

ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ
ΠΕΡΙΦΕΡΕΙΑ ΗΠΕΙΡΟΥ
ΓΕΝΙΚΗ ΔΙΕΥΘΥΝΣΗ ΑΝΑΠΤΥΞΙΑΚΟΥ ΠΡΟΓΡ/ΣΜΟΥ
ΠΕΡΙΒΑΛΛΟΝΤΟΣ ΚΑΙ ΥΠΟΔΟΜΩΝ
Δ/ΝΣΗ ΤΕΧΝΙΚΩΝ ΕΡΓΩΝ Π.Ε. ΙΩΑΝΝΙΝΩΝ

ΤΜΗΜΑ ΣΥΓΚΟΙΝΩΝΙΑΚΩΝ ΕΡΓΩΝ

ΘΕΣΗ: ΕΠΑΡΧΙΑΚΗ ΟΔΟΣ ΕΛΕΟΥΣΑΣ - ΚΡΥΑ

ΜΕΛΕΤΗ: «ΜΕΛΕΤΗ ΑΠΟΚΑΤΑΣΤΑΣΗΣ ΒΛΑΒΩΝ ΚΑΙ ΒΕΛΤΙΩΣΗΣ ΟΔΙΚΗΣ
ΛΕΙΤΟΥΡΓΙΑΣ ΥΦΙΣΤΑΜΕΝΩΝ ΓΕΦΥΡΩΝ ΤΗΣ Π.Ε. ΙΩΑΝΝΙΝΩΝ»

ΥΠΟΕΡΓΟ: «ΒΕΛΤΙΩΣΗΣ ΟΔΙΚΗΣ ΛΕΙΤΟΥΡΓΙΑΣ ΤΜΗΜΑΤΟΣ ΤΟΥ
ΟΔΙΚΟΥ ΔΙΚΤΥΟΥ ΕΛΕΟΥΣΑ – ΚΡΥΑ (Ν. ΙΩΑΝΝΙΝΩΝ)»

ΣΤΑΔΙΟ: ΟΡΙΣΤΙΚΗ ΣΤΑΤΙΚΗ ΜΕΛΕΤΗ

Αριθμός Τεύχους: **Σ3.Τ2**

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ΕΚΠΟΝΗΣΗ ΜΕΛΕΤΗΣ :

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| | ΗΜΕΡ/ΝΙΑ | ΟΝΟΜΑΤΕΠΩΝΥΜΟ | ΥΠΟΓΡΑΦΗ |
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| ΕΓΚΡΙΣΗ | 03-2019 | ΓΕΩΡΓΙΟΣ Χ. ΔΡΟΣΟΣ | |

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ΑΝΑΘΕΩΡΗΣΕΙΣ

| A / A | ΗΜΕΡ/ΝΙΑ | ΑΙΤΙΑ Η ΛΟΓΟΣ ΑΝΑΘΕΩΡΗΣΗΣ |
|-------|----------|---------------------------|
| A | | |
| B | | |

ΕΓΚΡΙΣΗ ΥΠΗΡΕΣΙΑΣ

ΕΛΕΓΧΘΗΚΕ ΑΠΟ ΓΕΝΙΚΗΣ ΑΠΟΦΗΣ ΚΑΙ ΕΓΚΡΙΝΕΤΑΙ ΜΕ ΤΙΣ ΑΚΟΛΟΥΘΕΣ ΠΑΡΑΤΗΡΗΣΕΙΣ :

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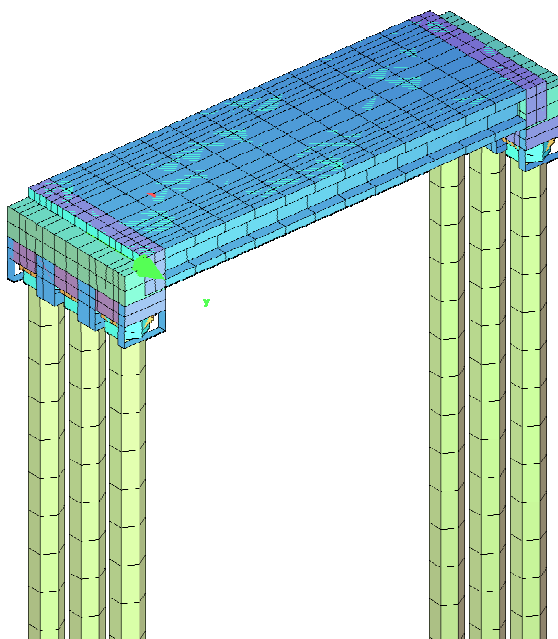
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Ο ΕΠΙΒΛΕΠΩΝ

ΙΩΑΝΝΙΝΑ, __/__/2019
Ο ΠΡΟΪΣΤΑΜΕΝΟΣ

ΣΤΑΤΙΚΟΙ ΥΠΟΛΟΓΙΣΜΟΙ ΤΕΧΝΙΚΟΥ “ΤΑ”

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ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/L=13.00
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00. ΤΕΥΧΟΣ ΣΤΑΤΙΚΗΣ ΜΕΛΕΤΗΣ
ΤΕΧΝΙΚΟΥ ΤΑ

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00

1) ΔΕΔΟΜΕΝΑ ΥΛΙΚΩΝ-ΔΙΑΤΟΜΩΝ

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΥΛΙΚΩΝ

No. 1 C 25/30 (DIN 1045-1)

| | | | | | | | |
|---------------------|----|----------|---------|------------------|------|-------|-------|
| Youngs-modulus | E | 26663 | [MPa] | Safetyfactor | | 1.50 | [-] |
| Poisson-Ratio | mu | 0.20 | [-] | Strength | fc | 21.25 | [MPa] |
| Shear-modulus | G | 11109 | [MPa] | Nomin. strength | fcn | 25.00 | [MPa] |
| Compression modulus | | 14813 | [MPa] | Tens. strength | fctm | 2.56 | [MPa] |
| weight | | 0.0 | [kN/m3] | 5 % t.strength | fctk | 1.80 | [MPa] |
| weight buoyancy | | 0.0 | [kN/m3] | 95 % t.strength | fctk | 3.33 | [MPa] |
| Temp.elongat.coeff. | | 1.00E-05 | [1/°K] | Bond strength | fbd | 2.69 | [MPa] |
| | | | | Service strength | | 33.00 | [MPa] |
| | | | | Fatigue strength | | 12.75 | [MPa] |

No. 3 C 25/30 (DIN 1045-1)

| | | | | | | | |
|---------------------|----|----------|---------|------------------|------|-------|-------|
| Youngs-modulus | E | 26663 | [MPa] | Safetyfactor | | 1.50 | [-] |
| Poisson-Ratio | mu | 0.20 | [-] | Strength | fc | 21.25 | [MPa] |
| Shear-modulus | G | 11109 | [MPa] | Nomin. strength | fcn | 25.00 | [MPa] |
| Compression modulus | | 14813 | [MPa] | Tens. strength | fctm | 2.56 | [MPa] |
| weight | | 0.0 | [kN/m3] | 5 % t.strength | fctk | 1.80 | [MPa] |
| weight buoyancy | | 0.0 | [kN/m3] | 95 % t.strength | fctk | 3.33 | [MPa] |
| Temp.elongat.coeff. | | 1.00E-05 | [1/°K] | Bond strength | fbd | 2.69 | [MPa] |
| | | | | Service strength | | 33.00 | [MPa] |
| | | | | Fatigue strength | | 12.75 | [MPa] |

No. 4 C 25/30 (DIN 1045-1)

| | | | | | | | |
|---------------------|----|----------|---------|------------------|------|-------|-------|
| Youngs-modulus | E | 26663 | [MPa] | Safetyfactor | | 1.50 | [-] |
| Poisson-Ratio | mu | 0.20 | [-] | Strength | fc | 21.25 | [MPa] |
| Shear-modulus | G | 11109 | [MPa] | Nomin. strength | fcn | 25.00 | [MPa] |
| Compression modulus | | 14813 | [MPa] | Tens. strength | fctm | 2.56 | [MPa] |
| weight | | 0.0 | [kN/m3] | 5 % t.strength | fctk | 1.80 | [MPa] |
| weight buoyancy | | 0.0 | [kN/m3] | 95 % t.strength | fctk | 3.33 | [MPa] |
| Temp.elongat.coeff. | | 1.00E-05 | [1/°K] | Bond strength | fbd | 2.69 | [MPa] |
| | | | | Service strength | | 33.00 | [MPa] |
| | | | | Fatigue strength | | 12.75 | [MPa] |

No. 5 C 25/30 (DIN 1045-1)

| | | | | | | | |
|---------------------|----|----------|---------|------------------|------|-------|-------|
| Youngs-modulus | E | 26663 | [MPa] | Safetyfactor | | 1.50 | [-] |
| Poisson-Ratio | mu | 0.20 | [-] | Strength | fc | 21.25 | [MPa] |
| Shear-modulus | G | 11109 | [MPa] | Nomin. strength | fcn | 25.00 | [MPa] |
| Compression modulus | | 14813 | [MPa] | Tens. strength | fctm | 2.56 | [MPa] |
| weight | | 0.0 | [kN/m3] | 5 % t.strength | fctk | 1.80 | [MPa] |
| weight buoyancy | | 0.0 | [kN/m3] | 95 % t.strength | fctk | 3.33 | [MPa] |
| Temp.elongat.coeff. | | 1.00E-05 | [1/°K] | Bond strength | fbd | 2.69 | [MPa] |
| | | | | Service strength | | 33.00 | [MPa] |
| | | | | Fatigue strength | | 12.75 | [MPa] |

No. 6 C 25/30 (DIN 1045-1)

| | | | | | | | |
|---------------------|----|----------|---------|------------------|------|-------|-------|
| Youngs-modulus | E | 26663 | [MPa] | Safetyfactor | | 1.50 | [-] |
| Poisson-Ratio | mu | 0.20 | [-] | Strength | fc | 21.25 | [MPa] |
| Shear-modulus | G | 11109 | [MPa] | Nomin. strength | fcn | 25.00 | [MPa] |
| Compression modulus | | 14813 | [MPa] | Tens. strength | fctm | 2.56 | [MPa] |
| weight | | 32.8 | [kN/m3] | 5 % t.strength | fctk | 1.80 | [MPa] |
| weight buoyancy | | 32.8 | [kN/m3] | 95 % t.strength | fctk | 3.33 | [MPa] |
| Temp.elongat.coeff. | | 1.00E-05 | [1/°K] | Bond strength | fbd | 2.69 | [MPa] |
| | | | | Service strength | | 33.00 | [MPa] |
| | | | | Fatigue strength | | 12.75 | [MPa] |

No. 7 C 25/30 (DIN 1045-1)

| | | | | | | | |
|---------------------|----|----------|---------|------------------|------|-------|-------|
| Youngs-modulus | E | 26663 | [MPa] | Safetyfactor | | 1.50 | [-] |
| Poisson-Ratio | mu | 0.20 | [-] | Strength | fc | 21.25 | [MPa] |
| Shear-modulus | G | 11109 | [MPa] | Nomin. strength | fcn | 25.00 | [MPa] |
| Compression modulus | | 14813 | [MPa] | Tens. strength | fctm | 2.56 | [MPa] |
| weight | | 25.0 | [kN/m3] | 5 % t.strength | fctk | 1.80 | [MPa] |
| weight buoyancy | | 25.0 | [kN/m3] | 95 % t.strength | fctk | 3.33 | [MPa] |
| Temp.elongat.coeff. | | 1.00E-05 | [1/°K] | Bond strength | fbd | 2.69 | [MPa] |
| | | | | Service strength | | 33.00 | [MPa] |
| | | | | Fatigue strength | | 12.75 | [MPa] |

No. 8 C 25/30 (DIN 1045-1)

| | | | | | | | |
|---------------------|----|----------|---------|-----------------|------|-------|-------|
| Youngs-modulus | E | 26663 | [MPa] | Safetyfactor | | 1.50 | [-] |
| Poisson-Ratio | mu | 0.20 | [-] | Strength | fc | 21.25 | [MPa] |
| Shear-modulus | G | 11109 | [MPa] | Nomin. strength | fcn | 25.00 | [MPa] |
| Compression modulus | | 14813 | [MPa] | Tens. strength | fctm | 2.56 | [MPa] |
| weight | | 25.0 | [kN/m3] | 5 % t.strength | fctk | 1.80 | [MPa] |
| weight buoyancy | | 25.0 | [kN/m3] | 95 % t.strength | fctk | 3.33 | [MPa] |
| Temp.elongat.coeff. | | 1.00E-05 | [1/°K] | Bond strength | fbd | 2.69 | [MPa] |

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No. 8 C 25/30 (DIN 1045-1)

Service strength 33.00 [MPa]
Fatigue strength 12.75 [MPa]

No. 9 C 25/30 (DIN 1045-1)

| | | | | | |
|---------------------|----|-----------------|------------------|------|-------------|
| Youngs-modulus | E | 26663 [MPa] | Safetyfactor | | 1.50 [-] |
| Poisson-Ratio | mu | 0.20 [-] | Strength | fc | 21.25 [MPa] |
| Shear-modulus | G | 11109 [MPa] | Nomin. strength | fcn | 25.00 [MPa] |
| Compression modulus | | 14813 [MPa] | Tens. strength | fctm | 2.56 [MPa] |
| Weight | | 2.5 [kN/m3] | 5 % t.strength | fctk | 1.80 [MPa] |
| Weight buoyancy | | 2.5 [kN/m3] | 95 % t.strength | fctk | 3.33 [MPa] |
| Temp.elongat.coeff. | | 1.00E-05 [1/°K] | Bond strength | fbd | 2.69 [MPa] |
| | | | Service strength | | 33.00 [MPa] |
| | | | Fatigue strength | | 12.75 [MPa] |

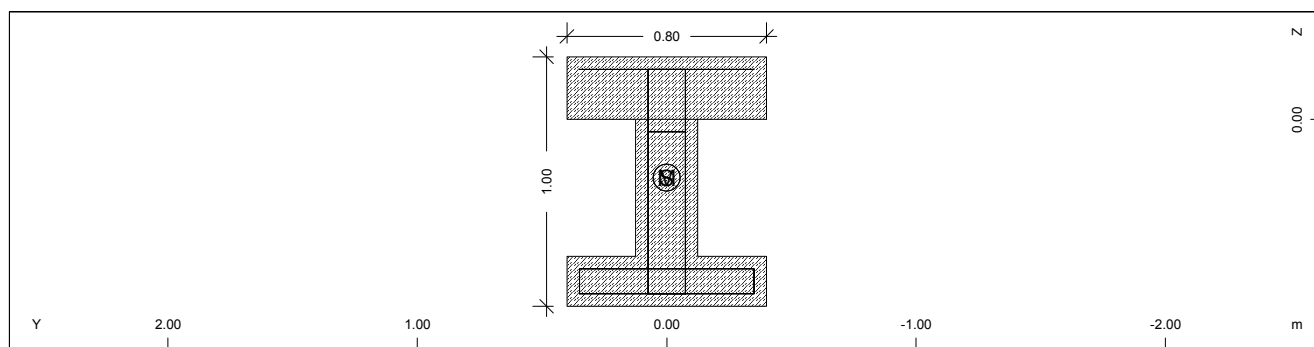
No. 10 C 25/30 (DIN 1045-1)

| | | | | | |
|---------------------|----|-----------------|------------------|------|-------------|
| Youngs-modulus | E | 26663 [MPa] | Safetyfactor | | 1.50 [-] |
| Poisson-Ratio | mu | 0.20 [-] | Strength | fc | 21.25 [MPa] |
| Shear-modulus | G | 11109 [MPa] | Nomin. strength | fcn | 25.00 [MPa] |
| Compression modulus | | 14813 [MPa] | Tens. strength | fctm | 2.56 [MPa] |
| Weight | | 0.0 [kN/m3] | 5 % t.strength | fctk | 1.80 [MPa] |
| Weight buoyancy | | 0.0 [kN/m3] | 95 % t.strength | fctk | 3.33 [MPa] |
| Temp.elongat.coeff. | | 1.00E-05 [1/°K] | Bond strength | fbd | 2.69 [MPa] |
| | | | Service strength | | 33.00 [MPa] |
| | | | Fatigue strength | | 12.75 [MPa] |

No. 12 BSt 500 SA (DIN 1045-1)

| | | | | | |
|---------------------|----|-----------------|----------------------|-----|--------------|
| Youngs-modulus | E | 200000 [MPa] | Safetyfactor | | 1.15 [-] |
| Poisson-Ratio | mu | 0.30 [-] | Yield stress | fy | 500.00 [MPa] |
| Shear-modulus | G | 76923 [MPa] | Compr.yield val. | fyc | 500.00 [MPa] |
| Compression modulus | | 166667 [MPa] | Tens. strength | ft | 550.00 [MPa] |
| Weight | | 78.5 [kN/m3] | Compr. strength | fc | 550.00 [MPa] |
| Weight buoyancy | | 78.5 [kN/m3] | Ultim. plast. strain | | 25.00 [o/oo] |
| Temp.elongat.coeff. | | 1.20E-05 [1/°K] | relative bond coeff. | | 1.00 [-] |
| max. thickness | | 32.00 [mm] | EC2 bondcoeff. K1 | | 0.80 [-] |
| | | | Hardening modulus | | 0.00 [MPa] |
| | | | Proportional limit | | 500.00 [MPa] |
| | | | Dynamic stress range | | 169.57 [MPa] |

Cross section No. 1

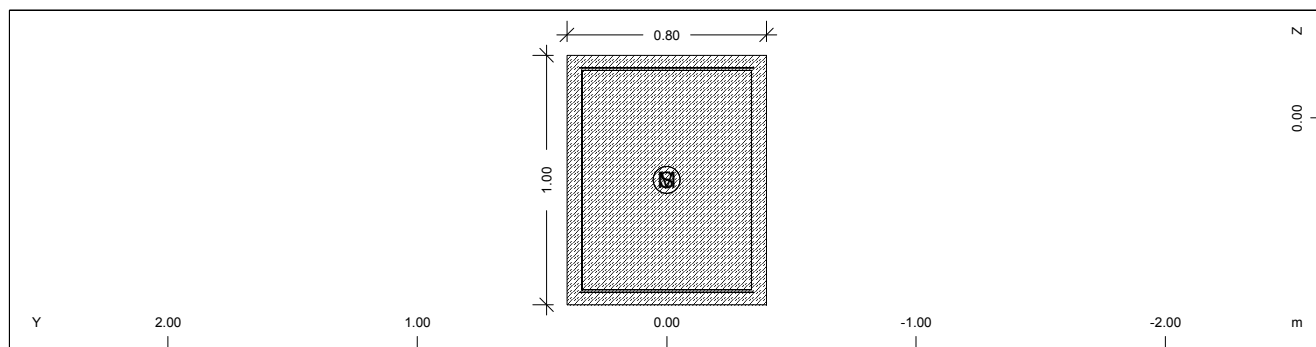


Static properties of cross section

| No. | Mat | A[m2] | Ay/Az/Ayz | Iy/Iz/Iyz | ys/zs | y/z-sc | modules | gam |
|-----|-----|----------------------------|-----------|-----------|-------|--------|---------|--------|
| NoR | | It[m4] | [m2] | [m4] | [m] | [m] | [MPa] | [MN/m] |
| 1 | = | Composit with materials: 1 | | | | | | |
| | 1 | 4.9904E-01 | | 5.887E-02 | 0.000 | 0.000 | 26663 | 0.000 |
| | 12 | 9.960E-03 | | 1.992E-02 | 0.235 | 0.235 | 11109 | |
| 1.1 | = | CS 10 | | | | | | |
| | 1 | 2.9750E-01 | | 1.440E-02 | 0.000 | 0.000 | 26663 | 0.000 |
| | 12 | 5.016E-03 | | 9.249E-03 | 0.477 | 0.477 | 11109 | |
| 1.2 | = | CS 40 | | | | | | |
| | 1 | 4.9904E-01 | | 5.887E-02 | 0.000 | 0.000 | 26663 | 0.000 |
| | 12 | 9.960E-03 | | 1.992E-02 | 0.235 | 0.235 | 11109 | |

Cross section No. 2 - DOKOS-2

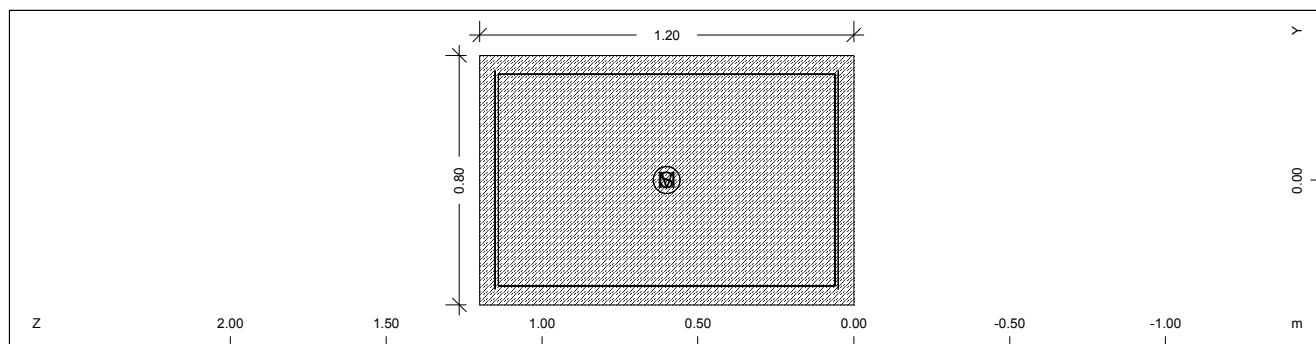
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ΟΡΙΣΜΟΣ ΥΛΙΚΩΝ



Static properties of cross section

| No. | Mat | A[m ²] | Ay/Az/Ayz | Iy/Iz/Iyz | ys/zs | y/z-sc | modules | gam |
|-----|-----|---------------------|-------------------|-------------------|-------|--------|---------|--------|
| | NOR | It[m ⁴] | [m ²] | [m ⁴] | [m] | [m] | [MPa] | [MN/m] |
| 2 | = | DOKOS-2 | | | | | | |
| | 3 | 8.0000E-01 | | 6.667E-02 | 0.000 | 0.000 | 26663 | 0.000 |
| | 12 | 8.795E-02 | | 4.267E-02 | 0.250 | 0.250 | 11109 | |

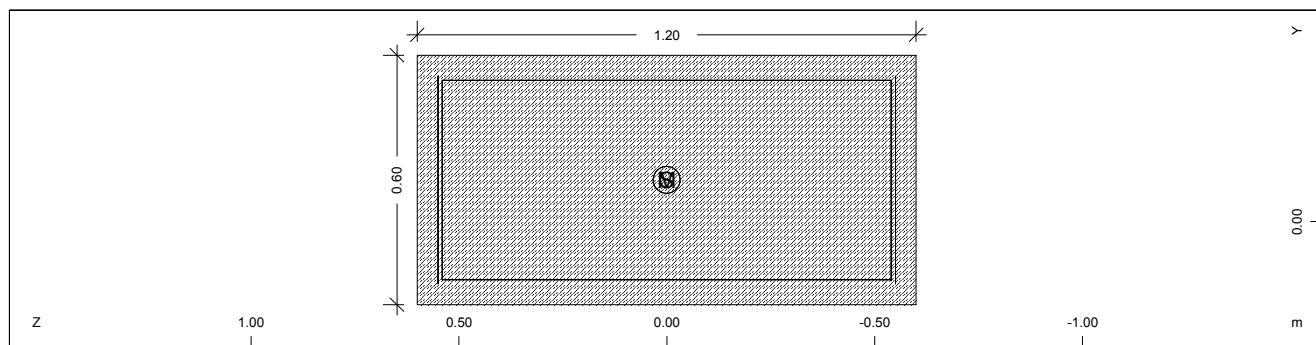
Cross section No. 3 - DOKOS-3



Static properties of cross section

| No. | Mat | A[m ²] | Ay/Az/Ayz | Iy/Iz/Iyz | ys/zs | y/z-sc | modules | gam |
|-----|-----|---------------------|-------------------|-------------------|-------|--------|---------|--------|
| | NOR | It[m ⁴] | [m ²] | [m ⁴] | [m] | [m] | [MPa] | [MN/m] |
| 3 | = | DOKOS-3 | | | | | | |
| | 5 | 9.6000E-01 | | 1.152E-01 | 0.000 | 0.000 | 26663 | 0.000 |
| | 12 | 1.203E-01 | | 5.120E-02 | 0.600 | 0.600 | 11109 | |

Cross section No. 4 - DOKOS-3a

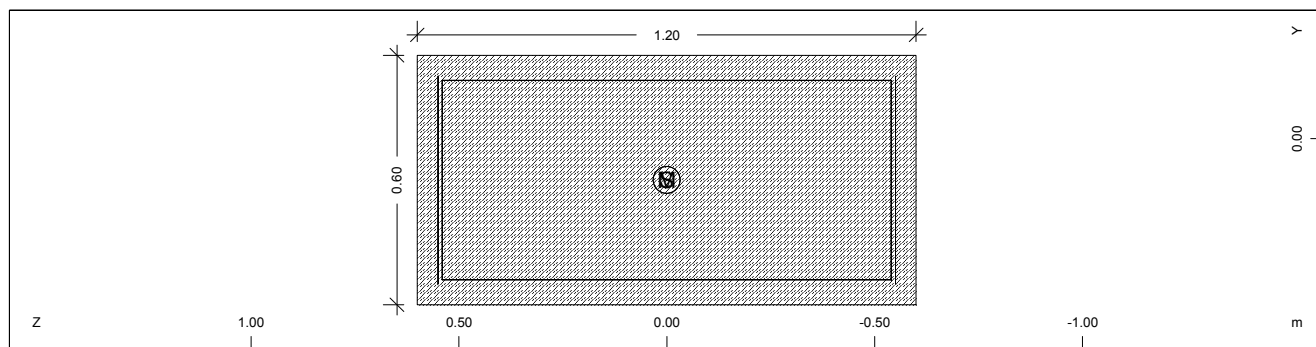


Static properties of cross section

| No. | Mat | A[m ²] | Ay/Az/Ayz | Iy/Iz/Iyz | ys/zs | y/z-sc | modules | gam |
|-----|-----|---------------------|-------------------|-------------------|-------|--------|---------|--------|
| | NOR | It[m ⁴] | [m ²] | [m ⁴] | [m] | [m] | [MPa] | [MN/m] |
| 4 | = | DOKOS-3a | | | | | | |
| | 5 | 7.2000E-01 | | 8.640E-02 | 0.100 | 0.100 | 26663 | 0.000 |
| | 12 | 5.931E-02 | | 2.160E-02 | 0.000 | 0.000 | 11109 | |

Cross section No. 5 - DOKOS-3b

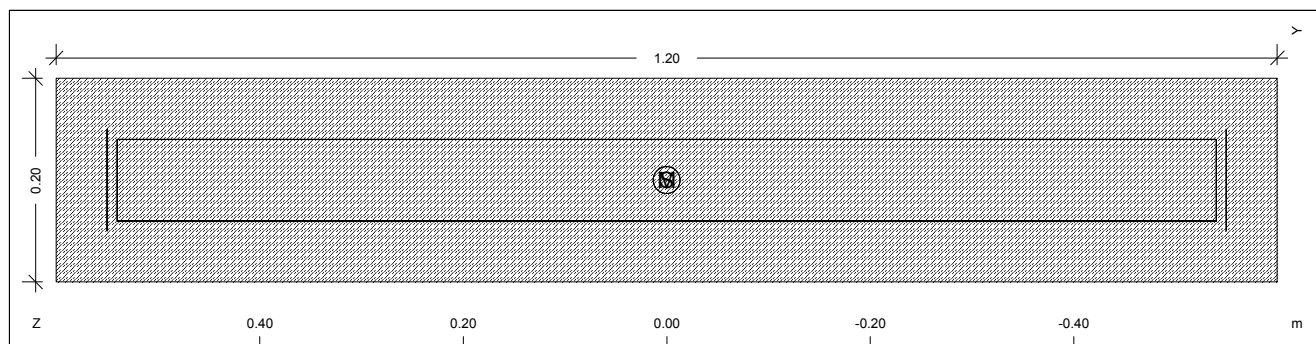
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΥΛΙΚΩΝ



Static properties of cross section

| No. | Mat | A[m ²] | Ay/Az/Ayz | Iy/Iz/Iyz | ys/zs | y/z-sc | modules | gam |
|-----|-----|---------------------|-------------------|-------------------|--------|--------|---------|--------|
| | NOR | It[m ⁴] | [m ²] | [m ⁴] | [m] | [m] | [MPa] | [MN/m] |
| 5 | = | DOKOS-3b | | | | | | |
| | 5 | 7.2000E-01 | | 8.640E-02 | -0.100 | -0.100 | 26663 | 0.000 |
| | 12 | 5.931E-02 | | 2.160E-02 | 0.000 | 0.000 | 11109 | |

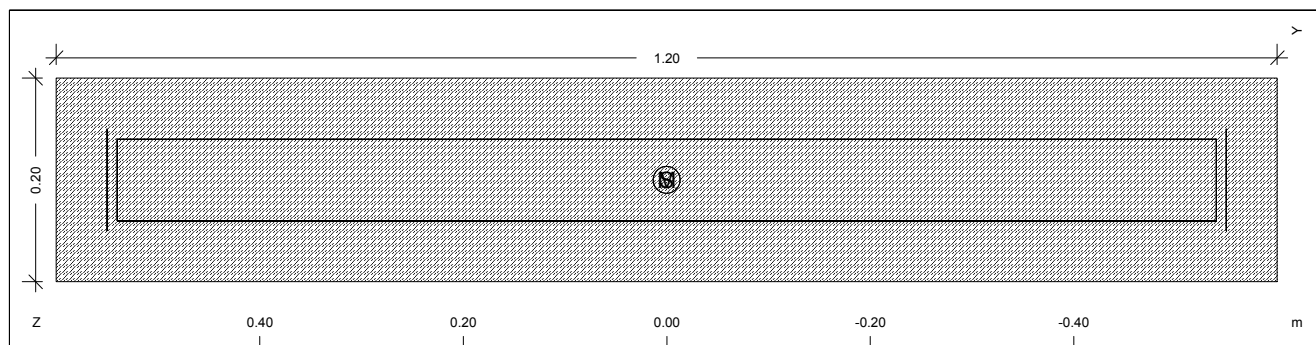
Cross section No. 6 - DOKOS-3c



Static properties of cross section

| No. | Mat | A[m ²] | Ay/Az/Ayz | Iy/Iz/Iyz | ys/zs | y/z-sc | modules | gam |
|-----|-----|---------------------|-------------------|-------------------|-------|--------|---------|--------|
| | NOR | It[m ⁴] | [m ²] | [m ⁴] | [m] | [m] | [MPa] | [MN/m] |
| 6 | = | DOKOS-3c | | | | | | |
| | 5 | 2.4000E-01 | | 2.880E-02 | 0.100 | 0.100 | 26663 | 0.000 |
| | 12 | 2.885E-03 | | 8.000E-04 | 0.000 | 0.000 | 11109 | |

Cross section No. 7 - DOKOS-3d

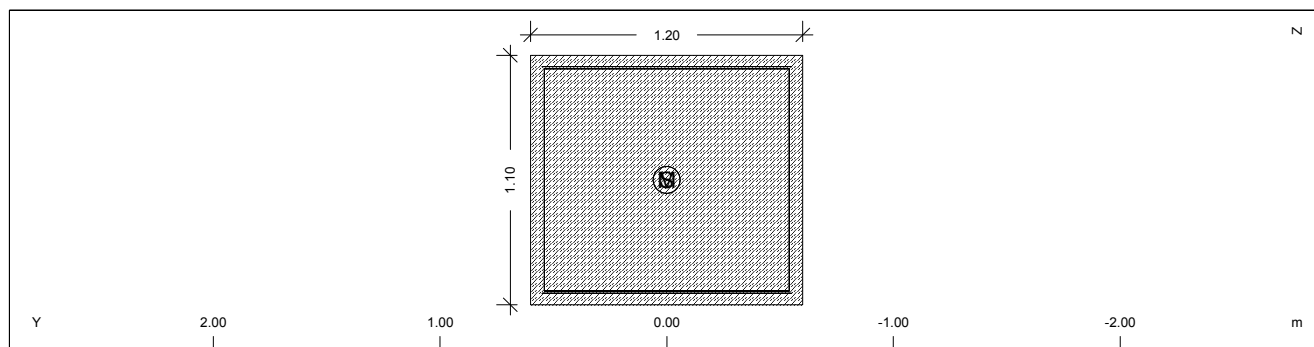


Static properties of cross section

| No. | Mat | A[m ²] | Ay/Az/Ayz | Iy/Iz/Iyz | ys/zs | y/z-sc | modules | gam |
|-----|-----|---------------------|-------------------|-------------------|--------|--------|---------|--------|
| | NOR | It[m ⁴] | [m ²] | [m ⁴] | [m] | [m] | [MPa] | [MN/m] |
| 7 | = | DOKOS-3d | | | | | | |
| | 5 | 2.4000E-01 | | 2.880E-02 | -0.100 | -0.100 | 26663 | 0.000 |
| | 12 | 2.885E-03 | | 8.000E-04 | 0.000 | 0.000 | 11109 | |

Cross section No. 8 - DOKOS-4

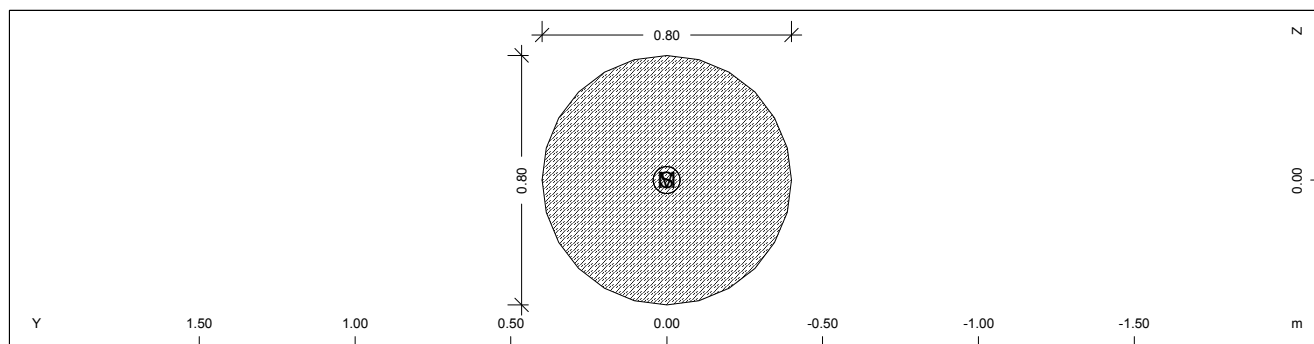
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΥΛΙΚΩΝ



Static properties of cross section

| No. | Mat | A[m ²] | Ay/Az/Ayz | Iy/Iz/Iyz | ys/zs | y/z-sc | modules | gam |
|-----|-----|---------------------|-------------------|-------------------|-------|--------|---------|--------|
| | NOR | It[m ⁴] | [m ²] | [m ⁴] | [m] | [m] | [MPa] | [MN/m] |
| 8 | = | DOKOS-4 | | | | | | |
| | 8 | 1.3200E+00 | | 1.331E-01 | 0.000 | 0.000 | 26663 | 0.033 |
| | 12 | 2.441E-01 | | 1.584E-01 | 0.550 | 0.550 | 11109 | |

Cross section No. 9 - section pile



Static properties of cross section

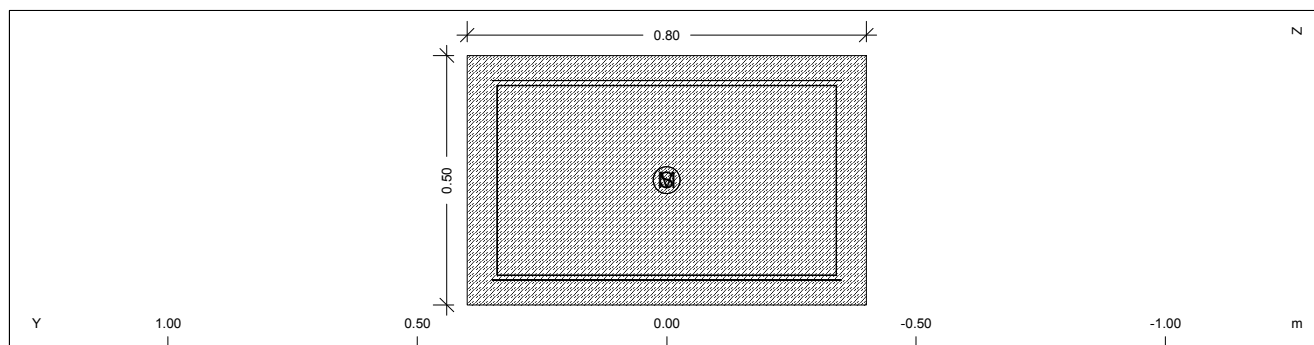
| No. | Mat | A[m ²] | Ay/Az/Ayz | Iy/Iz/Iyz | ys/zs | y/z-sc | modules | gam |
|-----|-----|---------------------|-------------------|-------------------|-------|--------|---------|--------|
| | NOR | It[m ⁴] | [m ²] | [m ⁴] | [m] | [m] | [MPa] | [MN/m] |
| 9 | = | section pile | | | | | | |
| | 7 | 5.0265E-01 | | 2.011E-02 | 0.000 | 0.000 | 26663 | 0.013 |
| | 12 | 4.021E-02 | | 2.011E-02 | 0.000 | 0.000 | 11109 | |

Cross section No. 10

Static properties of cross section

| No. | Mat | A[m ²] | Ay/Az/Ayz | Iy/Iz/Iyz | ys/zs | y/z-sc | modules | gam |
|-----|-----|---------------------|-------------------|-------------------|-------|--------|---------|--------|
| | NOR | It[m ⁴] | [m ²] | [m ⁴] | [m] | [m] | [MPa] | [MN/m] |
| 10 | 9 | 1.2000E+01 | | 1.000E+03 | 0.000 | 0.000 | 26663 | 0.030 |
| | | 2.626E-01 | | 1.000E+03 | 0.000 | 0.000 | 11109 | |

Cross section No. 11 - CANTIL-1

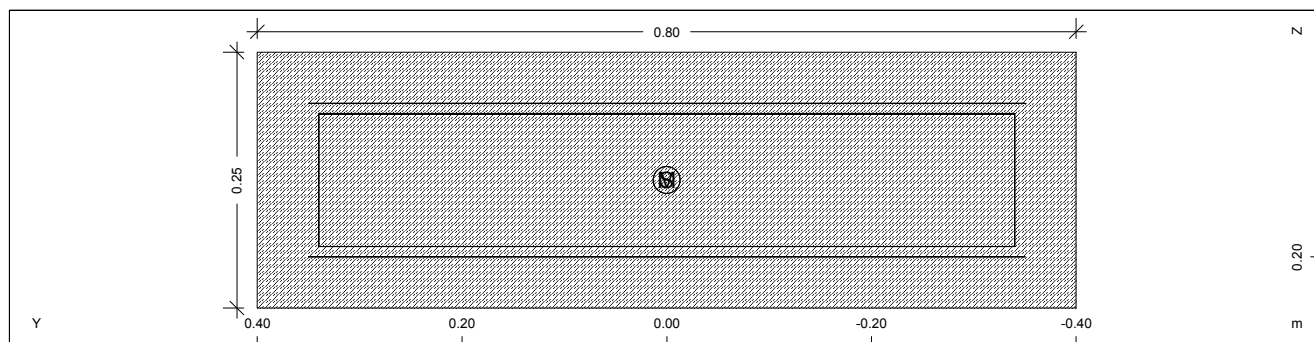


Static properties of cross section

| No. | Mat | A[m ²] | Ay/Az/Ayz | Iy/Iz/Iyz | ys/zs | y/z-sc | modules | gam |
|-----|-----|---------------------|-------------------|-------------------|-------|--------|---------|--------|
| | NOR | It[m ⁴] | [m ²] | [m ⁴] | [m] | [m] | [MPa] | [MN/m] |
| 11 | = | CANTIL-1 | | | | | | |
| | 6 | 4.0000E-01 | | 8.333E-03 | 0.000 | 0.000 | 26663 | 0.013 |
| | 12 | 2.038E-02 | | 2.133E-02 | 0.250 | 0.250 | 11109 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΥΛΙΚΩΝ

Cross section No. 12 - CANTIL-2



Static properties of cross section

| static properties of cross section | | | | | | | | |
|------------------------------------|-----|------------|-----------|-----------|-------|--------|---------|--------|
| No. | Mat | A[m2] | Ay/Az/Ayz | Iy/Iz/Iyz | ys/zs | y/z-sc | modules | gam |
| | NOR | It[m4] | [m2] | [m4] | [m] | [m] | [MPa] | [MN/m] |
| 12 | = | CANTIL-2 | | | | | | |
| | 6 | 2.0000E-01 | | 1.042E-03 | 0.000 | 0.000 | 26663 | 0.007 |
| | 12 | 3.351E-03 | | 1.067E-02 | 0.125 | 0.125 | 11109 | |

Cross section No. 13

Static properties of cross section

| No. | Mat | A[m2] | Ay/Az/Ayz | Iy/Iz/Iyz | ys/zs | y/z-sc | modules | gam |
|-----|-----|------------|-----------|-----------|-------|--------|---------|--------|
| | NOR | It[m4] | [m2] | [m4] | [m] | [m] | [MPa] | [MN/m] |
| 13 | 5 | 1.0000E+01 | | 1.000E+03 | 0.000 | 0.000 | 26663 | 0.000 |
| | | 1.267E-01 | | 1.000E+03 | 0.000 | 0.000 | 11109 | |

Summary of all beam elements

Cross sections

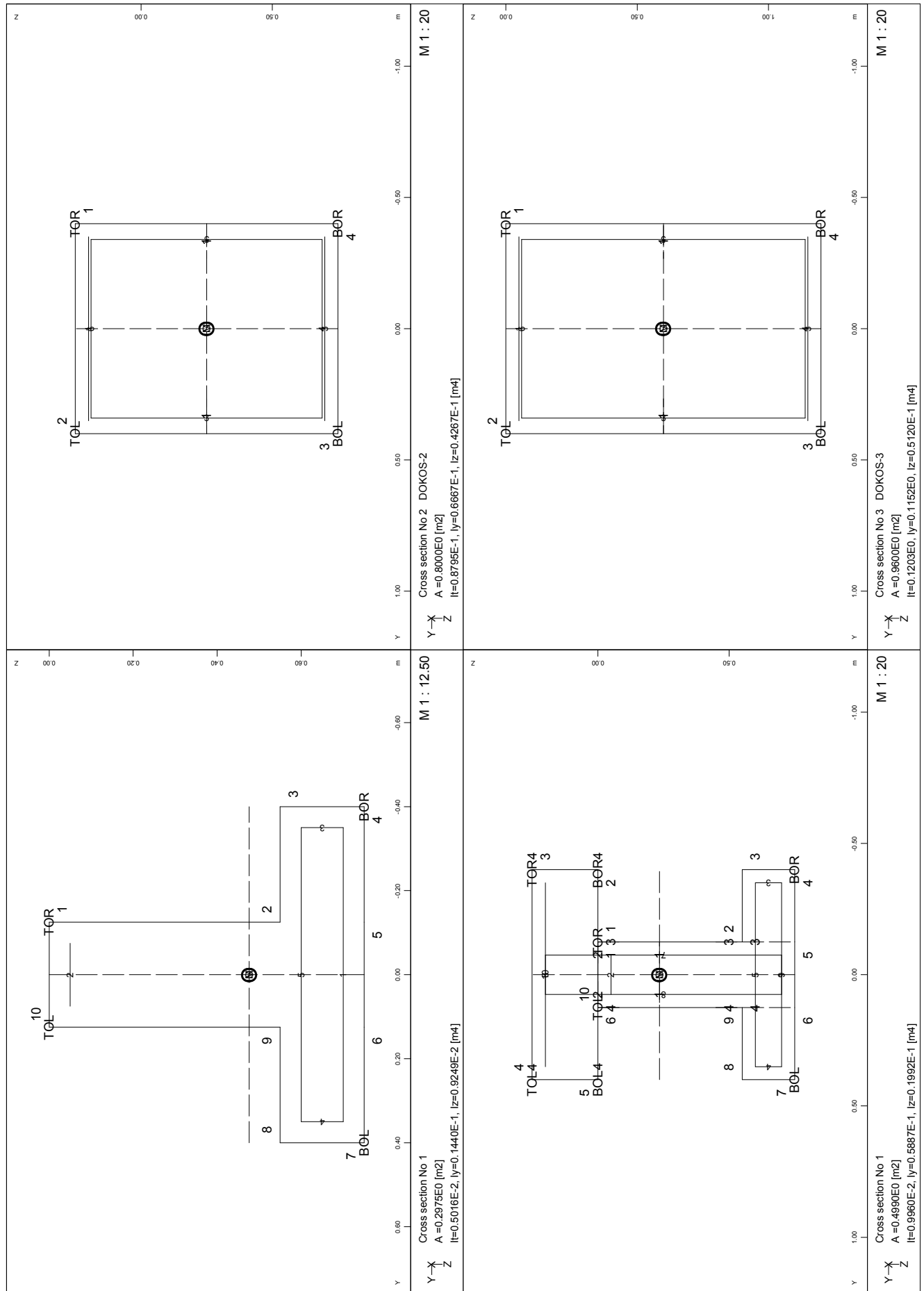
| No. | TotLength | Max.Length | Totweight | Surface | Title |
|-----|-----------|------------|-----------|-------------------|--------------|
| | [m] | [m] | [t] | [m ²] | |
| 1 | 53.000 | 0.883 | 0.000 | 111.300 | |
| 2 | 6.000 | 0.300 | 0.000 | 21.600 | DOKOS-2 |
| 8 | 3.200 | 0.400 | 10.560 | 14.720 | DOKOS-4 |
| 9 | 150.000 | 1.000 | 188.496 | 376.991 | section pile |
| 10 | 4.800 | 0.400 | 14.400 | | |
| 13 | 3.300 | 0.550 | 0.000 | | |
| Sum | 220.300 | | 213.456 | 524.611 | |

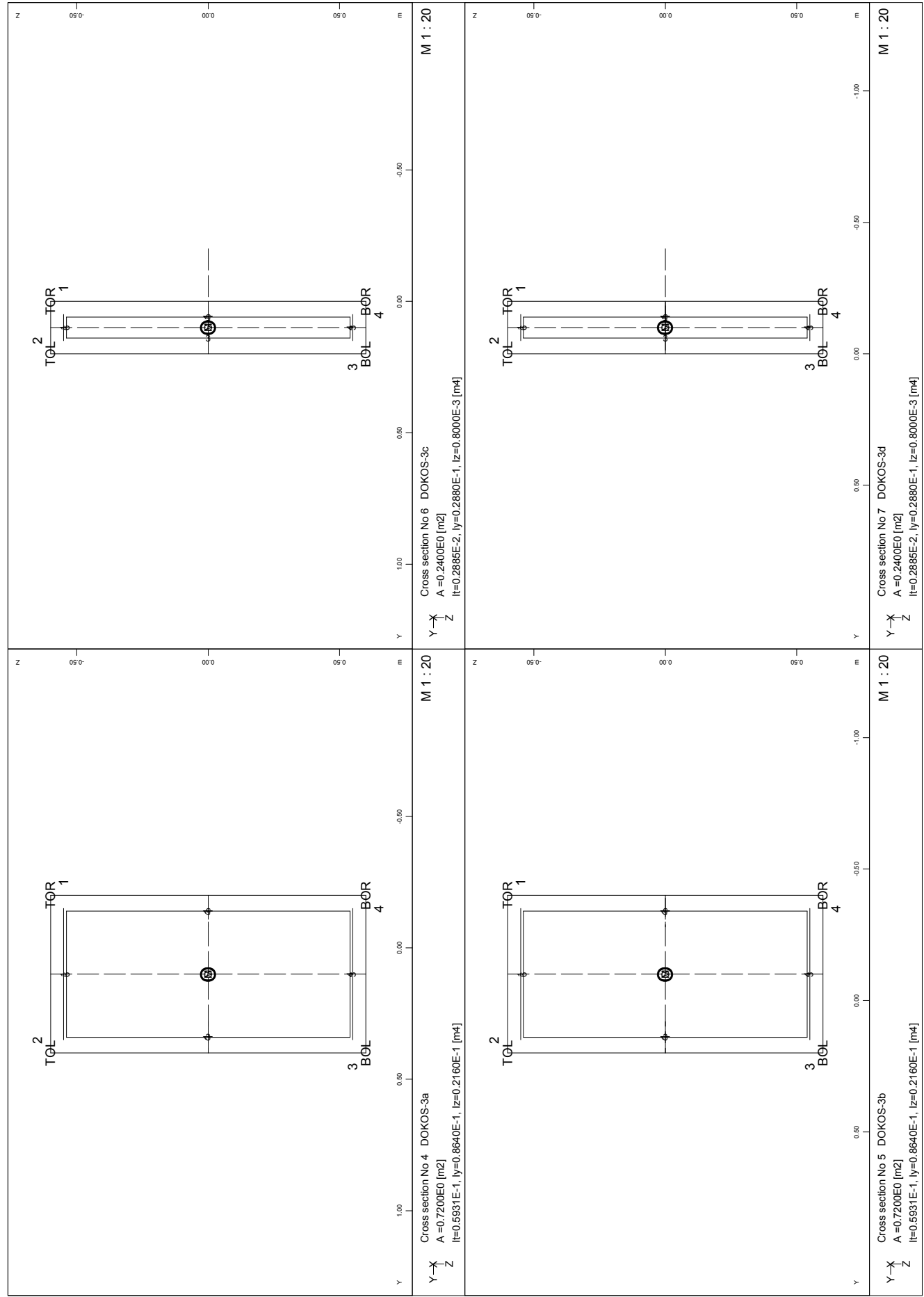
Bore Profile No. 1 ΠΑΣΣΑΛΟΙ ΤΟΙΧΟΥ

| X[m] | Y[m] | Z[m] | dx[-] | dy[-] | dz[-] | a[°] | P0 | P1 | P2 | P3 | Pmax |
|--------|-------|-------|--------|-------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| s[m] | K0-t | K1-t | K2-t | K3-t | [MN/m ²] | [MN/m ²] | [MN/m ²] | [MN/m ²] | [MN/m ²] | [MN/m ²] | [MN/m ²] |
| 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.0 | | | | | |
| 4.900 | 8.480 | | 11.520 | | 1.00 | 1.00 | 1.00 | 1.00 | | | 0.468 |
| 26.900 | | | | | | | | | | | 1.102 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00

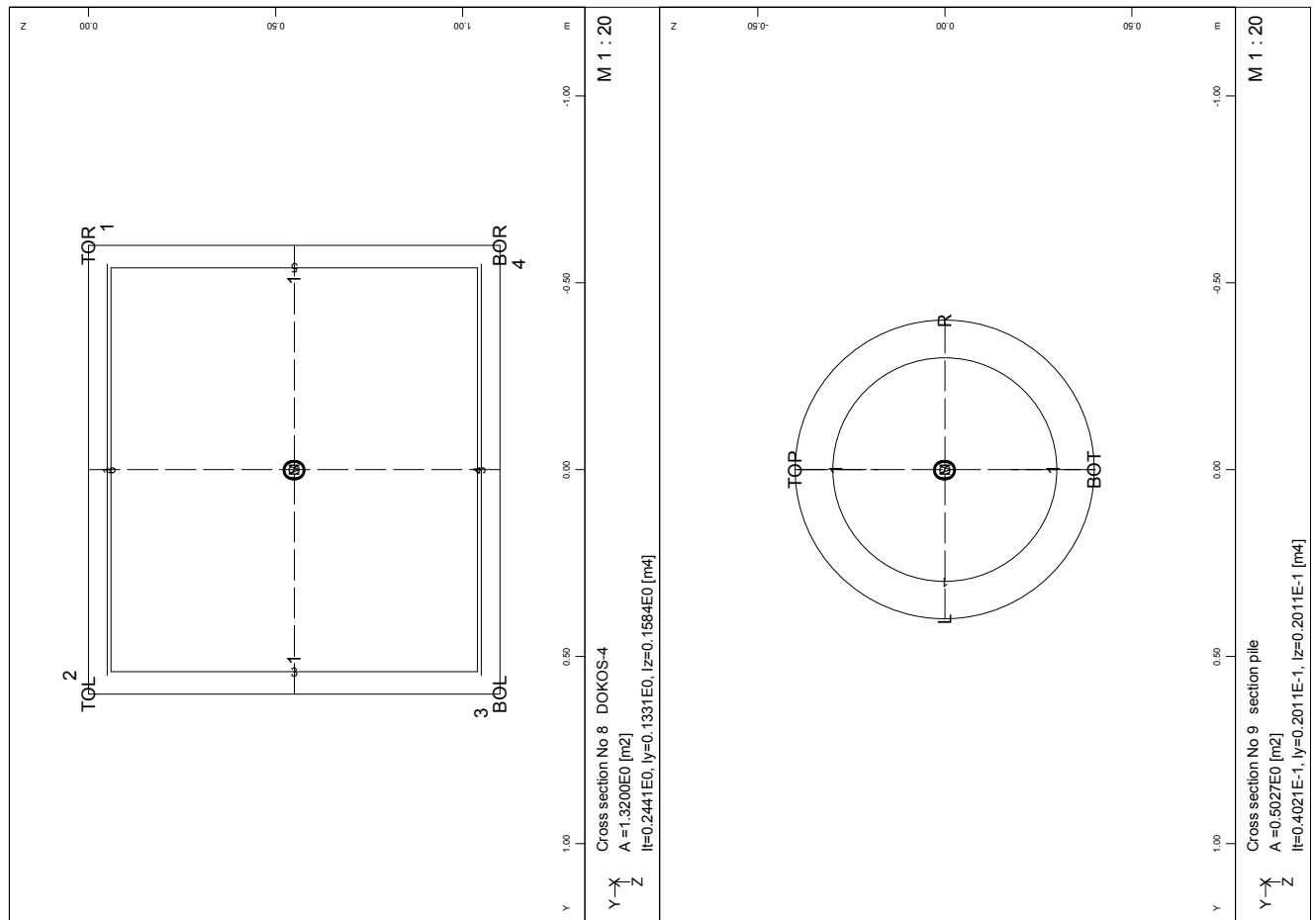
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ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/L=13.00


ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/L=13.00

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2) ΔΕΔΟΜΕΝΑ ΓΕΩΜΕΤΡΙΑΣ ΜΟΝΤΕΛΟΥ

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Groups

| Grp | number | type | min-no | max-no | Title |
|-----|--------|------|--------|--------|-------|
| 1 | 60 | BEAM | 1001 | 1060 | |
| 2 | 20 | BEAM | 2001 | 2020 | |
| 3 | 168 | QUAD | 3001 | 3168 | |
| 4 | 56 | QUAD | 4001 | 4056 | |
| 8 | 56 | QUAD | 8001 | 8056 | |
| 9 | 56 | QUAD | 9001 | 9056 | |
| 10 | 28 | BEAM | 10001 | 10029 | |
| 11 | 6 | BEAM | 11001 | 11006 | |
| 12 | 150 | BEAM | 12001 | 12150 | |
| 13 | 6 | SPRI | 13001 | 13006 | |

Nodal Coordinates and Supports

| Number | X[m] | Y[m] | Z[m] | Support Conditions |
|--------|--------|--------|-------|--------------------|
| 101 | 0.000 | 2.000 | 0.000 | |
| 102 | 0.000 | 1.800 | 0.000 | |
| 103 | 0.000 | 1.600 | 0.000 | |
| 104 | 0.000 | 1.400 | 0.000 | |
| 105 | 0.000 | 1.000 | 0.000 | |
| 106 | 0.000 | 0.800 | 0.000 | |
| 107 | 0.000 | 0.400 | 0.000 | |
| 108 | 0.000 | 0.000 | 0.000 | |
| 109 | 0.000 | -0.400 | 0.000 | |
| 110 | 0.000 | -0.800 | 0.000 | |
| 111 | 0.000 | -1.000 | 0.000 | |
| 112 | 0.000 | -1.400 | 0.000 | |
| 113 | 0.000 | -1.600 | 0.000 | |
| 114 | 0.000 | -1.800 | 0.000 | |
| 115 | 0.000 | -2.000 | 0.000 | |
| 201 | 0.600 | 2.000 | 0.000 | |
| 202 | 0.600 | 1.800 | 0.000 | |
| 203 | 0.600 | 1.600 | 0.000 | |
| 204 | 0.600 | 1.400 | 0.000 | |
| 205 | 0.600 | 1.000 | 0.000 | |
| 206 | 0.600 | 0.800 | 0.000 | |
| 207 | 0.600 | 0.400 | 0.000 | |
| 208 | 0.600 | 0.000 | 0.000 | |
| 209 | 0.600 | -0.400 | 0.000 | |
| 210 | 0.600 | -0.800 | 0.000 | |
| 211 | 0.600 | -1.000 | 0.000 | |
| 212 | 0.600 | -1.400 | 0.000 | |
| 213 | 0.600 | -1.600 | 0.000 | |
| 214 | 0.600 | -1.800 | 0.000 | |
| 215 | 0.600 | -2.000 | 0.000 | |
| 301 | 5.900 | 2.000 | 0.000 | |
| 302 | 5.900 | 1.800 | 0.000 | |
| 303 | 5.900 | 1.600 | 0.000 | |
| 304 | 5.900 | 1.400 | 0.000 | |
| 305 | 5.900 | 1.000 | 0.000 | |
| 306 | 5.900 | 0.800 | 0.000 | |
| 307 | 5.900 | 0.400 | 0.000 | |
| 308 | 5.900 | 0.000 | 0.000 | |
| 309 | 5.900 | -0.400 | 0.000 | |
| 310 | 5.900 | -0.800 | 0.000 | |
| 311 | 5.900 | -1.000 | 0.000 | |
| 312 | 5.900 | -1.400 | 0.000 | |
| 313 | 5.900 | -1.600 | 0.000 | |
| 314 | 5.900 | -1.800 | 0.000 | |
| 315 | 5.900 | -2.000 | 0.000 | |
| 401 | 11.200 | 2.000 | 0.000 | |
| 402 | 11.200 | 1.800 | 0.000 | |
| 403 | 11.200 | 1.600 | 0.000 | |
| 404 | 11.200 | 1.400 | 0.000 | |
| 405 | 11.200 | 1.000 | 0.000 | |
| 406 | 11.200 | 0.800 | 0.000 | |
| 407 | 11.200 | 0.400 | 0.000 | |
| 408 | 11.200 | 0.000 | 0.000 | |
| 409 | 11.200 | -0.400 | 0.000 | |
| 410 | 11.200 | -0.800 | 0.000 | |
| 411 | 11.200 | -1.000 | 0.000 | |
| 412 | 11.200 | -1.400 | 0.000 | |
| 413 | 11.200 | -1.600 | 0.000 | |
| 414 | 11.200 | -1.800 | 0.000 | |
| 415 | 11.200 | -2.000 | 0.000 | |
| 501 | 11.800 | 2.000 | 0.000 | |
| 502 | 11.800 | 1.800 | 0.000 | |
| 503 | 11.800 | 1.600 | 0.000 | |
| 504 | 11.800 | 1.400 | 0.000 | |
| 505 | 11.800 | 1.000 | 0.000 | |
| 506 | 11.800 | 0.800 | 0.000 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

| Number | X[m] | Y[m] | Z[m] | Support Conditions |
|--------|--------|--------|-------|--------------------|
| 507 | 11.800 | 0.400 | 0.000 | |
| 508 | 11.800 | 0.000 | 0.000 | |
| 509 | 11.800 | -0.400 | 0.000 | |
| 510 | 11.800 | -0.800 | 0.000 | |
| 511 | 11.800 | -1.000 | 0.000 | |
| 512 | 11.800 | -1.400 | 0.000 | |
| 513 | 11.800 | -1.600 | 0.000 | |
| 514 | 11.800 | -1.800 | 0.000 | |
| 515 | 11.800 | -2.000 | 0.000 | |
| 1101 | 0.000 | 2.000 | 0.800 | |
| 1102 | 0.000 | 1.800 | 0.800 | |
| 1103 | 0.000 | 1.600 | 0.800 | |
| 1104 | 0.000 | 1.400 | 0.800 | |
| 1105 | 0.000 | 1.000 | 0.800 | |
| 1106 | 0.000 | 0.800 | 0.800 | |
| 1107 | 0.000 | 0.400 | 0.800 | |
| 1108 | 0.000 | 0.000 | 0.800 | |
| 1109 | 0.000 | -0.400 | 0.800 | |
| 1110 | 0.000 | -0.800 | 0.800 | |
| 1111 | 0.000 | -1.000 | 0.800 | |
| 1112 | 0.000 | -1.400 | 0.800 | |
| 1113 | 0.000 | -1.600 | 0.800 | |
| 1114 | 0.000 | -1.800 | 0.800 | |
| 1115 | 0.000 | -2.000 | 0.800 | |
| 1201 | 0.600 | 2.000 | 0.800 | |
| 1202 | 0.600 | 1.800 | 0.800 | |
| 1203 | 0.600 | 1.600 | 0.800 | |
| 1204 | 0.600 | 1.400 | 0.800 | |
| 1205 | 0.600 | 1.000 | 0.800 | |
| 1206 | 0.600 | 0.800 | 0.800 | |
| 1207 | 0.600 | 0.400 | 0.800 | |
| 1208 | 0.600 | 0.000 | 0.800 | |
| 1209 | 0.600 | -0.400 | 0.800 | |
| 1210 | 0.600 | -0.800 | 0.800 | |
| 1211 | 0.600 | -1.000 | 0.800 | |
| 1212 | 0.600 | -1.400 | 0.800 | |
| 1213 | 0.600 | -1.600 | 0.800 | |
| 1214 | 0.600 | -1.800 | 0.800 | |
| 1215 | 0.600 | -2.000 | 0.800 | |
| 1223 | 0.900 | 1.600 | 0.800 | |
| 1226 | 0.900 | 0.800 | 0.800 | |
| 1228 | 0.900 | 0.000 | 0.800 | |
| 1230 | 0.900 | -0.800 | 0.800 | |
| 1233 | 0.900 | -1.600 | 0.800 | |
| 1301 | 5.900 | 2.000 | 0.800 | |
| 1302 | 5.900 | 1.800 | 0.800 | |
| 1303 | 5.900 | 1.600 | 0.800 | |
| 1304 | 5.900 | 1.400 | 0.800 | |
| 1305 | 5.900 | 1.000 | 0.800 | |
| 1306 | 5.900 | 0.800 | 0.800 | |
| 1307 | 5.900 | 0.400 | 0.800 | |
| 1308 | 5.900 | 0.000 | 0.800 | |
| 1309 | 5.900 | -0.400 | 0.800 | |
| 1310 | 5.900 | -0.800 | 0.800 | |
| 1311 | 5.900 | -1.000 | 0.800 | |
| 1312 | 5.900 | -1.400 | 0.800 | |
| 1313 | 5.900 | -1.600 | 0.800 | |
| 1314 | 5.900 | -1.800 | 0.800 | |
| 1315 | 5.900 | -2.000 | 0.800 | |
| 1401 | 11.200 | 2.000 | 0.800 | |
| 1402 | 11.200 | 1.800 | 0.800 | |
| 1403 | 11.200 | 1.600 | 0.800 | |
| 1404 | 11.200 | 1.400 | 0.800 | |
| 1405 | 11.200 | 1.000 | 0.800 | |
| 1406 | 11.200 | 0.800 | 0.800 | |
| 1407 | 11.200 | 0.400 | 0.800 | |
| 1408 | 11.200 | 0.000 | 0.800 | |
| 1409 | 11.200 | -0.400 | 0.800 | |
| 1410 | 11.200 | -0.800 | 0.800 | |
| 1411 | 11.200 | -1.000 | 0.800 | |
| 1412 | 11.200 | -1.400 | 0.800 | |
| 1413 | 11.200 | -1.600 | 0.800 | |
| 1414 | 11.200 | -1.800 | 0.800 | |
| 1415 | 11.200 | -2.000 | 0.800 | |
| 1423 | 10.900 | 1.600 | 0.800 | |
| 1426 | 10.900 | 0.800 | 0.800 | |
| 1428 | 10.900 | 0.000 | 0.800 | |
| 1430 | 10.900 | -0.800 | 0.800 | |
| 1433 | 10.900 | -1.600 | 0.800 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

| Number | X[m] | Y[m] | Z[m] | Support Conditions |
|--------|--------|--------|-------|--------------------|
| 1501 | 11.800 | 2.000 | 0.800 | |
| 1502 | 11.800 | 1.800 | 0.800 | |
| 1503 | 11.800 | 1.600 | 0.800 | |
| 1504 | 11.800 | 1.400 | 0.800 | |
| 1505 | 11.800 | 1.000 | 0.800 | |
| 1506 | 11.800 | 0.800 | 0.800 | |
| 1507 | 11.800 | 0.400 | 0.800 | |
| 1508 | 11.800 | 0.000 | 0.800 | |
| 1509 | 11.800 | -0.400 | 0.800 | |
| 1510 | 11.800 | -0.800 | 0.800 | |
| 1511 | 11.800 | -1.000 | 0.800 | |
| 1512 | 11.800 | -1.400 | 0.800 | |
| 1513 | 11.800 | -1.600 | 0.800 | |
| 1514 | 11.800 | -1.800 | 0.800 | |
| 1515 | 11.800 | -2.000 | 0.800 | |
| 2101 | 0.000 | 2.000 | 1.350 | |
| 2102 | 0.000 | 1.800 | 1.350 | |
| 2103 | 0.000 | 1.600 | 1.350 | |
| 2104 | 0.000 | 1.400 | 1.350 | |
| 2105 | 0.000 | 1.000 | 1.350 | |
| 2106 | 0.000 | 0.800 | 1.350 | |
| 2107 | 0.000 | 0.400 | 1.350 | |
| 2108 | 0.000 | 0.000 | 1.350 | |
| 2109 | 0.000 | -0.400 | 1.350 | |
| 2110 | 0.000 | -0.800 | 1.350 | |
| 2111 | 0.000 | -1.000 | 1.350 | |
| 2112 | 0.000 | -1.400 | 1.350 | |
| 2113 | 0.000 | -1.600 | 1.350 | |
| 2114 | 0.000 | -1.800 | 1.350 | |
| 2115 | 0.000 | -2.000 | 1.350 | |
| 2201 | 0.600 | 2.000 | 1.350 | |
| 2202 | 0.600 | 1.800 | 1.350 | |
| 2203 | 0.600 | 1.600 | 1.350 | |
| 2204 | 0.600 | 1.400 | 1.350 | |
| 2205 | 0.600 | 1.000 | 1.350 | |
| 2206 | 0.600 | 0.800 | 1.350 | |
| 2207 | 0.600 | 0.400 | 1.350 | |
| 2208 | 0.600 | 0.000 | 1.350 | |
| 2209 | 0.600 | -0.400 | 1.350 | |
| 2210 | 0.600 | -0.800 | 1.350 | |
| 2211 | 0.600 | -1.000 | 1.350 | |
| 2212 | 0.600 | -1.400 | 1.350 | |
| 2213 | 0.600 | -1.600 | 1.350 | |
| 2214 | 0.600 | -1.800 | 1.350 | |
| 2215 | 0.600 | -2.000 | 1.350 | |
| 2301 | 5.900 | 2.000 | 1.350 | |
| 2302 | 5.900 | 1.800 | 1.350 | |
| 2303 | 5.900 | 1.600 | 1.350 | |
| 2304 | 5.900 | 1.400 | 1.350 | |
| 2305 | 5.900 | 1.000 | 1.350 | |
| 2306 | 5.900 | 0.800 | 1.350 | |
| 2307 | 5.900 | 0.400 | 1.350 | |
| 2308 | 5.900 | 0.000 | 1.350 | |
| 2309 | 5.900 | -0.400 | 1.350 | |
| 2310 | 5.900 | -0.800 | 1.350 | |
| 2311 | 5.900 | -1.000 | 1.350 | |
| 2312 | 5.900 | -1.400 | 1.350 | |
| 2313 | 5.900 | -1.600 | 1.350 | |
| 2314 | 5.900 | -1.800 | 1.350 | |
| 2315 | 5.900 | -2.000 | 1.350 | |
| 2401 | 11.200 | 2.000 | 1.350 | |
| 2402 | 11.200 | 1.800 | 1.350 | |
| 2403 | 11.200 | 1.600 | 1.350 | |
| 2404 | 11.200 | 1.400 | 1.350 | |
| 2405 | 11.200 | 1.000 | 1.350 | |
| 2406 | 11.200 | 0.800 | 1.350 | |
| 2407 | 11.200 | 0.400 | 1.350 | |
| 2408 | 11.200 | 0.000 | 1.350 | |
| 2409 | 11.200 | -0.400 | 1.350 | |
| 2410 | 11.200 | -0.800 | 1.350 | |
| 2411 | 11.200 | -1.000 | 1.350 | |
| 2412 | 11.200 | -1.400 | 1.350 | |
| 2413 | 11.200 | -1.600 | 1.350 | |
| 2414 | 11.200 | -1.800 | 1.350 | |
| 2415 | 11.200 | -2.000 | 1.350 | |
| 2501 | 11.800 | 2.000 | 1.350 | |
| 2502 | 11.800 | 1.800 | 1.350 | |
| 2503 | 11.800 | 1.600 | 1.350 | |
| 2504 | 11.800 | 1.400 | 1.350 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

| Number | X[m] | Y[m] | Z[m] | Support Conditions |
|--------|--------|--------|-------|--------------------|
| 2505 | 11.800 | 1.000 | 1.350 | |
| 2506 | 11.800 | 0.800 | 1.350 | |
| 2507 | 11.800 | 0.400 | 1.350 | |
| 2508 | 11.800 | 0.000 | 1.350 | |
| 2509 | 11.800 | -0.400 | 1.350 | |
| 2510 | 11.800 | -0.800 | 1.350 | |
| 2511 | 11.800 | -1.000 | 1.350 | |
| 2512 | 11.800 | -1.400 | 1.350 | |
| 2513 | 11.800 | -1.600 | 1.350 | |
| 2514 | 11.800 | -1.800 | 1.350 | |
| 2515 | 11.800 | -2.000 | 1.350 | |
| 3101 | 0.000 | 2.000 | 1.900 | |
| 3102 | 0.000 | 1.800 | 1.900 | |
| 3103 | 0.000 | 1.600 | 1.900 | |
| 3104 | 0.000 | 1.400 | 1.900 | |
| 3105 | 0.000 | 1.000 | 1.900 | |
| 3106 | 0.000 | 0.800 | 1.900 | |
| 3107 | 0.000 | 0.400 | 1.900 | |
| 3108 | 0.000 | 0.000 | 1.900 | |
| 3109 | 0.000 | -0.400 | 1.900 | |
| 3110 | 0.000 | -0.800 | 1.900 | |
| 3111 | 0.000 | -1.000 | 1.900 | |
| 3112 | 0.000 | -1.400 | 1.900 | |
| 3113 | 0.000 | -1.600 | 1.900 | |
| 3114 | 0.000 | -1.800 | 1.900 | |
| 3115 | 0.000 | -2.000 | 1.900 | |
| 3201 | 0.600 | 2.000 | 1.900 | |
| 3202 | 0.600 | 1.800 | 1.900 | |
| 3203 | 0.600 | 1.600 | 1.900 | |
| 3204 | 0.600 | 1.400 | 1.900 | |
| 3205 | 0.600 | 1.000 | 1.900 | |
| 3206 | 0.600 | 0.800 | 1.900 | |
| 3207 | 0.600 | 0.400 | 1.900 | |
| 3208 | 0.600 | 0.000 | 1.900 | |
| 3209 | 0.600 | -0.400 | 1.900 | |
| 3210 | 0.600 | -0.800 | 1.900 | |
| 3211 | 0.600 | -1.000 | 1.900 | |
| 3212 | 0.600 | -1.400 | 1.900 | |
| 3213 | 0.600 | -1.600 | 1.900 | |
| 3214 | 0.600 | -1.800 | 1.900 | |
| 3215 | 0.600 | -2.000 | 1.900 | |
| 3301 | 5.900 | 2.000 | 1.900 | |
| 3302 | 5.900 | 1.800 | 1.900 | |
| 3303 | 5.900 | 1.600 | 1.900 | |
| 3304 | 5.900 | 1.400 | 1.900 | |
| 3305 | 5.900 | 1.000 | 1.900 | |
| 3306 | 5.900 | 0.800 | 1.900 | |
| 3307 | 5.900 | 0.400 | 1.900 | |
| 3308 | 5.900 | 0.000 | 1.900 | |
| 3309 | 5.900 | -0.400 | 1.900 | |
| 3310 | 5.900 | -0.800 | 1.900 | |
| 3311 | 5.900 | -1.000 | 1.900 | |
| 3312 | 5.900 | -1.400 | 1.900 | |
| 3313 | 5.900 | -1.600 | 1.900 | |
| 3314 | 5.900 | -1.800 | 1.900 | |
| 3315 | 5.900 | -2.000 | 1.900 | |
| 3401 | 11.200 | 2.000 | 1.900 | |
| 3402 | 11.200 | 1.800 | 1.900 | |
| 3403 | 11.200 | 1.600 | 1.900 | |
| 3404 | 11.200 | 1.400 | 1.900 | |
| 3405 | 11.200 | 1.000 | 1.900 | |
| 3406 | 11.200 | 0.800 | 1.900 | |
| 3407 | 11.200 | 0.400 | 1.900 | |
| 3408 | 11.200 | 0.000 | 1.900 | |
| 3409 | 11.200 | -0.400 | 1.900 | |
| 3410 | 11.200 | -0.800 | 1.900 | |
| 3411 | 11.200 | -1.000 | 1.900 | |
| 3412 | 11.200 | -1.400 | 1.900 | |
| 3413 | 11.200 | -1.600 | 1.900 | |
| 3414 | 11.200 | -1.800 | 1.900 | |
| 3415 | 11.200 | -2.000 | 1.900 | |
| 3501 | 11.800 | 2.000 | 1.900 | |
| 3502 | 11.800 | 1.800 | 1.900 | |
| 3503 | 11.800 | 1.600 | 1.900 | |
| 3504 | 11.800 | 1.400 | 1.900 | |
| 3505 | 11.800 | 1.000 | 1.900 | |
| 3506 | 11.800 | 0.800 | 1.900 | |
| 3507 | 11.800 | 0.400 | 1.900 | |
| 3508 | 11.800 | 0.000 | 1.900 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

| Number | X[m] | Y[m] | Z[m] | Support Conditions |
|--------|--------|--------|-------|--------------------|
| 3509 | 11.800 | -0.400 | 1.900 | |
| 3510 | 11.800 | -0.800 | 1.900 | |
| 3511 | 11.800 | -1.000 | 1.900 | |
| 3512 | 11.800 | -1.400 | 1.900 | |
| 3513 | 11.800 | -1.600 | 1.900 | |
| 3514 | 11.800 | -1.800 | 1.900 | |
| 3515 | 11.800 | -2.000 | 1.900 | |
| 4101 | 0.000 | 2.000 | 4.900 | |
| 4102 | 0.000 | 1.800 | 4.900 | |
| 4103 | 0.000 | 1.600 | 4.900 | |
| 4104 | 0.000 | 1.400 | 4.900 | |
| 4105 | 0.000 | 1.000 | 4.900 | |
| 4106 | 0.000 | 0.800 | 4.900 | |
| 4107 | 0.000 | 0.400 | 4.900 | |
| 4108 | 0.000 | 0.000 | 4.900 | |
| 4109 | 0.000 | -0.400 | 4.900 | |
| 4110 | 0.000 | -0.800 | 4.900 | |
| 4111 | 0.000 | -1.000 | 4.900 | |
| 4112 | 0.000 | -1.400 | 4.900 | |
| 4113 | 0.000 | -1.600 | 4.900 | |
| 4114 | 0.000 | -1.800 | 4.900 | |
| 4115 | 0.000 | -2.000 | 4.900 | |
| 4201 | 0.600 | 2.000 | 4.900 | |
| 4202 | 0.600 | 1.800 | 4.900 | |
| 4203 | 0.600 | 1.600 | 4.900 | |
| 4204 | 0.600 | 1.400 | 4.900 | |
| 4205 | 0.600 | 1.000 | 4.900 | |
| 4206 | 0.600 | 0.800 | 4.900 | |
| 4207 | 0.600 | 0.400 | 4.900 | |
| 4208 | 0.600 | 0.000 | 4.900 | |
| 4209 | 0.600 | -0.400 | 4.900 | |
| 4210 | 0.600 | -0.800 | 4.900 | |
| 4211 | 0.600 | -1.000 | 4.900 | |
| 4212 | 0.600 | -1.400 | 4.900 | |
| 4213 | 0.600 | -1.600 | 4.900 | |
| 4214 | 0.600 | -1.800 | 4.900 | |
| 4215 | 0.600 | -2.000 | 4.900 | |
| 4301 | 5.900 | 2.000 | 4.900 | |
| 4302 | 5.900 | 1.800 | 4.900 | |
| 4303 | 5.900 | 1.600 | 4.900 | |
| 4304 | 5.900 | 1.400 | 4.900 | |
| 4305 | 5.900 | 1.000 | 4.900 | |
| 4306 | 5.900 | 0.800 | 4.900 | |
| 4307 | 5.900 | 0.400 | 4.900 | |
| 4308 | 5.900 | 0.000 | 4.900 | |
| 4309 | 5.900 | -0.400 | 4.900 | |
| 4310 | 5.900 | -0.800 | 4.900 | |
| 4311 | 5.900 | -1.000 | 4.900 | |
| 4312 | 5.900 | -1.400 | 4.900 | |
| 4313 | 5.900 | -1.600 | 4.900 | |
| 4314 | 5.900 | -1.800 | 4.900 | |
| 4315 | 5.900 | -2.000 | 4.900 | |
| 4401 | 11.200 | 2.000 | 4.900 | |
| 4402 | 11.200 | 1.800 | 4.900 | |
| 4403 | 11.200 | 1.600 | 4.900 | |
| 4404 | 11.200 | 1.400 | 4.900 | |
| 4405 | 11.200 | 1.000 | 4.900 | |
| 4406 | 11.200 | 0.800 | 4.900 | |
| 4407 | 11.200 | 0.400 | 4.900 | |
| 4408 | 11.200 | 0.000 | 4.900 | |
| 4409 | 11.200 | -0.400 | 4.900 | |
| 4410 | 11.200 | -0.800 | 4.900 | |
| 4411 | 11.200 | -1.000 | 4.900 | |
| 4412 | 11.200 | -1.400 | 4.900 | |
| 4413 | 11.200 | -1.600 | 4.900 | |
| 4414 | 11.200 | -1.800 | 4.900 | |
| 4415 | 11.200 | -2.000 | 4.900 | |
| 4501 | 11.800 | 2.000 | 4.900 | |
| 4502 | 11.800 | 1.800 | 4.900 | |
| 4503 | 11.800 | 1.600 | 4.900 | |
| 4504 | 11.800 | 1.400 | 4.900 | |
| 4505 | 11.800 | 1.000 | 4.900 | |
| 4506 | 11.800 | 0.800 | 4.900 | |
| 4507 | 11.800 | 0.400 | 4.900 | |
| 4508 | 11.800 | 0.000 | 4.900 | |
| 4509 | 11.800 | -0.400 | 4.900 | |
| 4510 | 11.800 | -0.800 | 4.900 | |
| 4511 | 11.800 | -1.000 | 4.900 | |
| 4512 | 11.800 | -1.400 | 4.900 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

| Number | X[m] | Y[m] | Z[m] | Support Conditions |
|--------|--------|--------|--------|--------------------|
| 4513 | 11.800 | -1.600 | 4.900 | |
| 4514 | 11.800 | -1.800 | 4.900 | |
| 4515 | 11.800 | -2.000 | 4.900 | |
| 5101 | 0.000 | 2.000 | 26.900 | |
| 5102 | 0.000 | 1.800 | 26.900 | |
| 5103 | 0.000 | 1.600 | 26.900 | |
| 5104 | 0.000 | 1.400 | 26.900 | |
| 5105 | 0.000 | 1.000 | 26.900 | |
| 5106 | 0.000 | 0.800 | 26.900 | |
| 5107 | 0.000 | 0.400 | 26.900 | |
| 5108 | 0.000 | 0.000 | 26.900 | |
| 5109 | 0.000 | -0.400 | 26.900 | |
| 5110 | 0.000 | -0.800 | 26.900 | |
| 5111 | 0.000 | -1.000 | 26.900 | |
| 5112 | 0.000 | -1.400 | 26.900 | |
| 5113 | 0.000 | -1.600 | 26.900 | |
| 5114 | 0.000 | -1.800 | 26.900 | |
| 5115 | 0.000 | -2.000 | 26.900 | |
| 5201 | 0.600 | 2.000 | 26.900 | |
| 5202 | 0.600 | 1.800 | 26.900 | |
| 5203 | 0.600 | 1.600 | 26.900 | |
| 5204 | 0.600 | 1.400 | 26.900 | |
| 5205 | 0.600 | 1.000 | 26.900 | |
| 5206 | 0.600 | 0.800 | 26.900 | |
| 5207 | 0.600 | 0.400 | 26.900 | |
| 5208 | 0.600 | 0.000 | 26.900 | |
| 5209 | 0.600 | -0.400 | 26.900 | |
| 5210 | 0.600 | -0.800 | 26.900 | |
| 5211 | 0.600 | -1.000 | 26.900 | |
| 5212 | 0.600 | -1.400 | 26.900 | |
| 5213 | 0.600 | -1.600 | 26.900 | |
| 5214 | 0.600 | -1.800 | 26.900 | |
| 5215 | 0.600 | -2.000 | 26.900 | |
| 5301 | 5.900 | 2.000 | 26.900 | |
| 5302 | 5.900 | 1.800 | 26.900 | |
| 5303 | 5.900 | 1.600 | 26.900 | |
| 5304 | 5.900 | 1.400 | 26.900 | |
| 5305 | 5.900 | 1.000 | 26.900 | |
| 5306 | 5.900 | 0.800 | 26.900 | |
| 5307 | 5.900 | 0.400 | 26.900 | |
| 5308 | 5.900 | 0.000 | 26.900 | |
| 5309 | 5.900 | -0.400 | 26.900 | |
| 5310 | 5.900 | -0.800 | 26.900 | |
| 5311 | 5.900 | -1.000 | 26.900 | |
| 5312 | 5.900 | -1.400 | 26.900 | |
| 5313 | 5.900 | -1.600 | 26.900 | |
| 5314 | 5.900 | -1.800 | 26.900 | |
| 5315 | 5.900 | -2.000 | 26.900 | |
| 5401 | 11.200 | 2.000 | 26.900 | |
| 5402 | 11.200 | 1.800 | 26.900 | |
| 5403 | 11.200 | 1.600 | 26.900 | |
| 5404 | 11.200 | 1.400 | 26.900 | |
| 5405 | 11.200 | 1.000 | 26.900 | |
| 5406 | 11.200 | 0.800 | 26.900 | |
| 5407 | 11.200 | 0.400 | 26.900 | |
| 5408 | 11.200 | 0.000 | 26.900 | |
| 5409 | 11.200 | -0.400 | 26.900 | |
| 5410 | 11.200 | -0.800 | 26.900 | |
| 5411 | 11.200 | -1.000 | 26.900 | |
| 5412 | 11.200 | -1.400 | 26.900 | |
| 5413 | 11.200 | -1.600 | 26.900 | |
| 5414 | 11.200 | -1.800 | 26.900 | |
| 5415 | 11.200 | -2.000 | 26.900 | |
| 5501 | 11.800 | 2.000 | 26.900 | |
| 5502 | 11.800 | 1.800 | 26.900 | |
| 5503 | 11.800 | 1.600 | 26.900 | |
| 5504 | 11.800 | 1.400 | 26.900 | |
| 5505 | 11.800 | 1.000 | 26.900 | |
| 5506 | 11.800 | 0.800 | 26.900 | |
| 5507 | 11.800 | 0.400 | 26.900 | |
| 5508 | 11.800 | 0.000 | 26.900 | |
| 5509 | 11.800 | -0.400 | 26.900 | |
| 5510 | 11.800 | -0.800 | 26.900 | |
| 5511 | 11.800 | -1.000 | 26.900 | |
| 5512 | 11.800 | -1.400 | 26.900 | |
| 5513 | 11.800 | -1.600 | 26.900 | |
| 5514 | 11.800 | -1.800 | 26.900 | |
| 5515 | 11.800 | -2.000 | 26.900 | |
| 10001 | 0.300 | 2.000 | 0.000 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

| Number | X[m] | Y[m] | Z[m] | Support Conditions |
|--------|--------|--------|-------|--------------------|
| 10002 | 1.483 | 2.000 | 0.000 | |
| 10003 | 2.367 | 2.000 | 0.000 | |
| 10004 | 3.250 | 2.000 | 0.000 | |
| 10005 | 4.133 | 2.000 | 0.000 | |
| 10006 | 5.017 | 2.000 | 0.000 | |
| 10007 | 6.783 | 2.000 | 0.000 | |
| 10008 | 7.667 | 2.000 | 0.000 | |
| 10009 | 8.550 | 2.000 | 0.000 | |
| 10010 | 9.433 | 2.000 | 0.000 | |
| 10011 | 10.317 | 2.000 | 0.000 | |
| 10012 | 11.500 | 2.000 | 0.000 | |
| 10013 | 0.300 | 1.600 | 0.000 | |
| 10014 | 1.483 | 1.600 | 0.000 | |
| 10015 | 2.367 | 1.600 | 0.000 | |
| 10016 | 3.250 | 1.600 | 0.000 | |
| 10017 | 4.133 | 1.600 | 0.000 | |
| 10018 | 5.017 | 1.600 | 0.000 | |
| 10019 | 6.783 | 1.600 | 0.000 | |
| 10020 | 7.667 | 1.600 | 0.000 | |
| 10021 | 8.550 | 1.600 | 0.000 | |
| 10022 | 9.433 | 1.600 | 0.000 | |
| 10023 | 10.317 | 1.600 | 0.000 | |
| 10024 | 11.500 | 1.600 | 0.000 | |
| 10025 | 0.300 | 0.800 | 0.000 | |
| 10026 | 1.483 | 0.800 | 0.000 | |
| 10027 | 2.367 | 0.800 | 0.000 | |
| 10028 | 3.250 | 0.800 | 0.000 | |
| 10029 | 4.133 | 0.800 | 0.000 | |
| 10030 | 5.017 | 0.800 | 0.000 | |
| 10031 | 6.783 | 0.800 | 0.000 | |
| 10032 | 7.667 | 0.800 | 0.000 | |
| 10033 | 8.550 | 0.800 | 0.000 | |
| 10034 | 9.433 | 0.800 | 0.000 | |
| 10035 | 10.317 | 0.800 | 0.000 | |
| 10036 | 11.500 | 0.800 | 0.000 | |
| 10037 | 0.300 | 0.000 | 0.000 | |
| 10038 | 1.483 | 0.000 | 0.000 | |
| 10039 | 2.367 | 0.000 | 0.000 | |
| 10040 | 3.250 | 0.000 | 0.000 | |
| 10041 | 4.133 | 0.000 | 0.000 | |
| 10042 | 5.017 | 0.000 | 0.000 | |
| 10043 | 6.783 | 0.000 | 0.000 | |
| 10044 | 7.667 | 0.000 | 0.000 | |
| 10045 | 8.550 | 0.000 | 0.000 | |
| 10046 | 9.433 | 0.000 | 0.000 | |
| 10047 | 10.317 | 0.000 | 0.000 | |
| 10048 | 11.500 | 0.000 | 0.000 | |
| 10049 | 0.300 | -0.800 | 0.000 | |
| 10050 | 1.483 | -0.800 | 0.000 | |
| 10051 | 2.367 | -0.800 | 0.000 | |
| 10052 | 3.250 | -0.800 | 0.000 | |
| 10053 | 4.133 | -0.800 | 0.000 | |
| 10054 | 5.017 | -0.800 | 0.000 | |
| 10055 | 6.783 | -0.800 | 0.000 | |
| 10056 | 7.667 | -0.800 | 0.000 | |
| 10057 | 8.550 | -0.800 | 0.000 | |
| 10058 | 9.433 | -0.800 | 0.000 | |
| 10059 | 10.317 | -0.800 | 0.000 | |
| 10060 | 11.500 | -0.800 | 0.000 | |
| 10061 | 0.300 | -1.600 | 0.000 | |
| 10062 | 1.483 | -1.600 | 0.000 | |
| 10063 | 2.367 | -1.600 | 0.000 | |
| 10064 | 3.250 | -1.600 | 0.000 | |
| 10065 | 4.133 | -1.600 | 0.000 | |
| 10066 | 5.017 | -1.600 | 0.000 | |
| 10067 | 6.783 | -1.600 | 0.000 | |
| 10068 | 7.667 | -1.600 | 0.000 | |
| 10069 | 8.550 | -1.600 | 0.000 | |
| 10070 | 9.433 | -1.600 | 0.000 | |
| 10071 | 10.317 | -1.600 | 0.000 | |
| 10072 | 11.500 | -1.600 | 0.000 | |
| 10073 | 0.300 | -2.000 | 0.000 | |
| 10074 | 1.483 | -2.000 | 0.000 | |
| 10075 | 2.367 | -2.000 | 0.000 | |
| 10076 | 3.250 | -2.000 | 0.000 | |
| 10077 | 4.133 | -2.000 | 0.000 | |
| 10078 | 5.017 | -2.000 | 0.000 | |
| 10079 | 6.783 | -2.000 | 0.000 | |
| 10080 | 7.667 | -2.000 | 0.000 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

| Number | X[m] | Y[m] | Z[m] | Support Conditions |
|--------|--------|--------|-------|--------------------|
| 10081 | 8.550 | -2.000 | 0.000 | |
| 10082 | 9.433 | -2.000 | 0.000 | |
| 10083 | 10.317 | -2.000 | 0.000 | |
| 10084 | 11.500 | -2.000 | 0.000 | |
| 10085 | 1.483 | 1.800 | 0.000 | |
| 10086 | 2.367 | 1.800 | 0.000 | |
| 10087 | 3.250 | 1.800 | 0.000 | |
| 10088 | 4.133 | 1.800 | 0.000 | |
| 10089 | 5.017 | 1.800 | 0.000 | |
| 10090 | 1.483 | 1.400 | 0.000 | |
| 10091 | 2.367 | 1.400 | 0.000 | |
| 10092 | 3.250 | 1.400 | 0.000 | |
| 10093 | 4.133 | 1.400 | 0.000 | |
| 10094 | 5.017 | 1.400 | 0.000 | |
| 10095 | 1.483 | 1.000 | 0.000 | |
| 10096 | 2.367 | 1.000 | 0.000 | |
| 10097 | 3.250 | 1.000 | 0.000 | |
| 10098 | 4.133 | 1.000 | 0.000 | |
| 10099 | 5.017 | 1.000 | 0.000 | |
| 10100 | 1.483 | 0.400 | 0.000 | |
| 10101 | 2.367 | 0.400 | 0.000 | |
| 10102 | 3.250 | 0.400 | 0.000 | |
| 10103 | 4.133 | 0.400 | 0.000 | |
| 10104 | 5.017 | 0.400 | 0.000 | |
| 10105 | 1.483 | -0.400 | 0.000 | |
| 10106 | 2.367 | -0.400 | 0.000 | |
| 10107 | 3.250 | -0.400 | 0.000 | |
| 10108 | 4.133 | -0.400 | 0.000 | |
| 10109 | 5.017 | -0.400 | 0.000 | |
| 10110 | 1.483 | -1.000 | 0.000 | |
| 10111 | 2.367 | -1.000 | 0.000 | |
| 10112 | 3.250 | -1.000 | 0.000 | |
| 10113 | 4.133 | -1.000 | 0.000 | |
| 10114 | 5.017 | -1.000 | 0.000 | |
| 10115 | 1.483 | -1.400 | 0.000 | |
| 10116 | 2.367 | -1.400 | 0.000 | |
| 10117 | 3.250 | -1.400 | 0.000 | |
| 10118 | 4.133 | -1.400 | 0.000 | |
| 10119 | 5.017 | -1.400 | 0.000 | |
| 10120 | 1.483 | -1.800 | 0.000 | |
| 10121 | 2.367 | -1.800 | 0.000 | |
| 10122 | 3.250 | -1.800 | 0.000 | |
| 10123 | 4.133 | -1.800 | 0.000 | |
| 10124 | 5.017 | -1.800 | 0.000 | |
| 10125 | 6.783 | 1.800 | 0.000 | |
| 10126 | 7.667 | 1.800 | 0.000 | |
| 10127 | 8.550 | 1.800 | 0.000 | |
| 10128 | 9.433 | 1.800 | 0.000 | |
| 10129 | 10.317 | 1.800 | 0.000 | |
| 10130 | 6.783 | 1.400 | 0.000 | |
| 10131 | 7.667 | 1.400 | 0.000 | |
| 10132 | 8.550 | 1.400 | 0.000 | |
| 10133 | 9.433 | 1.400 | 0.000 | |
| 10134 | 10.317 | 1.400 | 0.000 | |
| 10135 | 6.783 | 1.000 | 0.000 | |
| 10136 | 7.667 | 1.000 | 0.000 | |
| 10137 | 8.550 | 1.000 | 0.000 | |
| 10138 | 9.433 | 1.000 | 0.000 | |
| 10139 | 10.317 | 1.000 | 0.000 | |
| 10140 | 6.783 | 0.400 | 0.000 | |
| 10141 | 7.667 | 0.400 | 0.000 | |
| 10142 | 8.550 | 0.400 | 0.000 | |
| 10143 | 9.433 | 0.400 | 0.000 | |
| 10144 | 10.317 | 0.400 | 0.000 | |
| 10145 | 6.783 | -0.400 | 0.000 | |
| 10146 | 7.667 | -0.400 | 0.000 | |
| 10147 | 8.550 | -0.400 | 0.000 | |
| 10148 | 9.433 | -0.400 | 0.000 | |
| 10149 | 10.317 | -0.400 | 0.000 | |
| 10150 | 6.783 | -1.000 | 0.000 | |
| 10151 | 7.667 | -1.000 | 0.000 | |
| 10152 | 8.550 | -1.000 | 0.000 | |
| 10153 | 9.433 | -1.000 | 0.000 | |
| 10154 | 10.317 | -1.000 | 0.000 | |
| 10155 | 6.783 | -1.400 | 0.000 | |
| 10156 | 7.667 | -1.400 | 0.000 | |
| 10157 | 8.550 | -1.400 | 0.000 | |
| 10158 | 9.433 | -1.400 | 0.000 | |
| 10159 | 10.317 | -1.400 | 0.000 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

| Number | X[m] | Y[m] | Z[m] | Support Conditions |
|--------|--------|--------|-------|--------------------|
| 10160 | 6.783 | -1.800 | 0.000 | |
| 10161 | 7.667 | -1.800 | 0.000 | |
| 10162 | 8.550 | -1.800 | 0.000 | |
| 10163 | 9.433 | -1.800 | 0.000 | |
| 10164 | 10.317 | -1.800 | 0.000 | |
| 10165 | 0.300 | 1.800 | 0.000 | |
| 10166 | 0.300 | 1.400 | 0.000 | |
| 10167 | 0.300 | 1.000 | 0.000 | |
| 10168 | 0.300 | 0.400 | 0.000 | |
| 10169 | 0.300 | -0.400 | 0.000 | |
| 10170 | 0.300 | -1.000 | 0.000 | |
| 10171 | 0.300 | -1.400 | 0.000 | |
| 10172 | 0.300 | -1.800 | 0.000 | |
| 10173 | 11.500 | 1.800 | 0.000 | |
| 10174 | 11.500 | 1.400 | 0.000 | |
| 10175 | 11.500 | 1.000 | 0.000 | |
| 10176 | 11.500 | 0.400 | 0.000 | |
| 10177 | 11.500 | -0.400 | 0.000 | |
| 10178 | 11.500 | -1.000 | 0.000 | |
| 10179 | 11.500 | -1.400 | 0.000 | |
| 10180 | 11.500 | -1.800 | 0.000 | |
| 10181 | 0.000 | 2.000 | 0.400 | |
| 10182 | 0.000 | 1.600 | 0.400 | |
| 10183 | 0.000 | 1.800 | 0.400 | |
| 10184 | 0.000 | 1.333 | 0.800 | |
| 10185 | 0.000 | 1.067 | 0.800 | |
| 10186 | 0.000 | 0.800 | 0.400 | |
| 10187 | 0.000 | 1.367 | 0.400 | |
| 10188 | 0.000 | 1.033 | 0.400 | |
| 10189 | 0.000 | 0.000 | 0.400 | |
| 10190 | 0.000 | 0.400 | 0.400 | |
| 10191 | 0.000 | -0.800 | 0.400 | |
| 10192 | 0.000 | -0.400 | 0.400 | |
| 10193 | 0.000 | -1.067 | 0.800 | |
| 10194 | 0.000 | -1.333 | 0.800 | |
| 10195 | 0.000 | -1.600 | 0.400 | |
| 10196 | 0.000 | -1.033 | 0.400 | |
| 10197 | 0.000 | -1.367 | 0.400 | |
| 10198 | 0.000 | -2.000 | 0.400 | |
| 10199 | 0.000 | -1.800 | 0.400 | |
| 10200 | 11.800 | 2.000 | 0.400 | |
| 10201 | 11.800 | 1.600 | 0.400 | |
| 10202 | 11.800 | 1.800 | 0.400 | |
| 10203 | 11.800 | 0.800 | 0.400 | |
| 10204 | 11.800 | 1.333 | 0.800 | |
| 10205 | 11.800 | 1.067 | 0.800 | |
| 10206 | 11.800 | 1.367 | 0.400 | |
| 10207 | 11.800 | 1.033 | 0.400 | |
| 10208 | 11.800 | 0.000 | 0.400 | |
| 10209 | 11.800 | 0.400 | 0.400 | |
| 10210 | 11.800 | -0.800 | 0.400 | |
| 10211 | 11.800 | -0.400 | 0.400 | |
| 10212 | 11.800 | -1.600 | 0.400 | |
| 10213 | 11.800 | -1.067 | 0.800 | |
| 10214 | 11.800 | -1.333 | 0.800 | |
| 10215 | 11.800 | -1.033 | 0.400 | |
| 10216 | 11.800 | -1.367 | 0.400 | |
| 10217 | 11.800 | -2.000 | 0.400 | |
| 10218 | 11.800 | -1.800 | 0.400 | |
| 10219 | 0.000 | 2.000 | 1.075 | |
| 10220 | 0.000 | 1.600 | 1.075 | |
| 10221 | 0.000 | 1.800 | 1.075 | |
| 10222 | 0.000 | 1.333 | 1.350 | |
| 10223 | 0.000 | 1.067 | 1.350 | |
| 10224 | 0.000 | 0.800 | 1.075 | |
| 10225 | 0.000 | 1.333 | 1.075 | |
| 10226 | 0.000 | 1.067 | 1.075 | |
| 10227 | 0.000 | 0.000 | 1.075 | |
| 10228 | 0.000 | 0.400 | 1.075 | |
| 10229 | 0.000 | -0.800 | 1.075 | |
| 10230 | 0.000 | -0.400 | 1.075 | |
| 10231 | 0.000 | -1.067 | 1.350 | |
| 10232 | 0.000 | -1.333 | 1.350 | |
| 10233 | 0.000 | -1.600 | 1.075 | |
| 10234 | 0.000 | -1.067 | 1.075 | |
| 10235 | 0.000 | -1.333 | 1.075 | |
| 10236 | 0.000 | -2.000 | 1.075 | |
| 10237 | 0.000 | -1.800 | 1.075 | |
| 10238 | 11.800 | 2.000 | 1.075 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

| Number | X[m] | Y[m] | Z[m] | Support Conditions |
|--------|--------|--------|--------|--------------------|
| 10239 | 11.800 | 1.600 | 1.075 | |
| 10240 | 11.800 | 1.800 | 1.075 | |
| 10241 | 11.800 | 0.800 | 1.075 | |
| 10242 | 11.800 | 1.333 | 1.350 | |
| 10243 | 11.800 | 1.067 | 1.350 | |
| 10244 | 11.800 | 1.333 | 1.075 | |
| 10245 | 11.800 | 1.067 | 1.075 | |
| 10246 | 11.800 | 0.000 | 1.075 | |
| 10247 | 11.800 | 0.400 | 1.075 | |
| 10248 | 11.800 | -0.800 | 1.075 | |
| 10249 | 11.800 | -0.400 | 1.075 | |
| 10250 | 11.800 | -1.600 | 1.075 | |
| 10251 | 11.800 | -1.067 | 1.350 | |
| 10252 | 11.800 | -1.333 | 1.350 | |
| 10253 | 11.800 | -1.067 | 1.075 | |
| 10254 | 11.800 | -1.333 | 1.075 | |
| 10255 | 11.800 | -2.000 | 1.075 | |
| 10256 | 11.800 | -1.800 | 1.075 | |
| 10257 | 0.000 | 1.400 | 2.900 | |
| 10258 | 0.000 | 1.400 | 3.900 | |
| 10259 | 0.000 | 0.000 | 2.900 | |
| 10260 | 0.000 | 0.000 | 3.900 | |
| 10261 | 0.000 | -1.400 | 2.900 | |
| 10262 | 0.000 | -1.400 | 3.900 | |
| 10263 | 11.800 | 1.400 | 2.900 | |
| 10264 | 11.800 | 1.400 | 3.900 | |
| 10265 | 11.800 | 0.000 | 2.900 | |
| 10266 | 11.800 | 0.000 | 3.900 | |
| 10267 | 11.800 | -1.400 | 2.900 | |
| 10268 | 11.800 | -1.400 | 3.900 | |
| 10269 | 0.000 | 1.400 | 5.900 | |
| 10270 | 0.000 | 1.400 | 6.900 | |
| 10271 | 0.000 | 1.400 | 7.900 | |
| 10272 | 0.000 | 1.400 | 8.900 | |
| 10273 | 0.000 | 1.400 | 9.900 | |
| 10274 | 0.000 | 1.400 | 10.900 | |
| 10275 | 0.000 | 1.400 | 11.900 | |
| 10276 | 0.000 | 1.400 | 12.900 | |
| 10277 | 0.000 | 1.400 | 13.900 | |
| 10278 | 0.000 | 1.400 | 14.900 | |
| 10279 | 0.000 | 1.400 | 15.900 | |
| 10280 | 0.000 | 1.400 | 16.900 | |
| 10281 | 0.000 | 1.400 | 17.900 | |
| 10282 | 0.000 | 1.400 | 18.900 | |
| 10283 | 0.000 | 1.400 | 19.900 | |
| 10284 | 0.000 | 1.400 | 20.900 | |
| 10285 | 0.000 | 1.400 | 21.900 | |
| 10286 | 0.000 | 1.400 | 22.900 | |
| 10287 | 0.000 | 1.400 | 23.900 | |
| 10288 | 0.000 | 1.400 | 24.900 | |
| 10289 | 0.000 | 1.400 | 25.900 | |
| 10290 | 0.000 | 0.000 | 5.900 | |
| 10291 | 0.000 | 0.000 | 6.900 | |
| 10292 | 0.000 | 0.000 | 7.900 | |
| 10293 | 0.000 | 0.000 | 8.900 | |
| 10294 | 0.000 | 0.000 | 9.900 | |
| 10295 | 0.000 | 0.000 | 10.900 | |
| 10296 | 0.000 | 0.000 | 11.900 | |
| 10297 | 0.000 | 0.000 | 12.900 | |
| 10298 | 0.000 | 0.000 | 13.900 | |
| 10299 | 0.000 | 0.000 | 14.900 | |
| 10300 | 0.000 | 0.000 | 15.900 | |
| 10301 | 0.000 | 0.000 | 16.900 | |
| 10302 | 0.000 | 0.000 | 17.900 | |
| 10303 | 0.000 | 0.000 | 18.900 | |
| 10304 | 0.000 | 0.000 | 19.900 | |
| 10305 | 0.000 | 0.000 | 20.900 | |
| 10306 | 0.000 | 0.000 | 21.900 | |
| 10307 | 0.000 | 0.000 | 22.900 | |
| 10308 | 0.000 | 0.000 | 23.900 | |
| 10309 | 0.000 | 0.000 | 24.900 | |
| 10310 | 0.000 | 0.000 | 25.900 | |
| 10311 | 0.000 | -1.400 | 5.900 | |
| 10312 | 0.000 | -1.400 | 6.900 | |
| 10313 | 0.000 | -1.400 | 7.900 | |
| 10314 | 0.000 | -1.400 | 8.900 | |
| 10315 | 0.000 | -1.400 | 9.900 | |
| 10316 | 0.000 | -1.400 | 10.900 | |
| 10317 | 0.000 | -1.400 | 11.900 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

| Number | X[m] | Y[m] | Z[m] | Support Conditions |
|--------|--------|--------|--------|--------------------|
| 10318 | 0.000 | -1.400 | 12.900 | |
| 10319 | 0.000 | -1.400 | 13.900 | |
| 10320 | 0.000 | -1.400 | 14.900 | |
| 10321 | 0.000 | -1.400 | 15.900 | |
| 10322 | 0.000 | -1.400 | 16.900 | |
| 10323 | 0.000 | -1.400 | 17.900 | |
| 10324 | 0.000 | -1.400 | 18.900 | |
| 10325 | 0.000 | -1.400 | 19.900 | |
| 10326 | 0.000 | -1.400 | 20.900 | |
| 10327 | 0.000 | -1.400 | 21.900 | |
| 10328 | 0.000 | -1.400 | 22.900 | |
| 10329 | 0.000 | -1.400 | 23.900 | |
| 10330 | 0.000 | -1.400 | 24.900 | |
| 10331 | 0.000 | -1.400 | 25.900 | |
| 10332 | 11.800 | 1.400 | 5.900 | |
| 10333 | 11.800 | 1.400 | 6.900 | |
| 10334 | 11.800 | 1.400 | 7.900 | |
| 10335 | 11.800 | 1.400 | 8.900 | |
| 10336 | 11.800 | 1.400 | 9.900 | |
| 10337 | 11.800 | 1.400 | 10.900 | |
| 10338 | 11.800 | 1.400 | 11.900 | |
| 10339 | 11.800 | 1.400 | 12.900 | |
| 10340 | 11.800 | 1.400 | 13.900 | |
| 10341 | 11.800 | 1.400 | 14.900 | |
| 10342 | 11.800 | 1.400 | 15.900 | |
| 10343 | 11.800 | 1.400 | 16.900 | |
| 10344 | 11.800 | 1.400 | 17.900 | |
| 10345 | 11.800 | 1.400 | 18.900 | |
| 10346 | 11.800 | 1.400 | 19.900 | |
| 10347 | 11.800 | 1.400 | 20.900 | |
| 10348 | 11.800 | 1.400 | 21.900 | |
| 10349 | 11.800 | 1.400 | 22.900 | |
| 10350 | 11.800 | 1.400 | 23.900 | |
| 10351 | 11.800 | 1.400 | 24.900 | |
| 10352 | 11.800 | 1.400 | 25.900 | |
| 10353 | 11.800 | 0.000 | 5.900 | |
| 10354 | 11.800 | 0.000 | 6.900 | |
| 10355 | 11.800 | 0.000 | 7.900 | |
| 10356 | 11.800 | 0.000 | 8.900 | |
| 10357 | 11.800 | 0.000 | 9.900 | |
| 10358 | 11.800 | 0.000 | 10.900 | |
| 10359 | 11.800 | 0.000 | 11.900 | |
| 10360 | 11.800 | 0.000 | 12.900 | |
| 10361 | 11.800 | 0.000 | 13.900 | |
| 10362 | 11.800 | 0.000 | 14.900 | |
| 10363 | 11.800 | 0.000 | 15.900 | |
| 10364 | 11.800 | 0.000 | 16.900 | |
| 10365 | 11.800 | 0.000 | 17.900 | |
| 10366 | 11.800 | 0.000 | 18.900 | |
| 10367 | 11.800 | 0.000 | 19.900 | |
| 10368 | 11.800 | 0.000 | 20.900 | |
| 10369 | 11.800 | 0.000 | 21.900 | |
| 10370 | 11.800 | 0.000 | 22.900 | |
| 10371 | 11.800 | 0.000 | 23.900 | |
| 10372 | 11.800 | 0.000 | 24.900 | |
| 10373 | 11.800 | 0.000 | 25.900 | |
| 10374 | 11.800 | -1.400 | 5.900 | |
| 10375 | 11.800 | -1.400 | 6.900 | |
| 10376 | 11.800 | -1.400 | 7.900 | |
| 10377 | 11.800 | -1.400 | 8.900 | |
| 10378 | 11.800 | -1.400 | 9.900 | |
| 10379 | 11.800 | -1.400 | 10.900 | |
| 10380 | 11.800 | -1.400 | 11.900 | |
| 10381 | 11.800 | -1.400 | 12.900 | |
| 10382 | 11.800 | -1.400 | 13.900 | |
| 10383 | 11.800 | -1.400 | 14.900 | |
| 10384 | 11.800 | -1.400 | 15.900 | |
| 10385 | 11.800 | -1.400 | 16.900 | |
| 10386 | 11.800 | -1.400 | 17.900 | |
| 10387 | 11.800 | -1.400 | 18.900 | |
| 10388 | 11.800 | -1.400 | 19.900 | |
| 10389 | 11.800 | -1.400 | 20.900 | |
| 10390 | 11.800 | -1.400 | 21.900 | |
| 10391 | 11.800 | -1.400 | 22.900 | |
| 10392 | 11.800 | -1.400 | 23.900 | |
| 10393 | 11.800 | -1.400 | 24.900 | |
| 10394 | 11.800 | -1.400 | 25.900 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

| Number | X[m] | Y[m] | Z[m] | Support Conditions |
|--------|--------|--------|--------|--------------------|
| MIN | 0.000 | -2.000 | 0.000 | |
| MAX | 11.800 | 2.000 | 26.900 | |

Flat Elements

| Grp | Number | Node | Node | Node | Node | MNo | t[m]C[kNsec/m2] | direction | local | x |
|-----|--------|-------|-------|-------|-------|-----|-----------------|-----------|-------|-------|
| 3 | 3001 | 201 | 10002 | 10085 | 202 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3002 | 10002 | 10003 | 10086 | 10085 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3003 | 10003 | 10004 | 10087 | 10086 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3004 | 10004 | 10005 | 10088 | 10087 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3005 | 10005 | 10006 | 10089 | 10088 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3006 | 10006 | 301 | 302 | 10089 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3007 | 202 | 10085 | 10014 | 203 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3008 | 10085 | 10086 | 10015 | 10014 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3009 | 10086 | 10087 | 10016 | 10015 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3010 | 10087 | 10088 | 10017 | 10016 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3011 | 10088 | 10089 | 10018 | 10017 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3012 | 10089 | 302 | 303 | 10018 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3013 | 203 | 10014 | 10090 | 204 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3014 | 10014 | 10015 | 10091 | 10090 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3015 | 10015 | 10016 | 10092 | 10091 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3016 | 10016 | 10017 | 10093 | 10092 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3017 | 10017 | 10018 | 10094 | 10093 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3018 | 10018 | 303 | 304 | 10094 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3019 | 204 | 10090 | 10095 | 205 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3020 | 10090 | 10091 | 10096 | 10095 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3021 | 10091 | 10092 | 10097 | 10096 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3022 | 10092 | 10093 | 10098 | 10097 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3023 | 10093 | 10094 | 10099 | 10098 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3024 | 10094 | 304 | 305 | 10099 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3025 | 205 | 10095 | 10026 | 206 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3026 | 10095 | 10096 | 10027 | 10026 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3027 | 10096 | 10097 | 10028 | 10027 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3028 | 10097 | 10098 | 10029 | 10028 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3029 | 10098 | 10099 | 10030 | 10029 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3030 | 10099 | 305 | 306 | 10030 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3031 | 206 | 10026 | 10100 | 207 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3032 | 10026 | 10027 | 10101 | 10100 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3033 | 10027 | 10028 | 10102 | 10101 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3034 | 10028 | 10029 | 10103 | 10102 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3035 | 10029 | 10030 | 10104 | 10103 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3036 | 10030 | 306 | 307 | 10104 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3037 | 207 | 10100 | 10038 | 208 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3038 | 10100 | 10101 | 10039 | 10038 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3039 | 10101 | 10102 | 10040 | 10039 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3040 | 10102 | 10103 | 10041 | 10040 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3041 | 10103 | 10104 | 10042 | 10041 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3042 | 10104 | 307 | 308 | 10042 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3043 | 208 | 10038 | 10105 | 209 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3044 | 10038 | 10039 | 10106 | 10105 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3045 | 10039 | 10040 | 10107 | 10106 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3046 | 10040 | 10041 | 10108 | 10107 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3047 | 10041 | 10042 | 10109 | 10108 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3048 | 10042 | 308 | 309 | 10109 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3049 | 209 | 10105 | 10050 | 210 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3050 | 10105 | 10106 | 10051 | 10050 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3051 | 10106 | 10107 | 10052 | 10051 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3052 | 10107 | 10108 | 10053 | 10052 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3053 | 10108 | 10109 | 10054 | 10053 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3054 | 10109 | 309 | 310 | 10054 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3055 | 210 | 10050 | 10110 | 211 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3056 | 10050 | 10051 | 10111 | 10110 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3057 | 10051 | 10052 | 10112 | 10111 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3058 | 10052 | 10053 | 10113 | 10112 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3059 | 10053 | 10054 | 10114 | 10113 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3060 | 10054 | 310 | 311 | 10114 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3061 | 211 | 10110 | 10115 | 212 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3062 | 10110 | 10111 | 10116 | 10115 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3063 | 10111 | 10112 | 10117 | 10116 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3064 | 10112 | 10113 | 10118 | 10117 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3065 | 10113 | 10114 | 10119 | 10118 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3066 | 10114 | 311 | 312 | 10119 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3067 | 212 | 10115 | 10062 | 213 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3068 | 10115 | 10116 | 10063 | 10062 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3069 | 10116 | 10117 | 10064 | 10063 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3070 | 10117 | 10118 | 10065 | 10064 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3071 | 10118 | 10119 | 10066 | 10065 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3072 | 10119 | 312 | 313 | 10066 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |
| 3 | 3073 | 213 | 10062 | 10120 | 214 | 5 | 0.250- | 1.000 | 0.000 | 0.000 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Flat Elements

| Grp | Number | Node | Node | Node | Node | MNO | t[m] | C[knsec/m2] | direction | local | x |
|-----|--------|-------|-------|-------|-------|-----|--------|-------------|-----------|-------|-------|
| 3 | 3074 | 10062 | 10063 | 10121 | 10120 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3075 | 10063 | 10064 | 10122 | 10121 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3076 | 10064 | 10065 | 10123 | 10122 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3077 | 10065 | 10066 | 10124 | 10123 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3078 | 10066 | 313 | 314 | 10124 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3079 | 214 | 10120 | 10074 | 215 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3080 | 10120 | 10121 | 10075 | 10074 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3081 | 10121 | 10122 | 10076 | 10075 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3082 | 10122 | 10123 | 10077 | 10076 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3083 | 10123 | 10124 | 10078 | 10077 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3084 | 10124 | 314 | 315 | 10078 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3085 | 301 | 10007 | 10125 | 302 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3086 | 10007 | 10008 | 10126 | 10125 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3087 | 10008 | 10009 | 10127 | 10126 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3088 | 10009 | 10010 | 10128 | 10127 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3089 | 10010 | 10011 | 10129 | 10128 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3090 | 10011 | 401 | 402 | 10129 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3091 | 302 | 10125 | 10019 | 303 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3092 | 10125 | 10126 | 10020 | 10019 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3093 | 10126 | 10127 | 10021 | 10020 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3094 | 10127 | 10128 | 10022 | 10021 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3095 | 10128 | 10129 | 10023 | 10022 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3096 | 10129 | 402 | 403 | 10023 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3097 | 303 | 10019 | 10130 | 304 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3098 | 10019 | 10020 | 10131 | 10130 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3099 | 10020 | 10021 | 10132 | 10131 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3100 | 10021 | 10022 | 10133 | 10132 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3101 | 10022 | 10023 | 10134 | 10133 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3102 | 10023 | 403 | 404 | 10134 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3103 | 304 | 10130 | 10135 | 305 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3104 | 10130 | 10131 | 10136 | 10135 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3105 | 10131 | 10132 | 10137 | 10136 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3106 | 10132 | 10133 | 10138 | 10137 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3107 | 10133 | 10134 | 10139 | 10138 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3108 | 10134 | 404 | 405 | 10139 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3109 | 305 | 10135 | 10031 | 306 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3110 | 10135 | 10136 | 10032 | 10031 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3111 | 10136 | 10137 | 10033 | 10032 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3112 | 10137 | 10138 | 10034 | 10033 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3113 | 10138 | 10139 | 10035 | 10034 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3114 | 10139 | 405 | 406 | 10035 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3115 | 306 | 10031 | 10140 | 307 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3116 | 10031 | 10032 | 10141 | 10140 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3117 | 10032 | 10033 | 10142 | 10141 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3118 | 10033 | 10034 | 10143 | 10142 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3119 | 10034 | 10035 | 10144 | 10143 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3120 | 10035 | 406 | 407 | 10144 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3121 | 307 | 10140 | 10043 | 308 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3122 | 10140 | 10141 | 10044 | 10043 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3123 | 10141 | 10142 | 10045 | 10044 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3124 | 10142 | 10143 | 10046 | 10045 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3125 | 10143 | 10144 | 10047 | 10046 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3126 | 10144 | 407 | 408 | 10047 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3127 | 308 | 10043 | 10145 | 309 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3128 | 10043 | 10044 | 10146 | 10145 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3129 | 10044 | 10045 | 10147 | 10146 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3130 | 10045 | 10046 | 10148 | 10147 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3131 | 10046 | 10047 | 10149 | 10148 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3132 | 10047 | 408 | 409 | 10149 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3133 | 309 | 10145 | 10055 | 310 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3134 | 10145 | 10146 | 10056 | 10055 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3135 | 10146 | 10147 | 10057 | 10056 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3136 | 10147 | 10148 | 10058 | 10057 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3137 | 10148 | 10149 | 10059 | 10058 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3138 | 10149 | 409 | 410 | 10059 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3139 | 310 | 10055 | 10150 | 311 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3140 | 10055 | 10056 | 10151 | 10150 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3141 | 10056 | 10057 | 10152 | 10151 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3142 | 10057 | 10058 | 10153 | 10152 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3143 | 10058 | 10059 | 10154 | 10153 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3144 | 10059 | 410 | 411 | 10154 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3145 | 311 | 10150 | 10155 | 312 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3146 | 10150 | 10151 | 10156 | 10155 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3147 | 10151 | 10152 | 10157 | 10156 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3148 | 10152 | 10153 | 10158 | 10157 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3149 | 10153 | 10154 | 10159 | 10158 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3150 | 10154 | 411 | 412 | 10159 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3151 | 312 | 10155 | 10067 | 313 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3152 | 10155 | 10156 | 10068 | 10067 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Flat Elements

| Grp | Number | Node | Node | Node | Node | MNO | t[m] | C[knsec/m2] | direction | local | x |
|-----|--------|-------|-------|-------|-------|-----|--------|-------------|-----------|-------|-------|
| 3 | 3153 | 10156 | 10157 | 10069 | 10068 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3154 | 10157 | 10158 | 10070 | 10069 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3155 | 10158 | 10159 | 10071 | 10070 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3156 | 10159 | 412 | 413 | 10071 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3157 | 313 | 10067 | 10160 | 314 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3158 | 10067 | 10068 | 10161 | 10160 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3159 | 10068 | 10069 | 10162 | 10161 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3160 | 10069 | 10070 | 10163 | 10162 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3161 | 10070 | 10071 | 10164 | 10163 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3162 | 10071 | 413 | 414 | 10164 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3163 | 314 | 10160 | 10079 | 315 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3164 | 10160 | 10161 | 10080 | 10079 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3165 | 10161 | 10162 | 10081 | 10080 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3166 | 10162 | 10163 | 10082 | 10081 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3167 | 10163 | 10164 | 10083 | 10082 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 3 | 3168 | 10164 | 414 | 415 | 10083 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4001 | 101 | 10001 | 10165 | 102 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4002 | 10001 | 201 | 202 | 10165 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4003 | 102 | 10165 | 10013 | 103 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4004 | 10165 | 202 | 203 | 10013 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4005 | 103 | 10013 | 10166 | 104 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4006 | 10013 | 203 | 204 | 10166 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4007 | 104 | 10166 | 10167 | 105 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4008 | 10166 | 204 | 205 | 10167 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4009 | 105 | 10167 | 10025 | 106 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4010 | 10167 | 205 | 206 | 10025 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4011 | 106 | 10025 | 10168 | 107 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4012 | 10025 | 206 | 207 | 10168 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4013 | 107 | 10168 | 10037 | 108 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4014 | 10168 | 207 | 208 | 10037 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4015 | 108 | 10037 | 10169 | 109 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4016 | 10037 | 208 | 209 | 10169 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4017 | 109 | 10169 | 10049 | 110 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4018 | 10169 | 209 | 210 | 10049 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4019 | 110 | 10049 | 10170 | 111 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4020 | 10049 | 210 | 211 | 10170 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4021 | 111 | 10170 | 10171 | 112 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4022 | 10170 | 211 | 212 | 10171 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4023 | 112 | 10171 | 10061 | 113 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4024 | 10171 | 212 | 213 | 10061 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4025 | 113 | 10061 | 10172 | 114 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4026 | 10061 | 213 | 214 | 10172 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4027 | 114 | 10172 | 10073 | 115 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4028 | 10172 | 214 | 215 | 10073 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4029 | 401 | 10012 | 10173 | 402 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4030 | 10012 | 501 | 502 | 10173 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4031 | 402 | 10173 | 10024 | 403 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4032 | 10173 | 502 | 503 | 10024 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4033 | 403 | 10024 | 10174 | 404 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4034 | 10024 | 503 | 504 | 10174 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4035 | 404 | 10174 | 10175 | 405 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4036 | 10174 | 504 | 505 | 10175 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4037 | 405 | 10175 | 10036 | 406 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4038 | 10175 | 505 | 506 | 10036 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4039 | 406 | 10036 | 10176 | 407 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4040 | 10036 | 506 | 507 | 10176 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4041 | 407 | 10176 | 10048 | 408 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4042 | 10176 | 507 | 508 | 10048 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4043 | 408 | 10048 | 10177 | 409 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4044 | 10048 | 508 | 509 | 10177 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4045 | 409 | 10177 | 10060 | 410 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4046 | 10177 | 509 | 510 | 10060 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4047 | 410 | 10060 | 10178 | 411 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4048 | 10060 | 510 | 511 | 10178 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4049 | 411 | 10178 | 10179 | 412 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4050 | 10178 | 511 | 512 | 10179 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4051 | 412 | 10179 | 10072 | 413 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4052 | 10179 | 512 | 513 | 10072 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4053 | 413 | 10072 | 10180 | 414 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4054 | 10072 | 513 | 514 | 10180 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4055 | 414 | 10180 | 10084 | 415 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 4 | 4056 | 10180 | 514 | 515 | 10084 | 5 | 0.250- | | 1.000 | 0.000 | 0.000 |
| 8 | 8001 | 101 | 10181 | 10183 | 102 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8002 | 10181 | 1101 | 1102 | 10183 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8003 | 102 | 10183 | 10182 | 103 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8004 | 10183 | 1102 | 1103 | 10182 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8005 | 103 | 10182 | 10187 | 104 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8006 | 10182 | 1103 | 10184 | 10187 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8007 | 104 | 10187 | 10188 | 105 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Flat Elements

| Grp | Number | Node | Node | Node | Node | MNO | t[m] | C[knsec/m2] | direction | local | x |
|-----|--------|-------|-------|-------|-------|-----|-------|-------------|-----------|-------|-------|
| 8 | 8008 | 10187 | 10184 | 10185 | 10188 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8009 | 105 | 10188 | 10186 | 106 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8010 | 10188 | 10185 | 1106 | 10186 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8011 | 106 | 10186 | 10190 | 107 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8012 | 10186 | 1106 | 1107 | 10190 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8013 | 107 | 10190 | 10189 | 108 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8014 | 10190 | 1107 | 1108 | 10189 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8015 | 108 | 10189 | 10192 | 109 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8016 | 10189 | 1108 | 1109 | 10192 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8017 | 109 | 10192 | 10191 | 110 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8018 | 10192 | 1109 | 1110 | 10191 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8019 | 110 | 10191 | 10196 | 111 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8020 | 10191 | 1110 | 10193 | 10196 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8021 | 111 | 10196 | 10197 | 112 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8022 | 10196 | 10193 | 10194 | 10197 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8023 | 112 | 10197 | 10195 | 113 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8024 | 10197 | 10194 | 1113 | 10195 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8025 | 113 | 10195 | 10199 | 114 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8026 | 10195 | 1113 | 1114 | 10199 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8027 | 114 | 10199 | 10198 | 115 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8028 | 10199 | 1114 | 1115 | 10198 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8029 | 501 | 502 | 10202 | 10200 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8030 | 502 | 503 | 10201 | 10202 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8031 | 10200 | 10202 | 1502 | 1501 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8032 | 10202 | 10201 | 1503 | 1502 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8033 | 503 | 504 | 10206 | 10201 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8034 | 504 | 505 | 10207 | 10206 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8035 | 505 | 506 | 10203 | 10207 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8036 | 10201 | 10206 | 10204 | 1503 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8037 | 10206 | 10207 | 10205 | 10204 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8038 | 10207 | 10203 | 1506 | 10205 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8039 | 506 | 507 | 10209 | 10203 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8040 | 507 | 508 | 10208 | 10209 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8041 | 10203 | 10209 | 1507 | 1506 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8042 | 10209 | 10208 | 1508 | 1507 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8043 | 508 | 509 | 10211 | 10208 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8044 | 509 | 510 | 10210 | 10211 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8045 | 10208 | 10211 | 1509 | 1508 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8046 | 10211 | 10210 | 1510 | 1509 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8047 | 510 | 511 | 10215 | 10210 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8048 | 511 | 512 | 10216 | 10215 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8049 | 512 | 513 | 10212 | 10216 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8050 | 10210 | 10215 | 10213 | 1510 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8051 | 10215 | 10216 | 10214 | 10213 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8052 | 10216 | 10212 | 1513 | 10214 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8053 | 513 | 514 | 10218 | 10212 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8054 | 514 | 515 | 10217 | 10218 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8055 | 10212 | 10218 | 1514 | 1513 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 8 | 8056 | 10218 | 10217 | 1515 | 1514 | 6 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9001 | 1101 | 10219 | 10221 | 1102 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9002 | 10219 | 2101 | 2102 | 10221 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9003 | 1102 | 10221 | 10220 | 1103 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9004 | 10221 | 2102 | 2103 | 10220 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9005 | 1103 | 10220 | 10225 | 10184 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9006 | 10220 | 2103 | 10222 | 10225 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9007 | 10184 | 10225 | 10226 | 10185 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9008 | 10225 | 10222 | 10223 | 10226 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9009 | 10185 | 10226 | 10224 | 1106 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9010 | 10226 | 10223 | 2106 | 10224 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9011 | 1106 | 10224 | 10228 | 1107 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9012 | 10224 | 2106 | 2107 | 10228 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9013 | 1107 | 10228 | 10227 | 1108 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9014 | 10228 | 2107 | 2108 | 10227 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9015 | 1108 | 10227 | 10230 | 1109 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9016 | 10227 | 2108 | 2109 | 10230 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9017 | 1109 | 10230 | 10229 | 1110 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9018 | 10230 | 2109 | 2110 | 10229 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9019 | 1110 | 10229 | 10234 | 10193 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9020 | 10229 | 2110 | 10231 | 10234 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9021 | 10193 | 10234 | 10235 | 10194 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9022 | 10234 | 10231 | 10232 | 10235 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9023 | 10194 | 10235 | 10233 | 1113 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9024 | 10235 | 10232 | 2113 | 10233 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9025 | 1113 | 10233 | 10237 | 1114 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9026 | 10233 | 2113 | 2114 | 10237 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9027 | 1114 | 10237 | 10236 | 1115 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9028 | 10237 | 2114 | 2115 | 10236 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9029 | 1501 | 1502 | 10240 | 10238 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9030 | 1502 | 1503 | 10239 | 10240 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Flat Elements

| Grp | Number | Node | Node | Node | Node | MNO | t[m] | C[kNsec/m2] | direction | local | x |
|-----|--------|-------|-------|-------|-------|-----|-------|-------------|-----------|--------|-------|
| 9 | 9031 | 10238 | 10240 | 2502 | 2501 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9032 | 10240 | 10239 | 2503 | 2502 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9033 | 1503 | 10204 | 10244 | 10239 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9034 | 10204 | 10205 | 10245 | 10244 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9035 | 10205 | 1506 | 10241 | 10245 | 10 | 1.200 | | 0.000 | -1.000 | 0.000 |
| 9 | 9036 | 10239 | 10244 | 10242 | 2503 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9037 | 10244 | 10245 | 10243 | 10242 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9038 | 10245 | 10241 | 2506 | 10243 | 10 | 1.200 | | 0.000 | -1.000 | 0.000 |
| 9 | 9039 | 1506 | 1507 | 10247 | 10241 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9040 | 1507 | 1508 | 10246 | 10247 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9041 | 10241 | 10247 | 2507 | 2506 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9042 | 10247 | 10246 | 2508 | 2507 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9043 | 1508 | 1509 | 10249 | 10246 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9044 | 1509 | 1510 | 10248 | 10249 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9045 | 10246 | 10249 | 2509 | 2508 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9046 | 10249 | 10248 | 2510 | 2509 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9047 | 1510 | 10213 | 10253 | 10248 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9048 | 10213 | 10214 | 10254 | 10253 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9049 | 10214 | 1513 | 10250 | 10254 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9050 | 10248 | 10253 | 10251 | 2510 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9051 | 10253 | 10254 | 10252 | 10251 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9052 | 10254 | 10250 | 2513 | 10252 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9053 | 1513 | 1514 | 10256 | 10250 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9054 | 1514 | 1515 | 10255 | 10256 | 10 | 1.200 | | 0.000 | -1.000 | 0.000 |
| 9 | 9055 | 10250 | 10256 | 2514 | 2513 | 10 | 1.200 | | 0.000 | 1.000 | 0.000 |
| 9 | 9056 | 10256 | 10255 | 2515 | 2514 | 10 | 1.200 | | 0.000 | -1.000 | 0.000 |

+ after t :Potential with free surface

Beam Elements

| Grp | Number | Node | x[m] | NoS | NoP | reference | Hinges | direction | local | y-axis |
|-----|--------|-------|-------|-----|-----|-----------|----------|-----------|-------|--------|
| 1 | 1001 | 203 | 0.000 | 1 | 0-0 | 0.000 | MyMz | 0.000 | 1.000 | 0.000 |
| | | 10014 | 0.883 | 1 | | 0.883 | | | | |
| 1 | 1002 | 10014 | 0.000 | 1 | 0-0 | 0.883 | | 0.000 | 1.000 | 0.000 |
| | | 10015 | 0.883 | 1 | | 1.767 | | | | |
| 1 | 1003 | 10015 | 0.000 | 1 | 0-0 | 1.767 | | 0.000 | 1.000 | 0.000 |
| | | 10016 | 0.883 | 1 | | 2.650 | | | | |
| 1 | 1004 | 10016 | 0.000 | 1 | 0-0 | 2.650 | | 0.000 | 1.000 | 0.000 |
| | | 10017 | 0.883 | 1 | | 3.533 | | | | |
| 1 | 1005 | 10017 | 0.000 | 1 | 0-0 | 3.533 | | 0.000 | 1.000 | 0.000 |
| | | 10018 | 0.883 | 1 | | 4.417 | | | | |
| 1 | 1006 | 10018 | 0.000 | 1 | 0-0 | 4.417 | | 0.000 | 1.000 | 0.000 |
| | | 303 | 0.883 | 1 | | 5.300 | | | | |
| 1 | 1007 | 303 | 0.000 | 1 | 0-0 | 5.300 | | 0.000 | 1.000 | 0.000 |
| | | 10019 | 0.883 | 1 | | 6.183 | | | | |
| 1 | 1008 | 10019 | 0.000 | 1 | 0-0 | 6.183 | | 0.000 | 1.000 | 0.000 |
| | | 10020 | 0.883 | 1 | | 7.067 | | | | |
| 1 | 1009 | 10020 | 0.000 | 1 | 0-0 | 7.067 | | 0.000 | 1.000 | 0.000 |
| | | 10021 | 0.883 | 1 | | 7.950 | | | | |
| 1 | 1010 | 10021 | 0.000 | 1 | 0-0 | 7.950 | | 0.000 | 1.000 | 0.000 |
| | | 10022 | 0.883 | 1 | | 8.833 | | | | |
| 1 | 1011 | 10022 | 0.000 | 1 | 0-0 | 8.833 | | 0.000 | 1.000 | 0.000 |
| | | 10023 | 0.883 | 1 | | 9.717 | | | | |
| 1 | 1012 | 10023 | 0.000 | 1 | 0-0 | 9.717 | | 0.000 | 1.000 | 0.000 |
| | | 403 | 0.883 | 1 | | 10.600 | N MtMyMz | | | |
| 1 | 1013 | 206 | 0.000 | 1 | 0-0 | 0.000 | MyMz | 0.000 | 1.000 | 0.000 |
| | | 10026 | 0.883 | 1 | | 0.883 | | | | |
| 1 | 1014 | 10026 | 0.000 | 1 | 0-0 | 0.883 | | 0.000 | 1.000 | 0.000 |
| | | 10027 | 0.883 | 1 | | 1.767 | | | | |
| 1 | 1015 | 10027 | 0.000 | 1 | 0-0 | 1.767 | | 0.000 | 1.000 | 0.000 |
| | | 10028 | 0.883 | 1 | | 2.650 | | | | |
| 1 | 1016 | 10028 | 0.000 | 1 | 0-0 | 2.650 | | 0.000 | 1.000 | 0.000 |
| | | 10029 | 0.883 | 1 | | 3.533 | | | | |
| 1 | 1017 | 10029 | 0.000 | 1 | 0-0 | 3.533 | | 0.000 | 1.000 | 0.000 |
| | | 10030 | 0.883 | 1 | | 4.417 | | | | |
| 1 | 1018 | 10030 | 0.000 | 1 | 0-0 | 4.417 | | 0.000 | 1.000 | 0.000 |
| | | 306 | 0.883 | 1 | | 5.300 | | | | |
| 1 | 1019 | 306 | 0.000 | 1 | 0-0 | 5.300 | | 0.000 | 1.000 | 0.000 |
| | | 10031 | 0.883 | 1 | | 6.183 | | | | |
| 1 | 1020 | 10031 | 0.000 | 1 | 0-0 | 6.183 | | 0.000 | 1.000 | 0.000 |
| | | 10032 | 0.883 | 1 | | 7.067 | | | | |
| 1 | 1021 | 10032 | 0.000 | 1 | 0-0 | 7.067 | | 0.000 | 1.000 | 0.000 |
| | | 10033 | 0.883 | 1 | | 7.950 | | | | |
| 1 | 1022 | 10033 | 0.000 | 1 | 0-0 | 7.950 | | 0.000 | 1.000 | 0.000 |
| | | 10034 | 0.883 | 1 | | 8.833 | | | | |
| 1 | 1023 | 10034 | 0.000 | 1 | 0-0 | 8.833 | | 0.000 | 1.000 | 0.000 |
| | | 10035 | 0.883 | 1 | | 9.717 | | | | |
| 1 | 1024 | 10035 | 0.000 | 1 | 0-0 | 9.717 | | 0.000 | 1.000 | 0.000 |
| | | 406 | 0.883 | 1 | | 10.600 | N MtMyMz | | | |
| 1 | 1025 | 208 | 0.000 | 1 | 0-0 | 0.000 | MyMz | 0.000 | 1.000 | 0.000 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Beam Elements

| Grp | Number | Node | x[m] | NoS | NoP | reference Hinges | direction | local | y-axis |
|-----|--------|-------|-------|-----|-----|------------------|-----------|-------|--------|
| 1 | 1025 | 10038 | 0.883 | 1 | | 0.883 | | | |
| 1 | 1026 | 10038 | 0.000 | 1 | 0-0 | 0.883 | 0.000 | 1.000 | 0.000 |
| | | 10039 | 0.883 | 1 | | 1.767 | | | |
| 1 | 1027 | 10039 | 0.000 | 1 | 0-0 | 1.767 | 0.000 | 1.000 | 0.000 |
| | | 10040 | 0.883 | 1 | | 2.650 | | | |
| 1 | 1028 | 10040 | 0.000 | 1 | 0-0 | 2.650 | 0.000 | 1.000 | 0.000 |
| | | 10041 | 0.883 | 1 | | 3.533 | | | |
| 1 | 1029 | 10041 | 0.000 | 1 | 0-0 | 3.533 | 0.000 | 1.000 | 0.000 |
| | | 10042 | 0.883 | 1 | | 4.417 | | | |
| 1 | 1030 | 10042 | 0.000 | 1 | 0-0 | 4.417 | 0.000 | 1.000 | 0.000 |
| | | 308 | 0.883 | 1 | | 5.300 | | | |
| 1 | 1031 | 308 | 0.000 | 1 | 0-0 | 5.300 | 0.000 | 1.000 | 0.000 |
| | | 10043 | 0.883 | 1 | | 6.183 | | | |
| 1 | 1032 | 10043 | 0.000 | 1 | 0-0 | 6.183 | 0.000 | 1.000 | 0.000 |
| | | 10044 | 0.883 | 1 | | 7.067 | | | |
| 1 | 1033 | 10044 | 0.000 | 1 | 0-0 | 7.067 | 0.000 | 1.000 | 0.000 |
| | | 10045 | 0.883 | 1 | | 7.950 | | | |
| 1 | 1034 | 10045 | 0.000 | 1 | 0-0 | 7.950 | 0.000 | 1.000 | 0.000 |
| | | 10046 | 0.883 | 1 | | 8.833 | | | |
| 1 | 1035 | 10046 | 0.000 | 1 | 0-0 | 8.833 | 0.000 | 1.000 | 0.000 |
| | | 10047 | 0.883 | 1 | | 9.717 | | | |
| 1 | 1036 | 10047 | 0.000 | 1 | 0-0 | 9.717 | 0.000 | 1.000 | 0.000 |
| | | 408 | 0.883 | 1 | | 10.600 | N MtMyMz | | |
| 1 | 1037 | 210 | 0.000 | 1 | 0-0 | 0.000 | MyMz | 0.000 | 1.000 |
| | | 10050 | 0.883 | 1 | | 0.883 | | | |
| 1 | 1038 | 10050 | 0.000 | 1 | 0-0 | 0.883 | 0.000 | 1.000 | 0.000 |
| | | 10051 | 0.883 | 1 | | 1.767 | | | |
| 1 | 1039 | 10051 | 0.000 | 1 | 0-0 | 1.767 | 0.000 | 1.000 | 0.000 |
| | | 10052 | 0.883 | 1 | | 2.650 | | | |
| 1 | 1040 | 10052 | 0.000 | 1 | 0-0 | 2.650 | 0.000 | 1.000 | 0.000 |
| | | 10053 | 0.883 | 1 | | 3.533 | | | |
| 1 | 1041 | 10053 | 0.000 | 1 | 0-0 | 3.533 | 0.000 | 1.000 | 0.000 |
| | | 10054 | 0.883 | 1 | | 4.417 | | | |
| 1 | 1042 | 10054 | 0.000 | 1 | 0-0 | 4.417 | 0.000 | 1.000 | 0.000 |
| | | 310 | 0.883 | 1 | | 5.300 | | | |
| 1 | 1043 | 310 | 0.000 | 1 | 0-0 | 5.300 | 0.000 | 1.000 | 0.000 |
| | | 10055 | 0.883 | 1 | | 6.183 | | | |
| 1 | 1044 | 10055 | 0.000 | 1 | 0-0 | 6.183 | 0.000 | 1.000 | 0.000 |
| | | 10056 | 0.883 | 1 | | 7.067 | | | |
| 1 | 1045 | 10056 | 0.000 | 1 | 0-0 | 7.067 | 0.000 | 1.000 | 0.000 |
| | | 10057 | 0.883 | 1 | | 7.950 | | | |
| 1 | 1046 | 10057 | 0.000 | 1 | 0-0 | 7.950 | 0.000 | 1.000 | 0.000 |
| | | 10058 | 0.883 | 1 | | 8.833 | | | |
| 1 | 1047 | 10058 | 0.000 | 1 | 0-0 | 8.833 | 0.000 | 1.000 | 0.000 |
| | | 10059 | 0.883 | 1 | | 9.717 | | | |
| 1 | 1048 | 10059 | 0.000 | 1 | 0-0 | 9.717 | 0.000 | 1.000 | 0.000 |
| | | 410 | 0.883 | 1 | | 10.600 | N MtMyMz | | |
| 1 | 1049 | 213 | 0.000 | 1 | 0-0 | 0.000 | MyMz | 0.000 | 1.000 |
| | | 10062 | 0.883 | 1 | | 0.883 | | | |
| 1 | 1050 | 10062 | 0.000 | 1 | 0-0 | 0.883 | 0.000 | 1.000 | 0.000 |
| | | 10063 | 0.883 | 1 | | 1.767 | | | |
| 1 | 1051 | 10063 | 0.000 | 1 | 0-0 | 1.767 | 0.000 | 1.000 | 0.000 |
| | | 10064 | 0.883 | 1 | | 2.650 | | | |
| 1 | 1052 | 10064 | 0.000 | 1 | 0-0 | 2.650 | 0.000 | 1.000 | 0.000 |
| | | 10065 | 0.883 | 1 | | 3.533 | | | |
| 1 | 1053 | 10065 | 0.000 | 1 | 0-0 | 3.533 | 0.000 | 1.000 | 0.000 |
| | | 10066 | 0.883 | 1 | | 4.417 | | | |
| 1 | 1054 | 10066 | 0.000 | 1 | 0-0 | 4.417 | 0.000 | 1.000 | 0.000 |
| | | 313 | 0.883 | 1 | | 5.300 | | | |
| 1 | 1055 | 313 | 0.000 | 1 | 0-0 | 5.300 | 0.000 | 1.000 | 0.000 |
| | | 10067 | 0.883 | 1 | | 6.183 | | | |
| 1 | 1056 | 10067 | 0.000 | 1 | 0-0 | 6.183 | 0.000 | 1.000 | 0.000 |
| | | 10068 | 0.883 | 1 | | 7.067 | | | |
| 1 | 1057 | 10068 | 0.000 | 1 | 0-0 | 7.067 | 0.000 | 1.000 | 0.000 |
| | | 10069 | 0.883 | 1 | | 7.950 | | | |
| 1 | 1058 | 10069 | 0.000 | 1 | 0-0 | 7.950 | 0.000 | 1.000 | 0.000 |
| | | 10070 | 0.883 | 1 | | 8.833 | | | |
| 1 | 1059 | 10070 | 0.000 | 1 | 0-0 | 8.833 | 0.000 | 1.000 | 0.000 |
| | | 10071 | 0.883 | 1 | | 9.717 | | | |
| 1 | 1060 | 10071 | 0.000 | 1 | 0-0 | 9.717 | 0.000 | 1.000 | 0.000 |
| | | 413 | 0.883 | 1 | | 10.600 | N MtMyMz | | |
| 2 | 2001 | 103 | 0.000 | 2 | 0-0 | 0.000 | | 0.000 | 1.000 |
| | | 10013 | 0.300 | 2 | | 0.300 | | | |
| 2 | 2002 | 10013 | 0.000 | 2 | 0-0 | 0.300 | 0.000 | 1.000 | 0.000 |
| | | 203 | 0.300 | 2 | | 0.600 | | | |
| 2 | 2003 | 403 | 0.000 | 2 | 0-0 | 0.000 | 0.000 | 1.000 | 0.000 |
| | | 10024 | 0.300 | 2 | | 0.300 | | | |
| 2 | 2004 | 10024 | 0.000 | 2 | 0-0 | 0.300 | 0.000 | 1.000 | 0.000 |
| | | 503 | 0.300 | 2 | | 0.600 | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Beam Elements

| Grp | Number | Node | x[m] | NoS | NoP | reference | Hinges | direction | local | y-axis |
|-----|--------|-------|-------|-----|-----|-----------|--------|-----------|-------|--------|
| 2 | 2005 | 106 | 0.000 | 2 | 0-0 | 0.000 | | 0.000 | 1.000 | 0.000 |
| | | 10025 | 0.300 | 2 | | 0.300 | | | | |
| 2 | 2006 | 10025 | 0.000 | 2 | 0-0 | 0.300 | | 0.000 | 1.000 | 0.000 |
| | | 206 | 0.300 | 2 | | 0.600 | | | | |
| 2 | 2007 | 406 | 0.000 | 2 | 0-0 | 0.000 | | 0.000 | 1.000 | 0.000 |
| | | 10036 | 0.300 | 2 | | 0.300 | | | | |
| 2 | 2008 | 10036 | 0.000 | 2 | 0-0 | 0.300 | | 0.000 | 1.000 | 0.000 |
| | | 506 | 0.300 | 2 | | 0.600 | | | | |
| 2 | 2009 | 108 | 0.000 | 2 | 0-0 | 0.000 | | 0.000 | 1.000 | 0.000 |
| | | 10037 | 0.300 | 2 | | 0.300 | | | | |
| 2 | 2010 | 10037 | 0.000 | 2 | 0-0 | 0.300 | | 0.000 | 1.000 | 0.000 |
| | | 208 | 0.300 | 2 | | 0.600 | | | | |
| 2 | 2011 | 408 | 0.000 | 2 | 0-0 | 0.000 | | 0.000 | 1.000 | 0.000 |
| | | 10048 | 0.300 | 2 | | 0.300 | | | | |
| 2 | 2012 | 10048 | 0.000 | 2 | 0-0 | 0.300 | | 0.000 | 1.000 | 0.000 |
| | | 508 | 0.300 | 2 | | 0.600 | | | | |
| 2 | 2013 | 110 | 0.000 | 2 | 0-0 | 0.000 | | 0.000 | 1.000 | 0.000 |
| | | 10049 | 0.300 | 2 | | 0.300 | | | | |
| 2 | 2014 | 10049 | 0.000 | 2 | 0-0 | 0.300 | | 0.000 | 1.000 | 0.000 |
| | | 210 | 0.300 | 2 | | 0.600 | | | | |
| 2 | 2015 | 410 | 0.000 | 2 | 0-0 | 0.000 | | 0.000 | 1.000 | 0.000 |
| | | 10060 | 0.300 | 2 | | 0.300 | | | | |
| 2 | 2016 | 10060 | 0.000 | 2 | 0-0 | 0.300 | | 0.000 | 1.000 | 0.000 |
| | | 510 | 0.300 | 2 | | 0.600 | | | | |
| 2 | 2017 | 113 | 0.000 | 2 | 0-0 | 0.000 | | 0.000 | 1.000 | 0.000 |
| | | 10061 | 0.300 | 2 | | 0.300 | | | | |
| 2 | 2018 | 10061 | 0.000 | 2 | 0-0 | 0.300 | | 0.000 | 1.000 | 0.000 |
| | | 213 | 0.300 | 2 | | 0.600 | | | | |
| 2 | 2019 | 413 | 0.000 | 2 | 0-0 | 0.000 | | 0.000 | 1.000 | 0.000 |
| | | 10072 | 0.300 | 2 | | 0.300 | | | | |
| 2 | 2020 | 10072 | 0.000 | 2 | 0-0 | 0.300 | | 0.000 | 1.000 | 0.000 |
| | | 513 | 0.300 | 2 | | 0.600 | | | | |
| 10 | 10001 | 2101 | 0.000 | 8 | | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 2102 | 0.200 | 8 | | 0.200 | | | | |
| 10 | 10002 | 2102 | 0.000 | 10 | | 0.200 | | 1.000 | 0.000 | 0.000 |
| | | 2103 | 0.200 | 10 | | 0.400 | | | | |
| 10 | 10003 | 2103 | 0.000 | 10 | | 0.400 | | 1.000 | 0.000 | 0.000 |
| | | 2104 | 0.200 | 10 | | 0.600 | | | | |
| 10 | 10004 | 2104 | 0.000 | 10 | | 0.600 | | 1.000 | 0.000 | 0.000 |
| | | 2105 | 0.400 | 10 | | 1.000 | | | | |
| 10 | 10005 | 2105 | 0.000 | 8 | | 1.000 | | 1.000 | 0.000 | 0.000 |
| | | 2106 | 0.200 | 8 | | 1.200 | | | | |
| 10 | 10006 | 2106 | 0.000 | 8 | | 1.200 | | 1.000 | 0.000 | 0.000 |
| | | 2107 | 0.400 | 8 | | 1.600 | | | | |
| 10 | 10007 | 2107 | 0.000 | 10 | | 1.600 | | 1.000 | 0.000 | 0.000 |
| | | 2108 | 0.400 | 10 | | 2.000 | | | | |
| 10 | 10008 | 2108 | 0.000 | 10 | | 2.000 | | 1.000 | 0.000 | 0.000 |
| | | 2109 | 0.400 | 10 | | 2.400 | | | | |
| 10 | 10009 | 2109 | 0.000 | 8 | | 2.400 | | 1.000 | 0.000 | 0.000 |
| | | 2110 | 0.400 | 8 | | 2.800 | | | | |
| 10 | 10010 | 2110 | 0.000 | 8 | | 2.800 | | 1.000 | 0.000 | 0.000 |
| | | 2111 | 0.200 | 8 | | 3.000 | | | | |
| 10 | 10011 | 2111 | 0.000 | 10 | | 3.000 | | 1.000 | 0.000 | 0.000 |
| | | 2112 | 0.400 | 10 | | 3.400 | | | | |
| 10 | 10012 | 2112 | 0.000 | 10 | | 3.400 | | 1.000 | 0.000 | 0.000 |
| | | 2113 | 0.200 | 10 | | 3.600 | | | | |
| 10 | 10013 | 2113 | 0.000 | 10 | | 3.600 | | 1.000 | 0.000 | 0.000 |
| | | 2114 | 0.200 | 10 | | 3.800 | | | | |
| 10 | 10014 | 2114 | 0.000 | 8 | | 3.800 | | 1.000 | 0.000 | 0.000 |
| | | 2115 | 0.200 | 8 | | 4.000 | | | | |
| 10 | 10016 | 2501 | 0.000 | 8 | | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 2502 | 0.200 | 8 | | 0.200 | | | | |
| 10 | 10017 | 2502 | 0.000 | 10 | | 0.200 | | 1.000 | 0.000 | 0.000 |
| | | 2503 | 0.200 | 10 | | 0.400 | | | | |
| 10 | 10018 | 2503 | 0.000 | 10 | | 0.400 | | 1.000 | 0.000 | 0.000 |
| | | 2504 | 0.200 | 10 | | 0.600 | | | | |
| 10 | 10019 | 2504 | 0.000 | 10 | | 0.600 | | 1.000 | 0.000 | 0.000 |
| | | 2505 | 0.400 | 10 | | 1.000 | | | | |
| 10 | 10020 | 2505 | 0.000 | 8 | | 1.000 | | 1.000 | 0.000 | 0.000 |
| | | 2506 | 0.200 | 8 | | 1.200 | | | | |
| 10 | 10021 | 2506 | 0.000 | 8 | | 1.200 | | 1.000 | 0.000 | 0.000 |
| | | 2507 | 0.400 | 8 | | 1.600 | | | | |
| 10 | 10022 | 2507 | 0.000 | 10 | | 1.600 | | 1.000 | 0.000 | 0.000 |
| | | 2508 | 0.400 | 10 | | 2.000 | | | | |
| 10 | 10023 | 2508 | 0.000 | 10 | | 2.000 | | 1.000 | 0.000 | 0.000 |
| | | 2509 | 0.400 | 10 | | 2.400 | | | | |
| 10 | 10024 | 2509 | 0.000 | 8 | | 2.400 | | 1.000 | 0.000 | 0.000 |
| | | 2510 | 0.400 | 8 | | 2.800 | | | | |
| 10 | 10025 | 2510 | 0.000 | 8 | | 2.800 | | 1.000 | 0.000 | 0.000 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Beam Elements

| Grp | Number | Node | x[m] | NoS | NoP | reference | Hinges | direction | local | y-axis |
|-----|--------|-------|-------|-----|-----|-----------|--------|-----------|-------|--------|
| 10 | 10025 | 2511 | 0.200 | 8 | | 3.000 | | | | |
| 10 | 10026 | 2511 | 0.000 | 10 | | 3.000 | | 1.000 | 0.000 | 0.000 |
| | | 2512 | 0.400 | 10 | | 3.400 | | | | |
| 10 | 10027 | 2512 | 0.000 | 10 | | 3.400 | | 1.000 | 0.000 | 0.000 |
| | | 2513 | 0.200 | 10 | | 3.600 | | | | |
| 10 | 10028 | 2513 | 0.000 | 10 | | 3.600 | | 1.000 | 0.000 | 0.000 |
| | | 2514 | 0.200 | 10 | | 3.800 | | | | |
| 10 | 10029 | 2514 | 0.000 | 8 | | 3.800 | | 1.000 | 0.000 | 0.000 |
| | | 2515 | 0.200 | 8 | | 4.000 | | | | |
| 11 | 11001 | 2104 | 0.000 | 13 | | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 3104 | 0.550 | 13 | | 0.550 | | | | |
| 11 | 11002 | 2108 | 0.000 | 13 | | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 3108 | 0.550 | 13 | | 0.550 | | | | |
| 11 | 11003 | 2112 | 0.000 | 13 | | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 3112 | 0.550 | 13 | | 0.550 | | | | |
| 11 | 11004 | 2504 | 0.000 | 13 | | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 3504 | 0.550 | 13 | | 0.550 | | | | |
| 11 | 11005 | 2508 | 0.000 | 13 | | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 3508 | 0.550 | 13 | | 0.550 | | | | |
| 11 | 11006 | 2512 | 0.000 | 13 | | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 3512 | 0.550 | 13 | | 0.550 | | | | |
| 12 | 12001 | 3104 | 0.000 | 9 | 1 | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 10257 | 1.000 | 9 | | 1.000 | | | | |
| 12 | 12002 | 10257 | 0.000 | 9 | 1 | 1.000 | | 1.000 | 0.000 | 0.000 |
| | | 10258 | 1.000 | 9 | | 2.000 | | | | |
| 12 | 12003 | 10258 | 0.000 | 9 | 1 | 2.000 | | 1.000 | 0.000 | 0.000 |
| | | 4104 | 1.000 | 9 | | 3.000 | | | | |
| 12 | 12004 | 3108 | 0.000 | 9 | 1 | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 10259 | 1.000 | 9 | | 1.000 | | | | |
| 12 | 12005 | 10259 | 0.000 | 9 | 1 | 1.000 | | 1.000 | 0.000 | 0.000 |
| | | 10260 | 1.000 | 9 | | 2.000 | | | | |
| 12 | 12006 | 10260 | 0.000 | 9 | 1 | 2.000 | | 1.000 | 0.000 | 0.000 |
| | | 4108 | 1.000 | 9 | | 3.000 | | | | |
| 12 | 12007 | 3112 | 0.000 | 9 | 1 | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 10261 | 1.000 | 9 | | 1.000 | | | | |
| 12 | 12008 | 10261 | 0.000 | 9 | 1 | 1.000 | | 1.000 | 0.000 | 0.000 |
| | | 10262 | 1.000 | 9 | | 2.000 | | | | |
| 12 | 12009 | 10262 | 0.000 | 9 | 1 | 2.000 | | 1.000 | 0.000 | 0.000 |
| | | 4112 | 1.000 | 9 | | 3.000 | | | | |
| 12 | 12010 | 3504 | 0.000 | 9 | 1 | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 10263 | 1.000 | 9 | | 1.000 | | | | |
| 12 | 12011 | 10263 | 0.000 | 9 | 1 | 1.000 | | 1.000 | 0.000 | 0.000 |
| | | 10264 | 1.000 | 9 | | 2.000 | | | | |
| 12 | 12012 | 10264 | 0.000 | 9 | 1 | 2.000 | | 1.000 | 0.000 | 0.000 |
| | | 4504 | 1.000 | 9 | | 3.000 | | | | |
| 12 | 12013 | 3508 | 0.000 | 9 | 1 | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 10265 | 1.000 | 9 | | 1.000 | | | | |
| 12 | 12014 | 10265 | 0.000 | 9 | 1 | 1.000 | | 1.000 | 0.000 | 0.000 |
| | | 10266 | 1.000 | 9 | | 2.000 | | | | |
| 12 | 12015 | 10266 | 0.000 | 9 | 1 | 2.000 | | 1.000 | 0.000 | 0.000 |
| | | 4508 | 1.000 | 9 | | 3.000 | | | | |
| 12 | 12016 | 3512 | 0.000 | 9 | 1 | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 10267 | 1.000 | 9 | | 1.000 | | | | |
| 12 | 12017 | 10267 | 0.000 | 9 | 1 | 1.000 | | 1.000 | 0.000 | 0.000 |
| | | 10268 | 1.000 | 9 | | 2.000 | | | | |
| 12 | 12018 | 10268 | 0.000 | 9 | 1 | 2.000 | | 1.000 | 0.000 | 0.000 |
| | | 4512 | 1.000 | 9 | | 3.000 | | | | |
| 12 | 12019 | 4104 | 0.000 | 9 | 1 | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 10269 | 1.000 | 9 | | 1.000 | | | | |
| 12 | 12020 | 10269 | 0.000 | 9 | 1 | 1.000 | | 1.000 | 0.000 | 0.000 |
| | | 10270 | 1.000 | 9 | | 2.000 | | | | |
| 12 | 12021 | 10270 | 0.000 | 9 | 1 | 2.000 | | 1.000 | 0.000 | 0.000 |
| | | 10271 | 1.000 | 9 | | 3.000 | | | | |
| 12 | 12022 | 10271 | 0.000 | 9 | 1 | 3.000 | | 1.000 | 0.000 | 0.000 |
| | | 10272 | 1.000 | 9 | | 4.000 | | | | |
| 12 | 12023 | 10272 | 0.000 | 9 | 1 | 4.000 | | 1.000 | 0.000 | 0.000 |
| | | 10273 | 1.000 | 9 | | 5.000 | | | | |
| 12 | 12024 | 10273 | 0.000 | 9 | 1 | 5.000 | | 1.000 | 0.000 | 0.000 |
| | | 10274 | 1.000 | 9 | | 6.000 | | | | |
| 12 | 12025 | 10274 | 0.000 | 9 | 1 | 6.000 | | 1.000 | 0.000 | 0.000 |
| | | 10275 | 1.000 | 9 | | 7.000 | | | | |
| 12 | 12026 | 10275 | 0.000 | 9 | 1 | 7.000 | | 1.000 | 0.000 | 0.000 |
| | | 10276 | 1.000 | 9 | | 8.000 | | | | |
| 12 | 12027 | 10276 | 0.000 | 9 | 1 | 8.000 | | 1.000 | 0.000 | 0.000 |
| | | 10277 | 1.000 | 9 | | 9.000 | | | | |
| 12 | 12028 | 10277 | 0.000 | 9 | 1 | 9.000 | | 1.000 | 0.000 | 0.000 |
| | | 10278 | 1.000 | 9 | | 10.000 | | | | |
| 12 | 12029 | 10278 | 0.000 | 9 | 1 | 10.000 | | 1.000 | 0.000 | 0.000 |
| | | 10279 | 1.000 | 9 | | 11.000 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Beam Elements

| Grp | Number | Node | x[m] | NoS | NoP | reference Hinges | direction | local | y-axis |
|-----|--------|-------|-------|-----|-----|------------------|-----------|-------|--------|
| 12 | 12030 | 10279 | 0.000 | 9 | 1 | 11.000 | 1.000 | 0.000 | 0.000 |
| | | 10280 | 1.000 | 9 | | 12.000 | | | |
| 12 | 12031 | 10280 | 0.000 | 9 | 1 | 12.000 | 1.000 | 0.000 | 0.000 |
| | | 10281 | 1.000 | 9 | | 13.000 | | | |
| 12 | 12032 | 10281 | 0.000 | 9 | 1 | 13.000 | 1.000 | 0.000 | 0.000 |
| | | 10282 | 1.000 | 9 | | 14.000 | | | |
| 12 | 12033 | 10282 | 0.000 | 9 | 1 | 14.000 | 1.000 | 0.000 | 0.000 |
| | | 10283 | 1.000 | 9 | | 15.000 | | | |
| 12 | 12034 | 10283 | 0.000 | 9 | 1 | 15.000 | 1.000 | 0.000 | 0.000 |
| | | 10284 | 1.000 | 9 | | 16.000 | | | |
| 12 | 12035 | 10284 | 0.000 | 9 | 1 | 16.000 | 1.000 | 0.000 | 0.000 |
| | | 10285 | 1.000 | 9 | | 17.000 | | | |
| 12 | 12036 | 10285 | 0.000 | 9 | 1 | 17.000 | 1.000 | 0.000 | 0.000 |
| | | 10286 | 1.000 | 9 | | 18.000 | | | |
| 12 | 12037 | 10286 | 0.000 | 9 | 1 | 18.000 | 1.000 | 0.000 | 0.000 |
| | | 10287 | 1.000 | 9 | | 19.000 | | | |
| 12 | 12038 | 10287 | 0.000 | 9 | 1 | 19.000 | 1.000 | 0.000 | 0.000 |
| | | 10288 | 1.000 | 9 | | 20.000 | | | |
| 12 | 12039 | 10288 | 0.000 | 9 | 1 | 20.000 | 1.000 | 0.000 | 0.000 |
| | | 10289 | 1.000 | 9 | | 21.000 | | | |
| 12 | 12040 | 10289 | 0.000 | 9 | 1 | 21.000 | 1.000 | 0.000 | 0.000 |
| | | 5104 | 1.000 | 9 | | 22.000 | | | |
| 12 | 12041 | 4108 | 0.000 | 9 | 1 | 0.000 | 1.000 | 0.000 | 0.000 |
| | | 10290 | 1.000 | 9 | | 1.000 | | | |
| 12 | 12042 | 10290 | 0.000 | 9 | 1 | 1.000 | 1.000 | 0.000 | 0.000 |
| | | 10291 | 1.000 | 9 | | 2.000 | | | |
| 12 | 12043 | 10291 | 0.000 | 9 | 1 | 2.000 | 1.000 | 0.000 | 0.000 |
| | | 10292 | 1.000 | 9 | | 3.000 | | | |
| 12 | 12044 | 10292 | 0.000 | 9 | 1 | 3.000 | 1.000 | 0.000 | 0.000 |
| | | 10293 | 1.000 | 9 | | 4.000 | | | |
| 12 | 12045 | 10293 | 0.000 | 9 | 1 | 4.000 | 1.000 | 0.000 | 0.000 |
| | | 10294 | 1.000 | 9 | | 5.000 | | | |
| 12 | 12046 | 10294 | 0.000 | 9 | 1 | 5.000 | 1.000 | 0.000 | 0.000 |
| | | 10295 | 1.000 | 9 | | 6.000 | | | |
| 12 | 12047 | 10295 | 0.000 | 9 | 1 | 6.000 | 1.000 | 0.000 | 0.000 |
| | | 10296 | 1.000 | 9 | | 7.000 | | | |
| 12 | 12048 | 10296 | 0.000 | 9 | 1 | 7.000 | 1.000 | 0.000 | 0.000 |
| | | 10297 | 1.000 | 9 | | 8.000 | | | |
| 12 | 12049 | 10297 | 0.000 | 9 | 1 | 8.000 | 1.000 | 0.000 | 0.000 |
| | | 10298 | 1.000 | 9 | | 9.000 | | | |
| 12 | 12050 | 10298 | 0.000 | 9 | 1 | 9.000 | 1.000 | 0.000 | 0.000 |
| | | 10299 | 1.000 | 9 | | 10.000 | | | |
| 12 | 12051 | 10299 | 0.000 | 9 | 1 | 10.000 | 1.000 | 0.000 | 0.000 |
| | | 10300 | 1.000 | 9 | | 11.000 | | | |
| 12 | 12052 | 10300 | 0.000 | 9 | 1 | 11.000 | 1.000 | 0.000 | 0.000 |
| | | 10301 | 1.000 | 9 | | 12.000 | | | |
| 12 | 12053 | 10301 | 0.000 | 9 | 1 | 12.000 | 1.000 | 0.000 | 0.000 |
| | | 10302 | 1.000 | 9 | | 13.000 | | | |
| 12 | 12054 | 10302 | 0.000 | 9 | 1 | 13.000 | 1.000 | 0.000 | 0.000 |
| | | 10303 | 1.000 | 9 | | 14.000 | | | |
| 12 | 12055 | 10303 | 0.000 | 9 | 1 | 14.000 | 1.000 | 0.000 | 0.000 |
| | | 10304 | 1.000 | 9 | | 15.000 | | | |
| 12 | 12056 | 10304 | 0.000 | 9 | 1 | 15.000 | 1.000 | 0.000 | 0.000 |
| | | 10305 | 1.000 | 9 | | 16.000 | | | |
| 12 | 12057 | 10305 | 0.000 | 9 | 1 | 16.000 | 1.000 | 0.000 | 0.000 |
| | | 10306 | 1.000 | 9 | | 17.000 | | | |
| 12 | 12058 | 10306 | 0.000 | 9 | 1 | 17.000 | 1.000 | 0.000 | 0.000 |
| | | 10307 | 1.000 | 9 | | 18.000 | | | |
| 12 | 12059 | 10307 | 0.000 | 9 | 1 | 18.000 | 1.000 | 0.000 | 0.000 |
| | | 10308 | 1.000 | 9 | | 19.000 | | | |
| 12 | 12060 | 10308 | 0.000 | 9 | 1 | 19.000 | 1.000 | 0.000 | 0.000 |
| | | 10309 | 1.000 | 9 | | 20.000 | | | |
| 12 | 12061 | 10309 | 0.000 | 9 | 1 | 20.000 | 1.000 | 0.000 | 0.000 |
| | | 10310 | 1.000 | 9 | | 21.000 | | | |
| 12 | 12062 | 10310 | 0.000 | 9 | 1 | 21.000 | 1.000 | 0.000 | 0.000 |
| | | 5108 | 1.000 | 9 | | 22.000 | | | |
| 12 | 12063 | 4112 | 0.000 | 9 | 1 | 0.000 | 1.000 | 0.000 | 0.000 |
| | | 10311 | 1.000 | 9 | | 1.000 | | | |
| 12 | 12064 | 10311 | 0.000 | 9 | 1 | 1.000 | 1.000 | 0.000 | 0.000 |
| | | 10312 | 1.000 | 9 | | 2.000 | | | |
| 12 | 12065 | 10312 | 0.000 | 9 | 1 | 2.000 | 1.000 | 0.000 | 0.000 |
| | | 10313 | 1.000 | 9 | | 3.000 | | | |
| 12 | 12066 | 10313 | 0.000 | 9 | 1 | 3.000 | 1.000 | 0.000 | 0.000 |
| | | 10314 | 1.000 | 9 | | 4.000 | | | |
| 12 | 12067 | 10314 | 0.000 | 9 | 1 | 4.000 | 1.000 | 0.000 | 0.000 |
| | | 10315 | 1.000 | 9 | | 5.000 | | | |
| 12 | 12068 | 10315 | 0.000 | 9 | 1 | 5.000 | 1.000 | 0.000 | 0.000 |
| | | 10316 | 1.000 | 9 | | 6.000 | | | |
| 12 | 12069 | 10316 | 0.000 | 9 | 1 | 6.000 | 1.000 | 0.000 | 0.000 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Beam Elements

| Grp | Number | Node | x[m] | NoS | NoP | reference | Hinges | direction | local | y-axis |
|-----|--------|-------|-------|-----|-----|-----------|--------|-----------|-------|--------|
| 12 | 12069 | 10317 | 1.000 | 9 | | 7.000 | | | | |
| 12 | 12070 | 10317 | 0.000 | 9 | 1 | 7.000 | | 1.000 | 0.000 | 0.000 |
| | | 10318 | 1.000 | 9 | | 8.000 | | | | |
| 12 | 12071 | 10318 | 0.000 | 9 | 1 | 8.000 | | 1.000 | 0.000 | 0.000 |
| | | 10319 | 1.000 | 9 | | 9.000 | | | | |
| 12 | 12072 | 10319 | 0.000 | 9 | 1 | 9.000 | | 1.000 | 0.000 | 0.000 |
| | | 10320 | 1.000 | 9 | | 10.000 | | | | |
| 12 | 12073 | 10320 | 0.000 | 9 | 1 | 10.000 | | 1.000 | 0.000 | 0.000 |
| | | 10321 | 1.000 | 9 | | 11.000 | | | | |
| 12 | 12074 | 10321 | 0.000 | 9 | 1 | 11.000 | | 1.000 | 0.000 | 0.000 |
| | | 10322 | 1.000 | 9 | | 12.000 | | | | |
| 12 | 12075 | 10322 | 0.000 | 9 | 1 | 12.000 | | 1.000 | 0.000 | 0.000 |
| | | 10323 | 1.000 | 9 | | 13.000 | | | | |
| 12 | 12076 | 10323 | 0.000 | 9 | 1 | 13.000 | | 1.000 | 0.000 | 0.000 |
| | | 10324 | 1.000 | 9 | | 14.000 | | | | |
| 12 | 12077 | 10324 | 0.000 | 9 | 1 | 14.000 | | 1.000 | 0.000 | 0.000 |
| | | 10325 | 1.000 | 9 | | 15.000 | | | | |
| 12 | 12078 | 10325 | 0.000 | 9 | 1 | 15.000 | | 1.000 | 0.000 | 0.000 |
| | | 10326 | 1.000 | 9 | | 16.000 | | | | |
| 12 | 12079 | 10326 | 0.000 | 9 | 1 | 16.000 | | 1.000 | 0.000 | 0.000 |
| | | 10327 | 1.000 | 9 | | 17.000 | | | | |
| 12 | 12080 | 10327 | 0.000 | 9 | 1 | 17.000 | | 1.000 | 0.000 | 0.000 |
| | | 10328 | 1.000 | 9 | | 18.000 | | | | |
| 12 | 12081 | 10328 | 0.000 | 9 | 1 | 18.000 | | 1.000 | 0.000 | 0.000 |
| | | 10329 | 1.000 | 9 | | 19.000 | | | | |
| 12 | 12082 | 10329 | 0.000 | 9 | 1 | 19.000 | | 1.000 | 0.000 | 0.000 |
| | | 10330 | 1.000 | 9 | | 20.000 | | | | |
| 12 | 12083 | 10330 | 0.000 | 9 | 1 | 20.000 | | 1.000 | 0.000 | 0.000 |
| | | 10331 | 1.000 | 9 | | 21.000 | | | | |
| 12 | 12084 | 10331 | 0.000 | 9 | 1 | 21.000 | | 1.000 | 0.000 | 0.000 |
| | | 5112 | 1.000 | 9 | | 22.000 | | | | |
| 12 | 12085 | 4504 | 0.000 | 9 | 1 | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 10332 | 1.000 | 9 | | 1.000 | | | | |
| 12 | 12086 | 10332 | 0.000 | 9 | 1 | 1.000 | | 1.000 | 0.000 | 0.000 |
| | | 10333 | 1.000 | 9 | | 2.000 | | | | |
| 12 | 12087 | 10333 | 0.000 | 9 | 1 | 2.000 | | 1.000 | 0.000 | 0.000 |
| | | 10334 | 1.000 | 9 | | 3.000 | | | | |
| 12 | 12088 | 10334 | 0.000 | 9 | 1 | 3.000 | | 1.000 | 0.000 | 0.000 |
| | | 10335 | 1.000 | 9 | | 4.000 | | | | |
| 12 | 12089 | 10335 | 0.000 | 9 | 1 | 4.000 | | 1.000 | 0.000 | 0.000 |
| | | 10336 | 1.000 | 9 | | 5.000 | | | | |
| 12 | 12090 | 10336 | 0.000 | 9 | 1 | 5.000 | | 1.000 | 0.000 | 0.000 |
| | | 10337 | 1.000 | 9 | | 6.000 | | | | |
| 12 | 12091 | 10337 | 0.000 | 9 | 1 | 6.000 | | 1.000 | 0.000 | 0.000 |
| | | 10338 | 1.000 | 9 | | 7.000 | | | | |
| 12 | 12092 | 10338 | 0.000 | 9 | 1 | 7.000 | | 1.000 | 0.000 | 0.000 |
| | | 10339 | 1.000 | 9 | | 8.000 | | | | |
| 12 | 12093 | 10339 | 0.000 | 9 | 1 | 8.000 | | 1.000 | 0.000 | 0.000 |
| | | 10340 | 1.000 | 9 | | 9.000 | | | | |
| 12 | 12094 | 10340 | 0.000 | 9 | 1 | 9.000 | | 1.000 | 0.000 | 0.000 |
| | | 10341 | 1.000 | 9 | | 10.000 | | | | |
| 12 | 12095 | 10341 | 0.000 | 9 | 1 | 10.000 | | 1.000 | 0.000 | 0.000 |
| | | 10342 | 1.000 | 9 | | 11.000 | | | | |
| 12 | 12096 | 10342 | 0.000 | 9 | 1 | 11.000 | | 1.000 | 0.000 | 0.000 |
| | | 10343 | 1.000 | 9 | | 12.000 | | | | |
| 12 | 12097 | 10343 | 0.000 | 9 | 1 | 12.000 | | 1.000 | 0.000 | 0.000 |
| | | 10344 | 1.000 | 9 | | 13.000 | | | | |
| 12 | 12098 | 10344 | 0.000 | 9 | 1 | 13.000 | | 1.000 | 0.000 | 0.000 |
| | | 10345 | 1.000 | 9 | | 14.000 | | | | |
| 12 | 12099 | 10345 | 0.000 | 9 | 1 | 14.000 | | 1.000 | 0.000 | 0.000 |
| | | 10346 | 1.000 | 9 | | 15.000 | | | | |
| 12 | 12100 | 10346 | 0.000 | 9 | 1 | 15.000 | | 1.000 | 0.000 | 0.000 |
| | | 10347 | 1.000 | 9 | | 16.000 | | | | |
| 12 | 12101 | 10347 | 0.000 | 9 | 1 | 16.000 | | 1.000 | 0.000 | 0.000 |
| | | 10348 | 1.000 | 9 | | 17.000 | | | | |
| 12 | 12102 | 10348 | 0.000 | 9 | 1 | 17.000 | | 1.000 | 0.000 | 0.000 |
| | | 10349 | 1.000 | 9 | | 18.000 | | | | |
| 12 | 12103 | 10349 | 0.000 | 9 | 1 | 18.000 | | 1.000 | 0.000 | 0.000 |
| | | 10350 | 1.000 | 9 | | 19.000 | | | | |
| 12 | 12104 | 10350 | 0.000 | 9 | 1 | 19.000 | | 1.000 | 0.000 | 0.000 |
| | | 10351 | 1.000 | 9 | | 20.000 | | | | |
| 12 | 12105 | 10351 | 0.000 | 9 | 1 | 20.000 | | 1.000 | 0.000 | 0.000 |
| | | 10352 | 1.000 | 9 | | 21.000 | | | | |
| 12 | 12106 | 10352 | 0.000 | 9 | 1 | 21.000 | | 1.000 | 0.000 | 0.000 |
| | | 5504 | 1.000 | 9 | | 22.000 | | | | |
| 12 | 12107 | 4508 | 0.000 | 9 | 1 | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 10353 | 1.000 | 9 | | 1.000 | | | | |
| 12 | 12108 | 10353 | 0.000 | 9 | 1 | 1.000 | | 1.000 | 0.000 | 0.000 |
| | | 10354 | 1.000 | 9 | | 2.000 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Beam Elements

| Grp | Number | Node | x[m] | NoS | NoP | reference | Hinges | direction | local | y-axis |
|-----|--------|-------|-------|-----|-----|-----------|--------|-----------|-------|--------|
| 12 | 12109 | 10354 | 0.000 | 9 | 1 | 2.000 | | 1.000 | 0.000 | 0.000 |
| | | 10355 | 1.000 | 9 | | 3.000 | | | | |
| 12 | 12110 | 10355 | 0.000 | 9 | 1 | 3.000 | | 1.000 | 0.000 | 0.000 |
| | | 10356 | 1.000 | 9 | | 4.000 | | | | |
| 12 | 12111 | 10356 | 0.000 | 9 | 1 | 4.000 | | 1.000 | 0.000 | 0.000 |
| | | 10357 | 1.000 | 9 | | 5.000 | | | | |
| 12 | 12112 | 10357 | 0.000 | 9 | 1 | 5.000 | | 1.000 | 0.000 | 0.000 |
| | | 10358 | 1.000 | 9 | | 6.000 | | | | |
| 12 | 12113 | 10358 | 0.000 | 9 | 1 | 6.000 | | 1.000 | 0.000 | 0.000 |
| | | 10359 | 1.000 | 9 | | 7.000 | | | | |
| 12 | 12114 | 10359 | 0.000 | 9 | 1 | 7.000 | | 1.000 | 0.000 | 0.000 |
| | | 10360 | 1.000 | 9 | | 8.000 | | | | |
| 12 | 12115 | 10360 | 0.000 | 9 | 1 | 8.000 | | 1.000 | 0.000 | 0.000 |
| | | 10361 | 1.000 | 9 | | 9.000 | | | | |
| 12 | 12116 | 10361 | 0.000 | 9 | 1 | 9.000 | | 1.000 | 0.000 | 0.000 |
| | | 10362 | 1.000 | 9 | | 10.000 | | | | |
| 12 | 12117 | 10362 | 0.000 | 9 | 1 | 10.000 | | 1.000 | 0.000 | 0.000 |
| | | 10363 | 1.000 | 9 | | 11.000 | | | | |
| 12 | 12118 | 10363 | 0.000 | 9 | 1 | 11.000 | | 1.000 | 0.000 | 0.000 |
| | | 10364 | 1.000 | 9 | | 12.000 | | | | |
| 12 | 12119 | 10364 | 0.000 | 9 | 1 | 12.000 | | 1.000 | 0.000 | 0.000 |
| | | 10365 | 1.000 | 9 | | 13.000 | | | | |
| 12 | 12120 | 10365 | 0.000 | 9 | 1 | 13.000 | | 1.000 | 0.000 | 0.000 |
| | | 10366 | 1.000 | 9 | | 14.000 | | | | |
| 12 | 12121 | 10366 | 0.000 | 9 | 1 | 14.000 | | 1.000 | 0.000 | 0.000 |
| | | 10367 | 1.000 | 9 | | 15.000 | | | | |
| 12 | 12122 | 10367 | 0.000 | 9 | 1 | 15.000 | | 1.000 | 0.000 | 0.000 |
| | | 10368 | 1.000 | 9 | | 16.000 | | | | |
| 12 | 12123 | 10368 | 0.000 | 9 | 1 | 16.000 | | 1.000 | 0.000 | 0.000 |
| | | 10369 | 1.000 | 9 | | 17.000 | | | | |
| 12 | 12124 | 10369 | 0.000 | 9 | 1 | 17.000 | | 1.000 | 0.000 | 0.000 |
| | | 10370 | 1.000 | 9 | | 18.000 | | | | |
| 12 | 12125 | 10370 | 0.000 | 9 | 1 | 18.000 | | 1.000 | 0.000 | 0.000 |
| | | 10371 | 1.000 | 9 | | 19.000 | | | | |
| 12 | 12126 | 10371 | 0.000 | 9 | 1 | 19.000 | | 1.000 | 0.000 | 0.000 |
| | | 10372 | 1.000 | 9 | | 20.000 | | | | |
| 12 | 12127 | 10372 | 0.000 | 9 | 1 | 20.000 | | 1.000 | 0.000 | 0.000 |
| | | 10373 | 1.000 | 9 | | 21.000 | | | | |
| 12 | 12128 | 10373 | 0.000 | 9 | 1 | 21.000 | | 1.000 | 0.000 | 0.000 |
| | | 5508 | 1.000 | 9 | | 22.000 | | | | |
| 12 | 12129 | 4512 | 0.000 | 9 | 1 | 0.000 | | 1.000 | 0.000 | 0.000 |
| | | 10374 | 1.000 | 9 | | 1.000 | | | | |
| 12 | 12130 | 10374 | 0.000 | 9 | 1 | 1.000 | | 1.000 | 0.000 | 0.000 |
| | | 10375 | 1.000 | 9 | | 2.000 | | | | |
| 12 | 12131 | 10375 | 0.000 | 9 | 1 | 2.000 | | 1.000 | 0.000 | 0.000 |
| | | 10376 | 1.000 | 9 | | 3.000 | | | | |
| 12 | 12132 | 10376 | 0.000 | 9 | 1 | 3.000 | | 1.000 | 0.000 | 0.000 |
| | | 10377 | 1.000 | 9 | | 4.000 | | | | |
| 12 | 12133 | 10377 | 0.000 | 9 | 1 | 4.000 | | 1.000 | 0.000 | 0.000 |
| | | 10378 | 1.000 | 9 | | 5.000 | | | | |
| 12 | 12134 | 10378 | 0.000 | 9 | 1 | 5.000 | | 1.000 | 0.000 | 0.000 |
| | | 10379 | 1.000 | 9 | | 6.000 | | | | |
| 12 | 12135 | 10379 | 0.000 | 9 | 1 | 6.000 | | 1.000 | 0.000 | 0.000 |
| | | 10380 | 1.000 | 9 | | 7.000 | | | | |
| 12 | 12136 | 10380 | 0.000 | 9 | 1 | 7.000 | | 1.000 | 0.000 | 0.000 |
| | | 10381 | 1.000 | 9 | | 8.000 | | | | |
| 12 | 12137 | 10381 | 0.000 | 9 | 1 | 8.000 | | 1.000 | 0.000 | 0.000 |
| | | 10382 | 1.000 | 9 | | 9.000 | | | | |
| 12 | 12138 | 10382 | 0.000 | 9 | 1 | 9.000 | | 1.000 | 0.000 | 0.000 |
| | | 10383 | 1.000 | 9 | | 10.000 | | | | |
| 12 | 12139 | 10383 | 0.000 | 9 | 1 | 10.000 | | 1.000 | 0.000 | 0.000 |
| | | 10384 | 1.000 | 9 | | 11.000 | | | | |
| 12 | 12140 | 10384 | 0.000 | 9 | 1 | 11.000 | | 1.000 | 0.000 | 0.000 |
| | | 10385 | 1.000 | 9 | | 12.000 | | | | |
| 12 | 12141 | 10385 | 0.000 | 9 | 1 | 12.000 | | 1.000 | 0.000 | 0.000 |
| | | 10386 | 1.000 | 9 | | 13.000 | | | | |
| 12 | 12142 | 10386 | 0.000 | 9 | 1 | 13.000 | | 1.000 | 0.000 | 0.000 |
| | | 10387 | 1.000 | 9 | | 14.000 | | | | |
| 12 | 12143 | 10387 | 0.000 | 9 | 1 | 14.000 | | 1.000 | 0.000 | 0.000 |
| | | 10388 | 1.000 | 9 | | 15.000 | | | | |
| 12 | 12144 | 10388 | 0.000 | 9 | 1 | 15.000 | | 1.000 | 0.000 | 0.000 |
| | | 10389 | 1.000 | 9 | | 16.000 | | | | |
| 12 | 12145 | 10389 | 0.000 | 9 | 1 | 16.000 | | 1.000 | 0.000 | 0.000 |
| | | 10390 | 1.000 | 9 | | 17.000 | | | | |
| 12 | 12146 | 10390 | 0.000 | 9 | 1 | 17.000 | | 1.000 | 0.000 | 0.000 |
| | | 10391 | 1.000 | 9 | | 18.000 | | | | |
| 12 | 12147 | 10391 | 0.000 | 9 | 1 | 18.000 | | 1.000 | 0.000 | 0.000 |
| | | 10392 | 1.000 | 9 | | 19.000 | | | | |
| 12 | 12148 | 10392 | 0.000 | 9 | 1 | 19.000 | | 1.000 | 0.000 | 0.000 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Beam Elements

| Grp | Number | Node | x[m] | NoS | NoP | reference | Hinges | direction local y-axis | | |
|-----|--------|-------|-------|-----|-----|-----------|--------|------------------------|-------|-------|
| 12 | 12148 | 10393 | 1.000 | 9 | | 20.000 | | | | |
| 12 | 12149 | 10393 | 0.000 | 9 | 1 | 20.000 | | 1.000 | 0.000 | 0.000 |
| | | 10394 | 1.000 | 9 | | 21.000 | | | | |
| 12 | 12150 | 10394 | 0.000 | 9 | 1 | 21.000 | | 1.000 | 0.000 | 0.000 |
| | | 5512 | 1.000 | 9 | | 22.000 | | | | |

Spring Elements

| Grp | Number | Node | Node | dx[-] e-P[-] | dy[-] e-T[-] | dz[-] e-M[-] | CP[MN/m] DP[kNsec/m] | CT[MN/m] DT[kNsec/m] | CM[MNm] DM[kNmsec] |
|-----|--------|------|------|-----------------|-----------------|-----------------|-------------------------|-------------------------|-----------------------|
| 13 | 13001 | 5104 | | 0.000 | 0.000 | 1.000 | 2.513E+02 | | |
| 13 | 13002 | 5108 | | 0.000 | 0.000 | 1.000 | 2.513E+02 | | |
| 13 | 13003 | 5112 | | 0.000 | 0.000 | 1.000 | 2.513E+02 | | |
| 13 | 13004 | 5504 | | 0.000 | 0.000 | 1.000 | 2.513E+02 | | |
| 13 | 13005 | 5508 | | 0.000 | 0.000 | 1.000 | 2.513E+02 | | |
| 13 | 13006 | 5512 | | 0.000 | 0.000 | 1.000 | 2.513E+02 | | |

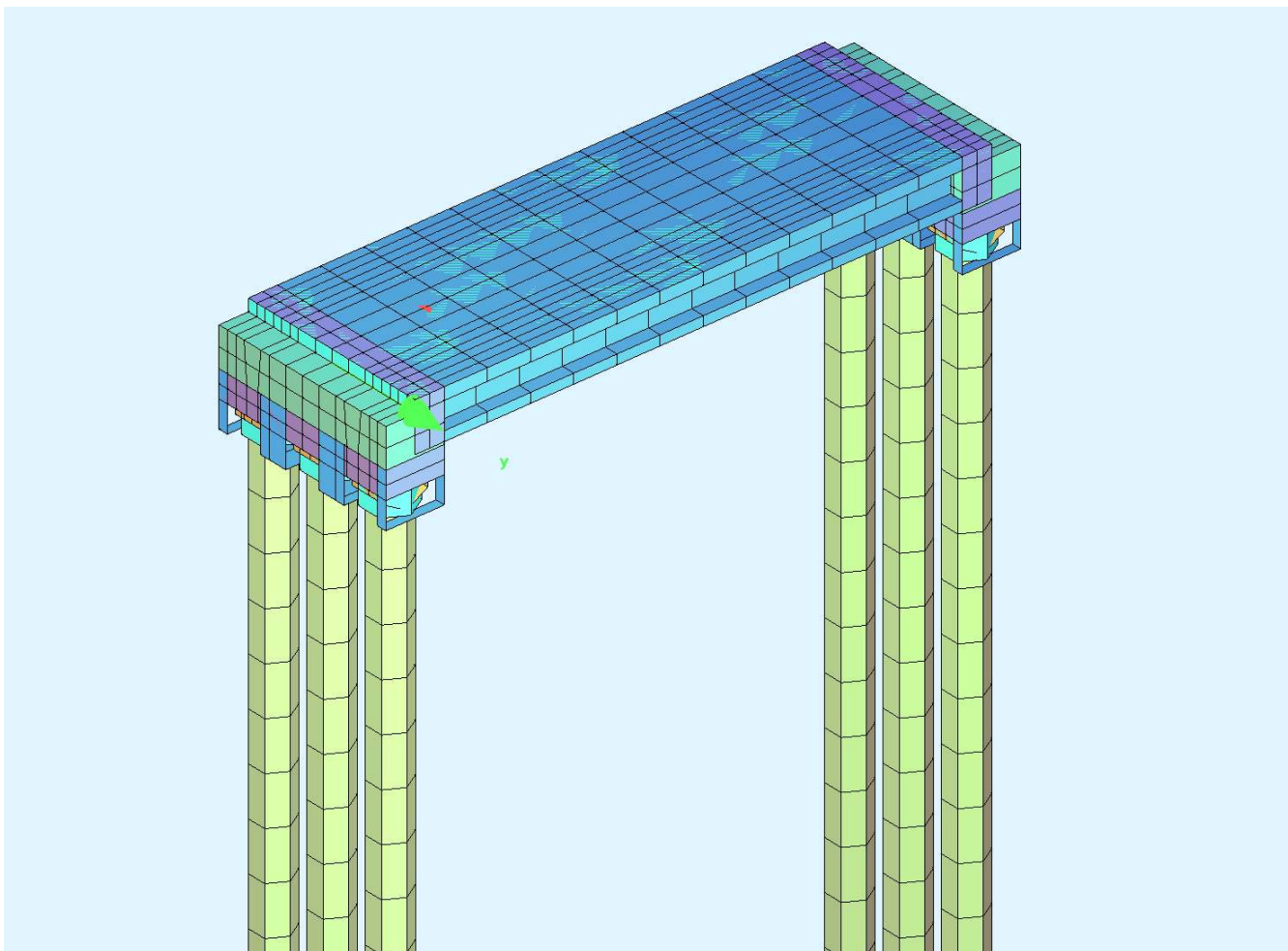
Summary of all beam elements

| Groups Grp | TotLength [m] | Max.Length [m] | Totweight [t] | Surface [m2] |
|---------------|------------------|-------------------|------------------|-----------------|
| 1 | 53.000 | 0.883 | 0.000 | 111.300 |
| 2 | 6.000 | 0.300 | 0.000 | 21.600 |
| 10 | 8.000 | 0.400 | 24.960 | 14.720 |
| 11 | 3.300 | 0.550 | 0.000 | |
| 12 | 150.000 | 1.000 | 188.496 | 376.991 |
| Sum | 220.300 | | 213.456 | 524.611 |

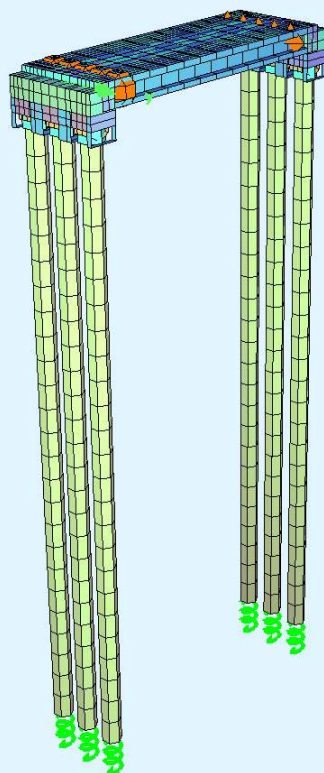
Summary of all planar elements

| Groups Grp | TotArea [m2] | TotVolume [m3] | Totweight [t] | Material No. |
|---------------|-----------------|-------------------|------------------|--------------|
| 3 | 42.400 | 10.600 | 0.000 | 5 |
| 4 | 4.800 | 1.200 | 0.000 | 5 |
| 8 | 6.400 | 7.680 | 25.200 | 6 |
| 9 | 4.400 | 5.280 | 0.000 | 10 |
| Sum | 58.000 | 24.760 | 25.200 | |

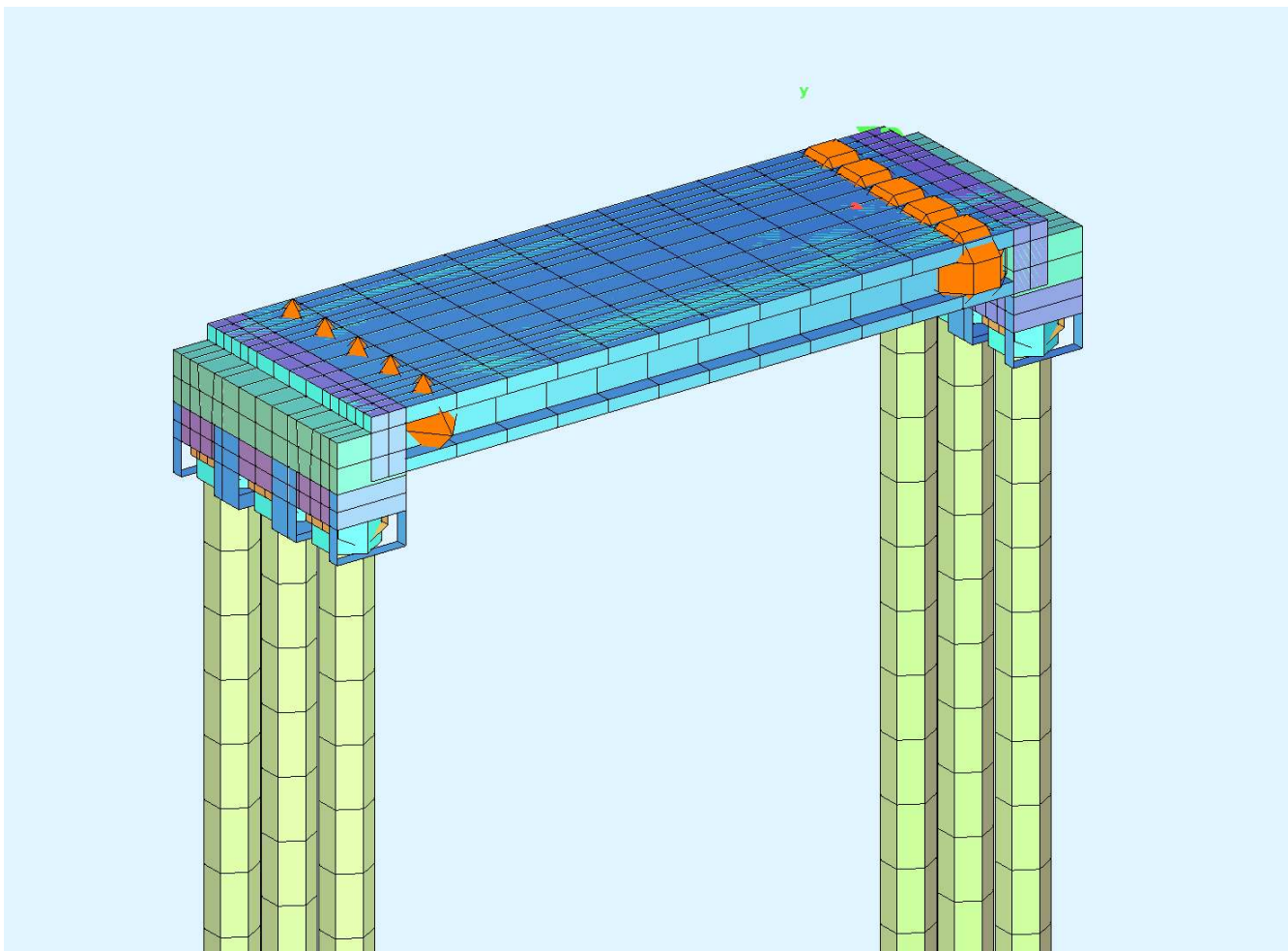
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00



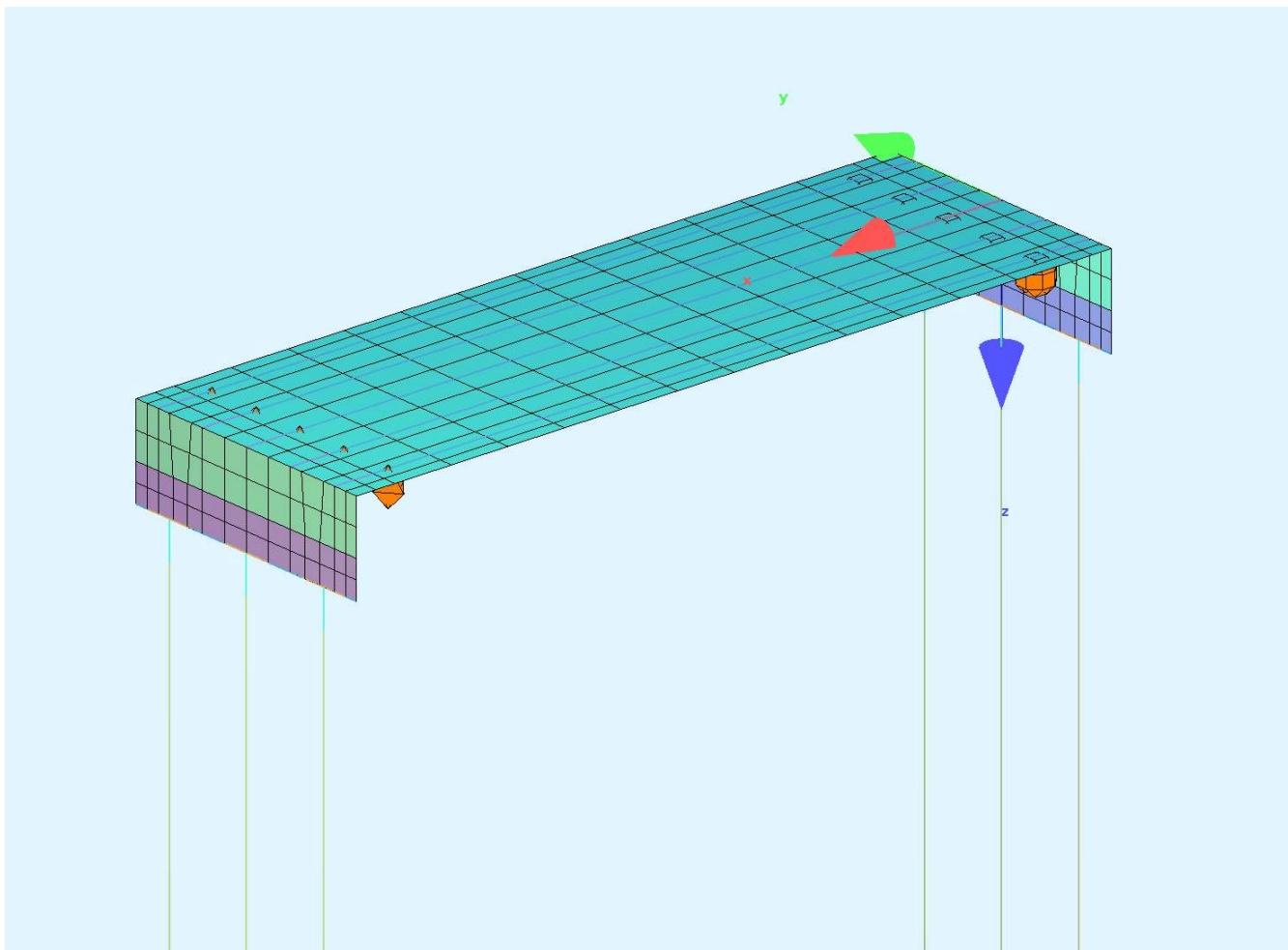
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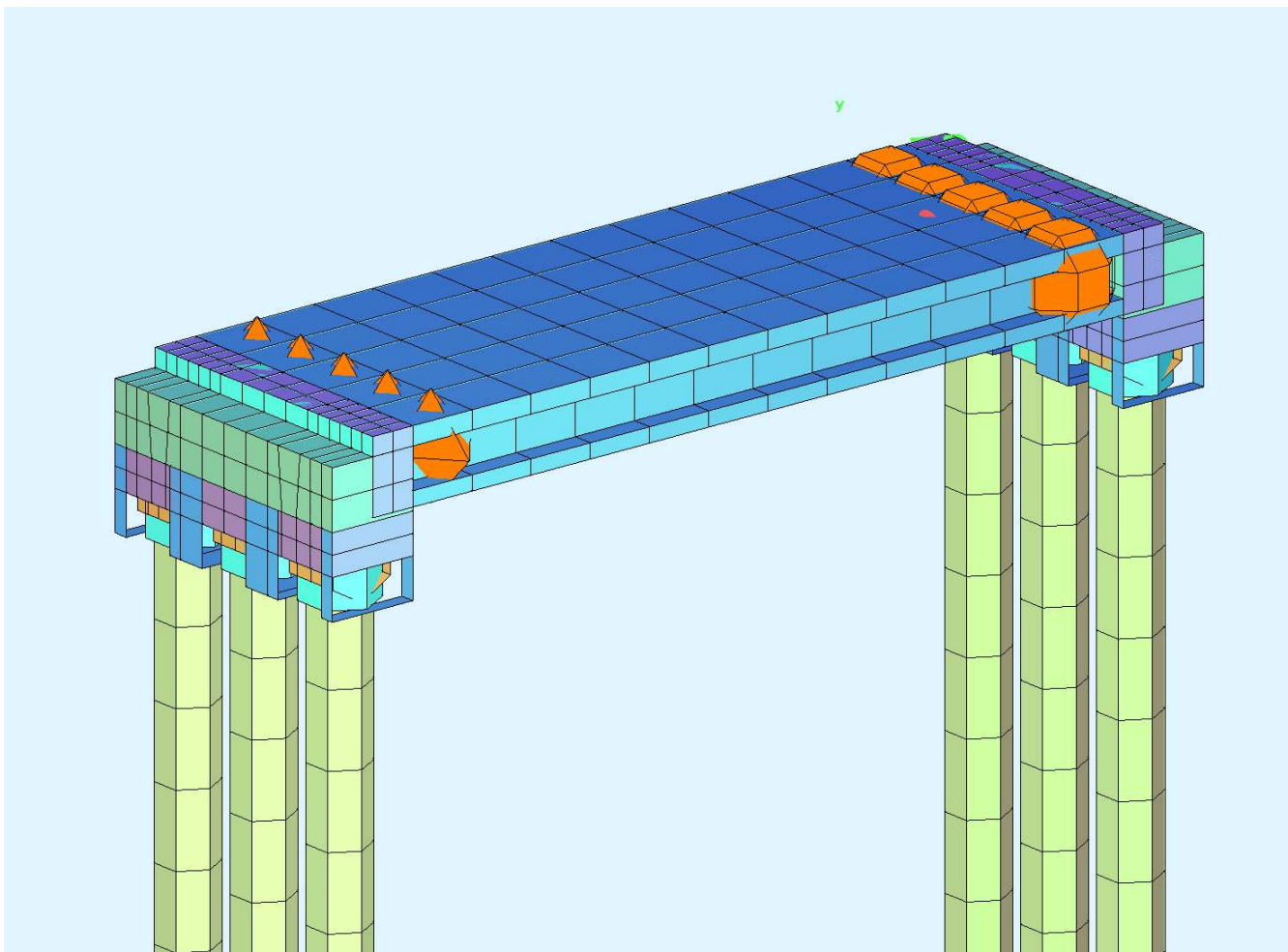
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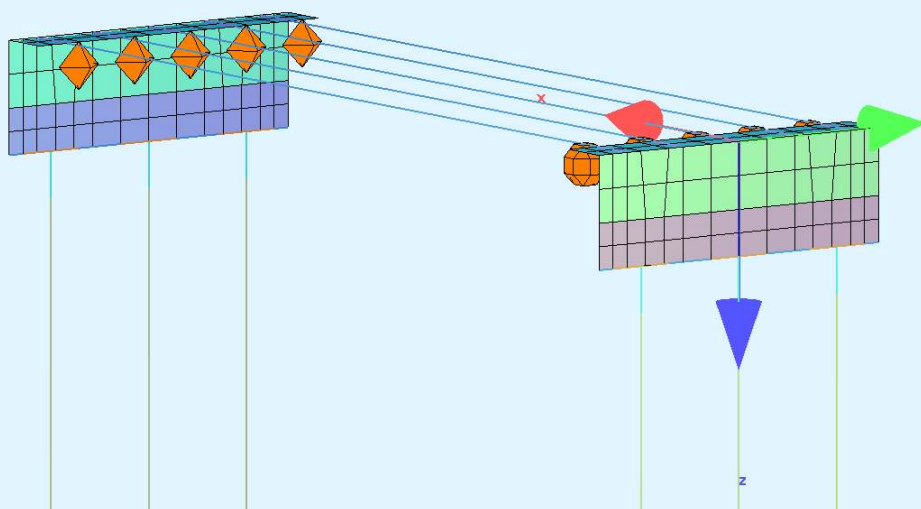
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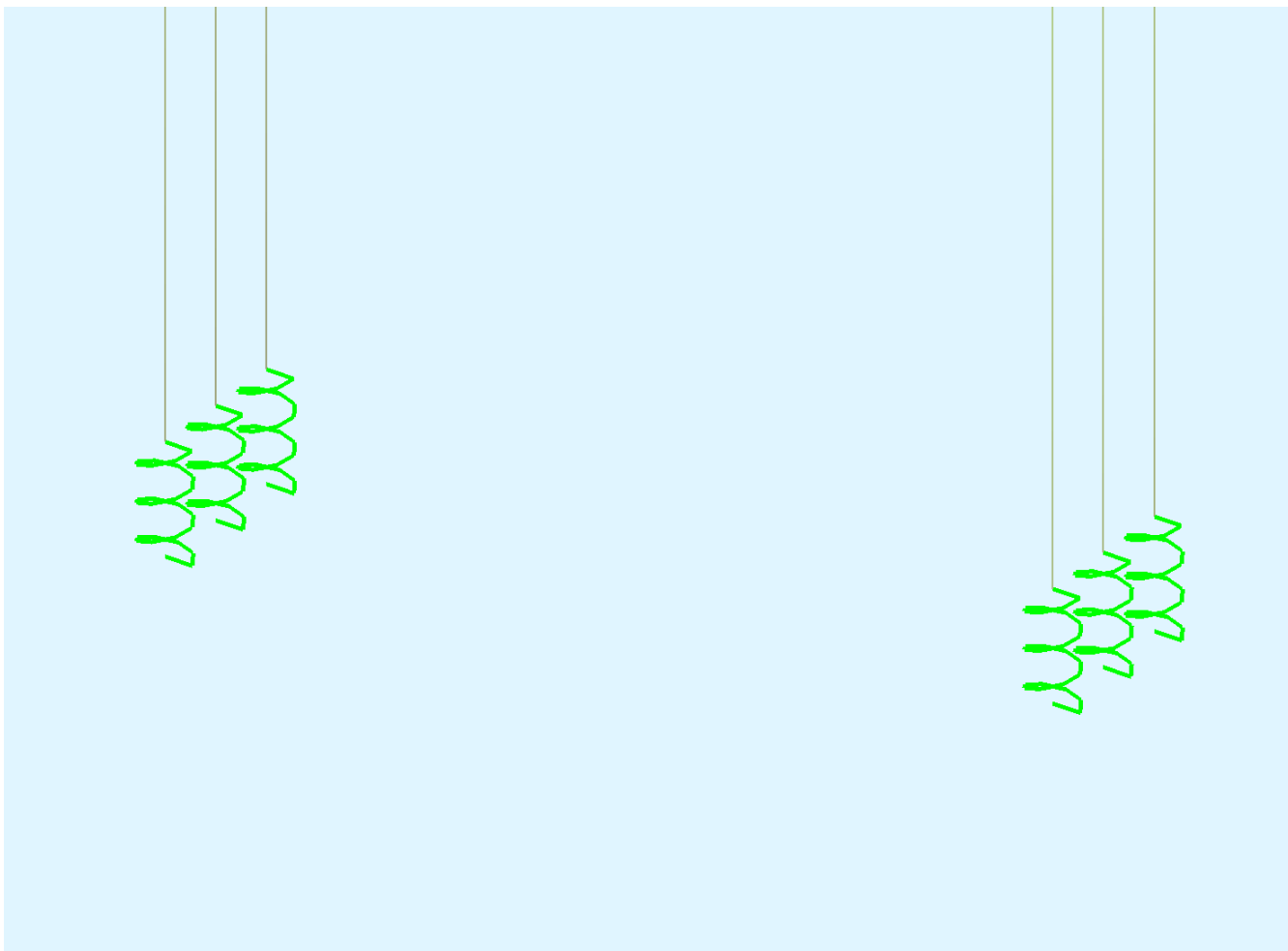
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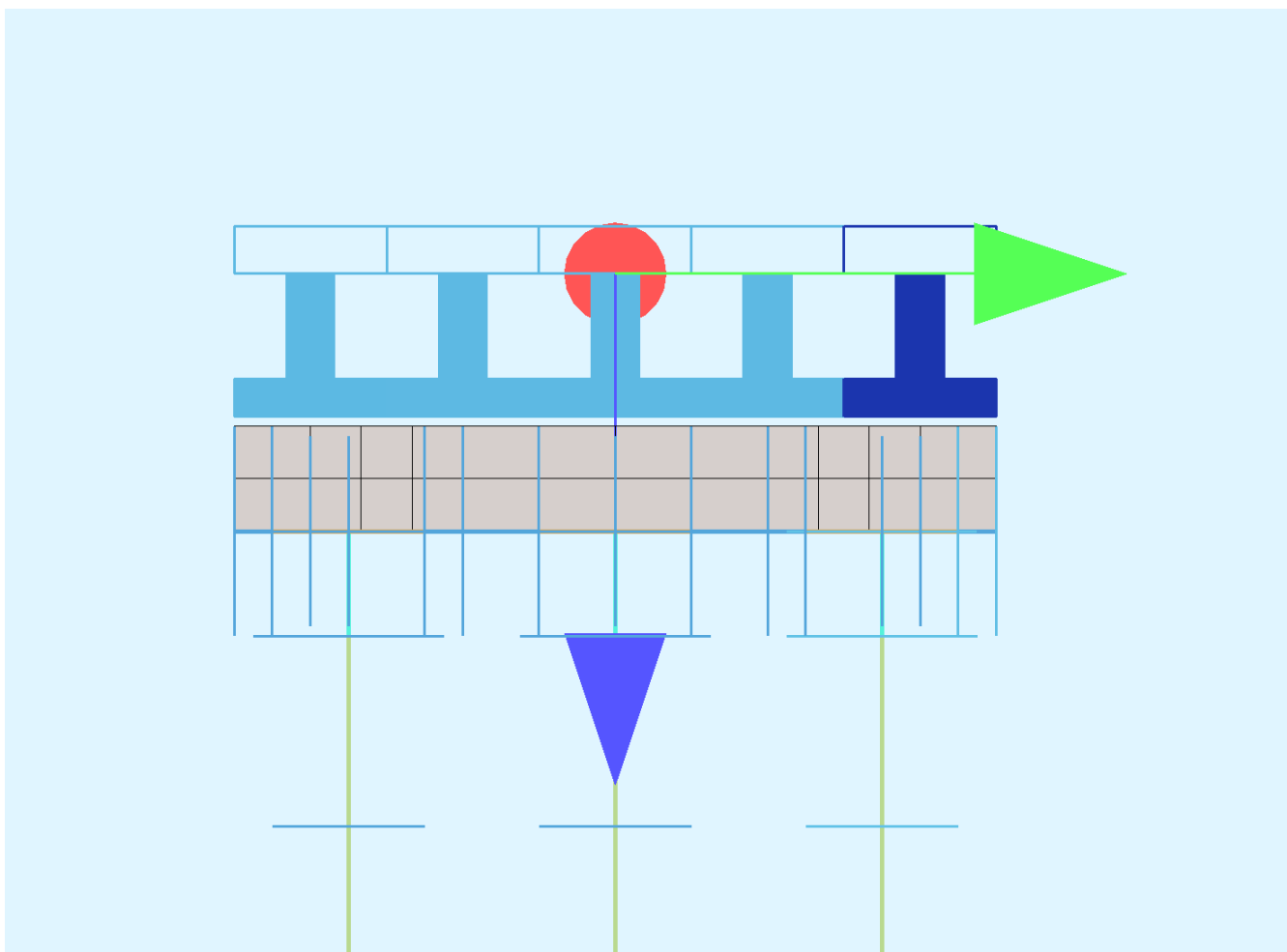
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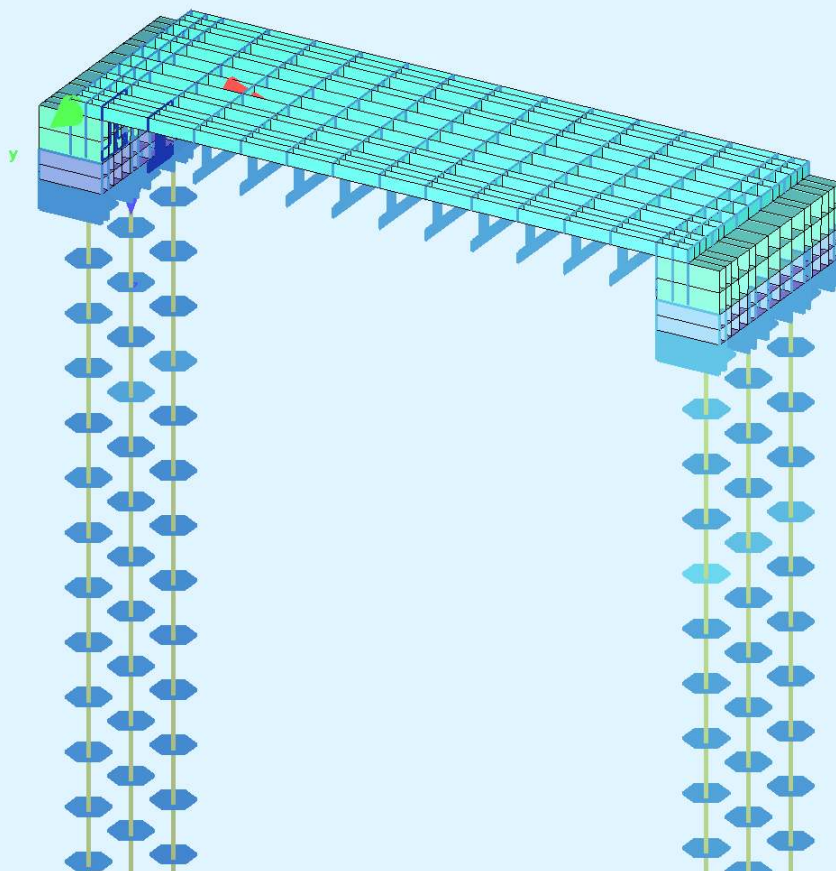
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ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/L=13.00



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00

3) ΟΡΙΣΜΟΣ & ΕΠΙΛΥΣΗ ΦΟΡΤΙΣΕΩΝ ΣΕ ΦΑΣΗ-1

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FORTIA ΦΑΣΗ-1

Load Case 1 I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ

Factor forces and moments 1.000
Factor dead weight DL-XX 0.000
Factor dead weight DL-YY 0.000
Factor dead weight DL-ZZ 1.000
effective construction stage 10 to 10

Load Case 2 I.B. ΔΟΚΩΝ

Factor forces and moments 1.000
Factor dead weight DL-XX 0.000
Factor dead weight DL-YY 0.000
Factor dead weight DL-ZZ 0.000

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1001 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1002 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1003 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1004 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1005 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1006 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1007 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1008 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1009 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1010 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1011 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1012 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1013 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1014 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1015 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1016 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1017 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1018 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1019 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1020 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1021 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1022 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1023 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1024 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1025 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1026 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1027 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1028 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1029 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1030 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1031 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1032 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1033 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1034 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1035 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1036 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1037 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1038 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1039 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1040 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1041 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1042 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1043 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1044 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1045 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1046 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1047 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1048 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1049 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1050 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1051 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1052 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1053 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1054 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1055 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1056 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1057 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1058 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1059 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |
| 1060 | PG | 0.000 | 0.883 | 0.007 | | [MN/m] | | | | |

Load Case 3 I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FORTIA ΦΑΣΗ-1

Load Case 3 Ι.Β. ΧΥΤΗΣ ΠΛΑΚΑΣ

Factor forces and moments 1.000
Factor dead weight DL-XX 0.000
Factor dead weight DL-YY 0.000
Factor dead weight DL-ZZ 0.000

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1001 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1002 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1003 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1004 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1005 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1006 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1007 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1008 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1009 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1010 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1011 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1012 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1013 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1014 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1015 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1016 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1017 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1018 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1019 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1020 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1021 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1022 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1023 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1024 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1025 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1026 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1027 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1028 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1029 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1030 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1031 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1032 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1033 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1034 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1035 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1036 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1037 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1038 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1039 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1040 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1041 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1042 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1043 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1044 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1045 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1046 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1047 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1048 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1049 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1050 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1051 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1052 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1053 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1054 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1055 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1056 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1057 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1058 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1059 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |
| 1060 | PG | 0.000 | 0.883 | 0.005 | | [MN/m] | | | | |

Load Case 4 ΚΙΝΗΤΟ ΦΑΣΗΣ-1

Factor forces and moments 1.000
Factor dead weight DL-XX 0.000
Factor dead weight DL-YY 0.000
Factor dead weight DL-ZZ 0.000

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1001 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1002 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1003 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1004 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FORTIA ΦΑΣΗ-1

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1005 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1006 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1007 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1008 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1009 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1010 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1011 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1012 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1013 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1014 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1015 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1016 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1017 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1018 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1019 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1020 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1021 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1022 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1023 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1024 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1025 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1026 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1027 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1028 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1029 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1030 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1031 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1032 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1033 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1034 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1035 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1036 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1037 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1038 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1039 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1040 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1041 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1042 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1043 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1044 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1045 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1046 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1047 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1048 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1049 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1050 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1051 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1052 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1053 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1054 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1055 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1056 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1057 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1058 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1059 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |
| 1060 | PG | 0.000 | 0.883 | 0.001 | | [MN/m] | | | | |

Load Case 5 ΟΘΗΣΕΙΣ ΓΑΙΩΝ Α1-K0 (Φ-1)

| | | |
|---------------------------|-------|-------|
| Factor forces and moments | | 1.000 |
| Factor dead weight | DL-XX | 0.000 |
| Factor dead weight | DL-YY | 0.000 |
| Factor dead weight | DL-ZZ | 0.000 |

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|--------|----------------|
| | | w[m] | x[m] | y[m] | z[m] |
| Area | | | 0.000 | 2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.800 |
| | | | 0.000 | -2.000 | 1.350 |
| | | | 0.000 | 2.000 | 1.350 |
| | | | | | activated |
| | | | | | 100.00 percent |
| QGRP | 9 | 3.000 | | | |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 11001 | PXX | 0.000 | 0.550 | 0.008 | 0.015 | [MN/m] | | | | |
| 11002 | PXX | 0.000 | 0.550 | 0.008 | 0.015 | [MN/m] | | | | |
| 11003 | PXX | 0.000 | 0.550 | 0.008 | 0.015 | [MN/m] | | | | |
| 12001 | PXX | 0.000 | 1.000 | 0.015 | 0.029 | [MN/m] | | | | |
| 12002 | PXX | 0.000 | 1.000 | 0.029 | 0.043 | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FORTIA ΦΑΣΗ-1

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 12003 | PXX | 0.000 | 1.000 | 0.043 | 0.057 | [MN/m] | | | | |
| 12004 | PXX | 0.000 | 1.000 | 0.015 | 0.029 | [MN/m] | | | | |
| 12005 | PXX | 0.000 | 1.000 | 0.029 | 0.043 | [MN/m] | | | | |
| 12006 | PXX | 0.000 | 1.000 | 0.043 | 0.057 | [MN/m] | | | | |
| 12007 | PXX | 0.000 | 1.000 | 0.015 | 0.029 | [MN/m] | | | | |
| 12008 | PXX | 0.000 | 1.000 | 0.029 | 0.043 | [MN/m] | | | | |
| 12009 | PXX | 0.000 | 1.000 | 0.043 | 0.057 | [MN/m] | | | | |

Load Case 6 ΘΩΣΕΙΣ ΓΑΙΩΝ Α2-Κ0 (ΦΑΣΗΣ-1)

| | |
|---------------------------|-------------|
| Factor forces and moments | 1.000 |
| Factor dead weight | DL-XX 0.000 |
| Factor dead weight | DL-YY 0.000 |
| Factor dead weight | DL-ZZ 0.000 |

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|----------------|
| | | w[m] | x[m] | y[m] | z[m] |
| Area | | | 11.800 | 2.000 | 0.800 PXX |
| | | | 11.800 | -2.000 | 0.800 |
| | | | 11.800 | -2.000 | 1.350 |
| | | | 11.800 | 2.000 | 1.350 |
| | | | | | -0.005 [MN/m2] |
| | | | | | -0.005 [MN/m2] |
| | | | | | -0.005 [MN/m2] |
| | | | | | -0.005 [MN/m2] |
| QGRP | 9 | 3.000 | | activated | 100.00 percent |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 11004 | PXX | 0.000 | 0.550 | -0.008 | -0.015 | [MN/m] | | | | |
| 11005 | PXX | 0.000 | 0.550 | -0.008 | -0.015 | [MN/m] | | | | |
| 11006 | PXX | 0.000 | 0.550 | -0.008 | -0.015 | [MN/m] | | | | |
| 12010 | PXX | 0.000 | 1.000 | -0.015 | -0.029 | [MN/m] | | | | |
| 12011 | PXX | 0.000 | 1.000 | -0.029 | -0.043 | [MN/m] | | | | |
| 12012 | PXX | 0.000 | 1.000 | -0.043 | -0.057 | [MN/m] | | | | |
| 12013 | PXX | 0.000 | 1.000 | -0.015 | -0.029 | [MN/m] | | | | |
| 12014 | PXX | 0.000 | 1.000 | -0.029 | -0.043 | [MN/m] | | | | |
| 12015 | PXX | 0.000 | 1.000 | -0.043 | -0.057 | [MN/m] | | | | |
| 12016 | PXX | 0.000 | 1.000 | -0.015 | -0.029 | [MN/m] | | | | |
| 12017 | PXX | 0.000 | 1.000 | -0.029 | -0.043 | [MN/m] | | | | |
| 12018 | PXX | 0.000 | 1.000 | -0.043 | -0.057 | [MN/m] | | | | |

Load Case 7 ΘΩΣΕΙΣ ΚΙΝΗΤΩΝ Α1-Κ0 (ΦΑΣΗΣ-1)

| | |
|---------------------------|-------------|
| Factor forces and moments | 1.000 |
| Factor dead weight | DL-XX 0.000 |
| Factor dead weight | DL-YY 0.000 |
| Factor dead weight | DL-ZZ 0.000 |

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|----------------|
| | | w[m] | x[m] | y[m] | z[m] |
| Area | | | 0.000 | 2.000 | 0.800 PXX |
| | | | 0.000 | -2.000 | 0.800 |
| | | | 0.000 | -2.000 | 1.350 |
| | | | 0.000 | 2.000 | 1.350 |
| | | | | | 0.041 [MN/m2] |
| | | | | | 0.041 [MN/m2] |
| | | | | | 0.026 [MN/m2] |
| | | | | | 0.026 [MN/m2] |
| QGRP | 9 | 3.000 | | activated | 100.00 percent |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 11001 | PXX | 0.000 | 0.550 | 0.037 | 0.026 | [MN/m] | | | | |
| 11002 | PXX | 0.000 | 0.550 | 0.037 | 0.026 | [MN/m] | | | | |
| 11003 | PXX | 0.000 | 0.550 | 0.037 | 0.026 | [MN/m] | | | | |
| 12001 | PXX | 0.000 | 1.000 | 0.026 | 0.019 | [MN/m] | | | | |
| 12002 | PXX | 0.000 | 1.000 | 0.019 | 0.013 | [MN/m] | | | | |
| 12003 | PXX | 0.000 | 1.000 | 0.013 | 0.007 | [MN/m] | | | | |
| 12004 | PXX | 0.000 | 1.000 | 0.026 | 0.019 | [MN/m] | | | | |
| 12005 | PXX | 0.000 | 1.000 | 0.019 | 0.013 | [MN/m] | | | | |
| 12006 | PXX | 0.000 | 1.000 | 0.013 | 0.007 | [MN/m] | | | | |
| 12007 | PXX | 0.000 | 1.000 | 0.026 | 0.019 | [MN/m] | | | | |
| 12008 | PXX | 0.000 | 1.000 | 0.019 | 0.013 | [MN/m] | | | | |
| 12009 | PXX | 0.000 | 1.000 | 0.013 | 0.007 | [MN/m] | | | | |

Load Case 8 ΘΩΣΕΙΣ ΚΙΝΗΤΩΝ Α2-Κ0 (ΦΑΣΗΣ-1)

| | |
|---------------------------|-------------|
| Factor forces and moments | 1.000 |
| Factor dead weight | DL-XX 0.000 |
| Factor dead weight | DL-YY 0.000 |
| Factor dead weight | DL-ZZ 0.000 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
 FORTIA ΦΑΣΗ-1

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|----------------|
| | | w[m] | x[m] | y[m] | z[m] |
| Area | | | 11.800 | 2.000 | 0.800 |
| | | | 11.800 | -2.000 | 0.800 |
| | | | 11.800 | -2.000 | 1.350 |
| | | | 11.800 | 2.000 | 1.350 |
| QGRP | 9 | 3.000 | | activated | 100.00 percent |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 11004 | PXX | 0.000 | 0.550 | -0.037 | -0.026 | [MN/m] | | | | |
| 11005 | PXX | 0.000 | 0.550 | -0.037 | -0.026 | [MN/m] | | | | |
| 11006 | PXX | 0.000 | 0.550 | -0.037 | -0.026 | [MN/m] | | | | |
| 12010 | PXX | 0.000 | 1.000 | -0.026 | -0.019 | [MN/m] | | | | |
| 12011 | PXX | 0.000 | 1.000 | -0.019 | -0.013 | [MN/m] | | | | |
| 12012 | PXX | 0.000 | 1.000 | -0.013 | -0.007 | [MN/m] | | | | |
| 12013 | PXX | 0.000 | 1.000 | -0.026 | -0.019 | [MN/m] | | | | |
| 12014 | PXX | 0.000 | 1.000 | -0.019 | -0.013 | [MN/m] | | | | |
| 12015 | PXX | 0.000 | 1.000 | -0.013 | -0.007 | [MN/m] | | | | |
| 12016 | PXX | 0.000 | 1.000 | -0.026 | -0.019 | [MN/m] | | | | |
| 12017 | PXX | 0.000 | 1.000 | -0.019 | -0.013 | [MN/m] | | | | |
| 12018 | PXX | 0.000 | 1.000 | -0.013 | -0.007 | [MN/m] | | | | |

Load Case 11 ΟΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5*A2(Φ1)

| | |
|---------------------------------------|---------------------|
| Factor forces and moments | 1.000 |
| Factor dead weight DL-XX | 0.000 |
| Factor dead weight DL-YY | 0.000 |
| Factor dead weight DL-ZZ | 0.000 |
| Loads partially copied from load case | 5 with factor 0.500 |
| Loads partially copied from load case | 6 with factor 0.500 |

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|----------------|
| | | w[m] | x[m] | y[m] | z[m] |
| Area | | | 0.000 | 2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.800 |
| | | | 0.000 | -2.000 | 1.350 |
| | | | 0.000 | 2.000 | 1.350 |
| QGRP | 9 | 3.000 | | activated | 100.00 percent |
| Area | | | 11.800 | 2.000 | 0.800 |
| | | | 11.800 | -2.000 | 0.800 |
| | | | 11.800 | -2.000 | 1.350 |
| | | | 11.800 | 2.000 | 1.350 |
| QGRP | 9 | 3.000 | | activated | 100.00 percent |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 11001 | PXX | 0.000 | 0.550 | 0.004 | 0.008 | [MN/m] | | | | |
| 11002 | PXX | 0.000 | 0.550 | 0.004 | 0.008 | [MN/m] | | | | |
| 11003 | PXX | 0.000 | 0.550 | 0.004 | 0.008 | [MN/m] | | | | |
| 11004 | PXX | 0.000 | 0.550 | -0.004 | -0.008 | [MN/m] | | | | |
| 11005 | PXX | 0.000 | 0.550 | -0.004 | -0.008 | [MN/m] | | | | |
| 11006 | PXX | 0.000 | 0.550 | -0.004 | -0.008 | [MN/m] | | | | |
| 12001 | PXX | 0.000 | 1.000 | 0.008 | 0.015 | [MN/m] | | | | |
| 12002 | PXX | 0.000 | 1.000 | 0.015 | 0.022 | [MN/m] | | | | |
| 12003 | PXX | 0.000 | 1.000 | 0.022 | 0.029 | [MN/m] | | | | |
| 12004 | PXX | 0.000 | 1.000 | 0.008 | 0.015 | [MN/m] | | | | |
| 12005 | PXX | 0.000 | 1.000 | 0.015 | 0.022 | [MN/m] | | | | |
| 12006 | PXX | 0.000 | 1.000 | 0.022 | 0.029 | [MN/m] | | | | |
| 12007 | PXX | 0.000 | 1.000 | 0.008 | 0.015 | [MN/m] | | | | |
| 12008 | PXX | 0.000 | 1.000 | 0.015 | 0.022 | [MN/m] | | | | |
| 12009 | PXX | 0.000 | 1.000 | 0.022 | 0.029 | [MN/m] | | | | |
| 12010 | PXX | 0.000 | 1.000 | -0.008 | -0.015 | [MN/m] | | | | |
| 12011 | PXX | 0.000 | 1.000 | -0.015 | -0.022 | [MN/m] | | | | |
| 12012 | PXX | 0.000 | 1.000 | -0.022 | -0.029 | [MN/m] | | | | |
| 12013 | PXX | 0.000 | 1.000 | -0.008 | -0.015 | [MN/m] | | | | |
| 12014 | PXX | 0.000 | 1.000 | -0.015 | -0.022 | [MN/m] | | | | |
| 12015 | PXX | 0.000 | 1.000 | -0.022 | -0.029 | [MN/m] | | | | |
| 12016 | PXX | 0.000 | 1.000 | -0.008 | -0.015 | [MN/m] | | | | |
| 12017 | PXX | 0.000 | 1.000 | -0.015 | -0.022 | [MN/m] | | | | |
| 12018 | PXX | 0.000 | 1.000 | -0.022 | -0.029 | [MN/m] | | | | |

Load Case 12 ΟΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5*A2(Φ1)

| | |
|---------------------------------------|---------------------|
| Factor forces and moments | 1.000 |
| Factor dead weight DL-XX | 0.000 |
| Factor dead weight DL-YY | 0.000 |
| Factor dead weight DL-ZZ | 0.000 |
| Loads partially copied from load case | 5 with factor 1.000 |
| Loads partially copied from load case | 6 with factor 0.500 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
 FORTIA ΦΑΣΗ-1

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|--------|----------------|
| | | w[m] | x[m] | Y[m] | Z[m] |
| Area | | | 0.000 | 2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.800 |
| | | | 0.000 | -2.000 | 1.350 |
| | | | 0.000 | 2.000 | 1.350 |
| | | | | | activated |
| | | | | | 100.00 percent |
| Area | QGRP | 9 | 3.000 | 11.800 | 2.000 |
| | | | | 0.800 | 0.800 |
| | | | | -2.000 | 0.800 |
| | | | | -2.000 | 1.350 |
| | | | | 2.000 | 1.350 |
| | | | | | activated |
| | | | | | 100.00 percent |
| | QGRP | 9 | 3.000 | | |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 11001 | PXX | 0.000 | 0.550 | 0.008 | 0.015 | [MN/m] | | | | |
| 11002 | PXX | 0.000 | 0.550 | 0.008 | 0.015 | [MN/m] | | | | |
| 11003 | PXX | 0.000 | 0.550 | 0.008 | 0.015 | [MN/m] | | | | |
| 11004 | PXX | 0.000 | 0.550 | -0.004 | -0.008 | [MN/m] | | | | |
| 11005 | PXX | 0.000 | 0.550 | -0.004 | -0.008 | [MN/m] | | | | |
| 11006 | PXX | 0.000 | 0.550 | -0.004 | -0.008 | [MN/m] | | | | |
| 12001 | PXX | 0.000 | 1.000 | 0.015 | 0.029 | [MN/m] | | | | |
| 12002 | PXX | 0.000 | 1.000 | 0.029 | 0.043 | [MN/m] | | | | |
| 12003 | PXX | 0.000 | 1.000 | 0.043 | 0.057 | [MN/m] | | | | |
| 12004 | PXX | 0.000 | 1.000 | 0.015 | 0.029 | [MN/m] | | | | |
| 12005 | PXX | 0.000 | 1.000 | 0.029 | 0.043 | [MN/m] | | | | |
| 12006 | PXX | 0.000 | 1.000 | 0.043 | 0.057 | [MN/m] | | | | |
| 12007 | PXX | 0.000 | 1.000 | 0.015 | 0.029 | [MN/m] | | | | |
| 12008 | PXX | 0.000 | 1.000 | 0.029 | 0.043 | [MN/m] | | | | |
| 12009 | PXX | 0.000 | 1.000 | 0.043 | 0.057 | [MN/m] | | | | |
| 12010 | PXX | 0.000 | 1.000 | -0.008 | -0.015 | [MN/m] | | | | |
| 12011 | PXX | 0.000 | 1.000 | -0.015 | -0.022 | [MN/m] | | | | |
| 12012 | PXX | 0.000 | 1.000 | -0.022 | -0.029 | [MN/m] | | | | |
| 12013 | PXX | 0.000 | 1.000 | -0.008 | -0.015 | [MN/m] | | | | |
| 12014 | PXX | 0.000 | 1.000 | -0.015 | -0.022 | [MN/m] | | | | |
| 12015 | PXX | 0.000 | 1.000 | -0.022 | -0.029 | [MN/m] | | | | |
| 12016 | PXX | 0.000 | 1.000 | -0.008 | -0.015 | [MN/m] | | | | |
| 12017 | PXX | 0.000 | 1.000 | -0.015 | -0.022 | [MN/m] | | | | |
| 12018 | PXX | 0.000 | 1.000 | -0.022 | -0.029 | [MN/m] | | | | |

Load Case 13 ΟΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0*A2(Φ1)

| | |
|---------------------------------------|---------------------|
| Factor forces and moments | 1.000 |
| Factor dead weight | DL-XX 0.000 |
| Factor dead weight | DL-YY 0.000 |
| Factor dead weight | DL-ZZ 0.000 |
| Loads partially copied from load case | 5 with factor 0.500 |
| Loads partially copied from load case | 6 with factor 1.000 |

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|--------|----------------|
| | | w[m] | x[m] | Y[m] | Z[m] |
| Area | | | 0.000 | 2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.800 |
| | | | 0.000 | -2.000 | 1.350 |
| | | | 0.000 | 2.000 | 1.350 |
| | | | | | activated |
| | | | | | 100.00 percent |
| Area | QGRP | 9 | 3.000 | 11.800 | 2.000 |
| | | | | 0.800 | 0.800 |
| | | | | -2.000 | 0.800 |
| | | | | -2.000 | 1.350 |
| | | | | 2.000 | 1.350 |
| | | | | | activated |
| | | | | | 100.00 percent |
| | QGRP | 9 | 3.000 | | |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 11001 | PXX | 0.000 | 0.550 | 0.004 | 0.008 | [MN/m] | | | | |
| 11002 | PXX | 0.000 | 0.550 | 0.004 | 0.008 | [MN/m] | | | | |
| 11003 | PXX | 0.000 | 0.550 | 0.004 | 0.008 | [MN/m] | | | | |
| 11004 | PXX | 0.000 | 0.550 | -0.008 | -0.015 | [MN/m] | | | | |
| 11005 | PXX | 0.000 | 0.550 | -0.008 | -0.015 | [MN/m] | | | | |
| 11006 | PXX | 0.000 | 0.550 | -0.008 | -0.015 | [MN/m] | | | | |
| 12001 | PXX | 0.000 | 1.000 | 0.008 | 0.015 | [MN/m] | | | | |
| 12002 | PXX | 0.000 | 1.000 | 0.015 | 0.022 | [MN/m] | | | | |
| 12003 | PXX | 0.000 | 1.000 | 0.022 | 0.029 | [MN/m] | | | | |
| 12004 | PXX | 0.000 | 1.000 | 0.008 | 0.015 | [MN/m] | | | | |
| 12005 | PXX | 0.000 | 1.000 | 0.015 | 0.022 | [MN/m] | | | | |
| 12006 | PXX | 0.000 | 1.000 | 0.022 | 0.029 | [MN/m] | | | | |
| 12007 | PXX | 0.000 | 1.000 | 0.008 | 0.015 | [MN/m] | | | | |
| 12008 | PXX | 0.000 | 1.000 | 0.015 | 0.022 | [MN/m] | | | | |
| 12009 | PXX | 0.000 | 1.000 | 0.022 | 0.029 | [MN/m] | | | | |
| 12010 | PXX | 0.000 | 1.000 | -0.015 | -0.029 | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
 FORTIA ΦΑΣΗ-1

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 12011 | PXX | 0.000 | 1.000 | -0.029 | -0.043 | [MN/m] | | | | |
| 12012 | PXX | 0.000 | 1.000 | -0.043 | -0.057 | [MN/m] | | | | |
| 12013 | PXX | 0.000 | 1.000 | -0.015 | -0.029 | [MN/m] | | | | |
| 12014 | PXX | 0.000 | 1.000 | -0.029 | -0.043 | [MN/m] | | | | |
| 12015 | PXX | 0.000 | 1.000 | -0.043 | -0.057 | [MN/m] | | | | |
| 12016 | PXX | 0.000 | 1.000 | -0.015 | -0.029 | [MN/m] | | | | |
| 12017 | PXX | 0.000 | 1.000 | -0.029 | -0.043 | [MN/m] | | | | |
| 12018 | PXX | 0.000 | 1.000 | -0.043 | -0.057 | [MN/m] | | | | |

Load Case 14 ΟΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0*A2(Φ1)

| | | |
|---------------------------------------|---------------|-------|
| Factor forces and moments | | 1.000 |
| Factor dead weight | DL-XX | 0.000 |
| Factor dead weight | DL-YY | 0.000 |
| Factor dead weight | DL-ZZ | 0.000 |
| Loads partially copied from load case | 5 with factor | 1.000 |
| Loads partially copied from load case | 6 with factor | 1.000 |

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|--------|----------------|
| | | w[m] | x[m] | y[m] | z[m] |
| Area | | | 0.000 | 2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.800 |
| | | | 0.000 | -2.000 | 1.350 |
| | | | 0.000 | 2.000 | 1.350 |
| | | | | | activated |
| | | | | | 100.00 percent |
| Area | QGRP | 9 | 3.000 | | |
| | | | 11.800 | 2.000 | 0.800 |
| | | | 11.800 | -2.000 | 0.800 |
| | | | 11.800 | -2.000 | 1.350 |
| | | | 11.800 | 2.000 | 1.350 |
| | | | | | activated |
| | | | | | 100.00 percent |
| | QGRP | 9 | 3.000 | | |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 11001 | PXX | 0.000 | 0.550 | 0.008 | 0.015 | [MN/m] | | | | |
| 11002 | PXX | 0.000 | 0.550 | 0.008 | 0.015 | [MN/m] | | | | |
| 11003 | PXX | 0.000 | 0.550 | 0.008 | 0.015 | [MN/m] | | | | |
| 11004 | PXX | 0.000 | 0.550 | -0.008 | -0.015 | [MN/m] | | | | |
| 11005 | PXX | 0.000 | 0.550 | -0.008 | -0.015 | [MN/m] | | | | |
| 11006 | PXX | 0.000 | 0.550 | -0.008 | -0.015 | [MN/m] | | | | |
| 12001 | PXX | 0.000 | 1.000 | 0.015 | 0.029 | [MN/m] | | | | |
| 12002 | PXX | 0.000 | 1.000 | 0.029 | 0.043 | [MN/m] | | | | |
| 12003 | PXX | 0.000 | 1.000 | 0.043 | 0.057 | [MN/m] | | | | |
| 12004 | PXX | 0.000 | 1.000 | 0.015 | 0.029 | [MN/m] | | | | |
| 12005 | PXX | 0.000 | 1.000 | 0.029 | 0.043 | [MN/m] | | | | |
| 12006 | PXX | 0.000 | 1.000 | 0.043 | 0.057 | [MN/m] | | | | |
| 12007 | PXX | 0.000 | 1.000 | 0.015 | 0.029 | [MN/m] | | | | |
| 12008 | PXX | 0.000 | 1.000 | 0.029 | 0.043 | [MN/m] | | | | |
| 12009 | PXX | 0.000 | 1.000 | 0.043 | 0.057 | [MN/m] | | | | |
| 12010 | PXX | 0.000 | 1.000 | -0.015 | -0.029 | [MN/m] | | | | |
| 12011 | PXX | 0.000 | 1.000 | -0.029 | -0.043 | [MN/m] | | | | |
| 12012 | PXX | 0.000 | 1.000 | -0.043 | -0.057 | [MN/m] | | | | |
| 12013 | PXX | 0.000 | 1.000 | -0.015 | -0.029 | [MN/m] | | | | |
| 12014 | PXX | 0.000 | 1.000 | -0.029 | -0.043 | [MN/m] | | | | |
| 12015 | PXX | 0.000 | 1.000 | -0.043 | -0.057 | [MN/m] | | | | |
| 12016 | PXX | 0.000 | 1.000 | -0.015 | -0.029 | [MN/m] | | | | |
| 12017 | PXX | 0.000 | 1.000 | -0.029 | -0.043 | [MN/m] | | | | |
| 12018 | PXX | 0.000 | 1.000 | -0.043 | -0.057 | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΕΠΙΛΥΣΗ ΦΑΣΗ-1

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-----------------------------|---------|---------|---------|
| 1 I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ | 0.000 | 0.000 | 2.387 |
| 2 I.B. ΔΟΚΩΝ | 0.000 | 0.000 | 0.394 |
| 3 I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ | 0.000 | 0.000 | 0.276 |
| 4 ΚΙΝΗΤΟ ΦΑΣΗΣ-1 | 0.000 | 0.000 | 0.042 |
| 5 ΩΘΗΣΕΙΣ ΓΑΙΩΝ Α1-Κ0 (Φ-1 | 0.353 | 0.000 | 0.000 |
| 6 ΩΘΗΣΕΙΣ ΓΑΙΩΝ Α2-Κ0 (ΦΑΣ | -0.353 | 0.000 | 0.000 |
| 7 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝ Α1-Κ0 (Φ | 0.272 | 0.000 | 0.000 |
| 8 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝ Α2-Κ0 (Φ | -0.272 | 0.000 | 0.000 |
| 11 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*Α1+0.5 | 0.000 | 0.000 | 0.000 |
| 12 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*Α1+0.5 | 0.176 | 0.000 | 0.000 |
| 13 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*Α1+1.0 | -0.176 | 0.000 | 0.000 |
| 14 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*Α1+1.0 | 0.000 | 0.000 | 0.000 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00

4) ΟΡΙΣΜΟΣ & ΕΠΙΛΥΣΗ ΦΟΡΤΙΣΕΩΝ ΥΠΟΛΟΓΙΣΜΟΣ ΕΡΠΥΣΜΩΝ ΣΕ ΦΑ

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FORTISEIS ΦΑΣΗ-2

Load Case 31 ΠΥΞΕΙΣ-ΟΔΟΣΤΡΩΣΙΑ

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|--------|---------------|
| | | w[m] | x[m] | Y[m] | Z[m] |
| Area | | | 0.000 | 2.000 | 0.000 |
| | | | 11.800 | 2.000 | 0.000 |
| | | | 11.800 | -1.000 | 0.000 |
| | | | 0.000 | -1.000 | 0.000 |
| Area | QGRP | 3 | 3.000 | (--) | activated |
| | | | | | 89.83 percent |
| | | | | 0.000 | 2.000 |
| | | | | 11.800 | 2.000 |
| Area | | | | 0.000 | 0.000 |
| | | | | 11.800 | -1.000 |
| | | | | 0.000 | -1.000 |
| | | | | 0.000 | 0.000 |
| Area | QGRP | 4 | 3.000 | (--) | activated |
| | | | | | 10.17 percent |
| | | | | 0.000 | 2.000 |
| | | | | 11.800 | 2.000 |

Load Case 32 PEZODROMIO

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|--------|---------------|
| | | w[m] | x[m] | Y[m] | Z[m] |
| Area | | | 11.800 | -2.000 | 0.000 |
| | | | 0.000 | -2.000 | 0.000 |
| | | | 0.000 | -1.000 | 0.000 |
| | | | 11.800 | -1.000 | 0.000 |
| Area | QGRP | 3 | 3.000 | (--) | activated |
| | | | | | 89.83 percent |
| | | | | 11.800 | -2.000 |
| | | | | 0.000 | -2.000 |
| Area | | | | 0.000 | 0.000 |
| | | | | 11.800 | -1.000 |
| | | | | 0.000 | -1.000 |
| | | | | 0.000 | 0.000 |
| Area | QGRP | 4 | 3.000 | (--) | activated |
| | | | | | 10.17 percent |
| | | | | 11.800 | -1.000 |
| | | | | 0.000 | 0.000 |

Load Case 33 ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50KN/m2

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|--------|---------------|
| | | w[m] | x[m] | Y[m] | Z[m] |
| Area | | | 0.000 | 2.000 | 0.000 |
| | | | 11.800 | 2.000 | 0.000 |
| | | | 11.800 | -1.000 | 0.000 |
| | | | 0.000 | -1.000 | 0.000 |
| Area | QGRP | 3 | 3.000 | (--) | activated |
| | | | | | 89.83 percent |
| | | | | 0.000 | 2.000 |
| | | | | 11.800 | 2.000 |
| Area | | | | 0.000 | 0.000 |
| | | | | 11.800 | -1.000 |
| | | | | 0.000 | -1.000 |
| | | | | 0.000 | 0.000 |
| Area | QGRP | 4 | 3.000 | (--) | activated |
| | | | | | 10.17 percent |
| | | | | 11.800 | -1.000 |
| | | | | 0.000 | 0.000 |

Load Case 34 ΟΘΗΣΕΙΣ ΓΑΙΩΝ Α1-Κ0(Φ-2)

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|--------|----------------|
| | | w[m] | x[m] | Y[m] | Z[m] |
| Area | | | 0.000 | 2.000 | 0.000 |
| | | | 0.000 | 2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.000 |
| Area | QGRP | 8 | 3.000 | | activated |
| | | | | | 100.00 percent |
| | | | | 0.000 | 2.000 |
| | | | | 0.000 | -2.000 |
| Area | | | | 0.000 | 0.800 |
| | | | | 0.000 | -2.000 |
| | | | | 0.000 | 1.350 |
| | | | | 0.000 | 2.000 |
| Area | QGRP | 9 | 3.000 | | activated |
| | | | | | 100.00 percent |
| | | | | 0.000 | 1.350 |
| | | | | 0.000 | 2.000 |

Load Case 35 ΟΘΗΣΕΙΣ ΓΑΙΩΝ Α2-Κ0(Φ-2)

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|--------|----------------|
| | | w[m] | x[m] | Y[m] | Z[m] |
| Area | | | 11.800 | 2.000 | 0.000 |
| | | | 11.800 | 2.000 | 0.800 |
| | | | 11.800 | -2.000 | 0.800 |
| | | | 11.800 | -2.000 | 0.000 |
| Area | QGRP | 8 | 3.000 | | activated |
| | | | | | 100.00 percent |
| | | | | 11.800 | 2.000 |
| | | | | 11.800 | -2.000 |
| Area | | | | 0.000 | 0.800 |
| | | | | 0.000 | -2.000 |
| | | | | 0.000 | 0.800 |
| | | | | 0.000 | 0.800 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FORTISEIS ΦΑΣΗ-2

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|----------------|
| | | w[m] | x[m] | y[m] | z[m] |
| | | | 11.800 | -2.000 | 1.350 |
| | | | 11.800 | 2.000 | 1.350 |
| QGRP | 9 | 3.000 | | activated | 100.00 percent |

Load Case 36 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5*A2(Φ1)

Factor forces and moments 1.000
Loads partially copied from load case 34 with factor 0.500
Loads partially copied from load case 35 with factor 0.500

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|----------------|
| | | w[m] | x[m] | y[m] | z[m] |
| Area | | | 0.000 | 2.000 | 0.000 |
| | | | 0.000 | 2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.000 |
| QGRP | 8 | 3.000 | | activated | 100.00 percent |
| Area | | | 0.000 | 2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.800 |
| | | | 0.000 | -2.000 | 1.350 |
| | | | 0.000 | 2.000 | 1.350 |
| QGRP | 9 | 3.000 | | activated | 100.00 percent |
| Area | | | 11.800 | 2.000 | 0.000 |
| | | | 11.800 | 2.000 | 0.800 |
| | | | 11.800 | -2.000 | 0.800 |
| | | | 11.800 | -2.000 | 0.000 |
| QGRP | 8 | 3.000 | | activated | 100.00 percent |
| Area | | | 11.800 | 2.000 | 0.800 |
| | | | 11.800 | -2.000 | 0.800 |
| | | | 11.800 | -2.000 | 1.350 |
| | | | 11.800 | 2.000 | 1.350 |
| QGRP | 9 | 3.000 | | activated | 100.00 percent |

Load Case 37 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5*A2(Φ1)

Factor forces and moments 1.000
Loads partially copied from load case 34 with factor 1.000
Loads partially copied from load case 35 with factor 0.500

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|----------------|
| | | w[m] | x[m] | y[m] | z[m] |
| Area | | | 0.000 | 2.000 | 0.000 |
| | | | 0.000 | 2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.000 |
| QGRP | 8 | 3.000 | | activated | 100.00 percent |
| Area | | | 0.000 | 2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.800 |
| | | | 0.000 | -2.000 | 1.350 |
| | | | 0.000 | 2.000 | 1.350 |
| QGRP | 9 | 3.000 | | activated | 100.00 percent |
| Area | | | 11.800 | 2.000 | 0.000 |
| | | | 11.800 | 2.000 | 0.800 |
| | | | 11.800 | -2.000 | 0.800 |
| | | | 11.800 | -2.000 | 0.000 |
| QGRP | 8 | 3.000 | | activated | 100.00 percent |
| Area | | | 11.800 | 2.000 | 0.800 |
| | | | 11.800 | -2.000 | 0.800 |
| | | | 11.800 | -2.000 | 1.350 |
| | | | 11.800 | 2.000 | 1.350 |
| QGRP | 9 | 3.000 | | activated | 100.00 percent |

Load Case 38 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0*A2(Φ1)

Factor forces and moments 1.000
Loads partially copied from load case 34 with factor 0.500
Loads partially copied from load case 35 with factor 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|----------------|
| | | w[m] | x[m] | y[m] | z[m] |
| Area | | | 0.000 | 2.000 | 0.000 |
| | | | 0.000 | 2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.000 |
| QGRP | 8 | 3.000 | | activated | 100.00 percent |
| Area | | | 0.000 | 2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.800 |
| | | | 0.000 | -2.000 | 1.350 |

OPISTIKH MELETH/TEKNIKO TA/L=13.00
FORTISEIS ΦΑΣΗ-2

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|--------------------|
| | | w[m] | x[m] | y[m] | z[m] |
| Area | QGRP | 9 | 3.000 | 0.000 | 2.000 |
| | | | | 1.350 | 0.007 [MN/m2] |
| | | | | activated | 100.00 percent |
| | | | | 11.800 | 2.000 |
| | | | | 0.000 | PXX -0.013 [MN/m2] |
| Area | QGRP | 8 | 3.000 | 11.800 | 2.000 |
| | | | | 0.800 | -0.013 [MN/m2] |
| | | | | 11.800 | -2.000 |
| | | | | 0.800 | -0.013 [MN/m2] |
| | | | | 11.800 | -2.000 |
| Area | QGRP | 9 | 3.000 | 0.000 | 2.000 |
| | | | | 1.350 | -0.013 [MN/m2] |
| | | | | activated | 100.00 percent |
| | | | | 11.800 | 2.000 |
| | | | | 0.800 | PXX -0.013 [MN/m2] |

Load Case 39 ΟΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0*A2(Φ1)

Factor forces and moments 1.000
Loads partially copied from load case 34 with factor 1.000
Loads partially copied from load case 35 with factor 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|--------------------|
| | | w[m] | x[m] | y[m] | z[m] |
| Area | QGRP | 8 | 3.000 | 0.000 | 2.000 |
| | | | | 0.800 | 0.013 [MN/m2] |
| | | | | 0.000 | 2.000 |
| | | | | 0.800 | 0.013 [MN/m2] |
| | | | | 0.000 | -2.000 |
| Area | QGRP | 9 | 3.000 | 0.000 | 2.000 |
| | | | | 1.350 | 0.013 [MN/m2] |
| | | | | activated | 100.00 percent |
| | | | | 11.800 | 2.000 |
| | | | | 0.000 | PXX -0.013 [MN/m2] |

Load Case 41 L.L.UDL_2.50KN/m2

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|--------|-------------------------|
| | | w[m] | x[m] | y[m] | z[m] |
| Area | QGRP | 3 | 3.000 | 0.000 | 2.000 |
| | | | | 0.000 | 0.000 |
| | | | | 11.800 | -2.000 |
| | | | | 0.000 | 0.000 |
| | | | | (--) | activated 89.83 percent |
| Area | QGRP | 4 | 3.000 | 0.000 | 2.000 |
| | | | | 0.000 | 0.000 |
| | | | | 11.800 | -2.000 |
| | | | | 0.000 | 0.000 |
| | | | | (--) | activated 10.17 percent |

Load Case 42 L.L.UDL_6.50KN/m2

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|--------|-------------------------|
| | | w[m] | x[m] | y[m] | z[m] |
| Area | QGRP | 3 | 3.000 | 11.800 | -1.000 |
| | | | | 0.000 | -1.000 |
| | | | | 0.000 | 2.000 |
| | | | | 11.800 | 2.000 |
| | | | | (--) | activated 89.83 percent |
| Area | QGRP | 4 | 3.000 | 11.800 | -1.000 |
| | | | | 0.000 | -1.000 |
| | | | | 0.000 | 2.000 |
| | | | | 11.800 | 2.000 |
| | | | | (--) | activated 10.17 percent |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FORTISEIS ΦΑΣΗ-2

Load Case 50 TS_RIGHT_Posit.1

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-----------------------|----------------|-----------|
| | | | w[m] X[m] Y[m] Z[m] | | |
| Area | | | 0.000 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 0.800 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 0.800 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 0.000 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 (--) activated | 25.00 percent | |
| | | | 0.000 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 0.800 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 0.800 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 0.000 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 (--) activated | 75.00 percent | |
| | | | 1.200 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 2.000 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 2.000 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 1.200 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 (--) activated | 100.00 percent | |
| | | | 1.200 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 2.000 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 2.000 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 1.200 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 (--) activated | 0.00 percent | |
| | | | 0.000 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 0.800 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 0.800 1.900 0.000 | 0.211 [MN/m2] | |
| | | | 0.000 1.900 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 (--) activated | 25.00 percent | |
| | | | 0.000 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 0.800 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 0.800 1.900 0.000 | 0.211 [MN/m2] | |
| | | | 0.000 1.900 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 (--) activated | 75.00 percent | |
| | | | 1.200 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 2.000 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 2.000 1.900 0.000 | 0.211 [MN/m2] | |
| | | | 1.200 1.900 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 (--) activated | 100.00 percent | |
| | | | 1.200 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 2.000 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 2.000 1.900 0.000 | 0.211 [MN/m2] | |
| | | | 1.200 1.900 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 (--) activated | 0.00 percent | |

Load Case 51 TS_RIGHT_Posit.2

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-----------------------|----------------|-----------|
| | | | w[m] X[m] Y[m] Z[m] | | |
| Area | | | 1.000 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 1.800 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 1.800 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 1.000 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 (--) activated | 100.00 percent | |
| | | | 1.000 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 1.800 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 1.800 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 1.000 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 (--) activated | 0.00 percent | |
| | | | 2.200 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 3.000 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 3.000 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 2.200 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 (--) activated | 100.00 percent | |
| | | | 2.200 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 3.000 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 3.000 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 2.200 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 (--) activated | 0.00 percent | |
| | | | 1.000 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 1.800 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 1.800 1.900 0.000 | 0.211 [MN/m2] | |
| | | | 1.000 1.900 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 (--) activated | 100.00 percent | |
| | | | 1.000 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 1.800 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 1.800 1.900 0.000 | 0.211 [MN/m2] | |

OPISTIKH MELETH/TEKNIKO TA/L=13.00
FORTISEIS FASH-2

Meshfree Loading

| Kind | Reference | to | Projection | Coordinates | | | | Type | Load | value |
|------|-----------|----|------------|-------------|-------|-------|-----------|------|--------|---------|
| | | | | w[m] | x[m] | y[m] | z[m] | | | |
| Area | QGRP | 4 | ZZ | 3.000 | 1.000 | 1.900 | 0.000 | PG | 0.211 | [MN/m2] |
| | | | | | (--) | | activated | | 0.00 | percent |
| | | | | | 2.200 | 1.100 | 0.000 | | 0.211 | [MN/m2] |
| | | | | | 3.000 | 1.100 | 0.000 | | 0.211 | [MN/m2] |
| | | | | | 3.000 | 1.900 | 0.000 | | 0.211 | [MN/m2] |
| Area | QGRP | 3 | ZZ | 3.000 | 2.200 | 1.900 | 0.000 | PG | 0.211 | [MN/m2] |
| | | | | | | | activated | | 100.00 | percent |
| | | | | | 2.200 | 1.100 | 0.000 | | 0.211 | [MN/m2] |
| | | | | | 3.000 | 1.100 | 0.000 | | 0.211 | [MN/m2] |
| | | | | | 3.000 | 1.900 | 0.000 | | 0.211 | [MN/m2] |
| Area | QGRP | 4 | ZZ | 3.000 | 2.200 | 1.900 | 0.000 | | 0.211 | [MN/m2] |
| | | | | | (--) | | activated | | 0.00 | percent |
| | | | | | | | | | | |

Load Case 52 TS_RIGHT_Posit.3

Factor forces and moments 1.000

Meshfree Loading

| Kind | Reference | Order | Projection | Coordinates | Type | Load | value | |
|------|-----------|-------|------------|-------------|-----------|--------|-------|------------------|
| | | | | w[m] | x[m] | y[m] | z[m] | |
| Area | | | | | 2.000 | -0.900 | 0.000 | PG 0.211 [MN/m2] |
| | | | | | 2.800 | -0.900 | 0.000 | 0.211 [MN/m2] |
| | | | | | 2.800 | -0.100 | 0.000 | 0.211 [MN/m2] |
| | | | | | 2.000 | -0.100 | 0.000 | 0.211 [MN/m2] |
| Area | QGRP | 3 | ZZ | 3.000 | activated | | | 100.00 percent |
| | | | | | 2.000 | -0.900 | 0.000 | PG 0.211 [MN/m2] |
| | | | | | 2.800 | -0.900 | 0.000 | 0.211 [MN/m2] |
| | | | | | 2.800 | -0.100 | 0.000 | 0.211 [MN/m2] |
| Area | QGRP | 4 | ZZ | 3.000 | 2.000 | -0.100 | 0.000 | 0.211 [MN/m2] |
| | | | | | activated | | | 0.00 percent |
| | | | | | (--) | | | |
| | | | | | 3.200 | -0.900 | 0.000 | PG 0.211 [MN/m2] |
| Area | | | | | 4.000 | -0.900 | 0.000 | 0.211 [MN/m2] |
| | | | | | 4.000 | -0.100 | 0.000 | 0.211 [MN/m2] |
| | | | | | 4.000 | -0.100 | 0.000 | 0.211 [MN/m2] |
| | | | | | 3.200 | -0.100 | 0.000 | 0.211 [MN/m2] |
| Area | QGRP | 3 | ZZ | 3.000 | activated | | | 100.00 percent |
| | | | | | 3.200 | -0.900 | 0.000 | PG 0.211 [MN/m2] |
| | | | | | 4.000 | -0.900 | 0.000 | 0.211 [MN/m2] |
| | | | | | 4.000 | -0.100 | 0.000 | 0.211 [MN/m2] |
| Area | QGRP | 4 | ZZ | 3.000 | 3.200 | -0.100 | 0.000 | 0.211 [MN/m2] |
| | | | | | activated | | | 0.00 percent |
| | | | | | (--) | | | |
| | | | | | 2.000 | 1.100 | 0.000 | PG 0.211 [MN/m2] |
| Area | | | | | 2.800 | 1.100 | 0.000 | 0.211 [MN/m2] |
| | | | | | 2.800 | 1.900 | 0.000 | 0.211 [MN/m2] |
| | | | | | 2.000 | 1.900 | 0.000 | 0.211 [MN/m2] |
| | | | | | 2.000 | 1.900 | 0.000 | 0.211 [MN/m2] |
| Area | QGRP | 3 | ZZ | 3.000 | activated | | | 100.00 percent |
| | | | | | 2.000 | 1.100 | 0.000 | PG 0.211 [MN/m2] |
| | | | | | 2.800 | 1.100 | 0.000 | 0.211 [MN/m2] |
| | | | | | 2.800 | 1.900 | 0.000 | 0.211 [MN/m2] |
| Area | QGRP | 4 | ZZ | 3.000 | 2.000 | 1.900 | 0.000 | 0.211 [MN/m2] |
| | | | | | activated | | | 0.00 percent |
| | | | | | (--) | | | |
| | | | | | 3.200 | 1.100 | 0.000 | PG 0.211 [MN/m2] |
| Area | | | | | 4.000 | 1.100 | 0.000 | 0.211 [MN/m2] |
| | | | | | 4.000 | 1.900 | 0.000 | 0.211 [MN/m2] |
| | | | | | 4.000 | 1.900 | 0.000 | 0.211 [MN/m2] |
| | | | | | 3.200 | 1.900 | 0.000 | 0.211 [MN/m2] |
| Area | QGRP | 3 | ZZ | 3.000 | activated | | | 100.00 percent |
| | | | | | 3.200 | 1.100 | 0.000 | PG 0.211 [MN/m2] |
| | | | | | 4.000 | 1.100 | 0.000 | 0.211 [MN/m2] |
| | | | | | 4.000 | 1.900 | 0.000 | 0.211 [MN/m2] |
| Area | QGRP | 4 | ZZ | 3.000 | 3.200 | 1.900 | 0.000 | 0.211 [MN/m2] |
| | | | | | activated | | | 0.00 percent |
| | | | | | (--) | | | |
| | | | | | 3.200 | 1.900 | 0.000 | 0.211 [MN/m2] |

Load Case 53 TS_RIGHT_Posit.4

Factor forces and moments 1.000

Meshfree Loading

| Mesh | Free | Loading | Kind | Referenceto | Projection | Coordinates | Type | Loadvalue | | | |
|------|------|---------|------|-------------|------------|-------------|-----------|---------------|---------------|----------------|---------------|
| | | | | | | w[m] | x[m] | y[m] | z[m] | | |
| Area | | | | | | 3.000 | 3.000 | -0.900 | 0.000 | PG | 0.211 [MN/m2] |
| | | | | | | | 3.800 | -0.900 | 0.000 | 0.211 [MN/m2] | |
| | | | | | | | 3.800 | -0.100 | 0.000 | 0.211 [MN/m2] | |
| | | | | | | | 3.000 | -0.100 | 0.000 | 0.211 [MN/m2] | |
| | | | | | | | | | activated | 100.00 percent | |
| Area | QGRP | 3 | ZZ | 3.000 | 3.000 | -0.900 | 0.000 | PG | 0.211 [MN/m2] | | |
| | | | | | 3.800 | -0.900 | 0.000 | 0.211 [MN/m2] | | | |
| | | | | | 3.800 | -0.100 | 0.000 | 0.211 [MN/m2] | | | |
| | | | | | 3.000 | -0.100 | 0.000 | 0.211 [MN/m2] | | | |
| | | | | | (--) | | activated | 0.00 percent | | | |
| Area | QGRP | 4 | ZZ | 3.000 | 4.200 | -0.900 | 0.000 | PG | 0.211 [MN/m2] | | |
| | | | | | 5.000 | -0.900 | 0.000 | 0.211 [MN/m2] | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FORTISEIS ΦΑΣΗ-2

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|---------------------|-----------|------------------------------------|
| | | | w[m] X[m] Y[m] Z[m] | | |
| Area | QGRP | 3 ZZ | 3.000 | | 5.000 -0.100 0.000 0.211 [MN/m2] |
| | | | | | 4.200 -0.100 0.000 0.211 [MN/m2] |
| | | | | activated | 100.00 percent |
| | | | | PG | 4.200 -0.900 0.000 0.211 [MN/m2] |
| Area | QGRP | 4 ZZ | 3.000 | | 5.000 -0.900 0.000 0.211 [MN/m2] |
| | | | | | 5.000 -0.100 0.000 0.211 [MN/m2] |
| | | | | activated | 0.00 percent |
| | | | | PG | 3.000 1.100 0.000 0.211 [MN/m2] |
| Area | QGRP | 3 ZZ | 3.000 | | 3.800 1.100 0.000 0.211 [MN/m2] |
| | | | | | 3.800 1.900 0.000 0.211 [MN/m2] |
| | | | | activated | 100.00 percent |
| | | | | PG | 3.000 1.900 0.000 0.211 [MN/m2] |
| Area | QGRP | 4 ZZ | 3.000 | | (--) activated 0.00 percent |
| | | | | | 4.200 1.100 0.000 PG 0.211 [MN/m2] |
| | | | | | 5.000 1.100 0.000 0.211 [MN/m2] |
| | | | | | 5.000 1.900 0.000 0.211 [MN/m2] |
| Area | QGRP | 3 ZZ | 3.000 | | 4.200 1.900 0.000 0.211 [MN/m2] |
| | | | | activated | 100.00 percent |
| | | | | PG | 4.200 1.100 0.000 0.211 [MN/m2] |
| | | | | | 5.000 1.100 0.000 0.211 [MN/m2] |
| Area | QGRP | 4 ZZ | 3.000 | | 5.000 1.900 0.000 0.211 [MN/m2] |
| | | | | activated | 0.00 percent |
| | | | | | 4.200 1.900 0.000 0.211 [MN/m2] |
| | | | | | (--) activated 0.00 percent |

Load Case 54 TS_RIGHT_Posit.5

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|---------------------|-----------|-------------------------------------|
| | | | w[m] X[m] Y[m] Z[m] | | |
| Area | QGRP | 3 ZZ | 3.000 | | 4.000 -0.900 0.000 PG 0.211 [MN/m2] |
| | | | | | 4.800 -0.900 0.000 0.211 [MN/m2] |
| | | | | | 4.800 -0.100 0.000 0.211 [MN/m2] |
| | | | | activated | 100.00 percent |
| Area | QGRP | 4 ZZ | 3.000 | | 4.000 -0.900 0.000 PG 0.211 [MN/m2] |
| | | | | | 4.800 -0.900 0.000 0.211 [MN/m2] |
| | | | | | 4.800 -0.100 0.000 0.211 [MN/m2] |
| | | | | activated | 0.00 percent |
| Area | QGRP | 3 ZZ | 3.000 | | 5.200 -0.900 0.000 PG 0.211 [MN/m2] |
| | | | | | 6.000 -0.900 0.000 0.211 [MN/m2] |
| | | | | | 6.000 -0.100 0.000 0.211 [MN/m2] |
| | | | | activated | 100.00 percent |
| Area | QGRP | 4 ZZ | 3.000 | | 5.200 -0.900 0.000 PG 0.211 [MN/m2] |
| | | | | | 6.000 -0.900 0.000 0.211 [MN/m2] |
| | | | | | 6.000 -0.100 0.000 0.211 [MN/m2] |
| | | | | activated | 0.00 percent |
| Area | QGRP | 3 ZZ | 3.000 | | 4.000 1.100 0.000 PG 0.211 [MN/m2] |
| | | | | | 4.800 1.100 0.000 0.211 [MN/m2] |
| | | | | | 4.800 1.900 0.000 0.211 [MN/m2] |
| | | | | activated | 100.00 percent |
| Area | QGRP | 4 ZZ | 3.000 | | 4.000 1.900 0.000 0.211 [MN/m2] |
| | | | | activated | 100.00 percent |
| | | | | PG | 4.000 1.100 0.000 0.211 [MN/m2] |
| | | | | | 4.800 1.100 0.000 0.211 [MN/m2] |
| Area | QGRP | 3 ZZ | 3.000 | | 4.800 1.900 0.000 0.211 [MN/m2] |
| | | | | | 4.000 1.900 0.000 0.211 [MN/m2] |
| | | | | activated | 0.00 percent |
| | | | | PG | 5.200 1.100 0.000 0.211 [MN/m2] |
| Area | QGRP | 4 ZZ | 3.000 | | 6.000 1.100 0.000 0.211 [MN/m2] |
| | | | | | 6.000 1.900 0.000 0.211 [MN/m2] |
| | | | | activated | 100.00 percent |
| | | | | PG | 5.200 1.100 0.000 0.211 [MN/m2] |
| Area | QGRP | 3 ZZ | 3.000 | | 6.000 1.100 0.000 0.211 [MN/m2] |
| | | | | | 6.000 1.900 0.000 0.211 [MN/m2] |
| | | | | activated | 0.00 percent |
| | | | | | 5.200 1.900 0.000 0.211 [MN/m2] |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FORTISEIS ΦΑΣΗ-2

Load Case 55 TS_RIGHT_Posit.6

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-----------------------|---------------|------------------------|
| | | | w[m] X[m] Y[m] Z[m] | | |
| Area | | | 5.000 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 5.800 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 5.800 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 5.000 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 | activated | 100.00 percent |
| | | | 5.000 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 5.800 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 5.800 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 5.000 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 | (--) | activated 0.00 percent |
| | | | 6.200 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 7.000 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 7.000 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 6.200 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 | activated | 100.00 percent |
| | | | 6.200 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 7.000 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 7.000 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 6.200 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 | (--) | activated 0.00 percent |
| | | | 5.000 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 5.800 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 5.800 1.900 0.000 | 0.211 [MN/m2] | |
| | | | 5.000 1.900 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 | activated | 100.00 percent |
| | | | 5.000 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 5.800 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 5.800 1.900 0.000 | 0.211 [MN/m2] | |
| | | | 5.000 1.900 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 | (--) | activated 0.00 percent |
| | | | 6.200 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 7.000 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 7.000 1.900 0.000 | 0.211 [MN/m2] | |
| | | | 6.200 1.900 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 | activated | 100.00 percent |
| | | | 6.200 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 7.000 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 7.000 1.900 0.000 | 0.211 [MN/m2] | |
| | | | 6.200 1.900 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 | (--) | activated 0.00 percent |

Load Case 56 TS_RIGHT_Posit.7

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-----------------------|---------------|------------------------|
| | | | w[m] X[m] Y[m] Z[m] | | |
| Area | | | 6.000 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 6.800 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 6.800 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 6.000 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 | activated | 100.00 percent |
| | | | 6.000 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 6.800 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 6.800 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 6.000 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 | (--) | activated 0.00 percent |
| | | | 7.200 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 8.000 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 8.000 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 7.200 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 | activated | 100.00 percent |
| | | | 7.200 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 8.000 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 8.000 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 7.200 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 | (--) | activated 0.00 percent |
| | | | 6.000 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 6.800 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 6.800 1.900 0.000 | 0.211 [MN/m2] | |
| | | | 6.000 1.900 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 | activated | 100.00 percent |
| | | | 6.000 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 6.800 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 6.800 1.900 0.000 | 0.211 [MN/m2] | |

OPISTIKH MELETH/TEKNIKO TA/L=13.00
FORTISEIS FASH-2

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|---------------------|-------|------------------------------------|
| | | | w[m] X[m] Y[m] Z[m] | | |
| Area | QGRP | 4 | ZZ | 3.000 | 6.000 1.900 0.000 0.211 [MN/m2] |
| | | | | | (--) activated 0.00 percent |
| | | | | | 7.200 1.100 0.000 PG 0.211 [MN/m2] |
| | | | | | 8.000 1.100 0.000 0.211 [MN/m2] |
| | | | | | 8.000 1.900 0.000 0.211 [MN/m2] |
| Area | QGRP | 3 | ZZ | 3.000 | 7.200 1.900 0.000 0.211 [MN/m2] |
| | | | | | activated 100.00 percent |
| | | | | | 7.200 1.100 0.000 PG 0.211 [MN/m2] |
| | | | | | 8.000 1.100 0.000 0.211 [MN/m2] |
| | | | | | 8.000 1.900 0.000 0.211 [MN/m2] |
| Area | QGRP | 4 | ZZ | 3.000 | 7.200 1.900 0.000 0.211 [MN/m2] |
| | | | | | (--) activated 0.00 percent |
| | | | | | |

Load Case 57 TS_RIGHT_Posit.8

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|---------------------|-------|-------------------------------------|
| | | | w[m] X[m] Y[m] Z[m] | | |
| Area | | | | | 7.000 -0.900 0.000 PG 0.211 [MN/m2] |
| | | | | | 7.800 -0.900 0.000 0.211 [MN/m2] |
| | | | | | 7.800 -0.100 0.000 0.211 [MN/m2] |
| | | | | | 7.000 -0.100 0.000 0.211 [MN/m2] |
| Area | QGRP | 3 | ZZ | 3.000 | activated 100.00 percent |
| | | | | | 7.000 -0.900 0.000 PG 0.211 [MN/m2] |
| | | | | | 7.800 -0.900 0.000 0.211 [MN/m2] |
| | | | | | 7.800 -0.100 0.000 0.211 [MN/m2] |
| Area | QGRP | 4 | ZZ | 3.000 | 7.000 -0.100 0.000 0.211 [MN/m2] |
| | | | | | (--) activated 0.00 percent |
| | | | | | 8.200 -0.900 0.000 PG 0.211 [MN/m2] |
| | | | | | 9.000 -0.900 0.000 0.211 [MN/m2] |
| Area | QGRP | 3 | ZZ | 3.000 | 9.000 -0.100 0.000 0.211 [MN/m2] |
| | | | | | 8.200 -0.100 0.000 0.211 [MN/m2] |
| | | | | | activated 100.00 percent |
| | | | | | 8.200 -0.900 0.000 PG 0.211 [MN/m2] |
| Area | QGRP | 4 | ZZ | 3.000 | 9.000 -0.900 0.000 0.211 [MN/m2] |
| | | | | | 9.000 -0.100 0.000 0.211 [MN/m2] |
| | | | | | 8.200 -0.100 0.000 0.211 [MN/m2] |
| | | | | | (--) activated 0.00 percent |
| Area | QGRP | 3 | ZZ | 3.000 | 7.000 1.100 0.000 PG 0.211 [MN/m2] |
| | | | | | 7.800 1.100 0.000 0.211 [MN/m2] |
| | | | | | 7.800 1.900 0.000 0.211 [MN/m2] |
| | | | | | 7.000 1.900 0.000 0.211 [MN/m2] |
| Area | QGRP | 4 | ZZ | 3.000 | activated 100.00 percent |
| | | | | | 7.000 1.100 0.000 PG 0.211 [MN/m2] |
| | | | | | 7.800 1.100 0.000 0.211 [MN/m2] |
| | | | | | 7.800 1.900 0.000 0.211 [MN/m2] |
| Area | QGRP | 3 | ZZ | 3.000 | 7.000 1.900 0.000 0.211 [MN/m2] |
| | | | | | (--) activated 0.00 percent |
| | | | | | 8.200 1.100 0.000 PG 0.211 [MN/m2] |
| | | | | | 9.000 1.100 0.000 0.211 [MN/m2] |
| Area | QGRP | 4 | ZZ | 3.000 | 9.000 1.900 0.000 0.211 [MN/m2] |
| | | | | | 8.200 1.900 0.000 0.211 [MN/m2] |
| | | | | | activated 100.00 percent |
| | | | | | 8.200 1.100 0.000 PG 0.211 [MN/m2] |
| Area | QGRP | 3 | ZZ | 3.000 | 9.000 1.100 0.000 0.211 [MN/m2] |
| | | | | | 9.000 1.900 0.000 0.211 [MN/m2] |
| | | | | | 8.200 1.900 0.000 0.211 [MN/m2] |
| | | | | | (--) activated 0.00 percent |

Load Case 58 TS_RIGHT_Posit.9

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|---------------------|-------|-------------------------------------|
| | | | w[m] X[m] Y[m] Z[m] | | |
| Area | | | | | 8.000 -0.900 0.000 PG 0.211 [MN/m2] |
| | | | | | 8.800 -0.900 0.000 0.211 [MN/m2] |
| | | | | | 8.800 -0.100 0.000 0.211 [MN/m2] |
| | | | | | 8.000 -0.100 0.000 0.211 [MN/m2] |
| Area | QGRP | 3 | ZZ | 3.000 | activated 100.00 percent |
| | | | | | 8.000 -0.900 0.000 PG 0.211 [MN/m2] |
| | | | | | 8.800 -0.900 0.000 0.211 [MN/m2] |
| | | | | | 8.800 -0.100 0.000 0.211 [MN/m2] |
| Area | QGRP | 4 | ZZ | 3.000 | 8.000 -0.100 0.000 0.211 [MN/m2] |
| | | | | | (--) activated 0.00 percent |
| | | | | | 9.200 -0.900 0.000 PG 0.211 [MN/m2] |
| | | | | | 10.000 -0.900 0.000 0.211 [MN/m2] |

OPISTIKH MEΛETH/TECHNIKO TA/L=13.00
FORTISEIS ΦΑΣΗ-2

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|---------------------|------|----------------|
| | | | w[m] X[m] Y[m] Z[m] | | |
| Area | QGRP | 3 ZZ | 3.000 | PG | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 100.00 percent |
| | | | | | 0.211 [MN/m2] |
| Area | QGRP | 4 ZZ | 3.000 | PG | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| Area | QGRP | 3 ZZ | 3.000 | PG | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| Area | QGRP | 4 ZZ | 3.000 | PG | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| Area | QGRP | 3 ZZ | 3.000 | PG | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| Area | QGRP | 4 ZZ | 3.000 | PG | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |

Load Case 59 TS_RIGHT_Posit.10

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|---------------------|------|---------------|
| | | | w[m] X[m] Y[m] Z[m] | | |
| Area | QGRP | 3 ZZ | 3.000 | PG | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| Area | QGRP | 4 ZZ | 3.000 | PG | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| Area | QGRP | 3 ZZ | 3.000 | PG | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| Area | QGRP | 4 ZZ | 3.000 | PG | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| Area | QGRP | 3 ZZ | 3.000 | PG | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| Area | QGRP | 4 ZZ | 3.000 | PG | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| Area | QGRP | 3 ZZ | 3.000 | PG | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| Area | QGRP | 4 ZZ | 3.000 | PG | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |
| | | | | | 0.211 [MN/m2] |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FORTISEIS ΦΑΣΗ-2

Load Case 60 TS_RIGHT_Posit.11

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|------------------------|---------------|----------------|
| | | | w[m] X[m] Y[m] Z[m] | | |
| Area | | | 10.000 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 10.800 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 10.800 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 10.000 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 | activated | 100.00 percent |
| | | | 10.000 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 10.800 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 10.800 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 10.000 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 | (--) | 0.00 percent |
| | | | 11.200 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 12.000 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 12.000 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 11.200 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 | (--) | 0.00 percent |
| | | | 11.200 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 12.000 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 12.000 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 11.200 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 | (--) | 75.00 percent |
| | | | 10.000 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 10.800 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 10.800 1.900 0.000 | 0.211 [MN/m2] | |
| | | | 10.000 1.900 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 | activated | 100.00 percent |
| | | | 10.000 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 10.800 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 10.800 1.900 0.000 | 0.211 [MN/m2] | |
| | | | 10.000 1.900 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 | (--) | 0.00 percent |
| | | | 11.200 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 12.000 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 12.000 1.900 0.000 | 0.211 [MN/m2] | |
| | | | 11.200 1.900 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 | (--) | 0.00 percent |
| | | | 11.200 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 12.000 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 12.000 1.900 0.000 | 0.211 [MN/m2] | |
| | | | 11.200 1.900 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 | (--) | 75.00 percent |

Load Case 61 TS_RIGHT_Posit.12

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|------------------------|---------------|---------------|
| | | | w[m] X[m] Y[m] Z[m] | | |
| Area | | | 11.000 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 11.800 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 11.800 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 11.000 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 | (--) | 25.00 percent |
| | | | 11.000 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 11.800 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 11.800 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 11.000 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 | (--) | 75.00 percent |
| | | | 12.200 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 13.000 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 13.000 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 12.200 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 | (--) | 0.00 percent |
| | | | 12.200 -0.900 0.000 PG | 0.211 [MN/m2] | |
| | | | 13.000 -0.900 0.000 | 0.211 [MN/m2] | |
| | | | 13.000 -0.100 0.000 | 0.211 [MN/m2] | |
| | | | 12.200 -0.100 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 4 ZZ | 3.000 | (--) | 0.00 percent |
| | | | 11.000 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 11.800 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 11.800 1.900 0.000 | 0.211 [MN/m2] | |
| | | | 11.000 1.900 0.000 | 0.211 [MN/m2] | |
| Area | QGRP | 3 ZZ | 3.000 | (--) | 25.00 percent |
| | | | 11.000 1.100 0.000 PG | 0.211 [MN/m2] | |
| | | | 11.800 1.100 0.000 | 0.211 [MN/m2] | |
| | | | 11.800 1.900 0.000 | 0.211 [MN/m2] | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FORTISEIS ΦΑΣΗ-2

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|----------------|------|----------------------------------|
| | | w[m] | X[m] Y[m] Z[m] | | |
| Area | QGRP | 4 ZZ | 3.000 | PG | 11.000 1.900 0.000 0.211 [MN/m2] |
| | | | | | (--) activated 75.00 percent |
| | | | | | 12.200 1.100 0.000 0.211 [MN/m2] |
| | | | | | 13.000 1.100 0.000 0.211 [MN/m2] |
| | | | | | 13.000 1.900 0.000 0.211 [MN/m2] |
| Area | QGRP | 3 ZZ | 3.000 | PG | 12.200 1.900 0.000 0.211 [MN/m2] |
| | | | | | (--) activated 0.00 percent |
| | | | | | 12.200 1.100 0.000 0.211 [MN/m2] |
| | | | | | 13.000 1.100 0.000 0.211 [MN/m2] |
| | | | | | 13.000 1.900 0.000 0.211 [MN/m2] |
| Area | QGRP | 4 ZZ | 3.000 | | 12.200 1.900 0.000 0.211 [MN/m2] |
| | | | | | (--) activated 0.00 percent |
| | | | | | |

Load Case 70 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 2.50-Κ0 (ΦΑΣΗ-
Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|----------------|------|----------------------------------|
| | | w[m] | X[m] Y[m] Z[m] | | |
| Area | | | | PXX | 0.000 2.000 0.000 0.001 [MN/m2] |
| | | | | | 0.000 2.000 0.800 0.001 [MN/m2] |
| | | | | | 0.000 -2.000 0.800 0.001 [MN/m2] |
| | | | | | 0.000 -2.000 0.000 0.001 [MN/m2] |
| | | | | | activated 100.00 percent |
| Area | QGRP | 8 | 3.000 | PXX | 0.000 2.000 0.800 0.001 [MN/m2] |
| | | | | | 0.000 -2.000 0.800 0.001 [MN/m2] |
| | | | | | 0.000 -2.000 1.350 0.001 [MN/m2] |
| | | | | | 0.000 2.000 1.350 0.001 [MN/m2] |
| | | | | | activated 100.00 percent |
| Area | QGRP | 9 | 3.000 | | |
| | | | | | |
| | | | | | |

Load Case 71 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 2.50-Κ0 (ΦΑΣΗ-
Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|----------------|------|------------------------------------|
| | | w[m] | X[m] Y[m] Z[m] | | |
| Area | | | | PXX | 11.800 2.000 0.000 -0.001 [MN/m2] |
| | | | | | 11.800 2.000 0.800 -0.001 [MN/m2] |
| | | | | | 11.800 -2.000 0.800 -0.001 [MN/m2] |
| | | | | | 11.800 -2.000 0.000 -0.001 [MN/m2] |
| | | | | | activated 100.00 percent |
| Area | QGRP | 8 | 3.000 | PXX | 11.800 2.000 0.800 -0.001 [MN/m2] |
| | | | | | 11.800 -2.000 0.800 -0.001 [MN/m2] |
| | | | | | 11.800 -2.000 1.350 -0.001 [MN/m2] |
| | | | | | 11.800 2.000 1.350 -0.001 [MN/m2] |
| | | | | | activated 100.00 percent |
| Area | QGRP | 9 | 3.000 | | |
| | | | | | |
| | | | | | |

Load Case 72 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 6.50-Κ0 (ΦΑΣΗ-
Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|----------------|------|----------------------------------|
| | | w[m] | X[m] Y[m] Z[m] | | |
| Area | | | | PXX | 0.000 2.000 0.000 0.003 [MN/m2] |
| | | | | | 0.000 2.000 0.800 0.003 [MN/m2] |
| | | | | | 0.000 -2.000 0.800 0.003 [MN/m2] |
| | | | | | 0.000 -2.000 0.000 0.003 [MN/m2] |
| | | | | | activated 100.00 percent |
| Area | QGRP | 8 | 3.000 | PXX | 0.000 2.000 0.800 0.003 [MN/m2] |
| | | | | | 0.000 -2.000 0.800 0.003 [MN/m2] |
| | | | | | 0.000 -2.000 1.350 0.003 [MN/m2] |
| | | | | | 0.000 2.000 1.350 0.003 [MN/m2] |
| | | | | | activated 100.00 percent |
| Area | QGRP | 9 | 3.000 | | |
| | | | | | |
| | | | | | |

Load Case 73 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 6.50-Κ0 (ΦΑΣΗ-
Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|----------------|------|------------------------------------|
| | | w[m] | X[m] Y[m] Z[m] | | |
| Area | | | | PXX | 11.800 2.000 0.000 -0.003 [MN/m2] |
| | | | | | 11.800 2.000 0.800 -0.003 [MN/m2] |
| | | | | | 11.800 -2.000 0.800 -0.003 [MN/m2] |
| | | | | | 11.800 -2.000 0.000 -0.003 [MN/m2] |
| | | | | | activated 100.00 percent |
| Area | QGRP | 8 | 3.000 | PXX | 11.800 2.000 0.800 -0.003 [MN/m2] |
| | | | | | 11.800 -2.000 0.800 -0.003 [MN/m2] |
| | | | | | 11.800 -2.000 1.350 -0.003 [MN/m2] |
| | | | | | |
| | | | | | |

OPISTIKH MELETH/TEKNIKO TA/L=13.00
FORTISEIS ΦΑΣΗ-2

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|----------------------------------|
| | | W[m] | X[m] | Y[m] | Z[m] |
| QGRP | 9 | 3.000 | 11.800 | 2.000 | 1.350 |
| | | | | activated | -0.003 [MN/m2] 100.00 percent |

Load Case 74 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 TS1-K0 (ΦΑΣΗ-2)
Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|---------------------------------|
| | | W[m] | X[m] | Y[m] | Z[m] |
| Area | | | 0.000 | 2.000 | 0.000 |
| | | | 0.000 | 2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.000 |
| QGRP | 8 | 3.000 | | activated | 0.041 [MN/m2] 100.00 percent |
| Area | | | 0.000 | 2.000 | 0.800 |
| | | | 0.000 | -2.000 | 0.800 |
| | | | 0.000 | -2.000 | 1.350 |
| QGRP | 9 | 3.000 | | activated | 0.022 [MN/m2] 100.00 percent |

Load Case 75 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 TS1-K0 (ΦΑΣΗ-2)
Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|----------------------------------|
| | | W[m] | X[m] | Y[m] | Z[m] |
| Area | | | 11.800 | 2.000 | 0.000 |
| | | | 11.800 | 2.000 | 0.800 |
| | | | 11.800 | -2.000 | 0.800 |
| | | | 11.800 | -2.000 | 0.000 |
| QGRP | 8 | 3.000 | | activated | -0.041 [MN/m2] 100.00 percent |
| Area | | | 11.800 | 2.000 | 0.800 |
| | | | 11.800 | -2.000 | 0.800 |
| | | | 11.800 | -2.000 | 1.350 |
| QGRP | 9 | 3.000 | | activated | -0.022 [MN/m2] 100.00 percent |

Load Case 80 ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ Α1
Factor forces and moments 1.000

Load Case 81 ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ Α2
Factor forces and moments 1.000

Load Case 85 ΔTN = +33
Factor forces and moments 1.000

Load Case 86 ΔTN = -20
Factor forces and moments 1.000

Load Case 87 ΔTM = 13
Factor forces and moments 1.000

Load Case 88 ΔTM = -7
Factor forces and moments 1.000

Load Case 90 (+ΔTN)+0.75*(+ΔTM)
Factor forces and moments 1.000
Loads partially copied from load case 85 with factor 1.000
Loads partially copied from load case 87 with factor 0.750

Load Case 91 (+ΔTN)+0.75*(-ΔTM)
Factor forces and moments 1.000
Loads partially copied from load case 85 with factor 1.000
Loads partially copied from load case 88 with factor 0.750

Load Case 92 (-ΔTN)+0.75*(+ΔTM)
Factor forces and moments 1.000
Loads partially copied from load case 86 with factor 1.000
Loads partially copied from load case 87 with factor 0.750

Load Case 93 (-ΔTN)+0.75*(-ΔTM)
Factor forces and moments 1.000
Loads partially copied from load case 86 with factor 1.000
Loads partially copied from load case 88 with factor 0.750

OPISTIKH MELETH/TEXNIKO TA/L=13.00
FORTISEIS FASH-2

Load Case 94 0.35*(+ΔTN)+(ΔTM)

Factor forces and moments 1.000
Loads partially copied from load case 85 with factor 0.350
Loads partially copied from load case 87 with factor 1.000

Load Case 95 0.35*(+ΔTN)+(-ΔTM)

Factor forces and moments 1.000
Loads partially copied from load case 91 with factor 0.350
Loads partially copied from load case 94 with factor 1.000

Load Case 96 0.35*(-ΔTN)+(ΔTM)

Factor forces and moments 1.000
Loads partially copied from load case 92 with factor 0.350
Loads partially copied from load case 93 with factor 1.000

Load Case 97 0.35*(-ΔTN)+(-ΔTM)

Factor forces and moments 1.000
Loads partially copied from load case 92 with factor 0.350
Loads partially copied from load case 94 with factor 1.000

Load Case 100 CRASH_-Y_Pos.1 _DECK

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|----------------|
| | | w[m] | x[m] | Y[m] | Z[m] |
| Line | | | 0.000 | -1.750 | 0.000 |
| | | | 0.500 | -1.750 | 0.000 |
| | | | (--) | activated | 0.00 percent |
| Line | QGRP | 3 | 2.000 | 0.000 | -1.750 |
| | | | 0.500 | -1.750 | 0.000 |
| | | | (--) | activated | 100.00 percent |
| Line | QGRP | 4 | 2.000 | 0.000 | -1.750 |
| | | | 0.500 | -1.750 | 0.000 |
| | | | (--) | activated | 100.00 percent |
| Line | QGRP | 3 | 2.000 | 0.000 | -1.750 |
| | | | 0.500 | -1.750 | 0.000 |
| | | | (--) | activated | 100.00 percent |
| Line | QGRP | 4 | 2.000 | 0.000 | -1.750 |
| | | | 0.500 | -1.750 | 0.000 |
| | | | (--) | activated | 100.00 percent |

Load Case 101 CRASH_-Y_Pos.2 _DECK

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|----------------|
| | | w[m] | x[m] | Y[m] | Z[m] |
| Line | | | 1.000 | -1.750 | 0.000 |
| | | | 1.500 | -1.750 | 0.000 |
| | | | (--) | activated | 100.00 percent |
| Line | QGRP | 3 | 2.000 | 1.000 | -1.750 |
| | | | 1.500 | -1.750 | 0.000 |
| | | | (--) | activated | 100.00 percent |
| Line | QGRP | 4 | 2.000 | 1.000 | -1.750 |
| | | | 1.500 | -1.750 | 0.000 |
| | | | (--) | activated | 100.00 percent |
| Line | QGRP | 3 | 2.000 | 1.000 | -1.750 |
| | | | 1.500 | -1.750 | 0.000 |
| | | | (--) | activated | 100.00 percent |
| Line | QGRP | 4 | 2.000 | 1.000 | -1.750 |
| | | | 1.500 | -1.750 | 0.000 |
| | | | (--) | activated | 100.00 percent |

Load Case 102 CRASH_-Y_Pos.3 _DECK

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|-----------|----------------|
| | | w[m] | x[m] | Y[m] | Z[m] |
| Line | | | 2.000 | -1.750 | 0.000 |
| | | | 2.500 | -1.750 | 0.000 |
| | | | (--) | activated | 100.00 percent |
| Line | QGRP | 3 | 2.000 | 2.000 | -1.750 |
| | | | 2.500 | -1.750 | 0.000 |
| | | | (--) | activated | 100.00 percent |
| Line | QGRP | 4 | 2.000 | 2.000 | -1.750 |
| | | | 2.500 | -1.750 | 0.000 |
| | | | (--) | activated | 100.00 percent |
| Line | QGRP | 3 | 2.000 | 2.000 | -1.750 |
| | | | 2.500 | -1.750 | 0.000 |
| | | | (--) | activated | 100.00 percent |
| Line | QGRP | 4 | 2.000 | 2.000 | -1.750 |
| | | | 2.500 | -1.750 | 0.000 |
| | | | (--) | activated | 100.00 percent |

Load Case 103 CRASH_-Y_Pos.4 _DECK

Factor forces and moments 1.000

OPISTIKH MELETH/TEKNIKO TA/L=13.00
FORTISEIS FASH-2

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|--------------------|-----------|----------------|
| | | w[m] | x[m] y[m] z[m] | | |
| Line | | | 3.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 3.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 3.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 3.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |
| | | | 3.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 3.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 3.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 3.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |

Load Case 104 CRASH_-Y_Pos.5 _DECK

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|--------------------|-----------|----------------|
| | | w[m] | x[m] y[m] z[m] | | |
| Line | | | 4.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 4.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 4.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 4.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |
| | | | 4.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 4.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 4.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 4.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |

Load Case 105 CRASH_-Y_Pos.6 _DECK

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|--------------------|-----------|----------------|
| | | w[m] | x[m] y[m] z[m] | | |
| Line | | | 5.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 5.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 5.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 5.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |
| | | | 5.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 5.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 5.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 5.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |

Load Case 106 CRASH_-Y_Pos.7 _DECK

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|--------------------|-----------|----------------|
| | | w[m] | x[m] y[m] z[m] | | |
| Line | | | 6.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 6.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 6.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 6.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |
| | | | 6.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 6.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 6.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 6.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |

Load Case 107 CRASH_-Y_Pos.8 _DECK

Factor forces and moments 1.000

OPISTIKH MELETH/TEXNIKO TA/L=13.00
FORTISEIS FASH-2

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|--------------------|-----------|----------------|
| | | w[m] | X[m] Y[m] Z[m] | | |
| Line | | | 7.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 7.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 7.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 7.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |
| | | | 7.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 7.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 7.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 7.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |

Load Case 108 CRASH_-Y_Pos.9 _DECK

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|--------------------|-----------|----------------|
| | | w[m] | X[m] Y[m] Z[m] | | |
| Line | | | 8.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 8.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 8.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 8.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |
| | | | 8.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 8.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 8.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 8.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |

Load Case 109 CRASH_-Y_Pos.10 _DECK

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|--------------------|-----------|----------------|
| | | w[m] | X[m] Y[m] Z[m] | | |
| Line | | | 9.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 9.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 9.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 9.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |
| | | | 9.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 9.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 9.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 9.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |

Load Case 110 CRASH_-Y_Pos.11 _DECK

Factor forces and moments 1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|---------------------|-----------|----------------|
| | | w[m] | X[m] Y[m] Z[m] | | |
| Line | | | 10.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 10.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 10.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 10.500 -1.750 0.000 | | -0.480 [MN/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |
| | | | 10.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 10.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 3 | 2.000 | activated | | 100.00 percent |
| | | | 10.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 10.500 -1.750 0.000 | | -0.480 [MNm/m] |
| Line | QGRP 4 | 2.000 | (--) | activated | 0.00 percent |

Load Case 111 CRASH_-Y_Pos.12 _DECK

Factor forces and moments 1.000

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
 FORTISEIS ΦΑΣΗ-2

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|---------------------|-----------|----------------|
| | | w[m] | x[m] y[m] z[m] | | |
| Line | | | 11.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 11.500 -1.750 0.000 | | -0.480 [MN/m] |
| | | | (--) | activated | 40.00 percent |
| Line | QGRP 3 | 2.000 | 11.000 -1.750 0.000 | PYY | -0.480 [MN/m] |
| | | | 11.500 -1.750 0.000 | | -0.480 [MN/m] |
| | | | (--) | activated | 60.00 percent |
| Line | QGRP 4 | 2.000 | 11.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 11.500 -1.750 0.000 | | -0.480 [MNm/m] |
| | | | (--) | activated | 40.00 percent |
| Line | QGRP 3 | 2.000 | 11.000 -1.750 0.000 | MXX | -0.480 [MNm/m] |
| | | | 11.500 -1.750 0.000 | | -0.480 [MNm/m] |
| | | | (--) | activated | 60.00 percent |
| | QGRP 4 | 2.000 | (--) | activated | 60.00 percent |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΕΠΙΛΥΣΗ ΦΑΣΗ-2 (t-beam)

Elementgroups

| No | fac-S | fac-L | fac-D | fac-P | fac-B | PLC |
|----|-------|-------|-------|-------|-------|-----|
| 1 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 2 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 3 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 4 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 8 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 9 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 10 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 11 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 12 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 13 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |

Elementgroups construction stage number

| no | CS |
|----|-----|
| 1 | 40 |
| 2 | 998 |
| 3 | 998 |
| 4 | 998 |
| 8 | 998 |
| 9 | 998 |
| 10 | 998 |
| 11 | 998 |
| 12 | 998 |
| 13 | 998 |

Elementgroups activated hinges

| no | hinge |
|----|-------|
| 1 | fixed |
| 2 | activ |
| 3 | activ |
| 4 | activ |
| 8 | activ |
| 9 | activ |
| 10 | activ |
| 11 | activ |
| 12 | activ |
| 13 | activ |

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-----------------------------|---------|---------|---------|
| 31 ΠΥΞΕΙΣ-ΟΔΟΣΤΡΩΣΙΑ | 0.000 | 0.000 | 0.272 |
| 32 PEZODROMIO | 0.000 | 0.000 | 0.192 |
| 33 ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50 | 0.000 | 0.000 | 0.018 |
| 34 ΩΘΗΣΕΙΣ ΓΑΙΩΝ Α1-Κ0(Φ-2) | 0.268 | 0.000 | 0.000 |
| 35 ΩΘΗΣΕΙΣ ΓΑΙΩΝ Α2-Κ0(Φ-2) | -0.268 | 0.000 | 0.000 |
| 36 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*Α1+0.5 | 0.000 | 0.000 | 0.000 |
| 37 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*Α1+0.5 | 0.134 | 0.000 | 0.000 |
| 38 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*Α1+1.0 | -0.134 | 0.000 | 0.000 |
| 39 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*Α1+1.0 | 0.000 | 0.000 | 0.000 |
| 41 L.L.UDL_2.50KN/m2 | 0.000 | 0.000 | 0.118 |
| 42 L.L.UDL_6.50KN/m2 | 0.000 | 0.000 | 0.230 |
| 50 TS_RIGHT_Posit.1 | 0.000 | 0.000 | 0.540 |
| 51 TS_RIGHT_Posit.2 | 0.000 | 0.000 | 0.540 |
| 52 TS_RIGHT_Posit.3 | 0.000 | 0.000 | 0.540 |
| 53 TS_RIGHT_Posit.4 | 0.000 | 0.000 | 0.540 |
| 54 TS_RIGHT_Posit.5 | 0.000 | 0.000 | 0.540 |
| 55 TS_RIGHT_Posit.6 | 0.000 | 0.000 | 0.540 |
| 56 TS_RIGHT_Posit.7 | 0.000 | 0.000 | 0.540 |
| 57 TS_RIGHT_Posit.8 | 0.000 | 0.000 | 0.540 |
| 58 TS_RIGHT_Posit.9 | 0.000 | 0.000 | 0.540 |
| 59 TS_RIGHT_Posit.10 | 0.000 | 0.000 | 0.540 |
| 60 TS_RIGHT_Posit.11 | 0.000 | 0.000 | 0.472 |
| 61 TS_RIGHT_Posit.12 | 0.000 | 0.000 | 0.270 |
| 70 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 2.50 | 0.025 | 0.000 | 0.000 |
| 71 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 2.50 | -0.025 | 0.000 | 0.000 |
| 72 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 6.50 | 0.066 | 0.000 | 0.000 |
| 73 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 6.50 | -0.066 | 0.000 | 0.000 |
| 74 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 TS1- | 0.310 | 0.000 | 0.000 |
| 75 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 TS1- | -0.310 | 0.000 | 0.000 |
| 80 ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ Α1 | 0.000 | 0.000 | 0.000 |
| 81 ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ Α2 | 0.000 | 0.000 | 0.000 |
| 90 (+ΔΤΝ)+0.75*(+ΔΤΜ) | 0.000 | 0.000 | 0.000 |
| 91 (+ΔΤΝ)+0.75*(-ΔΤΜ) | 0.000 | 0.000 | 0.000 |
| 92 (-ΔΤΝ)+0.75*(+ΔΤΜ) | 0.000 | 0.000 | 0.000 |
| 93 (-ΔΤΝ)+0.75*(-ΔΤΜ) | 0.000 | 0.000 | 0.000 |
| 94 0.35*(+ΔΤΝ)+(+ΔΤΜ) | 0.000 | 0.000 | 0.000 |
| 95 0.35*(+ΔΤΝ)+(-ΔΤΜ) | 0.000 | 0.000 | 0.000 |
| 96 0.35*(-ΔΤΝ)+(+ΔΤΜ) | 0.000 | 0.000 | 0.000 |
| 97 0.35*(-ΔΤΝ)+(-ΔΤΜ) | 0.000 | 0.000 | 0.000 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΕΠΙΛΥΣΗ ΦΑΣΗ-2 (t-beam)

Sum of Reactions and Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-----------------------------|---------|---------|---------|
| 31 ΠΥΞΕΙΣ-ΟΔΟΣΤΡΩΣΙΑ | 0.000 | 0.000 | -0.272 |
| | 0.000 | 0.000 | 0.272 |
| 32 ΡΕΖΟΔΡΟΜΙΟ | 0.000 | 0.000 | -0.192 |
| | 0.000 | 0.000 | 0.192 |
| 33 ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50 | 0.000 | 0.000 | -0.018 |
| | 0.000 | 0.000 | 0.018 |
| 34 ΩΘΗΣΕΙΣ ΓΑΙΩΝ Α1-Κ0(Φ-2) | -0.268 | 0.000 | 0.000 |
| | 0.268 | 0.000 | 0.000 |
| 35 ΩΘΗΣΕΙΣ ΓΑΙΩΝ Α2-Κ0(Φ-2) | 0.268 | 0.000 | 0.000 |
| | -0.268 | 0.000 | 0.000 |
| 36 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*Α1+0.5 | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 |
| 37 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*Α1+0.5 | -0.134 | 0.000 | 0.000 |
| | 0.134 | 0.000 | 0.000 |
| 38 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*Α1+1.0 | 0.134 | 0.000 | 0.000 |
| | -0.134 | 0.000 | 0.000 |
| 39 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*Α1+1.0 | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 |
| 41 L.L.UDL_2.50KN/m2 | 0.000 | 0.000 | -0.118 |
| | 0.000 | 0.000 | 0.118 |
| 42 L.L.UDL_6.50KN/m2 | 0.000 | 0.000 | -0.230 |
| | 0.000 | 0.000 | 0.230 |
| 50 TS_RIGHT_Posit.1 | 0.000 | 0.000 | -0.540 |
| | 0.000 | 0.000 | 0.540 |
| 51 TS_RIGHT_Posit.2 | 0.000 | 0.000 | -0.540 |
| | 0.000 | 0.000 | 0.540 |
| 52 TS_RIGHT_Posit.3 | 0.000 | 0.000 | -0.540 |
| | 0.000 | 0.000 | 0.540 |
| 53 TS_RIGHT_Posit.4 | 0.000 | 0.000 | -0.540 |
| | 0.000 | 0.000 | 0.540 |
| 54 TS_RIGHT_Posit.5 | 0.000 | 0.000 | -0.540 |
| | 0.000 | 0.000 | 0.540 |
| 55 TS_RIGHT_Posit.6 | 0.000 | 0.000 | -0.540 |
| | 0.000 | 0.000 | 0.540 |
| 56 TS_RIGHT_Posit.7 | 0.000 | 0.000 | -0.540 |
| | 0.000 | 0.000 | 0.540 |
| 57 TS_RIGHT_Posit.8 | 0.000 | 0.000 | -0.540 |
| | 0.000 | 0.000 | 0.540 |
| 58 TS_RIGHT_Posit.9 | 0.000 | 0.000 | -0.540 |
| | 0.000 | 0.000 | 0.540 |
| 59 TS_RIGHT_Posit.10 | 0.000 | 0.000 | -0.540 |
| | 0.000 | 0.000 | 0.540 |
| 60 TS_RIGHT_Posit.11 | 0.000 | 0.000 | -0.472 |
| | 0.000 | 0.000 | 0.472 |
| 61 TS_RIGHT_Posit.12 | 0.000 | 0.000 | -0.270 |
| | 0.000 | 0.000 | 0.270 |
| 70 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 2.50 | -0.025 | 0.000 | 0.000 |
| | 0.025 | 0.000 | 0.000 |
| 71 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 2.50 | 0.025 | 0.000 | 0.000 |
| | -0.025 | 0.000 | 0.000 |
| 72 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 6.50 | -0.066 | 0.000 | 0.000 |
| | 0.066 | 0.000 | 0.000 |
| 73 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 6.50 | 0.066 | 0.000 | 0.000 |
| | -0.066 | 0.000 | 0.000 |
| 74 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 TS1- | -0.310 | 0.000 | 0.000 |
| | 0.310 | 0.000 | 0.000 |
| 75 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 TS1- | 0.310 | 0.000 | 0.000 |
| | -0.310 | 0.000 | 0.000 |
| 80 ΠΙΘΑΝΕΣ ΚΑΘΙΣΤΗΣΕΙΣ Α1 | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 |
| 81 ΠΙΘΑΝΕΣ ΚΑΘΙΣΤΗΣΕΙΣ Α2 | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 |
| 90 (+ΔΤΝ)+0.75*(+ΔΤΜ) | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 |
| 91 (+ΔΤΝ)+0.75*(-ΔΤΜ) | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 |
| 92 (-ΔΤΝ)+0.75*(+ΔΤΜ) | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 |
| 93 (-ΔΤΝ)+0.75*(-ΔΤΜ) | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 |
| 94 0.35*(+ΔΤΝ)+(ΔΤΜ) | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 |
| 95 0.35*(+ΔΤΝ)+(-ΔΤΜ) | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 |
| 96 0.35*(-ΔΤΝ)+(ΔΤΜ) | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 |
| 97 0.35*(-ΔΤΝ)+(-ΔΤΜ) | 0.000 | 0.000 | 0.000 |
| | 0.000 | 0.000 | 0.000 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΕΠΙΛΥΣΗ ΦΑΣΗ-2 (normal)

Elementgroups

| No | fac-S | fac-L | fac-D | fac-P | fac-B | PLC |
|----|-------|-------|-------|-------|-------|-----|
| 1 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 2 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 3 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 4 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 8 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 9 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 10 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 11 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 12 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |
| 13 | 1.000 | 1.000 | 0.000 | 1.000 | 1.000 | 0 |

Elementgroups construction stage number

| no | CS |
|----|-----|
| 1 | 40 |
| 2 | 998 |
| 3 | 998 |
| 4 | 998 |
| 8 | 998 |
| 9 | 998 |
| 10 | 998 |
| 11 | 998 |
| 12 | 998 |
| 13 | 998 |

Elementgroups activated hinges

| no | hinge |
|----|-------|
| 1 | fixed |
| 2 | activ |
| 3 | activ |
| 4 | activ |
| 8 | activ |
| 9 | activ |
| 10 | activ |
| 11 | activ |
| 12 | activ |
| 13 | activ |

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|---------------------------|---------|---------|---------|
| 100 CRASH_-Y_Pos.1 _DECK | 0.000 | -0.240 | 0.000 |
| 101 CRASH_-Y_Pos.2 _DECK | 0.000 | -0.240 | 0.000 |
| 102 CRASH_-Y_Pos.3 _DECK | 0.000 | -0.240 | 0.000 |
| 103 CRASH_-Y_Pos.4 _DECK | 0.000 | -0.240 | 0.000 |
| 104 CRASH_-Y_Pos.5 _DECK | 0.000 | -0.240 | 0.000 |
| 105 CRASH_-Y_Pos.6 _DECK | 0.000 | -0.240 | 0.000 |
| 106 CRASH_-Y_Pos.7 _DECK | 0.000 | -0.240 | 0.000 |
| 107 CRASH_-Y_Pos.8 _DECK | 0.000 | -0.240 | 0.000 |
| 108 CRASH_-Y_Pos.9 _DECK | 0.000 | -0.240 | 0.000 |
| 109 CRASH_-Y_Pos.10 _DECK | 0.000 | -0.240 | 0.000 |
| 110 CRASH_-Y_Pos.11 _DECK | 0.000 | -0.240 | 0.000 |
| 111 CRASH_-Y_Pos.12 _DECK | 0.000 | -0.240 | 0.000 |

Sum of Reactions and Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|---------------------------|---------|---------|---------|
| 100 CRASH_-Y_Pos.1 _DECK | 0.000 | 0.240 | 0.000 |
| 101 CRASH_-Y_Pos.2 _DECK | 0.000 | -0.240 | 0.000 |
| 102 CRASH_-Y_Pos.3 _DECK | 0.000 | 0.240 | 0.000 |
| 103 CRASH_-Y_Pos.4 _DECK | 0.000 | -0.240 | 0.000 |
| 104 CRASH_-Y_Pos.5 _DECK | 0.000 | 0.240 | 0.000 |
| 105 CRASH_-Y_Pos.6 _DECK | 0.000 | -0.240 | 0.000 |
| 106 CRASH_-Y_Pos.7 _DECK | 0.000 | 0.240 | 0.000 |
| 107 CRASH_-Y_Pos.8 _DECK | 0.000 | -0.240 | 0.000 |
| 108 CRASH_-Y_Pos.9 _DECK | 0.000 | 0.240 | 0.000 |
| 109 CRASH_-Y_Pos.10 _DECK | 0.000 | -0.240 | 0.000 |
| 110 CRASH_-Y_Pos.11 _DECK | 0.000 | 0.240 | 0.000 |
| 111 CRASH_-Y_Pos.12 _DECK | 0.000 | -0.240 | 0.000 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΦΑΣΕΙΣ ΚΑΤΑΣΚΕΥΗΣ-ΥΠΟΛΟΓΙΣΜΟΣ ΕΡΠΥΣΜΟΥ&ΣΥΣΤ.ΞΗΡΑΝΣΗΣ

Global Settings

Dead load of elements is automatically activated.
Creep and shrinkage analysis will be done by AQB.
Creep and shrinkage values are calculated in advance in CSM.

Construction Stages

| CS | Type | Time d | RH % | Temp °C | launch m | laun_2 m | Title |
|----|------|-----------|---------|------------|-------------|-------------|----------------------------|
| 10 | G_1 | | | | | | G1 activating new group/CS |
| 15 | C | 7 | 70 | 20 | | | K creep step |
| 20 | G_2 | | | | | | G2 additional dead load |
| 25 | C | 30 | 70 | 20 | | | K creep step |
| 40 | G_3 | | | | | | G2 additional dead load |
| 55 | C | 60 | 70 | 20 | | | K creep step |
| 60 | C | 219 | 70 | 20 | | | K creep step |
| 61 | C | 681 | 70 | 20 | | | K creep step |
| 62 | C | 2115 | 70 | 20 | | | K creep step |
| 63 | C | 6571 | 70 | 20 | | | K creep step |
| 64 | C | 20414 | 70 | 20 | | | K creep step |

Group Properties

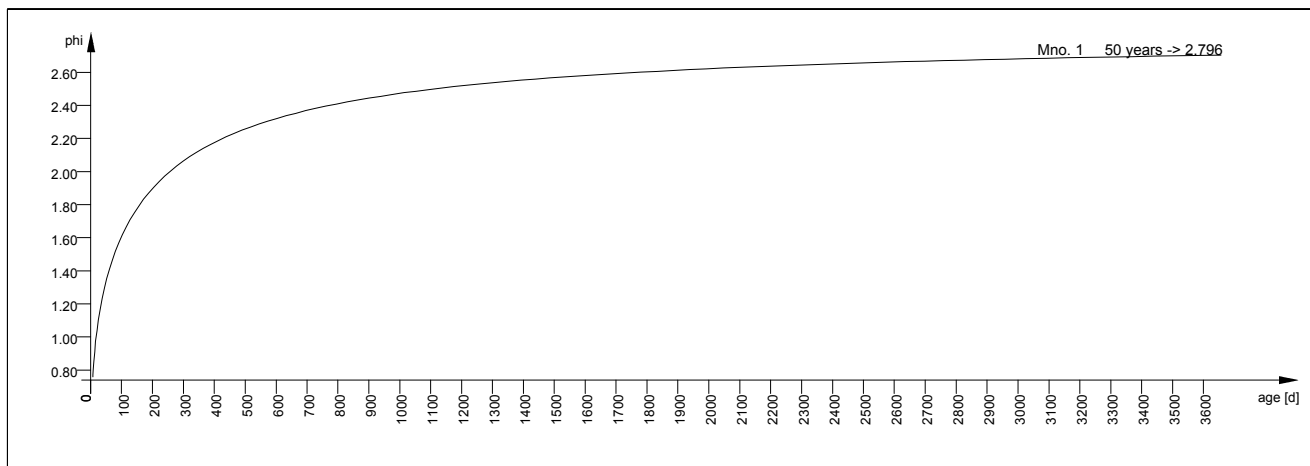
| Grp | active from CS | active until CS | deadload from CS | Hfix from CS | Bedd from | Deck from | T0 d | FAC1 | PHIF | QUEA | QEMX |
|-----|-------------------|--------------------|---------------------|-----------------|--------------|--------------|---------|------|-------|-------|------|
| 1 | 10 | 999 | 10 | 40 | | 20 | 7 | | 1.000 | | |
| 2 | 10 | 999 | 10 | | | 20 | 7 | | | | |
| 3 | 40 | 999 | 40 | | | 20 | 7 | | | 0.000 | |
| 4 | 40 | 999 | 40 | | | 20 | 7 | | | 0.000 | |
| 8 | 10 | 999 | 10 | | | 20 | 7 | | | | |
| 9 | 10 | 999 | 10 | | | 20 | 7 | | | | |
| 10 | 10 | 999 | 10 | | | 20 | 7 | | | | |
| 11 | 10 | 999 | 10 | | | 20 | 7 | | | | |
| 12 | 10 | 999 | 10 | | | 20 | 7 | | | | |
| 13 | 10 | 999 | 10 | | | 20 | 7 | | | | |

Hfix: beam hinges of this group are fixed starting from this Constrction stage
Deck: dead weight activation of cross sectional construction stages

Additional Loads

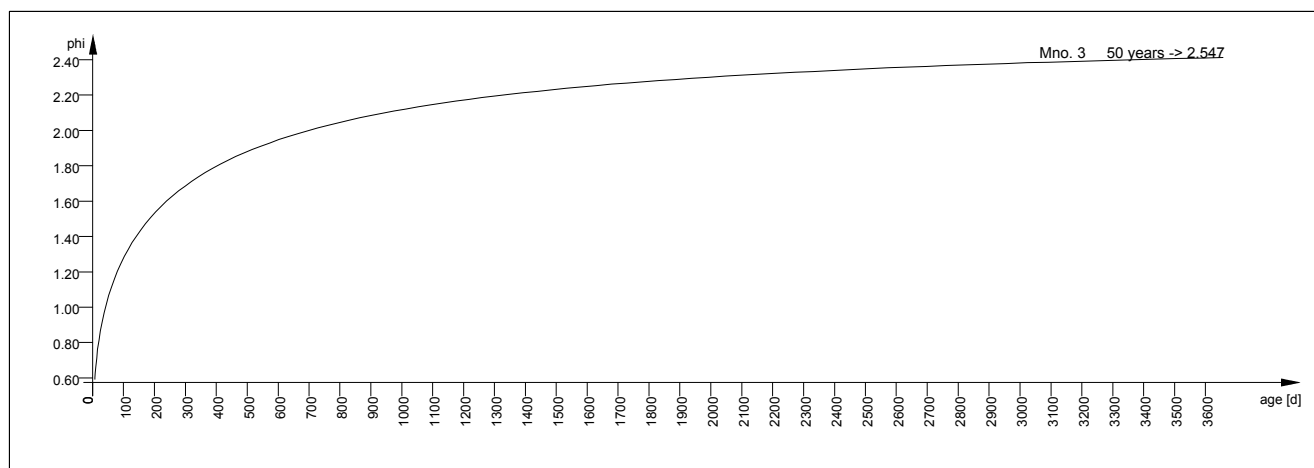
| LC | Type | active from CS | active until CS | faktor |
|----|------|-------------------|--------------------|----------|
| 2 | G_1 | 10 | 999 | 1.000000 |
| 3 | G_2 | 20 | 999 | 1.000000 |
| 31 | G_2 | 40 | 999 | 1.000000 |
| 32 | G_2 | 40 | 999 | 1.000000 |
| 33 | G_2 | 40 | 999 | 1.000000 |

Creep development material no. 1 deff= 0.192 m T0= 7 d Temp= 20 ° RH= 70

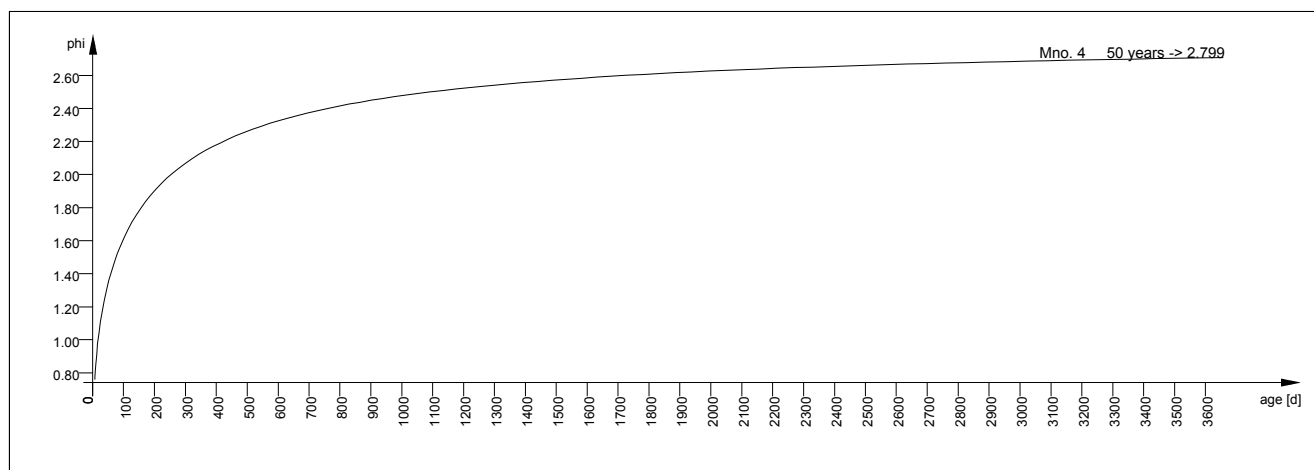


Creep development material no. 3 deff= 0.444 m T0= 7 d Temp= 20 ° RH= 70

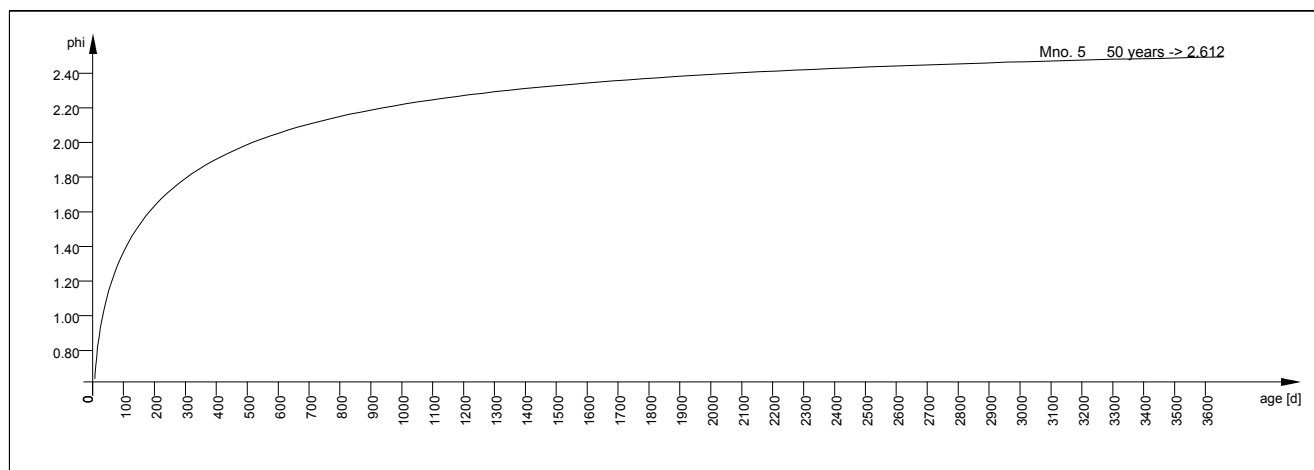
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΦΑΣΕΙΣ ΚΑΤΑΣΚΕΥΗΣ-ΥΠΟΛΟΓΙΣΜΟΣ ΕΡΠΥΣΜΟΥ&ΣΥΣΤ.ΞΗΡΑΝΣΗΣ



Creep development material no. 4 $deff = 0.190$ m $\tau_0 = 7$ d Temp= 20 ° RH= 70

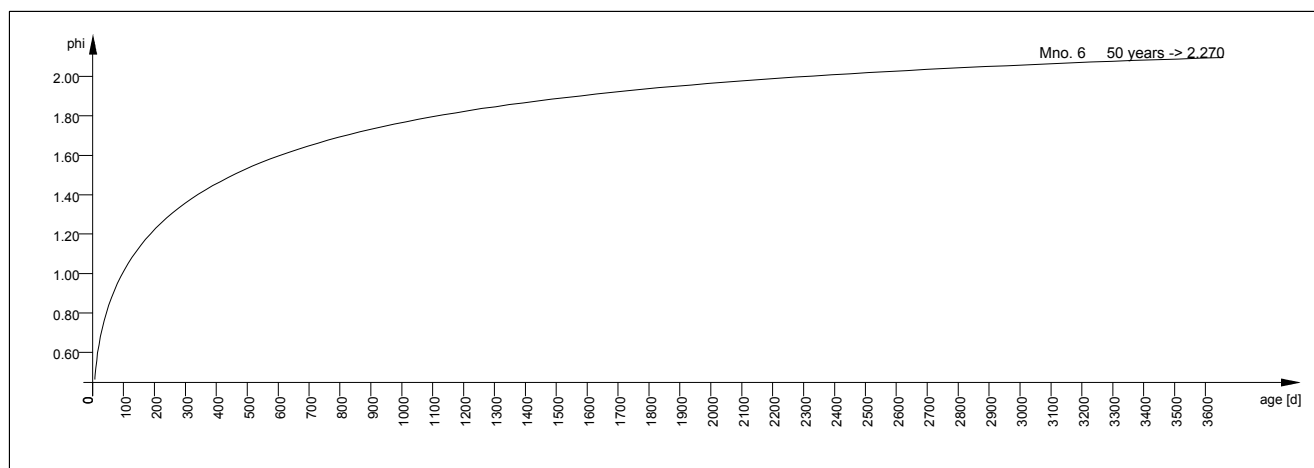


Creep development material no. 5 $deff = 0.350$ m $\tau_0 = 7$ d Temp= 20 ° RH= 70

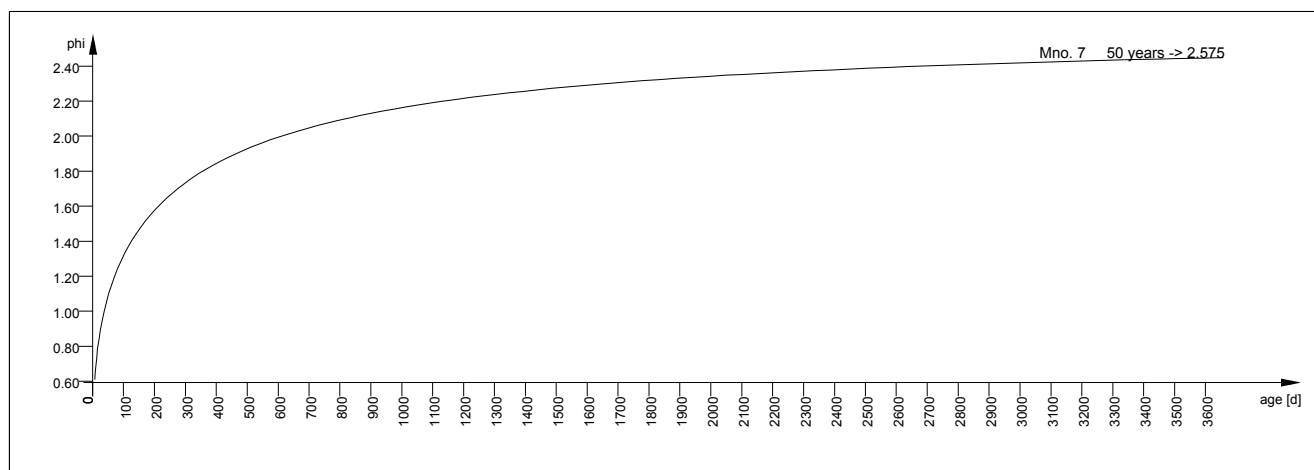


Creep development material no. 6 $deff = 1.680$ m $\tau_0 = 7$ d Temp= 20 ° RH= 70

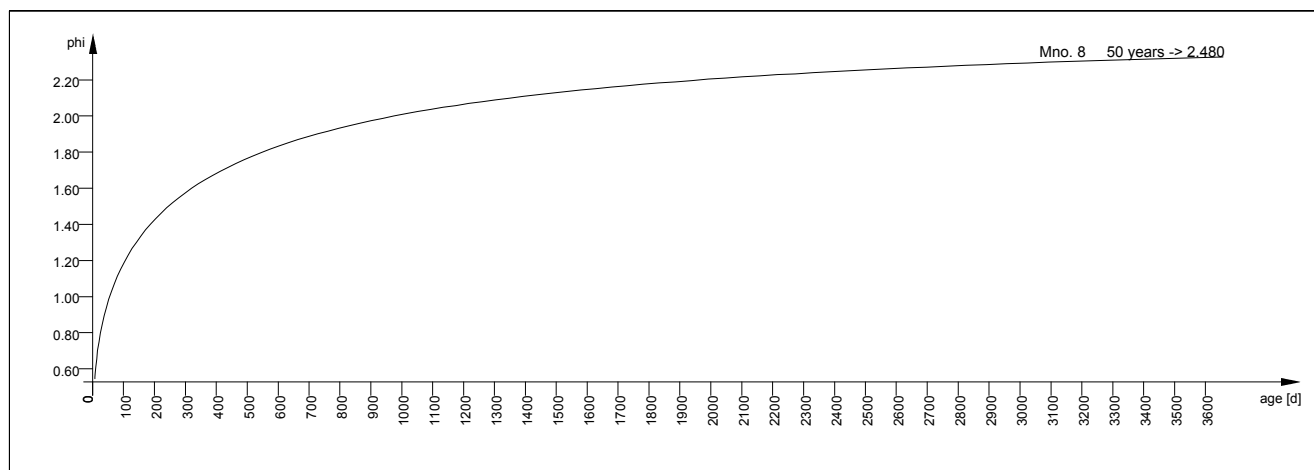
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΦΑΣΕΙΣ ΚΑΤΑΣΚΕΥΗΣ-ΥΠΟΛΟΓΙΣΜΟΣ ΕΡΠΥΣΜΟΥ&ΣΥΣΤ.ΞΗΡΑΝΣΗΣ



Creep development material no. 7 $deff = 0.400$ m $T_0 = 7$ d Temp= 20 ° RH= 70

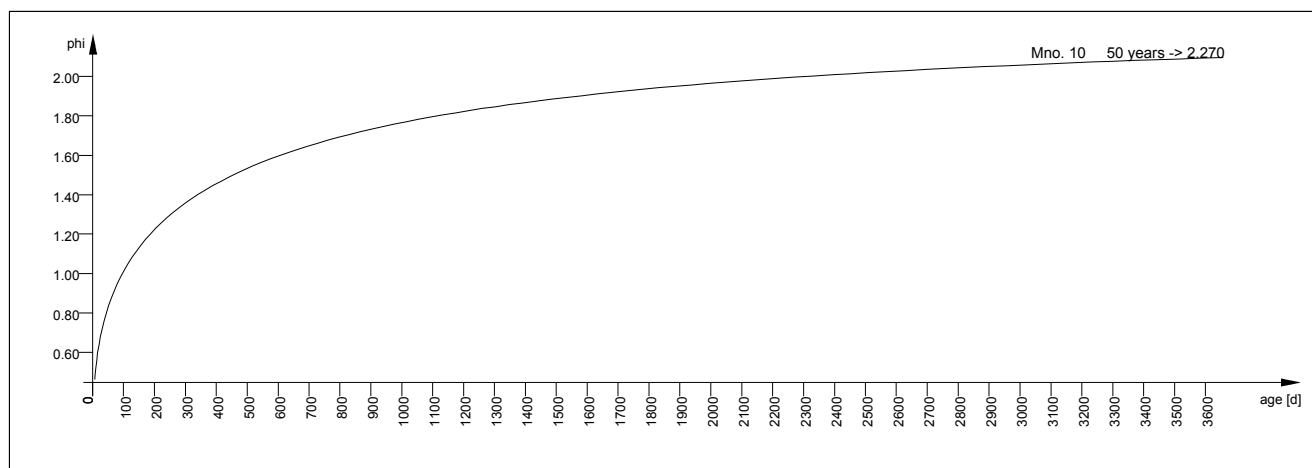


Creep development material no. 8 $deff = 0.574$ m $T_0 = 7$ d Temp= 20 ° RH= 70

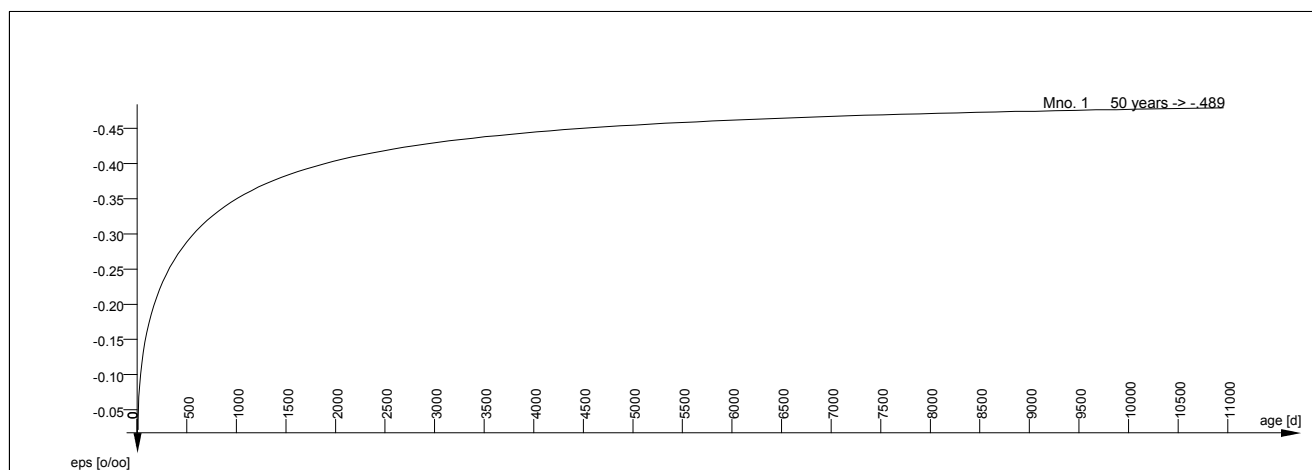


Creep development material no. 10 $deff = 1.680$ m $T_0 = 7$ d Temp= 20 ° RH= 70

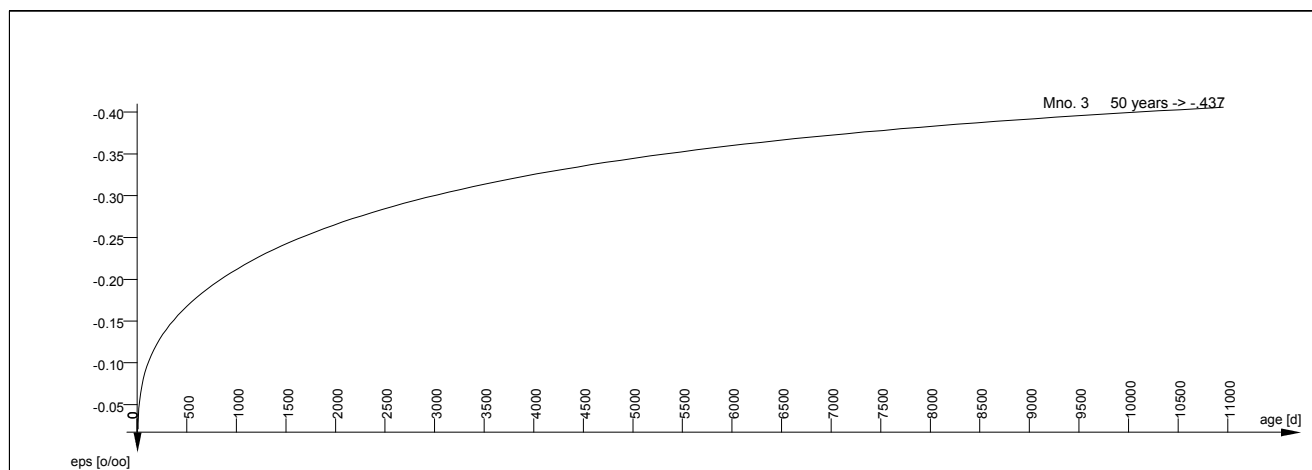
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΦΑΣΕΙΣ ΚΑΤΑΣΚΕΥΗΣ-ΥΠΟΛΟΓΙΣΜΟΣ ΕΡΠΥΣΜΟΥ&ΣΥΣΤ.ΞΗΡΑΝΣΗΣ



Shrinkage development material no. 1 deff= 0.192 m Temp= 20 ° RH= 70

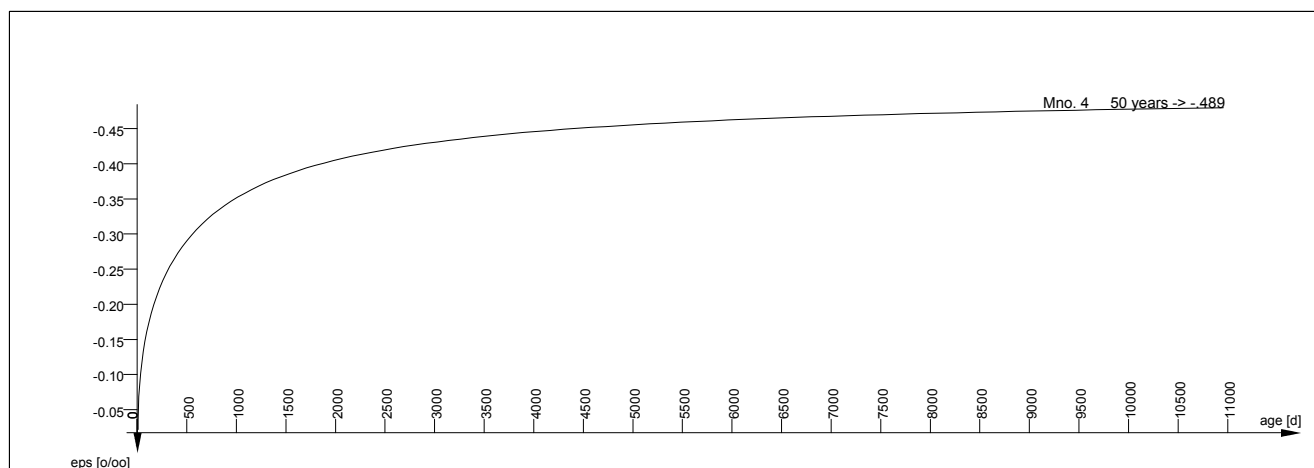


Shrinkage development material no. 3 deff= 0.444 m Temp= 20 ° RH= 70

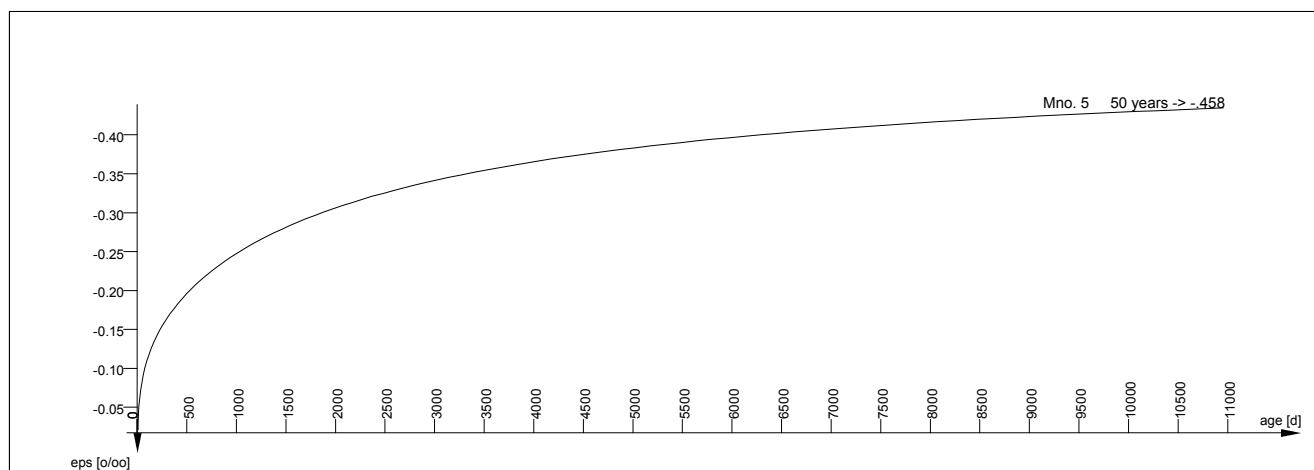


Shrinkage development material no. 4 deff= 0.190 m Temp= 20 ° RH= 70

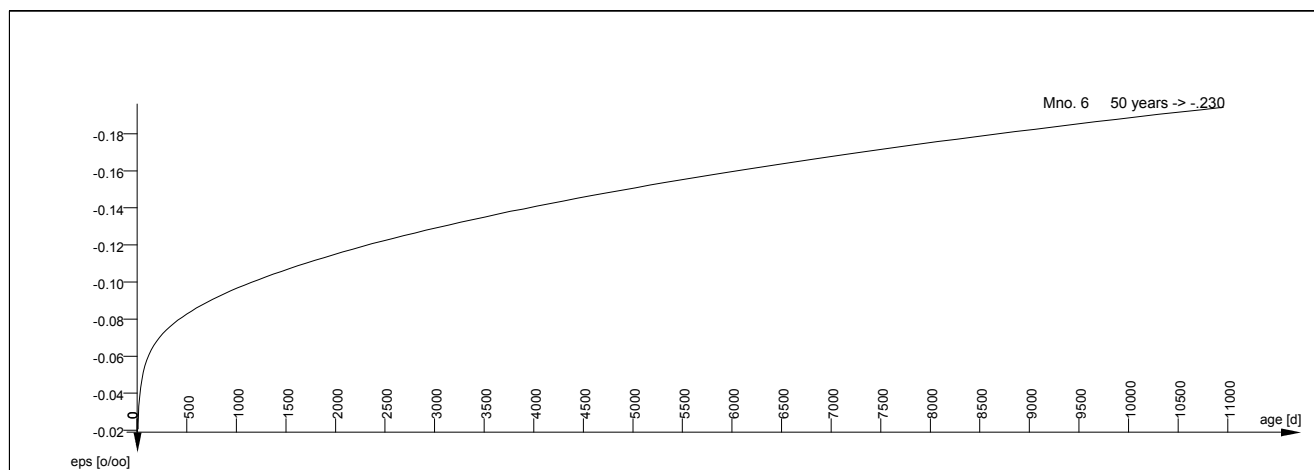
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
 ΦΑΣΕΙΣ ΚΑΤΑΣΚΕΥΗΣ-ΥΠΟΛΟΓΙΣΜΟΣ ΕΡΠΥΣΜΟΥ&ΣΥΣΤ.ΞΗΡΑΝΣΗΣ



Shrinkage development material no. 5 deff= 0.350 m Temp= 20 ° RH= 70

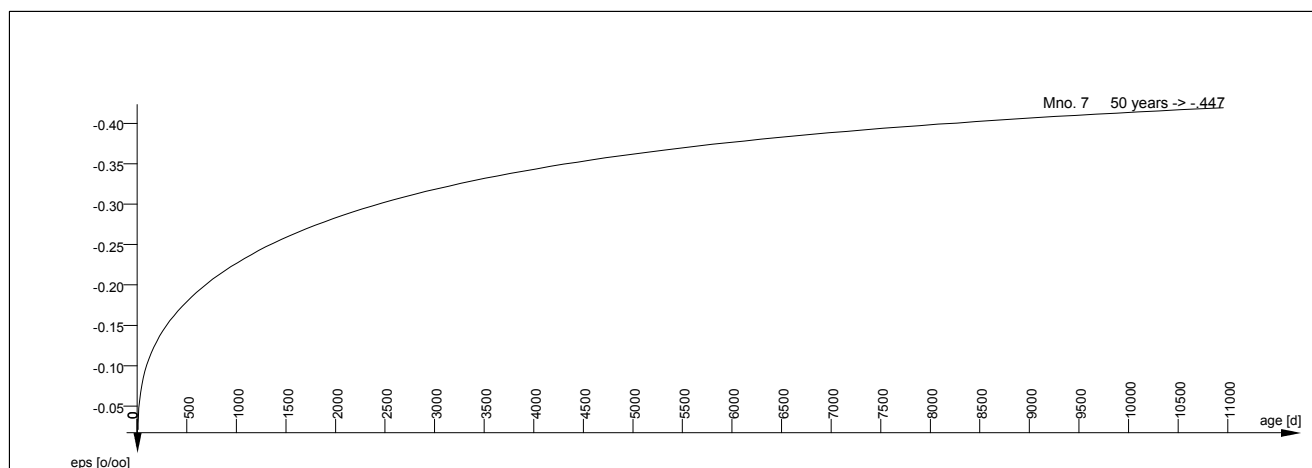


Shrinkage development material no. 6 deff= 1.680 m Temp= 20 ° RH= 70

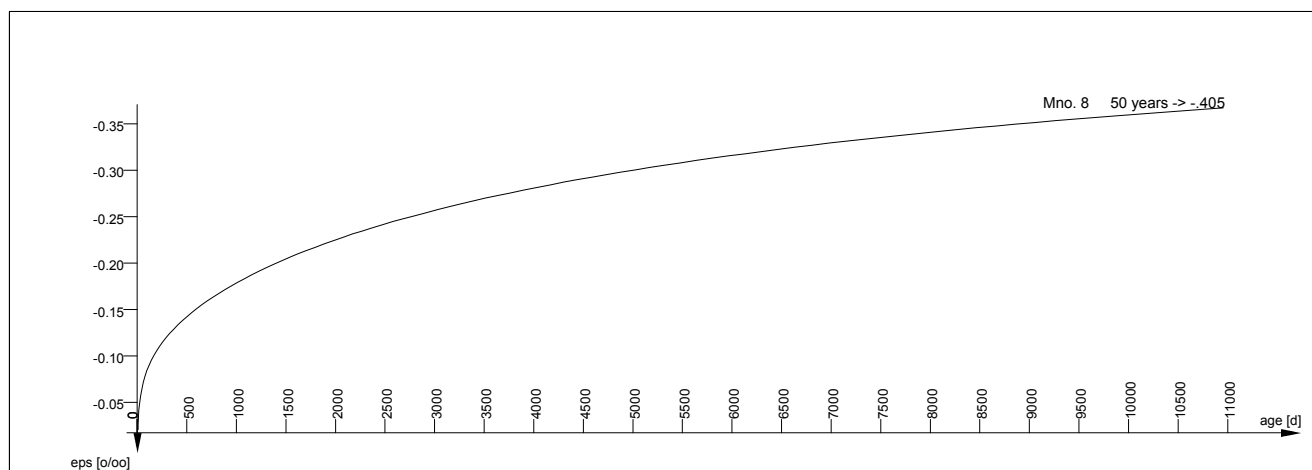


Shrinkage development material no. 7 deff= 0.400 m Temp= 20 ° RH= 70

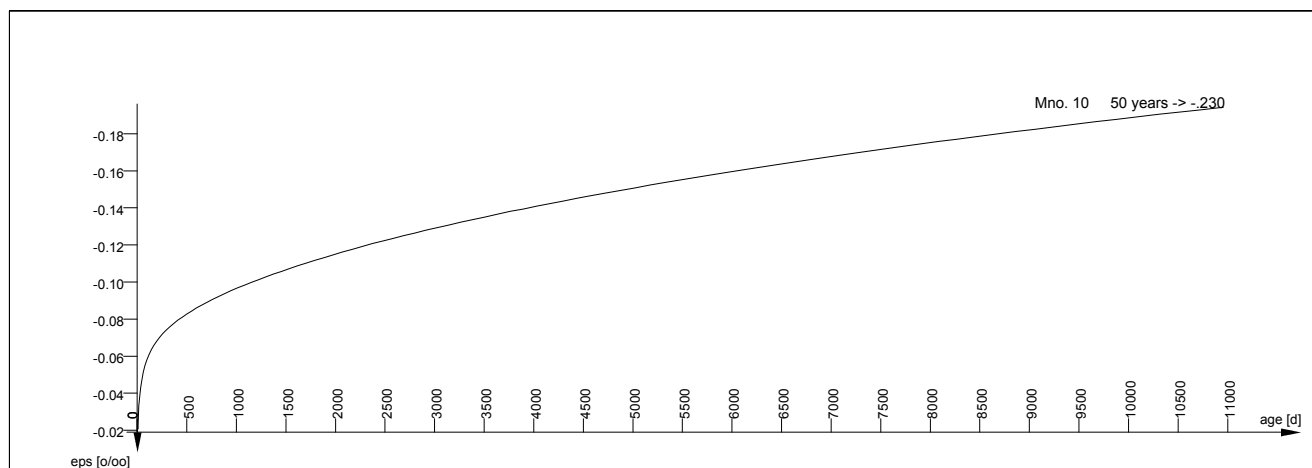
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΦΑΣΕΙΣ ΚΑΤΑΣΚΕΥΗΣ-ΥΠΟΛΟΓΙΣΜΟΣ ΕΡΠΥΣΜΟΥ&ΣΥΣΤ.ΞΗΡΑΝΣΗΣ



Shrinkage development material no. 8 deff= 0.574 m Temp= 20 ° RH= 70



Shrinkage development material no. 10 deff= 1.680 m Temp= 20 ° RH= 70



Creep values are evaluated according to the design code of the database.

Creep Values

| Grp | Mno | Type | deff [m] | T0 d | CS 15 | CS 25 | CS 55 | CS 60 | CS 61 | CS 62 | CS 63 | CS 64 | total |
|-----|-----|------|-------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------------|
| | | Time | --- | --- | 7 | 30 | 60 | 219 | 681 | 2115 | 6571 | 20414 | 30097 |
| | | RH % | --- | --- | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | |
| | | Temp | --- | --- | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | |
| 1 | 1 | beam | 0.192 | 7 | 0.76 | 0.47 | 0.37 | 0.49 | 0.39 | 0.21 | 0.09 | 0.03 | 2.81 / 1.14 ** |
| 1 | 4 | beam | 0.190 | 7 | - | - | 1.41 | 0.63 | 0.43 | 0.22 | 0.09 | 0.03 | 2.81 / 1.14 ** |
| 2 | 3 | beam | 0.444 | 7 | 0.59 | 0.37 | 0.30 | 0.44 | 0.41 | 0.27 | 0.13 | 0.05 | 2.56 / 1.14 ** |
| 3 | 5 | - | 0.350 | 7 | - | - | 1.19 | 0.57 | 0.44 | 0.26 | 0.11 | 0.04 | 2.63 / 1.14 ** |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΦΑΣΕΙΣ ΚΑΤΑΣΚΕΥΗΣ-ΥΠΟΛΟΓΙΣΜΟΣ ΕΡΠΥΣΜΟΥ&ΣΥΣΤ.ΞΗΡΑΝΣΗΣ

Creep Values

| Grp | Mno | Type | deff [m] | T0 d | CS 15 | CS 25 | CS 55 | CS 60 | CS 61 | CS 62 | CS 63 | CS 64 | total | | |
|-------|-----|------|-------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|-------|---|---------|
| <hr/> | | | | | | | | | | | | | | | |
| | | | Time ---> | | 7 | 30 | 60 | 219 | 681 | 2115 | 6571 | 20414 | 30097 | | |
| | | | RH % ---> | | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | | | |
| | | | Temp ---> | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | | |
| <hr/> | | | | | | | | | | | | | | | |
| 4 | 5 | - | 0.350 | 7 | - | - | 1.19 | 0.57 | 0.44 | 0.26 | 0.11 | 0.04 | 2.63 | / | 1.14 ** |
| 8 | 6 | - | 1.680 | 7 | 0.46 | 0.30 | 0.24 | 0.37 | 0.39 | 0.30 | 0.16 | 0.06 | 2.29 | / | 1.14 ** |
| 9 | 10 | - | 1.680 | 7 | 0.46 | 0.30 | 0.24 | 0.37 | 0.39 | 0.30 | 0.16 | 0.06 | 2.29 | / | 1.14 ** |
| 10 | 8 | beam | 0.574 | 7 | 0.55 | 0.35 | 0.28 | 0.42 | 0.41 | 0.29 | 0.14 | 0.06 | 2.50 | / | 1.14 ** |
| 12 | 7 | - | 0.400 | 7 | 0.61 | 0.39 | 0.31 | 0.45 | 0.41 | 0.26 | 0.12 | 0.04 | 2.59 | / | 1.14 ** |

** For the ** marked elements, the creep value will be additionally divided by the printed factor in AQB due to the problem of the reference E-modulus [Ecm/Ec0]. Please refer to Heft 525 Deutscher Ausschuss fuer Stahlbeton S. 65ff.

Shrinkage Values *10^-6

| Grp | Mno | Type | deff [m] | T0 d | CS 15 | CS 25 | CS 55 | CS 60 | CS 61 | CS 62 | CS 63 | CS 64 | total | | |
|-------|-----|------|-------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|-------|--|--|
| <hr/> | | | | | | | | | | | | | | | |
| | | | Time ---> | | 7 | 30 | 60 | 219 | 681 | 2115 | 6571 | 20414 | 30097 | | |
| | | | RH % ---> | | 70 | 70 | 70 | 70 | 70 | 70 | 70 | 70 | | | |
| | | | Temp ---> | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | | | |
| <hr/> | | | | | | | | | | | | | | | |
| 1 | 1 | beam | 0.192 | 7 | -21.8 | -82.2 | -55.5 | -89.1 | -101. | -82.2 | -44.7 | -18.0 | -494. | | |
| 1 | 4 | beam | 0.190 | 7 | - | - | -131. | -109. | -108. | -84.2 | -44.6 | -17.8 | -495. | | |
| 2 | 3 | beam | 0.444 | 7 | -21.1 | -44.6 | -29.8 | -48.1 | -68.0 | -91.9 | -93.6 | -62.4 | -459. | | |
| 3 | 5 | - | 0.350 | 7 | - | - | -90.3 | -69.8 | -84.2 | -99.3 | -84.2 | -46.8 | -475. | | |
| 4 | 5 | - | 0.350 | 7 | - | - | -90.3 | -69.8 | -84.2 | -99.3 | -84.2 | -46.8 | -475. | | |
| 8 | 6 | - | 1.680 | 7 | -20.6 | -23.1 | -14.0 | -17.4 | -21.2 | -34.0 | -56.1 | -83.5 | -270. | | |
| 9 | 10 | - | 1.680 | 7 | -20.6 | -23.1 | -14.0 | -17.4 | -21.2 | -34.0 | -56.1 | -83.5 | -270. | | |
| 10 | 8 | beam | 0.574 | 7 | -20.9 | -38.0 | -25.0 | -39.1 | -55.5 | -81.2 | -97.2 | -79.1 | -436. | | |
| 12 | 7 | - | 0.400 | 7 | -21.1 | -47.8 | -32.1 | -52.4 | -73.3 | -94.9 | -89.9 | -55.3 | -467. | | |

Overview loadcases

Total CS displacements and forces starting at loadcase number. 4000
Difference displacements and forces starting at loadcase number. 5000
AQB inner stresses from creep and shrinkage from loadcasenumber. 6000
Stress results of the AQB-LCST-evaluation from loadcasenumber. 7000
[to check prestress normal force after creep and shrinkage :
-> WINGRAF beam normal force LC 7000ff]

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00

5) ΦΑΣΗ-1_ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ ULS-ΣΤΑΤΙΚΑ

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
 ULS-BASIKOS SYNDYASMOS 1 (BEAMS)

Combination rule Number 1

FASH_1-ULS

Resulting loadcases type Design Combination

Loadcase selection

| Number | factor | type | | Title |
|--------|--------|-----------|---------------------------------|----------------------|
| 1 | 1.35 | permanent | load grouped in actions | I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ |
| 2 | 1.35 | permanent | load grouped in actions | I.B. ΔΟΚΩΝ |
| 3 | 1.35 | permanent | load grouped in actions | I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ |
| 4 | 1.50 | Exclusive | LC A 1 ΚΙΝΗΤΟ ΦΑΣΗΣ-1 | |
| 11 | 1.50 | Exclusive | LC A 2 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 | |
| 12 | 1.50 | Exclusive | LC A 2 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 | |
| 13 | 1.50 | Exclusive | LC A 2 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 | |
| 14 | 1.50 | Exclusive | LC A 2 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 | |
| 7 | 1.35 | Exclusive | LC A 3 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝ Α1-Κ0 (Φ | |
| 8 | 1.35 | Exclusive | LC A 4 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝ Α2-Κ0 (Φ | |

Generated Loadcases

| Number | Comb | Title |
|--------|------|-------------|
| 1001 | 1 | MAX-MY BEAM |
| 1002 | 1 | MIN-MY BEAM |
| 1003 | 1 | MAX-VZ BEAM |
| 1004 | 1 | MIN-VZ BEAM |
| 1005 | 1 | MAX-MZ BEAM |
| 1006 | 1 | MIN-MZ BEAM |
| 1007 | 1 | MAX-VY BEAM |
| 1008 | 1 | MIN-VY BEAM |
| 1009 | 1 | MAX-N BEAM |
| 1010 | 1 | MIN-N BEAM |
| 1011 | 1 | MAX-MT BEAM |
| 1012 | 1 | MIN-MT BEAM |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Selected Beam Elements

| FROM | TO | INC | X-VALUE | NC | MEMBER | CS0 | CS1 | CS2 | CS3 | CS4 | CS5 |
|-------|-------|-----|---------|----|--------|-----|-----|-----|-----|-----|-----|
| 10001 | | | | | | | | | | | |
| 10005 | | | | | | | | | | | |
| 10006 | | | | | | | | | | | |
| 10009 | | | | | | | | | | | |
| 10010 | | | | | | | | | | | |
| 10014 | | | | | | | | | | | |
| 10016 | | | | | | | | | | | |
| 10020 | | | | | | | | | | | |
| 10021 | | | | | | | | | | | |
| 10024 | | | | | | | | | | | |
| 10025 | | | | | | | | | | | |
| 10029 | | | | | | | | | | | |
| 12000 | 12150 | 1 | | | | | | | | | |

Default design code is DIN Fachbericht 102 Massivbröcken (2003) (Germany)

Klasse(Tab.4.118): D

wind zone : Binnenland

Materials

| | |
|--------|-------------------------|
| No. 1 | C 25/30 (DIN 1045-1) |
| No. 3 | C 25/30 (DIN 1045-1) |
| No. 4 | C 25/30 (DIN 1045-1) |
| No. 5 | C 25/30 (DIN 1045-1) |
| No. 6 | C 25/30 (DIN 1045-1) |
| No. 7 | C 25/30 (DIN 1045-1) |
| No. 8 | C 25/30 (DIN 1045-1) |
| No. 9 | C 25/30 (DIN 1045-1) |
| No. 10 | C 25/30 (DIN 1045-1) |
| No. 12 | BSt 500 SA (DIN 1045-1) |

Reinforcement will be accounted for sectional values as defined in AQUA

Reinforcements saved as design case LCR 501

Considered Load Cases

| No. | refer | act on | Title/type of load case | gam-u | gam-f | psi-0 | psi-1 | psi-2 | psi-1' |
|-----|-------|--------|---|-------|-------|-------|-------|-------|-------------|
| 1 | part. | CS 0 | I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 2 | part. | CS 0 | I.B. ΔΟΚΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 3 | part. | CS 0 | I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 4 | part. | CS 0 | KINHTO ΦΑΣΗΣ-1 Q_A (Pay load residential cat. A) | 1.50 | 0.00 | 0.70 | 0.50 | 0.30 | 0.70 Q cond |
| 7 | part. | CS 0 | ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝ Α1-Κ0 (Φ Q_B (Pay load offices cat. B) | 1.50 | 0.00 | 0.70 | 0.50 | 0.30 | 0.70 Q cond |
| 8 | part. | CS 0 | ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝ Α2-Κ0 (Φ Q_B (Pay load offices cat. B) | 1.50 | 0.00 | 0.70 | 0.50 | 0.30 | 0.70 Q cond |
| 11 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 12 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 13 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 14 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |

Ultimate Load Design

Design for ultimate loads DIN Fachbericht 102 Massivbröcken (2003)

Biaxial bending, uniaxial stress calculated in y-z axis

Safety factors SC-1 SC-2 SC-S SS-1 SS-2 PIIa

1.50 1.50 1.50 1.15 1.15 7

Strain limits C1 C2 S1 S2 Z1 Z2
max -3.50 -2.00 3.00 25.00 -3.50 25.00

parameters for reinforcements

Minimum reinforcements compression min. reinforcem. maximum-
Bending. Compress. e/d N/Np1 requ. section reforc.
0.00 [cm²] 0.30 [o/o] 3.50 0.0010 0.00 0.15 9.00

Tensile forces in the longitudinal reinforcements due to shear are NOT accounted for.

Material of sections uses Ultimate Limit strain-stress law with global safety factors

Material of reinforcements uses Ultimate Limit strain-stress law with global safety factors

| MNo. | temp lev. | Material-safety | max.compr stress [MPa] | at strain [o/oo] | max.tens stress [MPa] | at strain [o/oo] | tension-stiffening [MPa] |
|------|-----------|-----------------|------------------------|------------------|-----------------------|------------------|--------------------------|
| 1 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 3 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 4 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 5 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| MNo. | temp lev. | Material- safety | max.compr stress [MPa] | at strain [o/oo] | max.tens stress [MPa] | at strain [o/oo] | tension- stiffening [MPa] |
|------|--------------|---------------------|------------------------------|------------------------|-----------------------------|------------------------|---------------------------------|
| 6 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 7 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 8 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 9 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 10 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 12 | 0 | 1.150 | -456.52 | -25.00 | 456.52 | 25.00 | |

Combinations For Ultimate Design

1013 (gross) max_my-1013

MAX + MY :
 $1.35 * G + 1.50 * Q_A + 1.50 * L_A + 1.35 * Q_B$

1014 (gross) min_my-1014

MIN + MY :
 $1.35 * G + 1.50 * Q_A + 1.50 * L_A + 1.35 * Q_B$

Required Reinforcements

| Beam | x[m] | Nos | LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn [mm] | nue c/s | rel tra | As L [cm2] |
|-------|-------|-----|------|------------|------------------|-----------------|---------------|------------|----------------|---------------|
| 10001 | 0.000 | 8 | 1013 | 0.006 | 0.000 | 25.00 | 25.00 | 1.50 | 1.00 | 0.04 0 |
| | | | | | | | | | | 0.04 1 |
| | | 8 | 1014 | 0.006 | 0.000 | 25.00 | 25.00 | 1.50 | 1.00 | 0.04 3 |
| | | | | | | | | | | 0.35 T |
| | | 8 | 1013 | -0.020 | -0.006 | 0.00 | 0.00 | 1.50 | not calculated | 0.04 0 |
| | | | | | | | | | | 0.04 1 |
| | 0.200 | 8 | 1014 | -0.021 | -0.006 | 0.00 | 0.00 | 1.50 | not calculated | 0.04 3 |
| | | | | | | | | | | 0.41 T |
| | | 8 | 1013 | 0.029 | -0.014 | 25.00 | 25.00 | 1.50 | 1.00 | 0.38 T |
| | | | | | | | | | | 0.04 0 |
| | | 8 | 1014 | 0.031 | -0.014 | 25.00 | 25.00 | 1.50 | 1.00 | 0.60 3 |
| | | | | | | | | | | 1.70 T |
| 10005 | 0.000 | 8 | 1013 | 0.029 | -0.014 | 25.00 | 25.00 | 1.50 | 1.00 | 0.05 0 |
| | | | | | | | | | | 0.63 3 |
| | | 8 | 1014 | 0.031 | 0.004 | 25.00 | 25.00 | 1.50 | 1.00 | 1.64 T |
| | | | | | | | | | | 0.23 0 |
| | 0.200 | 8 | 1013 | 0.031 | 0.004 | 25.00 | 25.00 | 1.50 | 1.00 | 0.31 1 |
| | | | | | | | | | | 0.14 3 |
| | | 8 | 1014 | 0.029 | 0.004 | 25.00 | 25.00 | 1.50 | 1.00 | 1.81 T |
| | | | | | | | | | | 0.21 0 |
| 10006 | 0.000 | 8 | 1013 | 0.002 | 0.004 | -0.09 | 25.00 | 1.50 | 1.00 | 0.30 1 |
| | | | | | | | | | | 0.13 3 |
| | | 8 | 1014 | 0.002 | 0.004 | -0.09 | 25.00 | 1.50 | 1.00 | 1.53 T |
| | | | | | | | | | | 0.10 1 |
| | 0.400 | 8 | 1013 | 0.003 | 0.003 | -0.05 | 25.00 | 1.50 | 1.00 | 0.14 T |
| | | | | | | | | | | 0.10 1 |
| | | 8 | 1014 | 0.005 | 0.002 | 25.00 | 25.00 | 1.50 | 1.00 | 0.11 T |
| | | | | | | | | | | 0.12 T |
| 10009 | 0.000 | 8 | 1013 | 0.003 | 0.003 | -0.05 | 25.00 | 1.50 | 1.00 | 0.09 1 |
| | | | | | | | | | | 0.10 1 |
| | | 8 | 1014 | 0.005 | 0.002 | 25.00 | 25.00 | 1.50 | 1.00 | 0.13 T |
| | | | | | | | | | | 0.14 T |
| | 0.400 | 8 | 1013 | 0.002 | 0.004 | -0.09 | 25.00 | 1.50 | 1.00 | 0.10 1 |
| | | | | | | | | | | 0.12 T |
| | | 8 | 1014 | 0.002 | 0.004 | -0.09 | 25.00 | 1.50 | 1.00 | 0.10 1 |
| | | | | | | | | | | 0.13 T |
| 10010 | 0.000 | 8 | 1013 | 0.031 | 0.004 | 25.00 | 25.00 | 1.50 | 1.00 | 0.23 0 |
| | | | | | | | | | | 0.31 1 |
| | | 8 | 1014 | 0.029 | 0.004 | 25.00 | 25.00 | 1.50 | 1.00 | 0.14 3 |
| | | | | | | | | | | 1.64 T |
| | 0.200 | 8 | 1013 | 0.029 | -0.014 | 25.00 | 25.00 | 1.50 | 1.00 | 0.21 0 |
| | | | | | | | | | | 0.30 1 |
| | | 8 | 1014 | 0.031 | -0.014 | 25.00 | 25.00 | 1.50 | 1.00 | 0.13 3 |
| | | | | | | | | | | 1.70 T |
| 10014 | 0.000 | 8 | 1013 | -0.020 | -0.006 | 0.00 | 0.00 | 1.50 | not calculated | 0.04 0 |
| | | | | | | | | | | 0.60 3 |
| | | 8 | 1014 | -0.021 | -0.006 | 0.00 | 0.00 | 1.50 | not calculated | 1.53 T |
| | | | | | | | | | | 0.05 0 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] | NoS | LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn [mm] | nue C/S | rel tra | As L [cm2] |
|---------------|---------------------|-----|------|---------|-----------------|--------------|---------------|--------------|----------------|--|
| 10014 | 0.200 | 8 | 1013 | 0.006 | 0.000 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.04 0 0.04 1 0.04 3 0.35 T 0.04 0 0.04 1 0.04 3 0.41 T |
| | | | 1014 | 0.006 | 0.000 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.04 0 0.04 1 0.04 3 0.41 T |
| 10016 | 0.000 | 8 | 1013 | 0.006 | 0.000 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.04 0 0.04 1 0.04 3 0.38 T |
| | | | 1014 | 0.006 | 0.000 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.04 0 0.04 1 0.04 3 0.37 T |
| | 0.200 | 8 | 1013 | -0.020 | -0.006 | 0.00 | 0.00 | 1.50 | not calculated | 0.38 T |
| | | | 1014 | -0.021 | -0.006 | 0.00 | 0.00 | 1.50 | not calculated | 0.37 T |
| 10020 | 0.000 | 8 | 1013 | 0.029 | -0.014 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.04 0 0.60 3 1.53 T |
| | | | 1014 | 0.031 | -0.014 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.05 0 0.63 3 1.81 T |
| | 0.200 | 8 | 1013 | 0.031 | 0.004 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.23 0 0.31 1 0.14 3 1.64 T |
| | | | 1014 | 0.029 | 0.004 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.21 0 0.30 1 0.13 3 1.70 T |
| 10021 | 0.000 | 8 | 1013 | 0.006 | 0.004 0.000 | -0.05 | 25.00 | 1.50 1.15 | 1.00 | 0.15 1 0.12 T |
| | | | 1014 | 0.006 | 0.004 0.000 | -0.05 | 25.00 | 1.50 1.15 | 1.00 | 0.14 1 0.13 T |
| | 0.400 | 8 | 1013 | 0.003 | 0.003 0.000 | -0.05 | 25.00 | 1.50 1.15 | 1.00 | 0.09 1 0.14 T |
| | | | 1014 | 0.005 | 0.002 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.10 1 0.11 T |
| 10024 | 0.000 | 8 | 1013 | 0.003 | 0.003 0.000 | -0.05 | 25.00 | 1.50 1.15 | 1.00 | 0.09 1 0.14 T |
| | | | 1014 | 0.005 | 0.002 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.10 1 0.11 T |
| | 0.400 | 8 | 1013 | 0.002 | 0.004 0.000 | -0.09 | 25.00 | 1.50 1.15 | 1.00 | 0.10 1 0.14 T |
| | | | 1014 | 0.002 | 0.004 0.000 | -0.09 | 25.00 | 1.50 1.15 | 1.00 | 0.10 1 0.11 T |
| 10025 | 0.000 | 8 | 1013 | 0.031 | 0.004 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.23 0 0.31 1 0.14 3 1.81 T |
| | | | 1014 | 0.029 | 0.004 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.21 0 0.30 1 0.13 3 1.53 T |
| | 0.200 | 8 | 1013 | 0.029 | -0.014 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.04 0 0.60 3 1.70 T |
| | | | 1014 | 0.031 | -0.014 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.05 0 0.63 3 1.64 T |
| 10029 | 0.000 | 8 | 1013 | -0.018 | -0.006 | 0.00 | 0.00 | 1.50 | not calculated | 0.38 T |
| | | | 1014 | -0.019 | -0.006 | 0.00 | 0.00 | 1.50 | not calculated | 0.37 T |
| | 0.200 | 8 | 1013 | 0.006 | 0.000 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.04 0 0.04 1 0.04 3 0.34 T |
| | | | 1014 | 0.006 | 0.000 0.000 | 25.00 | 25.00 | 1.50 1.15 | 1.00 | 0.04 0 0.04 1 0.04 3 0.41 T |
| 12001 | 0.000 | 9 | 1013 | -1.585 | 0.002 0.557 | -3.50 110 | 4.93 -9999 | 1.50 1.15 | 5.78 | 15.08 1 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] NoS LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm] | nue C/S | rel tra | As L [cm2] |
|------------------|-------------------------------|------------|------------------|-----------------|----------------|--------------|------------|---------------|
| 12001 | 0.000 9 1014 | -0.883 | 0.001 0.433 | -3.50 181 | 7.68 -9999 | 1.50 1.15 | 3.35 | 15.08 1 |
| | 1.000 9 1013 | -1.751 | 0.001 0.580 | -3.50 93 | 4.48 -9999 | 1.50 1.15 | 6.02 | 15.08 1 |
| | 1014 | -0.394 | 0.000 0.322 | -3.50 233 | 11.17 -9999 | 1.50 1.15 | 1.41 | 15.08 1 |
| 12002 | 0.000 9 1013 | -1.751 | 0.001 0.580 | -3.50 93 | 4.48 -9999 | 1.50 1.15 | 6.02 | 15.08 1 |
| | 1014 | -0.394 | 0.000 0.322 | -3.50 233 | 11.17 -9999 | 1.50 1.15 | 1.41 | 15.08 1 |
| | 1.000 9 1013 | -1.917 | 0.001 0.601 | -3.50 77 | 4.07 -9999 | 1.50 1.15 | 6.22 | 15.08 1 |
| | 1014 | -0.297 | 0.000 0.399 | -3.50 219 | 10.00 -9999 | 1.50 1.15 | 1.00 | 24.24 1 |
| 12003 | 0.000 9 1013 | -1.917 | 0.001 0.601 | -3.50 77 | 4.07 -9999 | 1.50 1.15 | 6.22 | 15.08 1 |
| | 1014 | -0.297 | 0.000 0.399 | -3.50 219 | 10.00 -9999 | 1.50 1.15 | 1.00 | 24.24 1 |
| | 1.000 9 1013 | -0.325 | 0.000 0.659 | -3.50 172 | 7.24 -9999 | 1.50 1.15 | 1.00 | 49.35 1 |
| | 1014 | -2.193 | 0.001 0.630 | -3.50 50 | 3.49 -9999 | 1.50 1.15 | 6.97 | 15.08 1 |
| 12004 | 0.000 9 1013 | -1.628 | 0.000 0.563 | -3.50 106 | 4.81 9999 | 1.50 1.15 | 6.18 | 15.08 1 |
| | 1014 | -0.855 | 0.000 0.427 | -3.50 184 | 7.83 9999 | 1.50 1.15 | 3.12 | 15.08 1 |
| | 1.000 9 1013 | -1.812 | 0.000 0.588 | -3.50 87 | 4.32 9999 | 1.50 1.15 | 6.46 | 15.08 1 |
| | 1014 | -0.397 | 0.000 0.323 | -3.50 233 | 11.14 9999 | 1.50 1.15 | 1.36 | 15.08 1 |
| 12005 | 0.000 9 1013 | -1.812 | 0.000 0.588 | -3.50 87 | 4.32 9999 | 1.50 1.15 | 6.46 | 15.08 1 |
| | 1014 | -0.397 | 0.000 0.323 | -3.50 233 | 11.14 9999 | 1.50 1.15 | 1.36 | 15.08 1 |
| | 1.000 9 1013 | -1.996 | 0.000 0.610 | -3.50 69 | 3.90 9999 | 1.50 1.15 | 6.71 | 15.08 1 |
| | 1014 | -0.308 | 0.000 0.406 | -3.50 217 | 9.85 9999 | 1.50 1.15 | 1.00 | 24.68 1 |
| 12006 | 0.000 9 1013 | -1.996 | 0.000 0.610 | -3.50 69 | 3.90 9999 | 1.50 1.15 | 6.71 | 15.08 1 |
| | 1014 | -0.308 | 0.000 0.406 | -3.50 217 | 9.85 9999 | 1.50 1.15 | 1.00 | 24.68 1 |
| | 1.000 9 1013 | -0.315 | 0.000 0.653 | -3.50 174 | 7.30 9999 | 1.50 1.15 | 1.00 | 48.95 1 |
| | 1014 | -2.066 | 0.000 0.617 | -3.50 62 | 3.75 9999 | 1.50 1.15 | 6.35 | 15.08 1 |
| 12007 | 0.000 9 1013 | -1.664 | -0.002 0.568 | -3.50 102 | 4.71 9999 | 1.50 1.15 | 6.31 | 15.08 1 |
| | 1014 | -0.870 | -0.001 0.431 | -3.50 183 | 7.75 9999 | 1.50 1.15 | 3.17 | 15.08 1 |
| | 1.000 9 1013 | -1.842 | -0.001 0.592 | -3.50 84 | 4.25 9999 | 1.50 1.15 | 6.57 | 15.08 1 |
| | 1014 | -0.400 | 0.000 0.323 | -3.50 233 | 11.11 9999 | 1.50 1.15 | 1.37 | 15.08 1 |
| 12008 | 0.000 9 1013 | -1.842 | -0.001 0.592 | -3.50 84 | 4.25 9999 | 1.50 1.15 | 6.57 | 15.08 1 |
| | 1014 | -0.400 | 0.000 0.323 | -3.50 233 | 11.11 9999 | 1.50 1.15 | 1.37 | 15.08 1 |
| | 1.000 9 1013 | -2.019 | -0.001 0.612 | -3.50 67 | 3.85 9999 | 1.50 1.15 | 6.79 | 15.08 1 |
| | 1014 | -0.308 | 0.000 0.406 | -3.50 217 | 9.87 9999 | 1.50 1.15 | 1.00 | 24.60 1 |
| 12009 | 0.000 9 1013 | -2.019 | -0.001 0.612 | -3.50 67 | 3.85 9999 | 1.50 1.15 | 6.79 | 15.08 1 |
| | 1014 | -0.308 | 0.000 0.406 | -3.50 217 | 9.87 9999 | 1.50 1.15 | 1.00 | 24.60 1 |
| | 1.000 9 1013 | -0.314 | 0.000 0.652 | -3.50 174 | 7.30 9999 | 1.50 1.15 | 1.00 | 48.90 1 |
| | 1014 | -2.081 | -0.001 0.619 | -3.50 61 | 3.71 9999 | 1.50 1.15 | 6.40 | 15.08 1 |
| 12010 | 0.000 9 1013 | -1.585 | 0.002 -0.557 | -3.50 -109 | 4.93 -9999 | 1.50 1.15 | 5.78 | 15.08 1 |
| | 1014 | -0.883 | 0.001 -0.433 | -3.50 -180 | 7.68 -9999 | 1.50 1.15 | 3.35 | 15.08 1 |
| | 1.000 9 1013 | -1.751 | 0.001 -0.580 | -3.50 -92 | 4.48 -9999 | 1.50 1.15 | 6.02 | 15.08 1 |
| | 1014 | -0.394 | 0.000 -0.322 | -3.50 -232 | 11.17 -9999 | 1.50 1.15 | 1.41 | 15.08 1 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] Nos LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm | nue C/S | rel tra | As L [cm2] |
|------------------|-------------------------------|------------|-----------------------------|-----------------|---------------|------------|------------|---------------|
| 12011 | 0.000 9 1013 | -1.751 | 0.001 -3.50 4.48 1.50 6.02 | 15.08 | 1 | | | |
| | 1014 | -0.394 | -0.580 -92 -9999 1.15 | 15.08 | 1 | | | |
| | 1.000 9 1013 | -1.917 | 0.000 -3.50 11.17 1.50 1.41 | 15.08 | 1 | | | |
| | 1014 | -0.297 | -0.322 -232 -9999 1.15 | 15.08 | 1 | | | |
| 12012 | 0.000 9 1013 | -1.917 | 0.001 -3.50 4.07 1.50 6.22 | 15.08 | 1 | | | |
| | 1014 | -0.297 | -0.601 -76 -9999 1.15 | 24.24 | 1 | | | |
| | 1.000 9 1013 | -2.081 | 0.000 -3.50 10.00 1.50 1.00 | 15.08 | 1 | | | |
| | 1014 | -0.314 | -0.399 -218 -9999 1.15 | 48.90 | 1 | | | |
| 12013 | 0.000 9 1013 | -0.868 | 0.001 -3.50 3.71 1.50 6.40 | 15.08 | 1 | | | |
| | 1014 | -1.551 | -0.619 -60 -9999 1.15 | 15.08 | 1 | | | |
| | 1.000 9 1013 | -0.392 | 0.000 -3.50 7.30 1.50 1.00 | 15.08 | 1 | | | |
| | 1014 | -1.722 | -0.652 -173 -9999 1.15 | 15.08 | 1 | | | |
| 12014 | 0.000 9 1013 | -0.392 | 0.000 -3.50 5.03 1.50 5.66 | 15.08 | 1 | | | |
| | 1014 | -1.722 | -0.552 -112 9999 1.15 | 15.08 | 1 | | | |
| | 1.000 9 1013 | -0.298 | 0.000 -3.50 11.19 1.50 1.40 | 24.31 | 1 | | | |
| | 1014 | -1.894 | -0.321 -233 -9999 1.15 | 15.08 | 1 | | | |
| 12015 | 0.000 9 1013 | -0.298 | 0.000 -3.50 4.55 1.50 5.91 | 15.08 | 1 | | | |
| | 1014 | -1.894 | -0.576 -95 9999 1.15 | 15.08 | 1 | | | |
| | 1.000 9 1013 | -0.315 | 0.000 -3.50 11.19 1.50 1.40 | 15.08 | 1 | | | |
| | 1014 | -2.066 | -0.321 -233 -9999 1.15 | 15.08 | 1 | | | |
| 12016 | 0.000 9 1013 | -1.664 | 0.000 -3.50 9.99 1.50 1.00 | 15.08 | 1 | | | |
| | 1014 | -0.870 | -0.400 -218 -9999 1.15 | 15.08 | 1 | | | |
| | 1.000 9 1013 | -1.842 | 0.000 -3.50 4.13 1.50 6.15 | 15.08 | 1 | | | |
| | 1014 | -0.400 | -0.598 -78 9999 1.15 | 15.08 | 1 | | | |
| 12017 | 0.000 9 1013 | -1.842 | 0.000 -3.50 7.30 1.50 1.00 | 15.08 | 1 | | | |
| | 1014 | -0.400 | -0.653 -173 9999 1.15 | 15.08 | 1 | | | |
| | 1.000 9 1013 | -2.019 | 0.000 -3.50 3.75 1.50 6.35 | 15.08 | 1 | | | |
| | 1014 | -0.308 | -0.617 -61 9999 1.15 | 15.08 | 1 | | | |
| 12018 | 0.000 9 1013 | -2.019 | 0.000 -3.50 4.71 1.50 6.31 | 15.08 | 1 | | | |
| | 1014 | -0.308 | -0.568 -101 9999 1.15 | 15.08 | 1 | | | |
| | 1.000 9 1013 | -2.193 | 0.001 -3.50 7.75 1.50 3.17 | 15.08 | 1 | | | |
| | 1014 | -0.325 | -0.431 -182 9999 1.15 | 15.08 | 1 | | | |
| 12019 | 0.000 9 1013 | -0.325 | 0.000 -3.50 4.25 1.50 6.57 | 15.08 | 1 | | | |
| | 1014 | -2.193 | -0.592 -83 9999 1.15 | 15.08 | 1 | | | |
| | 1.000 9 1013 | -0.342 | 0.000 -3.50 11.11 1.50 1.37 | 15.08 | 1 | | | |
| | 1014 | -2.542 | -0.323 -232 9999 1.15 | 15.08 | 1 | | | |
| 12020 | 0.000 9 1013 | -0.342 | 0.000 -3.50 4.25 1.50 6.57 | 15.08 | 1 | | | |
| | 1014 | -2.543 | -0.592 -83 9999 1.15 | 15.08 | 1 | | | |
| | 1.000 9 1013 | -0.359 | 0.000 -3.50 11.11 1.50 1.37 | 15.08 | 1 | | | |
| | 1014 | -2.543 | -0.323 -232 9999 1.15 | 15.08 | 1 | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] | NoS | LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm | nue C/S | rel tra | As L [cm2] | L |
|---------------|---------------------|-----|------|---------|---------------|--------------|------------|---------|---------|------------|---|
| 12020 | 1.000 | 9 | 1014 | -3.173 | 0.000 | -3.50 | 2.04 | 1.50 | 9.11 | 15.08 | 1 |
| | | | | | 0.676 | -42 | 9999 | 1.15 | | | |
| 12021 | 0.000 | 9 | 1013 | -0.359 | 0.000 | -3.50 | 6.01 | 1.50 | 1.00 | 74.03 | 1 |
| | | | | | 0.893 | 143 | -9999 | 1.15 | | | |
| | | | 1014 | -3.174 | 0.000 | -3.50 | 2.04 | 1.50 | 9.11 | 15.08 | 1 |
| | | | | | 0.676 | -42 | 9999 | 1.15 | | | |
| | 1.000 | 9 | 1013 | -0.365 | 0.000 | -3.50 | 6.29 | 1.50 | 1.00 | 65.97 | 1 |
| | | | | | 0.821 | 150 | 9999 | 1.15 | | | |
| | | | 1014 | -3.892 | 0.000 | -3.50 | 1.31 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | 0.662 | -109 | -9999 | 1.15 | | | |
| 12022 | 0.000 | 9 | 1013 | -0.365 | 0.000 | -3.50 | 6.29 | 1.50 | 1.00 | 65.94 | 1 |
| | | | | | 0.821 | 150 | 9999 | 1.15 | | | |
| | | | 1014 | -3.893 | 0.000 | -3.50 | 1.31 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | 0.662 | -109 | -9999 | 1.15 | | | |
| | 1.000 | 9 | 1013 | -0.382 | 0.000 | -3.50 | 6.89 | 1.50 | 1.00 | 52.06 | 1 |
| | | | | | 0.695 | 165 | 9999 | 1.15 | | | |
| | | | 1014 | -4.859 | 0.000 | -3.50 | 0.55 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | 0.591 | -204 | -9999 | 1.15 | | | |
| 12023 | 0.000 | 9 | 1013 | -0.382 | 0.000 | -3.50 | 6.89 | 1.50 | 1.00 | 52.04 | 1 |
| | | | | | 0.695 | 165 | 9999 | 1.15 | | | |
| | | | 1014 | -4.859 | 0.000 | -3.50 | 0.55 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | 0.591 | -204 | -9999 | 1.15 | | | |
| | 1.000 | 9 | 1013 | -0.399 | 0.000 | -3.50 | 7.94 | 1.50 | 1.00 | 36.21 | 1 |
| | | | | | 0.545 | 186 | 9999 | 1.15 | | | |
| | | | 1014 | -5.765 | 0.000 | -3.50 | -0.02 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | 0.465 | -303 | -9999 | 1.15 | | | |
| 12024 | 0.000 | 9 | 1013 | -0.399 | 0.000 | -3.50 | 7.94 | 1.50 | 1.00 | 36.20 | 1 |
| | | | | | 0.545 | 186 | 9999 | 1.15 | | | |
| | | | 1014 | -5.765 | 0.000 | -3.50 | -0.02 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | 0.465 | -303 | -9999 | 1.15 | | | |
| | 1.000 | 9 | 1013 | -0.416 | 0.000 | -3.50 | 9.67 | 1.50 | 1.00 | 21.35 | 1 |
| | | | | | 0.396 | 214 | 9999 | 1.15 | | | |
| | | | 1014 | -6.509 | 0.000 | -3.50 | -0.44 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | 0.314 | -400 | -9999 | 1.15 | | | |
| 12025 | 0.000 | 9 | 1013 | -0.416 | 0.000 | -3.50 | 9.67 | 1.50 | 1.00 | 21.35 | 1 |
| | | | | | 0.396 | 214 | 9999 | 1.15 | | | |
| | | | 1014 | -6.509 | 0.000 | -3.50 | -0.44 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | 0.314 | -400 | -9999 | 1.15 | | | |
| | 1.000 | 9 | 1013 | -0.617 | 0.000 | -3.50 | 9.32 | 1.50 | 1.42 | 15.08 | 1 |
| | | | | | 0.375 | 209 | 9999 | 1.15 | | | |
| | | | 1014 | -7.064 | 0.000 | -3.09 | -0.55 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | 0.174 | -574 | -9999 | 1.15 | | | |
| 12026 | 0.000 | 9 | 1013 | -0.617 | 0.000 | -3.50 | 9.32 | 1.50 | 1.42 | 15.08 | 1 |
| | | | | | 0.375 | 209 | 9999 | 1.15 | | | |
| | | | 1014 | -7.063 | 0.000 | -3.09 | -0.55 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | 0.174 | -573 | -9999 | 1.15 | | | |
| | 1.000 | 9 | 1013 | -1.633 | 0.000 | -3.50 | 4.79 | 1.50 | 3.63 | 15.08 | 1 |
| | | | | | 0.564 | 105 | 9999 | 1.15 | | | |
| | | | 1014 | -7.497 | 0.000 | -2.61 | -1.18 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | 0.065 | -1059 | -9999 | 1.15 | | | |
| 12027 | 0.000 | 9 | 1013 | -1.632 | 0.000 | -3.50 | 4.80 | 1.50 | 3.63 | 15.08 | 1 |
| | | | | | 0.564 | 105 | 9999 | 1.15 | | | |
| | | | 1014 | -7.496 | 0.000 | -2.61 | -1.18 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | 0.066 | -1058 | -9999 | 1.15 | | | |
| | 1.000 | 9 | 1013 | -4.094 | 0.000 | -3.50 | 1.14 | 1.50 | 8.77 | 15.08 | 1 |
| | | | | | 0.652 | -128 | -9999 | 1.15 | | | |
| | | | 1014 | -7.707 | 0.000 | -2.14 | -1.81 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | -0.008 | 4769 | -9999 | 1.15 | | | |
| 12028 | 0.000 | 9 | 1013 | -4.092 | 0.000 | -3.50 | 1.14 | 1.50 | 8.76 | 15.08 | 1 |
| | | | | | 0.652 | -128 | -9999 | 1.15 | | | |
| | | | 1014 | -7.708 | 0.000 | -2.14 | -1.81 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | -0.008 | 4798 | -9999 | 1.15 | | | |
| | 1.000 | 9 | 1013 | -6.736 | 0.000 | -3.35 | -0.21 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | 0.257 | -452 | -9999 | 1.15 | | | |
| | | | 1014 | -7.570 | 0.000 | -2.50 | -1.33 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | -0.047 | 1317 | -9999 | 1.15 | | | |
| 12029 | 0.000 | 9 | 1013 | -6.734 | 0.000 | -3.35 | -0.20 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | 0.257 | -452 | -9999 | 1.15 | | | |
| | | | 1014 | -7.570 | 0.000 | -2.50 | -1.33 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | -0.047 | 1318 | -9999 | 1.15 | | | |
| | 1.000 | 9 | 1013 | -6.881 | 0.000 | -3.24 | -0.35 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | -0.220 | 498 | -9999 | 1.15 | | | |
| | | | 1014 | -7.512 | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | -0.062 | 1103 | -9999 | 1.15 | | | |
| 12030 | 0.000 | 9 | 1013 | -6.883 | 0.000 | -3.24 | -0.35 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | -0.220 | 498 | -9999 | 1.15 | | | |
| | | | 1014 | -7.513 | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 | 1 |
| | | | | | -0.061 | 1103 | -9999 | 1.15 | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] NoS LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm | nue C/S | rel tra | As L [cm2] |
|------------------|-------------------------------|------------|------------------|-----------------|---------------|------------|------------|---------------|
| 12030 | 1.000 9 1013 | -7.524 | 0.000 | -2.57 | -1.23 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.059 | 1138 | -9999 | 1.15 | | |
| | 1014 | -6.128 | 0.000 | -3.50 | -0.22 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.396 | 348 | -9999 | 1.15 | | |
| 12031 | 0.000 9 1013 | -7.524 | 0.000 | -2.57 | -1.23 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.059 | 1138 | -9999 | 1.15 | | |
| | 1014 | -6.129 | 0.000 | -3.50 | -0.22 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.396 | 348 | -9999 | 1.15 | | |
| | 1.000 9 1013 | -7.554 | 0.000 | -2.53 | -1.30 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.051 | 1248 | -9999 | 1.15 | | |
| | 1014 | -5.925 | 0.000 | -3.50 | -0.11 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.436 | 323 | -9999 | 1.15 | | |
| 12032 | 0.000 9 1013 | -7.554 | 0.000 | -2.53 | -1.30 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.051 | 1248 | -9999 | 1.15 | | |
| | 1014 | -5.925 | 0.000 | -3.50 | -0.11 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.436 | 323 | -9999 | 1.15 | | |
| | 1.000 9 1013 | -7.589 | 0.000 | -2.46 | -1.38 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.042 | 1419 | 9999 | 1.15 | | |
| | 1014 | -6.023 | 0.000 | -3.50 | -0.16 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.417 | 335 | 9999 | 1.15 | | |
| 12033 | 0.000 9 1013 | -7.589 | 0.000 | -2.46 | -1.38 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.042 | 1419 | 9999 | 1.15 | | |
| | 1014 | -6.023 | 0.000 | -3.50 | -0.16 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.417 | 335 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.635 | 0.000 | -2.37 | -1.50 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.030 | 1779 | 9999 | 1.15 | | |
| | 1014 | -6.307 | 0.000 | -3.50 | -0.32 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.359 | 372 | 9999 | 1.15 | | |
| 12034 | 0.000 9 1013 | -7.635 | 0.000 | -2.37 | -1.50 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.030 | 1779 | 9999 | 1.15 | | |
| | 1014 | -6.307 | 0.000 | -3.50 | -0.32 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.359 | 372 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.673 | 0.000 | -2.28 | -1.63 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.020 | 2416 | 9999 | 1.15 | | |
| | 1014 | -6.638 | 0.000 | -3.41 | -0.11 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.282 | 428 | 9999 | 1.15 | | |
| 12035 | 0.000 9 1013 | -7.673 | 0.000 | -2.28 | -1.63 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.020 | 2416 | 9999 | 1.15 | | |
| | 1014 | -6.638 | 0.000 | -3.41 | -0.11 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.282 | 428 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.697 | 0.000 | -2.19 | -1.74 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.012 | 3522 | 9999 | 1.15 | | |
| | 1014 | -6.961 | 0.000 | -3.17 | -0.44 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.200 | 528 | 9999 | 1.15 | | |
| 12036 | 0.000 9 1013 | -7.697 | 0.000 | -2.19 | -1.74 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.012 | 3522 | 9999 | 1.15 | | |
| | 1014 | -6.961 | 0.000 | -3.17 | -0.44 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.200 | 528 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.712 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.006 | 5787 | 9999 | 1.15 | | |
| | 1014 | -7.252 | 0.000 | -2.91 | -0.79 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.127 | 698 | 9999 | 1.15 | | |
| 12037 | 0.000 9 1013 | -7.712 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.006 | 5786 | 9999 | 1.15 | | |
| | 1014 | -7.252 | 0.000 | -2.91 | -0.79 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.127 | 698 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.720 | 0.000 | -2.06 | -1.92 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.003 | 9999 | 9999 | 1.15 | | |
| | 1014 | -7.483 | 0.000 | -2.63 | -1.16 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.069 | 1026 | 9999 | 1.15 | | |
| 12038 | 0.000 9 1013 | -7.720 | 0.000 | -2.06 | -1.92 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.003 | 9999 | 9999 | 1.15 | | |
| | 1014 | -7.483 | 0.000 | -2.63 | -1.16 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.069 | 1025 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.723 | 0.000 | -2.02 | -1.97 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.001 | 9999 | 9999 | 1.15 | | |
| | 1014 | -7.641 | 0.000 | -2.36 | -1.52 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.029 | 1853 | 9999 | 1.15 | | |
| 12039 | 0.000 9 1013 | -7.723 | 0.000 | -2.02 | -1.97 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.001 | 9999 | 9999 | 1.15 | | |
| | 1014 | -7.641 | 0.000 | -2.36 | -1.52 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.029 | 1852 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.000 | 9999 | 9999 | 1.15 | | |
| | 1014 | -7.711 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.007 | 5586 | 9999 | 1.15 | | |
| 12040 | 0.000 9 1013 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.000 | 9999 | 9999 | 1.15 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] | NoS | LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm | nue C/S | rel tra | As L [cm2] |
|---------------|---------------------|-----|------|---------|---------------|--------------|------------|---------|---------|------------|
| 12040 | 0.000 | 9 | 1014 | -7.711 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | 1.000 | 9 | 1013 | -7.724 | -0.007 | 5574 | 9999 | 1.15 | | |
| | | | | | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 1014 | -7.724 | 0.000 | -9999 | -9999 | 1.15 | | |
| | | | | | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.000 | -9999 | -9999 | 1.15 | | |
| 12041 | 0.000 | 9 | 1013 | -0.315 | 0.000 | -3.50 | 7.30 | 1.50 | 1.00 | 48.95 1 |
| | | | 1014 | -2.066 | 0.653 | 174 | 9999 | 1.15 | | |
| | | | | | 0.000 | -3.50 | 3.75 | 1.50 | 6.35 | 15.08 1 |
| | | | | | 0.617 | 62 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -0.332 | 0.000 | -3.50 | 6.22 | 1.50 | 1.00 | 69.85 1 |
| | | | | | 0.851 | 149 | 9999 | 1.15 | | |
| | | | 1014 | -2.411 | 0.000 | -3.50 | 3.10 | 1.50 | 7.05 | 15.08 1 |
| | | | | | 0.648 | 29 | 9999 | 1.15 | | |
| 12042 | 0.000 | 9 | 1013 | -0.332 | 0.000 | -3.50 | 6.23 | 1.50 | 1.00 | 69.79 1 |
| | | | 1014 | -2.412 | 0.850 | 149 | 9999 | 1.15 | | |
| | | | | | 0.000 | -3.50 | 3.09 | 1.50 | 7.05 | 15.08 1 |
| | | | | | 0.648 | 29 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -0.348 | 0.000 | -3.50 | 6.05 | 1.50 | 1.00 | 73.69 1 |
| | | | | | 0.889 | 144 | 9999 | 1.15 | | |
| | | | 1014 | -3.050 | 0.000 | -3.50 | 2.18 | 1.50 | 8.50 | 15.08 1 |
| | | | | | 0.676 | -31 | -9999 | 1.15 | | |
| 12043 | 0.000 | 9 | 1013 | -0.348 | 0.000 | -3.50 | 6.05 | 1.50 | 1.00 | 73.64 1 |
| | | | 1014 | -3.051 | 0.888 | 144 | 9999 | 1.15 | | |
| | | | | | 0.000 | -3.50 | 2.18 | 1.50 | 8.50 | 15.08 1 |
| | | | | | 0.676 | -31 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -0.365 | 0.000 | -3.50 | 6.29 | 1.50 | 1.00 | 65.97 1 |
| | | | | | 0.821 | 150 | 9999 | 1.15 | | |
| | | | 1014 | -3.894 | 0.000 | -3.50 | 1.31 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.661 | -109 | -9999 | 1.15 | | |
| 12044 | 0.000 | 9 | 1013 | -0.365 | 0.000 | -3.50 | 6.29 | 1.50 | 1.00 | 65.94 1 |
| | | | 1014 | -3.894 | 0.821 | 150 | 9999 | 1.15 | | |
| | | | | | 0.000 | -3.50 | 1.31 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.661 | -109 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -0.382 | 0.000 | -3.50 | 6.89 | 1.50 | 1.00 | 52.04 1 |
| | | | | | 0.695 | 165 | 9999 | 1.15 | | |
| | | | 1014 | -4.864 | 0.000 | -3.50 | 0.55 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.591 | -205 | -9999 | 1.15 | | |
| 12045 | 0.000 | 9 | 1013 | -0.382 | 0.000 | -3.50 | 6.89 | 1.50 | 1.00 | 52.03 1 |
| | | | 1014 | -4.864 | 0.695 | 165 | 9999 | 1.15 | | |
| | | | | | 0.000 | -3.50 | 0.55 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.591 | -205 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -0.399 | 0.000 | -3.50 | 7.94 | 1.50 | 1.00 | 36.19 1 |
| | | | | | 0.545 | 186 | 9999 | 1.15 | | |
| | | | 1014 | -5.772 | 0.000 | -3.50 | -0.02 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.464 | -304 | -9999 | 1.15 | | |
| 12046 | 0.000 | 9 | 1013 | -0.399 | 0.000 | -3.50 | 7.94 | 1.50 | 1.00 | 36.19 1 |
| | | | 1014 | -5.772 | 0.545 | 186 | 9999 | 1.15 | | |
| | | | | | 0.000 | -3.50 | -0.02 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.464 | -304 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -0.416 | 0.000 | -3.50 | 9.67 | 1.50 | 1.00 | 21.33 1 |
| | | | | | 0.396 | 215 | 9999 | 1.15 | | |
| | | | 1014 | -6.514 | 0.000 | -3.50 | 0.00 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.313 | -401 | -9999 | 1.15 | | |
| 12047 | 0.000 | 9 | 1013 | -0.416 | 0.000 | -3.50 | 9.67 | 1.50 | 1.00 | 21.33 1 |
| | | | 1014 | -6.514 | 0.396 | 215 | 9999 | 1.15 | | |
| | | | | | 0.000 | -3.50 | 0.00 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.313 | -400 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -0.618 | 0.000 | -3.50 | 9.31 | 1.50 | 1.43 | 15.08 1 |
| | | | | | 0.375 | 209 | 9999 | 1.15 | | |
| | | | 1014 | -7.070 | 0.000 | -3.08 | -0.56 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.173 | -577 | -9999 | 1.15 | | |
| 12048 | 0.000 | 9 | 1013 | -0.618 | 0.000 | -3.50 | 9.31 | 1.50 | 1.43 | 15.08 1 |
| | | | 1014 | -7.070 | 0.375 | 209 | 9999 | 1.15 | | |
| | | | | | 0.000 | -3.08 | -0.56 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.173 | -577 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -1.636 | 0.000 | -3.50 | 4.79 | 1.50 | 3.63 | 15.08 1 |
| | | | | | 0.564 | 105 | 9999 | 1.15 | | |
| | | | 1014 | -7.503 | 0.000 | -2.61 | -1.19 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.064 | -1074 | -9999 | 1.15 | | |
| 12049 | 0.000 | 9 | 1013 | -1.635 | 0.000 | -3.50 | 4.79 | 1.50 | 3.63 | 15.08 1 |
| | | | 1014 | -7.502 | 0.564 | 105 | 9999 | 1.15 | | |
| | | | | | 0.000 | -2.61 | -1.19 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.064 | -1073 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -4.168 | 0.000 | -3.50 | 1.07 | 1.50 | 8.72 | 15.08 1 |
| | | | | | 0.648 | -135 | 9999 | 1.15 | | |
| | | | 1014 | -7.706 | 0.000 | -2.15 | -1.80 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.009 | 4459 | 9999 | 1.15 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] | NoS | LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm | nue C/S | rel tra | As L [cm2] |
|---------------|---------------------|-----|------|---------|---------------|--------------|------------|---------|---------|------------|
| 12050 | 0.000 | 9 | 1013 | -4.166 | 0.000 | -3.50 | 1.08 | 1.50 | 8.72 | 15.08 1 |
| | | | | | 0.648 | -135 | 9999 | 1.15 | | |
| | | | 1014 | -7.706 | 0.000 | -2.15 | -1.80 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.009 | 4483 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -6.767 | 0.000 | -3.32 | -0.24 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.249 | -461 | 9999 | 1.15 | | |
| | | | 1014 | -7.575 | 0.000 | -2.49 | -1.35 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.046 | 1343 | 9999 | 1.15 | | |
| 12051 | 0.000 | 9 | 1013 | -6.766 | 0.000 | -3.32 | -0.24 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.250 | -460 | 9999 | 1.15 | | |
| | | | 1014 | -7.576 | 0.000 | -2.49 | -1.35 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.046 | 1346 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -6.883 | 0.000 | -3.24 | -0.35 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.220 | 498 | 9999 | 1.15 | | |
| | | | 1014 | -7.522 | 0.000 | -2.58 | -1.23 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.059 | 1131 | 9999 | 1.15 | | |
| 12052 | 0.000 | 9 | 1013 | -6.884 | 0.000 | -3.23 | -0.35 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.220 | 499 | 9999 | 1.15 | | |
| | | | 1014 | -7.522 | 0.000 | -2.58 | -1.23 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.059 | 1131 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.512 | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.062 | 1101 | 9999 | 1.15 | | |
| | | | 1014 | -6.110 | 0.000 | -3.50 | -0.21 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.400 | 346 | 9999 | 1.15 | | |
| 12053 | 0.000 | 9 | 1013 | -7.512 | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.062 | 1102 | 9999 | 1.15 | | |
| | | | 1014 | -6.111 | 0.000 | -3.50 | -0.21 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.400 | 346 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.544 | 0.000 | -2.54 | -1.28 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.054 | 1208 | 9999 | 1.15 | | |
| | | | 1014 | -5.902 | 0.000 | -3.50 | -0.10 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.440 | 320 | 9999 | 1.15 | | |
| 12054 | 0.000 | 9 | 1013 | -7.544 | 0.000 | -2.54 | -1.28 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.054 | 1208 | 9999 | 1.15 | | |
| | | | 1014 | -5.903 | 0.000 | -3.50 | -0.10 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.440 | 320 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.589 | 0.000 | -2.46 | -1.38 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.042 | 1418 | 9999 | 1.15 | | |
| | | | 1014 | -6.023 | 0.000 | -3.50 | -0.16 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.417 | 335 | 9999 | 1.15 | | |
| 12055 | 0.000 | 9 | 1013 | -7.589 | 0.000 | -2.46 | -1.38 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.042 | 1419 | 9999 | 1.15 | | |
| | | | 1014 | -6.024 | 0.000 | -3.50 | -0.16 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.417 | 335 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.635 | 0.000 | -2.37 | -1.50 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.030 | 1781 | 9999 | 1.15 | | |
| | | | 1014 | -6.307 | 0.000 | -3.50 | -0.32 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.359 | 372 | 9999 | 1.15 | | |
| 12056 | 0.000 | 9 | 1013 | -7.635 | 0.000 | -2.37 | -1.50 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.030 | 1781 | 9999 | 1.15 | | |
| | | | 1014 | -6.308 | 0.000 | -3.50 | -0.32 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.359 | 372 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.673 | 0.000 | -2.28 | -1.63 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.020 | 2422 | 9999 | 1.15 | | |
| | | | 1014 | -6.638 | 0.000 | -3.41 | -0.11 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.282 | 428 | 9999 | 1.15 | | |
| 12057 | 0.000 | 9 | 1013 | -7.673 | 0.000 | -2.28 | -1.63 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.020 | 2422 | 9999 | 1.15 | | |
| | | | 1014 | -6.638 | 0.000 | -3.41 | -0.12 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.282 | 428 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.697 | 0.000 | -2.19 | -1.75 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.012 | 3535 | 9999 | 1.15 | | |
| | | | 1014 | -6.961 | 0.000 | -3.17 | -0.44 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.200 | 528 | 9999 | 1.15 | | |
| 12058 | 0.000 | 9 | 1013 | -7.697 | 0.000 | -2.19 | -1.75 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.012 | 3535 | 9999 | 1.15 | | |
| | | | 1014 | -6.961 | 0.000 | -3.17 | -0.44 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.200 | 528 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.712 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.006 | 5822 | 9999 | 1.15 | | |
| | | | 1014 | -7.252 | 0.000 | -2.91 | -0.79 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.127 | 698 | 9999 | 1.15 | | |
| 12059 | 0.000 | 9 | 1013 | -7.712 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.006 | 5821 | 9999 | 1.15 | | |
| | | | 1014 | -7.252 | 0.000 | -2.91 | -0.79 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.127 | 698 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.720 | 0.000 | -2.06 | -1.92 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.003 | 9999 | 9999 | 1.15 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] Nos LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm] | nue C/S | rel tra | As L [cm2] |
|------------------|-------------------------------|------------|------------------|-----------------|----------------|------------|------------|---------------|
| 12059 | 1.000 9 1014 | -7.483 | 0.000 | -2.63 | -1.16 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.069 | 1026 | 9999 | 1.15 | | |
| 12060 | 0.000 9 1013 | -7.720 | 0.000 | -2.06 | -1.92 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.003 | 9999 | 9999 | 1.15 | | |
| | 1014 | -7.483 | 0.000 | -2.63 | -1.16 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.069 | 1026 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.723 | 0.000 | -2.02 | -1.97 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.001 | 9999 | 9999 | 1.15 | | |
| | 1014 | -7.641 | 0.000 | -2.36 | -1.52 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.029 | 1854 | 9999 | 1.15 | | |
| 12061 | 0.000 9 1013 | -7.723 | 0.000 | -2.02 | -1.97 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.001 | 9999 | 9999 | 1.15 | | |
| | 1014 | -7.641 | 0.000 | -2.36 | -1.52 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.029 | 1853 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.000 | 9999 | 9999 | 1.15 | | |
| | 1014 | -7.711 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.007 | 5590 | 9999 | 1.15 | | |
| 12062 | 0.000 9 1013 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.000 | 9999 | 9999 | 1.15 | | |
| | 1014 | -7.711 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.007 | 5578 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.000 | -9999 | -9999 | 1.15 | | |
| | 1014 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.000 | -9999 | -9999 | 1.15 | | |
| 12063 | 0.000 9 1013 | -0.314 | 0.000 | -3.50 | 7.30 | 1.50 | 1.00 | 48.90 1 |
| | | | 0.652 | 174 | 9999 | 1.15 | | |
| | 1014 | -2.081 | -0.001 | -3.50 | 3.71 | 1.50 | 6.40 | 15.08 1 |
| | | | 0.619 | 61 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -0.331 | 0.000 | -3.50 | 6.22 | 1.50 | 1.00 | 69.82 1 |
| | | | 0.851 | 149 | 9999 | 1.15 | | |
| | 1014 | -2.420 | 0.000 | -3.50 | 3.08 | 1.50 | 7.08 | 15.08 1 |
| | | | 0.648 | 28 | 9999 | 1.15 | | |
| 12064 | 0.000 9 1013 | -0.331 | 0.000 | -3.50 | 6.23 | 1.50 | 1.00 | 69.76 1 |
| | | | 0.850 | 149 | 9999 | 1.15 | | |
| | 1014 | -2.421 | 0.000 | -3.50 | 3.08 | 1.50 | 7.08 | 15.08 1 |
| | | | 0.648 | 28 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -0.348 | 0.000 | -3.50 | 6.05 | 1.50 | 1.00 | 73.68 1 |
| | | | 0.888 | 144 | 9999 | 1.15 | | |
| | 1014 | -3.053 | 0.000 | -3.50 | 2.17 | 1.50 | 8.51 | 15.08 1 |
| | | | 0.676 | -31 | -9999 | 1.15 | | |
| 12065 | 0.000 9 1013 | -0.348 | 0.000 | -3.50 | 6.05 | 1.50 | 1.00 | 73.63 1 |
| | | | 0.888 | 144 | 9999 | 1.15 | | |
| | 1014 | -3.054 | 0.000 | -3.50 | 2.17 | 1.50 | 8.51 | 15.08 1 |
| | | | 0.676 | -31 | -9999 | 1.15 | | |
| | 1.000 9 1013 | -0.376 | 0.000 | -3.50 | 6.25 | 1.50 | 1.00 | 66.24 1 |
| | | | 0.825 | 149 | -9999 | 1.15 | | |
| | 1014 | -4.015 | 0.000 | -3.50 | 1.20 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.656 | -120 | 9999 | 1.15 | | |
| 12066 | 0.000 9 1013 | -0.376 | 0.000 | -3.50 | 6.26 | 1.50 | 1.00 | 66.21 1 |
| | | | 0.825 | 149 | -9999 | 1.15 | | |
| | 1014 | -4.015 | 0.000 | -3.50 | 1.20 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.656 | -120 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -0.393 | 0.000 | -3.50 | 6.85 | 1.50 | 1.00 | 52.19 1 |
| | | | 0.698 | 164 | -9999 | 1.15 | | |
| | 1014 | -4.963 | 0.000 | -3.50 | 0.48 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.580 | -215 | 9999 | 1.15 | | |
| 12067 | 0.000 9 1013 | -0.393 | 0.000 | -3.50 | 6.85 | 1.50 | 1.00 | 52.17 1 |
| | | | 0.698 | 164 | -9999 | 1.15 | | |
| | 1014 | -4.963 | 0.000 | -3.50 | 0.48 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.580 | -215 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -0.410 | 0.000 | -3.50 | 7.89 | 1.50 | 1.00 | 36.21 1 |
| | | | 0.547 | 185 | -9999 | 1.15 | | |
| | 1014 | -5.840 | 0.000 | -3.50 | -0.06 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.452 | -312 | 9999 | 1.15 | | |
| 12068 | 0.000 9 1013 | -0.410 | 0.000 | -3.50 | 7.89 | 1.50 | 1.00 | 36.20 1 |
| | | | 0.547 | 185 | -9999 | 1.15 | | |
| | 1014 | -5.840 | 0.000 | -3.50 | -0.06 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.452 | -312 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -0.427 | 0.000 | -3.50 | 9.62 | 1.50 | 1.00 | 21.25 1 |
| | | | 0.397 | 214 | -9999 | 1.15 | | |
| | 1014 | -6.552 | 0.000 | -3.47 | -0.04 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.303 | -408 | 9999 | 1.15 | | |
| 12069 | 0.000 9 1013 | -0.427 | 0.000 | -3.50 | 9.62 | 1.50 | 1.00 | 21.24 1 |
| | | | 0.397 | 214 | -9999 | 1.15 | | |
| | 1014 | -6.552 | 0.000 | -3.47 | -0.04 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.303 | -408 | 9999 | 1.15 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] | NoS | LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm | nue C/S | rel tra | As L [cm2] |
|---------------|---------------------|-----|------|---------|---------------|--------------|------------|---------|---------|------------|
| 12069 | 1.000 | 9 | 1013 | -0.639 | 0.000 | -3.50 | 9.16 | 1.50 | 1.44 | 15.08 |
| | | | | | 0.380 | 207 | -9999 | 1.15 | | |
| | | | 1014 | -7.091 | 0.000 | -3.06 | -0.58 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.168 | -588 | 9999 | 1.15 | | |
| 12070 | 0.000 | 9 | 1013 | -0.639 | 0.000 | -3.50 | 9.16 | 1.50 | 1.44 | 15.08 |
| | | | | | 0.380 | 207 | -9999 | 1.15 | | |
| | | | 1014 | -7.091 | 0.000 | -3.06 | -0.58 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.168 | -588 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -1.693 | 0.000 | -3.50 | 4.63 | 1.50 | 3.68 | 15.08 |
| | | | | | 0.572 | 99 | -9999 | 1.15 | | |
| | | | 1014 | -7.508 | 0.000 | -2.60 | -1.20 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.063 | -1089 | 9999 | 1.15 | | |
| 12071 | 0.000 | 9 | 1013 | -1.693 | 0.000 | -3.50 | 4.63 | 1.50 | 3.67 | 15.08 |
| | | | | | 0.572 | 99 | -9999 | 1.15 | | |
| | | | 1014 | -7.507 | 0.000 | -2.60 | -1.20 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.063 | -1088 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -4.164 | 0.000 | -3.50 | 1.08 | 1.50 | 8.72 | 15.08 |
| | | | | | 0.648 | -135 | 9999 | 1.15 | | |
| | | | 1014 | -7.708 | 0.000 | -2.14 | -1.82 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.008 | 4941 | 9999 | 1.15 | | |
| 12072 | 0.000 | 9 | 1013 | -4.162 | 0.000 | -3.50 | 1.08 | 1.50 | 8.71 | 15.08 |
| | | | | | 0.648 | -135 | 9999 | 1.15 | | |
| | | | 1014 | -7.708 | 0.000 | -2.14 | -1.82 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.008 | 4971 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -6.764 | 0.000 | -3.32 | -0.23 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.250 | -460 | 9999 | 1.15 | | |
| | | | 1014 | -7.578 | 0.000 | -2.48 | -1.35 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.045 | 1359 | 9999 | 1.15 | | |
| 12073 | 0.000 | 9 | 1013 | -6.763 | 0.000 | -3.33 | -0.23 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.250 | -460 | 9999 | 1.15 | | |
| | | | 1014 | -7.578 | 0.000 | -2.48 | -1.35 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.045 | 1360 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -6.884 | 0.000 | -3.23 | -0.35 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.220 | 499 | 9999 | 1.15 | | |
| | | | 1014 | -7.523 | 0.000 | -2.57 | -1.23 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.059 | 1136 | 9999 | 1.15 | | |
| 12074 | 0.000 | 9 | 1013 | -6.886 | 0.000 | -3.23 | -0.36 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.219 | 499 | 9999 | 1.15 | | |
| | | | 1014 | -7.523 | 0.000 | -2.57 | -1.23 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.059 | 1137 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.513 | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.061 | 1104 | 9999 | 1.15 | | |
| | | | 1014 | -6.110 | 0.000 | -3.50 | -0.21 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.400 | 346 | 9999 | 1.15 | | |
| 12075 | 0.000 | 9 | 1013 | -7.513 | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.061 | 1104 | 9999 | 1.15 | | |
| | | | 1014 | -6.111 | 0.000 | -3.50 | -0.21 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.400 | 346 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.544 | 0.000 | -2.54 | -1.28 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.053 | 1210 | 9999 | 1.15 | | |
| | | | 1014 | -5.902 | 0.000 | -3.50 | -0.10 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.440 | 320 | 9999 | 1.15 | | |
| 12076 | 0.000 | 9 | 1013 | -7.544 | 0.000 | -2.54 | -1.28 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.053 | 1210 | 9999 | 1.15 | | |
| | | | 1014 | -5.903 | 0.000 | -3.50 | -0.10 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.440 | 320 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.597 | 0.000 | -2.45 | -1.40 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.040 | 1467 | -9999 | 1.15 | | |
| | | | 1014 | -6.044 | 0.000 | -3.50 | -0.18 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.413 | 338 | -9999 | 1.15 | | |
| 12077 | 0.000 | 9 | 1013 | -7.597 | 0.000 | -2.45 | -1.40 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.040 | 1468 | -9999 | 1.15 | | |
| | | | 1014 | -6.045 | 0.000 | -3.50 | -0.18 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.413 | 338 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.640 | 0.000 | -2.36 | -1.52 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.029 | 1843 | -9999 | 1.15 | | |
| | | | 1014 | -6.325 | 0.000 | -3.50 | -0.33 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.355 | 374 | -9999 | 1.15 | | |
| 12078 | 0.000 | 9 | 1013 | -7.640 | 0.000 | -2.36 | -1.52 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.029 | 1843 | -9999 | 1.15 | | |
| | | | 1014 | -6.325 | 0.000 | -3.50 | -0.33 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.355 | 374 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.676 | 0.000 | -2.27 | -1.64 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.019 | 2511 | -9999 | 1.15 | | |
| | | | 1014 | -6.651 | 0.000 | -3.41 | -0.13 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.278 | 431 | -9999 | 1.15 | | |
| 12079 | 0.000 | 9 | 1013 | -7.676 | 0.000 | -2.27 | -1.64 | 1.50 | 9.99 | 15.08 |
| | | | | | -0.019 | 2511 | -9999 | 1.15 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] NoS LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm] | nue C/S | rel tra | As L [cm2] |
|------------------|-------------------------------|------------|------------------|-----------------|----------------|------------|------------|---------------|
| 12079 | 0.000 9 1014 | -6.651 | 0.000 | -3.40 | -0.13 | 1.50 | 9.99 | 15.08 1 |
| | 1.000 9 1013 | -7.699 | -0.278 | 431 | -9999 | 1.15 | | |
| | | | 0.000 | -2.18 | -1.75 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.011 | 3658 | -9999 | 1.15 | | |
| | | 1014 | 0.000 | -3.17 | -0.45 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.198 | 532 | -9999 | 1.15 | | |
| 12080 | 0.000 9 1013 | -7.699 | 0.000 | -2.18 | -1.75 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.011 | 3657 | -9999 | 1.15 | | |
| | | 1014 | 0.000 | -3.17 | -0.45 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.198 | 532 | -9999 | 1.15 | | |
| | 1.000 9 1013 | -7.712 | 0.000 | -2.11 | -1.85 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.006 | 6028 | -9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.90 | -0.80 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.125 | 704 | -9999 | 1.15 | | |
| 12081 | 0.000 9 1013 | -7.712 | 0.000 | -2.11 | -1.85 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.006 | 6026 | -9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.90 | -0.80 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.125 | 703 | -9999 | 1.15 | | |
| | 1.000 9 1013 | -7.720 | 0.000 | -2.06 | -1.93 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.003 | 9999 | -9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.63 | -1.16 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.068 | 1035 | -9999 | 1.15 | | |
| 12082 | 0.000 9 1013 | -7.720 | 0.000 | -2.06 | -1.93 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.003 | 9999 | -9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.63 | -1.16 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.068 | 1034 | -9999 | 1.15 | | |
| | 1.000 9 1013 | -7.723 | 0.000 | -2.02 | -1.97 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.001 | 9999 | -9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.36 | -1.53 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.028 | 1872 | -9999 | 1.15 | | |
| 12083 | 0.000 9 1013 | -7.723 | 0.000 | -2.02 | -1.97 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.001 | 9999 | -9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.36 | -1.53 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.028 | 1871 | -9999 | 1.15 | | |
| | 1.000 9 1013 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.000 | 9999 | -9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.007 | 5651 | -9999 | 1.15 | | |
| 12084 | 0.000 9 1013 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.000 | 9999 | -9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.007 | 5638 | -9999 | 1.15 | | |
| | 1.000 9 1013 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.000 | -9999 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.000 | -9999 | 9999 | 1.15 | | |
| 12085 | 0.000 9 1013 | -2.081 | 0.001 | -3.50 | 3.71 | 1.50 | 6.40 | 15.08 1 |
| | | | -0.619 | -60 | -9999 | 1.15 | | |
| | | 1014 | 0.000 | -3.50 | 7.30 | 1.50 | 1.00 | 48.90 1 |
| | | | -0.652 | -173 | -9999 | 1.15 | | |
| | 1.000 9 1013 | -2.420 | 0.000 | -3.50 | 3.08 | 1.50 | 7.08 | 15.08 1 |
| | | | -0.648 | -27 | -9999 | 1.15 | | |
| | | 1014 | 0.000 | -3.50 | 6.22 | 1.50 | 1.00 | 69.82 1 |
| | | | -0.851 | -148 | -9999 | 1.15 | | |
| 12086 | 0.000 9 1013 | -2.421 | 0.000 | -3.50 | 3.08 | 1.50 | 7.08 | 15.08 1 |
| | | | -0.648 | -27 | -9999 | 1.15 | | |
| | | 1014 | 0.000 | -3.50 | 6.23 | 1.50 | 1.00 | 69.76 1 |
| | | | -0.850 | -148 | -9999 | 1.15 | | |
| | 1.000 9 1013 | -3.053 | 0.000 | -3.50 | 2.17 | 1.50 | 8.51 | 15.08 1 |
| | | | -0.676 | 32 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -3.50 | 6.05 | 1.50 | 1.00 | 73.68 1 |
| | | | -0.888 | -143 | -9999 | 1.15 | | |
| 12087 | 0.000 9 1013 | -3.054 | 0.000 | -3.50 | 2.17 | 1.50 | 8.51 | 15.08 1 |
| | | | -0.676 | 32 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -3.50 | 6.05 | 1.50 | 1.00 | 73.63 1 |
| | | | -0.888 | -143 | -9999 | 1.15 | | |
| | 1.000 9 1013 | -4.015 | 0.000 | -3.50 | 1.20 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.656 | 121 | -9999 | 1.15 | | |
| | | 1014 | 0.000 | -3.50 | 6.25 | 1.50 | 1.00 | 66.24 1 |
| | | | -0.825 | -148 | 9999 | 1.15 | | |
| 12088 | 0.000 9 1013 | -4.015 | 0.000 | -3.50 | 1.20 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.656 | 121 | -9999 | 1.15 | | |
| | | 1014 | 0.000 | -3.50 | 6.26 | 1.50 | 1.00 | 66.21 1 |
| | | | -0.825 | -148 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -0.382 | 0.000 | -3.50 | 6.89 | 1.50 | 1.00 | 52.06 1 |
| | | | -0.695 | -164 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -3.50 | 0.55 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.591 | 205 | -9999 | 1.15 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] | NoS | LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm | nue C/S | rel tra | As L [cm2] |
|---------------|---------------------|-----|------|---------|---------------|--------------|------------|---------|---------|------------|
| 12089 | 0.000 | 9 | 1013 | -0.382 | 0.000 | -3.50 | 6.89 | 1.50 | 1.00 | 52.04 |
| | | | 1014 | -4.859 | -0.695 | -164 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -0.399 | 0.000 | -3.50 | 7.94 | 1.50 | 1.00 | 36.21 |
| | | | 1014 | -5.765 | -0.545 | -185 | 9999 | 1.15 | | |
| | | | 1014 | -5.765 | 0.000 | -3.50 | -0.02 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -5.765 | -0.465 | 304 | -9999 | 1.15 | | |
| 12090 | 0.000 | 9 | 1013 | -0.399 | 0.000 | -3.50 | 7.94 | 1.50 | 1.00 | 36.20 |
| | | | 1014 | -5.765 | -0.545 | -185 | 9999 | 1.15 | | |
| | | | 1014 | -5.765 | 0.000 | -3.50 | -0.02 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -5.765 | -0.465 | 304 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -0.416 | 0.000 | -3.50 | 9.67 | 1.50 | 1.00 | 21.35 |
| | | | 1014 | -6.509 | -0.396 | -213 | 9999 | 1.15 | | |
| | | | 1014 | -6.509 | 0.000 | -3.50 | -0.44 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -6.509 | -0.314 | 401 | -9999 | 1.15 | | |
| 12091 | 0.000 | 9 | 1013 | -0.416 | 0.000 | -3.50 | 9.67 | 1.50 | 1.00 | 21.35 |
| | | | 1014 | -6.509 | -0.396 | -213 | 9999 | 1.15 | | |
| | | | 1014 | -6.509 | 0.000 | -3.50 | -0.44 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -6.509 | -0.314 | 401 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -0.617 | 0.000 | -3.50 | 9.32 | 1.50 | 1.42 | 15.08 |
| | | | 1014 | -7.064 | -0.375 | -208 | 9999 | 1.15 | | |
| | | | 1014 | -7.064 | 0.000 | -3.09 | -0.55 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.064 | -0.174 | 575 | -9999 | 1.15 | | |
| 12092 | 0.000 | 9 | 1013 | -0.617 | 0.000 | -3.50 | 9.32 | 1.50 | 1.42 | 15.08 |
| | | | 1014 | -7.063 | -0.375 | -208 | 9999 | 1.15 | | |
| | | | 1014 | -7.063 | 0.000 | -3.09 | -0.55 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.063 | -0.174 | 574 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -1.633 | 0.000 | -3.50 | 4.79 | 1.50 | 3.63 | 15.08 |
| | | | 1014 | -7.497 | -0.564 | -104 | 9999 | 1.15 | | |
| | | | 1014 | -7.497 | 0.000 | -2.61 | -1.18 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.497 | -0.065 | 1060 | -9999 | 1.15 | | |
| 12093 | 0.000 | 9 | 1013 | -1.632 | 0.000 | -3.50 | 4.80 | 1.50 | 3.63 | 15.08 |
| | | | 1014 | -7.496 | -0.564 | -104 | 9999 | 1.15 | | |
| | | | 1014 | -7.496 | 0.000 | -2.61 | -1.18 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.496 | -0.066 | 1059 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -4.094 | 0.000 | -3.50 | 1.14 | 1.50 | 8.77 | 15.08 |
| | | | 1014 | -7.707 | -0.652 | 129 | -9999 | 1.15 | | |
| | | | 1014 | -7.707 | 0.000 | -2.14 | -1.81 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.707 | 0.008 | -4768 | -9999 | 1.15 | | |
| 12094 | 0.000 | 9 | 1013 | -4.092 | 0.000 | -3.50 | 1.14 | 1.50 | 8.76 | 15.08 |
| | | | 1014 | -7.708 | -0.652 | 129 | -9999 | 1.15 | | |
| | | | 1014 | -7.708 | 0.000 | -2.14 | -1.81 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.708 | 0.008 | -4797 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -6.736 | 0.000 | -3.35 | -0.21 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.570 | -0.257 | 453 | -9999 | 1.15 | | |
| | | | 1014 | -7.570 | 0.000 | -2.50 | -1.33 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.570 | 0.047 | -1316 | -9999 | 1.15 | | |
| 12095 | 0.000 | 9 | 1013 | -6.734 | 0.000 | -3.35 | -0.20 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.570 | -0.257 | 453 | -9999 | 1.15 | | |
| | | | 1014 | -7.570 | 0.000 | -2.50 | -1.33 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.570 | 0.047 | -1317 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -6.881 | 0.000 | -3.24 | -0.35 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.512 | 0.220 | -497 | -9999 | 1.15 | | |
| | | | 1014 | -7.512 | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.512 | 0.062 | -1102 | -9999 | 1.15 | | |
| 12096 | 0.000 | 9 | 1013 | -6.883 | 0.000 | -3.24 | -0.35 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.513 | 0.220 | -497 | -9999 | 1.15 | | |
| | | | 1014 | -7.513 | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.513 | 0.061 | -1102 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -6.110 | 0.000 | -3.50 | -0.21 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.513 | 0.400 | -345 | -9999 | 1.15 | | |
| | | | 1014 | -7.513 | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.513 | 0.061 | -1103 | -9999 | 1.15 | | |
| 12097 | 0.000 | 9 | 1013 | -6.111 | 0.000 | -3.50 | -0.21 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.513 | 0.400 | -345 | -9999 | 1.15 | | |
| | | | 1014 | -7.513 | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.513 | 0.061 | -1103 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -5.902 | 0.000 | -3.50 | -0.10 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.544 | 0.440 | -319 | -9999 | 1.15 | | |
| | | | 1014 | -7.544 | 0.000 | -2.54 | -1.28 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.544 | 0.053 | -1209 | -9999 | 1.15 | | |
| 12098 | 0.000 | 9 | 1013 | -5.903 | 0.000 | -3.50 | -0.10 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.544 | 0.440 | -319 | -9999 | 1.15 | | |
| | | | 1014 | -7.544 | 0.000 | -2.54 | -1.28 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -7.544 | 0.053 | -1209 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -6.044 | 0.000 | -3.50 | -0.18 | 1.50 | 9.99 | 15.08 |
| | | | 1014 | -6.044 | 0.413 | -337 | 9999 | 1.15 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] Nos LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm | nue C/S | rel tra | As L [cm2] |
|------------------|-------------------------------|------------|------------------|-----------------|---------------|------------|------------|---------------|
| 12098 | 1.000 9 1014 | -7.597 | 0.000 | -2.45 | -1.40 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.040 | -1466 | 9999 | 1.15 | | |
| 12099 | 0.000 9 1013 | -6.045 | 0.000 | -3.50 | -0.18 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.413 | -337 | 9999 | 1.15 | | |
| | 1014 | -7.597 | 0.000 | -2.45 | -1.40 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.040 | -1467 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.635 | 0.000 | -2.37 | -1.50 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.030 | -1778 | 9999 | 1.15 | | |
| | 1014 | -6.307 | 0.000 | -3.50 | -0.32 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.359 | -371 | 9999 | 1.15 | | |
| 12100 | 0.000 9 1013 | -7.635 | 0.000 | -2.37 | -1.50 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.030 | -1778 | 9999 | 1.15 | | |
| | 1014 | -6.307 | 0.000 | -3.50 | -0.32 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.359 | -371 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.673 | 0.000 | -2.28 | -1.63 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.020 | -2415 | 9999 | 1.15 | | |
| | 1014 | -6.638 | 0.000 | -3.41 | -0.11 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.282 | -427 | 9999 | 1.15 | | |
| 12101 | 0.000 9 1013 | -7.673 | 0.000 | -2.28 | -1.63 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.020 | -2415 | 9999 | 1.15 | | |
| | 1014 | -6.638 | 0.000 | -3.41 | -0.11 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.282 | -427 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.697 | 0.000 | -2.19 | -1.74 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.012 | -3521 | 9999 | 1.15 | | |
| | 1014 | -6.961 | 0.000 | -3.17 | -0.44 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.200 | -527 | 9999 | 1.15 | | |
| 12102 | 0.000 9 1013 | -7.697 | 0.000 | -2.19 | -1.74 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.012 | -3521 | 9999 | 1.15 | | |
| | 1014 | -6.961 | 0.000 | -3.17 | -0.44 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.200 | -527 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.712 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.006 | -5786 | 9999 | 1.15 | | |
| | 1014 | -7.252 | 0.000 | -2.91 | -0.79 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.127 | -697 | 9999 | 1.15 | | |
| 12103 | 0.000 9 1013 | -7.712 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.006 | -5785 | 9999 | 1.15 | | |
| | 1014 | -7.252 | 0.000 | -2.91 | -0.79 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.127 | -697 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.720 | 0.000 | -2.06 | -1.92 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.003 | -9999 | 9999 | 1.15 | | |
| | 1014 | -7.483 | 0.000 | -2.63 | -1.16 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.069 | -1025 | 9999 | 1.15 | | |
| 12104 | 0.000 9 1013 | -7.720 | 0.000 | -2.06 | -1.92 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.003 | -9999 | 9999 | 1.15 | | |
| | 1014 | -7.483 | 0.000 | -2.63 | -1.16 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.069 | -1024 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.723 | 0.000 | -2.02 | -1.97 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.001 | -9999 | 9999 | 1.15 | | |
| | 1014 | -7.641 | 0.000 | -2.36 | -1.52 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.029 | -1852 | 9999 | 1.15 | | |
| 12105 | 0.000 9 1013 | -7.723 | 0.000 | -2.02 | -1.97 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.001 | -9999 | 9999 | 1.15 | | |
| | 1014 | -7.641 | 0.000 | -2.36 | -1.52 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.029 | -1851 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.000 | -9999 | 9999 | 1.15 | | |
| | 1014 | -7.711 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.007 | -5585 | 9999 | 1.15 | | |
| 12106 | 0.000 9 1013 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.000 | -9999 | 9999 | 1.15 | | |
| | 1014 | -7.711 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.007 | -5573 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.000 | 9999 | -9999 | 1.15 | | |
| | 1014 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.000 | 9999 | -9999 | 1.15 | | |
| 12107 | 0.000 9 1013 | -0.315 | 0.000 | -3.50 | 7.30 | 1.50 | 1.00 | 48.95 1 |
| | | | -0.653 | -173 | 9999 | 1.15 | | |
| | 1014 | -2.066 | 0.000 | -3.50 | 3.75 | 1.50 | 6.35 | 15.08 1 |
| | | | -0.617 | -61 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -0.332 | 0.000 | -3.50 | 6.22 | 1.50 | 1.00 | 69.85 1 |
| | | | -0.851 | -148 | 9999 | 1.15 | | |
| | 1014 | -2.411 | 0.000 | -3.50 | 3.10 | 1.50 | 7.05 | 15.08 1 |
| | | | -0.648 | -28 | 9999 | 1.15 | | |
| 12108 | 0.000 9 1013 | -0.332 | 0.000 | -3.50 | 6.23 | 1.50 | 1.00 | 69.79 1 |
| | | | -0.850 | -148 | 9999 | 1.15 | | |
| | 1014 | -2.412 | 0.000 | -3.50 | 3.09 | 1.50 | 7.05 | 15.08 1 |
| | | | -0.648 | -28 | 9999 | 1.15 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] | NoS | LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm | nue C/S | rel tra | As L [cm2] |
|---------------|---------------------|-----|------|---------|---------------|--------------|------------|---------|---------|------------|
| 12108 | 1.000 | 9 | 1013 | -0.348 | 0.000 | -3.50 | 6.05 | 1.50 | 1.00 | 73.69 1 |
| | | | | | -0.889 | -143 | 9999 | 1.15 | | |
| | | | 1014 | -3.050 | 0.000 | -3.50 | 2.18 | 1.50 | 8.50 | 15.08 1 |
| | | | | | -0.676 | 32 | -9999 | 1.15 | | |
| 12109 | 0.000 | 9 | 1013 | -0.348 | 0.000 | -3.50 | 6.05 | 1.50 | 1.00 | 73.64 1 |
| | | | | | -0.888 | -143 | 9999 | 1.15 | | |
| | | | 1014 | -3.051 | 0.000 | -3.50 | 2.18 | 1.50 | 8.50 | 15.08 1 |
| | | | | | -0.676 | 32 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -4.016 | 0.000 | -3.50 | 1.20 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.656 | 121 | -9999 | 1.15 | | |
| | | | 1014 | -0.376 | 0.000 | -3.50 | 6.25 | 1.50 | 1.00 | 66.23 1 |
| | | | | | -0.825 | -148 | 9999 | 1.15 | | |
| 12110 | 0.000 | 9 | 1013 | -4.017 | 0.000 | -3.50 | 1.20 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.656 | 122 | -9999 | 1.15 | | |
| | | | 1014 | -0.376 | 0.000 | -3.50 | 6.26 | 1.50 | 1.00 | 66.21 1 |
| | | | | | -0.825 | -148 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -4.967 | 0.000 | -3.50 | 0.48 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.579 | 216 | -9999 | 1.15 | | |
| | | | 1014 | -0.393 | 0.000 | -3.50 | 6.85 | 1.50 | 1.00 | 52.17 1 |
| | | | | | -0.698 | -163 | 9999 | 1.15 | | |
| 12111 | 0.000 | 9 | 1013 | -4.968 | 0.000 | -3.50 | 0.48 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.579 | 216 | -9999 | 1.15 | | |
| | | | 1014 | -0.393 | 0.000 | -3.50 | 6.85 | 1.50 | 1.00 | 52.16 1 |
| | | | | | -0.698 | -163 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -5.846 | 0.000 | -3.50 | -0.06 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.450 | 313 | -9999 | 1.15 | | |
| | | | 1014 | -0.410 | 0.000 | -3.50 | 7.90 | 1.50 | 1.00 | 36.19 1 |
| | | | | | -0.547 | -184 | 9999 | 1.15 | | |
| 12112 | 0.000 | 9 | 1013 | -5.846 | 0.000 | -3.50 | -0.06 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.450 | 313 | -9999 | 1.15 | | |
| | | | 1014 | -0.410 | 0.000 | -3.50 | 7.90 | 1.50 | 1.00 | 36.19 1 |
| | | | | | -0.547 | -185 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -6.558 | 0.000 | -3.47 | -0.04 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.302 | 411 | -9999 | 1.15 | | |
| | | | 1014 | -0.427 | 0.000 | -3.50 | 9.62 | 1.50 | 1.00 | 21.23 1 |
| | | | | | -0.397 | -213 | 9999 | 1.15 | | |
| 12113 | 0.000 | 9 | 1013 | -6.558 | 0.000 | -3.47 | -0.04 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.302 | 411 | -9999 | 1.15 | | |
| | | | 1014 | -0.427 | 0.000 | -3.50 | 9.62 | 1.50 | 1.00 | 21.23 1 |
| | | | | | -0.397 | -213 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.097 | 0.000 | -3.06 | -0.59 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.166 | 592 | -9999 | 1.15 | | |
| | | | 1014 | -0.640 | 0.000 | -3.50 | 9.16 | 1.50 | 1.44 | 15.08 1 |
| | | | | | -0.380 | -206 | 9999 | 1.15 | | |
| 12114 | 0.000 | 9 | 1013 | -7.097 | 0.000 | -3.06 | -0.59 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.166 | 592 | -9999 | 1.15 | | |
| | | | 1014 | -0.640 | 0.000 | -3.50 | 9.16 | 1.50 | 1.44 | 15.08 1 |
| | | | | | -0.380 | -206 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.513 | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.061 | 1106 | -9999 | 1.15 | | |
| | | | 1014 | -1.696 | 0.000 | -3.50 | 4.62 | 1.50 | 3.68 | 15.08 1 |
| | | | | | -0.573 | -98 | 9999 | 1.15 | | |
| 12115 | 0.000 | 9 | 1013 | -7.513 | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.061 | 1105 | -9999 | 1.15 | | |
| | | | 1014 | -1.695 | 0.000 | -3.50 | 4.62 | 1.50 | 3.68 | 15.08 1 |
| | | | | | -0.573 | -98 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.706 | 0.000 | -2.15 | -1.80 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.009 | -4458 | -9999 | 1.15 | | |
| | | | 1014 | -4.168 | 0.000 | -3.50 | 1.07 | 1.50 | 8.72 | 15.08 1 |
| | | | | | -0.648 | 136 | -9999 | 1.15 | | |
| 12116 | 0.000 | 9 | 1013 | -7.706 | 0.000 | -2.15 | -1.80 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.009 | -4482 | -9999 | 1.15 | | |
| | | | 1014 | -4.166 | 0.000 | -3.50 | 1.08 | 1.50 | 8.72 | 15.08 1 |
| | | | | | -0.648 | 136 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.567 | 0.000 | -2.50 | -1.33 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.048 | -1302 | 9999 | 1.15 | | |
| | | | 1014 | -6.739 | 0.000 | -3.34 | -0.21 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.256 | 454 | -9999 | 1.15 | | |
| 12117 | 0.000 | 9 | 1013 | -7.567 | 0.000 | -2.50 | -1.33 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.048 | -1303 | 9999 | 1.15 | | |
| | | | 1014 | -6.737 | 0.000 | -3.34 | -0.21 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.257 | 453 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.511 | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.062 | -1097 | 9999 | 1.15 | | |
| | | | 1014 | -6.880 | 0.000 | -3.24 | -0.35 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.221 | -496 | -9999 | 1.15 | | |
| 12118 | 0.000 | 9 | 1013 | -7.511 | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.062 | -1097 | 9999 | 1.15 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] Nos LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm] | nue C/S | rel tra | As L [cm2] |
|------------------|-------------------------------|------------|------------------|-----------------|----------------|------------|------------|---------------|
| 12118 | 0.000 9 1014 | -6.881 | 0.000 | -3.24 | -0.35 | 1.50 | 9.99 | 15.08 1 |
| | 1.000 9 1013 | -7.512 | 0.220 | -497 | -9999 | 1.15 | | |
| | | | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.062 | -1100 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -3.50 | -0.21 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.400 | -345 | 9999 | 1.15 | | |
| 12119 | 0.000 9 1013 | -7.512 | 0.000 | -2.59 | -1.21 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.062 | -1101 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -3.50 | -0.21 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.400 | -345 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.544 | 0.000 | -2.54 | -1.28 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.054 | -1207 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -3.50 | -0.10 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.440 | -319 | 9999 | 1.15 | | |
| 12120 | 0.000 9 1013 | -7.544 | 0.000 | -2.54 | -1.28 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.054 | -1207 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -3.50 | -0.10 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.440 | -319 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -6.045 | 0.000 | -3.50 | -0.18 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.413 | -337 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.45 | -1.40 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.040 | -1466 | 9999 | 1.15 | | |
| 12121 | 0.000 9 1013 | -6.045 | 0.000 | -3.50 | -0.18 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.413 | -337 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.45 | -1.40 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.040 | -1466 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -6.325 | 0.000 | -3.50 | -0.33 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.355 | -373 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.36 | -1.52 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.029 | -1844 | 9999 | 1.15 | | |
| 12122 | 0.000 9 1013 | -6.326 | 0.000 | -3.50 | -0.33 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.355 | -373 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.36 | -1.52 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.029 | -1844 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -6.651 | 0.000 | -3.40 | -0.13 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.278 | -430 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.27 | -1.64 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.019 | -2515 | 9999 | 1.15 | | |
| 12123 | 0.000 9 1013 | -6.652 | 0.000 | -3.40 | -0.13 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.278 | -431 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.27 | -1.64 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.019 | -2515 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -6.971 | 0.000 | -3.17 | -0.45 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.198 | -531 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.18 | -1.75 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.011 | -3670 | 9999 | 1.15 | | |
| 12124 | 0.000 9 1013 | -6.971 | 0.000 | -3.17 | -0.45 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.198 | -531 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.18 | -1.75 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.011 | -3670 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.259 | 0.000 | -2.90 | -0.80 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.125 | -703 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.11 | -1.85 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.006 | -6064 | 9999 | 1.15 | | |
| 12125 | 0.000 9 1013 | -7.258 | 0.000 | -2.90 | -0.80 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.125 | -703 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.11 | -1.85 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.006 | -6062 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.487 | 0.000 | -2.63 | -1.16 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.068 | -1034 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.06 | -1.93 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.003 | -9999 | 9999 | 1.15 | | |
| 12126 | 0.000 9 1013 | -7.487 | 0.000 | -2.63 | -1.16 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.068 | -1034 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.06 | -1.93 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.003 | -9999 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.643 | 0.000 | -2.36 | -1.53 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.028 | -1872 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.02 | -1.97 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.001 | -9999 | 9999 | 1.15 | | |
| 12127 | 0.000 9 1013 | -7.643 | 0.000 | -2.36 | -1.53 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.028 | -1871 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.02 | -1.97 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.001 | -9999 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.711 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.006 | -5654 | 9999 | 1.15 | | |
| | | 1014 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.000 | -9999 | 9999 | 1.15 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] | NoS | LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm | nue C/S | rel tra | As L [cm2] |
|---------------|---------------------|-----|------|---------|---------------|--------------|------------|---------|---------|------------|
| 12128 | 0.000 | 9 | 1013 | -7.711 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.007 | -5641 | 9999 | 1.15 | | |
| | | | 1014 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.000 | -9999 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.000 | 9999 | -9999 | 1.15 | | |
| | | | 1014 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 1 |
| | | | | | 0.000 | 9999 | -9999 | 1.15 | | |
| 12129 | 0.000 | 9 | 1013 | -2.193 | -0.001 | -3.50 | 3.49 | 1.50 | 6.97 | 15.08 1 |
| | | | | | -0.630 | -49 | 9999 | 1.15 | | |
| | | | 1014 | -0.325 | 0.000 | -3.50 | 7.24 | 1.50 | 1.00 | 49.35 1 |
| | | | | | -0.659 | -171 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -2.542 | 0.000 | -3.50 | 2.88 | 1.50 | 7.67 | 15.08 1 |
| | | | | | -0.656 | -16 | 9999 | 1.15 | | |
| | | | 1014 | -0.342 | 0.000 | -3.50 | 6.18 | 1.50 | 1.00 | 70.29 1 |
| | | | | | -0.857 | -146 | 9999 | 1.15 | | |
| 12130 | 0.000 | 9 | 1013 | -2.543 | 0.000 | -3.50 | 2.88 | 1.50 | 7.67 | 15.08 1 |
| | | | | | -0.657 | -15 | 9999 | 1.15 | | |
| | | | 1014 | -0.342 | 0.000 | -3.50 | 6.19 | 1.50 | 1.00 | 70.23 1 |
| | | | | | -0.856 | -147 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -3.173 | 0.000 | -3.50 | 2.04 | 1.50 | 9.11 | 15.08 1 |
| | | | | | -0.676 | 43 | -9999 | 1.15 | | |
| | | | 1014 | -0.359 | 0.000 | -3.50 | 6.01 | 1.50 | 1.00 | 74.07 1 |
| | | | | | -0.894 | -142 | 9999 | 1.15 | | |
| 12131 | 0.000 | 9 | 1013 | -3.174 | 0.000 | -3.50 | 2.04 | 1.50 | 9.11 | 15.08 1 |
| | | | | | -0.676 | 43 | -9999 | 1.15 | | |
| | | | 1014 | -0.359 | 0.000 | -3.50 | 6.01 | 1.50 | 1.00 | 74.03 1 |
| | | | | | -0.893 | -142 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -3.892 | 0.000 | -3.50 | 1.31 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.662 | 110 | 9999 | 1.15 | | |
| | | | 1014 | -0.365 | 0.000 | -3.50 | 6.29 | 1.50 | 1.00 | 65.97 1 |
| | | | | | -0.821 | -149 | -9999 | 1.15 | | |
| 12132 | 0.000 | 9 | 1013 | -3.893 | 0.000 | -3.50 | 1.31 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.662 | 110 | 9999 | 1.15 | | |
| | | | 1014 | -0.365 | 0.000 | -3.50 | 6.29 | 1.50 | 1.00 | 65.94 1 |
| | | | | | -0.821 | -149 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -4.859 | 0.000 | -3.50 | 0.55 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.591 | 205 | 9999 | 1.15 | | |
| | | | 1014 | -0.382 | 0.000 | -3.50 | 6.89 | 1.50 | 1.00 | 52.06 1 |
| | | | | | -0.695 | -164 | -9999 | 1.15 | | |
| 12133 | 0.000 | 9 | 1013 | -4.859 | 0.000 | -3.50 | 0.55 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.591 | 205 | 9999 | 1.15 | | |
| | | | 1014 | -0.382 | 0.000 | -3.50 | 6.89 | 1.50 | 1.00 | 52.04 1 |
| | | | | | -0.695 | -164 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -0.410 | 0.000 | -3.50 | 7.89 | 1.50 | 1.00 | 36.21 1 |
| | | | | | -0.547 | -184 | -9999 | 1.15 | | |
| | | | 1014 | -5.840 | 0.000 | -3.50 | -0.06 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.452 | 313 | 9999 | 1.15 | | |
| 12134 | 0.000 | 9 | 1013 | -0.410 | 0.000 | -3.50 | 7.89 | 1.50 | 1.00 | 36.20 1 |
| | | | | | -0.547 | -184 | -9999 | 1.15 | | |
| | | | 1014 | -5.840 | 0.000 | -3.50 | -0.06 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.452 | 313 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -0.427 | 0.000 | -3.50 | 9.62 | 1.50 | 1.00 | 21.25 1 |
| | | | | | -0.397 | -213 | -9999 | 1.15 | | |
| | | | 1014 | -6.552 | 0.000 | -3.47 | -0.04 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.303 | 409 | 9999 | 1.15 | | |
| 12135 | 0.000 | 9 | 1013 | -0.427 | 0.000 | -3.50 | 9.62 | 1.50 | 1.00 | 21.24 1 |
| | | | | | -0.397 | -213 | -9999 | 1.15 | | |
| | | | 1014 | -6.552 | 0.000 | -3.47 | -0.04 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.303 | 409 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -0.639 | 0.000 | -3.50 | 9.16 | 1.50 | 1.44 | 15.08 1 |
| | | | | | -0.380 | -206 | -9999 | 1.15 | | |
| | | | 1014 | -7.091 | 0.000 | -3.06 | -0.58 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.168 | 589 | 9999 | 1.15 | | |
| 12136 | 0.000 | 9 | 1013 | -0.639 | 0.000 | -3.50 | 9.16 | 1.50 | 1.44 | 15.08 1 |
| | | | | | -0.380 | -206 | -9999 | 1.15 | | |
| | | | 1014 | -7.091 | 0.000 | -3.06 | -0.58 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.168 | 589 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -1.693 | 0.000 | -3.50 | 4.63 | 1.50 | 3.68 | 15.08 1 |
| | | | | | -0.572 | -98 | -9999 | 1.15 | | |
| | | | 1014 | -7.508 | 0.000 | -2.60 | -1.20 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.063 | 1090 | 9999 | 1.15 | | |
| 12137 | 0.000 | 9 | 1013 | -1.693 | 0.000 | -3.50 | 4.63 | 1.50 | 3.67 | 15.08 1 |
| | | | | | -0.572 | -98 | -9999 | 1.15 | | |
| | | | 1014 | -7.507 | 0.000 | -2.60 | -1.20 | 1.50 | 9.99 | 15.08 1 |
| | | | | | -0.063 | 1089 | 9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -4.164 | 0.000 | -3.50 | 1.08 | 1.50 | 8.72 | 15.08 1 |
| | | | | | -0.648 | 136 | 9999 | 1.15 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Required Beam | Reinforcements x[m] NoS LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm] | nue C/S | rel tra | As L [cm2] |
|------------------|-------------------------------|------------|------------------|-----------------|----------------|------------|------------|---------------|
| 12137 | 1.000 9 1014 | -7.708 | 0.000 | -2.14 | -1.82 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.008 | -4940 | 9999 | 1.15 | | |
| 12138 | 0.000 9 1013 | -4.162 | 0.000 | -3.50 | 1.08 | 1.50 | 8.71 | 15.08 1 |
| | | | -0.648 | 136 | 9999 | 1.15 | | |
| | 1014 | -7.708 | 0.000 | -2.14 | -1.82 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.008 | -4970 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -6.764 | 0.000 | -3.32 | -0.23 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.250 | 461 | 9999 | 1.15 | | |
| | 1014 | -7.578 | 0.000 | -2.48 | -1.35 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.045 | -1358 | 9999 | 1.15 | | |
| 12139 | 0.000 9 1013 | -6.763 | 0.000 | -3.33 | -0.23 | 1.50 | 9.99 | 15.08 1 |
| | | | -0.250 | 461 | 9999 | 1.15 | | |
| | 1014 | -7.578 | 0.000 | -2.48 | -1.35 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.045 | -1359 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -6.884 | 0.000 | -3.23 | -0.35 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.220 | -498 | 9999 | 1.15 | | |
| | 1014 | -7.523 | 0.000 | -2.57 | -1.23 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.059 | -1135 | 9999 | 1.15 | | |
| 12140 | 0.000 9 1013 | -6.886 | 0.000 | -3.23 | -0.36 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.219 | -498 | 9999 | 1.15 | | |
| | 1014 | -7.523 | 0.000 | -2.57 | -1.23 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.059 | -1136 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -6.128 | 0.000 | -3.50 | -0.22 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.396 | -347 | 9999 | 1.15 | | |
| | 1014 | -7.524 | 0.000 | -2.57 | -1.23 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.059 | -1137 | 9999 | 1.15 | | |
| 12141 | 0.000 9 1013 | -6.129 | 0.000 | -3.50 | -0.22 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.396 | -347 | 9999 | 1.15 | | |
| | 1014 | -7.524 | 0.000 | -2.57 | -1.23 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.059 | -1137 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -5.925 | 0.000 | -3.50 | -0.11 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.436 | -322 | 9999 | 1.15 | | |
| | 1014 | -7.554 | 0.000 | -2.53 | -1.30 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.051 | -1247 | 9999 | 1.15 | | |
| 12142 | 0.000 9 1013 | -5.925 | 0.000 | -3.50 | -0.11 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.436 | -322 | 9999 | 1.15 | | |
| | 1014 | -7.554 | 0.000 | -2.53 | -1.30 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.051 | -1247 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -6.023 | 0.000 | -3.50 | -0.16 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.417 | -334 | 9999 | 1.15 | | |
| | 1014 | -7.589 | 0.000 | -2.46 | -1.38 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.042 | -1418 | 9999 | 1.15 | | |
| 12143 | 0.000 9 1013 | -6.023 | 0.000 | -3.50 | -0.16 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.417 | -334 | 9999 | 1.15 | | |
| | 1014 | -7.589 | 0.000 | -2.46 | -1.38 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.042 | -1418 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -6.307 | 0.000 | -3.50 | -0.32 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.359 | -371 | 9999 | 1.15 | | |
| | 1014 | -7.635 | 0.000 | -2.37 | -1.50 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.030 | -1778 | 9999 | 1.15 | | |
| 12144 | 0.000 9 1013 | -6.307 | 0.000 | -3.50 | -0.32 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.359 | -371 | 9999 | 1.15 | | |
| | 1014 | -7.635 | 0.000 | -2.37 | -1.50 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.030 | -1778 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -6.638 | 0.000 | -3.41 | -0.11 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.282 | -427 | 9999 | 1.15 | | |
| | 1014 | -7.673 | 0.000 | -2.28 | -1.63 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.020 | -2415 | 9999 | 1.15 | | |
| 12145 | 0.000 9 1013 | -6.638 | 0.000 | -3.41 | -0.11 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.282 | -427 | 9999 | 1.15 | | |
| | 1014 | -7.673 | 0.000 | -2.28 | -1.63 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.020 | -2415 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.699 | 0.000 | -2.18 | -1.75 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.011 | -3657 | 9999 | 1.15 | | |
| | 1014 | -6.970 | 0.000 | -3.17 | -0.45 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.198 | -531 | 9999 | 1.15 | | |
| 12146 | 0.000 9 1013 | -7.699 | 0.000 | -2.18 | -1.75 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.011 | -3656 | 9999 | 1.15 | | |
| | 1014 | -6.970 | 0.000 | -3.17 | -0.45 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.198 | -531 | 9999 | 1.15 | | |
| | 1.000 9 1013 | -7.712 | 0.000 | -2.11 | -1.85 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.006 | -6027 | 9999 | 1.15 | | |
| | 1014 | -7.258 | 0.000 | -2.90 | -0.80 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.125 | -703 | 9999 | 1.15 | | |
| 12147 | 0.000 9 1013 | -7.712 | 0.000 | -2.11 | -1.85 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.006 | -6026 | 9999 | 1.15 | | |
| | 1014 | -7.258 | 0.000 | -2.90 | -0.80 | 1.50 | 9.99 | 15.08 1 |
| | | | 0.125 | -703 | 9999 | 1.15 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Required Reinforcements

| Beam | x[m] | Nos | LC | Ni [MN] | Myi/Mzi [MNm] | e1/yn [o/oo] | e2/zn / mm] | nue C/S | rel tra | As L [cm2] |
|-------|-------|-----|------|------------|------------------|-----------------|----------------|------------|------------|---------------|
| 12147 | 1.000 | 9 | 1013 | -7.720 | 0.000 | -2.06 | -1.93 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.003 | -9999 | -9999 | 1.15 | | |
| | | | 1014 | -7.487 | 0.000 | -2.63 | -1.16 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.068 | -1034 | -9999 | 1.15 | | |
| 12148 | 0.000 | 9 | 1013 | -7.720 | 0.000 | -2.06 | -1.93 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.003 | -9999 | -9999 | 1.15 | | |
| | | | 1014 | -7.487 | 0.000 | -2.63 | -1.16 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.068 | -1033 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.723 | 0.000 | -2.02 | -1.97 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.001 | -9999 | -9999 | 1.15 | | |
| | | | 1014 | -7.643 | 0.000 | -2.36 | -1.53 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.028 | -1871 | -9999 | 1.15 | | |
| 12149 | 0.000 | 9 | 1013 | -7.723 | 0.000 | -2.02 | -1.97 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.001 | -9999 | -9999 | 1.15 | | |
| | | | 1014 | -7.642 | 0.000 | -2.36 | -1.53 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.028 | -1870 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.000 | -9999 | -9999 | 1.15 | | |
| | | | 1014 | -7.711 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.007 | -5650 | -9999 | 1.15 | | |
| 12150 | 0.000 | 9 | 1013 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.000 | -9999 | -9999 | 1.15 | | |
| | | | 1014 | -7.711 | 0.000 | -2.12 | -1.84 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.007 | -5637 | -9999 | 1.15 | | |
| | 1.000 | 9 | 1013 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.000 | 9999 | 9999 | 1.15 | | |
| | | | 1014 | -7.724 | 0.000 | -2.00 | -2.00 | 1.50 | 9.99 | 15.08 |
| | | | | | 0.000 | 9999 | 9999 | 1.15 | | |

Shear Design

Design for shear DIN 1045-1 (2003)

Minimum shear factor or tan of inclination of compressive struts 0.57 / 1.72
fyd [MPa]

| MNo | f-cd [MPa] | tau-rd [MPa] | sigIIQ [MPa] | sigIIIT [MPa] | sigIIQ+ [MPa] |
|-----|---------------|-----------------|-----------------|------------------|------------------|
| 1 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 3 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 4 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 5 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 6 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 7 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 8 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 9 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 10 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 12 | | | | | |

434.78

Tolerance for exceeding maximum shear or principal compression stress 0.0200

Longitudinal Reinforcements LCR 501

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | mue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|-------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 10001 | 0.000 | 8 | 0.01 | 0.84 | | 0.76T | 0.04 | | 0.04 | |
| 10001 | 0.200 | 8 | 0.01 | 0.67 | | 0.67T | | | | |
| 10005 | 0.000 | 8 | 0.03 | 3.65 | | 3.02T | | | 0.63 | |
| 10005 | 0.200 | 8 | 0.03 | 3.84 | | 3.39T | 0.31 | | 0.14 | |
| 10006 | 0.000 | 8 | 0.00 | 0.34 | | 0.24T | 0.10 | | | |
| 10006 | 0.400 | 8 | 0.00 | 0.33 | | 0.23T | 0.10 | | | |
| 10009 | 0.000 | 8 | 0.00 | 0.34 | | 0.24T | 0.10 | | | |
| 10009 | 0.400 | 8 | 0.00 | 0.33 | | 0.23T | 0.10 | | | |
| 10010 | 0.000 | 8 | 0.03 | 3.64 | | 3.19T | 0.31 | | 0.14 | |
| 10010 | 0.200 | 8 | 0.03 | 3.84 | | 3.21T | | | 0.63 | |
| 10014 | 0.000 | 8 | 0.01 | 0.67 | | 0.67T | | | | |
| 10014 | 0.200 | 8 | 0.01 | 0.84 | | 0.75T | 0.04 | | 0.04 | |
| 10016 | 0.000 | 8 | 0.01 | 0.80 | | 0.71T | 0.04 | | 0.04 | |
| 10016 | 0.200 | 8 | 0.01 | 0.67 | | 0.67T | | | | |
| 10020 | 0.000 | 8 | 0.03 | 3.84 | | 3.21T | | | 0.63 | |
| 10020 | 0.200 | 8 | 0.03 | 3.64 | | 3.19T | 0.31 | | 0.14 | |
| 10021 | 0.000 | 8 | 0.00 | 0.38 | | 0.23T | 0.15 | | | |
| 10021 | 0.400 | 8 | 0.00 | 0.34 | | 0.24T | 0.10 | | | |
| 10024 | 0.000 | 8 | 0.00 | 0.34 | | 0.24T | 0.10 | | | |
| 10024 | 0.400 | 8 | 0.00 | 0.34 | | 0.24T | 0.10 | | | |
| 10025 | 0.000 | 8 | 0.03 | 3.84 | | 3.39T | 0.31 | | 0.14 | |
| 10025 | 0.200 | 8 | 0.03 | 3.65 | | 3.02T | | | 0.63 | |
| 10029 | 0.000 | 8 | 0.01 | 0.67 | | 0.67T | | | | |
| 10029 | 0.200 | 8 | 0.01 | 0.85 | | 0.76T | 0.04 | | 0.04 | |
| 12001 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12001 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements LCR 501

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | μue [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|-------|-------|-----|------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 12002 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12002 | 1.000 | 9 | 0.48 | 24.24 | | 24.24T | | | | |
| 12003 | 0.000 | 9 | 0.48 | 24.24 | | 24.24T | | | | |
| 12003 | 1.000 | 9 | 0.98 | 49.36 | | 49.36T | | | | |
| 12004 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12004 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12005 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12005 | 1.000 | 9 | 0.49 | 24.68 | | 24.68T | | | | |
| 12006 | 0.000 | 9 | 0.49 | 24.68 | | 24.68T | | | | |
| 12006 | 1.000 | 9 | 0.97 | 48.95 | | 48.95T | | | | |
| 12007 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12007 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12008 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12008 | 1.000 | 9 | 0.49 | 24.60 | | 24.60T | | | | |
| 12009 | 0.000 | 9 | 0.49 | 24.60 | | 24.60T | | | | |
| 12009 | 1.000 | 9 | 0.97 | 48.90 | | 48.90T | | | | |
| 12010 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12010 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12011 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12011 | 1.000 | 9 | 0.48 | 24.24 | | 24.24T | | | | |
| 12012 | 0.000 | 9 | 0.48 | 24.24 | | 24.24T | | | | |
| 12012 | 1.000 | 9 | 0.97 | 48.90 | | 48.90T | | | | |
| 12013 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12013 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12014 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12014 | 1.000 | 9 | 0.48 | 24.31 | | 24.31T | | | | |
| 12015 | 0.000 | 9 | 0.48 | 24.31 | | 24.31T | | | | |
| 12015 | 1.000 | 9 | 0.97 | 48.95 | | 48.95T | | | | |
| 12016 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12016 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12017 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12017 | 1.000 | 9 | 0.49 | 24.60 | | 24.60T | | | | |
| 12018 | 0.000 | 9 | 0.49 | 24.60 | | 24.60T | | | | |
| 12018 | 1.000 | 9 | 0.98 | 49.36 | | 49.36T | | | | |
| 12019 | 0.000 | 9 | 0.98 | 49.36 | | 49.36T | | | | |
| 12019 | 1.000 | 9 | 1.40 | 70.29 | | 70.29T | | | | |
| 12020 | 0.000 | 9 | 1.40 | 70.23 | | 70.23T | | | | |
| 12020 | 1.000 | 9 | 1.47 | 74.07 | | 74.07T | | | | |
| 12021 | 0.000 | 9 | 1.47 | 74.03 | | 74.03T | | | | |
| 12021 | 1.000 | 9 | 1.31 | 65.97 | | 65.97T | | | | |
| 12022 | 0.000 | 9 | 1.31 | 65.94 | | 65.94T | | | | |
| 12022 | 1.000 | 9 | 1.04 | 52.06 | | 52.06T | | | | |
| 12023 | 0.000 | 9 | 1.04 | 52.04 | | 52.04T | | | | |
| 12023 | 1.000 | 9 | 0.72 | 36.21 | | 36.21T | | | | |
| 12024 | 0.000 | 9 | 0.72 | 36.20 | | 36.20T | | | | |
| 12024 | 1.000 | 9 | 0.42 | 21.35 | | 21.35T | | | | |
| 12025 | 0.000 | 9 | 0.42 | 21.35 | | 21.35T | | | | |
| 12025 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12026 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12026 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12027 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12027 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12028 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12028 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12029 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12029 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12030 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12030 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12031 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12031 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12032 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12032 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12033 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12033 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12034 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12034 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12035 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12035 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12036 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12036 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12037 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12037 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12038 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12038 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12039 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12039 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements LCR 501

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | μue [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|-------|-------|-----|------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 12040 | 0.000 | 9 | 0.30 | 15.08 | | 15.08' | | | | |
| 12040 | 1.000 | 9 | 0.30 | 15.08 | | 15.08' | | | | |
| 12041 | 0.000 | 9 | 0.97 | 48.95 | | 48.95T | | | | |
| 12041 | 1.000 | 9 | 1.39 | 69.85 | | 69.85T | | | | |
| 12042 | 0.000 | 9 | 1.39 | 69.79 | | 69.79T | | | | |
| 12042 | 1.000 | 9 | 1.47 | 73.69 | | 73.69T | | | | |
| 12043 | 0.000 | 9 | 1.47 | 73.65 | | 73.65T | | | | |
| 12043 | 1.000 | 9 | 1.31 | 65.97 | | 65.97T | | | | |
| 12044 | 0.000 | 9 | 1.31 | 65.94 | | 65.94T | | | | |
| 12044 | 1.000 | 9 | 1.04 | 52.05 | | 52.05T | | | | |
| 12045 | 0.000 | 9 | 1.04 | 52.03 | | 52.03T | | | | |
| 12045 | 1.000 | 9 | 0.72 | 36.19 | | 36.19T | | | | |
| 12046 | 0.000 | 9 | 0.72 | 36.19 | | 36.19T | | | | |
| 12046 | 1.000 | 9 | 0.42 | 21.33 | | 21.33T | | | | |
| 12047 | 0.000 | 9 | 0.42 | 21.33 | | 21.33T | | | | |
| 12047 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12048 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12048 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12049 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12049 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12050 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12050 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12051 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12051 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12052 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12052 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12053 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12053 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12054 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12054 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12055 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12055 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12056 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12056 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12057 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12057 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12058 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12058 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12059 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12059 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12060 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12060 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12061 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12061 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12062 | 0.000 | 9 | 0.30 | 15.08 | | 15.08' | | | | |
| 12062 | 1.000 | 9 | 0.30 | 15.08 | | 15.08' | | | | |
| 12063 | 0.000 | 9 | 0.97 | 48.90 | | 48.90T | | | | |
| 12063 | 1.000 | 9 | 1.39 | 69.82 | | 69.82T | | | | |
| 12064 | 0.000 | 9 | 1.39 | 69.76 | | 69.76T | | | | |
| 12064 | 1.000 | 9 | 1.47 | 73.68 | | 73.68T | | | | |
| 12065 | 0.000 | 9 | 1.46 | 73.63 | | 73.63T | | | | |
| 12065 | 1.000 | 9 | 1.32 | 66.24 | | 66.24T | | | | |
| 12066 | 0.000 | 9 | 1.32 | 66.21 | | 66.21T | | | | |
| 12066 | 1.000 | 9 | 1.04 | 52.19 | | 52.19T | | | | |
| 12067 | 0.000 | 9 | 1.04 | 52.17 | | 52.17T | | | | |
| 12067 | 1.000 | 9 | 0.72 | 36.21 | | 36.21T | | | | |
| 12068 | 0.000 | 9 | 0.72 | 36.20 | | 36.20T | | | | |
| 12068 | 1.000 | 9 | 0.42 | 21.25 | | 21.25T | | | | |
| 12069 | 0.000 | 9 | 0.42 | 21.24 | | 21.24T | | | | |
| 12069 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12070 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12070 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12071 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12071 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12072 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12072 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12073 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12073 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12074 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12074 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12075 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12075 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12076 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12076 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12077 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12077 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements LCR 501

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | mue | As-Sum | shift by | Lay-0&5 | Lay-1&6 | Lay-2&7 | Lay-3&8 | Lay-4&9 |
|-------|-------|-----|------|--------------------|----------|--------------------|--------------------|--------------------|--------------------|--------------------|
| | | | [-] | [cm ²] | [m] | [cm ²] | [cm ²] | [cm ²] | [cm ²] | [cm ²] |
| 12078 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12078 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12079 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12079 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12080 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12080 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12081 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12081 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12082 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12082 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12083 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12083 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12084 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12084 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12085 | 0.000 | 9 | 0.97 | 48.90 | | | 48.90T | | | |
| 12085 | 1.000 | 9 | 1.39 | 69.82 | | | 69.82T | | | |
| 12086 | 0.000 | 9 | 1.39 | 69.76 | | | 69.76T | | | |
| 12086 | 1.000 | 9 | 1.47 | 73.68 | | | 73.68T | | | |
| 12087 | 0.000 | 9 | 1.46 | 73.63 | | | 73.63T | | | |
| 12087 | 1.000 | 9 | 1.32 | 66.24 | | | 66.24T | | | |
| 12088 | 0.000 | 9 | 1.32 | 66.21 | | | 66.21T | | | |
| 12088 | 1.000 | 9 | 1.04 | 52.06 | | | 52.06T | | | |
| 12089 | 0.000 | 9 | 1.04 | 52.04 | | | 52.04T | | | |
| 12089 | 1.000 | 9 | 0.72 | 36.21 | | | 36.21T | | | |
| 12090 | 0.000 | 9 | 0.72 | 36.20 | | | 36.20T | | | |
| 12090 | 1.000 | 9 | 0.42 | 21.35 | | | 21.35T | | | |
| 12091 | 0.000 | 9 | 0.42 | 21.35 | | | 21.35T | | | |
| 12091 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12092 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12092 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12093 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12093 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12094 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12094 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12095 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12095 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12096 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12096 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12097 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12097 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12098 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12098 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12099 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12099 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12100 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12100 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12101 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12101 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12102 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12102 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12103 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12103 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12104 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12104 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12105 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12105 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12106 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12106 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12107 | 0.000 | 9 | 0.97 | 48.95 | | | 48.95T | | | |
| 12107 | 1.000 | 9 | 1.39 | 69.85 | | | 69.85T | | | |
| 12108 | 0.000 | 9 | 1.39 | 69.79 | | | 69.79T | | | |
| 12108 | 1.000 | 9 | 1.47 | 73.69 | | | 73.69T | | | |
| 12109 | 0.000 | 9 | 1.47 | 73.65 | | | 73.65T | | | |
| 12109 | 1.000 | 9 | 1.32 | 66.23 | | | 66.23T | | | |
| 12110 | 0.000 | 9 | 1.32 | 66.21 | | | 66.21T | | | |
| 12110 | 1.000 | 9 | 1.04 | 52.17 | | | 52.17T | | | |
| 12111 | 0.000 | 9 | 1.04 | 52.16 | | | 52.16T | | | |
| 12111 | 1.000 | 9 | 0.72 | 36.19 | | | 36.19T | | | |
| 12112 | 0.000 | 9 | 0.72 | 36.19 | | | 36.19T | | | |
| 12112 | 1.000 | 9 | 0.42 | 21.23 | | | 21.23T | | | |
| 12113 | 0.000 | 9 | 0.42 | 21.23 | | | 21.23T | | | |
| 12113 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12114 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12114 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12115 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12115 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements LCR 501

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | μue [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|-------|-------|-----|------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 12116 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12116 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12117 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12117 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12118 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12118 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12119 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12119 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12120 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12120 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12121 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12121 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12122 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12122 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12123 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12123 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12124 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12124 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12125 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12125 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12126 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12126 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12127 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12127 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12128 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12128 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12129 | 0.000 | 9 | 0.98 | 49.36 | | | 49.36T | | | |
| 12129 | 1.000 | 9 | 1.40 | 70.29 | | | 70.29T | | | |
| 12130 | 0.000 | 9 | 1.40 | 70.23 | | | 70.23T | | | |
| 12130 | 1.000 | 9 | 1.47 | 74.07 | | | 74.07T | | | |
| 12131 | 0.000 | 9 | 1.47 | 74.03 | | | 74.03T | | | |
| 12131 | 1.000 | 9 | 1.31 | 65.97 | | | 65.97T | | | |
| 12132 | 0.000 | 9 | 1.31 | 65.94 | | | 65.94T | | | |
| 12132 | 1.000 | 9 | 1.04 | 52.06 | | | 52.06T | | | |
| 12133 | 0.000 | 9 | 1.04 | 52.04 | | | 52.04T | | | |
| 12133 | 1.000 | 9 | 0.72 | 36.21 | | | 36.21T | | | |
| 12134 | 0.000 | 9 | 0.72 | 36.20 | | | 36.20T | | | |
| 12134 | 1.000 | 9 | 0.42 | 21.25 | | | 21.25T | | | |
| 12135 | 0.000 | 9 | 0.42 | 21.24 | | | 21.24T | | | |
| 12135 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12136 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12136 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12137 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12137 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12138 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12138 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12139 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12139 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12140 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12140 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12141 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12141 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12142 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12142 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12143 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12143 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12144 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12144 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12145 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12145 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12146 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12146 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12147 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12147 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12148 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12148 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12149 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12149 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12150 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12150 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Maximum Degree of Utilization

| | | N | Vy | Vz | Mt | My | Mz | Mb | Mt2 | Total | lamda |
|--------------|---|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| | | sig-c | sig-t | tau | sig-* | tend. | As-l | As-v | crack | sigdyn | tau-* |
| Cross sect. | 8 | 0.000 | 0.000 | 0.018 | 0.032 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| DOKOS-4 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 | 0.000 | 0.000 | 0.000 |
| Cross sect. | 9 | 0.000 | 0.000 | 0.248 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 |
| section pile | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| <hr/> | | | | | | | | | | | |
| Total System | | 0.000 | 0.000 | 0.248 | 0.032 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 | 0.000 | 0.000 | 0.000 |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_DOKOI

Selected Beam Elements

| FROM | TO | INC | X-VALUE | NC | MEMBER | CS0 | CS1 | CS2 | CS3 | CS4 | CS5 |
|------|------|-----|---------|----|---------|-----|-----|-----|-----|-----|-----|
| 1000 | 1060 | 1 | | 1 | bending | 10 | 40 | | | | |

Default design code is DIN Fachbericht 102 Massivbröcken (2003) (Germany)

Klasse(Tab.4.118): D

wind zone : Binnenland

Materials

No. 1 C 25/30 (DIN 1045-1)
No. 3 C 25/30 (DIN 1045-1)
No. 4 C 25/30 (DIN 1045-1)
No. 5 C 25/30 (DIN 1045-1)
No. 6 C 25/30 (DIN 1045-1)
No. 7 C 25/30 (DIN 1045-1)
No. 8 C 25/30 (DIN 1045-1)
No. 9 C 25/30 (DIN 1045-1)
No. 10 C 25/30 (DIN 1045-1)
No. 12 BSt 500 SA (DIN 1045-1)

All moments will be smoothed out between face and support

Reinforcement will be accounted for sectional values as defined in AQUA

Reinforcements saved as design case LCR 502

Reinforcements are superposed with existing minimum reinforcements

Considered Load Cases

| No. | refer | act on | Title/type of load case | gam-u | gam-f | psi-0 | psi-1 | psi-2 | psi-1' |
|------|-------|--------|---|-------|-------|-------|-------|-------|-------------|
| 1 | part. | CS 0 | I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 2 | part. | CS 0 | I.B. ΔΟΚΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 3 | part. | CS 0 | I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 4 | part. | CS 0 | KINHTO ΦΑΣΗΣ-1 Q_A (Pay load residential cat. A) | 1.50 | 0.00 | 0.70 | 0.50 | 0.30 | 0.70 Q cond |
| 7 | part. | CS 0 | ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝ Α1-Κ0 (Φ Q_B (Pay load offices cat. B) | 1.50 | 0.00 | 0.70 | 0.50 | 0.30 | 0.70 Q cond |
| 8 | part. | CS 0 | ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝ Α2-Κ0 (Φ Q_B (Pay load offices cat. B) | 1.50 | 0.00 | 0.70 | 0.50 | 0.30 | 0.70 Q cond |
| 11 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 12 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 13 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 14 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 5015 | part. | CS 0 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5025 | part. | CS 0 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 6015 | part. | CS 0 | 15 K creep step C (creep + shrinkage) | | | | | | P perm |
| 6025 | part. | CS 0 | 25 K creep step C (creep + shrinkage) | | | | | | P perm |

Ultimate Load Design

Design for ultimate loads DIN Fachbericht 102 Massivbröcken (2003)

Uniaxial bending due to symmetry

Safety factors SC-1 SC-2 SC-S SS-1 SS-2 PIIa
1.50 1.50 1.50 1.15 1.15 7

Strain limits C1 C2 S1 S2 Z1 Z2
max -3.50 -2.00 3.00 25.00 -3.50 25.00

parameters for reinforcements

| Minimum reinforcements | compression | min. reinforcem. | maximum- |
|-------------------------|-------------|------------------|----------------|
| Bending. | Compress. | e/d N/Np1 | requ. section |
| 0.00 [cm ²] | 0.30 [o/o] | 3.50 0.0010 | 0.00 0.15 9.00 |

Tensile forces in the longitudinal reinforcements due to shear are NOT accounted for.

Material of sections uses Ultimate Limit strain-stress law with global safety factors

Material of reinforcements uses Ultimate Limit strain-stress law with global safety factors

| MNo. | temp lev. | Material-safety | max.compr stress | at strain | max.tens stress | at strain | tension-stiffening |
|------|-----------|-----------------|------------------|-----------|-----------------|-----------|--------------------|
| | | [-] | [MPa] | [o/oo] | [MPa] | [o/oo] | [MPa] |
| 1 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 3 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 4 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 5 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 6 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 7 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |

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| MNo. | temp lev. | Material- safety | max.compr stress [MPa] | at strain [o/oo] | max.tens stress [MPa] | at strain [o/oo] | tension- stiffening [MPa] |
|------|--------------|---------------------|------------------------------|------------------------|-----------------------------|------------------------|---------------------------------|
| 8 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 9 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 10 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 12 | 0 | 1.150 | -456.52 | -25.00 | 456.52 | 25.00 | |

Combinations For Ultimate Design

1015 (CS 1) max_my-1015

MAX + MY :
 $1.35 * G + 1.50 * Q_A + 1.50 * L_A + 1.35 * Q_B + 1.00 * C$

1016 (CS 1) min_my-1016

MIN + MY :
 $1.35 * G + 1.50 * Q_A + 1.50 * L_A + 1.35 * Q_B + 1.00 * C$

Shear Design

Design for shear DIN 1045-1 (2003)

Minimum shear factor or tan of inclination of compressive struts 0.57 / 1.72
MNo f-cd [MPa] tau-rd [MPa] sigIIQ [MPa] sigIIIT [MPa] sigIIQ+ [MPa] fyd [MPa]

| | | | | | |
|----|-------|------|-------|------|-------|
| 1 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 3 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 4 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 5 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 6 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 7 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 8 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 9 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 10 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 12 | | | | | |

434.78

Tolerance for exceeding maximum shear or principal compression stress 0.0200

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | mue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 1001 | 0.000 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1001 | 0.883 | 1 | 0.10 | 4.89 | | 2.37 | 2.52 | | | |
| 1002 | 0.000 | 1 | 0.10 | 4.89 | | 2.37 | 2.52 | | | |
| 1002 | 0.883 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1003 | 0.000 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1003 | 0.883 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1004 | 0.000 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1004 | 0.883 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1005 | 0.000 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1005 | 0.883 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1006 | 0.000 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1006 | 0.883 | 1 | 0.23 | 11.33 | | 2.37 | 8.95 | | | |
| 1007 | 0.000 | 1 | 0.23 | 11.33 | | 2.37 | 8.95 | | | |
| 1007 | 0.883 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1008 | 0.000 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1008 | 0.883 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1009 | 0.000 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1009 | 0.883 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1010 | 0.000 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1010 | 0.883 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1011 | 0.000 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |

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Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | μ _{ue} [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|------|-------|-----|------------------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1011 | 0.883 | 1 | 0.10 | 4.89 | | 2.37 | 2.52 | | | |
| 1012 | 0.000 | 1 | 0.10 | 4.89 | | 2.37' | 2.52 | | | |
| 1012 | 0.883 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1013 | 0.000 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1013 | 0.883 | 1 | 0.10 | 4.89 | | 2.37 | 2.52 | | | |
| 1014 | 0.000 | 1 | 0.10 | 4.89 | | 2.37 | 2.52 | | | |
| 1014 | 0.883 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1015 | 0.000 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1015 | 0.883 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1016 | 0.000 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1016 | 0.883 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1017 | 0.000 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1017 | 0.883 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1018 | 0.000 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1018 | 0.883 | 1 | 0.23 | 11.33 | | 2.37 | 8.95 | | | |
| 1019 | 0.000 | 1 | 0.23 | 11.33 | | 2.37 | 8.95 | | | |
| 1019 | 0.883 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1020 | 0.000 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1020 | 0.883 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1021 | 0.000 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1021 | 0.883 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1022 | 0.000 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1022 | 0.883 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1023 | 0.000 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1023 | 0.883 | 1 | 0.10 | 4.89 | | 2.37 | 2.52 | | | |
| 1024 | 0.000 | 1 | 0.10 | 4.89 | | 2.37' | 2.52 | | | |
| 1024 | 0.883 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1025 | 0.000 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1025 | 0.883 | 1 | 0.10 | 4.89 | | 2.37 | 2.52 | | | |
| 1026 | 0.000 | 1 | 0.10 | 4.89 | | 2.37 | 2.52 | | | |
| 1026 | 0.883 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1027 | 0.000 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1027 | 0.883 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1028 | 0.000 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1028 | 0.883 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1029 | 0.000 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1029 | 0.883 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1030 | 0.000 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |

OPISTIKH MEΛETH/TECHNIKO TA/L=13.00
FASH-1_ULS_DOKOI

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | μ _{ue} [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|------|-------|-----|------------------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1030 | 0.883 | 1 | 0.23 | 11.33 | | 2.37 | 8.95 | | | |
| 1031 | 0.000 | 1 | 0.23 | 11.33 | | 2.37 | 8.95 | | | |
| 1031 | 0.883 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1032 | 0.000 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1032 | 0.883 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1033 | 0.000 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1033 | 0.883 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1034 | 0.000 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1034 | 0.883 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1035 | 0.000 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1035 | 0.883 | 1 | 0.10 | 4.89 | | 2.37 | 2.52 | | | |
| 1036 | 0.000 | 1 | 0.10 | 4.89 | | 2.37' | 2.52 | | | |
| 1036 | 0.883 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1037 | 0.000 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1037 | 0.883 | 1 | 0.10 | 4.89 | | 2.37 | 2.52 | | | |
| 1038 | 0.000 | 1 | 0.10 | 4.89 | | 2.37 | 2.52 | | | |
| 1038 | 0.883 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1039 | 0.000 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1039 | 0.883 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1040 | 0.000 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1040 | 0.883 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1041 | 0.000 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1041 | 0.883 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1042 | 0.000 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1042 | 0.883 | 1 | 0.23 | 11.33 | | 2.37 | 8.95 | | | |
| 1043 | 0.000 | 1 | 0.23 | 11.33 | | 2.37 | 8.95 | | | |
| 1043 | 0.883 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1044 | 0.000 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1044 | 0.883 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1045 | 0.000 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1045 | 0.883 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1046 | 0.000 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1046 | 0.883 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1047 | 0.000 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1047 | 0.883 | 1 | 0.10 | 4.89 | | 2.37 | 2.52 | | | |
| 1048 | 0.000 | 1 | 0.10 | 4.89 | | 2.37' | 2.52 | | | |
| 1048 | 0.883 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1049 | 0.000 | 1 | 0.05 | 2.37 | | 2.37 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_ULS_DOKOI

Longitudinal Reinforcements Accumulated minimum

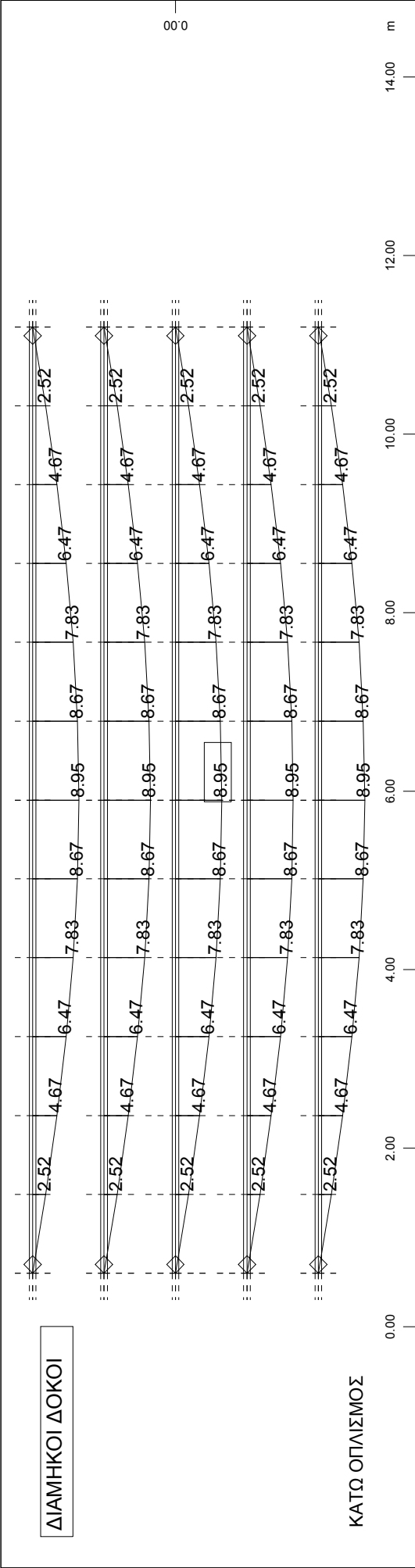
Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | mue [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|------|-------|-----|------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1049 | 0.883 | 1 | 0.10 | 4.89 | | 2.37 | 2.52 | | | |
| 1050 | 0.000 | 1 | 0.10 | 4.89 | | 2.37 | 2.52 | | | |
| 1050 | 0.883 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1051 | 0.000 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1051 | 0.883 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1052 | 0.000 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1052 | 0.883 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1053 | 0.000 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1053 | 0.883 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1054 | 0.000 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1054 | 0.883 | 1 | 0.23 | 11.33 | | 2.37 | 8.95 | | | |
| 1055 | 0.000 | 1 | 0.23 | 11.33 | | 2.37 | 8.95 | | | |
| 1055 | 0.883 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1056 | 0.000 | 1 | 0.22 | 11.04 | | 2.37 | 8.67 | | | |
| 1056 | 0.883 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1057 | 0.000 | 1 | 0.21 | 10.21 | | 2.37 | 7.83 | | | |
| 1057 | 0.883 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1058 | 0.000 | 1 | 0.18 | 8.84 | | 2.37 | 6.47 | | | |
| 1058 | 0.883 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1059 | 0.000 | 1 | 0.14 | 7.04 | | 2.37 | 4.67 | | | |
| 1059 | 0.883 | 1 | 0.10 | 4.89 | | 2.37 | 2.52 | | | |
| 1060 | 0.000 | 1 | 0.10 | 4.89 | | 2.37' | 2.52 | | | |
| 1060 | 0.883 | 1 | 0.05 | 2.37 | | 2.37 | | | | |

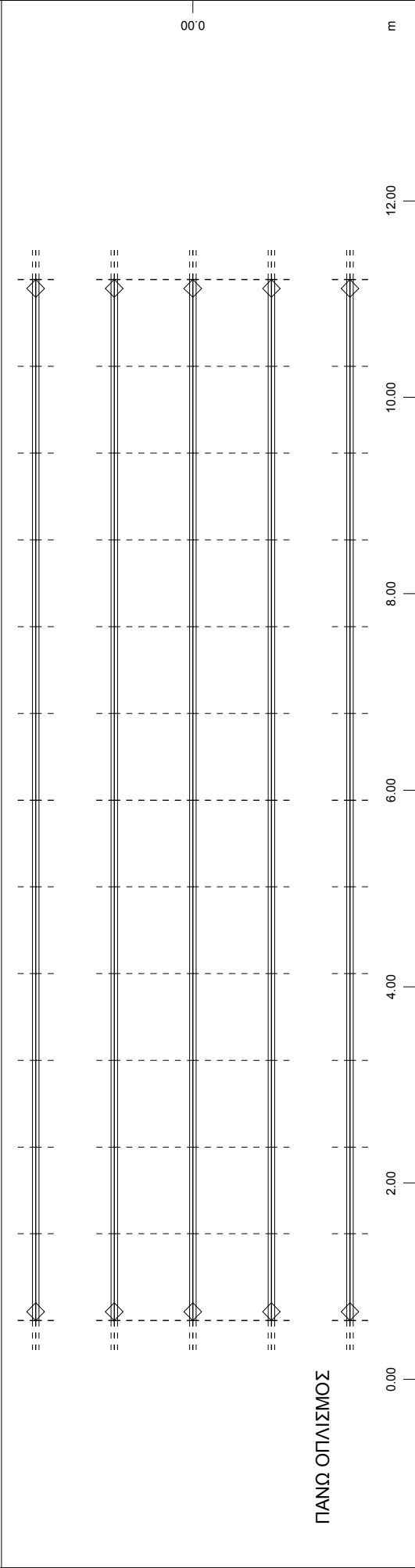
Maximum Degree of Utilization

| Cross sect. | 1 | N sig-c | Vy sig-t | Vz tau | Mt sig-* | My tend. | Mz As-l | Mb As-v | Mt2 crack | Total sigdyn | lamda tau-* |
|--------------|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|
| | | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 1.000 | 0.000 0.000 | 0.000 0.000 | 1.000 0.000 | 0.000 0.000 |
| Total system | | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 1.000 | 0.000 0.000 | 0.000 0.000 | 1.000 0.000 | 0.000 0.000 |



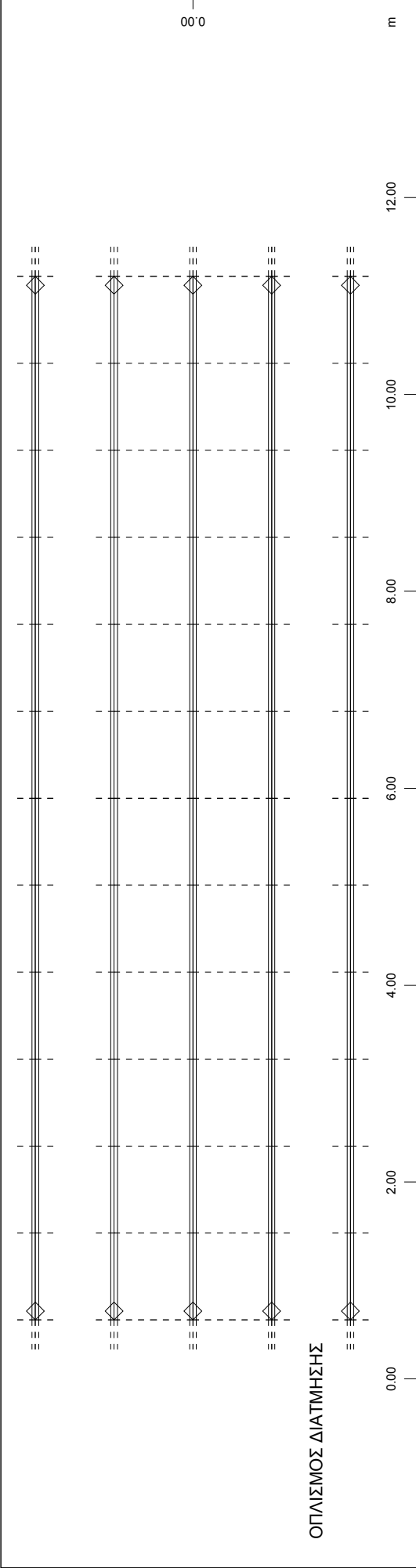
Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 502 , 1 cm 3D = 11.2 cm2 (Max=8.95)
Z-X
Y

M 1 : 66



Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case 502 , 1 cm 3D = 0 cm2 (Max=0)
Z-X
Y

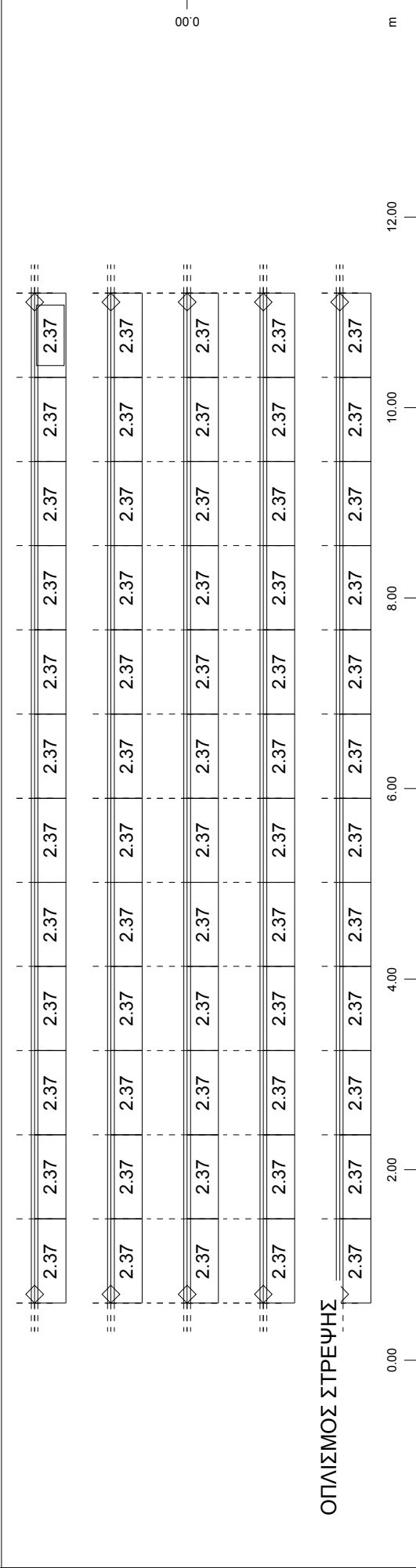
M 1 : 60



ΟΠΛΙΣΜΟΣ ΔΙΑΤΜΗΣΗΣ

Sector of system Beam Elements Group 1
Beam Elements , Shear reinforcements (maximum), Design Case 502 , 1 cm 3D = 0 cm2/m (Max=0)

Z-X
Y



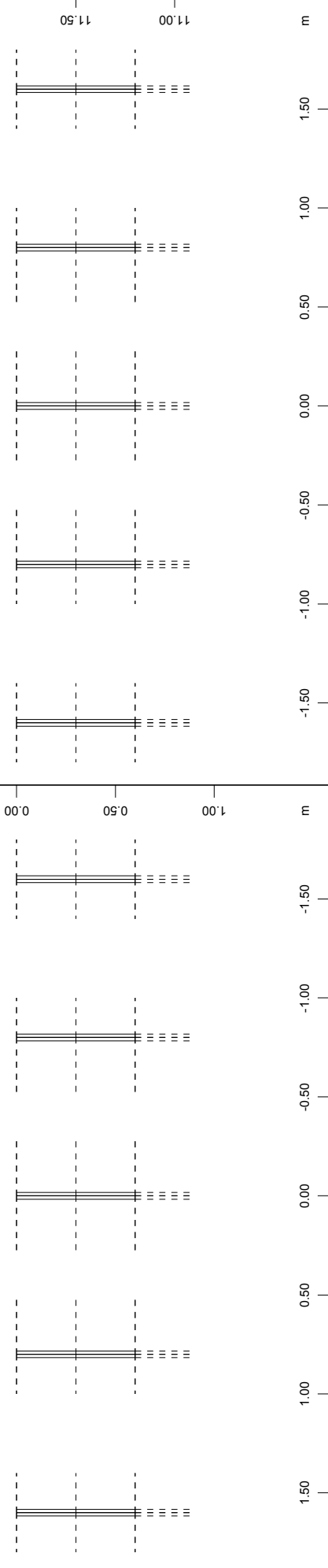
ΟΠΛΙΣΜΟΣ ΣΤΡΕΨΗΣ

Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 0, Design Case 502 , 1 cm 3D = 4.48 cm2 (Max=2.37)

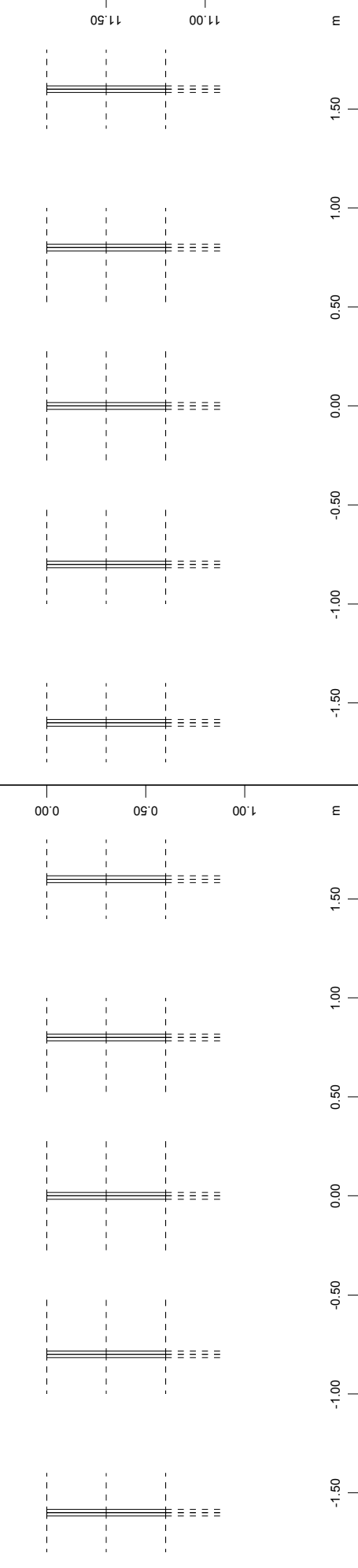
Z-X
Y

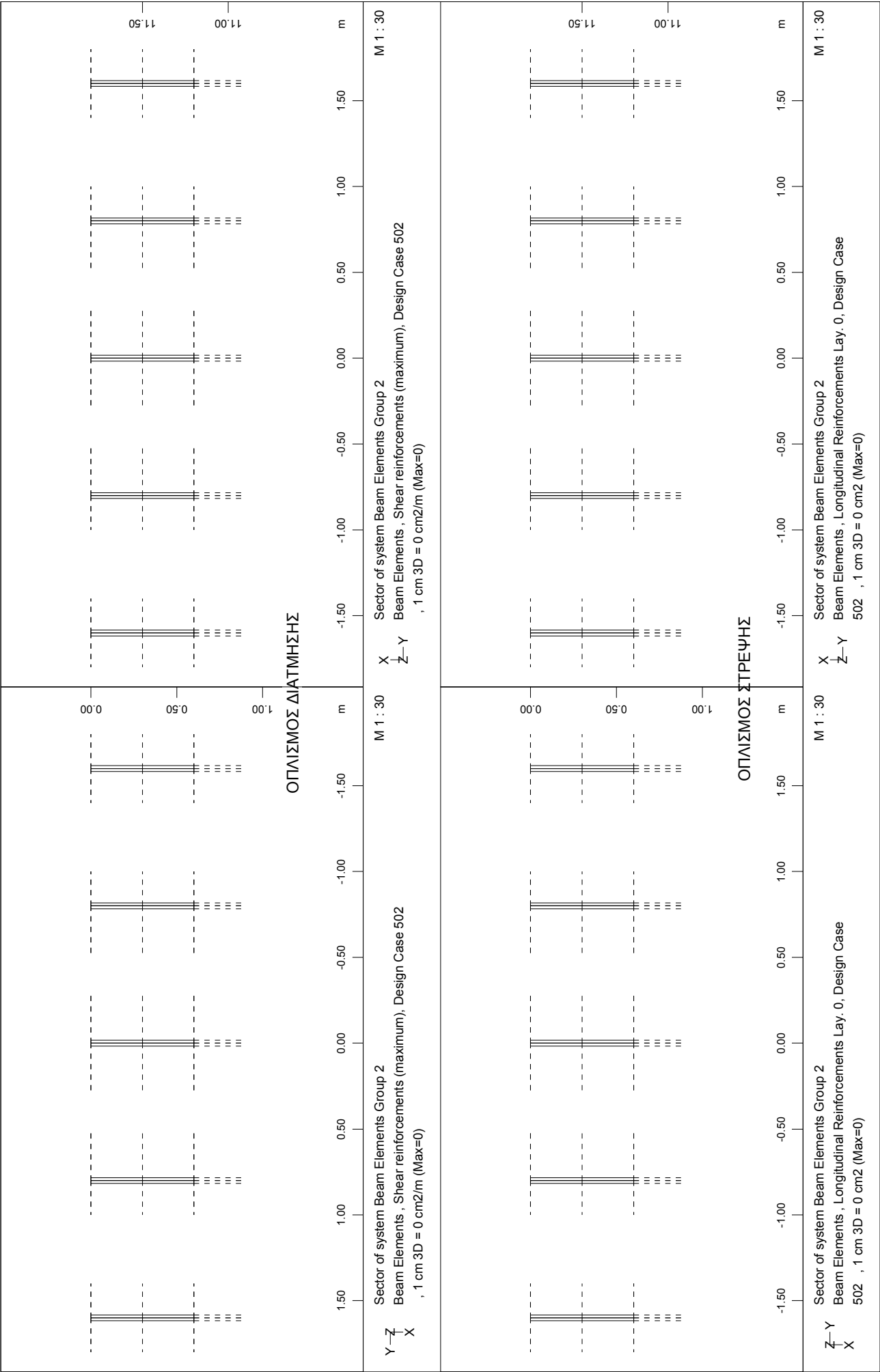
ΔΙΑΜΗΚΗ ΔΟΚΟΙ-ΣΤΗΡΙΞΗΣ

ΚΑΤΩ ΟΠΛΙΣΜΟΣ



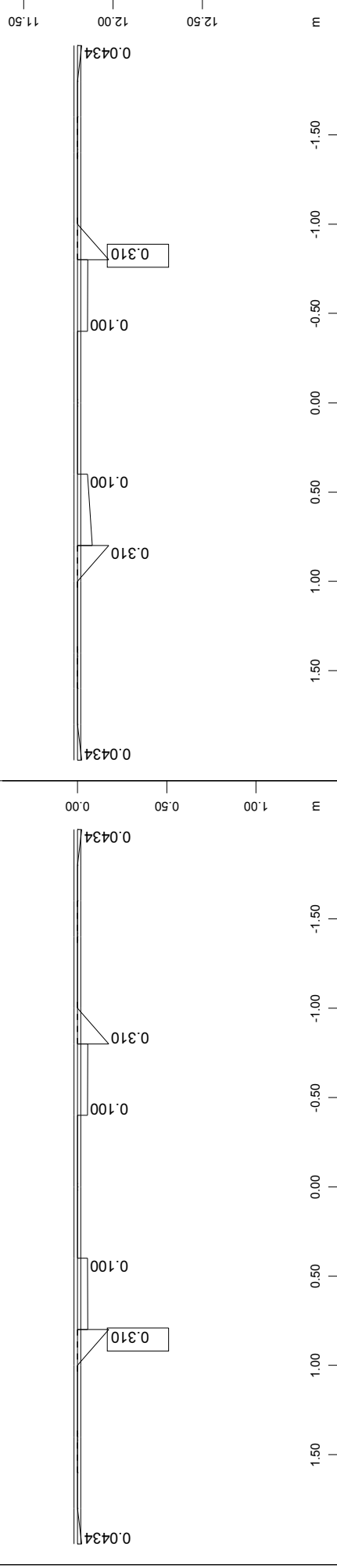
ΠΑΝΩ ΟΠΛΙΣΜΟΣ





ΠΑΡΑΣΧΟΛΟΓΙΣΜΟΣ

ΚΑΤΩ ΟΠΛΙΣΜΟΣ



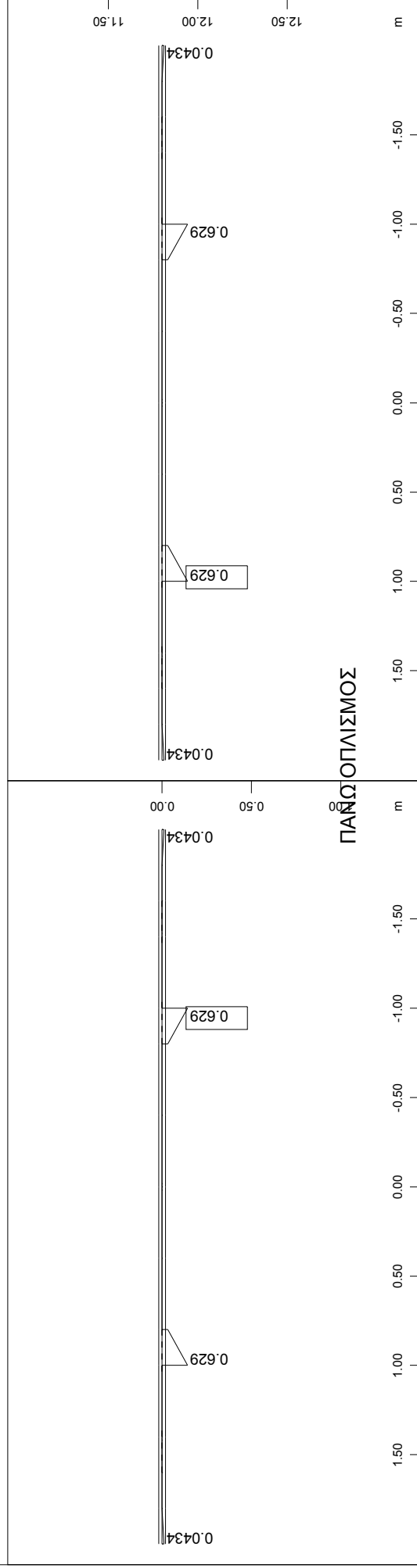
Y-Z
X

M 1 : 33

$$\begin{array}{c} \text{Z} \text{---} \text{X} \\ | \\ \text{Y} \end{array}$$

M 1 : 33

Sector of system Beam Elements Group 10
Beam Elements, Longitudinal Reinforcements Lay. 1, Design Case
501, 1 cm 3D = 0.581 cm2 (Max=0.310)



Y-Z
X

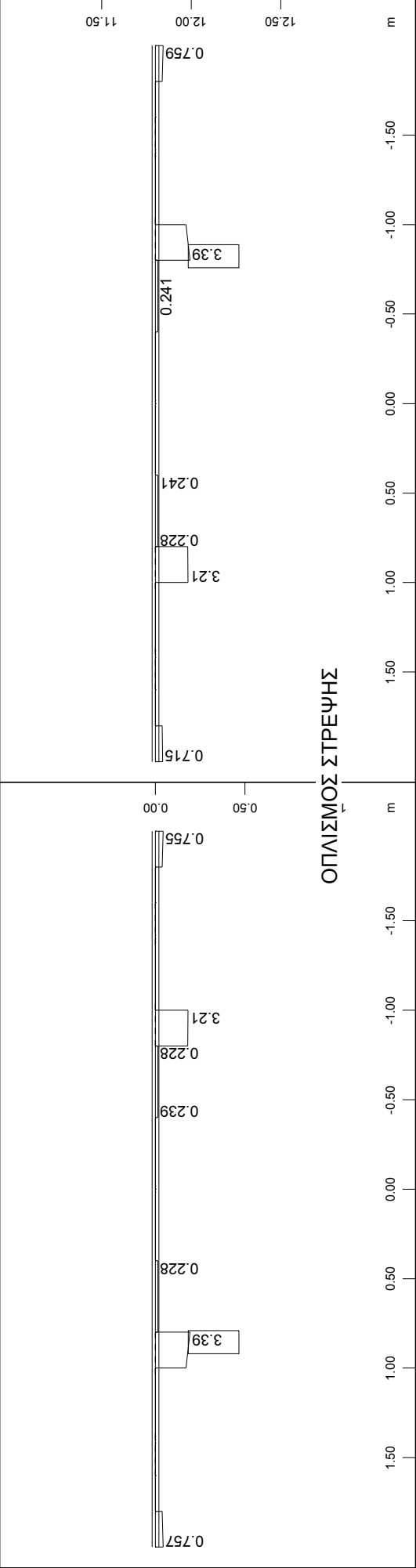
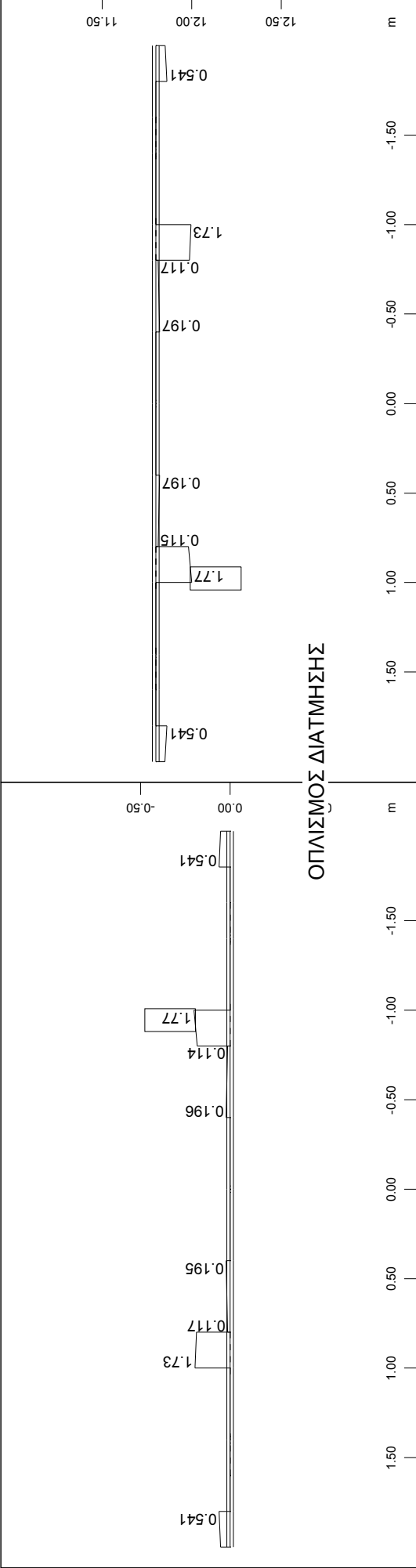
M 1 : 33

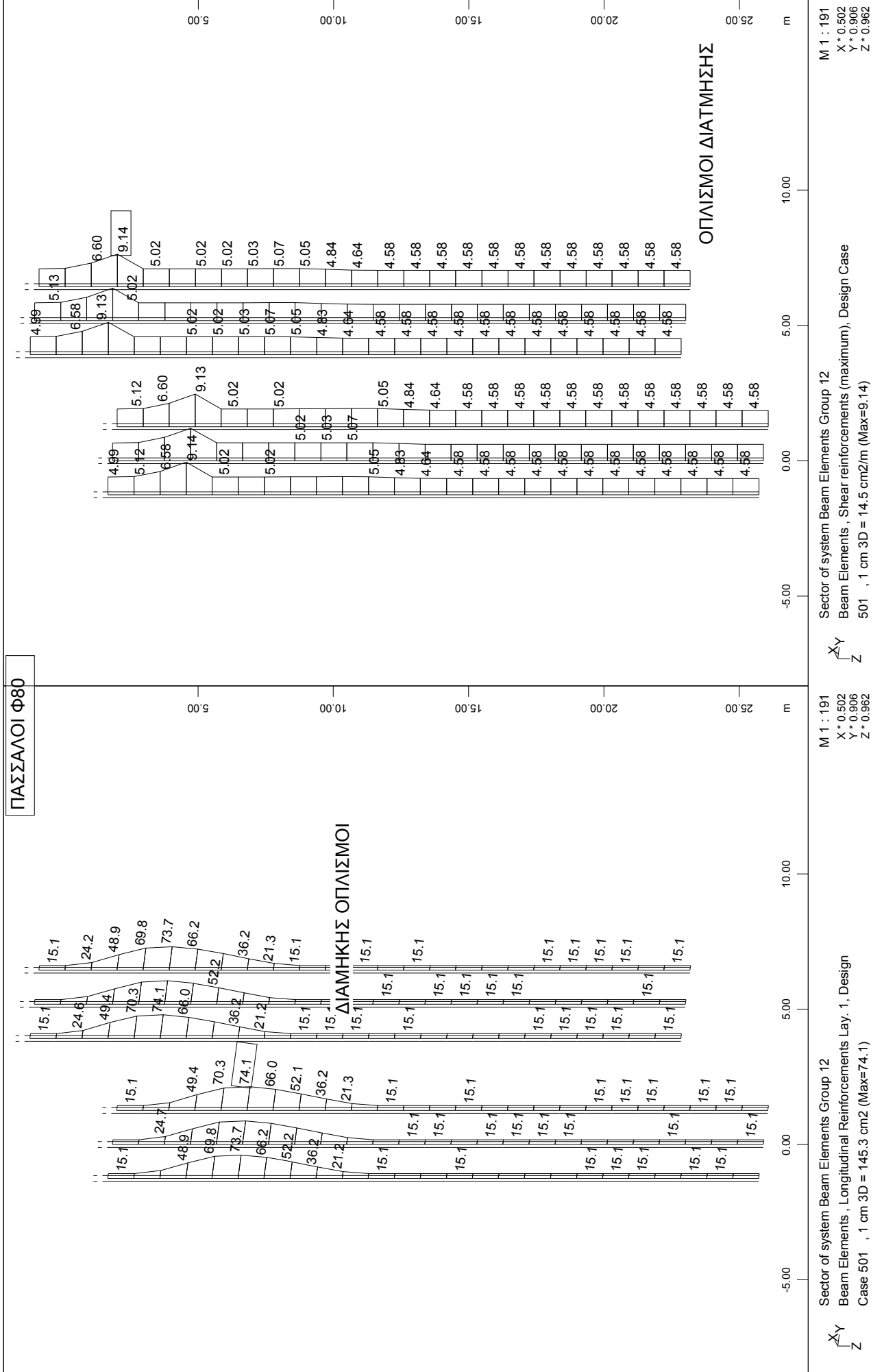
$$\begin{array}{c} \text{X} \\ | \\ \text{Z} \\ | \\ \text{Y} \end{array}$$

M 1:33

Sector of system Beam Elements Group 10
Beam Elements, Longitudinal Reinforcements Lay. 3, Design Case
501, 1 cm 3D = 1.45 cm² (Max=0.629)

p. 115





ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/L=13.00

6) ΦΑΣΗ-1 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ SLS

OPISTIKH MELETH/TEKNIKO TA/L=13.00
FASH-1_SLS_DOKOI

Selected Beam Elements

| FROM | TO | INC | X-VALUE | NC | MEMBER | CS0 | CS1 | CS2 | CS3 | CS4 | CS5 |
|------|------|-----|---------|----|---------|-----|-----|-----|-----|-----|-----|
| 1000 | 1060 | 1 | | 1 | bending | 10 | 40 | | | | |

Default design code is DIN Fachbericht 102 Massivbröcken (2003) (Germany)

Klasse(Tab.4.118): D

wind zone : Binnenland

Materials

No. 1 C 25/30 (DIN 1045-1)
No. 3 C 25/30 (DIN 1045-1)
No. 4 C 25/30 (DIN 1045-1)
No. 5 C 25/30 (DIN 1045-1)
No. 6 C 25/30 (DIN 1045-1)
No. 7 C 25/30 (DIN 1045-1)
No. 8 C 25/30 (DIN 1045-1)
No. 9 C 25/30 (DIN 1045-1)
No. 10 C 25/30 (DIN 1045-1)
No. 12 BSt 500 SA (DIN 1045-1)

All moments will be smoothed out between face and support

Reinforcement will be accounted for sectional values as defined in AQUA

Reinforcements saved as design case LCR 503

Reinforcements are superposed with existing minimum reinforcements

Considered Load Cases

| No. | refer | act on | Title/type of load case | gam-u | gam-f | psi-0 | psi-1 | psi-2 | psi-1' |
|------|-------|--------|---|-------|-------|-------|-------|-------|-------------|
| 1 | part. | CS 0 | I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 2 | part. | CS 0 | I.B. ΔΟΚΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 3 | part. | CS 0 | I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 4 | part. | CS 0 | ΚΙΝΗΤΟ ΦΑΣΗΣ-1 Q_A (Pay load residential cat. A) | 1.50 | 0.00 | 0.70 | 0.50 | 0.30 | 0.70 Q cond |
| 11 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q excl |
| 12 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q excl |
| 13 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q excl |
| 14 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q excl |
| 5015 | part. | CS 0 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5025 | part. | CS 0 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 6015 | part. | CS 0 | 15 K creep step C (creep + shrinkage) | | | | | | P perm |
| 6025 | part. | CS 0 | 25 K creep step C (creep + shrinkage) | | | | | | P perm |

Combinations For Serviceability

1017 (CS 1) max_my-1017
MAX + MY :
1.00 * G + 1.00 * L_A + 1.00 * C
1018 (CS 1) min_my-1018
MIN + MY :
1.00 * G + 1.00 * L_A + 1.00 * C

Parameters for nonlinear stresses

Iteration for all forces and moments

Material of sections uses Serviceability strain-stress law without safety factors

Material of reinforcements uses Serviceability strain-stress law without safety factors

| MNo. | temp lev. | Material-safety | max.compr stress [MPa] | at strain [o/oo] | max.tens stress [MPa] | at strain [o/oo] | tension-stiffening [MPa] |
|------|-----------|-----------------|------------------------|------------------|-----------------------|------------------|--------------------------|
| 1 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 3 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 4 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 5 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 6 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 7 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 8 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 9 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 10 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 12 | 0 | 1.000 | -550.00 | -25.00 | 550.00 | 25.00 | |

Interaction thin walled normal- and shearstress via Prandtl flow rule

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
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Nonlinear Stresses

| Beam | x[m] | Nos | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/Vi [MN] | Myi/Mzi [MNm] | Ey/Ez/G-EFF [MPa] | | | | |
|--|--|-----|------|---------------|-----------------|-------------|--------------|---------------|------------------|----------------------|-------------|-------|-------|------|
| 1001 | 0.000 | 1 | 1017 | 0.000 | 0.000 | 0.750 | -.- | 0.000 | 0.000 | 26663 | | | | |
| | | | 1018 | 0.000 | 0.000 | 0.750 | -.- | 0.000 | 0.000 | 26663 | | | | |
| | 0.883 | 1 | 1017 | 1.018 | 2.643 | 0.092-0.150 | | 0.000 | 0.054 | 1417 | | | | |
| | | | 1017 | 0.665 | 1.816 | 0.111-0.131 | | 0.000 | 0.054 | 2063 | | | | |
| | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | | | | | | | |
| | T-zone h= 0.125 20.0 0.30 214.05 537.35 3.81 | | | | | | | | | | | | | |
| | ---- Check for crack width passed with additional reinforcements | | | | | | | | | | | | | |
| | | | | | | | | 1018 | 1.018 | 2.643 | 0.092-0.150 | 0.000 | 0.054 | 1417 |
| | | | | | | | | 1018 | 0.665 | 1.816 | 0.111-0.131 | 0.000 | 0.054 | 2063 |
| | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | | | | | | | |
| T-zone h= 0.125 20.0 0.30 214.05 537.35 3.81 | | | | | | | | | | | | | | |
| 1002 | 0.000 | 1 | 1017 | 1.018 | 2.643 | 0.092-0.150 | | 0.000 | 0.054 | 1417 | | | | |
| | | | 1017 | 0.665 | 1.816 | 0.111-0.131 | | 0.000 | 0.054 | 2063 | | | | |
| | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | | | | | | | |
| | T-zone h= 0.125 20.0 0.30 214.05 537.35 3.81 | | | | | | | | | | | | | |
| | ---- Check for crack width passed with additional reinforcements | | | | | | | | | | | | | |
| | | | | | | | | 1018 | 1.018 | 2.643 | 0.092-0.150 | 0.000 | 0.054 | 1417 |
| | | | | | | | | 1018 | 0.665 | 1.816 | 0.111-0.131 | 0.000 | 0.054 | 2063 |
| | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | | | | | | | |
| | T-zone h= 0.125 20.0 0.30 214.05 537.35 3.81 | | | | | | | | | | | | | |
| | ---- Check for crack width passed with additional reinforcements | | | | | | | | | | | | | |
| 1003 | 0.000 | 1 | 1017 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 | | | | |
| | | | 1017 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 | | | | |
| | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | | | | | | | |
| | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | | | | | | | |
| | ---- Check for crack width passed with additional reinforcements | | | | | | | | | | | | | |
| | 0.883 | 1 | 1017 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 | | | | |
| | | | 1017 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 | | | | |
| | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | | | | | | | |
| | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | | | | | | | |
| | ---- Check for crack width passed with additional reinforcements | | | | | | | | | | | | | |
| 1004 | 0.000 | 1 | 1017 | 0.947 | 2.830 | 0.142-0.100 | | 0.000 | 0.133 | 3220 | | | | |
| | | | 1017 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 | | | | |
| | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | | | | | | | |
| | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | | | | | | | |
| | ---- Check for crack width passed with additional reinforcements | | | | | | | | | | | | | |
| | 0.883 | 1 | 1017 | 0.947 | 2.830 | 0.142-0.100 | | 0.000 | 0.133 | 3220 | | | | |
| | | | 1017 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 | | | | |
| | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | | | | | | | |
| | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | | | | | | | |
| | ---- Check for crack width passed with additional reinforcements | | | | | | | | | | | | | |
| 1005 | 0.000 | 1 | 1017 | 0.918 | 2.856 | 0.155-0.087 | | 0.000 | 0.158 | 3771 | | | | |
| | | | 1017 | 0.609 | 2.070 | 0.183-0.059 | | 0.000 | 0.158 | 5203 | | | | |
| | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | | | | | | | |
| | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | | | | | | | | |
| | ---- Check for crack width passed with additional reinforcements | | | | | | | | | | | | | |
| | 0.883 | 1 | 1017 | 0.918 | 2.856 | 0.155-0.087 | | 0.000 | 0.158 | 3771 | | | | |
| | | | 1017 | 0.609 | 2.070 | 0.183-0.059 | | 0.000 | 0.158 | 5203 | | | | |
| | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | | | | | | | |
| | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | | | | | | | | |
| | ---- Check for crack width passed with additional reinforcements | | | | | | | | | | | | | |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_SLS_DOKOI

Nonlinear Stresses

| Beam | x[m] | Nos | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/Vi [MN] | Myi/Mzi [MNM] | Ey/Ez/G-EFF [MPa] |
|------|-------|-----|------|---------------|-----------------|--|--------------|---------------|------------------|----------------------|
| 1005 | 0.000 | 1 | 1018 | 0.609 | 2.070 | 0.183-0.059 | | 0.000 | 0.158 | 5203 |
| | | | | | | D[mm] w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | |
| | | | | | | 214.23 | 187.68 | | 11.52 | |
| | | | | | | T-zone h= 0.125 20.0 0.30 | | | | |
| | | | | | | ---- check for crack width passed with additional reinforcements | | | | |
| | 0.883 | 1 | 1017 | 0.902 | 2.872 | 0.163-0.079 | | 0.000 | 0.173 | 4096 |
| | | | 1017 | 0.621 | 2.151 | 0.188-0.054 | | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | |
| | | | | | | 220.21 | 176.67 | | 12.29 | |
| | | | | | | T-zone h= 0.125 20.0 0.30 | | | | |
| | | | | | | ---- check for crack width passed with additional reinforcements | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163-0.079 | | 0.000 | 0.173 | 4096 |
| | | | 1018 | 0.621 | 2.151 | 0.188-0.054 | | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | |
| | | | | | | 220.21 | 176.67 | | 12.29 | |
| | | | | | | T-zone h= 0.125 20.0 0.30 | | | | |
| | | | | | | ---- check for crack width passed with additional reinforcements | | | | |
| 1006 | 0.000 | 1 | 1017 | 0.902 | 2.872 | 0.163-0.079 | | 0.000 | 0.173 | 4096 |
| | | | 1017 | 0.621 | 2.151 | 0.188-0.054 | | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | |
| | | | | | | 220.21 | 176.67 | | 12.29 | |
| | | | | | | T-zone h= 0.125 20.0 0.30 | | | | |
| | | | | | | ---- check for crack width passed with additional reinforcements | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163-0.079 | | 0.000 | 0.173 | 4096 |
| | | | 1018 | 0.621 | 2.151 | 0.188-0.054 | | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | |
| | | | | | | 220.21 | 176.67 | | 12.29 | |
| | | | | | | T-zone h= 0.125 20.0 0.30 | | | | |
| | | | | | | ---- check for crack width passed with additional reinforcements | | | | |
| | 0.883 | 1 | 1017 | 0.897 | 2.877 | 0.165-0.077 | | 0.000 | 0.178 | 4203 |
| | | | 1017 | 0.629 | 2.188 | 0.189-0.052 | | 0.000 | 0.178 | 5526 |
| | | | | | | D[mm] w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | |
| | | | | | | 223.43 | 174.36 | | 12.47 | |
| | | | | | | T-zone h= 0.125 20.0 0.30 | | | | |
| | | | | | | ---- check for crack width passed with additional reinforcements | | | | |
| | | | 1018 | 0.897 | 2.877 | 0.165-0.077 | | 0.000 | 0.178 | 4203 |
| | | | 1018 | 0.629 | 2.188 | 0.189-0.052 | | 0.000 | 0.178 | 5526 |
| | | | | | | D[mm] w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | |
| | | | | | | 223.43 | 174.36 | | 12.47 | |
| | | | | | | T-zone h= 0.125 20.0 0.30 | | | | |
| | | | | | | ---- check for crack width passed with additional reinforcements | | | | |
| 1007 | 0.000 | 1 | 1017 | 0.897 | 2.877 | 0.165-0.077 | | 0.000 | 0.178 | 4203 |
| | | | 1017 | 0.629 | 2.188 | 0.189-0.052 | | 0.000 | 0.178 | 5526 |
| | | | | | | D[mm] w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | |
| | | | | | | 223.43 | 174.36 | | 12.47 | |
| | | | | | | T-zone h= 0.125 20.0 0.30 | | | | |
| | | | | | | ---- check for crack width passed with additional reinforcements | | | | |
| | | | 1018 | 0.897 | 2.877 | 0.165-0.077 | | 0.000 | 0.178 | 4203 |
| | | | 1018 | 0.629 | 2.188 | 0.189-0.052 | | 0.000 | 0.178 | 5526 |
| | | | | | | D[mm] w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | |
| | | | | | | 223.43 | 174.36 | | 12.47 | |
| | | | | | | T-zone h= 0.125 20.0 0.30 | | | | |
| | | | | | | ---- check for crack width passed with additional reinforcements | | | | |
| | 0.883 | 1 | 1017 | 0.902 | 2.872 | 0.163-0.079 | | 0.000 | 0.173 | 4096 |
| | | | 1017 | 0.621 | 2.151 | 0.188-0.054 | | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | |
| | | | | | | 220.21 | 176.67 | | 12.29 | |
| | | | | | | T-zone h= 0.125 20.0 0.30 | | | | |
| | | | | | | ---- check for crack width passed with additional reinforcements | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163-0.079 | | 0.000 | 0.173 | 4096 |
| | | | 1018 | 0.621 | 2.151 | 0.188-0.054 | | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | |
| | | | | | | 220.21 | 176.67 | | 12.29 | |
| | | | | | | T-zone h= 0.125 20.0 0.30 | | | | |
| | | | | | | ---- check for crack width passed with additional reinforcements | | | | |
| 1008 | 0.000 | 1 | 1017 | 0.902 | 2.872 | 0.163-0.079 | | 0.000 | 0.173 | 4096 |
| | | | 1017 | 0.621 | 2.151 | 0.188-0.054 | | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | |
| | | | | | | 220.21 | 176.67 | | 12.29 | |
| | | | | | | T-zone h= 0.125 20.0 0.30 | | | | |
| | | | | | | ---- check for crack width passed with additional reinforcements | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163-0.079 | | 0.000 | 0.173 | 4096 |
| | | | 1018 | 0.621 | 2.151 | 0.188-0.054 | | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | |
| | | | | | | 220.21 | 176.67 | | 12.29 | |
| | | | | | | T-zone h= 0.125 20.0 0.30 | | | | |
| | | | | | | ---- check for crack width passed with additional reinforcements | | | | |
| | 0.883 | 1 | 1017 | 0.918 | 2.856 | 0.155-0.087 | | 0.000 | 0.158 | 3771 |
| | | | 1017 | 0.609 | 2.070 | 0.183-0.059 | | 0.000 | 0.158 | 5203 |
| | | | | | | D[mm] w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | |
| | | | | | | 214.23 | 187.68 | | 11.52 | |
| | | | | | | T-zone h= 0.125 20.0 0.30 | | | | |
| | | | | | | ---- check for crack width passed with additional reinforcements | | | | |
| | | | 1018 | 0.918 | 2.856 | 0.155-0.087 | | 0.000 | 0.158 | 3771 |
| | | | 1018 | 0.609 | 2.070 | 0.183-0.059 | | 0.000 | 0.158 | 5203 |
| | | | | | | D[mm] w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | |
| | | | | | | 214.23 | 187.68 | | 11.52 | |
| | | | | | | T-zone h= 0.125 20.0 0.30 | | | | |
| | | | | | | ---- check for crack width passed with additional reinforcements | | | | |
| 1009 | 0.000 | 1 | 1017 | 0.918 | 2.856 | 0.155-0.087 | | 0.000 | 0.158 | 3771 |
| | | | 1017 | 0.609 | 2.070 | 0.183-0.059 | | 0.000 | 0.158 | 5203 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_SLS_DOKOI

Nonlinear Stresses

| Beam | x[m] | Nos | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/vi [MN] | Myi/Mzi [MNm] | Ey/Ez/G-EFF [MPa] |
|------|-------|-----|------|---------------|-----------------|----------------------------|--------------|---------------|------------------|----------------------|
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.23 | 187.68 | 11.52 |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | | | 1018 | 0.918 | 2.856 | 0.155-0.087 | | 0.000 | 0.158 | 3771 |
| | | | 1018 | 0.609 | 2.070 | 0.183-0.059 | | 0.000 | 0.158 | 5203 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.23 | 187.68 | 11.52 |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | 0.883 | | 1017 | 0.947 | 2.830 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| | | | 1017 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.19 | 221.57 | 9.65 |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | | | 1018 | 0.947 | 2.830 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| | | | 1018 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.19 | 221.57 | 9.65 |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| 1010 | 0.000 | | 1017 | 0.947 | 2.831 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| | | | 1017 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.19 | 221.57 | 9.65 |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | | | 1018 | 0.947 | 2.831 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| | | | 1018 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.19 | 221.57 | 9.65 |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | 0.883 | | 1017 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.12 | 297.53 | 7.06 |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | | | 1018 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| | | | 1018 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.12 | 297.53 | 7.06 |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| 1011 | 0.000 | | 1017 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.12 | 297.53 | 7.06 |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | | | 1018 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| | | | 1018 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.12 | 297.53 | 7.06 |

OPIΣTIKH MEΛETH/TEKNIKO TA/L=13.00
FASH-1_SLS_DOKOI

Nonlinear Stresses

| Beam | x[m] | NOS | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/Vi [MN] | Myi/Mzi [MNM] | Ey/Ez/G-EFF [MPa] |
|-------|-------|-----|------|---------------|-----------------|--|--------------|---------------|---------------------------|----------------------|
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | C-zone h= 0.477 | 20.0 | 0.00 | | 0.00 |
| | | | | | | ---- check for crack width passed with | | | given reinforcements | |
| | | | | | | T-zone h= 0.273 | 20.0 | 0.00 | | 0.00 |
| | | | | | | ---- check for crack width passed with | | | given reinforcements | |
| | | | 1018 | 0.000 | 0.000 | 0.000 | -- | 0.000 | 0.000 | 26663 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | C-zone h= 0.477 | 20.0 | 0.00 | | 0.00 |
| | | | | | | ---- check for crack width passed with | | | given reinforcements | |
| | | | | | | T-zone h= 0.273 | 20.0 | 0.00 | | 0.00 |
| | | | | | | ---- check for crack width passed with | | | given reinforcements | |
| 0.883 | | 1 | 1017 | 1.018 | 2.643 | 0.092-0.150 | | 0.000 | 0.054 | 1417 |
| | | | 1017 | 0.665 | 1.816 | 0.111-0.131 | | 0.000 | 0.054 | 2063 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.05 | 537.35 |
| | | | | | | ---- check for crack width passed with | | | additional reinforcements | |
| | | | 1018 | 1.018 | 2.643 | 0.092-0.150 | | 0.000 | 0.054 | 1417 |
| | | | 1018 | 0.665 | 1.816 | 0.111-0.131 | | 0.000 | 0.054 | 2063 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.05 | 537.35 |
| | | | | | | ---- check for crack width passed with | | | additional reinforcements | |
| 1014 | 0.000 | 1 | 1017 | 1.018 | 2.643 | 0.092-0.150 | | 0.000 | 0.054 | 1417 |
| | | | 1017 | 0.665 | 1.816 | 0.111-0.131 | | 0.000 | 0.054 | 2063 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.05 | 537.35 |
| | | | | | | ---- check for crack width passed with | | | additional reinforcements | |
| | | | 1018 | 1.018 | 2.643 | 0.092-0.150 | | 0.000 | 0.054 | 1417 |
| | | | 1018 | 0.665 | 1.816 | 0.111-0.131 | | 0.000 | 0.054 | 2063 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.05 | 537.35 |
| | | | | | | ---- check for crack width passed with | | | additional reinforcements | |
| 0.883 | | 1 | 1017 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.12 | 297.53 |
| | | | | | | ---- check for crack width passed with | | | additional reinforcements | |
| | | | 1018 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| | | | 1018 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.12 | 297.53 |
| | | | | | | ---- check for crack width passed with | | | additional reinforcements | |
| 1015 | 0.000 | 1 | 1017 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.12 | 297.53 |
| | | | | | | ---- check for crack width passed with | | | additional reinforcements | |
| | | | 1018 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| | | | 1018 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.12 | 297.53 |
| | | | | | | ---- check for crack width passed with | | | additional reinforcements | |
| 0.883 | | 1 | 1017 | 0.947 | 2.830 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| | | | 1017 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.19 | 221.57 |
| | | | | | | ---- check for crack width passed with | | | additional reinforcements | |
| | | | 1018 | 0.947 | 2.830 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| | | | 1018 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.19 | 221.57 |
| | | | | | | ---- check for crack width passed with | | | additional reinforcements | |
| 1016 | 0.000 | 1 | 1017 | 0.947 | 2.830 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| | | | 1017 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.19 | 221.57 |
| | | | | | | ---- check for crack width passed with | | | additional reinforcements | |
| | | | 1018 | 0.947 | 2.830 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| | | | 1018 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.19 | 221.57 |
| | | | | | | ---- check for crack width passed with | | | additional reinforcements | |
| 0.883 | | 1 | 1017 | 0.918 | 2.856 | 0.155-0.087 | | 0.000 | 0.158 | 3771 |
| | | | 1017 | 0.609 | 2.070 | 0.183-0.059 | | 0.000 | 0.158 | 5203 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.23 | 187.68 |
| | | | | | | ---- check for crack width passed with | | | additional reinforcements | |
| | | | 1018 | 0.918 | 2.856 | 0.155-0.087 | | 0.000 | 0.158 | 3771 |
| | | | 1018 | 0.609 | 2.070 | 0.183-0.059 | | 0.000 | 0.158 | 5203 |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_SLS_DOKOI

Nonlinear Stresses

| Beam | x[m] | NOS | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/Vi [MN] | Myi/Mzi [MNm] | Ey/Ez/G-EFF [MPa] |
|------|-------|-----|------|--|-----------------|----------|--------------|---------------|------------------|--------------------------|
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 1017 | 0.000 | 1 | 1017 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | | | 1017 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | | | 1018 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | 0.883 | 1 | 1017 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1017 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1018 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 1018 | 0.000 | 1 | 1017 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1017 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1018 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | 0.883 | 1 | 1017 | 0.897 | 2.877 | 0.165 | -0.077 | 0.000 | 0.178 | 4203 |
| | | | 1017 | 0.629 | 2.188 | 0.189 | -0.052 | 0.000 | 0.178 | 5526 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 223.43 174.36 12.47 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.897 | 2.877 | 0.165 | -0.077 | 0.000 | 0.178 | 4203 |
| | | | 1018 | 0.629 | 2.188 | 0.189 | -0.052 | 0.000 | 0.178 | 5526 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 223.43 174.36 12.47 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 1019 | 0.000 | 1 | 1017 | 0.897 | 2.877 | 0.165 | -0.077 | 0.000 | 0.178 | 4203 |
| | | | 1017 | 0.629 | 2.188 | 0.189 | -0.052 | 0.000 | 0.178 | 5526 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 223.43 174.36 12.47 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.897 | 2.877 | 0.165 | -0.077 | 0.000 | 0.178 | 4203 |
| | | | 1018 | 0.629 | 2.188 | 0.189 | -0.052 | 0.000 | 0.178 | 5526 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 223.43 174.36 12.47 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | 0.883 | 1 | 1017 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1017 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1018 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 1020 | 0.000 | 1 | 1017 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1017 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1018 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | 0.883 | 1 | 1017 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | | | 1017 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_SLS_DOKOI

Nonlinear Stresses

| Beam | x[m] | NOS | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/Vi [MN] | Myi/Mzi [MNm] | Ey/Ez/G-EFF [MPa] |
|--|--|-----|--|---------------|-----------------|-------------|--------------|---------------|------------------|----------------------|
| 1020 | 0.883 | 1 | 1018 | 0.918 | 2.856 | 0.155-0.087 | | 0.000 | 0.158 | 3771 |
| | | | 1018 | 0.609 | 2.070 | 0.183-0.059 | | 0.000 | 0.158 | 5203 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | | |
| ---- check for crack width passed with additional reinforcements | | | | | | | | | | |
| 1021 | 0.000 | 1 | 1017 | 0.918 | 2.856 | 0.155-0.087 | | 0.000 | 0.158 | 3771 |
| | | | 1017 | 0.609 | 2.070 | 0.183-0.059 | | 0.000 | 0.158 | 5203 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.918 | 2.856 | 0.155-0.087 | | 0.000 | 0.158 | 3771 |
| | | | 1018 | 0.609 | 2.070 | 0.183-0.059 | | 0.000 | 0.158 | 5203 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | | | | |
| | ---- check for crack width passed with additional reinforcements | | | | | | | | | |
| | 0.883 | 1 | 1017 | 0.947 | 2.830 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| | | | 1017 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.947 | 2.830 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| 1018 | | | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 | |
| ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | | | | |
| T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | | | | |
| ---- check for crack width passed with additional reinforcements | | | | | | | | | | |
| 1022 | 0.000 | 1 | 1017 | 0.947 | 2.830 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| | | | 1017 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.947 | 2.830 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| | | | 1018 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | | | |
| | ---- check for crack width passed with additional reinforcements | | | | | | | | | |
| | 0.883 | 1 | 1017 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| 1018 | | | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 | |
| ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | | | | |
| T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | | | | |
| ---- check for crack width passed with additional reinforcements | | | | | | | | | | |
| 1023 | 0.000 | 1 | 1017 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| | | | 1018 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | | | |
| | ---- check for crack width passed with additional reinforcements | | | | | | | | | |
| | 0.883 | 1 | 1017 | 1.018 | 2.643 | 0.092-0.150 | | 0.000 | 0.054 | 1417 |
| | | | 1017 | 0.665 | 1.816 | 0.111-0.131 | | 0.000 | 0.054 | 2063 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.05 537.35 3.81 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 1.018 | 2.643 | 0.092-0.150 | | 0.000 | 0.054 | 1417 |
| 1018 | | | 0.665 | 1.816 | 0.111-0.131 | | 0.000 | 0.054 | 2063 | |
| ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | | | | |
| T-zone h= 0.125 20.0 0.30 214.05 537.35 3.81 | | | | | | | | | | |
| ---- check for crack width passed with additional reinforcements | | | | | | | | | | |
| 1024 | 0.000 | 1 | 1017 | 1.018 | 2.643 | 0.092-0.150 | | 0.000 | 0.054 | 1417 |
| | | | 1017 | 0.665 | 1.816 | 0.111-0.131 | | 0.000 | 0.054 | 2063 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.05 538.88 3.81 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 1.018 | 2.643 | 0.092-0.150 | | 0.000 | 0.054 | 1417 |
| | | | 1018 | 0.665 | 1.816 | 0.111-0.131 | | 0.000 | 0.054 | 2063 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | T-zone h= 0.125 20.0 0.30 214.05 538.88 3.81 | | | | | | | | | |
| | ---- check for crack width passed with additional reinforcements | | | | | | | | | |
| | 0.883 | 1 | 1017 | 0.000 | 0.000 | 0.477 -.- | | 0.000 | 0.000 | 26663 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_SLS_DOKOI

Nonlinear Stresses

| Beam | Linear Str. Stress | x[m] | NoS | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/Vi [MN] | Myi/Mzi [Mmm] | Ey/Ez/G-EFF [MPa] |
|------|--------------------|------|------|----------------------------|---------------------------------------|-----------------|-------------|--------------|---------------|------------------|----------------------|
| 1025 | 0.000 | 1 | 1017 | T-zone h= 0.273 | 0.000 | 0.000 | 0.000 | 0.00 | 0.00 | 0.000 | 0.00 |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | | ---- Check for crack width | passed with given reinforcements | | | | | | |
| | | | | 0.000 | 0.000 | 0.477 | -- | 0.000 | 0.000 | 26663 | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | 1018 | T-zone h= 0.273 | 0.000 | 0.000 | 0.000 | 0.00 | 0.000 | 0.00 | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | | ---- Check for crack width | passed with given reinforcements | | | | | | |
| | | | | 0.000 | 0.000 | 0.000 | -- | 0.000 | 0.000 | 26663 | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| 1026 | 0.000 | 1 | 1017 | C-zone h= 0.477 | 0.000 | 0.000 | 0.000 | 0.00 | 0.000 | 0.00 | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | | ---- Check for crack width | passed with given reinforcements | | | | | | |
| | | | | T-zone h= 0.273 | 0.000 | 0.000 | 0.000 | 0.00 | 0.000 | 0.00 | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | 1018 | ---- Check for crack width | passed with given reinforcements | | | | | | |
| | | | | 0.000 | 0.000 | 0.000 | -- | 0.000 | 0.000 | 26663 | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | | C-zone h= 0.477 | 0.000 | 0.000 | 0.000 | 0.00 | 0.000 | 0.00 | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| 1027 | 0.000 | 1 | 1017 | T-zone h= 0.273 | 0.000 | 0.000 | 0.000 | 0.00 | 0.000 | 0.00 | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | | ---- Check for crack width | passed with given reinforcements | | | | | | |
| | | | | 1.018 | 2.643 | 0.092-0.150 | 0.000 | 0.054 | 1417 | | |
| | | | | 1017 | 0.665 | 1.816 | 0.111-0.131 | 0.000 | 0.054 | 2063 | |
| | | | 1018 | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.05 | 537.35 | 3.81 | | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | | ---- Check for crack width | passed with additional reinforcements | | | | | | |
| | | | | 1.018 | 2.643 | 0.092-0.150 | 0.000 | 0.054 | 1417 | | |
| 1028 | 0.000 | 1 | 1017 | 1018 | 0.665 | 1.816 | 0.111-0.131 | 0.000 | 0.054 | 2063 | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.05 | 537.35 | 3.81 | | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | | ---- Check for crack width | passed with additional reinforcements | | | | | | |
| | | | 1018 | 1017 | 0.984 | 2.777 | 0.122-0.120 | 0.000 | 0.099 | 2441 | |
| | | | | 1017 | 0.638 | 1.935 | 0.147-0.095 | 0.000 | 0.099 | 3503 | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.12 | 297.53 | 7.06 | | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| 1029 | 0.883 | 1 | 1017 | 1018 | 0.984 | 2.777 | 0.122-0.120 | 0.000 | 0.099 | 2441 | |
| | | | | 1018 | 0.638 | 1.935 | 0.147-0.095 | 0.000 | 0.099 | 3503 | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.12 | 297.53 | 7.06 | | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | 1018 | 1017 | 0.947 | 2.830 | 0.142-0.100 | 0.000 | 0.133 | 3220 | |
| | | | | 1017 | 0.621 | 2.016 | 0.169-0.073 | 0.000 | 0.133 | 4521 | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.19 | 221.57 | 9.65 | | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| 1030 | 0.883 | 1 | 1017 | 1018 | 0.947 | 2.830 | 0.142-0.100 | 0.000 | 0.133 | 3220 | |
| | | | | 1018 | 0.621 | 2.016 | 0.169-0.073 | 0.000 | 0.133 | 4521 | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.19 | 221.57 | 9.65 | | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | 1018 | 1017 | 0.947 | 2.830 | 0.142-0.100 | 0.000 | 0.133 | 3220 | |
| | | | | 1018 | 0.621 | 2.016 | 0.169-0.073 | 0.000 | 0.133 | 4521 | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |
| | | | | T-zone h= 0.125 | 20.0 | 0.30 | 214.19 | 221.57 | 9.65 | | |
| | | | | ----- | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] | 0.00 | |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_SLS_DOKOI

Nonlinear Stresses

| Beam | x[m] | NOS | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/Vi [MN] | Myi/Mzi [MNm] | Ey/Ez/G-EFF [MPa] |
|-------|-------|-----|------|--|-----------------|-------------|--------------|---------------|------------------|--------------------------|
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 0.883 | | 1 | 1017 | 0.918 | 2.856 | 0.155-0.087 | 0.000 | 0.158 | 3771 | |
| | | | 1017 | 0.609 | 2.070 | 0.183-0.059 | 0.000 | 0.158 | 5203 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.918 | 2.856 | 0.155-0.087 | 0.000 | 0.158 | 3771 | |
| | | | 1018 | 0.609 | 2.070 | 0.183-0.059 | 0.000 | 0.158 | 5203 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 1029 | 0.000 | 1 | 1017 | 0.918 | 2.856 | 0.155-0.087 | 0.000 | 0.158 | 3771 | |
| | | | 1017 | 0.609 | 2.070 | 0.183-0.059 | 0.000 | 0.158 | 5203 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.918 | 2.856 | 0.155-0.087 | 0.000 | 0.158 | 3771 | |
| | | | 1018 | 0.609 | 2.070 | 0.183-0.059 | 0.000 | 0.158 | 5203 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 0.883 | | 1 | 1017 | 0.902 | 2.872 | 0.163-0.079 | 0.000 | 0.173 | 4096 | |
| | | | 1017 | 0.621 | 2.151 | 0.188-0.054 | 0.000 | 0.173 | 5468 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163-0.079 | 0.000 | 0.173 | 4096 | |
| | | | 1018 | 0.621 | 2.151 | 0.188-0.054 | 0.000 | 0.173 | 5468 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 1030 | 0.000 | 1 | 1017 | 0.902 | 2.872 | 0.163-0.079 | 0.000 | 0.173 | 4096 | |
| | | | 1017 | 0.621 | 2.151 | 0.188-0.054 | 0.000 | 0.173 | 5468 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163-0.079 | 0.000 | 0.173 | 4096 | |
| | | | 1018 | 0.621 | 2.151 | 0.188-0.054 | 0.000 | 0.173 | 5468 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 0.883 | | 1 | 1017 | 0.897 | 2.877 | 0.165-0.077 | 0.000 | 0.178 | 4203 | |
| | | | 1017 | 0.629 | 2.188 | 0.189-0.052 | 0.000 | 0.178 | 5526 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 223.43 174.36 12.47 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.897 | 2.877 | 0.165-0.077 | 0.000 | 0.178 | 4203 | |
| | | | 1018 | 0.629 | 2.188 | 0.189-0.052 | 0.000 | 0.178 | 5526 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 223.43 174.36 12.47 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 1031 | 0.000 | 1 | 1017 | 0.897 | 2.877 | 0.165-0.077 | 0.000 | 0.178 | 4203 | |
| | | | 1017 | 0.629 | 2.188 | 0.189-0.052 | 0.000 | 0.178 | 5526 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 223.43 174.36 12.47 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.897 | 2.877 | 0.165-0.077 | 0.000 | 0.178 | 4203 | |
| | | | 1018 | 0.629 | 2.188 | 0.189-0.052 | 0.000 | 0.178 | 5526 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 223.43 174.36 12.47 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 0.883 | | 1 | 1017 | 0.902 | 2.872 | 0.163-0.079 | 0.000 | 0.173 | 4096 | |
| | | | 1017 | 0.621 | 2.151 | 0.188-0.054 | 0.000 | 0.173 | 5468 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163-0.079 | 0.000 | 0.173 | 4096 | |
| | | | 1018 | 0.621 | 2.151 | 0.188-0.054 | 0.000 | 0.173 | 5468 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 1032 | 0.000 | 1 | 1017 | 0.902 | 2.872 | 0.163-0.079 | 0.000 | 0.173 | 4096 | |
| | | | 1017 | 0.621 | 2.151 | 0.188-0.054 | 0.000 | 0.173 | 5468 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_SLS_DOKOI

Nonlinear Stresses

| Beam | x[m] | Nos | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/Vi [MN] | Myi/Mzi [MNm] | Ey/Ez/G-EFF [MPa] |
|------|-------|-----|--|---------------|-----------------|----------|--------------|---------------|------------------|----------------------|
| 1032 | 0.000 | 1 | 1018 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1018 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1017 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | 0.883 | 1 | 1017 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | | | 1018 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| 1033 | 0.000 | 1 | 1017 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | | | 1017 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | 0.883 | 1 | 1017 | 0.947 | 2.830 | 0.142 | -0.100 | 0.000 | 0.133 | 3220 |
| | | | 1017 | 0.621 | 2.016 | 0.169 | -0.073 | 0.000 | 0.133 | 4521 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.947 | 2.830 | 0.142 | -0.100 | 0.000 | 0.133 | 3220 |
| 1034 | 0.000 | 1 | 1017 | 0.947 | 2.830 | 0.142 | -0.100 | 0.000 | 0.133 | 3220 |
| | | | 1017 | 0.621 | 2.016 | 0.169 | -0.073 | 0.000 | 0.133 | 4521 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.947 | 2.830 | 0.142 | -0.100 | 0.000 | 0.133 | 3220 |
| | 0.883 | 1 | 1017 | 0.984 | 2.777 | 0.122 | -0.120 | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147 | -0.095 | 0.000 | 0.099 | 3503 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.984 | 2.777 | 0.122 | -0.120 | 0.000 | 0.099 | 2441 |
| 1035 | 0.000 | 1 | 1017 | 0.984 | 2.777 | 0.122 | -0.120 | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147 | -0.095 | 0.000 | 0.099 | 3503 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.984 | 2.777 | 0.122 | -0.120 | 0.000 | 0.099 | 2441 |
| | 0.883 | 1 | 1017 | 1.018 | 2.643 | 0.092 | -0.150 | 0.000 | 0.054 | 1417 |
| | | | 1017 | 0.665 | 1.816 | 0.111 | -0.131 | 0.000 | 0.054 | 2063 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.05 537.35 3.81 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 1.018 | 2.643 | 0.092 | -0.150 | 0.000 | 0.054 | 1417 |
| 1036 | 0.000 | 1 | 1017 | 1.018 | 2.643 | 0.092 | -0.150 | 0.000 | 0.054 | 1417 |
| | | | 1017 | 0.665 | 1.816 | 0.111 | -0.131 | 0.000 | 0.054 | 2063 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.05 537.35 3.81 | | | | | | | |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_SLS_DOKOI

Nonlinear Stresses

| Beam | x[m] | NOS | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/Vi [MN] | Myi/Mzi [MNm] | Ey/Ez/G-EFF [MPa] |
|------|-------|-----|------|---------------|-----------------|----------------------------|--------------|---------------|------------------|----------------------|
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.05 | 538.88 | 3.81 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | | | 1018 | 1.018 | 2.643 | 0.092-0.150 | | 0.000 | 0.054 | 1417 |
| | | | 1018 | 0.665 | 1.816 | 0.111-0.131 | | 0.000 | 0.054 | 2063 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.05 | 538.88 | 3.81 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | 0.883 | 1 | 1017 | 0.000 | 0.000 | 0.477 | -- | 0.000 | 0.000 | 26663 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.273 | 20.0 | 0.00 | | 0.00 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | given | reinforcements | |
| | | | 1018 | 0.000 | 0.000 | 0.477 | -- | 0.000 | 0.000 | 26663 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.273 | 20.0 | 0.00 | | 0.00 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | given | reinforcements | |
| 1037 | 0.000 | 1 | 1017 | 0.000 | 0.000 | 0.750 | -- | 0.000 | 0.000 | 26663 |
| | | | 1018 | 0.000 | 0.000 | 0.750 | -- | 0.000 | 0.000 | 26663 |
| | 0.883 | 1 | 1017 | 1.018 | 2.643 | 0.092-0.150 | | 0.000 | 0.054 | 1417 |
| | | | 1017 | 0.665 | 1.816 | 0.111-0.131 | | 0.000 | 0.054 | 2063 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.05 | 537.35 | 3.81 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | | | 1018 | 1.018 | 2.643 | 0.092-0.150 | | 0.000 | 0.054 | 1417 |
| | | | 1018 | 0.665 | 1.816 | 0.111-0.131 | | 0.000 | 0.054 | 2063 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.05 | 537.35 | 3.81 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| 1038 | 0.000 | 1 | 1017 | 1.018 | 2.643 | 0.092-0.150 | | 0.000 | 0.054 | 1417 |
| | | | 1017 | 0.665 | 1.816 | 0.111-0.131 | | 0.000 | 0.054 | 2063 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.05 | 537.35 | 3.81 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | | | 1018 | 1.018 | 2.643 | 0.092-0.150 | | 0.000 | 0.054 | 1417 |
| | | | 1018 | 0.665 | 1.816 | 0.111-0.131 | | 0.000 | 0.054 | 2063 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.05 | 537.35 | 3.81 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | 0.883 | 1 | 1017 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.12 | 297.53 | 7.06 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | | | 1018 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| | | | 1018 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.12 | 297.53 | 7.06 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| 1039 | 0.000 | 1 | 1017 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.12 | 297.53 | 7.06 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | | | 1018 | 0.984 | 2.777 | 0.122-0.120 | | 0.000 | 0.099 | 2441 |
| | | | 1018 | 0.638 | 1.935 | 0.147-0.095 | | 0.000 | 0.099 | 3503 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.12 | 297.53 | 7.06 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | 0.883 | 1 | 1017 | 0.947 | 2.831 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| | | | 1017 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.19 | 221.57 | 9.65 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | | | 1018 | 0.947 | 2.831 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| | | | 1018 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.19 | 221.57 | 9.65 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| 1040 | 0.000 | 1 | 1017 | 0.947 | 2.831 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| | | | 1017 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.19 | 221.57 | 9.65 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |
| | | | 1018 | 0.947 | 2.831 | 0.142-0.100 | | 0.000 | 0.133 | 3220 |
| | | | 1018 | 0.621 | 2.016 | 0.169-0.073 | | 0.000 | 0.133 | 4521 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | | | T-zone h= 0.125 | 20.0 0.30 | 214.19 | 221.57 | 9.65 |
| | | | | | | ---- | | | | |
| | | | | | | ---- check for crack width | passed with | additional | reinforcements | |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_SLS_DOKOI

Nonlinear Stresses

| Beam | x[m] | NOS | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/Vi [MN] | Myi/Mzi [MNM] | Ey/Ez/G-EFF [MPa] |
|------|-------|-----|--|---------------|-----------------|----------|--------------|---------------|------------------|----------------------|
| 1040 | 0.883 | 1 | 1017 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | | | 1017 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | | | 1018 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| 1041 | 0.000 | 1 | 1017 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | | | 1017 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | | | 1018 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| 1041 | 0.883 | 1 | 1017 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1017 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1018 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| 1042 | 0.000 | 1 | 1017 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1017 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1018 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| 1042 | 0.883 | 1 | 1017 | 0.897 | 2.877 | 0.165 | -0.077 | 0.000 | 0.178 | 4203 |
| | | | 1017 | 0.629 | 2.188 | 0.189 | -0.052 | 0.000 | 0.178 | 5526 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 223.43 174.36 12.47 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.897 | 2.877 | 0.165 | -0.077 | 0.000 | 0.178 | 4203 |
| | | | 1018 | 0.629 | 2.188 | 0.189 | -0.052 | 0.000 | 0.178 | 5526 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 223.43 174.36 12.47 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| 1043 | 0.000 | 1 | 1017 | 0.897 | 2.877 | 0.165 | -0.077 | 0.000 | 0.178 | 4203 |
| | | | 1017 | 0.629 | 2.188 | 0.189 | -0.052 | 0.000 | 0.178 | 5526 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 223.43 174.36 12.47 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.897 | 2.877 | 0.165 | -0.077 | 0.000 | 0.178 | 4203 |
| | | | 1018 | 0.629 | 2.188 | 0.189 | -0.052 | 0.000 | 0.178 | 5526 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 223.43 174.36 12.47 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| 1043 | 0.883 | 1 | 1017 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1017 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1018 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| 1044 | 0.000 | 1 | 1017 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1017 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163 | -0.079 | 0.000 | 0.173 | 4096 |
| | | | 1018 | 0.621 | 2.151 | 0.188 | -0.054 | 0.000 | 0.173 | 5468 |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_SLS_DOKOI

Nonlinear Stresses

| Beam | x[m] | Nos | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/Vi [MN] | Myi/Mzi [MNm] | Ey/Ez/G-EFF [MPa] |
|-------|-------|-----|------|--|-----------------|-------------|--------------|---------------|------------------|----------------------|
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm2] |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 0.883 | | 1 | 1017 | 0.918 | 2.856 | 0.155-0.087 | 0.000 | 0.158 | 3771 | |
| | | | 1017 | 0.609 | 2.070 | 0.183-0.059 | 0.000 | 0.158 | 5203 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.918 | 2.856 | 0.155-0.087 | 0.000 | 0.158 | 3771 | |
| | | | 1018 | 0.609 | 2.070 | 0.183-0.059 | 0.000 | 0.158 | 5203 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 1045 | 0.000 | 1 | 1017 | 0.918 | 2.856 | 0.155-0.087 | 0.000 | 0.158 | 3771 | |
| | | | 1017 | 0.609 | 2.070 | 0.183-0.059 | 0.000 | 0.158 | 5203 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.918 | 2.856 | 0.155-0.087 | 0.000 | 0.158 | 3771 | |
| | | | 1018 | 0.609 | 2.070 | 0.183-0.059 | 0.000 | 0.158 | 5203 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 0.883 | | 1 | 1017 | 0.947 | 2.831 | 0.142-0.100 | 0.000 | 0.133 | 3220 | |
| | | | 1017 | 0.621 | 2.016 | 0.169-0.073 | 0.000 | 0.133 | 4521 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.947 | 2.831 | 0.142-0.100 | 0.000 | 0.133 | 3220 | |
| | | | 1018 | 0.621 | 2.016 | 0.169-0.073 | 0.000 | 0.133 | 4521 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 1046 | 0.000 | 1 | 1017 | 0.947 | 2.831 | 0.142-0.100 | 0.000 | 0.133 | 3220 | |
| | | | 1017 | 0.621 | 2.016 | 0.169-0.073 | 0.000 | 0.133 | 4521 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.947 | 2.831 | 0.142-0.100 | 0.000 | 0.133 | 3220 | |
| | | | 1018 | 0.621 | 2.016 | 0.169-0.073 | 0.000 | 0.133 | 4521 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 0.883 | | 1 | 1017 | 0.984 | 2.777 | 0.122-0.120 | 0.000 | 0.099 | 2441 | |
| | | | 1017 | 0.638 | 1.935 | 0.147-0.095 | 0.000 | 0.099 | 3503 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.984 | 2.777 | 0.122-0.120 | 0.000 | 0.099 | 2441 | |
| | | | 1018 | 0.638 | 1.935 | 0.147-0.095 | 0.000 | 0.099 | 3503 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 1047 | 0.000 | 1 | 1017 | 0.984 | 2.777 | 0.122-0.120 | 0.000 | 0.099 | 2441 | |
| | | | 1017 | 0.638 | 1.935 | 0.147-0.095 | 0.000 | 0.099 | 3503 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.984 | 2.777 | 0.122-0.120 | 0.000 | 0.099 | 2441 | |
| | | | 1018 | 0.638 | 1.935 | 0.147-0.095 | 0.000 | 0.099 | 3503 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 0.883 | | 1 | 1017 | 1.018 | 2.643 | 0.092-0.150 | 0.000 | 0.054 | 1417 | |
| | | | 1017 | 0.665 | 1.816 | 0.111-0.131 | 0.000 | 0.054 | 2063 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.05 537.35 3.81 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 1.018 | 2.643 | 0.092-0.150 | 0.000 | 0.054 | 1417 | |
| | | | 1018 | 0.665 | 1.816 | 0.111-0.131 | 0.000 | 0.054 | 2063 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.05 537.35 3.81 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 1048 | 0.000 | 1 | 1017 | 1.018 | 2.643 | 0.092-0.150 | 0.000 | 0.054 | 1417 | |
| | | | 1017 | 0.665 | 1.816 | 0.111-0.131 | 0.000 | 0.054 | 2063 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.05 538.88 3.81 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_SLS_DOKOI

Nonlinear Stresses

| Beam | x[m] | Nos | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/Vi [MN] | Myi/Mzi [MNm] | Ey/Ez/G-EFF [MPa] |
|------|-------|-----|--|---------------|-----------------|----------|--------------|---------------|------------------|----------------------|
| 1048 | 0.000 | 1 | 1018 | 1.018 | 2.643 | 0.092 | -0.150 | 0.000 | 0.054 | 1417 |
| | | | 1018 | 0.665 | 1.816 | 0.111 | -0.131 | 0.000 | 0.054 | 2063 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.05 538.88 3.81 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | 0.883 | 1 | 1017 | 0.000 | 0.000 | 0.273 | -- | 0.000 | 0.000 | 26663 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.477 20.0 0.00 0.00 0.00 | | | | | | | |
| | | | ---- check for crack width passed with given reinforcements | | | | | | | |
| | | | 1018 | 0.000 | 0.000 | 0.273 | -- | 0.000 | 0.000 | 26663 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| 1049 | 0.000 | 1 | 1017 | 0.000 | 0.000 | 0.750 | -- | 0.000 | 0.000 | 26663 |
| | | | 1018 | 0.000 | 0.000 | 0.750 | -- | 0.000 | 0.000 | 26663 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.05 537.35 3.81 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | 0.883 | 1 | 1017 | 1.018 | 2.643 | 0.092 | -0.150 | 0.000 | 0.054 | 1417 |
| | | | 1017 | 0.665 | 1.816 | 0.111 | -0.131 | 0.000 | 0.054 | 2063 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.05 537.35 3.81 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| 1050 | 0.000 | 1 | 1017 | 1.018 | 2.643 | 0.092 | -0.150 | 0.000 | 0.054 | 1417 |
| | | | 1017 | 0.665 | 1.816 | 0.111 | -0.131 | 0.000 | 0.054 | 2063 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.05 537.35 3.81 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | 0.883 | 1 | 1017 | 0.984 | 2.777 | 0.122 | -0.120 | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147 | -0.095 | 0.000 | 0.099 | 3503 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| 1051 | 0.000 | 1 | 1017 | 0.984 | 2.777 | 0.122 | -0.120 | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147 | -0.095 | 0.000 | 0.099 | 3503 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | 0.883 | 1 | 1017 | 0.947 | 2.831 | 0.142 | -0.100 | 0.000 | 0.133 | 3220 |
| | | | 1017 | 0.621 | 2.016 | 0.169 | -0.073 | 0.000 | 0.133 | 4521 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| 1052 | 0.000 | 1 | 1017 | 0.947 | 2.830 | 0.142 | -0.100 | 0.000 | 0.133 | 3220 |
| | | | 1017 | 0.621 | 2.016 | 0.169 | -0.073 | 0.000 | 0.133 | 4521 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | 0.883 | 1 | 1017 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | | | 1017 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |

OPIΣTIKH MEΛETH/TECHNIKO TA/L=13.00
FASH-1_SLS_DOKOI

Nonlinear Stresses

| Beam | x[m] | NOS | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/Vi [MPa] | Myi/Mzi [MNm] | Ey/Ez/G-EFF [MPa] |
|------|------|-----|------|--|-----------------|-------------|--------------|----------------|------------------|--------------------------|
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.918 | 2.856 | 0.155-0.087 | 0.000 | 0.158 | 3771 | |
| | | | 1018 | 0.609 | 2.070 | 0.183-0.059 | 0.000 | 0.158 | 5203 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1017 | 0.918 | 2.856 | 0.155-0.087 | 0.000 | 0.158 | 3771 | |
| | | | 1017 | 0.609 | 2.070 | 0.183-0.059 | 0.000 | 0.158 | 5203 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.918 | 2.856 | 0.155-0.087 | 0.000 | 0.158 | 3771 | |
| | | | 1018 | 0.609 | 2.070 | 0.183-0.059 | 0.000 | 0.158 | 5203 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1017 | 0.902 | 2.872 | 0.163-0.079 | 0.000 | 0.173 | 4096 | |
| | | | 1017 | 0.621 | 2.151 | 0.188-0.054 | 0.000 | 0.173 | 5468 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163-0.079 | 0.000 | 0.173 | 4096 | |
| | | | 1018 | 0.621 | 2.151 | 0.188-0.054 | 0.000 | 0.173 | 5468 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1017 | 0.902 | 2.872 | 0.163-0.079 | 0.000 | 0.173 | 4096 | |
| | | | 1017 | 0.621 | 2.151 | 0.188-0.054 | 0.000 | 0.173 | 5468 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1017 | 0.897 | 2.877 | 0.165-0.077 | 0.000 | 0.178 | 4203 | |
| | | | 1017 | 0.629 | 2.188 | 0.189-0.052 | 0.000 | 0.178 | 5526 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 223.43 174.36 12.47 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.897 | 2.877 | 0.165-0.077 | 0.000 | 0.178 | 4203 | |
| | | | 1018 | 0.629 | 2.188 | 0.189-0.052 | 0.000 | 0.178 | 5526 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 223.43 174.36 12.47 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1017 | 0.897 | 2.877 | 0.165-0.077 | 0.000 | 0.178 | 4203 | |
| | | | 1017 | 0.629 | 2.188 | 0.189-0.052 | 0.000 | 0.178 | 5526 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 223.43 174.36 12.47 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1017 | 0.902 | 2.872 | 0.163-0.079 | 0.000 | 0.173 | 4096 | |
| | | | 1017 | 0.621 | 2.151 | 0.188-0.054 | 0.000 | 0.173 | 5468 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163-0.079 | 0.000 | 0.173 | 4096 | |
| | | | 1018 | 0.621 | 2.151 | 0.188-0.054 | 0.000 | 0.173 | 5468 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1017 | 0.902 | 2.872 | 0.163-0.079 | 0.000 | 0.173 | 4096 | |
| | | | 1017 | 0.621 | 2.151 | 0.188-0.054 | 0.000 | 0.173 | 5468 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| | | | 1018 | 0.902 | 2.872 | 0.163-0.079 | 0.000 | 0.173 | 4096 | |
| | | | 1018 | 0.621 | 2.151 | 0.188-0.054 | 0.000 | 0.173 | 5468 | |
| | | | | D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²] | | | | | | |
| | | | | T-zone h= 0.125 20.0 0.30 220.21 176.67 12.29 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_SLS_DOKOI

Nonlinear Stresses

| Beam | x[m] | NOS | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/Vi [MN] | Myi/Mzi [MNm] | Ey/Ez/G-EFF [MPa] |
|------|-------|-----|--|---------------|-----------------|----------|--------------|---------------|------------------|----------------------|
| 1056 | 0.883 | 1 | 1017 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | | | 1017 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | | | 1018 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1017 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | | | 1017 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| 1057 | 0.000 | 1 | 1017 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | | | 1017 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.918 | 2.856 | 0.155 | -0.087 | 0.000 | 0.158 | 3771 |
| | | | 1018 | 0.609 | 2.070 | 0.183 | -0.059 | 0.000 | 0.158 | 5203 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.23 187.68 11.52 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1017 | 0.947 | 2.831 | 0.142 | -0.100 | 0.000 | 0.133 | 3220 |
| | | | 1017 | 0.621 | 2.016 | 0.169 | -0.073 | 0.000 | 0.133 | 4521 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.947 | 2.831 | 0.142 | -0.100 | 0.000 | 0.133 | 3220 |
| | | | 1018 | 0.621 | 2.016 | 0.169 | -0.073 | 0.000 | 0.133 | 4521 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | 0.883 | 1 | 1017 | 0.947 | 2.831 | 0.142 | -0.100 | 0.000 | 0.133 | 3220 |
| | | | 1017 | 0.621 | 2.016 | 0.169 | -0.073 | 0.000 | 0.133 | 4521 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.947 | 2.831 | 0.142 | -0.100 | 0.000 | 0.133 | 3220 |
| | | | 1018 | 0.621 | 2.016 | 0.169 | -0.073 | 0.000 | 0.133 | 4521 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1017 | 0.984 | 2.777 | 0.122 | -0.120 | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147 | -0.095 | 0.000 | 0.099 | 3503 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | |
| 1058 | 0.000 | 1 | 1017 | 0.947 | 2.831 | 0.142 | -0.100 | 0.000 | 0.133 | 3220 |
| | | | 1017 | 0.621 | 2.016 | 0.169 | -0.073 | 0.000 | 0.133 | 4521 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.947 | 2.831 | 0.142 | -0.100 | 0.000 | 0.133 | 3220 |
| | | | 1018 | 0.621 | 2.016 | 0.169 | -0.073 | 0.000 | 0.133 | 4521 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.19 221.57 9.65 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1017 | 0.984 | 2.777 | 0.122 | -0.120 | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147 | -0.095 | 0.000 | 0.099 | 3503 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | 0.883 | 1 | 1017 | 0.984 | 2.777 | 0.122 | -0.120 | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147 | -0.095 | 0.000 | 0.099 | 3503 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.984 | 2.777 | 0.122 | -0.120 | 0.000 | 0.099 | 2441 |
| | | | 1018 | 0.638 | 1.935 | 0.147 | -0.095 | 0.000 | 0.099 | 3503 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1017 | 1.018 | 2.643 | 0.092 | -0.150 | 0.000 | 0.054 | 1417 |
| | | | 1017 | 0.665 | 1.816 | 0.111 | -0.131 | 0.000 | 0.054 | 2063 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.05 537.35 3.81 | | | | | | | |
| 1059 | 0.000 | 1 | 1017 | 0.984 | 2.777 | 0.122 | -0.120 | 0.000 | 0.099 | 2441 |
| | | | 1017 | 0.638 | 1.935 | 0.147 | -0.095 | 0.000 | 0.099 | 3503 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 0.984 | 2.777 | 0.122 | -0.120 | 0.000 | 0.099 | 2441 |
| | | | 1018 | 0.638 | 1.935 | 0.147 | -0.095 | 0.000 | 0.099 | 3503 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.12 297.53 7.06 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1017 | 1.018 | 2.643 | 0.092 | -0.150 | 0.000 | 0.054 | 1417 |
| | | | 1017 | 0.665 | 1.816 | 0.111 | -0.131 | 0.000 | 0.054 | 2063 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.05 537.35 3.81 | | | | | | | |
| 1060 | 0.000 | 1 | 1017 | 1.018 | 2.643 | 0.092 | -0.150 | 0.000 | 0.054 | 1417 |
| | | | 1017 | 0.665 | 1.816 | 0.111 | -0.131 | 0.000 | 0.054 | 2063 |
| | | | ----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2] | | | | | | | |
| | | | T-zone h= 0.125 20.0 0.30 214.05 538.88 3.81 | | | | | | | |
| | | | ---- check for crack width passed with additional reinforcements | | | | | | | |
| | | | 1018 | 1.018 | 2.643 | 0.092 | -0.150 | 0.000 | 0.054 | 1417 |
| | | | 1018 | 0.665 | 1.816 | 0.111 | -0.131 | 0.000 | 0.054 | 2063 |

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Nonlinear Stresses

| Beam | x[m] | NOS | LC | e-o [o/oo] | ky/kz [1/km] | x [m] | zn/yn [m] | Ni/Vi [MN] | Myi/Mzi [MNm] | Ey/Ez/G-EFF [MPa] |
|-------|------|------|----|--|-----------------|----------|--------------|---------------|------------------|--------------------------|
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.125 20.0 0.30 214.05 538.88 3.81 | | | | | | |
| | | | | ---- Check for crack width passed with additional reinforcements | | | | | | |
| 0.883 | 1 | 1017 | | 0.000 | 0.000 | 0.273 | -. - | 0.000 | 0.000 | 26663 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.477 20.0 0.00 0.00 | | | | | | |
| | | | | ---- Check for crack width passed with given reinforcements | | | | | | |
| | | 1018 | | 0.000 | 0.000 | 0.273 | -. - | 0.000 | 0.000 | 26663 |
| | | | | | | D[mm] | w[mm] | sig[MPa] | ssr[MPa] | As-eff[cm ²] |
| | | | | T-zone h= 0.477 20.0 0.00 0.00 | | | | | | |
| | | | | ---- Check for crack width passed with given reinforcements | | | | | | |

Parameters for nonlinear stress / Crackwidth DIN 1045-1 (neu)

| MNO | design width [mm] | bond [mm] | load [-] | h-max [m] | |
|-----|----------------------|--------------|-------------|--------------|-------|
| 12 | 0.300 | 0.300 | 0.80 | 0.25 | 0.800 |

Check for crack width passed with additional reinforcements

Stiffness is not saved in database

Longitudinal Reinforcements LCR 503

Note: Layer includes reinforcements for torsion if followed by T
Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NOS | mue [-] | AS-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|------|-------|-----|------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1001 | 0.000 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1001 | 0.883 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1002 | 0.000 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1002 | 0.883 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1003 | 0.000 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1003 | 0.883 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1004 | 0.000 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1004 | 0.883 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1005 | 0.000 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1005 | 0.883 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1006 | 0.000 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1006 | 0.883 | 1 | 0.30 | 14.84 | | 2.37 | 12.47 | | | |
| 1007 | 0.000 | 1 | 0.30 | 14.84 | | 2.37 | 12.47 | | | |
| 1007 | 0.883 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1008 | 0.000 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1008 | 0.883 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1009 | 0.000 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1009 | 0.883 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1010 | 0.000 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1010 | 0.883 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1011 | 0.000 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1011 | 0.883 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1012 | 0.000 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1012 | 0.883 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1013 | 0.000 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1013 | 0.883 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |

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Longitudinal Reinforcements LCR 503

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | μ _{ue} [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|------|-------|-----|------------------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1014 | 0.000 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1014 | 0.883 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1015 | 0.000 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1015 | 0.883 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1016 | 0.000 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1016 | 0.883 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1017 | 0.000 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1017 | 0.883 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1018 | 0.000 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1018 | 0.883 | 1 | 0.30 | 14.84 | | 2.37 | 12.47 | | | |
| 1019 | 0.000 | 1 | 0.30 | 14.84 | | 2.37 | 12.47 | | | |
| 1019 | 0.883 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1020 | 0.000 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1020 | 0.883 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1021 | 0.000 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1021 | 0.883 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1022 | 0.000 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1022 | 0.883 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1023 | 0.000 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1023 | 0.883 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1024 | 0.000 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1024 | 0.883 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1025 | 0.000 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1025 | 0.883 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1026 | 0.000 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1026 | 0.883 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1027 | 0.000 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1027 | 0.883 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1028 | 0.000 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1028 | 0.883 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1029 | 0.000 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1029 | 0.883 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1030 | 0.000 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1030 | 0.883 | 1 | 0.30 | 14.84 | | 2.37 | 12.47 | | | |
| 1031 | 0.000 | 1 | 0.30 | 14.84 | | 2.37 | 12.47 | | | |
| 1031 | 0.883 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1032 | 0.000 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1032 | 0.883 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |

OPISTIKH MEΛETH/TEXNIKO TA/L=13.00
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Longitudinal Reinforcements LCR 503

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | μ _{ue} [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|------|-------|-----|------------------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1033 | 0.000 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1033 | 0.883 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1034 | 0.000 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1034 | 0.883 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1035 | 0.000 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1035 | 0.883 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1036 | 0.000 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1036 | 0.883 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1037 | 0.000 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1037 | 0.883 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1038 | 0.000 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1038 | 0.883 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1039 | 0.000 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1039 | 0.883 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1040 | 0.000 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1040 | 0.883 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1041 | 0.000 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1041 | 0.883 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1042 | 0.000 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1042 | 0.883 | 1 | 0.30 | 14.84 | | 2.37 | 12.47 | | | |
| 1043 | 0.000 | 1 | 0.30 | 14.84 | | 2.37 | 12.47 | | | |
| 1043 | 0.883 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1044 | 0.000 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1044 | 0.883 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1045 | 0.000 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1045 | 0.883 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1046 | 0.000 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1046 | 0.883 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1047 | 0.000 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1047 | 0.883 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1048 | 0.000 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1048 | 0.883 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1049 | 0.000 | 1 | 0.05 | 2.37 | | 2.37 | | | | |
| 1049 | 0.883 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1050 | 0.000 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1050 | 0.883 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1051 | 0.000 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1051 | 0.883 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-1_SLS_DOKOI

Longitudinal Reinforcements LCR 503

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

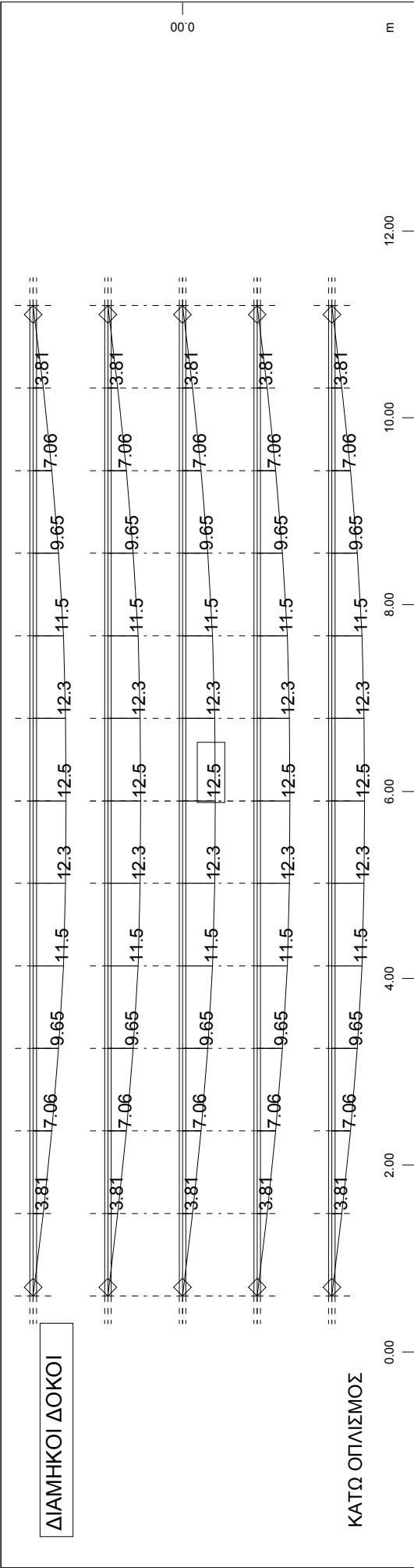
| Beam | x[m] | NoS | μ _{ue} [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|------|-------|-----|------------------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1052 | 0.000 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1052 | 0.883 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1053 | 0.000 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1053 | 0.883 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1054 | 0.000 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1054 | 0.883 | 1 | 0.30 | 14.84 | | 2.37 | 12.47 | | | |
| 1055 | 0.000 | 1 | 0.30 | 14.84 | | 2.37 | 12.47 | | | |
| 1055 | 0.883 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1056 | 0.000 | 1 | 0.29 | 14.66 | | 2.37 | 12.29 | | | |
| 1056 | 0.883 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1057 | 0.000 | 1 | 0.28 | 13.89 | | 2.37 | 11.52 | | | |
| 1057 | 0.883 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1058 | 0.000 | 1 | 0.24 | 12.02 | | 2.37 | 9.65 | | | |
| 1058 | 0.883 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1059 | 0.000 | 1 | 0.19 | 9.44 | | 2.37 | 7.06 | | | |
| 1059 | 0.883 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1060 | 0.000 | 1 | 0.12 | 6.19 | | 2.37 | 3.81 | | | |
| 1060 | 0.883 | 1 | 0.05 | 2.37 | | 2.37 | | | | |

Reinforcements saved as design case LCR 503

Reinforcements are superposed with existing minimum reinforcements

Maximum Degree of Utilization

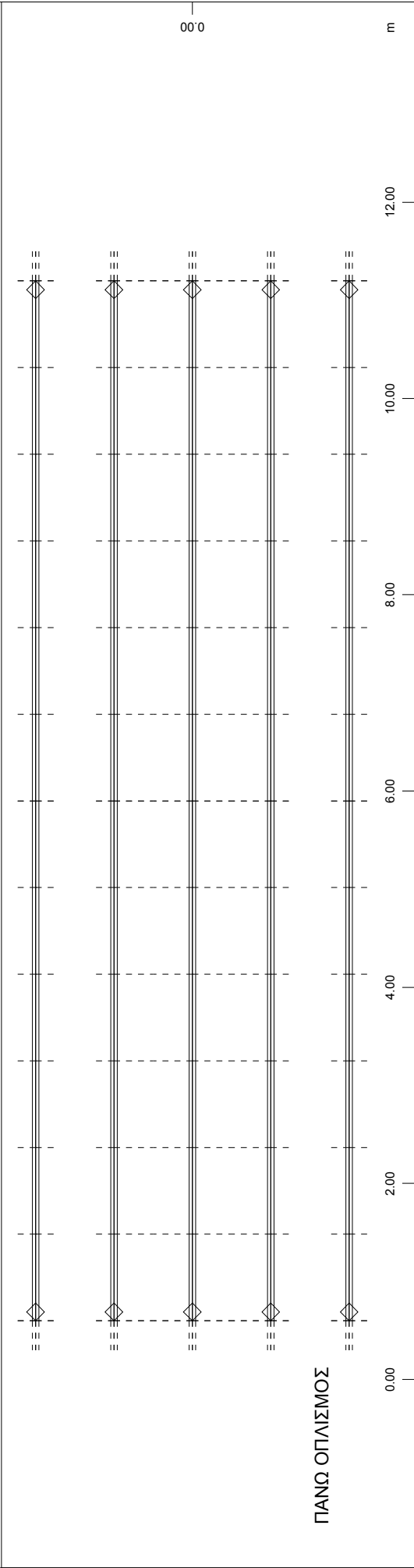
| Cross sect. | 1 | N sig-c | Vy sig-t | Vz tau | Mt sig-* | My tend. | Mz As-l | Mb As-v | Mt2 crack | Total sigdyn | lamda tau-* |
|--------------|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|
| | | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 2.241 | 0.000 0.000 | 0.000 0.000 |
| Total System | | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 2.241 | 0.000 0.000 | 0.000 0.000 |



M 1 : 63

Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 503 , 1 cm 3D = 22.4 cm2 (Max=12.5)

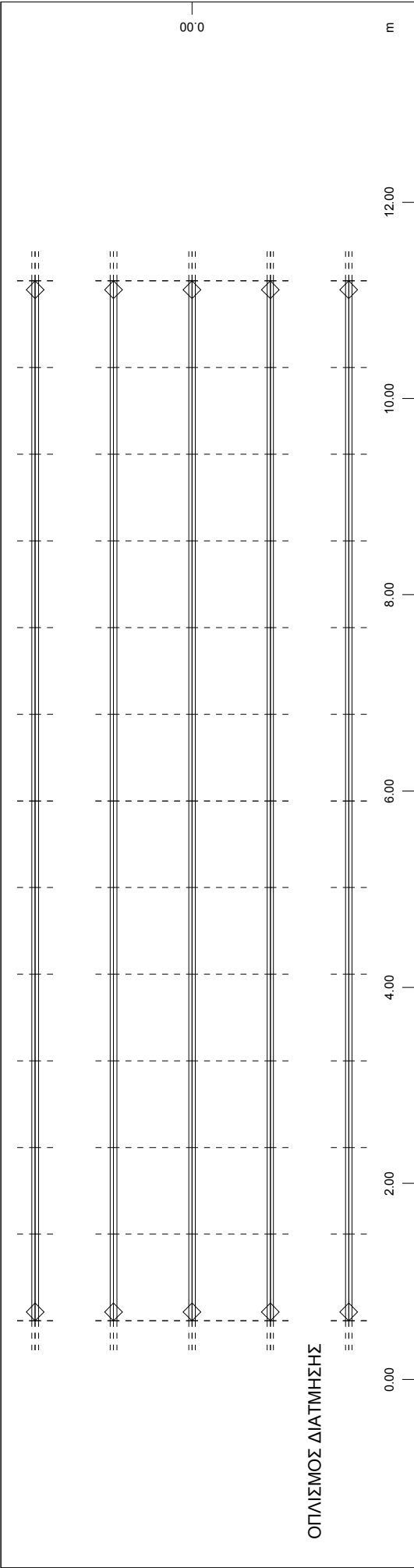
Z-X
Y



M 1 : 60

Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case 503 , 1 cm 3D = 0 cm2 (Max=0)

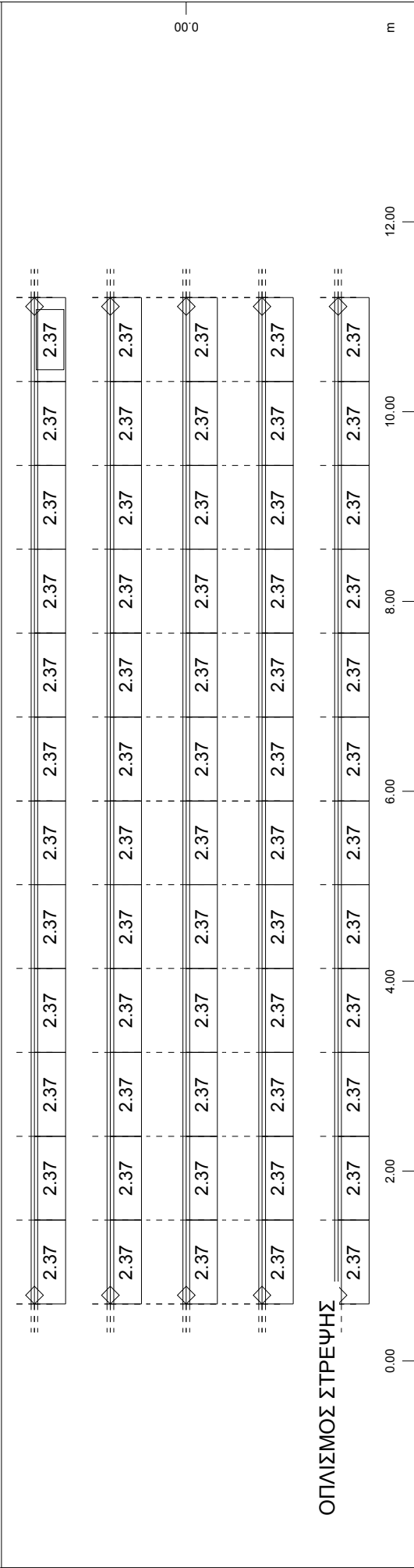
Z-X
Y



M 1 : 60

Sector of system Beam Elements Group 1
Beam Elements , Shear reinforcements (maximum), Design Case 503 , 1 cm 3D = 0 cm2/m (Max=0)

Z-X
Y



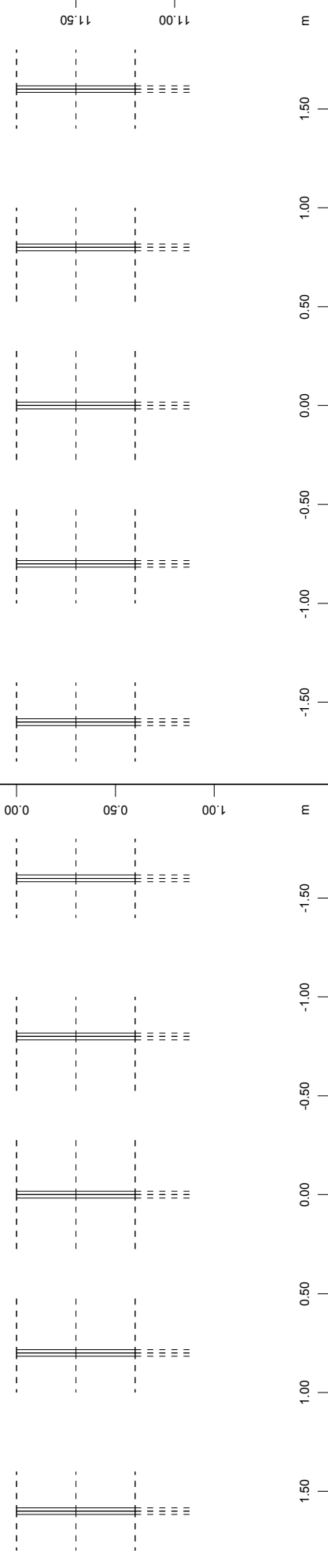
M 1 : 62

Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 0, Design Case 503 , 1 cm 3D = 4.48 cm2 (Max=2.37)

Z-X
Y

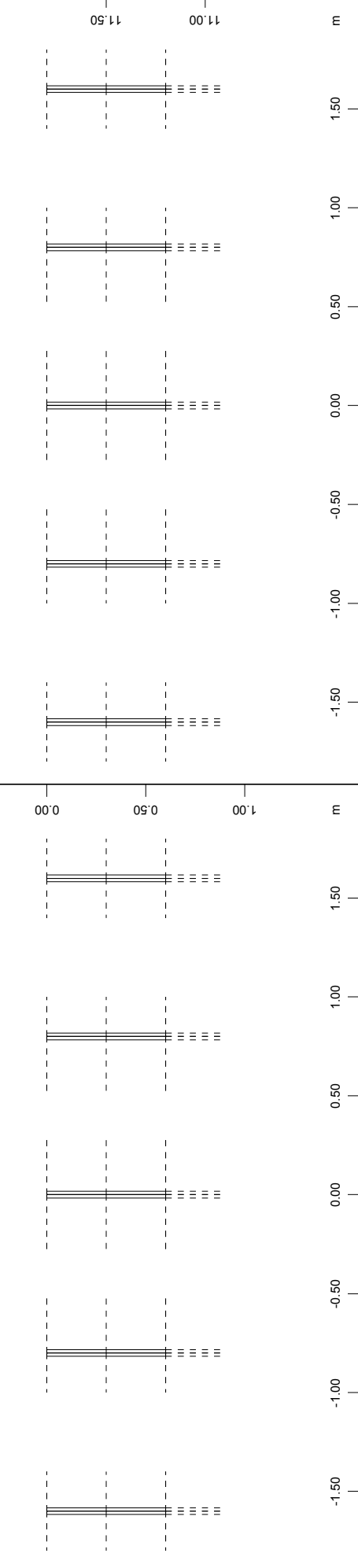
ΔΙΑΜΗΚΗ ΔΟΚΟΙ-ΣΤΗΡΙΞΗΣ

ΚΑΤΩ ΟΠΛΙΣΜΟΣ

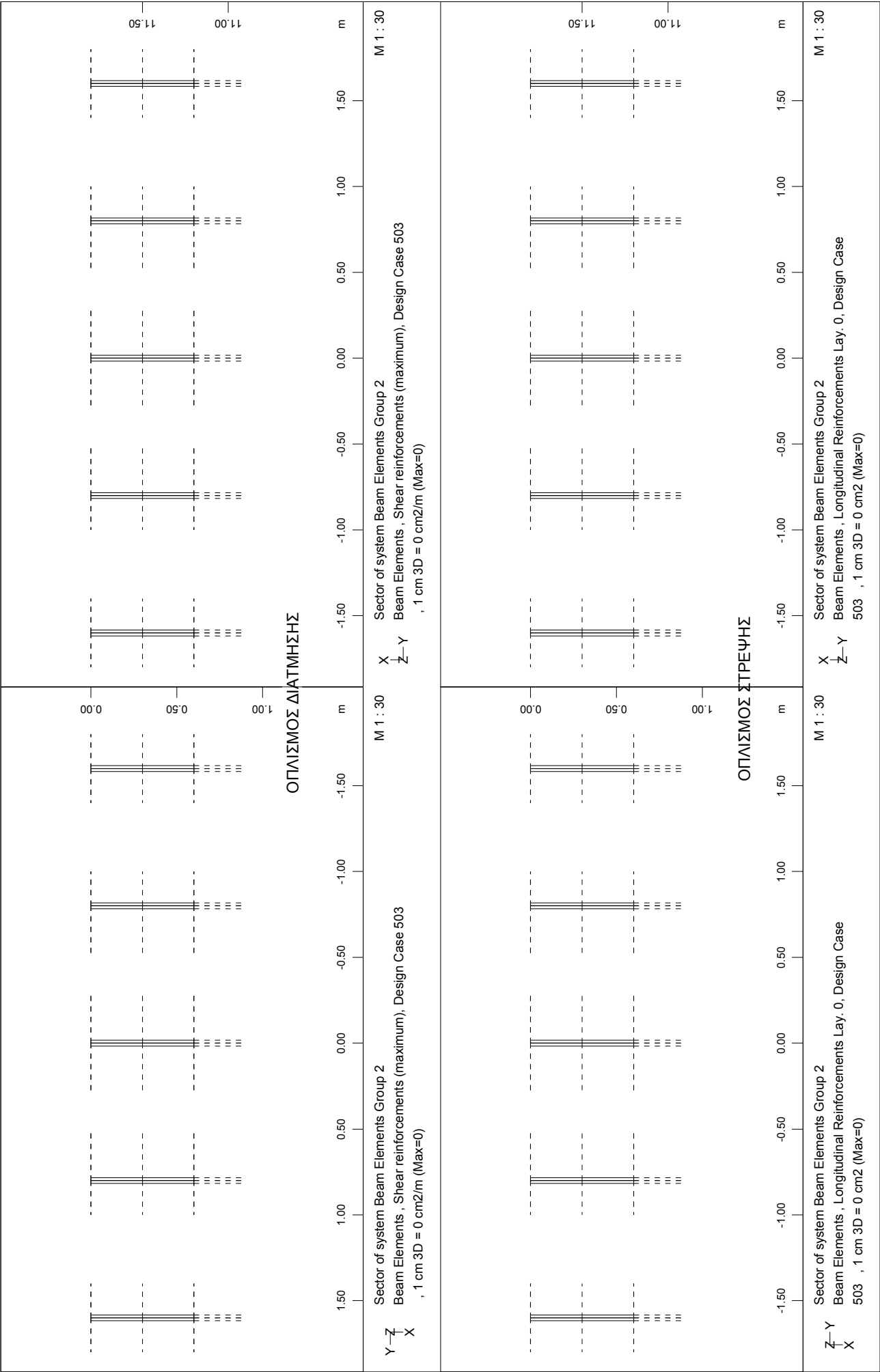


Y-Z
X
Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case
503 , 1 cm 3D = 0 cm2 (Max=0)
M 1 : 30

ΠΑΝΩ ΟΠΛΙΣΜΟΣ

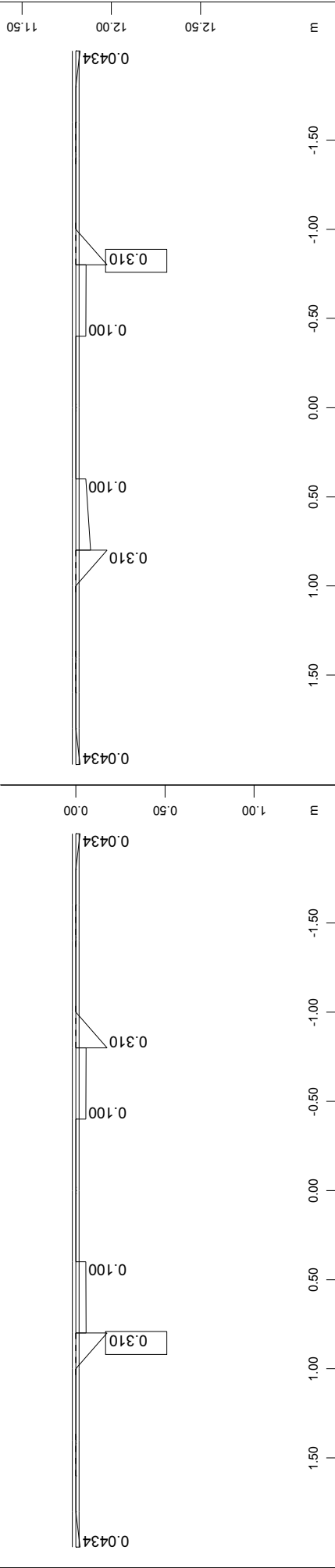


Z-Y
X
Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
503 , 1 cm 3D = 0 cm2 (Max=0)
M 1 : 30



ΠΑΡΑΣΧΟΛΟΓΙΣΜΟΣ

ΚΑΤΩ ΟΠΛΙΣΜΟΣ



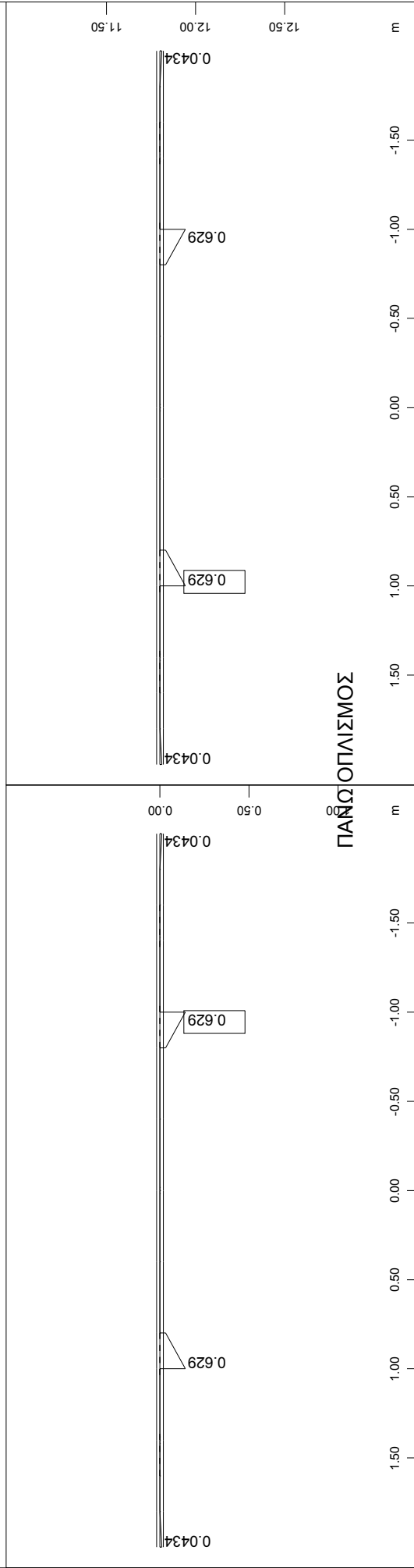
Y-Z
X

M 1 : 33

$$\begin{array}{c} \text{Z} - \text{X} \\ | \\ \text{Y} \end{array}$$

M 1 : 33

Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case
503 , 1 cm 3D = 0.581 cm² (Max=0.310)



Y-Z
X

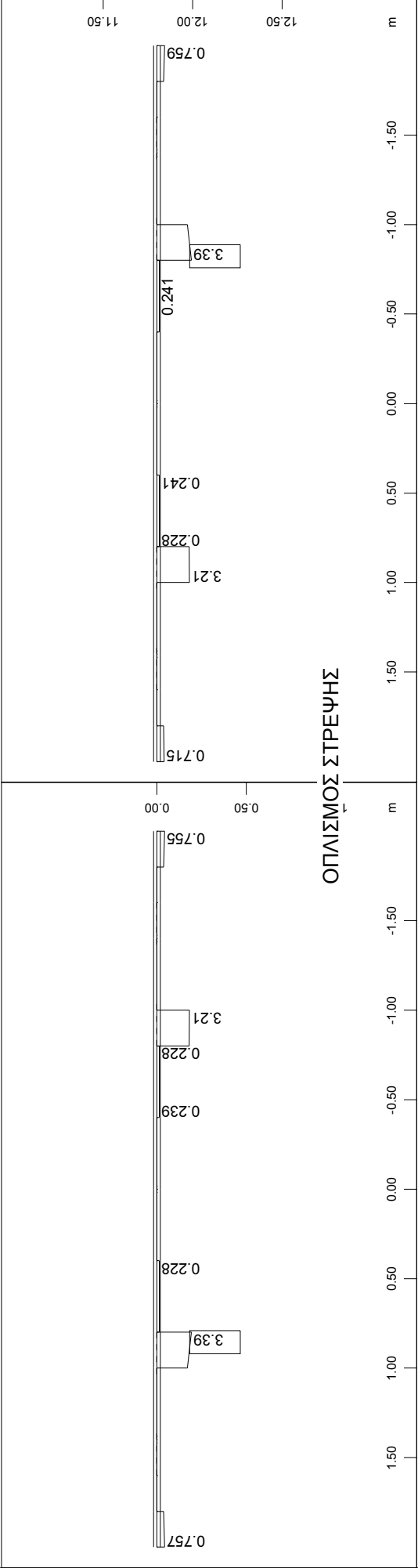
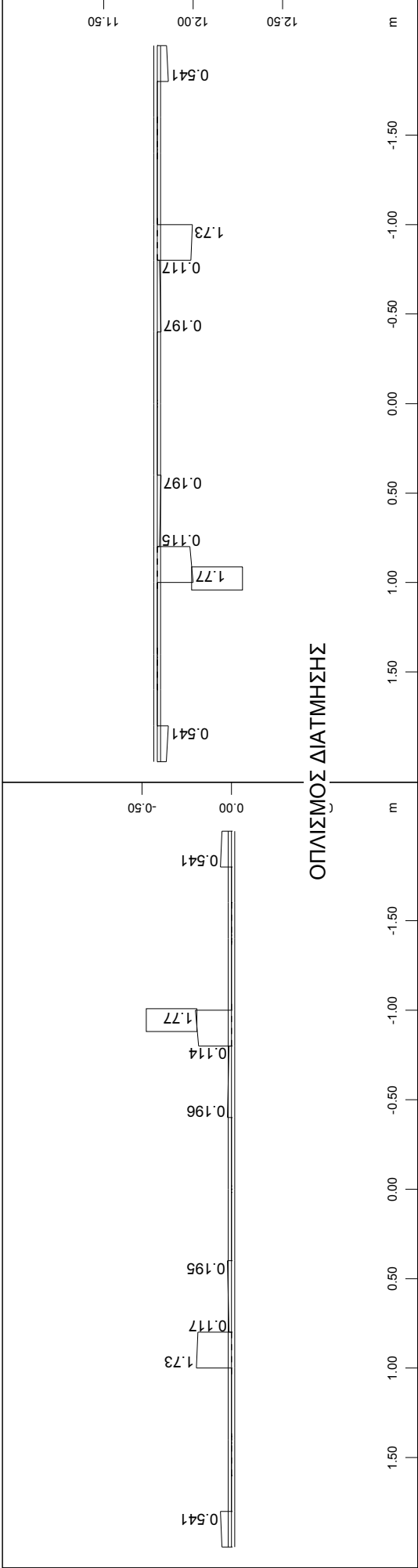
M 1 : 33

$$\begin{array}{c} \text{Z} - \text{X} \\ | \\ \text{Y} \end{array}$$

M 1 : 33

Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
503 , 1 cm 3D = 1.45 cm2 (Max=0.629)

ΠΑΝΩ ΟΠΛΙΣΜΟΣ



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/L=13.00

7) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ ULS-STATIKA

OPIΣTIKH MEΛETH/TECHNIKO TA/L=13.00
COMBINATION-LL-characteristik

Combination rule Number 1

COMB.LL-TS_ON DECK

Resulting loadcases type Design Combination

Loadcase selection

| Number | factor | type | Title |
|--------|--------|------------------|--------------------------|
| 41 | 1.00 | Conditional LC | L.L.UDL_2.50KN/m2 |
| 42 | 1.00 | Conditional LC | L.L.UDL_6.50KN/m2 |
| 50 | 1.00 | Exclusive LC A 1 | TS_RIGHT_Posit.1 |
| 51 | 1.00 | Exclusive LC A 1 | TS_RIGHT_Posit.2 |
| 52 | 1.00 | Exclusive LC A 1 | TS_RIGHT_Posit.3 |
| 53 | 1.00 | Exclusive LC A 1 | TS_RIGHT_Posit.4 |
| 54 | 1.00 | Exclusive LC A 1 | TS_RIGHT_Posit.5 |
| 55 | 1.00 | Exclusive LC A 1 | TS_RIGHT_Posit.6 |
| 56 | 1.00 | Exclusive LC A 1 | TS_RIGHT_Posit.7 |
| 57 | 1.00 | Exclusive LC A 1 | TS_RIGHT_Posit.8 |
| 58 | 1.00 | Exclusive LC A 1 | TS_RIGHT_Posit.9 |
| 59 | 1.00 | Exclusive LC A 1 | TS_RIGHT_Posit.10 |
| 60 | 1.00 | Exclusive LC A 1 | TS_RIGHT_Posit.11 |
| 61 | 1.00 | Exclusive LC A 1 | TS_RIGHT_Posit.12 |
| 70 | 1.00 | Conditional LC | ΩΘΗΣΕΙΣ KINHΤΩΝΝ A1 2.50 |
| 71 | 1.00 | Conditional LC | ΩΘΗΣΕΙΣ KINHΤΩΝΝ A2 2.50 |
| 72 | 1.00 | Conditional LC | ΩΘΗΣΕΙΣ KINHΤΩΝΝ A1 6.50 |
| 73 | 1.00 | Conditional LC | ΩΘΗΣΕΙΣ KINHΤΩΝΝ A2 6.50 |

Combination rule Number 2

COMB.LL-TS_OUT OF DECK

Resulting loadcases type Design Combination

Loadcase selection

| Number | factor | type | Title |
|--------|--------|----------------|--------------------------|
| 41 | 1.00 | Conditional LC | L.L.UDL_2.50KN/m2 |
| 42 | 1.00 | Conditional LC | L.L.UDL_6.50KN/m2 |
| 70 | 1.00 | Conditional LC | ΩΘΗΣΕΙΣ KINHΤΩΝΝ A1 2.50 |
| 71 | 1.00 | Conditional LC | ΩΘΗΣΕΙΣ KINHΤΩΝΝ A2 2.50 |
| 72 | 1.00 | Conditional LC | ΩΘΗΣΕΙΣ KINHΤΩΝΝ A1 6.50 |
| 73 | 1.00 | Conditional LC | ΩΘΗΣΕΙΣ KINHΤΩΝΝ A2 6.50 |
| 74 | 1.00 | Conditional LC | ΩΘΗΣΕΙΣ KINHΤΩΝΝ A1 TS1- |
| 75 | 1.00 | Conditional LC | ΩΘΗΣΕΙΣ KINHΤΩΝΝ A2 TS1- |

Generated Loadcases

| Number | Comb | Title |
|--------|----------------------|-------|
| 2001 | 1 MAX-MX QUAD LL-ON | |
| 2002 | 1 MIN-MX QUAD LL-ON | |
| 2003 | 1 MAX-MY QUAD LL-ON | |
| 2004 | 1 MIN-MY QUAD LL-ON | |
| 2005 | 1 MAX-MXY QUAD LL-ON | |
| 2006 | 1 MIN-MXY QUAD LL-ON | |
| 2001 | 1 MAX-MX QUAK LL-ON | |
| 2002 | 1 MIN-MX QUAK LL-ON | |
| 2003 | 1 MAX-MY QUAK LL-ON | |
| 2004 | 1 MIN-MY QUAK LL-ON | |
| 2005 | 1 MAX-MXY QUAK LL-ON | |
| 2006 | 1 MIN-MXY QUAK LL-ON | |
| 2007 | 1 MAX-VX QUAD LL-ON | |
| 2008 | 1 MIN-VX QUAD LL-ON | |
| 2007 | 1 MAX-VX QUAK LL-ON | |
| 2008 | 1 MIN-VX QUAK LL-ON | |
| 2009 | 1 MAX-VY QUAD LL-ON | |
| 2010 | 1 MIN-VY QUAD LL-ON | |
| 2009 | 1 MAX-VY QUAK LL-ON | |
| 2010 | 1 MIN-VY QUAK LL-ON | |
| 2011 | 1 MAX-NXX QUAD LL-ON | |
| 2012 | 1 MIN-NXX QUAD LL-ON | |
| 2013 | 1 MAX-NYY QUAD LL-ON | |
| 2014 | 1 MIN-NYY QUAD LL-ON | |
| 2015 | 1 MAX-NXY QUAD LL-ON | |
| 2016 | 1 MIN-NXY QUAD LL-ON | |
| 2011 | 1 MAX-NXX QUAK LL-ON | |
| 2012 | 1 MIN-NXX QUAK LL-ON | |
| 2013 | 1 MAX-NYY QUAK LL-ON | |
| 2014 | 1 MIN-NYY QUAK LL-ON | |
| 2015 | 1 MAX-NXY QUAK LL-ON | |
| 2016 | 1 MIN-NXY QUAK LL-ON | |
| 1101 | 1 MAX-MY BEAM | |
| 1102 | 1 MIN-MY BEAM | |
| 1103 | 1 MAX-VZ BEAM | |
| 1104 | 1 MIN-VZ BEAM | |
| 1105 | 1 MAX-MZ BEAM | |
| 1106 | 1 MIN-MZ BEAM | |
| 1107 | 1 MAX-VY BEAM | |
| 1108 | 1 MIN-VY BEAM | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
COMBINATION-LL-characteristik

Generated Loadcases

| Number | Comb | Title |
|--------|------|---------------------|
| 1109 | 1 | MAX-N BEAM |
| 1110 | 1 | MIN-N BEAM |
| 1111 | 1 | MAX-MT BEAM |
| 1112 | 1 | MIN-MT BEAM |
| 2021 | 2 | MAX-MX QUAD LL-OFF |
| 2022 | 2 | MIN-MX QUAD LL-OFF |
| 2023 | 2 | MAX-MY QUAD LL-OFF |
| 2024 | 2 | MIN-MY QUAD LL-OFF |
| 2025 | 2 | MAX-MXY QUAD LL-OFF |
| 2026 | 2 | MIN-MXY QUAD LL-OFF |
| 2021 | 2 | MAX-MX QUAK LL-OFF |
| 2022 | 2 | MIN-MX QUAK LL-OFF |
| 2023 | 2 | MAX-MY QUAK LL-OFF |
| 2024 | 2 | MIN-MY QUAK LL-OFF |
| 2025 | 2 | MAX-MXY QUAK LL-OFF |
| 2026 | 2 | MIN-MXY QUAK LL-OFF |
| 2027 | 2 | MAX-VX QUAD LL-OFF |
| 2028 | 2 | MIN-VX QUAD LL-OFF |
| 2027 | 2 | MAX-VX QUAK LL-OFF |
| 2028 | 2 | MIN-VX QUAK LL-OFF |
| 2029 | 2 | MAX-VY QUAD LL-OFF |
| 2030 | 2 | MIN-VY QUAD LL-OFF |
| 2029 | 2 | MAX-VY QUAK LL-OFF |
| 2030 | 2 | MIN-VY QUAK LL-OFF |
| 2031 | 2 | MAX-NXX QUAD LL-OFF |
| 2032 | 2 | MIN-NXX QUAD LL-OFF |
| 2033 | 2 | MAX-NYY QUAD LL-OFF |
| 2034 | 2 | MIN-NYY QUAD LL-OFF |
| 2035 | 2 | MAX-NXY QUAD LL-OFF |
| 2036 | 2 | MIN-NXY QUAD LL-OFF |
| 2031 | 2 | MAX-NXX QUAK LL-OFF |
| 2032 | 2 | MIN-NXX QUAK LL-OFF |
| 2033 | 2 | MAX-NYY QUAK LL-OFF |
| 2034 | 2 | MIN-NYY QUAK LL-OFF |
| 2035 | 2 | MAX-NXY QUAK LL-OFF |
| 2036 | 2 | MIN-NXY QUAK LL-OFF |
| 1121 | 2 | MAX-MY BEAM |
| 1122 | 2 | MIN-MY BEAM |
| 1123 | 2 | MAX-VZ BEAM |
| 1124 | 2 | MIN-VZ BEAM |
| 1125 | 2 | MAX-MZ BEAM |
| 1126 | 2 | MIN-MZ BEAM |
| 1127 | 2 | MAX-VY BEAM |
| 1128 | 2 | MIN-VY BEAM |
| 1129 | 2 | MAX-N BEAM |
| 1130 | 2 | MIN-N BEAM |
| 1131 | 2 | MAX-MT BEAM |
| 1132 | 2 | MIN-MT BEAM |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
COMBINATION ULD

Combination rule Number 1

COMB.ULS-2-BEAM

Resulting loadcases type Design Combination

Loadcase selection

| Number | factor | type | Title |
|--------|--------|------------------|--------------------------|
| 31 | 1.35 | Exclusive LC AG | ΠΥΣΕΙΣ-ΟΔΟΣΤΡΩΣΙΑ |
| 32 | 1.35 | Combined with LC | PEZODROMIO |
| 33 | 1.35 | Combined with LC | ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50 |
| 31 | 1.00 | Exclusive LC AG | ΠΥΣΕΙΣ-ΟΔΟΣΤΡΩΣΙΑ |
| 32 | 1.00 | Combined with LC | PEZODROMIO |
| 33 | 1.00 | Combined with LC | ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50 |
| 36 | 1.50 | Exclusive LC A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 |
| 37 | 1.50 | Exclusive LC A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 |
| 38 | 1.50 | Exclusive LC A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 |
| 39 | 1.50 | Exclusive LC A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 |
| 1101 | 1.35 | Exclusive LC A 2 | MAX-MY BEAM |
| 1102 | 1.35 | Exclusive LC A 2 | MIN-MY BEAM |
| 1103 | 1.35 | Exclusive LC A 2 | MAX-VZ BEAM |
| 1104 | 1.35 | Exclusive LC A 2 | MIN-VZ BEAM |
| 1105 | 1.35 | Exclusive LC A 2 | MAX-MZ BEAM |
| 1106 | 1.35 | Exclusive LC A 2 | MIN-MZ BEAM |
| 1107 | 1.35 | Exclusive LC A 2 | MAX-VY BEAM |
| 1108 | 1.35 | Exclusive LC A 2 | MIN-VY BEAM |
| 1109 | 1.35 | Exclusive LC A 2 | MAX-N BEAM |
| 1110 | 1.35 | Exclusive LC A 2 | MIN-N BEAM |
| 1111 | 1.35 | Exclusive LC A 2 | MAX-MT BEAM |
| 1112 | 1.35 | Exclusive LC A 2 | MIN-MT BEAM |
| 1121 | 1.35 | Exclusive LC A 2 | MAX-MY BEAM |
| 1122 | 1.35 | Exclusive LC A 2 | MIN-MY BEAM |
| 1123 | 1.35 | Exclusive LC A 2 | MAX-VZ BEAM |
| 1124 | 1.35 | Exclusive LC A 2 | MIN-VZ BEAM |
| 1125 | 1.35 | Exclusive LC A 2 | MAX-MZ BEAM |
| 1126 | 1.35 | Exclusive LC A 2 | MIN-MZ BEAM |
| 1127 | 1.35 | Exclusive LC A 2 | MAX-VY BEAM |
| 1128 | 1.35 | Exclusive LC A 2 | MIN-VY BEAM |
| 1129 | 1.35 | Exclusive LC A 2 | MAX-N BEAM |
| 1130 | 1.35 | Exclusive LC A 2 | MIN-N BEAM |
| 1131 | 1.35 | Exclusive LC A 2 | MAX-MT BEAM |
| 1132 | 1.35 | Exclusive LC A 2 | MIN-MT BEAM |
| 80 | 1.20 | Conditional LC | ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ A1 |
| 81 | 1.20 | Conditional LC | ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ A2 |

Combination rule Number 2

COMB.ULS-2-QUAD

Resulting loadcases type Design Combination

Loadcase selection

| Number | factor | type | Title |
|--------|--------|------------------|--------------------------|
| 1 | 1.35 | Exclusive LC AG | I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ |
| 2 | 1.35 | Combined with LC | I.B. ΔΟΚΩΝ |
| 3 | 1.35 | Combined with LC | I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ |
| 31 | 1.35 | Combined with LC | ΠΥΣΕΙΣ-ΟΔΟΣΤΡΩΣΙΑ |
| 32 | 1.35 | Combined with LC | PEZODROMIO |
| 33 | 1.35 | Combined with LC | ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50 |
| 1 | 1.00 | Exclusive LC AG | I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ |
| 2 | 1.00 | Combined with LC | I.B. ΔΟΚΩΝ |
| 3 | 1.00 | Combined with LC | I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ |
| 31 | 1.00 | Combined with LC | ΠΥΣΕΙΣ-ΟΔΟΣΤΡΩΣΙΑ |
| 32 | 1.00 | Combined with LC | PEZODROMIO |
| 33 | 1.00 | Combined with LC | ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50 |
| 11 | 1.50 | Exclusive LC A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 |
| 12 | 1.50 | Exclusive LC A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 |
| 13 | 1.50 | Exclusive LC A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 |
| 14 | 1.50 | Exclusive LC A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 |
| 36 | 1.50 | Exclusive LC A 2 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 |
| 37 | 1.50 | Exclusive LC A 2 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 |
| 38 | 1.50 | Exclusive LC A 2 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 |
| 39 | 1.50 | Exclusive LC A 2 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 |
| 2001 | 1.35 | Exclusive LC A 3 | MAX-MX QUAK LL-ON |
| 2002 | 1.35 | Exclusive LC A 3 | MIN-MX QUAK LL-ON |
| 2003 | 1.35 | Exclusive LC A 3 | MAX-MY QUAK LL-ON |
| 2004 | 1.35 | Exclusive LC A 3 | MIN-MY QUAK LL-ON |
| 2005 | 1.35 | Exclusive LC A 3 | MAX-MXY QUAK LL-ON |
| 2006 | 1.35 | Exclusive LC A 3 | MIN-MXY QUAK LL-ON |
| 2007 | 1.35 | Exclusive LC A 3 | MAX-VX QUAK LL-ON |
| 2008 | 1.35 | Exclusive LC A 3 | MIN-VX QUAK LL-ON |
| 2009 | 1.35 | Exclusive LC A 3 | MAX-VY QUAK LL-ON |
| 2010 | 1.35 | Exclusive LC A 3 | MIN-VY QUAK LL-ON |
| 2011 | 1.35 | Exclusive LC A 3 | MAX-NXX QUAK LL-ON |
| 2012 | 1.35 | Exclusive LC A 3 | MIN-NXX QUAK LL-ON |
| 2013 | 1.35 | Exclusive LC A 3 | MAX-NYY QUAK LL-ON |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
COMBINATION ULD

Combination rule Number 2

COMB.ULS-2-QUAD

Resulting loadcases type Design Combination

Loadcase selection

| Number | factor | type | | | Title |
|--------|--------|----------------|---|---|-----------------------|
| 2014 | 1.35 | Exclusive LC | A | 3 | MIN-NYY QUAK LL-ON |
| 2015 | 1.35 | Exclusive LC | A | 3 | MAX-NXY QUAK LL-ON |
| 2016 | 1.35 | Exclusive LC | A | 3 | MIN-NXY QUAK LL-ON |
| 2021 | 1.35 | Exclusive LC | A | 3 | MAX-MX QUAK LL-OFF |
| 2022 | 1.35 | Exclusive LC | A | 3 | MIN-MX QUAK LL-OFF |
| 2023 | 1.35 | Exclusive LC | A | 3 | MAX-MY QUAK LL-OFF |
| 2024 | 1.35 | Exclusive LC | A | 3 | MIN-MY QUAK LL-OFF |
| 2025 | 1.35 | Exclusive LC | A | 3 | MAX-MXY QUAK LL-OFF |
| 2026 | 1.35 | Exclusive LC | A | 3 | MIN-MXY QUAK LL-OFF |
| 2027 | 1.35 | Exclusive LC | A | 3 | MAX-VX QUAK LL-OFF |
| 2028 | 1.35 | Exclusive LC | A | 3 | MIN-VX QUAK LL-OFF |
| 2029 | 1.35 | Exclusive LC | A | 3 | MAX-VY QUAK LL-OFF |
| 2030 | 1.35 | Exclusive LC | A | 3 | MIN-VY QUAK LL-OFF |
| 2031 | 1.35 | Exclusive LC | A | 3 | MAX-NXX QUAK LL-OFF |
| 2032 | 1.35 | Exclusive LC | A | 3 | MIN-NXX QUAK LL-OFF |
| 2033 | 1.35 | Exclusive LC | A | 3 | MAX-NYY QUAK LL-OFF |
| 2034 | 1.35 | Exclusive LC | A | 3 | MIN-NYY QUAK LL-OFF |
| 2035 | 1.35 | Exclusive LC | A | 3 | MAX-NXY QUAK LL-OFF |
| 2036 | 1.35 | Exclusive LC | A | 3 | MIN-NXY QUAK LL-OFF |
| 80 | 1.20 | Conditional LC | | | ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ A1 |
| 81 | 1.20 | Conditional LC | | | ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ A2 |
| 6015 | 1.00 | Conditional LC | | | 15 K creep step |
| 6025 | 1.00 | Conditional LC | | | 25 K creep step |
| 6055 | 1.00 | Conditional LC | | | 55 K creep step |
| 6060 | 1.00 | Conditional LC | | | 60 K creep step |
| 6061 | 1.00 | Conditional LC | | | 61 K creep step |
| 6062 | 1.00 | Conditional LC | | | 62 K creep step |
| 6063 | 1.00 | Conditional LC | | | 63 K creep step |
| 6064 | 1.00 | Conditional LC | | | 64 K creep step |

Combination rule Number 3

COMB.ULS_1+2_piles

Resulting loadcases type Design Combination

Loadcase selection

| Number | factor | type | | | Title |
|--------|--------|------------------|----|---|--------------------------|
| 1 | 1.35 | Exclusive LC | AG | | I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ |
| 2 | 1.35 | Combined with LC | | | I.B. ΔΟΚΩΝ |
| 3 | 1.35 | Combined with LC | | | I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ |
| 31 | 1.35 | Combined with LC | | | ΡΥΣΕΙΣ-ΟΔΟΣΤΡΩΣΙΑ |
| 32 | 1.35 | Combined with LC | | | PEZODROMIO |
| 33 | 1.35 | Combined with LC | | | ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50 |
| 1 | 1.00 | Exclusive LC | AG | | I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ |
| 2 | 1.00 | Combined with LC | | | I.B. ΔΟΚΩΝ |
| 3 | 1.00 | Combined with LC | | | I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ |
| 31 | 1.00 | Combined with LC | | | ΡΥΣΕΙΣ-ΟΔΟΣΤΡΩΣΙΑ |
| 32 | 1.00 | Combined with LC | | | PEZODROMIO |
| 33 | 1.00 | Combined with LC | | | ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50 |
| 11 | 1.50 | Exclusive LC | A | 3 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 |
| 12 | 1.50 | Exclusive LC | A | 3 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 |
| 13 | 1.50 | Exclusive LC | A | 3 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 |
| 14 | 1.50 | Exclusive LC | A | 3 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 |
| 36 | 1.50 | Exclusive LC | A | 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 |
| 37 | 1.50 | Exclusive LC | A | 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 |
| 38 | 1.50 | Exclusive LC | A | 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 |
| 39 | 1.50 | Exclusive LC | A | 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 |
| 1101 | 1.35 | Exclusive LC | A | 2 | MAX-MY BEAM |
| 1102 | 1.35 | Exclusive LC | A | 2 | MIN-MY BEAM |
| 1103 | 1.35 | Exclusive LC | A | 2 | MAX-VZ BEAM |
| 1104 | 1.35 | Exclusive LC | A | 2 | MIN-VZ BEAM |
| 1105 | 1.35 | Exclusive LC | A | 2 | MAX-MZ BEAM |
| 1106 | 1.35 | Exclusive LC | A | 2 | MIN-MZ BEAM |
| 1107 | 1.35 | Exclusive LC | A | 2 | MAX-VY BEAM |
| 1108 | 1.35 | Exclusive LC | A | 2 | MIN-VY BEAM |
| 1109 | 1.35 | Exclusive LC | A | 2 | MAX-N BEAM |
| 1110 | 1.35 | Exclusive LC | A | 2 | MIN-N BEAM |
| 1111 | 1.35 | Exclusive LC | A | 2 | MAX-MT BEAM |
| 1112 | 1.35 | Exclusive LC | A | 2 | MIN-MT BEAM |
| 1121 | 1.35 | Exclusive LC | A | 2 | MAX-MY BEAM |
| 1122 | 1.35 | Exclusive LC | A | 2 | MIN-MY BEAM |
| 1123 | 1.35 | Exclusive LC | A | 2 | MAX-VZ BEAM |
| 1124 | 1.35 | Exclusive LC | A | 2 | MIN-VZ BEAM |
| 1125 | 1.35 | Exclusive LC | A | 2 | MAX-MZ BEAM |
| 1126 | 1.35 | Exclusive LC | A | 2 | MIN-MZ BEAM |
| 1127 | 1.35 | Exclusive LC | A | 2 | MAX-VY BEAM |
| 1128 | 1.35 | Exclusive LC | A | 2 | MIN-VY BEAM |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
COMBINATION ULD

Combination rule Number 3

COMB.ULS_1+2_piles

Resulting loadcases type Design Combination

Loadcase selection

| Number | factor | type | | | Title |
|--------|--------|----------------|---|---|-----------------------|
| 1129 | 1.35 | Exclusive LC | A | 2 | MAX-N BEAM |
| 1130 | 1.35 | Exclusive LC | A | 2 | MIN-N BEAM |
| 1131 | 1.35 | Exclusive LC | A | 2 | MAX-MT BEAM |
| 1132 | 1.35 | Exclusive LC | A | 2 | MIN-MT BEAM |
| 80 | 1.20 | Conditional LC | | | ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ A1 |
| 81 | 1.20 | Conditional LC | | | ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ A2 |

Generated Loadcases

| Number | Comb | Title |
|--------|------|---------------------|
| 1201 | 1 | MAX-MY BEAM |
| 1202 | 1 | MIN-MY BEAM |
| 1203 | 1 | MAX-VZ BEAM |
| 1204 | 1 | MIN-VZ BEAM |
| 1205 | 1 | MAX-MZ BEAM |
| 1206 | 1 | MIN-MZ BEAM |
| 1207 | 1 | MAX-VY BEAM |
| 1208 | 1 | MIN-VY BEAM |
| 1209 | 1 | MAX-N BEAM |
| 1210 | 1 | MIN-N BEAM |
| 1211 | 1 | MAX-MT BEAM |
| 1212 | 1 | MIN-MT BEAM |
| 2101 | 2 | MAX-MX QUAD ULS-B1 |
| 2102 | 2 | MIN-MX QUAD ULS-B1 |
| 2103 | 2 | MAX-MY QUAD ULS-B1 |
| 2104 | 2 | MIN-MY QUAD ULS-B1 |
| 2105 | 2 | MAX-MXY QUAD ULS-B1 |
| 2106 | 2 | MIN-MXY QUAD ULS-B1 |
| 2101 | 2 | MAX-MX QUAK ULS-B1 |
| 2102 | 2 | MIN-MX QUAK ULS-B1 |
| 2103 | 2 | MAX-MY QUAK ULS-B1 |
| 2104 | 2 | MIN-MY QUAK ULS-B1 |
| 2105 | 2 | MAX-MXY QUAK ULS-B1 |
| 2106 | 2 | MIN-MXY QUAK ULS-B1 |
| 2107 | 2 | MAX-VX QUAD ULS-B1 |
| 2108 | 2 | MIN-VX QUAD ULS-B1 |
| 2107 | 2 | MAX-VX QUAK ULS-B1 |
| 2108 | 2 | MIN-VX QUAK ULS-B1 |
| 2109 | 2 | MAX-VY QUAD ULS-B1 |
| 2110 | 2 | MIN-VY QUAD ULS-B1 |
| 2109 | 2 | MAX-VY QUAK ULS-B1 |
| 2110 | 2 | MIN-VY QUAK ULS-B1 |
| 2111 | 2 | MAX-NXX QUAD ULS-B1 |
| 2112 | 2 | MIN-NXX QUAD ULS-B1 |
| 2113 | 2 | MAX-NYY QUAD ULS-B1 |
| 2114 | 2 | MIN-NYY QUAD ULS-B1 |
| 2115 | 2 | MAX-NXY QUAD ULS-B1 |
| 2116 | 2 | MIN-NXY QUAD ULS-B1 |
| 2111 | 2 | MAX-NXX QUAK ULS-B1 |
| 2112 | 2 | MIN-NXX QUAK ULS-B1 |
| 2113 | 2 | MAX-NYY QUAK ULS-B1 |
| 2114 | 2 | MIN-NYY QUAK ULS-B1 |
| 2115 | 2 | MAX-NXY QUAK ULS-B1 |
| 2116 | 2 | MIN-NXY QUAK ULS-B1 |
| 1281 | 3 | MAX-MY BEAM |
| 1282 | 3 | MIN-MY BEAM |
| 1283 | 3 | MAX-VZ BEAM |
| 1284 | 3 | MIN-VZ BEAM |
| 1285 | 3 | MAX-MZ BEAM |
| 1286 | 3 | MIN-MZ BEAM |
| 1287 | 3 | MAX-VY BEAM |
| 1288 | 3 | MIN-VY BEAM |
| 1289 | 3 | MAX-N BEAM |
| 1290 | 3 | MIN-N BEAM |
| 1291 | 3 | MAX-MT BEAM |
| 1292 | 3 | MIN-MT BEAM |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΤΕΧΝΙΚΟΥ ΓΙΑ ΟΚΑ ΣΤΑΤΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Design according to DIN1045-1 2008
Loadcases have been calculated in the Ultimate Limit State
In BEMESS no additional load safety factor is applied.

Load Cases for the Design

Loadcase 2101 MAX-MX QUAK ULS-B1
Loadcase 2102 MIN-MX QUAK ULS-B1
Loadcase 2103 MAX-MY QUAK ULS-B1
Loadcase 2104 MIN-MY QUAK ULS-B1
Loadcase 2105 MAX-MXY QUAK ULS-B1
Loadcase 2106 MIN-MXY QUAK ULS-B1
Loadcase 2107 MAX-VX QUAK ULS-B1
Loadcase 2108 MIN-VX QUAK ULS-B1
Loadcase 2109 MAX-VY QUAK ULS-B1
Loadcase 2110 MIN-VY QUAK ULS-B1
Loadcase 2111 MAX-NXX QUAK ULS-B1
Loadcase 2112 MIN-NXX QUAK ULS-B1
Loadcase 2113 MAX-NYY QUAK ULS-B1
Loadcase 2114 MIN-NYY QUAK ULS-B1
Loadcase 2115 MAX-NXY QUAK ULS-B1
Loadcase 2116 MIN-NXY QUAK ULS-B1

Material (DIN1045-1 2008)

| Mat | f-ck [MPa] | f-cr [MPa] | f-yk [MPa] | f-tk [MPa] | f-ctm [MPa] | N minQ | type |
|--|---------------|---------------|---------------|---------------|----------------|----------|---------------|
| 1 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 3 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 4 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 5 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 6 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 7 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 8 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 9 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 10 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| Minimum reinforcement: 0.00 p.c. of stat. req. section | | | | | | | |
| 12 | | | 500.0 | 525.0 | | | |

Reduction of FC in case of transvers tension = 25.0 [o/o]

Material-safety-factors:

| Mat | concr | SC1 | SC2 | steel | SS1 | SS2 |
|-----|-------|------|------|-------|------|-----|
| 1 | | 1.50 | 1.50 | | | |
| 3 | | 1.50 | 1.50 | | | |
| 4 | | 1.50 | 1.50 | | | |
| 5 | | 1.50 | 1.50 | | | |
| 6 | | 1.50 | 1.50 | | | |
| 7 | | 1.50 | 1.50 | | | |
| 8 | | 1.50 | 1.50 | | | |
| 9 | | 1.50 | 1.50 | | | |
| 10 | | 1.50 | 1.50 | | | |
| 12 | | | | 1.15 | 1.15 | |

Acc. the german DIN Fachberichten a minimum concrete shear capacity VRd,ct is taken into account in the shear design without shear reinforcement.

In shear design the cotangens theta is limited to 1.750 .

At direct supports from the face of the support up to 1.0*d the shear force is reduced. The maximum shear capacity is checked at the face of the support without reduction.

The punching design has been switched off and must be done separately. Outside the punching area, the normal slab shear design may increase the, longitudinal reinforcement up to 0.20% [input CTRL...RO_V].

Geometry (axial covers)

| No | he-upper [mm] | hi-upper [mm] | he-lower [mm] | hi-lower [mm] | Elem. height [mm] |
|----|------------------|------------------|------------------|------------------|----------------------|
| 1 | 50 | 70 | 35 | 55 | As saved |

Selection of elements

| | from | to | inc | group | GEOMETRY |
|---------|------|------|-----|-------|----------|
| Element | 3001 | 3999 | 1 | - | 1 |
| Element | 4001 | 4999 | 1 | - | 1 |
| Element | 8001 | 8999 | 1 | - | 1 |

Reinforcement is saved in the data base file
Number of stored reinforcement-distribution: 521

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΤΕΧΝΙΚΟΥ ΓΙΑ ΟΚΑ ΣΤΑΤΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Maximum Reinforcement [cm²/m]

(stored in data base file with reinforcement-distribution-no. 521)

| Grp | Element | upper:As | Ast | dir | lower:As | Ast | dir | Ass[cm ² /m ²] | Asse[cm ²] |
|-----|---------|----------|------|-----|----------|------|-----|---------------------------------------|------------------------|
| 3 | 3001 | 0.77 | 0.28 | 0 | 0.50 | 0.25 | 0 | | |
| 3 | 3002 | 0.67 | 0.28 | 0 | 0.79 | 0.17 | 0 | | |
| 3 | 3003 | 0.56 | 0.20 | 0 | 0.97 | 0.20 | 0 | | |
| 3 | 3004 | 0.46 | 0.11 | 0 | 1.11 | 0.22 | 0 | | |
| 3 | 3005 | 0.37 | 0.07 | 0 | 1.18 | 0.24 | 0 | | |
| 3 | 3006 | 0.33 | 0.07 | 0 | 1.20 | 0.24 | 0 | | |
| 3 | 3007 | 0.82 | 0.68 | 0 | 0.34 | 0.37 | 0 | | |
| 3 | 3008 | 0.67 | 0.82 | 0 | 0.65 | 0.24 | 0 | | |
| 3 | 3009 | 0.56 | 0.66 | 0 | 0.84 | 0.29 | 0 | | |
| 3 | 3010 | 0.46 | 0.62 | 0 | 1.01 | 0.27 | 0 | | |
| 3 | 3011 | 0.37 | 0.56 | 0 | 1.05 | 0.24 | 0 | | |
| 3 | 3012 | 0.33 | 0.53 | 0 | 1.07 | 0.21 | 0 | | |
| 3 | 3013 | 0.77 | 0.66 | 0 | 0.42 | 0.17 | 0 | | |
| 3 | 3014 | 0.67 | 0.64 | 0 | 0.78 | 0.33 | 0 | | |
| 3 | 3015 | 0.57 | 0.50 | 0 | 1.02 | 0.41 | 0 | | |
| 3 | 3016 | 0.46 | 0.36 | 0 | 1.17 | 0.44 | 0 | | |
| 3 | 3017 | 0.37 | 0.24 | 0 | 1.24 | 0.42 | 0 | | |
| 3 | 3018 | 0.33 | 0.24 | 0 | 1.18 | 0.41 | 0 | | |
| 3 | 3019 | 0.78 | 0.63 | 0 | 0.45 | 0.38 | 0 | | |
| 3 | 3020 | 0.69 | 0.70 | 0 | 0.75 | 0.33 | 0 | | |
| 3 | 3021 | 0.58 | 0.66 | 0 | 0.96 | 0.26 | 0 | | |
| 3 | 3022 | 0.47 | 0.60 | 0 | 1.08 | 0.22 | 0 | | |
| 3 | 3023 | 0.38 | 0.53 | 0 | 1.15 | 0.23 | 0 | | |
| 3 | 3024 | 0.33 | 0.41 | 0 | 1.14 | 0.23 | 0 | | |
| 3 | 3025 | 0.85 | 0.87 | 0 | 0.37 | 0.27 | 0 | | |
| 3 | 3026 | 0.71 | 1.20 | 0 | 0.58 | 0.23 | 0 | | |
| 3 | 3027 | 0.58 | 1.35 | 0 | 0.72 | 0.19 | 0 | | |
| 3 | 3028 | 0.48 | 1.32 | 0 | 0.80 | 0.16 | 0 | | |
| 3 | 3029 | 0.38 | 1.27 | 0 | 0.79 | 0.16 | 0 | | |
| 3 | 3030 | 0.33 | 1.22 | 0 | 0.78 | 0.16 | 0 | | |
| 3 | 3031 | 0.81 | 0.72 | 0 | 0.38 | 0.13 | 0 | | |
| 3 | 3032 | 0.70 | 0.97 | 0 | 0.41 | 0.16 | 0 | | |
| 3 | 3033 | 0.59 | 1.10 | 0 | 0.63 | 0.24 | 0 | | |
| 3 | 3034 | 0.48 | 1.05 | 0 | 0.75 | 0.18 | 0 | | |
| 3 | 3035 | 0.38 | 0.98 | 0 | 0.76 | 0.25 | 0 | | |
| 3 | 3036 | 0.33 | 0.94 | 0 | 0.78 | 0.22 | 0 | | |
| 3 | 3037 | 0.85 | 0.52 | 0 | 0.41 | 0.28 | 0 | | |
| 3 | 3038 | 0.72 | 0.60 | 0 | 0.45 | 0.30 | 0 | | |
| 3 | 3039 | 0.59 | 0.67 | 0 | 0.62 | 0.28 | 0 | | |
| 3 | 3040 | 0.48 | 0.65 | 0 | 0.73 | 0.26 | 0 | | |
| 3 | 3041 | 0.38 | 0.63 | 0 | 0.79 | 0.22 | 0 | | |
| 3 | 3042 | 0.33 | 0.61 | 0 | 0.80 | 0.20 | 0 | | |
| 3 | 3043 | 0.81 | 0.35 | 0 | 0.42 | 0.46 | 0 | | |
| 3 | 3044 | 0.72 | 0.37 | 0 | 0.70 | 0.69 | 0 | | |
| 3 | 3045 | 0.59 | 0.22 | 0 | 0.91 | 0.83 | 0 | | |
| 3 | 3046 | 0.48 | 0.13 | 0 | 1.02 | 0.88 | 0 | | |
| 3 | 3047 | 0.38 | 0.18 | 0 | 1.04 | 0.85 | 0 | | |
| 3 | 3048 | 0.33 | 0.09 | 0 | 1.02 | 0.83 | 0 | | |
| 3 | 3049 | 0.78 | 0.22 | 0 | 0.58 | 0.84 | 0 | | |
| 3 | 3050 | 0.70 | 0.16 | 0 | 0.79 | 1.08 | 0 | | |
| 3 | 3051 | 0.59 | 0.19 | 0 | 1.00 | 1.26 | 0 | | |
| 3 | 3052 | 0.48 | 0.15 | 0 | 1.08 | 1.28 | 0 | | |
| 3 | 3053 | 0.38 | 0.11 | 0 | 1.10 | 1.22 | 0 | | |
| 3 | 3054 | 0.33 | 0.10 | 0 | 1.00 | 1.09 | 0 | | |
| 3 | 3055 | 0.81 | 0.44 | 0 | 0.55 | 0.54 | 0 | | |
| 3 | 3056 | 0.71 | 0.40 | 0 | 0.82 | 0.91 | 0 | | |
| 3 | 3057 | 0.58 | 0.27 | 0 | 0.91 | 0.99 | 0 | | |
| 3 | 3058 | 0.48 | 0.21 | 0 | 1.00 | 1.08 | 0 | | |
| 3 | 3059 | 0.38 | 0.16 | 0 | 1.03 | 1.06 | 0 | | |
| 3 | 3060 | 0.33 | 0.07 | 0 | 1.01 | 1.02 | 0 | | |
| 3 | 3061 | 0.74 | 0.27 | 0 | 0.59 | 0.52 | 0 | | |
| 3 | 3062 | 0.69 | 0.23 | 0 | 0.75 | 0.61 | 0 | | |
| 3 | 3063 | 0.58 | 0.19 | 0 | 0.86 | 0.59 | 0 | | |
| 3 | 3064 | 0.47 | 0.17 | 0 | 0.83 | 0.56 | 0 | | |
| 3 | 3065 | 0.38 | 0.13 | 0 | 0.85 | 0.47 | 0 | | |
| 3 | 3066 | 0.33 | 0.07 | 0 | 0.83 | 0.40 | 0 | | |
| 3 | 3067 | 0.79 | 0.25 | 0 | 0.43 | 0.57 | 0 | | |
| 3 | 3068 | 0.67 | 0.45 | 0 | 0.69 | 0.48 | 0 | | |
| 3 | 3069 | 0.57 | 0.61 | 0 | 0.70 | 0.36 | 0 | | |
| 3 | 3070 | 0.46 | 0.62 | 0 | 0.71 | 0.27 | 0 | | |
| 3 | 3071 | 0.37 | 0.58 | 0 | 0.57 | 0.22 | 0 | | |
| 3 | 3072 | 0.33 | 0.54 | 0 | 0.55 | 0.18 | 0 | | |
| 3 | 3073 | 0.75 | 0.24 | 0 | 0.47 | 0.26 | 0 | | |
| 3 | 3074 | 0.67 | 0.28 | 0 | 0.55 | 0.25 | 0 | | |
| 3 | 3075 | 0.56 | 0.29 | 0 | 0.64 | 0.25 | 0 | | |
| 3 | 3076 | 0.46 | 0.28 | 0 | 0.61 | 0.21 | 0 | | |
| 3 | 3077 | 0.37 | 0.18 | 0 | 0.64 | 0.17 | 0 | | |
| 3 | 3078 | 0.33 | 0.12 | 0 | 0.62 | 0.14 | 0 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΤΕΧΝΙΚΟΥ ΓΙΑ ΟΚΑ ΣΤΑΤΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Maximum Reinforcement [cm²/m]

(stored in data base file with reinforcement-distribution-no. 521)

| Grp | Element | upper:As | Ast | dir | lower:As | Ast | dir | Ass[cm ² /m ²] | AssE[cm ²] |
|-----|---------|----------|------|-----|----------|------|-----|---------------------------------------|------------------------|
| 3 | 3079 | 0.74 | 0.15 | 0 | 0.44 | 0.16 | 0 | | |
| 3 | 3080 | 0.67 | 0.18 | 0 | 0.56 | 0.17 | 0 | | |
| 3 | 3081 | 0.56 | 0.18 | 0 | 0.58 | 0.17 | 0 | | |
| 3 | 3082 | 0.46 | 0.12 | 0 | 0.58 | 0.15 | 0 | | |
| 3 | 3083 | 0.37 | 0.08 | 0 | 0.61 | 0.13 | 0 | | |
| 3 | 3084 | 0.33 | 0.07 | 0 | 0.61 | 0.12 | 0 | | |
| 3 | 3085 | 0.33 | 0.07 | 0 | 1.20 | 0.24 | 0 | | |
| 3 | 3086 | 0.37 | 0.08 | 0 | 1.19 | 0.24 | 0 | | |
| 3 | 3087 | 0.46 | 0.10 | 0 | 1.11 | 0.22 | 0 | | |
| 3 | 3088 | 0.56 | 0.23 | 0 | 0.96 | 0.19 | 0 | | |
| 3 | 3089 | 0.67 | 0.26 | 0 | 0.71 | 0.17 | 0 | | |
| 3 | 3090 | 0.77 | 0.25 | 0 | 0.62 | 0.26 | 0 | | |
| 3 | 3091 | 0.33 | 0.58 | 0 | 1.07 | 0.22 | 0 | | |
| 3 | 3092 | 0.37 | 0.62 | 0 | 1.04 | 0.25 | 0 | | |
| 3 | 3093 | 0.46 | 0.66 | 0 | 0.98 | 0.27 | 0 | | |
| 3 | 3094 | 0.56 | 0.67 | 0 | 0.78 | 0.24 | 0 | | |
| 3 | 3095 | 0.67 | 0.79 | 0 | 0.62 | 0.18 | 0 | | |
| 3 | 3096 | 0.82 | 0.69 | 0 | 0.34 | 0.33 | 0 | | |
| 3 | 3097 | 0.33 | 0.24 | 0 | 1.23 | 0.39 | 0 | | |
| 3 | 3098 | 0.37 | 0.26 | 0 | 1.23 | 0.45 | 0 | | |
| 3 | 3099 | 0.46 | 0.32 | 0 | 1.15 | 0.46 | 0 | | |
| 3 | 3100 | 0.57 | 0.51 | 0 | 0.99 | 0.43 | 0 | | |
| 3 | 3101 | 0.67 | 0.65 | 0 | 0.76 | 0.34 | 0 | | |
| 3 | 3102 | 0.81 | 0.66 | 0 | 0.39 | 0.16 | 0 | | |
| 3 | 3103 | 0.33 | 0.46 | 0 | 1.14 | 0.23 | 0 | | |
| 3 | 3104 | 0.38 | 0.55 | 0 | 1.14 | 0.23 | 0 | | |
| 3 | 3105 | 0.47 | 0.62 | 0 | 1.07 | 0.23 | 0 | | |
| 3 | 3106 | 0.58 | 0.66 | 0 | 0.93 | 0.25 | 0 | | |
| 3 | 3107 | 0.69 | 0.68 | 0 | 0.77 | 0.31 | 0 | | |
| 3 | 3108 | 0.78 | 0.64 | 0 | 0.41 | 0.35 | 0 | | |
| 3 | 3109 | 0.33 | 1.26 | 0 | 0.78 | 0.16 | 0 | | |
| 3 | 3110 | 0.38 | 1.29 | 0 | 0.80 | 0.16 | 0 | | |
| 3 | 3111 | 0.48 | 1.32 | 0 | 0.79 | 0.16 | 0 | | |
| 3 | 3112 | 0.58 | 1.34 | 0 | 0.70 | 0.20 | 0 | | |
| 3 | 3113 | 0.71 | 1.21 | 0 | 0.55 | 0.23 | 0 | | |
| 3 | 3114 | 0.85 | 0.82 | 0 | 0.38 | 0.27 | 0 | | |
| 3 | 3115 | 0.33 | 0.96 | 0 | 0.79 | 0.24 | 0 | | |
| 3 | 3116 | 0.38 | 1.00 | 0 | 0.76 | 0.24 | 0 | | |
| 3 | 3117 | 0.48 | 1.06 | 0 | 0.71 | 0.25 | 0 | | |
| 3 | 3118 | 0.59 | 1.08 | 0 | 0.64 | 0.23 | 0 | | |
| 3 | 3119 | 0.70 | 0.98 | 0 | 0.41 | 0.16 | 0 | | |
| 3 | 3120 | 0.81 | 0.71 | 0 | 0.38 | 0.13 | 0 | | |
| 3 | 3121 | 0.33 | 0.62 | 0 | 0.80 | 0.22 | 0 | | |
| 3 | 3122 | 0.38 | 0.64 | 0 | 0.79 | 0.21 | 0 | | |
| 3 | 3123 | 0.48 | 0.66 | 0 | 0.73 | 0.25 | 0 | | |
| 3 | 3124 | 0.59 | 0.67 | 0 | 0.63 | 0.27 | 0 | | |
| 3 | 3125 | 0.72 | 0.58 | 0 | 0.46 | 0.30 | 0 | | |
| 3 | 3126 | 0.85 | 0.50 | 0 | 0.41 | 0.28 | 0 | | |
| 3 | 3127 | 0.33 | 0.14 | 0 | 1.03 | 0.82 | 0 | | |
| 3 | 3128 | 0.38 | 0.18 | 0 | 1.06 | 0.88 | 0 | | |
| 3 | 3129 | 0.48 | 0.13 | 0 | 1.03 | 0.89 | 0 | | |
| 3 | 3130 | 0.59 | 0.20 | 0 | 0.91 | 0.83 | 0 | | |
| 3 | 3131 | 0.72 | 0.37 | 0 | 0.68 | 0.67 | 0 | | |
| 3 | 3132 | 0.81 | 0.40 | 0 | 0.42 | 0.42 | 0 | | |
| 3 | 3133 | 0.33 | 0.15 | 0 | 1.07 | 1.16 | 0 | | |
| 3 | 3134 | 0.38 | 0.17 | 0 | 1.11 | 1.24 | 0 | | |
| 3 | 3135 | 0.48 | 0.14 | 0 | 1.09 | 1.29 | 0 | | |
| 3 | 3136 | 0.59 | 0.22 | 0 | 0.98 | 1.25 | 0 | | |
| 3 | 3137 | 0.70 | 0.16 | 0 | 0.80 | 1.10 | 0 | | |
| 3 | 3138 | 0.78 | 0.21 | 0 | 0.58 | 0.84 | 0 | | |
| 3 | 3139 | 0.33 | 0.07 | 0 | 0.99 | 1.00 | 0 | | |
| 3 | 3140 | 0.38 | 0.17 | 0 | 1.01 | 1.04 | 0 | | |
| 3 | 3141 | 0.48 | 0.22 | 0 | 0.98 | 1.04 | 0 | | |
| 3 | 3142 | 0.58 | 0.27 | 0 | 0.94 | 1.08 | 0 | | |
| 3 | 3143 | 0.71 | 0.40 | 0 | 0.83 | 0.89 | 0 | | |
| 3 | 3144 | 0.81 | 0.44 | 0 | 0.49 | 0.49 | 0 | | |
| 3 | 3145 | 0.33 | 0.07 | 0 | 0.81 | 0.42 | 0 | | |
| 3 | 3146 | 0.38 | 0.14 | 0 | 0.82 | 0.49 | 0 | | |
| 3 | 3147 | 0.47 | 0.17 | 0 | 0.80 | 0.55 | 0 | | |
| 3 | 3148 | 0.58 | 0.22 | 0 | 0.85 | 0.59 | 0 | | |
| 3 | 3149 | 0.69 | 0.22 | 0 | 0.76 | 0.61 | 0 | | |
| 3 | 3150 | 0.74 | 0.26 | 0 | 0.59 | 0.51 | 0 | | |
| 3 | 3151 | 0.33 | 0.56 | 0 | 0.54 | 0.19 | 0 | | |
| 3 | 3152 | 0.37 | 0.57 | 0 | 0.58 | 0.19 | 0 | | |
| 3 | 3153 | 0.46 | 0.59 | 0 | 0.67 | 0.28 | 0 | | |
| 3 | 3154 | 0.57 | 0.59 | 0 | 0.74 | 0.36 | 0 | | |
| 3 | 3155 | 0.67 | 0.45 | 0 | 0.68 | 0.48 | 0 | | |
| 3 | 3156 | 0.79 | 0.23 | 0 | 0.43 | 0.57 | 0 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΤΕΧΝΙΚΟΥ ΓΙΑ ΟΚΑ ΣΤΑΤΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Maximum Reinforcement [cm²/m]

(stored in data base file with reinforcement-distribution-no. 521)

| Grp | Element | upper:As | Ast | dir | lower:As | Ast | dir | Ass[cm ² /m ²] | Asse[cm ²] |
|-----|---------|----------|------|-----|----------|-------|-----|---------------------------------------|------------------------|
| 3 | 3157 | 0.33 | 0.13 | 0 | 0.60 | 0.13 | 0 | | |
| 3 | 3158 | 0.37 | 0.17 | 0 | 0.62 | 0.18 | 0 | | |
| 3 | 3159 | 0.46 | 0.28 | 0 | 0.67 | 0.22 | 0 | | |
| 3 | 3160 | 0.56 | 0.29 | 0 | 0.62 | 0.25 | 0 | | |
| 3 | 3161 | 0.67 | 0.28 | 0 | 0.58 | 0.25 | 0 | | |
| 3 | 3162 | 0.75 | 0.24 | 0 | 0.47 | 0.25 | 0 | | |
| 3 | 3163 | 0.33 | 0.07 | 0 | 0.60 | 0.12 | 0 | | |
| 3 | 3164 | 0.37 | 0.09 | 0 | 0.60 | 0.13 | 0 | | |
| 3 | 3165 | 0.46 | 0.11 | 0 | 0.62 | 0.16 | 0 | | |
| 3 | 3166 | 0.56 | 0.18 | 0 | 0.57 | 0.17 | 0 | | |
| 3 | 3167 | 0.67 | 0.18 | 0 | 0.59 | 0.17 | 0 | | |
| 3 | 3168 | 0.74 | 0.15 | 0 | 0.44 | 0.16 | 0 | | |
| 4 | 4001 | 2.91 | 0.58 | 0 | 1.03 | 0.21 | 0 | | |
| 4 | 4002 | 1.00 | 0.20 | 0 | 0.63 | 0.47 | 0 | | |
| 4 | 4003 | 1.95 | 0.46 | 0 | 0.80 | 1.00 | 0 | 10.80 | 0.65 |
| 4 | 4004 | 0.85 | 0.38 | 0 | 0.50 | 0.85 | 0 | | |
| 4 | 4005 | 2.24 | 1.52 | 0 | 0.91 | 0.21 | 0 | | |
| 4 | 4006 | 0.97 | 0.75 | 0 | 0.39 | 0.08 | 0 | | |
| 4 | 4007 | 2.43 | 0.99 | 0 | 0.97 | 0.27 | 0 | | |
| 4 | 4008 | 1.04 | 0.65 | 0 | 0.47 | 0.35 | 0 | | |
| 4 | 4009 | 1.90 | 0.53 | 0 | 0.79 | 0.60 | 0 | | |
| 4 | 4010 | 0.96 | 0.40 | 0 | 0.42 | 0.52 | 0 | | |
| 4 | 4011 | 2.07 | 1.13 | 0 | 0.85 | 0.30 | 0 | | |
| 4 | 4012 | 0.91 | 0.60 | 0 | 0.41 | 0.11 | 0 | | |
| 4 | 4013 | 1.97 | 0.77 | 0 | 0.84 | 0.32 | 0 | | |
| 4 | 4014 | 0.97 | 0.51 | 0 | 0.43 | 0.34 | 0 | | |
| 4 | 4015 | 2.01 | 0.97 | 0 | 0.84 | 0.43 | 0 | | |
| 4 | 4016 | 0.91 | 0.47 | 0 | 0.49 | 0.51 | 0 | | |
| 4 | 4017 | 1.92 | 0.66 | 0 | 0.85 | 0.60 | 0 | | |
| 4 | 4018 | 0.91 | 0.22 | 0 | 0.52 | 0.71 | 0 | | |
| 4 | 4019 | 1.86 | 1.03 | 0 | 0.79 | 0.22 | 0 | | |
| 4 | 4020 | 0.88 | 0.51 | 0 | 0.43 | 0.09 | 0 | | |
| 4 | 4021 | 2.17 | 0.58 | 0 | 0.97 | 0.27 | 0 | | |
| 4 | 4022 | 0.90 | 0.27 | 0 | 0.48 | 0.39 | 0 | | |
| 4 | 4023 | 1.77 | 0.50 | 0 | 0.91 | 1.07 | 0 | | |
| 4 | 4024 | 0.82 | 0.16 | 0 | 0.53 | 0.79 | 0 | | |
| 4 | 4025 | 1.77 | 1.04 | 0 | 0.80 | 0.18 | 0 | | |
| 4 | 4026 | 0.78 | 0.51 | 0 | 0.39 | 0.18 | 0 | | |
| 4 | 4027 | 2.24 | 0.45 | 0 | 1.07 | 0.21 | 0 | | |
| 4 | 4028 | 0.96 | 0.28 | 0 | 0.46 | 0.11 | 0 | | |
| 4 | 4029 | 1.00 | 0.20 | 0 | 0.44 | 0.47 | 0 | | |
| 4 | 4030 | 2.89 | 0.58 | 0 | 1.03 | 0.21 | 0 | | |
| 4 | 4031 | 0.85 | 0.40 | 0 | 0.44 | 0.85 | 0 | | |
| 4 | 4032 | 1.95 | 0.46 | 0 | 0.80 | 1.03 | 0 | 10.94 | 0.66 |
| 4 | 4033 | 0.97 | 0.75 | 0 | 0.39 | 0.08 | 0 | | |
| 4 | 4034 | 2.24 | 1.52 | 0 | 0.91 | 0.21 | 0 | | |
| 4 | 4035 | 1.02 | 0.66 | 0 | 0.42 | 0.34 | 0 | | |
| 4 | 4036 | 2.42 | 0.99 | 0 | 0.97 | 0.27 | 0 | | |
| 4 | 4037 | 0.96 | 0.35 | 0 | 0.42 | 0.52 | 0 | | |
| 4 | 4038 | 1.90 | 0.53 | 0 | 0.79 | 0.60 | 0 | | |
| 4 | 4039 | 0.91 | 0.61 | 0 | 0.41 | 0.11 | 0 | | |
| 4 | 4040 | 2.07 | 1.12 | 0 | 0.85 | 0.30 | 0 | | |
| 4 | 4041 | 0.97 | 0.46 | 0 | 0.43 | 0.33 | 0 | | |
| 4 | 4042 | 1.97 | 0.72 | 0 | 0.84 | 0.32 | 0 | | |
| 4 | 4043 | 0.91 | 0.48 | 0 | 0.43 | 0.44 | 0 | | |
| 4 | 4044 | 2.01 | 0.97 | 0 | 0.84 | 0.40 | 0 | | |
| 4 | 4045 | 0.91 | 0.22 | 0 | 0.45 | 0.67 | 0 | | |
| 4 | 4046 | 1.92 | 0.66 | 0 | 0.85 | 0.58 | 0 | | |
| 4 | 4047 | 0.88 | 0.51 | 0 | 0.43 | 0.09 | 0 | | |
| 4 | 4048 | 1.86 | 1.03 | 0 | 0.79 | 0.22 | 0 | | |
| 4 | 4049 | 0.90 | 0.27 | 0 | 0.48 | 0.39 | 0 | | |
| 4 | 4050 | 2.17 | 0.58 | 0 | 0.97 | 0.27 | 0 | | |
| 4 | 4051 | 0.82 | 0.16 | 0 | 0.51 | 0.80 | 0 | | |
| 4 | 4052 | 1.77 | 0.50 | 0 | 0.91 | 1.07 | 0 | | |
| 4 | 4053 | 0.78 | 0.51 | 0 | 0.39 | 0.18 | 0 | | |
| 4 | 4054 | 1.77 | 1.04 | 0 | 0.80 | 0.18 | 0 | | |
| 4 | 4055 | 0.96 | 0.28 | 0 | 0.46 | 0.11 | 0 | | |
| 4 | 4056 | 2.24 | 0.46 | 0 | 1.07 | 0.21 | 0 | | |
| 8 | 8001 | 0.28 | 1.39 | 0 | 0.85 | 4.25 | 0 | | |
| 8 | 8002 | 0.53 | 2.62 | 0 | 1.73 | 8.67 | 0 | | |
| 8 | 8003 | 0.67 | 3.20 | 0 | 7.25 | 18.76 | 0 | | |
| 8 | 8004 | 3.02 | 2.86 | 0 | 1.69 | 8.44 | 0 | | |
| 8 | 8005 | 2.37 | 3.18 | 0 | 8.92 | 20.87 | 0 | | |
| 8 | 8006 | 0.95 | 2.62 | 0 | 1.55 | 7.73 | 0 | | |
| 8 | 8007 | 0.44 | 1.53 | 0 | 0.85 | 4.26 | 0 | | |
| 8 | 8008 | 0.47 | 2.33 | 0 | 1.88 | 7.58 | 0 | | |
| 8 | 8009 | 1.37 | 3.33 | 0 | 7.98 | 18.78 | 0 | | |
| 8 | 8010 | 0.49 | 2.44 | 0 | 1.51 | 7.55 | 0 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΤΕΧΝΙΚΟΥ ΓΙΑ ΟΚΑ ΣΤΑΤΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Maximum Reinforcement [cm²/m]

(stored in data base file with reinforcement-distribution-no. 521)

| Grp | Element | upper:As | Ast | dir | lower:As | Ast | dir | Ass[cm ² /m ²] | AssE[cm ²] |
|-----|---------|----------|------|-----|----------|-------|-----|---------------------------------------|------------------------|
| 8 | 8011 | 2.02 | 3.00 | 0 | 5.84 | 15.03 | 0 | | |
| 8 | 8012 | 0.57 | 2.85 | 0 | 1.69 | 8.44 | 0 | | |
| 8 | 8013 | 1.85 | 2.90 | 0 | 5.60 | 14.05 | 0 | | |
| 8 | 8014 | 0.59 | 2.96 | 0 | 1.74 | 8.69 | 0 | | |
| 8 | 8015 | 1.47 | 3.06 | 0 | 5.63 | 14.07 | 0 | | |
| 8 | 8016 | 0.59 | 2.95 | 0 | 1.73 | 8.67 | 0 | | |
| 8 | 8017 | 1.41 | 2.20 | 0 | 5.81 | 14.94 | 0 | | |
| 8 | 8018 | 0.48 | 2.42 | 0 | 1.69 | 8.46 | 0 | | |
| 8 | 8019 | 1.38 | 2.56 | 0 | 7.98 | 18.71 | 0 | | |
| 8 | 8020 | 0.46 | 2.28 | 0 | 1.51 | 7.57 | 0 | | |
| 8 | 8021 | 0.37 | 1.34 | 0 | 0.88 | 4.41 | 0 | | |
| 8 | 8022 | 0.60 | 1.99 | 0 | 1.78 | 7.58 | 0 | | |
| 8 | 8023 | 1.76 | 0.65 | 0 | 9.08 | 21.11 | 0 | | |
| 8 | 8024 | 0.70 | 1.93 | 0 | 1.58 | 7.88 | 0 | | |
| 8 | 8025 | 0.52 | 0.54 | 0 | 8.18 | 21.25 | 0 | | |
| 8 | 8026 | 2.57 | 1.93 | 0 | 1.68 | 8.42 | 0 | | |
| 8 | 8027 | 0.15 | 0.76 | 0 | 0.85 | 4.24 | 0 | | |
| 8 | 8028 | 0.45 | 1.39 | 0 | 1.73 | 8.64 | 0 | | |
| 8 | 8029 | 0.28 | 1.39 | 0 | 0.85 | 4.25 | 0 | | |
| 8 | 8030 | 0.67 | 3.20 | 0 | 7.20 | 18.62 | 0 | | |
| 8 | 8031 | 0.56 | 2.62 | 0 | 1.73 | 8.67 | 0 | | |
| 8 | 8032 | 3.06 | 2.86 | 0 | 1.69 | 8.44 | 0 | | |
| 8 | 8033 | 2.39 | 3.18 | 0 | 8.92 | 20.87 | 0 | | |
| 8 | 8034 | 0.50 | 1.53 | 0 | 0.85 | 4.26 | 0 | | |
| 8 | 8035 | 1.37 | 3.33 | 0 | 7.98 | 18.78 | 0 | | |
| 8 | 8036 | 0.99 | 2.62 | 0 | 1.55 | 7.73 | 0 | | |
| 8 | 8037 | 0.47 | 2.33 | 0 | 1.88 | 7.58 | 0 | | |
| 8 | 8038 | 0.49 | 2.44 | 0 | 1.51 | 7.56 | 0 | | |
| 8 | 8039 | 2.02 | 3.00 | 0 | 5.84 | 15.03 | 0 | | |
| 8 | 8040 | 1.66 | 2.90 | 0 | 5.60 | 14.05 | 0 | | |
| 8 | 8041 | 0.57 | 2.85 | 0 | 1.69 | 8.44 | 0 | | |
| 8 | 8042 | 0.59 | 2.96 | 0 | 1.74 | 8.69 | 0 | | |
| 8 | 8043 | 1.47 | 3.06 | 0 | 5.63 | 14.07 | 0 | | |
| 8 | 8044 | 1.41 | 2.20 | 0 | 5.81 | 14.94 | 0 | | |
| 8 | 8045 | 0.59 | 2.95 | 0 | 1.73 | 8.67 | 0 | | |
| 8 | 8046 | 0.48 | 2.42 | 0 | 1.69 | 8.46 | 0 | | |
| 8 | 8047 | 1.38 | 2.56 | 0 | 7.98 | 18.71 | 0 | | |
| 8 | 8048 | 0.37 | 1.34 | 0 | 0.88 | 4.41 | 0 | | |
| 8 | 8049 | 1.76 | 0.65 | 0 | 9.08 | 21.11 | 0 | | |
| 8 | 8050 | 0.46 | 2.28 | 0 | 1.51 | 7.57 | 0 | | |
| 8 | 8051 | 0.60 | 1.99 | 0 | 1.81 | 7.58 | 0 | | |
| 8 | 8052 | 0.70 | 1.93 | 0 | 1.58 | 7.88 | 0 | | |
| 8 | 8053 | 0.52 | 0.54 | 0 | 8.18 | 21.25 | 0 | | |
| 8 | 8054 | 0.15 | 0.76 | 0 | 0.85 | 4.24 | 0 | | |
| 8 | 8055 | 2.57 | 1.93 | 0 | 1.68 | 8.42 | 0 | | |
| 8 | 8056 | 0.45 | 1.39 | 0 | 1.73 | 8.64 | 0 | | |

REINFORCEMENT INDEX [kg netto]: 0.058 (Upper)
 0.116 (Lower)
 0.001 (Shear)

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΤΕΧΝΙΚΟΥ ΓΙΑ ΟΚΑ ΣΤΑΤΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Maximal values of the shear design

Only elements with shear reinforcement are printed.

At punching points punching reinforcement is printed.

| element | ass [cm ² /m ²] | tau [MPa] | acc.VED/VRDmax | acc.cot_theta | min_z [m] |
|---------|---|--------------|----------------|---------------|--------------|
| 4003 | 10.80 | 0.56 | 0.180 | 1.75 | 0.186 |
| 4032 | 10.94 | 0.57 | 0.182 | 1.75 | 0.186 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Selected Beam Elements

| FROM | TO | INC | X-VALUE | NC | MEMBER | CS0 | CS1 | CS2 | CS3 | CS4 | CS5 |
|-------|-------|-----|---------|----|--------|-----|-----|-----|-----|-----|-----|
| 10001 | | | | | | | | | | | |
| 10005 | | | | | | | | | | | |
| 10006 | | | | | | | | | | | |
| 10009 | | | | | | | | | | | |
| 10010 | | | | | | | | | | | |
| 10014 | | | | | | | | | | | |
| 10016 | | | | | | | | | | | |
| 10020 | | | | | | | | | | | |
| 10021 | | | | | | | | | | | |
| 10024 | | | | | | | | | | | |
| 10025 | | | | | | | | | | | |
| 10029 | | | | | | | | | | | |
| 12000 | 12150 | 1 | | | | | | | | | |

Default design code is DIN Fachbericht 102 Massivbröcken (2003) (Germany)

Klasse(Tab.4.118): D

wind zone : Binnenland

Materials

| | |
|--------|-------------------------|
| No. 1 | C 25/30 (DIN 1045-1) |
| No. 3 | C 25/30 (DIN 1045-1) |
| No. 4 | C 25/30 (DIN 1045-1) |
| No. 5 | C 25/30 (DIN 1045-1) |
| No. 6 | C 25/30 (DIN 1045-1) |
| No. 7 | C 25/30 (DIN 1045-1) |
| No. 8 | C 25/30 (DIN 1045-1) |
| No. 9 | C 25/30 (DIN 1045-1) |
| No. 10 | C 25/30 (DIN 1045-1) |
| No. 12 | BSt 500 SA (DIN 1045-1) |

Reinforcement will be accounted for sectional values as defined in AQUA

Reinforcements saved as design case LCR 506

Considered Load Cases

| No. refer | act on | Title/type of load case | gam-u | gam-f | psi-0 | psi-1 | psi-2 | psi-1' |
|------------|--------|---|-------|-------|-------|-------|-------|-------------|
| 1 part. | CS 1 | I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 2 part. | CS 1 | I.B. ΔΟΚΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 3 part. | CS 1 | I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 11 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 12 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 13 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 14 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1201 part. | CS 1 | MAX-MY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1202 part. | CS 1 | MIN-MY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1203 part. | CS 1 | MAX-VZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1204 part. | CS 1 | MIN-VZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1205 part. | CS 1 | MAX-MZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1206 part. | CS 1 | MIN-MZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1207 part. | CS 1 | MAX-VY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1208 part. | CS 1 | MIN-VY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1209 part. | CS 1 | MAX-N BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1210 part. | CS 1 | MIN-N BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1211 part. | CS 1 | MAX-MT BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1212 part. | CS 1 | MIN-MT BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Ultimate Load Design

Design for ultimate loads DIN Fachbericht 102 Massivbröcken (2003)

Biaxial bending, uniaxial stress calculated in y-z axis

Safety factors SC-1 SC-2 SC-S SS-1 SS-2 PIIa
1.50 1.50 1.50 1.15 1.15 7
Strain limits C1 C2 S1 S2 Z1 Z2
max -3.50 -2.00 3.00 25.00 -3.50 25.00

parameters for reinforcements

Minimum reinforcements compression min. reinforcem. maximum-
Bending. Compress. e/d N/Npl requ. section reforc.
0.00 [cm²] 0.30 [o/o] 3.50 0.0010 0.00 0.15 9.00

Tensile forces in the longitudinal reinforcements due to shear are NOT accounted for.

Material of sections uses Ultimate Limit strain-stress law with global safety factors

Material of reinforcements uses Ultimate Limit strain-stress law with global safety factors

| MNo. | temp lev. | Material-safety | max.compr stress [MPa] | at strain [o/o] | max.tens stress [MPa] | at strain [o/o] | tension-stiffening [MPa] |
|------|-----------|-----------------|------------------------|-----------------|-----------------------|-----------------|--------------------------|
| 1 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 3 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 4 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 5 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 6 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 7 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 8 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 9 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 10 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 12 | 0 | 1.150 | -456.52 | -25.00 | 456.52 | 25.00 | |

Combinations For Ultimate Design

1213 (gross) max_my-1213

MAX + MY :
1.35 * G + 1.50 * L_A + 1.00 * L_B

1214 (gross) min_my-1214

MIN + MY :
1.35 * G + 1.50 * L_A + 1.00 * L_B

Shear Design

Design for shear DIN 1045-1 (2003)

Minimum shear factor or tan of inclination of compressive struts 0.57 / 1.72
MNo f-cd [MPa] tau-rd [MPa] sigIIQ [MPa] sigIIT [MPa] sigIIQ+ [MPa] fyd [MPa]

| | | | | | | |
|----|-------|------|-------|------|-------|--|
| 1 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 3 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 4 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 5 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 6 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 7 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 8 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 9 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 10 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 12 | | | | | | |

434.78

Tolerance for exceeding maximum shear or principal compression stress 0.0200

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | mue | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|-------|-------|-----|------|---------------------------|--------------|----------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| 10001 | 0.000 | 8 | 0.03 | 4.25 | | 3.98T | 0.14 | | 0.14 | |
| 10001 | 0.200 | 8 | 0.02 | 3.29 | | 3.29T | | | | |
| 10005 | 0.000 | 8 | 0.12 | 15.75 | | 13.82T | | | 1.93 | |
| 10005 | 0.200 | 8 | 0.13 | 16.90 | | 15.67T | 0.83 | | 0.40 | |
| 10006 | 0.000 | 8 | 0.00 | 0.46 | | 0.35T | 0.10 | | | |
| 10006 | 0.400 | 8 | 0.01 | 1.43 | | 1.24T | 0.19 | | | |
| 10009 | 0.000 | 8 | 0.02 | 2.00 | | 1.60T | 0.40 | | | |
| 10009 | 0.400 | 8 | 0.02 | 2.01 | | 1.67T | 0.34 | | | |
| 10010 | 0.000 | 8 | 0.13 | 16.58 | | 15.37T | 0.78 | | 0.43 | |
| 10010 | 0.200 | 8 | 0.13 | 17.19 | | 15.31T | | | 1.88 | |
| 10014 | 0.000 | 8 | 0.02 | 3.28 | | 3.28T | | | | |
| 10014 | 0.200 | 8 | 0.03 | 3.60 | | 3.39T | 0.11 | | 0.11 | |
| 10016 | 0.000 | 8 | 0.03 | 4.22 | | 3.94T | 0.14 | | 0.14 | |
| 10016 | 0.200 | 8 | 0.03 | 3.56 | | 3.56T | | | | |
| 10020 | 0.000 | 8 | 0.12 | 15.59 | | 13.74T | | | 1.85 | |
| 10020 | 0.200 | 8 | 0.13 | 16.80 | | 15.56T | 0.83 | | 0.40 | |
| 10021 | 0.000 | 8 | 0.00 | 0.51 | | 0.27T | 0.25 | | | |
| 10021 | 0.400 | 8 | 0.01 | 1.43 | | 1.25T | 0.19 | | | |
| 10024 | 0.000 | 8 | 0.01 | 1.87 | | 1.50T | 0.37 | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | μ _{ue} [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|-------|-------|-----|------------------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 10024 | 0.400 | 8 | 0.01 | 1.87 | | 1.53T | 0.34 | | | |
| 10025 | 0.000 | 8 | 0.12 | 16.21 | | 15.05T | 0.75 | | 0.41 | |
| 10025 | 0.200 | 8 | 0.14 | 18.37 | | 16.54T | | | 1.83 | |
| 10029 | 0.000 | 8 | 0.03 | 3.43 | | 3.43T | | | | |
| 10029 | 0.200 | 8 | 0.03 | 3.55 | | 3.35T | 0.10 | | 0.10 | |
| 12001 | 0.000 | 9 | 0.69 | 34.65 | | | 34.65T | | | |
| 12001 | 1.000 | 9 | 0.41 | 20.40 | | | 20.40T | | | |
| 12002 | 0.000 | 9 | 0.41 | 20.40 | | | 20.40T | | | |
| 12002 | 1.000 | 9 | 0.48 | 24.24 | | | 24.24T | | | |
| 12003 | 0.000 | 9 | 0.48 | 24.24 | | | 24.24T | | | |
| 12003 | 1.000 | 9 | 0.98 | 49.36 | | | 49.36T | | | |
| 12004 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12004 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12005 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12005 | 1.000 | 9 | 0.49 | 24.68 | | | 24.68T | | | |
| 12006 | 0.000 | 9 | 0.49 | 24.68 | | | 24.68T | | | |
| 12006 | 1.000 | 9 | 0.97 | 48.95 | | | 48.95T | | | |
| 12007 | 0.000 | 9 | 0.40 | 20.22 | | | 20.22T | | | |
| 12007 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12008 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12008 | 1.000 | 9 | 0.49 | 24.60 | | | 24.60T | | | |
| 12009 | 0.000 | 9 | 0.49 | 24.60 | | | 24.60T | | | |
| 12009 | 1.000 | 9 | 0.97 | 48.90 | | | 48.90T | | | |
| 12010 | 0.000 | 9 | 0.69 | 34.65 | | | 34.65T | | | |
| 12010 | 1.000 | 9 | 0.41 | 20.40 | | | 20.40T | | | |
| 12011 | 0.000 | 9 | 0.41 | 20.40 | | | 20.40T | | | |
| 12011 | 1.000 | 9 | 0.48 | 24.24 | | | 24.24T | | | |
| 12012 | 0.000 | 9 | 0.48 | 24.24 | | | 24.24T | | | |
| 12012 | 1.000 | 9 | 0.97 | 48.90 | | | 48.90T | | | |
| 12013 | 0.000 | 9 | 0.31 | 15.65 | | | 15.65T | | | |
| 12013 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12014 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12014 | 1.000 | 9 | 0.48 | 24.31 | | | 24.31T | | | |
| 12015 | 0.000 | 9 | 0.48 | 24.31 | | | 24.31T | | | |
| 12015 | 1.000 | 9 | 0.97 | 48.95 | | | 48.95T | | | |
| 12016 | 0.000 | 9 | 0.46 | 22.97 | | | 22.97T | | | |
| 12016 | 1.000 | 9 | 0.31 | 15.70 | | | 15.70T | | | |
| 12017 | 0.000 | 9 | 0.31 | 15.70 | | | 15.70T | | | |
| 12017 | 1.000 | 9 | 0.49 | 24.60 | | | 24.60T | | | |
| 12018 | 0.000 | 9 | 0.49 | 24.60 | | | 24.60T | | | |
| 12018 | 1.000 | 9 | 0.98 | 49.36 | | | 49.36T | | | |
| 12019 | 0.000 | 9 | 0.98 | 49.36 | | | 49.36T | | | |
| 12019 | 1.000 | 9 | 1.40 | 70.29 | | | 70.29T | | | |
| 12020 | 0.000 | 9 | 1.40 | 70.23 | | | 70.23T | | | |
| 12020 | 1.000 | 9 | 1.47 | 74.07 | | | 74.07T | | | |
| 12021 | 0.000 | 9 | 1.47 | 74.03 | | | 74.03T | | | |
| 12021 | 1.000 | 9 | 1.31 | 65.97 | | | 65.97T | | | |
| 12022 | 0.000 | 9 | 1.31 | 65.94 | | | 65.94T | | | |
| 12022 | 1.000 | 9 | 1.04 | 52.06 | | | 52.06T | | | |
| 12023 | 0.000 | 9 | 1.04 | 52.04 | | | 52.04T | | | |
| 12023 | 1.000 | 9 | 0.72 | 36.21 | | | 36.21T | | | |
| 12024 | 0.000 | 9 | 0.72 | 36.20 | | | 36.20T | | | |
| 12024 | 1.000 | 9 | 0.42 | 21.35 | | | 21.35T | | | |
| 12025 | 0.000 | 9 | 0.42 | 21.35 | | | 21.35T | | | |
| 12025 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12026 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12026 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12027 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12027 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12028 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12028 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12029 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12029 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12030 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12030 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12031 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12031 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12032 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12032 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12033 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12033 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12034 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12034 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12035 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12035 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12036 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|-------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 12036 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12037 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12037 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12038 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12038 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12039 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12039 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12040 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12040 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12041 | 0.000 | 9 | 0.97 | 48.95 | | | 48.95T | | | |
| 12041 | 1.000 | 9 | 1.39 | 69.85 | | | 69.85T | | | |
| 12042 | 0.000 | 9 | 1.39 | 69.79 | | | 69.79T | | | |
| 12042 | 1.000 | 9 | 1.47 | 73.69 | | | 73.69T | | | |
| 12043 | 0.000 | 9 | 1.47 | 73.65 | | | 73.65T | | | |
| 12043 | 1.000 | 9 | 1.31 | 65.97 | | | 65.97T | | | |
| 12044 | 0.000 | 9 | 1.31 | 65.94 | | | 65.94T | | | |
| 12044 | 1.000 | 9 | 1.04 | 52.05 | | | 52.05T | | | |
| 12045 | 0.000 | 9 | 1.04 | 52.03 | | | 52.03T | | | |
| 12045 | 1.000 | 9 | 0.72 | 36.19 | | | 36.19T | | | |
| 12046 | 0.000 | 9 | 0.72 | 36.19 | | | 36.19T | | | |
| 12046 | 1.000 | 9 | 0.42 | 21.33 | | | 21.33T | | | |
| 12047 | 0.000 | 9 | 0.42 | 21.33 | | | 21.33T | | | |
| 12047 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12048 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12048 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12049 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12049 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12050 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12050 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12051 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12051 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12052 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12052 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12053 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12053 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12054 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12054 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12055 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12055 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12056 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12056 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12057 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12057 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12058 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12058 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12059 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12059 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12060 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12060 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12061 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12061 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12062 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12062 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12063 | 0.000 | 9 | 0.97 | 48.90 | | | 48.90T | | | |
| 12063 | 1.000 | 9 | 1.39 | 69.82 | | | 69.82T | | | |
| 12064 | 0.000 | 9 | 1.39 | 69.76 | | | 69.76T | | | |
| 12064 | 1.000 | 9 | 1.47 | 73.68 | | | 73.68T | | | |
| 12065 | 0.000 | 9 | 1.46 | 73.63 | | | 73.63T | | | |
| 12065 | 1.000 | 9 | 1.32 | 66.24 | | | 66.24T | | | |
| 12066 | 0.000 | 9 | 1.32 | 66.21 | | | 66.21T | | | |
| 12066 | 1.000 | 9 | 1.04 | 52.19 | | | 52.19T | | | |
| 12067 | 0.000 | 9 | 1.04 | 52.17 | | | 52.17T | | | |
| 12067 | 1.000 | 9 | 0.72 | 36.21 | | | 36.21T | | | |
| 12068 | 0.000 | 9 | 0.72 | 36.20 | | | 36.20T | | | |
| 12068 | 1.000 | 9 | 0.42 | 21.25 | | | 21.25T | | | |
| 12069 | 0.000 | 9 | 0.42 | 21.24 | | | 21.24T | | | |
| 12069 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12070 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12070 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12071 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12071 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12072 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12072 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12073 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12073 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12074 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|-------|-------|-----|------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 12074 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12075 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12075 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12076 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12076 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12077 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12077 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12078 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12078 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12079 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12079 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12080 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12080 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12081 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12081 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12082 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12082 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12083 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12083 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12084 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12084 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12085 | 0.000 | 9 | 0.97 | 48.90 | | | 48.90T | | | |
| 12085 | 1.000 | 9 | 1.39 | 69.82 | | | 69.82T | | | |
| 12086 | 0.000 | 9 | 1.39 | 69.76 | | | 69.76T | | | |
| 12086 | 1.000 | 9 | 1.47 | 73.68 | | | 73.68T | | | |
| 12087 | 0.000 | 9 | 1.46 | 73.63 | | | 73.63T | | | |
| 12087 | 1.000 | 9 | 1.32 | 66.24 | | | 66.24T | | | |
| 12088 | 0.000 | 9 | 1.32 | 66.21 | | | 66.21T | | | |
| 12088 | 1.000 | 9 | 1.04 | 52.06 | | | 52.06T | | | |
| 12089 | 0.000 | 9 | 1.04 | 52.04 | | | 52.04T | | | |
| 12089 | 1.000 | 9 | 0.72 | 36.21 | | | 36.21T | | | |
| 12090 | 0.000 | 9 | 0.72 | 36.20 | | | 36.20T | | | |
| 12090 | 1.000 | 9 | 0.42 | 21.35 | | | 21.35T | | | |
| 12091 | 0.000 | 9 | 0.42 | 21.35 | | | 21.35T | | | |
| 12091 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12092 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12092 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12093 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12093 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12094 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12094 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12095 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12095 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12096 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12096 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12097 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12097 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12098 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12098 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12099 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12099 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12100 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12100 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12101 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12101 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12102 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12102 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12103 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12103 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12104 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12104 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12105 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12105 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12106 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12106 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12107 | 0.000 | 9 | 0.97 | 48.95 | | | 48.95T | | | |
| 12107 | 1.000 | 9 | 1.39 | 69.85 | | | 69.85T | | | |
| 12108 | 0.000 | 9 | 1.39 | 69.79 | | | 69.79T | | | |
| 12108 | 1.000 | 9 | 1.47 | 73.69 | | | 73.69T | | | |
| 12109 | 0.000 | 9 | 1.47 | 73.65 | | | 73.65T | | | |
| 12109 | 1.000 | 9 | 1.32 | 66.23 | | | 66.23T | | | |
| 12110 | 0.000 | 9 | 1.32 | 66.21 | | | 66.21T | | | |
| 12110 | 1.000 | 9 | 1.04 | 52.17 | | | 52.17T | | | |
| 12111 | 0.000 | 9 | 1.04 | 52.16 | | | 52.16T | | | |
| 12111 | 1.000 | 9 | 0.72 | 36.19 | | | 36.19T | | | |
| 12112 | 0.000 | 9 | 0.72 | 36.19 | | | 36.19T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|-------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 12112 | 1.000 | 9 | 0.42 | 21.23 | | | 21.23T | | | |
| 12113 | 0.000 | 9 | 0.42 | 21.23 | | | 21.23T | | | |
| 12113 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12114 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12114 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12115 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12115 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12116 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12116 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12117 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12117 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12118 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12118 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12119 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12119 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12120 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12120 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12121 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12121 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12122 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12122 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12123 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12123 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12124 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12124 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12125 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12125 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12126 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12126 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12127 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12127 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12128 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12128 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12129 | 0.000 | 9 | 0.98 | 49.36 | | | 49.36T | | | |
| 12129 | 1.000 | 9 | 1.40 | 70.29 | | | 70.29T | | | |
| 12130 | 0.000 | 9 | 1.40 | 70.23 | | | 70.23T | | | |
| 12130 | 1.000 | 9 | 1.47 | 74.07 | | | 74.07T | | | |
| 12131 | 0.000 | 9 | 1.47 | 74.03 | | | 74.03T | | | |
| 12131 | 1.000 | 9 | 1.31 | 65.97 | | | 65.97T | | | |
| 12132 | 0.000 | 9 | 1.31 | 65.94 | | | 65.94T | | | |
| 12132 | 1.000 | 9 | 1.04 | 52.06 | | | 52.06T | | | |
| 12133 | 0.000 | 9 | 1.04 | 52.04 | | | 52.04T | | | |
| 12133 | 1.000 | 9 | 0.72 | 36.21 | | | 36.21T | | | |
| 12134 | 0.000 | 9 | 0.72 | 36.20 | | | 36.20T | | | |
| 12134 | 1.000 | 9 | 0.42 | 21.25 | | | 21.25T | | | |
| 12135 | 0.000 | 9 | 0.42 | 21.24 | | | 21.24T | | | |
| 12135 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12136 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12136 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12137 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12137 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12138 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12138 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12139 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12139 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12140 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12140 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12141 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12141 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12142 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12142 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12143 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12143 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12144 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12144 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12145 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12145 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12146 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12146 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12147 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12147 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12148 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12148 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12149 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12149 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12150 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|-------|-------|-----|------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 12150 | 1.000 | 9 | 0.30 | 15.08 | | 15.08' | | | | |

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | Nos | Asl-Mt [cm ² /m] | SLay-0&5 [cm ² /m] | SLay-1&6 [cm ² /m] | SLay-2&7 [cm ² /m] | SLay-3&8 [cm ² /m] | SLay-4&9 [cm ² /m] |
|-------|-------|-----|--------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 10001 | 0.000 | 8 | 0.93 | 1.76 | | | | |
| 10001 | 0.200 | 8 | 0.80 | 1.89 | | | | |
| 10005 | 0.000 | 8 | 3.35 | 5.65 | | | | |
| 10005 | 0.200 | 8 | 3.65 | 5.34 | | | | |
| 10006 | 0.000 | 8 | 0.09 | 0.13 | | | | |
| 10006 | 0.400 | 8 | 0.30 | 0.35 | | | | |
| 10009 | 0.000 | 8 | 0.39 | 0.38 | | | | |
| 10009 | 0.400 | 8 | 0.39 | 0.54 | | | | |
| 10010 | 0.000 | 8 | 3.58 | 5.53 | | | | |
| 10010 | 0.200 | 8 | 3.71 | 5.87 | | | | |
| 10014 | 0.000 | 8 | 0.80 | 1.45 | | | | |
| 10014 | 0.200 | 8 | 0.80 | 1.33 | | | | |
| 10016 | 0.000 | 8 | 0.92 | 1.76 | | | | |
| 10016 | 0.200 | 8 | 0.86 | 1.89 | | | | |
| 10020 | 0.000 | 8 | 3.34 | 5.50 | | | | |
| 10020 | 0.200 | 8 | 3.63 | 5.34 | | | | |
| 10021 | 0.000 | 8 | 0.09 | 0.14 | | | | |
| 10021 | 0.400 | 8 | 0.30 | 0.35 | | | | |
| 10024 | 0.000 | 8 | 0.36 | 0.38 | | | | |
| 10024 | 0.400 | 8 | 0.36 | 0.50 | | | | |
| 10025 | 0.000 | 8 | 3.51 | 5.35 | | | | |
| 10025 | 0.200 | 8 | 4.02 | 5.96 | | | | |
| 10029 | 0.000 | 8 | 0.83 | 1.46 | | | | |
| 10029 | 0.200 | 8 | 0.79 | 1.31 | | | | |
| 12001 | 0.000 | 9 | 0.00 | 5.03 | | | | |
| 12001 | 1.000 | 9 | 0.00 | 5.12 | | | | |
| 12002 | 0.000 | 9 | 0.00 | 5.12 | | | | |
| 12002 | 1.000 | 9 | 0.00 | 6.60 | | | | |
| 12003 | 0.000 | 9 | 0.00 | 6.60 | | | | |
| 12003 | 1.000 | 9 | 0.00 | 9.13 | | | | |
| 12004 | 0.000 | 9 | 0.00 | 5.06 | | | | |
| 12004 | 1.000 | 9 | 0.00 | 5.12 | | | | |
| 12005 | 0.000 | 9 | 0.00 | 5.12 | | | | |
| 12005 | 1.000 | 9 | 0.00 | 6.57 | | | | |
| 12006 | 0.000 | 9 | 0.00 | 6.57 | | | | |
| 12006 | 1.000 | 9 | 0.00 | 10.21 | | | | |
| 12007 | 0.000 | 9 | 0.00 | 5.13 | | | | |
| 12007 | 1.000 | 9 | 0.00 | 5.12 | | | | |
| 12008 | 0.000 | 9 | 0.00 | 5.12 | | | | |
| 12008 | 1.000 | 9 | 0.00 | 6.58 | | | | |
| 12009 | 0.000 | 9 | 0.00 | 6.58 | | | | |
| 12009 | 1.000 | 9 | 0.00 | 9.68 | | | | |
| 12010 | 0.000 | 9 | 0.00 | 5.03 | | | | |
| 12010 | 1.000 | 9 | 0.00 | 5.12 | | | | |
| 12011 | 0.000 | 9 | 0.00 | 5.12 | | | | |
| 12011 | 1.000 | 9 | 0.00 | 6.60 | | | | |
| 12012 | 0.000 | 9 | 0.00 | 6.60 | | | | |
| 12012 | 1.000 | 9 | 0.00 | 9.14 | | | | |
| 12013 | 0.000 | 9 | 0.00 | 5.11 | | | | |
| 12013 | 1.000 | 9 | 0.00 | 5.13 | | | | |
| 12014 | 0.000 | 9 | 0.00 | 5.13 | | | | |
| 12014 | 1.000 | 9 | 0.00 | 6.59 | | | | |
| 12015 | 0.000 | 9 | 0.00 | 6.59 | | | | |
| 12015 | 1.000 | 9 | 0.00 | 9.13 | | | | |
| 12016 | 0.000 | 9 | 0.00 | 5.13 | | | | |
| 12016 | 1.000 | 9 | 0.00 | 5.12 | | | | |
| 12017 | 0.000 | 9 | 0.00 | 5.12 | | | | |
| 12017 | 1.000 | 9 | 0.00 | 6.58 | | | | |
| 12018 | 0.000 | 9 | 0.00 | 6.58 | | | | |
| 12018 | 1.000 | 9 | 0.00 | 9.13 | | | | |
| 12019 | 0.000 | 9 | 0.00 | 9.13 | | | | |
| 12019 | 1.000 | 9 | 0.00 | 5.04 | | | | |
| 12020 | 0.000 | 9 | 0.00 | 5.04 | | | | |
| 12020 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12021 | 0.000 | 9 | 0.00 | 5.05 | | | | |
| 12021 | 1.000 | 9 | 0.00 | 5.04 | | | | |
| 12022 | 0.000 | 9 | 0.00 | 5.04 | | | | |
| 12022 | 1.000 | 9 | 0.00 | 5.04 | | | | |
| 12023 | 0.000 | 9 | 0.00 | 5.04 | | | | |
| 12023 | 1.000 | 9 | 0.00 | 5.06 | | | | |
| 12024 | 0.000 | 9 | 0.00 | 5.06 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | Nos | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|------|------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|------|------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|

| | | | | | | | | |
|-------|-------|---|------|-------|--|--|--|--|
| 12024 | 1.000 | 9 | 0.00 | 5.10 | | | | |
| 12025 | 0.000 | 9 | 0.00 | 5.10 | | | | |
| 12025 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12026 | 0.000 | 9 | 0.00 | 5.05 | | | | |
| 12026 | 1.000 | 9 | 0.00 | 4.84 | | | | |
| 12027 | 0.000 | 9 | 0.00 | 4.84 | | | | |
| 12027 | 1.000 | 9 | 0.00 | 4.64 | | | | |
| 12028 | 0.000 | 9 | 0.00 | 4.64 | | | | |
| 12028 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12029 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12029 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12030 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12030 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12031 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12031 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12032 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12032 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12033 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12033 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12034 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12034 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12035 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12035 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12036 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12036 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12037 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12037 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12038 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12038 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12039 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12039 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12040 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12040 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12041 | 0.000 | 9 | 0.00 | 10.21 | | | | |
| 12041 | 1.000 | 9 | 0.00 | 5.04 | | | | |
| 12042 | 0.000 | 9 | 0.00 | 5.04 | | | | |
| 12042 | 1.000 | 9 | 0.00 | 5.03 | | | | |
| 12043 | 0.000 | 9 | 0.00 | 5.03 | | | | |
| 12043 | 1.000 | 9 | 0.00 | 5.04 | | | | |
| 12044 | 0.000 | 9 | 0.00 | 5.04 | | | | |
| 12044 | 1.000 | 9 | 0.00 | 5.07 | | | | |
| 12045 | 0.000 | 9 | 0.00 | 5.07 | | | | |
| 12045 | 1.000 | 9 | 0.00 | 5.04 | | | | |
| 12046 | 0.000 | 9 | 0.00 | 5.04 | | | | |
| 12046 | 1.000 | 9 | 0.00 | 5.07 | | | | |
| 12047 | 0.000 | 9 | 0.00 | 5.07 | | | | |
| 12047 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12048 | 0.000 | 9 | 0.00 | 5.05 | | | | |
| 12048 | 1.000 | 9 | 0.00 | 4.84 | | | | |
| 12049 | 0.000 | 9 | 0.00 | 4.84 | | | | |
| 12049 | 1.000 | 9 | 0.00 | 4.64 | | | | |
| 12050 | 0.000 | 9 | 0.00 | 4.64 | | | | |
| 12050 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12051 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12051 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12052 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12052 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12053 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12053 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12054 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12054 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12055 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12055 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12056 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12056 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12057 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12057 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12058 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12058 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12059 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12059 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12060 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12060 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12061 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12061 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12062 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12062 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12063 | 0.000 | 9 | 0.00 | 9.68 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | Nos | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|------|------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|------|------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|

| | | | | | | | | |
|-------|-------|---|------|------|--|--|--|--|
| 12063 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12064 | 0.000 | 9 | 0.00 | 5.05 | | | | |
| 12064 | 1.000 | 9 | 0.00 | 5.03 | | | | |
| 12065 | 0.000 | 9 | 0.00 | 5.03 | | | | |
| 12065 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12066 | 0.000 | 9 | 0.00 | 5.05 | | | | |
| 12066 | 1.000 | 9 | 0.00 | 5.02 | | | | |
| 12067 | 0.000 | 9 | 0.00 | 5.02 | | | | |
| 12067 | 1.000 | 9 | 0.00 | 5.03 | | | | |
| 12068 | 0.000 | 9 | 0.00 | 5.03 | | | | |
| 12068 | 1.000 | 9 | 0.00 | 5.07 | | | | |
| 12069 | 0.000 | 9 | 0.00 | 5.07 | | | | |
| 12069 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12070 | 0.000 | 9 | 0.00 | 5.05 | | | | |
| 12070 | 1.000 | 9 | 0.00 | 4.83 | | | | |
| 12071 | 0.000 | 9 | 0.00 | 4.83 | | | | |
| 12071 | 1.000 | 9 | 0.00 | 4.64 | | | | |
| 12072 | 0.000 | 9 | 0.00 | 4.64 | | | | |
| 12072 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12073 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12073 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12074 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12074 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12075 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12075 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12076 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12076 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12077 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12077 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12078 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12078 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12079 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12079 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12080 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12080 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12081 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12081 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12082 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12082 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12083 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12083 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12084 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12084 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12085 | 0.000 | 9 | 0.00 | 9.14 | | | | |
| 12085 | 1.000 | 9 | 0.00 | 5.03 | | | | |
| 12086 | 0.000 | 9 | 0.00 | 5.03 | | | | |
| 12086 | 1.000 | 9 | 0.00 | 5.03 | | | | |
| 12087 | 0.000 | 9 | 0.00 | 5.03 | | | | |
| 12087 | 1.000 | 9 | 0.00 | 5.03 | | | | |
| 12088 | 0.000 | 9 | 0.00 | 5.03 | | | | |
| 12088 | 1.000 | 9 | 0.00 | 5.04 | | | | |
| 12089 | 0.000 | 9 | 0.00 | 5.04 | | | | |
| 12089 | 1.000 | 9 | 0.00 | 5.06 | | | | |
| 12090 | 0.000 | 9 | 0.00 | 5.06 | | | | |
| 12090 | 1.000 | 9 | 0.00 | 5.10 | | | | |
| 12091 | 0.000 | 9 | 0.00 | 5.10 | | | | |
| 12091 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12092 | 0.000 | 9 | 0.00 | 5.05 | | | | |
| 12092 | 1.000 | 9 | 0.00 | 4.84 | | | | |
| 12093 | 0.000 | 9 | 0.00 | 4.84 | | | | |
| 12093 | 1.000 | 9 | 0.00 | 4.64 | | | | |
| 12094 | 0.000 | 9 | 0.00 | 4.64 | | | | |
| 12094 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12095 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12095 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12096 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12096 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12097 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12097 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12098 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12098 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12099 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12099 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12100 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12100 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12101 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12101 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12102 | 0.000 | 9 | 0.00 | 4.58 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

| Shear Reinforcements per Cutted Part of Section Accumulated minimum | | | | | | | | |
|---|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Beam | x[m] | Nos | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
| 12102 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12103 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12103 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12104 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12104 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12105 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12105 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12106 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12106 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12107 | 0.000 | 9 | 0.00 | 9.13 | | | | |
| 12107 | 1.000 | 9 | 0.00 | 5.04 | | | | |
| 12108 | 0.000 | 9 | 0.00 | 5.04 | | | | |
| 12108 | 1.000 | 9 | 0.00 | 5.04 | | | | |
| 12109 | 0.000 | 9 | 0.00 | 5.04 | | | | |
| 12109 | 1.000 | 9 | 0.00 | 5.02 | | | | |
| 12110 | 0.000 | 9 | 0.00 | 5.02 | | | | |
| 12110 | 1.000 | 9 | 0.00 | 5.02 | | | | |
| 12111 | 0.000 | 9 | 0.00 | 5.02 | | | | |
| 12111 | 1.000 | 9 | 0.00 | 5.03 | | | | |
| 12112 | 0.000 | 9 | 0.00 | 5.03 | | | | |
| 12112 | 1.000 | 9 | 0.00 | 5.07 | | | | |
| 12113 | 0.000 | 9 | 0.00 | 5.07 | | | | |
| 12113 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12114 | 0.000 | 9 | 0.00 | 5.05 | | | | |
| 12114 | 1.000 | 9 | 0.00 | 4.83 | | | | |
| 12115 | 0.000 | 9 | 0.00 | 4.83 | | | | |
| 12115 | 1.000 | 9 | 0.00 | 4.64 | | | | |
| 12116 | 0.000 | 9 | 0.00 | 4.64 | | | | |
| 12116 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12117 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12117 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12118 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12118 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12119 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12119 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12120 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12120 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12121 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12121 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12122 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12122 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12123 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12123 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12124 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12124 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12125 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12125 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12126 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12126 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12127 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12127 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12128 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12128 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12129 | 0.000 | 9 | 0.00 | 9.13 | | | | |
| 12129 | 1.000 | 9 | 0.00 | 5.03 | | | | |
| 12130 | 0.000 | 9 | 0.00 | 5.03 | | | | |
| 12130 | 1.000 | 9 | 0.00 | 5.03 | | | | |
| 12131 | 0.000 | 9 | 0.00 | 5.03 | | | | |
| 12131 | 1.000 | 9 | 0.00 | 5.04 | | | | |
| 12132 | 0.000 | 9 | 0.00 | 5.04 | | | | |
| 12132 | 1.000 | 9 | 0.00 | 5.04 | | | | |
| 12133 | 0.000 | 9 | 0.00 | 5.04 | | | | |
| 12133 | 1.000 | 9 | 0.00 | 5.03 | | | | |
| 12134 | 0.000 | 9 | 0.00 | 5.03 | | | | |
| 12134 | 1.000 | 9 | 0.00 | 5.07 | | | | |
| 12135 | 0.000 | 9 | 0.00 | 5.07 | | | | |
| 12135 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12136 | 0.000 | 9 | 0.00 | 5.05 | | | | |
| 12136 | 1.000 | 9 | 0.00 | 4.83 | | | | |
| 12137 | 0.000 | 9 | 0.00 | 4.83 | | | | |
| 12137 | 1.000 | 9 | 0.00 | 4.64 | | | | |
| 12138 | 0.000 | 9 | 0.00 | 4.64 | | | | |
| 12138 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12139 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12139 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12140 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12140 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12141 | 0.000 | 9 | 0.00 | 4.58 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | NoS | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|-------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 12141 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12142 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12142 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12143 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12143 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12144 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12144 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12145 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12145 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12146 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12146 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12147 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12147 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12148 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12148 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12149 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12149 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12150 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12150 | 1.000 | 9 | 0.00 | 4.58 | | | | |

Maximum Degree of Utilization

| | | N sig-c | Vy sig-t | Vz tau | Mt sig-* | My tend. | Mz As-l | Mb As-v | Mt2 crack | Total sigdyn | lamda tau-* |
|--------------|---|------------|-------------|-----------|-------------|-------------|------------|------------|--------------|-----------------|----------------|
| Cross sect. | 8 | 0.000 | 0.000 | 0.048 | 0.170 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| DOKOS-4 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 2.368 | 0.000 | 0.000 | 0.000 |
| Cross sect. | 9 | 0.000 | 0.000 | 0.273 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 |
| section pile | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 1.119 | 0.000 | 0.000 | 0.000 |
| Total System | | 0.000 | 0.000 | 0.273 | 0.170 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 2.368 | 0.000 | 0.000 | 0.000 |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_DOKOI

Selected Beam Elements

| FROM | TO | INC | X-VALUE | NC | MEMBER | CS0 | CS1 | CS2 | CS3 | CS4 | CS5 |
|------|------|-----|---------|----|---------|-----|-----|-----|-----|-----|-----|
| 1000 | 1060 | 1 | | 1 | bending | 10 | 40 | | | | |
| 2000 | 2020 | 1 | | | | | | | | | |

Default design code is DIN Fachbericht 102 Massivbröcken (2003) (Germany)

Klasse(Tab.4.118): D

wind zone : Binnenland

Materials

No. 1 C 25/30 (DIN 1045-1)
No. 3 C 25/30 (DIN 1045-1)
No. 4 C 25/30 (DIN 1045-1)
No. 5 C 25/30 (DIN 1045-1)
No. 6 C 25/30 (DIN 1045-1)
No. 7 C 25/30 (DIN 1045-1)
No. 8 C 25/30 (DIN 1045-1)
No. 9 C 25/30 (DIN 1045-1)
No. 10 C 25/30 (DIN 1045-1)
No. 12 BSt 500 SA (DIN 1045-1)

Reinforcement will be accounted for sectional values as defined in AQUA
Reinforcements saved as design case LCR 507

Considered Load Cases

| No. refer | act on | Title/type of load case | gam-u | gam-f | psi-0 | psi-1 | psi-2 | psi-1' |
|------------|--------|---|-------|-------|-------|-------|-------|-------------|
| 1 part. | CS 0 | I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 2 part. | CS 0 | I.B. ΔΟΚΩΝ (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 3 part. | CS 0 | I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 11 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 12 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 13 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 14 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1201 part. | CS 1 | MAX-MY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1202 part. | CS 1 | MIN-MY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1203 part. | CS 1 | MAX-VZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1204 part. | CS 1 | MIN-VZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1205 part. | CS 1 | MAX-MZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1206 part. | CS 1 | MIN-MZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1207 part. | CS 1 | MAX-VY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1208 part. | CS 1 | MIN-VY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1209 part. | CS 1 | MAX-N BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1210 part. | CS 1 | MIN-N BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1211 part. | CS 1 | MAX-MT BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1212 part. | CS 1 | MIN-MT BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 5015 part. | CS 0 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5025 part. | CS 0 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5055 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5060 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5061 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5062 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5063 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5064 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 6015 part. | CS 0 | 15 K creep step C (creep + shrinkage) | | | | | | P perm |

OPIΣTIKH MEΛETH/TECHNIKO TA/L=13.00
FASH-2_ULS_DOKOI

Considered Load Cases

| No. refer | act on | Title/type of load case | gam-u | gam-f | psi-0 | psi-1 | psi-2 | psi-1' |
|------------|--------|---|-------|-------|-------|-------|-------|--------|
| 6025 part. | CS 0 | 25 K creep step C (creep + shrinkage) | | | | | | P perm |
| 6055 part. | CS 1 | 55 K creep step C (creep + shrinkage) | | | | | | P perm |
| 6060 part. | CS 1 | 60 K creep step C (creep + shrinkage) | | | | | | P perm |
| 6061 part. | CS 1 | 61 K creep step C (creep + shrinkage) | | | | | | P perm |
| 6062 part. | CS 1 | 62 K creep step C (creep + shrinkage) | | | | | | P perm |
| 6063 part. | CS 1 | 63 K creep step C (creep + shrinkage) | | | | | | P perm |
| 6064 part. | CS 1 | 64 K creep step C (creep + shrinkage) | | | | | | P perm |

Ultimate Load Design

Design for ultimate loads DIN Fachbericht 102 Massivbröcken (2003)

Uniaxial bending due to symmetry

| | | | | | | |
|----------------|-------|-------|------|-------|-------|-------|
| Safety factors | SC-1 | SC-2 | SC-S | SS-1 | SS-2 | PIIa |
| | 1.50 | 1.50 | 1.50 | 1.15 | 1.15 | 7 |
| Strain limits | C1 | C2 | S1 | S2 | Z1 | Z2 |
| max | -3.50 | -2.00 | 3.00 | 25.00 | -3.50 | 25.00 |

parameters for reinforcements

| | | | |
|-------------------------|-------------|------------------|----------------|
| Minimum reinforcements | compression | min. reinforcem. | maximum- |
| Bending. | Compress. | e/d N/Np1 | requ. section |
| 0.00 [cm ²] | 0.30 [o/o] | 3.50 0.0010 | 0.00 0.15 9.00 |

Tensile forces in the longitudinal reinforcements due to shear are NOT accounted for.

Material of sections uses Ultimate Limit strain-stress law with global safety factors

Material of reinforcements uses Ultimate Limit strain-stress law with global safety factors

| MNo. | temp lev. | Material-safety | max.compr stress | at strain | max.tens stress | at strain | tension-stiffening |
|------|-----------|-----------------|------------------|-----------|-----------------|-----------|--------------------|
| | | [-] | [MPa] | [o/oo] | [MPa] | [o/oo] | [MPa] |
| 1 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 3 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 4 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 5 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 6 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 7 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 8 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 9 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 10 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 12 | 0 | 1.150 | -456.52 | -25.00 | 456.52 | 25.00 | |

Combinations For Ultimate Design

1215 (CS-1: 1) max_my-1215

MAX + MY :

$$1.35 * G + 1.50 * L_A + 1.00 * L_B + 1.00 * C$$

1216 (CS-1: 1) min_my-1216

MIN + MY :

$$1.35 * G + 1.50 * L_A + 1.00 * L_B + 1.00 * C$$

1221 (CS-1: 1) max_vz-1221

MAX + VZ :

$$1.35 * G + 1.50 * L_A + 1.00 * L_B + 1.00 * C$$

1222 (CS-1: 1) min_vz-1222

MIN + VY :

$$1.35 * G + 1.50 * L_A + 1.00 * L_B + 1.00 * C$$

Shear Design

Design for shear DIN 1045-1 (2003)

Minimum shear factor or tan of inclination of compressive struts 0.57 / 1.72
MNo f-cd [MPa] tau-rd [MPa] sigIIQ [MPa] sigIIIT [MPa] sigIIQ+ [MPa] fyd [MPa]

| | | | | | |
|----|-------|------|-------|------|-------|
| 1 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 3 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 4 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 5 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 6 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 7 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 8 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 9 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 10 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 12 | | | | | |

434.78

Tolerance for exceeding maximum shear or principal compression stress 0.0200

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_DOKOI

Longitudinal Reinforcements LCR 507

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|------|-------|-----|------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1001 | 0.000 | 1 | 0.26 | 13.17 | | 3.28T | 0.57 | | 9.32 | |
| 1001 | 0.883 | 1 | 0.28 | 13.94 | | 3.38T | 5.32 | | 5.23 | |
| 1002 | 0.000 | 1 | 0.30 | 14.75 | | 4.21T | 5.31 | | 5.23 | |
| 1002 | 0.883 | 1 | 0.32 | 15.98 | | 3.58T | 10.15 | | 2.24 | |
| 1003 | 0.000 | 1 | 0.32 | 15.85 | | 3.46T | 10.14 | | 2.25 | |
| 1003 | 0.883 | 1 | 0.35 | 17.18 | | 3.37T | 13.80 | | | |
| 1004 | 0.000 | 1 | 0.34 | 16.83 | | 3.04T | 13.79 | | | |
| 1004 | 0.883 | 1 | 0.39 | 19.52 | | 2.98T | 16.54 | | | |
| 1005 | 0.000 | 1 | 0.38 | 19.04 | | 2.52T | 16.53 | | | |
| 1005 | 0.883 | 1 | 0.42 | 20.77 | | 2.47T | 18.30 | | | |
| 1006 | 0.000 | 1 | 0.42 | 20.67 | | 2.37T | 18.29 | | | |
| 1006 | 0.883 | 1 | 0.42 | 21.11 | | 2.37T | 18.74 | | | |
| 1007 | 0.000 | 1 | 0.42 | 21.12 | | 2.37T | 18.74 | | | |
| 1007 | 0.883 | 1 | 0.41 | 20.64 | | 2.37T | 18.27 | | | |
| 1008 | 0.000 | 1 | 0.42 | 21.06 | | 2.79T | 18.28 | | | |
| 1008 | 0.883 | 1 | 0.39 | 19.27 | | 2.82T | 16.44 | | | |
| 1009 | 0.000 | 1 | 0.40 | 19.83 | | 3.36T | 16.46 | | | |
| 1009 | 0.883 | 1 | 0.35 | 17.38 | | 3.42T | 13.96 | | | |
| 1010 | 0.000 | 1 | 0.36 | 17.84 | | 3.88T | 13.97 | | | |
| 1010 | 0.883 | 1 | 0.33 | 16.45 | | 3.96T | 10.24 | | 2.25 | |
| 1011 | 0.000 | 1 | 0.34 | 16.69 | | 4.19T | 10.26 | | 2.24 | |
| 1011 | 0.883 | 1 | 0.31 | 15.46 | | 4.90T | 5.33 | | 5.23 | |
| 1012 | 0.000 | 1 | 0.30 | 14.70 | | 4.13T | 5.34 | | 5.23 | |
| 1012 | 0.883 | 1 | 0.28 | 13.92 | | 4.02T | 0.57 | | 9.32 | |
| 1013 | 0.000 | 1 | 0.24 | 12.08 | | 2.37T | 0.58 | | 9.12 | |
| 1013 | 0.883 | 1 | 0.23 | 11.45 | | 2.37T | 3.81 | | 5.26 | |
| 1014 | 0.000 | 1 | 0.24 | 11.89 | | 2.81T | 3.81 | | 5.26 | |
| 1014 | 0.883 | 1 | 0.26 | 13.06 | | 2.78T | 8.03 | | 2.25 | |
| 1015 | 0.000 | 1 | 0.26 | 13.07 | | 2.77T | 8.05 | | 2.25 | |
| 1015 | 0.883 | 1 | 0.29 | 14.19 | | 2.71T | 11.47 | | | |
| 1016 | 0.000 | 1 | 0.28 | 13.94 | | 2.45T | 11.49 | | | |
| 1016 | 0.883 | 1 | 0.33 | 16.33 | | 2.41T | 13.92 | | | |
| 1017 | 0.000 | 1 | 0.33 | 16.29 | | 2.37T | 13.92 | | | |
| 1017 | 0.883 | 1 | 0.36 | 17.98 | | 2.37T | 15.61 | | | |
| 1018 | 0.000 | 1 | 0.36 | 17.98 | | 2.37T | 15.61 | | | |
| 1018 | 0.883 | 1 | 0.37 | 18.39 | | 2.37T | 16.02 | | | |
| 1019 | 0.000 | 1 | 0.37 | 18.40 | | 2.37T | 16.02 | | | |
| 1019 | 0.883 | 1 | 0.36 | 17.94 | | 2.37T | 15.56 | | | |
| 1020 | 0.000 | 1 | 0.36 | 17.94 | | 2.37T | 15.57 | | | |
| 1020 | 0.883 | 1 | 0.33 | 16.33 | | 2.37T | 13.96 | | | |
| 1021 | 0.000 | 1 | 0.33 | 16.39 | | 2.45T | 13.94 | | | |
| 1021 | 0.883 | 1 | 0.28 | 14.03 | | 2.48T | 11.55 | | | |
| 1022 | 0.000 | 1 | 0.29 | 14.31 | | 2.77T | 11.54 | | | |
| 1022 | 0.883 | 1 | 0.26 | 13.12 | | 2.82T | 8.06 | | 2.25 | |
| 1023 | 0.000 | 1 | 0.26 | 13.14 | | 2.85T | 8.04 | | 2.25 | |
| 1023 | 0.883 | 1 | 0.24 | 11.99 | | 2.92T | 3.81 | | 5.26 | |
| 1024 | 0.000 | 1 | 0.23 | 11.64 | | 2.57T | 3.81 | | 5.26 | |
| 1024 | 0.883 | 1 | 0.25 | 12.20 | | 2.50T | 0.58 | | 9.12 | |
| 1025 | 0.000 | 1 | 0.24 | 12.14 | | 2.37T | 0.54 | | 9.23 | |
| 1025 | 0.883 | 1 | 0.23 | 11.63 | | 2.37T | 3.91 | | 5.34 | |
| 1026 | 0.000 | 1 | 0.23 | 11.63 | | 2.37T | 3.91 | | 5.34 | |
| 1026 | 0.883 | 1 | 0.25 | 12.61 | | 2.37T | 7.99 | | 2.24 | |
| 1027 | 0.000 | 1 | 0.25 | 12.61 | | 2.37T | 7.99 | | 2.24 | |
| 1027 | 0.883 | 1 | 0.27 | 13.48 | | 2.37T | 11.10 | | | |
| 1028 | 0.000 | 1 | 0.27 | 13.48 | | 2.37T | 11.10 | | | |
| 1028 | 0.883 | 1 | 0.32 | 15.73 | | 2.37T | 13.36 | | | |
| 1029 | 0.000 | 1 | 0.32 | 15.73 | | 2.37T | 13.36 | | | |
| 1029 | 0.883 | 1 | 0.35 | 17.27 | | 2.37T | 14.90 | | | |
| 1030 | 0.000 | 1 | 0.35 | 17.27 | | 2.37T | 14.90 | | | |
| 1030 | 0.883 | 1 | 0.35 | 17.64 | | 2.37T | 15.27 | | | |
| 1031 | 0.000 | 1 | 0.35 | 17.64 | | 2.37T | 15.27 | | | |
| 1031 | 0.883 | 1 | 0.35 | 17.25 | | 2.37T | 14.87 | | | |
| 1032 | 0.000 | 1 | 0.35 | 17.25 | | 2.37T | 14.87 | | | |
| 1032 | 0.883 | 1 | 0.32 | 15.74 | | 2.37T | 13.36 | | | |
| 1033 | 0.000 | 1 | 0.32 | 15.73 | | 2.37T | 13.36 | | | |
| 1033 | 0.883 | 1 | 0.27 | 13.57 | | 2.37T | 11.20 | | | |
| 1034 | 0.000 | 1 | 0.27 | 13.57 | | 2.37T | 11.20 | | | |
| 1034 | 0.883 | 1 | 0.25 | 12.64 | | 2.37T | 8.02 | | 2.24 | |
| 1035 | 0.000 | 1 | 0.25 | 12.63 | | 2.37T | 8.02 | | 2.24 | |
| 1035 | 0.883 | 1 | 0.23 | 11.59 | | 2.37T | 3.88 | | 5.34 | |
| 1036 | 0.000 | 1 | 0.23 | 11.59 | | 2.37T | 3.87 | | 5.34 | |
| 1036 | 0.883 | 1 | 0.24 | 12.14 | | 2.37T | 0.53 | | 9.23 | |
| 1037 | 0.000 | 1 | 0.24 | 11.78 | | 2.37T | 0.36 | | 9.05 | |
| 1037 | 0.883 | 1 | 0.24 | 11.92 | | 2.37T | 4.22 | | 5.32 | |
| 1038 | 0.000 | 1 | 0.24 | 12.13 | | 2.60T | 4.20 | | 5.32 | |
| 1038 | 0.883 | 1 | 0.26 | 12.89 | | 2.58T | 8.11 | | 2.20 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_DOKOI

Longitudinal Reinforcements LCR 507

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|------|-------|-----|------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1039 | 0.000 | 1 | 0.26 | 12.95 | | 2.66T | 8.10 | | | |
| 1039 | 0.883 | 1 | 0.27 | 13.62 | | 2.64T | 10.98 | | | |
| 1040 | 0.000 | 1 | 0.27 | 13.34 | | 2.37T | 10.97 | | | |
| 1040 | 0.883 | 1 | 0.31 | 15.46 | | 2.37T | 13.09 | | | |
| 1041 | 0.000 | 1 | 0.31 | 15.47 | | 2.37T | 13.09 | | | |
| 1041 | 0.883 | 1 | 0.34 | 16.88 | | 2.37T | 14.50 | | | |
| 1042 | 0.000 | 1 | 0.34 | 16.88 | | 2.37T | 14.50 | | | |
| 1042 | 0.883 | 1 | 0.35 | 17.21 | | 2.37T | 14.84 | | | |
| 1043 | 0.000 | 1 | 0.35 | 17.21 | | 2.37T | 14.84 | | | |
| 1043 | 0.883 | 1 | 0.34 | 16.87 | | 2.37T | 14.50 | | | |
| 1044 | 0.000 | 1 | 0.34 | 16.87 | | 2.37T | 14.49 | | | |
| 1044 | 0.883 | 1 | 0.31 | 15.44 | | 2.37T | 13.07 | | | |
| 1045 | 0.000 | 1 | 0.31 | 15.45 | | 2.37T | 13.08 | | | |
| 1045 | 0.883 | 1 | 0.27 | 13.47 | | 2.37T | 11.10 | | | |
| 1046 | 0.000 | 1 | 0.27 | 13.48 | | 2.37T | 11.11 | | | |
| 1046 | 0.883 | 1 | 0.26 | 12.72 | | 2.37T | 8.15 | | 2.20 | |
| 1047 | 0.000 | 1 | 0.26 | 12.73 | | 2.37T | 8.16 | | 2.20 | |
| 1047 | 0.883 | 1 | 0.24 | 11.85 | | 2.37T | 4.16 | | 5.32 | |
| 1048 | 0.000 | 1 | 0.24 | 11.87 | | 2.37T | 4.17 | | 5.32 | |
| 1048 | 0.883 | 1 | 0.24 | 11.78 | | 2.37T | 0.36 | | 9.05 | |
| 1049 | 0.000 | 1 | 0.24 | 12.11 | | 2.42T | 0.32 | | 9.36 | |
| 1049 | 0.883 | 1 | 0.23 | 11.58 | | 2.47T | 3.81 | | 5.30 | |
| 1050 | 0.000 | 1 | 0.24 | 11.85 | | 2.74T | 3.81 | | 5.30 | |
| 1050 | 0.883 | 1 | 0.24 | 11.84 | | 2.68T | 7.06 | | 2.10 | |
| 1051 | 0.000 | 1 | 0.24 | 12.11 | | 2.94T | 7.06 | | 2.11 | |
| 1051 | 0.883 | 1 | 0.25 | 12.64 | | 2.90T | 9.73 | | | |
| 1052 | 0.000 | 1 | 0.25 | 12.48 | | 2.74T | 9.74 | | | |
| 1052 | 0.883 | 1 | 0.29 | 14.32 | | 2.72T | 11.61 | | | |
| 1053 | 0.000 | 1 | 0.28 | 13.99 | | 2.37T | 11.61 | | | |
| 1053 | 0.883 | 1 | 0.31 | 15.26 | | 2.37T | 12.88 | | | |
| 1054 | 0.000 | 1 | 0.31 | 15.26 | | 2.37T | 12.88 | | | |
| 1054 | 0.883 | 1 | 0.31 | 15.55 | | 2.37T | 13.18 | | | |
| 1055 | 0.000 | 1 | 0.31 | 15.55 | | 2.37T | 13.18 | | | |
| 1055 | 0.883 | 1 | 0.31 | 15.22 | | 2.37T | 12.85 | | | |
| 1056 | 0.000 | 1 | 0.31 | 15.22 | | 2.37T | 12.85 | | | |
| 1056 | 0.883 | 1 | 0.28 | 14.01 | | 2.37T | 11.64 | | | |
| 1057 | 0.000 | 1 | 0.28 | 14.01 | | 2.37T | 11.63 | | | |
| 1057 | 0.883 | 1 | 0.24 | 12.11 | | 2.37T | 9.73 | | | |
| 1058 | 0.000 | 1 | 0.24 | 12.10 | | 2.37T | 9.73 | | | |
| 1058 | 0.883 | 1 | 0.23 | 11.55 | | 2.37T | 7.06 | | 2.11 | |
| 1059 | 0.000 | 1 | 0.23 | 11.54 | | 2.37T | 7.06 | | 2.10 | |
| 1059 | 0.883 | 1 | 0.23 | 11.49 | | 2.37T | 3.81 | | 5.30 | |
| 1060 | 0.000 | 1 | 0.23 | 11.48 | | 2.37T | 3.81 | | 5.29 | |
| 1060 | 0.883 | 1 | 0.24 | 12.06 | | 2.37T | 0.33 | | 9.36 | |
| 2001 | 0.000 | 2 | 0.17 | 13.75 | | 0.35T | | | 13.41 | |
| 2001 | 0.300 | 2 | 0.14 | 11.34 | | 0.24T | | | 11.09 | |
| 2002 | 0.000 | 2 | 0.15 | 11.93 | | 0.81T | | | 11.12 | |
| 2002 | 0.300 | 2 | 0.14 | 10.89 | | 0.81T | 0.62 | | 9.46 | |
| 2003 | 0.000 | 2 | 0.14 | 11.01 | | 0.93T | 0.63 | | 9.45 | |
| 2003 | 0.300 | 2 | 0.15 | 12.04 | | 0.93T | | | 11.12 | |
| 2004 | 0.000 | 2 | 0.14 | 11.50 | | 0.41T | | | 11.09 | |
| 2004 | 0.300 | 2 | 0.17 | 13.81 | | 0.41T | | | 13.40 | |
| 2005 | 0.000 | 2 | 0.15 | 12.39 | | 0.22T | | | 12.17 | |
| 2005 | 0.300 | 2 | 0.14 | 11.42 | | 0.22T | 0.36 | | 10.84 | |
| 2006 | 0.000 | 2 | 0.14 | 11.52 | | 0.54T | 0.11 | | 10.87 | |
| 2006 | 0.300 | 2 | 0.13 | 10.44 | | 0.54T | 0.64 | | 9.26 | |
| 2007 | 0.000 | 2 | 0.13 | 10.46 | | 0.56T | 0.64 | | 9.26 | |
| 2007 | 0.300 | 2 | 0.14 | 11.54 | | 0.55T | 0.11 | | 10.87 | |
| 2008 | 0.000 | 2 | 0.14 | 11.17 | | 0.23T | 0.10 | | 10.84 | |
| 2008 | 0.300 | 2 | 0.15 | 12.40 | | 0.23T | | | 12.17 | |
| 2009 | 0.000 | 2 | 0.16 | 12.58 | | 0.16T | | | 12.42 | |
| 2009 | 0.300 | 2 | 0.14 | 11.22 | | 0.17T | 0.06 | | 11.00 | |
| 2010 | 0.000 | 2 | 0.14 | 11.39 | | 0.29T | 0.06 | | 11.03 | |
| 2010 | 0.300 | 2 | 0.13 | 10.27 | | 0.30T | 0.60 | | 9.37 | |
| 2011 | 0.000 | 2 | 0.13 | 10.27 | | 0.30T | 0.60 | | 9.37 | |
| 2011 | 0.300 | 2 | 0.14 | 11.38 | | 0.29T | 0.05 | | 11.04 | |
| 2012 | 0.000 | 2 | 0.14 | 11.18 | | 0.12T | 0.05 | | 11.00 | |
| 2012 | 0.300 | 2 | 0.16 | 12.54 | | 0.12T | | | 12.42 | |
| 2013 | 0.000 | 2 | 0.15 | 12.12 | | 0.08T | | | 12.04 | |
| 2013 | 0.300 | 2 | 0.14 | 10.81 | | 0.08T | | | 10.74 | |
| 2014 | 0.000 | 2 | 0.14 | 11.11 | | 0.34T | | | 10.77 | |
| 2014 | 0.300 | 2 | 0.12 | 9.95 | | 0.34T | 0.42 | | 9.19 | |
| 2015 | 0.000 | 2 | 0.12 | 9.82 | | 0.22T | 0.42 | | 9.19 | |
| 2015 | 0.300 | 2 | 0.14 | 10.99 | | 0.22T | | | 10.77 | |
| 2016 | 0.000 | 2 | 0.14 | 10.82 | | 0.09T | | | 10.74 | |
| 2016 | 0.300 | 2 | 0.15 | 12.12 | | 0.08T | | | 12.04 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_DOKOI

Longitudinal Reinforcements LCR 507

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | mue [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|------|-------|-----|------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 2017 | 0.000 | 2 | 0.16 | 12.55 | | 0.19T | | | 12.36 | |
| 2017 | 0.300 | 2 | 0.14 | 11.16 | | 0.11T | | | 11.05 | |
| 2018 | 0.000 | 2 | 0.14 | 11.55 | | 0.47T | | | 11.08 | |
| 2018 | 0.300 | 2 | 0.13 | 10.41 | | 0.55T | 0.37 | | 9.50 | |
| 2019 | 0.000 | 2 | 0.13 | 10.34 | | 0.48T | 0.37 | | 9.49 | |
| 2019 | 0.300 | 2 | 0.14 | 11.55 | | 0.47T | | | 11.07 | |
| 2020 | 0.000 | 2 | 0.14 | 11.16 | | 0.11T | | | 11.05 | |
| 2020 | 0.300 | 2 | 0.16 | 12.55 | | 0.19T | | | 12.36 | |

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | mue [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|------|-------|-----|------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1001 | 0.000 | 1 | 0.26 | 13.17 | | 3.28T | 0.57 | | 9.32 | |
| 1001 | 0.883 | 1 | 0.28 | 13.94 | | 3.38T | 5.32 | | 5.23 | |
| 1002 | 0.000 | 1 | 0.30 | 14.75 | | 4.21T | 5.31 | | 5.23 | |
| 1002 | 0.883 | 1 | 0.32 | 15.98 | | 3.58T | 10.15 | | 2.24 | |
| 1003 | 0.000 | 1 | 0.32 | 15.85 | | 3.46T | 10.14 | | 2.25 | |
| 1003 | 0.883 | 1 | 0.35 | 17.18 | | 3.37T | 13.80 | | | |
| 1004 | 0.000 | 1 | 0.34 | 16.83 | | 3.04T | 13.79 | | | |
| 1004 | 0.883 | 1 | 0.39 | 19.52 | | 2.98T | 16.54 | | | |
| 1005 | 0.000 | 1 | 0.38 | 19.04 | | 2.52T | 16.53 | | | |
| 1005 | 0.883 | 1 | 0.42 | 20.77 | | 2.47T | 18.30 | | | |
| 1006 | 0.000 | 1 | 0.42 | 20.67 | | 2.37T | 18.29 | | | |
| 1006 | 0.883 | 1 | 0.42 | 21.11 | | 2.37T | 18.74 | | | |
| 1007 | 0.000 | 1 | 0.42 | 21.12 | | 2.37T | 18.74 | | | |
| 1007 | 0.883 | 1 | 0.41 | 20.64 | | 2.37T | 18.27 | | | |
| 1008 | 0.000 | 1 | 0.42 | 21.06 | | 2.79T | 18.28 | | | |
| 1008 | 0.883 | 1 | 0.39 | 19.27 | | 2.82T | 16.44 | | | |
| 1009 | 0.000 | 1 | 0.40 | 19.83 | | 3.36T | 16.46 | | | |
| 1009 | 0.883 | 1 | 0.35 | 17.38 | | 3.42T | 13.96 | | | |
| 1010 | 0.000 | 1 | 0.36 | 17.84 | | 3.88T | 13.97 | | | |
| 1010 | 0.883 | 1 | 0.33 | 16.45 | | 3.96T | 10.24 | | 2.25 | |
| 1011 | 0.000 | 1 | 0.34 | 16.69 | | 4.19T | 10.26 | | 2.24 | |
| 1011 | 0.883 | 1 | 0.31 | 15.46 | | 4.90T | 5.33 | | 5.23 | |
| 1012 | 0.000 | 1 | 0.30 | 14.70 | | 4.13T | 5.34 | | 5.23 | |
| 1012 | 0.883 | 1 | 0.28 | 13.92 | | 4.02T | 0.57 | | 9.32 | |
| 1013 | 0.000 | 1 | 0.24 | 12.08 | | 2.37T | 0.58 | | 9.12 | |
| 1013 | 0.883 | 1 | 0.23 | 11.45 | | 2.37T | 3.81 | | 5.26 | |
| 1014 | 0.000 | 1 | 0.24 | 11.89 | | 2.81T | 3.81 | | 5.26 | |
| 1014 | 0.883 | 1 | 0.26 | 13.06 | | 2.78T | 8.03 | | 2.25 | |
| 1015 | 0.000 | 1 | 0.26 | 13.07 | | 2.77T | 8.05 | | 2.25 | |
| 1015 | 0.883 | 1 | 0.29 | 14.19 | | 2.71T | 11.47 | | | |
| 1016 | 0.000 | 1 | 0.28 | 13.94 | | 2.45T | 11.49 | | | |
| 1016 | 0.883 | 1 | 0.33 | 16.33 | | 2.41T | 13.92 | | | |
| 1017 | 0.000 | 1 | 0.33 | 16.29 | | 2.37T | 13.92 | | | |
| 1017 | 0.883 | 1 | 0.36 | 17.98 | | 2.37T | 15.61 | | | |
| 1018 | 0.000 | 1 | 0.36 | 17.98 | | 2.37T | 15.61 | | | |
| 1018 | 0.883 | 1 | 0.37 | 18.39 | | 2.37T | 16.02 | | | |
| 1019 | 0.000 | 1 | 0.37 | 18.40 | | 2.37T | 16.02 | | | |
| 1019 | 0.883 | 1 | 0.36 | 17.94 | | 2.37T | 15.56 | | | |
| 1020 | 0.000 | 1 | 0.36 | 17.94 | | 2.37T | 15.57 | | | |
| 1020 | 0.883 | 1 | 0.33 | 16.33 | | 2.37T | 13.96 | | | |
| 1021 | 0.000 | 1 | 0.33 | 16.39 | | 2.45T | 13.94 | | | |
| 1021 | 0.883 | 1 | 0.28 | 14.03 | | 2.48T | 11.55 | | | |
| 1022 | 0.000 | 1 | 0.29 | 14.31 | | 2.77T | 11.54 | | | |
| 1022 | 0.883 | 1 | 0.26 | 13.12 | | 2.82T | 8.06 | | 2.25 | |
| 1023 | 0.000 | 1 | 0.26 | 13.14 | | 2.85T | 8.04 | | 2.25 | |
| 1023 | 0.883 | 1 | 0.24 | 11.99 | | 2.92T | 3.81 | | 5.26 | |
| 1024 | 0.000 | 1 | 0.23 | 11.64 | | 2.57T | 3.81 | | 5.26 | |
| 1024 | 0.883 | 1 | 0.25 | 12.20 | | 2.50T | 0.58 | | 9.12 | |
| 1025 | 0.000 | 1 | 0.24 | 12.14 | | 2.37T | 0.54 | | 9.23 | |
| 1025 | 0.883 | 1 | 0.23 | 11.63 | | 2.37T | 3.91 | | 5.34 | |
| 1026 | 0.000 | 1 | 0.23 | 11.63 | | 2.37T | 3.91 | | 5.34 | |
| 1026 | 0.883 | 1 | 0.25 | 12.61 | | 2.37T | 7.99 | | 2.24 | |
| 1027 | 0.000 | 1 | 0.25 | 12.61 | | 2.37T | 7.99 | | 2.24 | |
| 1027 | 0.883 | 1 | 0.27 | 13.48 | | 2.37T | 11.10 | | | |
| 1028 | 0.000 | 1 | 0.27 | 13.48 | | 2.37T | 11.10 | | | |
| 1028 | 0.883 | 1 | 0.32 | 15.73 | | 2.37T | 13.36 | | | |
| 1029 | 0.000 | 1 | 0.32 | 15.73 | | 2.37T | 13.36 | | | |
| 1029 | 0.883 | 1 | 0.35 | 17.27 | | 2.37T | 14.90 | | | |
| 1030 | 0.000 | 1 | 0.35 | 17.27 | | 2.37T | 14.90 | | | |
| 1030 | 0.883 | 1 | 0.35 | 17.64 | | 2.37T | 15.27 | | | |
| 1031 | 0.000 | 1 | 0.35 | 17.64 | | 2.37T | 15.27 | | | |
| 1031 | 0.883 | 1 | 0.35 | 17.25 | | 2.37T | 14.87 | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_DOKOI

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 1032 | 0.000 | 1 | 0.35 | 17.25 | | 2.37T | 14.87 | | | |
| 1032 | 0.883 | 1 | 0.32 | 15.74 | | 2.37T | 13.36 | | | |
| 1033 | 0.000 | 1 | 0.32 | 15.73 | | 2.37T | 13.36 | | | |
| 1033 | 0.883 | 1 | 0.27 | 13.57 | | 2.37T | 11.20 | | | |
| 1034 | 0.000 | 1 | 0.27 | 13.57 | | 2.37T | 11.20 | | | |
| 1034 | 0.883 | 1 | 0.25 | 12.64 | | 2.37T | 8.02 | | 2.24 | |
| 1035 | 0.000 | 1 | 0.25 | 12.63 | | 2.37T | 8.02 | | 2.24 | |
| 1035 | 0.883 | 1 | 0.23 | 11.59 | | 2.37T | 3.88 | | 5.34 | |
| 1036 | 0.000 | 1 | 0.23 | 11.59 | | 2.37T | 3.87 | | 5.34 | |
| 1036 | 0.883 | 1 | 0.24 | 12.14 | | 2.37T | 0.53 | | 9.23 | |
| 1037 | 0.000 | 1 | 0.24 | 11.78 | | 2.37T | 0.36 | | 9.05 | |
| 1037 | 0.883 | 1 | 0.24 | 11.92 | | 2.37T | 4.22 | | 5.32 | |
| 1038 | 0.000 | 1 | 0.24 | 12.13 | | 2.60T | 4.20 | | 5.32 | |
| 1038 | 0.883 | 1 | 0.26 | 12.89 | | 2.58T | 8.11 | | 2.20 | |
| 1039 | 0.000 | 1 | 0.26 | 12.95 | | 2.66T | 8.10 | | 2.20 | |
| 1039 | 0.883 | 1 | 0.27 | 13.62 | | 2.64T | 10.98 | | | |
| 1040 | 0.000 | 1 | 0.27 | 13.34 | | 2.37T | 10.97 | | | |
| 1040 | 0.883 | 1 | 0.31 | 15.46 | | 2.37T | 13.09 | | | |
| 1041 | 0.000 | 1 | 0.31 | 15.47 | | 2.37T | 13.09 | | | |
| 1041 | 0.883 | 1 | 0.34 | 16.88 | | 2.37T | 14.50 | | | |
| 1042 | 0.000 | 1 | 0.34 | 16.88 | | 2.37T | 14.50 | | | |
| 1042 | 0.883 | 1 | 0.35 | 17.21 | | 2.37T | 14.84 | | | |
| 1043 | 0.000 | 1 | 0.35 | 17.21 | | 2.37T | 14.84 | | | |
| 1043 | 0.883 | 1 | 0.34 | 16.87 | | 2.37T | 14.50 | | | |
| 1044 | 0.000 | 1 | 0.34 | 16.87 | | 2.37T | 14.49 | | | |
| 1044 | 0.883 | 1 | 0.31 | 15.44 | | 2.37T | 13.07 | | | |
| 1045 | 0.000 | 1 | 0.31 | 15.45 | | 2.37T | 13.08 | | | |
| 1045 | 0.883 | 1 | 0.27 | 13.47 | | 2.37T | 11.10 | | | |
| 1046 | 0.000 | 1 | 0.27 | 13.48 | | 2.37T | 11.11 | | | |
| 1046 | 0.883 | 1 | 0.26 | 12.72 | | 2.37T | 8.15 | | 2.20 | |
| 1047 | 0.000 | 1 | 0.26 | 12.73 | | 2.37T | 8.16 | | 2.20 | |
| 1047 | 0.883 | 1 | 0.24 | 11.85 | | 2.37T | 4.16 | | 5.32 | |
| 1048 | 0.000 | 1 | 0.24 | 11.87 | | 2.37T | 4.17 | | 5.32 | |
| 1048 | 0.883 | 1 | 0.24 | 11.78 | | 2.37T | 0.36 | | 9.05 | |
| 1049 | 0.000 | 1 | 0.24 | 12.11 | | 2.42T | 0.32 | | 9.36 | |
| 1049 | 0.883 | 1 | 0.23 | 11.58 | | 2.47T | 3.81 | | 5.30 | |
| 1050 | 0.000 | 1 | 0.24 | 11.85 | | 2.74T | 3.81 | | 5.30 | |
| 1050 | 0.883 | 1 | 0.24 | 11.84 | | 2.68T | 7.06 | | 2.10 | |
| 1051 | 0.000 | 1 | 0.24 | 12.11 | | 2.94T | 7.06 | | 2.11 | |
| 1051 | 0.883 | 1 | 0.25 | 12.64 | | 2.90T | 9.73 | | | |
| 1052 | 0.000 | 1 | 0.25 | 12.48 | | 2.74T | 9.74 | | | |
| 1052 | 0.883 | 1 | 0.29 | 14.32 | | 2.72T | 11.61 | | | |
| 1053 | 0.000 | 1 | 0.28 | 13.99 | | 2.37T | 11.61 | | | |
| 1053 | 0.883 | 1 | 0.31 | 15.26 | | 2.37T | 12.88 | | | |
| 1054 | 0.000 | 1 | 0.31 | 15.26 | | 2.37T | 12.88 | | | |
| 1054 | 0.883 | 1 | 0.31 | 15.55 | | 2.37T | 13.18 | | | |
| 1055 | 0.000 | 1 | 0.31 | 15.55 | | 2.37T | 13.18 | | | |
| 1055 | 0.883 | 1 | 0.31 | 15.22 | | 2.37T | 12.85 | | | |
| 1056 | 0.000 | 1 | 0.31 | 15.22 | | 2.37T | 12.85 | | | |
| 1056 | 0.883 | 1 | 0.28 | 14.01 | | 2.37T | 11.64 | | | |
| 1057 | 0.000 | 1 | 0.28 | 14.01 | | 2.37T | 11.63 | | | |
| 1057 | 0.883 | 1 | 0.24 | 12.11 | | 2.37T | 9.73 | | | |
| 1058 | 0.000 | 1 | 0.24 | 12.10 | | 2.37T | 9.73 | | | |
| 1058 | 0.883 | 1 | 0.23 | 11.55 | | 2.37T | 7.06 | | 2.11 | |
| 1059 | 0.000 | 1 | 0.23 | 11.54 | | 2.37T | 7.06 | | 2.10 | |
| 1059 | 0.883 | 1 | 0.23 | 11.49 | | 2.37T | 3.81 | | 5.30 | |
| 1060 | 0.000 | 1 | 0.23 | 11.48 | | 2.37T | 3.81 | | 5.29 | |
| 1060 | 0.883 | 1 | 0.24 | 12.06 | | 2.37T | 0.33 | | 9.36 | |
| 2001 | 0.000 | 2 | 0.17 | 13.75 | | 0.35T | | | 13.41 | |
| 2001 | 0.300 | 2 | 0.14 | 11.34 | | 0.24T | | | 11.09 | |
| 2002 | 0.000 | 2 | 0.15 | 11.93 | | 0.81T | | | 11.12 | |
| 2002 | 0.300 | 2 | 0.14 | 10.89 | | 0.81T | 0.62 | | 9.46 | |
| 2003 | 0.000 | 2 | 0.14 | 11.01 | | 0.93T | 0.63 | | 9.45 | |
| 2003 | 0.300 | 2 | 0.15 | 12.04 | | 0.93T | | | 11.12 | |
| 2004 | 0.000 | 2 | 0.14 | 11.50 | | 0.41T | | | 11.09 | |
| 2004 | 0.300 | 2 | 0.17 | 13.81 | | 0.41T | | | 13.40 | |
| 2005 | 0.000 | 2 | 0.15 | 12.39 | | 0.22T | | | 12.17 | |
| 2005 | 0.300 | 2 | 0.14 | 11.42 | | 0.22T | 0.36 | | 10.84 | |
| 2006 | 0.000 | 2 | 0.14 | 11.52 | | 0.54T | 0.11 | | 10.87 | |
| 2006 | 0.300 | 2 | 0.13 | 10.44 | | 0.54T | 0.64 | | 9.26 | |
| 2007 | 0.000 | 2 | 0.13 | 10.46 | | 0.56T | 0.64 | | 9.26 | |
| 2007 | 0.300 | 2 | 0.14 | 11.54 | | 0.55T | 0.11 | | 10.87 | |
| 2008 | 0.000 | 2 | 0.14 | 11.17 | | 0.23T | 0.10 | | 10.84 | |
| 2008 | 0.300 | 2 | 0.15 | 12.40 | | 0.23T | | | 12.17 | |
| 2009 | 0.000 | 2 | 0.16 | 12.58 | | 0.16T | | | 12.42 | |
| 2009 | 0.300 | 2 | 0.14 | 11.22 | | 0.17T | 0.06 | | 11.00 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_DOKOI

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 2010 | 0.000 | 2 | 0.14 | 11.39 | | 0.29T | 0.06 | | 11.03 | |
| 2010 | 0.300 | 2 | 0.13 | 10.27 | | 0.30T | 0.60 | | 9.37 | |
| 2011 | 0.000 | 2 | 0.13 | 10.27 | | 0.30T | 0.60 | | 9.37 | |
| 2011 | 0.300 | 2 | 0.14 | 11.38 | | 0.29T | 0.05 | | 11.04 | |
| 2012 | 0.000 | 2 | 0.14 | 11.18 | | 0.12T | 0.05 | | 11.00 | |
| 2012 | 0.300 | 2 | 0.16 | 12.54 | | 0.12T | | | 12.42 | |
| 2013 | 0.000 | 2 | 0.15 | 12.12 | | 0.08T | | | 12.04 | |
| 2013 | 0.300 | 2 | 0.14 | 10.81 | | 0.08T | | | 10.74 | |
| 2014 | 0.000 | 2 | 0.14 | 11.11 | | 0.34T | | | 10.77 | |
| 2014 | 0.300 | 2 | 0.12 | 9.95 | | 0.34T | 0.42 | | 9.19 | |
| 2015 | 0.000 | 2 | 0.12 | 9.82 | | 0.22T | 0.42 | | 9.19 | |
| 2015 | 0.300 | 2 | 0.14 | 10.99 | | 0.22T | | | 10.77 | |
| 2016 | 0.000 | 2 | 0.14 | 10.82 | | 0.09T | | | 10.74 | |
| 2016 | 0.300 | 2 | 0.15 | 12.12 | | 0.08T | | | 12.04 | |
| 2017 | 0.000 | 2 | 0.16 | 12.55 | | 0.19T | | | 12.36 | |
| 2017 | 0.300 | 2 | 0.14 | 11.16 | | 0.11T | | | 11.05 | |
| 2018 | 0.000 | 2 | 0.14 | 11.55 | | 0.47T | | | 11.08 | |
| 2018 | 0.300 | 2 | 0.13 | 10.41 | | 0.55T | 0.37 | | 9.50 | |
| 2019 | 0.000 | 2 | 0.13 | 10.34 | | 0.48T | 0.37 | | 9.49 | |
| 2019 | 0.300 | 2 | 0.14 | 11.55 | | 0.47T | | | 11.07 | |
| 2020 | 0.000 | 2 | 0.14 | 11.16 | | 0.11T | | | 11.05 | |
| 2020 | 0.300 | 2 | 0.16 | 12.55 | | 0.19T | | | 12.36 | |

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | Nos | Asl-Mt [cm2/m] | SLay-0&5 [cm2/m] | SLay-1&6 [cm2/m] | SLay-2&7 [cm2/m] | SLay-3&8 [cm2/m] | SLay-4&9 [cm2/m] |
|------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1001 | 0.000 | 1 | 1.84 | 7.22 | | | | |
| 1001 | 0.883 | 1 | 1.84 | 6.93 | | | | |
| 1002 | 0.000 | 1 | 2.00 | 6.46 | | | | |
| 1002 | 0.883 | 1 | 2.00 | 6.23 | | | | |
| 1003 | 0.000 | 1 | 1.92 | 5.68 | | | | |
| 1003 | 0.883 | 1 | 1.92 | 5.44 | | | | |
| 1004 | 0.000 | 1 | 1.72 | 4.81 | | | | |
| 1004 | 0.883 | 1 | 1.72 | 4.57 | | | | |
| 1005 | 0.000 | 1 | 1.44 | 3.87 | | | | |
| 1005 | 0.883 | 1 | 1.44 | 3.64 | | | | |
| 1006 | 0.000 | 1 | 1.11 | 2.89 | | | | |
| 1006 | 0.883 | 1 | 1.11 | 2.66 | | | | |
| 1007 | 0.000 | 1 | 1.25 | 2.42 | | | | |
| 1007 | 0.883 | 1 | 1.25 | 2.64 | | | | |
| 1008 | 0.000 | 1 | 1.61 | 3.28 | | | | |
| 1008 | 0.883 | 1 | 1.61 | 3.51 | | | | |
| 1009 | 0.000 | 1 | 1.94 | 4.18 | | | | |
| 1009 | 0.883 | 1 | 1.94 | 4.41 | | | | |
| 1010 | 0.000 | 1 | 2.19 | 4.75 | | | | |
| 1010 | 0.883 | 1 | 2.19 | 4.97 | | | | |
| 1011 | 0.000 | 1 | 2.33 | 5.66 | | | | |
| 1011 | 0.883 | 1 | 2.33 | 5.88 | | | | |
| 1012 | 0.000 | 1 | 2.24 | 6.51 | | | | |
| 1012 | 0.883 | 1 | 2.24 | 6.75 | | | | |
| 1013 | 0.000 | 1 | 1.33 | 5.60 | | | | |
| 1013 | 0.883 | 1 | 1.33 | 5.35 | | | | |
| 1014 | 0.000 | 1 | 1.54 | 5.17 | | | | |
| 1014 | 0.883 | 1 | 1.54 | 4.95 | | | | |
| 1015 | 0.000 | 1 | 1.53 | 4.52 | | | | |
| 1015 | 0.883 | 1 | 1.53 | 4.29 | | | | |
| 1016 | 0.000 | 1 | 1.38 | 3.74 | | | | |
| 1016 | 0.883 | 1 | 1.38 | 3.51 | | | | |
| 1017 | 0.000 | 1 | 1.10 | 2.87 | | | | |
| 1017 | 0.883 | 1 | 1.14 | 2.66 | | | | |
| 1018 | 0.000 | 1 | 0.84 | 2.02 | | | | |
| 1018 | 0.883 | 1 | 0.84 | 1.79 | | | | |
| 1019 | 0.000 | 1 | 0.89 | 1.28 | | | | |
| 1019 | 0.883 | 1 | 0.89 | 1.37 | | | | |
| 1020 | 0.000 | 1 | 1.17 | 2.12 | | | | |
| 1020 | 0.883 | 1 | 1.17 | 2.35 | | | | |
| 1021 | 0.000 | 1 | 1.41 | 2.93 | | | | |
| 1021 | 0.883 | 1 | 1.41 | 3.16 | | | | |
| 1022 | 0.000 | 1 | 1.57 | 3.59 | | | | |
| 1022 | 0.883 | 1 | 1.57 | 3.82 | | | | |
| 1023 | 0.000 | 1 | 1.59 | 4.33 | | | | |
| 1023 | 0.883 | 1 | 1.59 | 4.56 | | | | |
| 1024 | 0.000 | 1 | 1.41 | 5.10 | | | | |
| 1024 | 0.883 | 1 | 1.41 | 5.36 | | | | |
| 1025 | 0.000 | 1 | 0.64 | 4.69 | | | | |
| 1025 | 0.883 | 1 | 0.64 | 4.43 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_DOKOI

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | NOS | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1026 | 0.000 | 1 | 0.48 | 4.18 | | | | |
| 1026 | 0.883 | 1 | 0.48 | 3.95 | | | | |
| 1027 | 0.000 | 1 | 0.46 | 3.48 | | | | |
| 1027 | 0.883 | 1 | 0.46 | 3.25 | | | | |
| 1028 | 0.000 | 1 | 0.54 | 2.84 | | | | |
| 1028 | 0.883 | 1 | 0.54 | 2.61 | | | | |
| 1029 | 0.000 | 1 | 0.58 | 2.21 | | | | |
| 1029 | 0.883 | 1 | 0.58 | 1.98 | | | | |
| 1030 | 0.000 | 1 | 0.56 | 1.60 | | | | |
| 1030 | 0.883 | 1 | 0.56 | 1.37 | | | | |
| 1031 | 0.000 | 1 | 0.54 | 1.03 | | | | |
| 1031 | 0.883 | 1 | 0.54 | 0.85 | | | | |
| 1032 | 0.000 | 1 | 0.59 | 1.41 | | | | |
| 1032 | 0.883 | 1 | 0.59 | 1.64 | | | | |
| 1033 | 0.000 | 1 | 0.70 | 2.06 | | | | |
| 1033 | 0.883 | 1 | 0.70 | 2.29 | | | | |
| 1034 | 0.000 | 1 | 0.78 | 2.64 | | | | |
| 1034 | 0.883 | 1 | 0.78 | 2.74 | | | | |
| 1035 | 0.000 | 1 | 0.81 | 3.28 | | | | |
| 1035 | 0.883 | 1 | 0.81 | 3.78 | | | | |
| 1036 | 0.000 | 1 | 0.72 | 3.93 | | | | |
| 1036 | 0.883 | 1 | 0.72 | 3.68 | | | | |
| 1037 | 0.000 | 1 | 0.97 | 4.81 | | | | |
| 1037 | 0.883 | 1 | 0.97 | 4.54 | | | | |
| 1038 | 0.000 | 1 | 1.43 | 4.21 | | | | |
| 1038 | 0.883 | 1 | 1.43 | 3.98 | | | | |
| 1039 | 0.000 | 1 | 1.48 | 3.75 | | | | |
| 1039 | 0.883 | 1 | 1.48 | 3.51 | | | | |
| 1040 | 0.000 | 1 | 1.30 | 3.25 | | | | |
| 1040 | 0.883 | 1 | 1.30 | 3.02 | | | | |
| 1041 | 0.000 | 1 | 1.06 | 2.69 | | | | |
| 1041 | 0.883 | 1 | 1.06 | 2.45 | | | | |
| 1042 | 0.000 | 1 | 0.83 | 2.08 | | | | |
| 1042 | 0.883 | 1 | 0.83 | 1.85 | | | | |
| 1043 | 0.000 | 1 | 0.80 | 1.90 | | | | |
| 1043 | 0.883 | 1 | 0.80 | 2.13 | | | | |
| 1044 | 0.000 | 1 | 0.97 | 2.10 | | | | |
| 1044 | 0.883 | 1 | 0.97 | 2.32 | | | | |
| 1045 | 0.000 | 1 | 0.98 | 2.63 | | | | |
| 1045 | 0.883 | 1 | 0.98 | 2.85 | | | | |
| 1046 | 0.000 | 1 | 1.22 | 3.14 | | | | |
| 1046 | 0.883 | 1 | 1.22 | 3.36 | | | | |
| 1047 | 0.000 | 1 | 0.96 | 3.26 | | | | |
| 1047 | 0.883 | 1 | 0.96 | 3.32 | | | | |
| 1048 | 0.000 | 1 | 0.84 | 3.79 | | | | |
| 1048 | 0.883 | 1 | 0.78 | 3.81 | | | | |
| 1049 | 0.000 | 1 | 1.36 | 4.20 | | | | |
| 1049 | 0.883 | 1 | 1.36 | 3.76 | | | | |
| 1050 | 0.000 | 1 | 1.48 | 3.35 | | | | |
| 1050 | 0.883 | 1 | 1.48 | 3.13 | | | | |
| 1051 | 0.000 | 1 | 1.62 | 2.88 | | | | |
| 1051 | 0.883 | 1 | 1.62 | 2.65 | | | | |
| 1052 | 0.000 | 1 | 1.52 | 2.45 | | | | |
| 1052 | 0.883 | 1 | 1.52 | 2.22 | | | | |
| 1053 | 0.000 | 1 | 1.30 | 2.01 | | | | |
| 1053 | 0.883 | 1 | 1.30 | 1.78 | | | | |
| 1054 | 0.000 | 1 | 1.03 | 1.16 | | | | |
| 1054 | 0.883 | 1 | 1.03 | 0.94 | | | | |
| 1055 | 0.000 | 1 | 0.84 | 0.75 | | | | |
| 1055 | 0.883 | 1 | 0.84 | 0.89 | | | | |
| 1056 | 0.000 | 1 | 0.72 | 1.21 | | | | |
| 1056 | 0.883 | 1 | 0.72 | 1.67 | | | | |
| 1057 | 0.000 | 1 | 0.84 | 1.99 | | | | |
| 1057 | 0.883 | 1 | 0.84 | 2.22 | | | | |
| 1058 | 0.000 | 1 | 1.08 | 2.50 | | | | |
| 1058 | 0.883 | 1 | 1.08 | 2.73 | | | | |
| 1059 | 0.000 | 1 | 1.23 | 2.97 | | | | |
| 1059 | 0.883 | 1 | 1.23 | 3.19 | | | | |
| 1060 | 0.000 | 1 | 1.16 | 3.34 | | | | |
| 1060 | 0.883 | 1 | 1.34 | 4.20 | | | | |
| 2001 | 0.000 | 2 | 0.15 | 6.31 | | | | |
| 2001 | 0.300 | 2 | 0.11 | 6.05 | | | | |
| 2002 | 0.000 | 2 | 0.36 | 6.76 | | | | |
| 2002 | 0.300 | 2 | 0.36 | 6.55 | | | | |
| 2003 | 0.000 | 2 | 0.40 | 5.34 | | | | |
| 2003 | 0.300 | 2 | 0.40 | 5.47 | | | | |
| 2004 | 0.000 | 2 | 0.18 | 5.38 | | | | |
| 2004 | 0.300 | 2 | 0.18 | 5.52 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_ULS_DOKOI

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | NoS | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 2005 | 0.000 | 2 | 0.10 | 4.61 | | | | |
| 2005 | 0.300 | 2 | 0.10 | 4.47 | | | | |
| 2006 | 0.000 | 2 | 0.24 | 5.03 | | | | |
| 2006 | 0.300 | 2 | 0.24 | 4.85 | | | | |
| 2007 | 0.000 | 2 | 0.24 | 4.66 | | | | |
| 2007 | 0.300 | 2 | 0.24 | 4.83 | | | | |
| 2008 | 0.000 | 2 | 0.10 | 4.26 | | | | |
| 2008 | 0.300 | 2 | 0.10 | 4.41 | | | | |
| 2009 | 0.000 | 2 | 0.07 | 4.86 | | | | |
| 2009 | 0.300 | 2 | 0.07 | 4.73 | | | | |
| 2010 | 0.000 | 2 | 0.13 | 5.06 | | | | |
| 2010 | 0.300 | 2 | 0.13 | 4.89 | | | | |
| 2011 | 0.000 | 2 | 0.13 | 3.48 | | | | |
| 2011 | 0.300 | 2 | 0.13 | 3.67 | | | | |
| 2012 | 0.000 | 2 | 0.05 | 3.33 | | | | |
| 2012 | 0.300 | 2 | 0.05 | 3.40 | | | | |
| 2013 | 0.000 | 2 | 0.03 | 5.15 | | | | |
| 2013 | 0.300 | 2 | 0.03 | 4.94 | | | | |
| 2014 | 0.000 | 2 | 0.15 | 5.11 | | | | |
| 2014 | 0.300 | 2 | 0.15 | 4.95 | | | | |
| 2015 | 0.000 | 2 | 0.10 | 3.38 | | | | |
| 2015 | 0.300 | 2 | 0.10 | 3.56 | | | | |
| 2016 | 0.000 | 2 | 0.04 | 4.00 | | | | |
| 2016 | 0.300 | 2 | 0.04 | 4.04 | | | | |
| 2017 | 0.000 | 2 | 0.08 | 3.68 | | | | |
| 2017 | 0.300 | 2 | 0.06 | 3.57 | | | | |
| 2018 | 0.000 | 2 | 0.23 | 3.96 | | | | |
| 2018 | 0.300 | 2 | 0.23 | 3.82 | | | | |
| 2019 | 0.000 | 2 | 0.21 | 3.45 | | | | |
| 2019 | 0.300 | 2 | 0.21 | 3.64 | | | | |
| 2020 | 0.000 | 2 | 0.05 | | | | | |
| 2020 | 0.300 | 2 | 0.08 | 3.26 | | | | |

Maximum Degree of Utilization

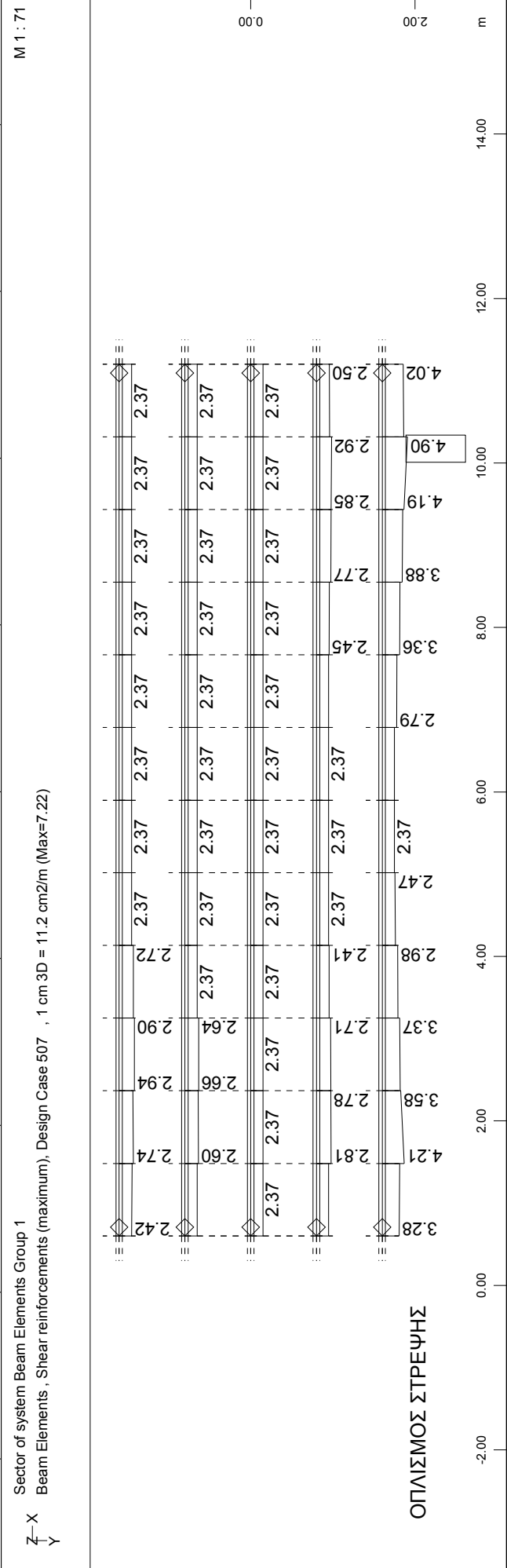
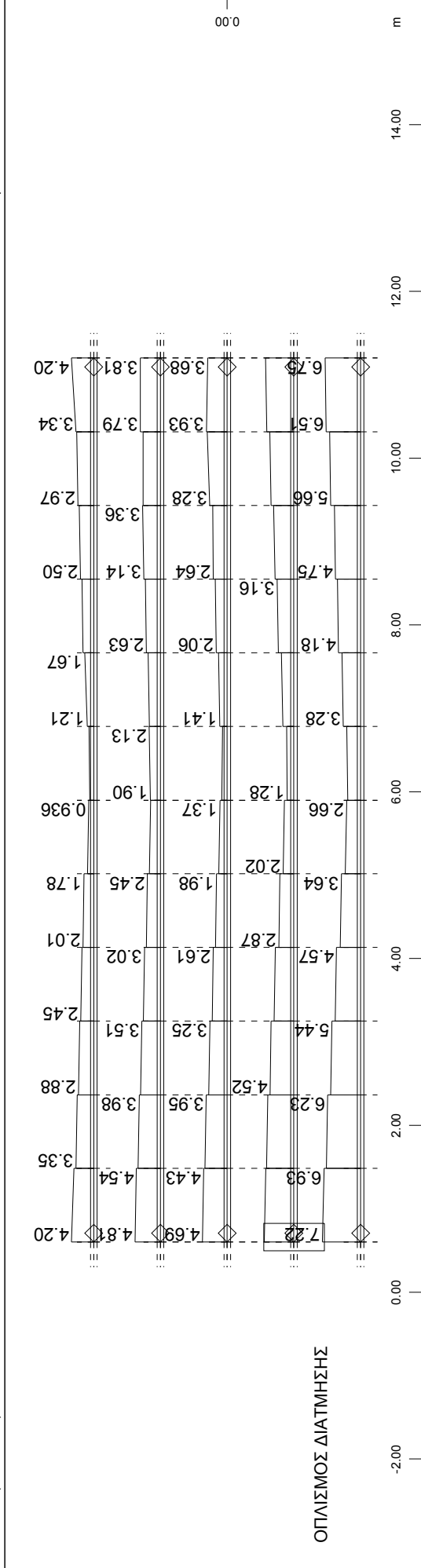
| | | N | Vy | Vz | Mt | My | Mz | Mb | Mt2 | Total | lamda |
|--------------|---|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| | | sig-c | sig-t | tau | sig-* | tend. | As-l | As-v | crack | sigdyn | tau-* |
| Cross sect. | 1 | 0.000 | 0.000 | 0.398 | 0.182 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| Cross sect. | 2 | 0.000 | 0.000 | 0.136 | 0.023 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| DOKOS-2 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 | 0.000 | 0.000 | 0.000 |
| Total System | | 0.000 | 0.000 | 0.398 | 0.182 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 | 0.000 | 0.000 | 0.000 |

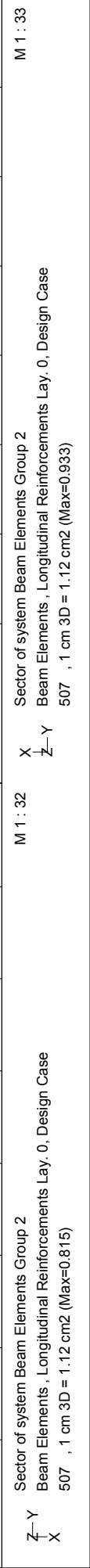
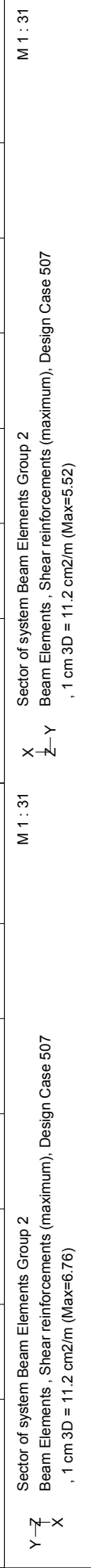


Beam Elements, Longitudinal Reinforcements Lay. 1, Design Case 507, 1 cm 3D = 22.4 cm2 (Max=18.7)

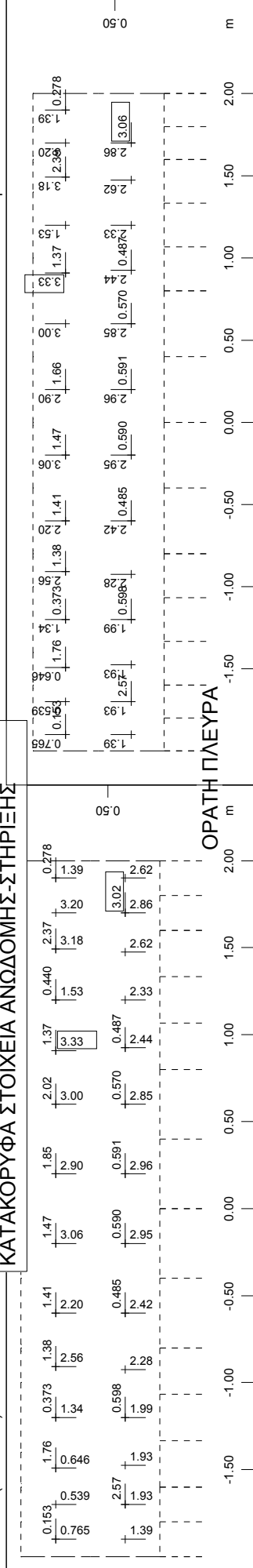


Beam Elements. Longitudinal Reinforcements Lay. 3. Design Case 507. 1 cm 3D = 11.2 cm2 (Max=9.36)





ΚΑΤΑΚΟΡΥΦΑ ΣΤΟΙΧΕΙΑ ΑΝΩΔΟΜΗΣ-ΣΤΗΡΙΞΗΣ



Sector of system Quadrilateral Elements Group 8
upper Reinforcements in Elements in cm2/m, Design Case 521 ULS
design (Max=3.33)

M 1 : 34

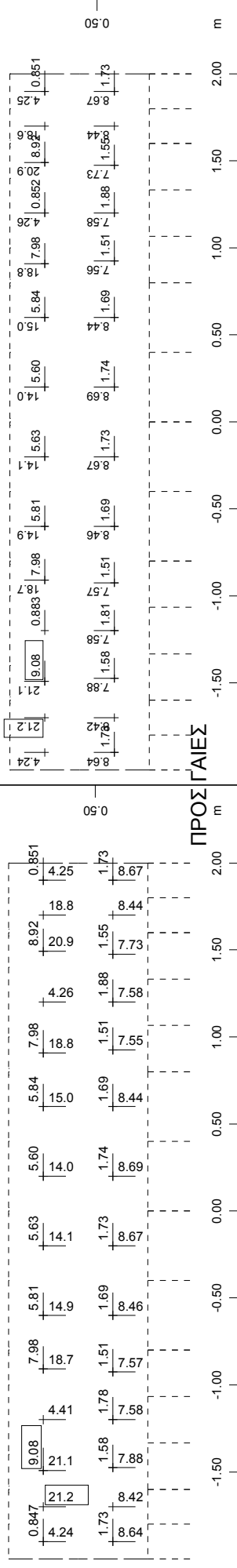
X-Y
Z

ΟΡΑΤΗ ΠΛΕΥΡΑ

M 1 : 36

Sector of system Quadrilateral Elements Group 8
upper Reinforcements in Elements in cm2/m, Design Case 521 ULS
design (Max=3.33)

X-Y
Z



Sector of system Quadrilateral Elements Group 8
lower Reinforcements in Elements in cm2/m, Design Case 521 ULS
design (Max=21.2)

M 1 : 34

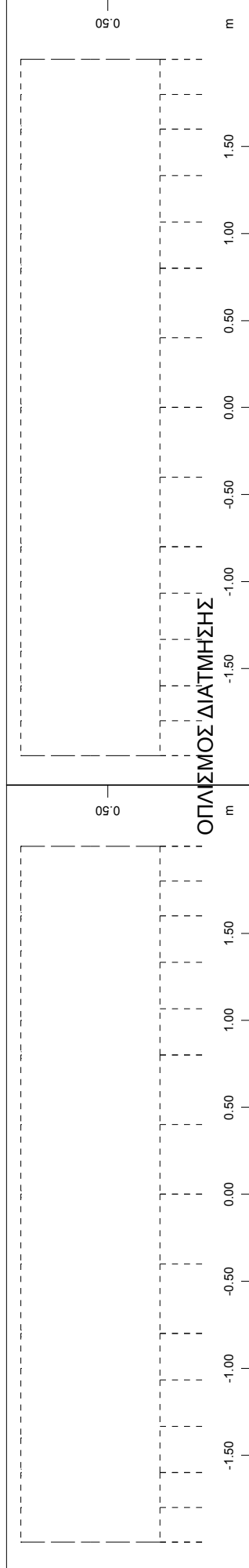
X-Y
Z

ΠΡΟΣ ΓΑΙΕΣ

M 1 : 34

Sector of system Quadrilateral Elements Group 8
lower Reinforcements in Elements in cm2/m, Design Case 521 ULS
design (Max=21.2)

X-Y
Z



Sector of system Quadrilateral Elements Group 8
Shear reinforcement from middle of element in cm2/m2, Design Case 521 ULS design (Max=0)

M 1 : 34

X-Y
Z

ΟΠΛΙΣΜΟΣ ΔΙΑΤΜΗΣΗΣ

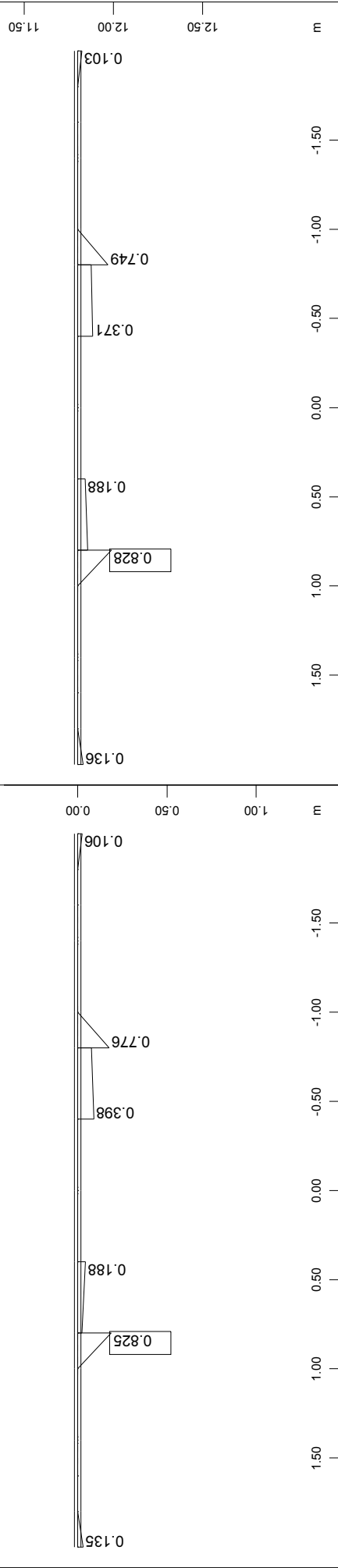
M 1 : 34

Sector of system Quadrilateral Elements Group 8
Shear reinforcement from middle of element in cm2/m2, Design Case 521 ULS design (Max=0)

X-Y
Z

ΠΑΡΑΣΧΟΛΟΓΙΣΜΟΣ

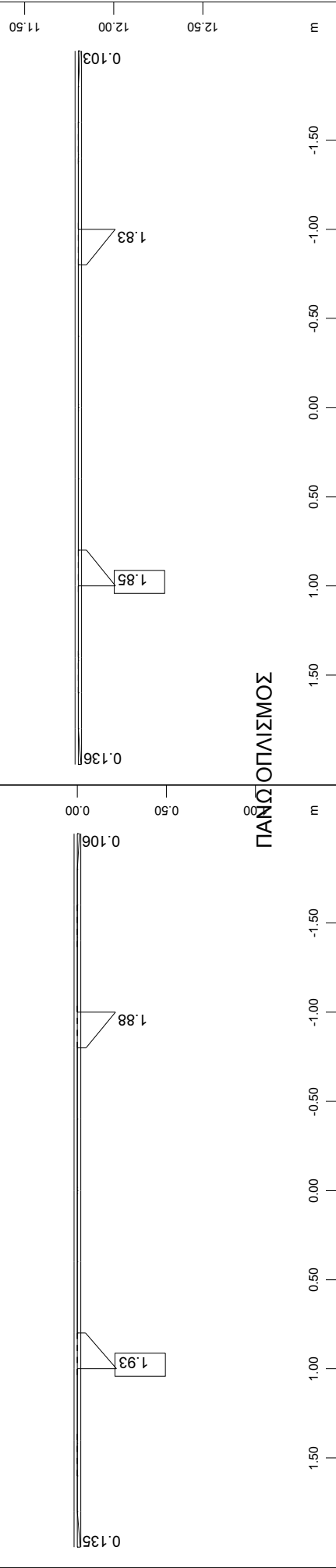
ΚΑΤΩ ΟΠΛΙΣΜΟΣ



Y-Z
X

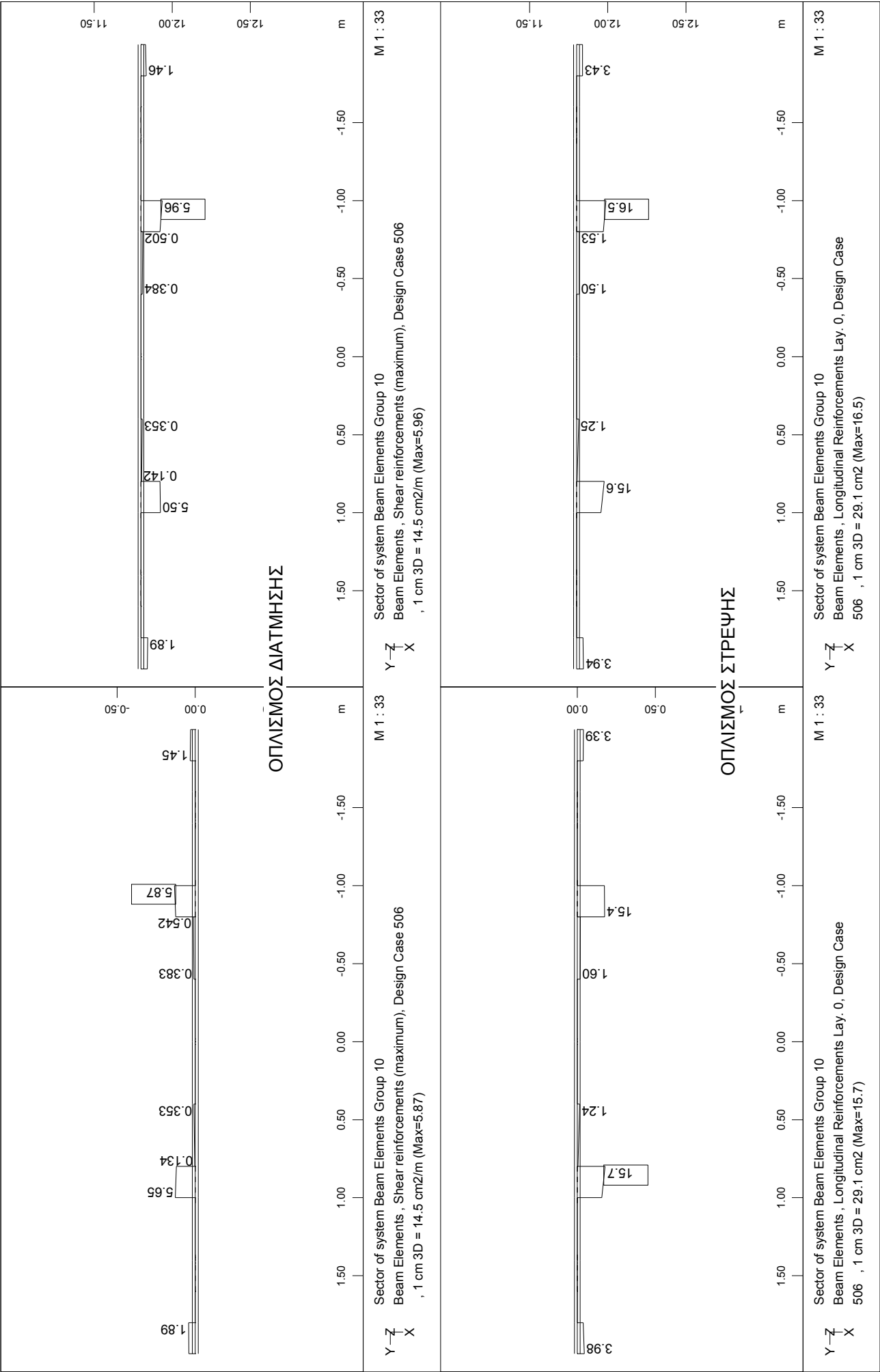
Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case
506 , 1 cm 3D = 1.45 cm² (Max=0.828)

ΠΑΝΕΠΙΣΤΗΜΙΟΝ

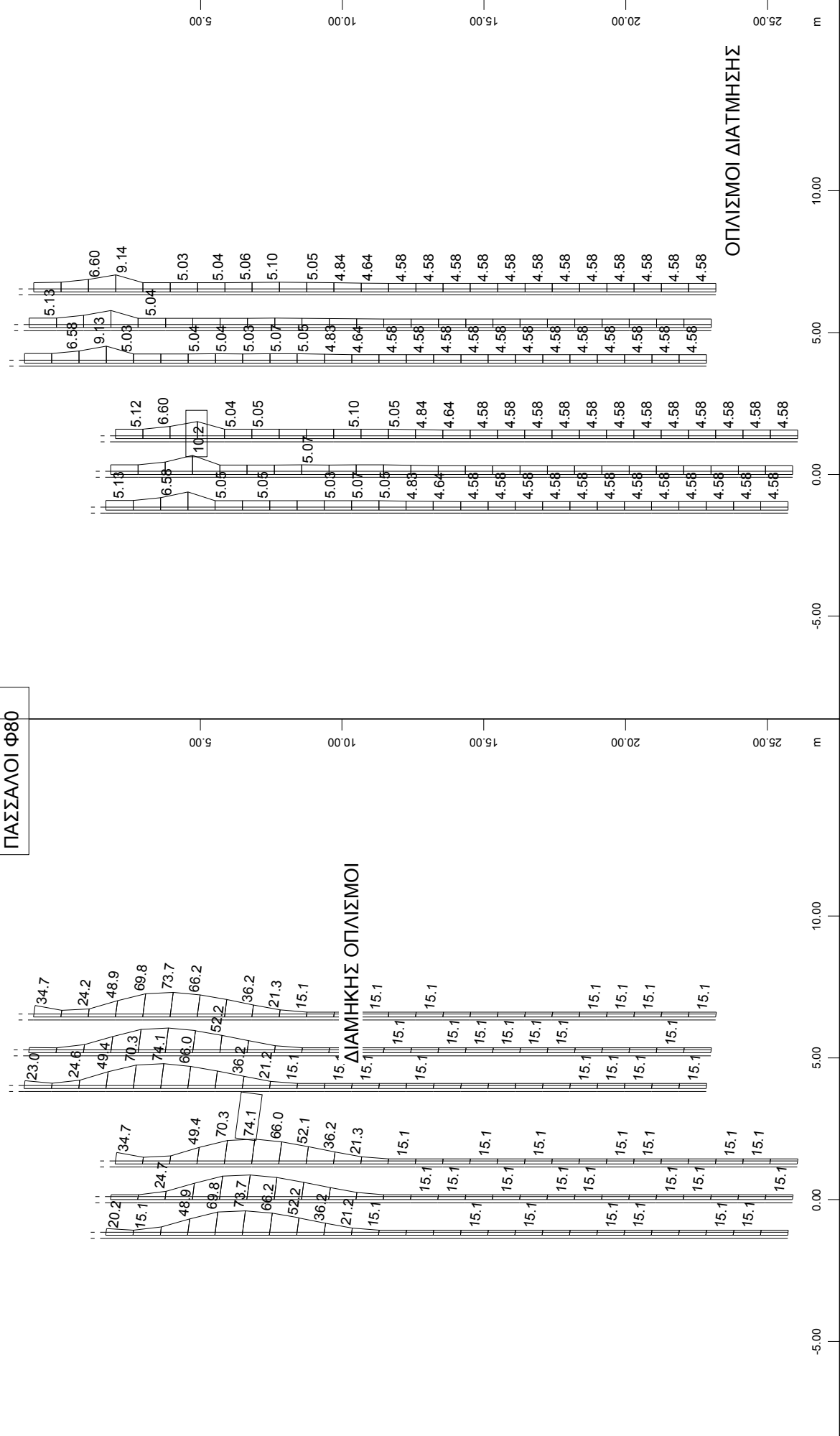


Y-Z
X

Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
506 , 1 cm 3D = 2.91 cm2 (Max=1.85)



ΠΑΣΣΑΛΟΙ Φ80



Sector of system Beam Elements Group 12

Beam Elements , Longitudinal Reinforcements Lay. 1, Design

Case 506 , 1 cm 3D = 145.3 cm2 (Max=74.1)

Beam Elements , Shear reinforcements (maximum), Design Case

506 , 1 cm 3D = 29.1 cm2/m (Max=10.2)

Μ 1 : 191

X*0.502

Y*0.906

Z*0.962

Μ 1 : 191

X*0.502

Y*0.906

Z*0.962

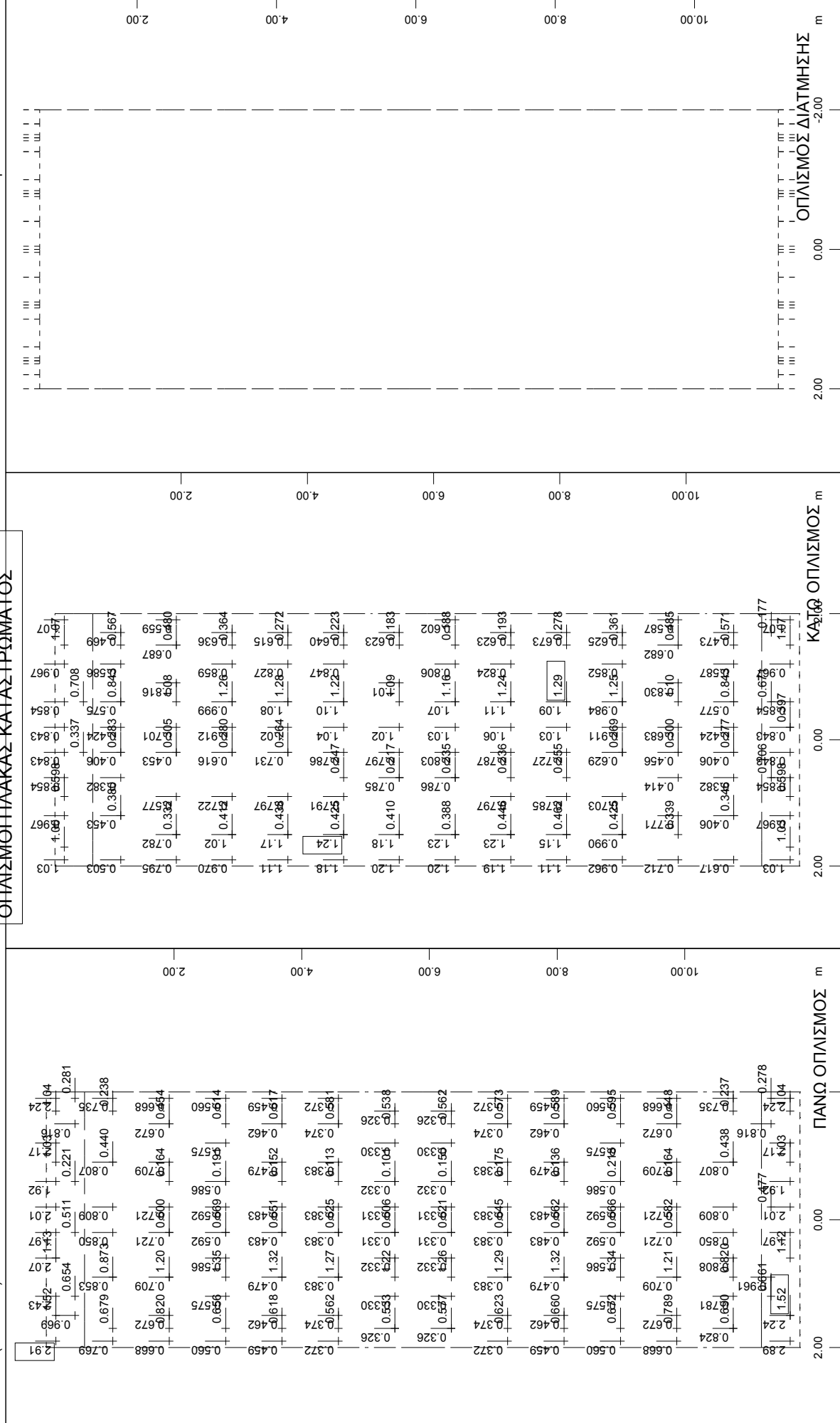
Μ 1 : 191

X*0.502

Y*0.906

Z*0.962

ΟΠΛΙΣΜΟΙ ΠΛΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00

8) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ ULS-ΠΡΟΣΚΡΟΥΣΗΣ

OPIΣTIKH MEΛETH/TECHNIKO TA/L=13.00
COMBINATION-LL-frequent

Combination rule Number 1

COMB.LL-TS_ON DECK

Resulting loadcases type Design Combination

Loadcase selection

| Number | factor | type | Title |
|--------|--------|------------------|--------------------------|
| 41 | 0.40 | Conditional LC | L.L.UDL_2.50KN/m2 |
| 42 | 0.40 | Conditional LC | L.L.UDL_6.50KN/m2 |
| 50 | 0.75 | Exclusive LC A 1 | TS_RIGHT_Posit.1 |
| 51 | 0.75 | Exclusive LC A 1 | TS_RIGHT_Posit.2 |
| 52 | 0.75 | Exclusive LC A 1 | TS_RIGHT_Posit.3 |
| 53 | 0.75 | Exclusive LC A 1 | TS_RIGHT_Posit.4 |
| 54 | 0.75 | Exclusive LC A 1 | TS_RIGHT_Posit.5 |
| 55 | 0.75 | Exclusive LC A 1 | TS_RIGHT_Posit.6 |
| 56 | 0.75 | Exclusive LC A 1 | TS_RIGHT_Posit.7 |
| 57 | 0.75 | Exclusive LC A 1 | TS_RIGHT_Posit.8 |
| 58 | 0.75 | Exclusive LC A 1 | TS_RIGHT_Posit.9 |
| 59 | 0.75 | Exclusive LC A 1 | TS_RIGHT_Posit.10 |
| 60 | 0.75 | Exclusive LC A 1 | TS_RIGHT_Posit.11 |
| 61 | 0.75 | Exclusive LC A 1 | TS_RIGHT_Posit.12 |
| 70 | 0.40 | Conditional LC | ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A1 2.50 |
| 71 | 0.40 | Conditional LC | ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A2 2.50 |
| 72 | 0.40 | Conditional LC | ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A1 6.50 |
| 73 | 0.40 | Conditional LC | ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A2 6.50 |

Combination rule Number 2

COMB.LL-TS_OUT OF DECK

Resulting loadcases type Design Combination

Loadcase selection

| Number | factor | type | Title |
|--------|--------|----------------|--------------------------|
| 41 | 0.40 | Conditional LC | L.L.UDL_2.50KN/m2 |
| 42 | 0.40 | Conditional LC | L.L.UDL_6.50KN/m2 |
| 70 | 0.40 | Conditional LC | ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A1 2.50 |
| 71 | 0.40 | Conditional LC | ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A2 2.50 |
| 72 | 0.40 | Conditional LC | ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A1 6.50 |
| 73 | 0.40 | Conditional LC | ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A2 6.50 |
| 74 | 0.75 | Conditional LC | ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A1 TS1- |
| 75 | 0.75 | Conditional LC | ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A2 TS1- |

Generated Loadcases

| Number | Comb | Title |
|--------|----------------------|-------|
| 2201 | 1 MAX-MX QUAD LL-ON | |
| 2202 | 1 MIN-MX QUAD LL-ON | |
| 2203 | 1 MAX-MY QUAD LL-ON | |
| 2204 | 1 MIN-MY QUAD LL-ON | |
| 2205 | 1 MAX-MXY QUAD LL-ON | |
| 2206 | 1 MIN-MXY QUAD LL-ON | |
| 2201 | 1 MAX-MX QUAK LL-ON | |
| 2202 | 1 MIN-MX QUAK LL-ON | |
| 2203 | 1 MAX-MY QUAK LL-ON | |
| 2204 | 1 MIN-MY QUAK LL-ON | |
| 2205 | 1 MAX-MXY QUAK LL-ON | |
| 2206 | 1 MIN-MXY QUAK LL-ON | |
| 2207 | 1 MAX-VX QUAD LL-ON | |
| 2208 | 1 MIN-VX QUAD LL-ON | |
| 2207 | 1 MAX-VX QUAK LL-ON | |
| 2208 | 1 MIN-VX QUAK LL-ON | |
| 2209 | 1 MAX-VY QUAD LL-ON | |
| 2210 | 1 MIN-VY QUAD LL-ON | |
| 2209 | 1 MAX-VY QUAK LL-ON | |
| 2210 | 1 MIN-VY QUAK LL-ON | |
| 2211 | 1 MAX-NXX QUAD LL-ON | |
| 2212 | 1 MIN-NXX QUAD LL-ON | |
| 2213 | 1 MAX-NYY QUAD LL-ON | |
| 2214 | 1 MIN-NYY QUAD LL-ON | |
| 2215 | 1 MAX-NXY QUAD LL-ON | |
| 2216 | 1 MIN-NXY QUAD LL-ON | |
| 2211 | 1 MAX-NXX QUAK LL-ON | |
| 2212 | 1 MIN-NXX QUAK LL-ON | |
| 2213 | 1 MAX-NYY QUAK LL-ON | |
| 2214 | 1 MIN-NYY QUAK LL-ON | |
| 2215 | 1 MAX-NXY QUAK LL-ON | |
| 2216 | 1 MIN-NXY QUAK LL-ON | |
| 1401 | 1 MAX-MY BEAM | |
| 1402 | 1 MIN-MY BEAM | |
| 1403 | 1 MAX-VZ BEAM | |
| 1404 | 1 MIN-VZ BEAM | |
| 1405 | 1 MAX-MZ BEAM | |
| 1406 | 1 MIN-MZ BEAM | |
| 1407 | 1 MAX-VY BEAM | |
| 1408 | 1 MIN-VY BEAM | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
COMBINATION-LL-frequent

Generated Loadcases

| Number | Comb | Title |
|--------|------|---------------------|
| 1409 | 1 | MAX-N BEAM |
| 1410 | 1 | MIN-N BEAM |
| 1411 | 1 | MAX-MT BEAM |
| 1412 | 1 | MIN-MT BEAM |
| 2221 | 2 | MAX-MX QUAD LL-OFF |
| 2222 | 2 | MIN-MX QUAD LL-OFF |
| 2223 | 2 | MAX-MY QUAD LL-OFF |
| 2224 | 2 | MIN-MY QUAD LL-OFF |
| 2225 | 2 | MAX-MXY QUAD LL-OFF |
| 2226 | 2 | MIN-MXY QUAD LL-OFF |
| 2221 | 2 | MAX-MX QUAK LL-OFF |
| 2222 | 2 | MIN-MX QUAK LL-OFF |
| 2223 | 2 | MAX-MY QUAK LL-OFF |
| 2224 | 2 | MIN-MY QUAK LL-OFF |
| 2225 | 2 | MAX-MXY QUAK LL-OFF |
| 2226 | 2 | MIN-MXY QUAK LL-OFF |
| 2227 | 2 | MAX-VX QUAD LL-OFF |
| 2228 | 2 | MIN-VX QUAD LL-OFF |
| 2227 | 2 | MAX-VX QUAK LL-OFF |
| 2228 | 2 | MIN-VX QUAK LL-OFF |
| 2229 | 2 | MAX-VY QUAD LL-OFF |
| 2230 | 2 | MIN-VY QUAD LL-OFF |
| 2229 | 2 | MAX-VY QUAK LL-OFF |
| 2230 | 2 | MIN-VY QUAK LL-OFF |
| 2231 | 2 | MAX-NXX QUAD LL-OFF |
| 2232 | 2 | MIN-NXX QUAD LL-OFF |
| 2233 | 2 | MAX-NYY QUAD LL-OFF |
| 2234 | 2 | MIN-NYY QUAD LL-OFF |
| 2235 | 2 | MAX-NXY QUAD LL-OFF |
| 2236 | 2 | MIN-NXY QUAD LL-OFF |
| 2231 | 2 | MAX-NXX QUAK LL-OFF |
| 2232 | 2 | MIN-NXX QUAK LL-OFF |
| 2233 | 2 | MAX-NYY QUAK LL-OFF |
| 2234 | 2 | MIN-NYY QUAK LL-OFF |
| 2235 | 2 | MAX-NXY QUAK LL-OFF |
| 2236 | 2 | MIN-NXY QUAK LL-OFF |
| 1421 | 2 | MAX-MY BEAM |
| 1422 | 2 | MIN-MY BEAM |
| 1423 | 2 | MAX-VZ BEAM |
| 1424 | 2 | MIN-VZ BEAM |
| 1425 | 2 | MAX-MZ BEAM |
| 1426 | 2 | MIN-MZ BEAM |
| 1427 | 2 | MAX-VY BEAM |
| 1428 | 2 | MIN-VY BEAM |
| 1429 | 2 | MAX-N BEAM |
| 1430 | 2 | MIN-N BEAM |
| 1431 | 2 | MAX-MT BEAM |
| 1432 | 2 | MIN-MT BEAM |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
COMBINATION ULD-CRASH

Combination rule Number 1

COMB.ULS-1-BEAM

Resulting loadcases type Design Combination

Loadcase selection

| Number | factor | type | | | Title |
|--------|--------|------------------|-----|--------------------------|-------|
| 31 | 1.00 | Exclusive LC | AG | PΥΣΕΙΣ-ΟΔΟΣΤΡΩΣΙΑ | |
| 32 | 1.00 | Combined with LC | | PEZODROMIO | |
| 33 | 1.00 | Combined with LC | | ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50 | |
| 36 | 1.00 | Exclusive LC | A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 | |
| 37 | 1.00 | Exclusive LC | A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 | |
| 38 | 1.00 | Exclusive LC | A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 | |
| 39 | 1.00 | Exclusive LC | A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 | |
| 1401 | 1.00 | Exclusive LC | A 2 | MAX-MY BEAM | |
| 1402 | 1.00 | Exclusive LC | A 2 | MIN-MY BEAM | |
| 1403 | 1.00 | Exclusive LC | A 2 | MAX-VZ BEAM | |
| 1404 | 1.00 | Exclusive LC | A 2 | MIN-VZ BEAM | |
| 1405 | 1.00 | Exclusive LC | A 2 | MAX-MZ BEAM | |
| 1406 | 1.00 | Exclusive LC | A 2 | MIN-MZ BEAM | |
| 1407 | 1.00 | Exclusive LC | A 2 | MAX-VY BEAM | |
| 1408 | 1.00 | Exclusive LC | A 2 | MIN-VY BEAM | |
| 1409 | 1.00 | Exclusive LC | A 2 | MAX-N BEAM | |
| 1410 | 1.00 | Exclusive LC | A 2 | MIN-N BEAM | |
| 1411 | 1.00 | Exclusive LC | A 2 | MAX-MT BEAM | |
| 1412 | 1.00 | Exclusive LC | A 2 | MIN-MT BEAM | |
| 1421 | 1.00 | Exclusive LC | A 2 | MAX-MY BEAM | |
| 1422 | 1.00 | Exclusive LC | A 2 | MIN-MY BEAM | |
| 1423 | 1.00 | Exclusive LC | A 2 | MAX-VZ BEAM | |
| 1424 | 1.00 | Exclusive LC | A 2 | MIN-VZ BEAM | |
| 1425 | 1.00 | Exclusive LC | A 2 | MAX-MZ BEAM | |
| 1426 | 1.00 | Exclusive LC | A 2 | MIN-MZ BEAM | |
| 1427 | 1.00 | Exclusive LC | A 2 | MAX-VY BEAM | |
| 1428 | 1.00 | Exclusive LC | A 2 | MIN-VY BEAM | |
| 1429 | 1.00 | Exclusive LC | A 2 | MAX-N BEAM | |
| 1430 | 1.00 | Exclusive LC | A 2 | MIN-N BEAM | |
| 1431 | 1.00 | Exclusive LC | A 2 | MAX-MT BEAM | |
| 1432 | 1.00 | Exclusive LC | A 2 | MIN-MT BEAM | |
| 80 | 1.00 | Conditional LC | | ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ A1 | |
| 81 | 1.00 | Conditional LC | | ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ A2 | |
| 100 | 1.00 | Exclusive LC | A 3 | CRASH_-Y_Pos.1 _DECK | |
| 101 | 1.00 | Exclusive LC | A 3 | CRASH_-Y_Pos.2 _DECK | |
| 102 | 1.00 | Exclusive LC | A 3 | CRASH_-Y_Pos.3 _DECK | |
| 103 | 1.00 | Exclusive LC | A 3 | CRASH_-Y_Pos.4 _DECK | |
| 104 | 1.00 | Exclusive LC | A 3 | CRASH_-Y_Pos.5 _DECK | |
| 105 | 1.00 | Exclusive LC | A 3 | CRASH_-Y_Pos.6 _DECK | |
| 106 | 1.00 | Exclusive LC | A 3 | CRASH_-Y_Pos.7 _DECK | |
| 107 | 1.00 | Exclusive LC | A 3 | CRASH_-Y_Pos.8 _DECK | |
| 108 | 1.00 | Exclusive LC | A 3 | CRASH_-Y_Pos.9 _DECK | |
| 109 | 1.00 | Exclusive LC | A 3 | CRASH_-Y_Pos.10 _DECK | |
| 110 | 1.00 | Exclusive LC | A 3 | CRASH_-Y_Pos.11 _DECK | |
| 111 | 1.00 | Exclusive LC | A 3 | CRASH_-Y_Pos.12 _DECK | |

Combination rule Number 2

COMB.ULS-1-QUAD

Resulting loadcases type Design Combination

Loadcase selection

| Number | factor | type | | | Title |
|--------|--------|------------------|-----|--------------------------|-------|
| 1 | 1.00 | Exclusive LC | AG | I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ | |
| 2 | 1.00 | Combined with LC | | I.B. ΔΟΚΩΝ | |
| 3 | 1.00 | Combined with LC | | I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ | |
| 31 | 1.00 | Combined with LC | | PΥΣΕΙΣ-ΟΔΟΣΤΡΩΣΙΑ | |
| 32 | 1.00 | Combined with LC | | PEZODROMIO | |
| 33 | 1.00 | Combined with LC | | ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50 | |
| 11 | 1.00 | Exclusive LC | A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 | |
| 12 | 1.00 | Exclusive LC | A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 | |
| 13 | 1.00 | Exclusive LC | A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 | |
| 14 | 1.00 | Exclusive LC | A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 | |
| 36 | 1.00 | Exclusive LC | A 2 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 | |
| 37 | 1.00 | Exclusive LC | A 2 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 | |
| 38 | 1.00 | Exclusive LC | A 2 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 | |
| 39 | 1.00 | Exclusive LC | A 2 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 | |
| 2201 | 1.00 | Exclusive LC | A 3 | MAX-MX QUAK LL-ON | |
| 2202 | 1.00 | Exclusive LC | A 3 | MIN-MX QUAK LL-ON | |
| 2203 | 1.00 | Exclusive LC | A 3 | MAX-MY QUAK LL-ON | |
| 2204 | 1.00 | Exclusive LC | A 3 | MIN-MY QUAK LL-ON | |
| 2205 | 1.00 | Exclusive LC | A 3 | MAX-MXY QUAK LL-ON | |
| 2206 | 1.00 | Exclusive LC | A 3 | MIN-MXY QUAK LL-ON | |
| 2207 | 1.00 | Exclusive LC | A 3 | MAX-VX QUAK LL-ON | |
| 2208 | 1.00 | Exclusive LC | A 3 | MIN-VX QUAK LL-ON | |
| 2209 | 1.00 | Exclusive LC | A 3 | MAX-VY QUAK LL-ON | |
| 2210 | 1.00 | Exclusive LC | A 3 | MIN-VY QUAK LL-ON | |

OPIΣTIKH MEΛETH/TECHNIKO TA/L=13.00
COMBINATION ULD-CRASH

Combination rule Number 2

COMB.ULS-1-QUAD

Resulting loadcases type Design Combination

Loadcase selection

| Number | factor | type | Title |
|--------|--------|----------------|---------------------------|
| 2211 | 1.00 | Exclusive LC | A 3 MAX-NXX QUAK LL-ON |
| 2212 | 1.00 | Exclusive LC | A 3 MIN-NXX QUAK LL-ON |
| 2213 | 1.00 | Exclusive LC | A 3 MAX-NYY QUAK LL-ON |
| 2214 | 1.00 | Exclusive LC | A 3 MIN-NYY QUAK LL-ON |
| 2215 | 1.00 | Exclusive LC | A 3 MAX-NXY QUAK LL-ON |
| 2216 | 1.00 | Exclusive LC | A 3 MIN-NXY QUAK LL-ON |
| 2221 | 1.00 | Exclusive LC | A 3 MAX-MX QUAK LL-OFF |
| 2222 | 1.00 | Exclusive LC | A 3 MIN-MX QUAK LL-OFF |
| 2223 | 1.00 | Exclusive LC | A 3 MAX-MY QUAK LL-OFF |
| 2224 | 1.00 | Exclusive LC | A 3 MIN-MY QUAK LL-OFF |
| 2225 | 1.00 | Exclusive LC | A 3 MAX-MXY QUAK LL-OFF |
| 2226 | 1.00 | Exclusive LC | A 3 MIN-MXY QUAK LL-OFF |
| 2227 | 1.00 | Exclusive LC | A 3 MAX-VX QUAK LL-OFF |
| 2228 | 1.00 | Exclusive LC | A 3 MIN-VX QUAK LL-OFF |
| 2229 | 1.00 | Exclusive LC | A 3 MAX-VY QUAK LL-OFF |
| 2230 | 1.00 | Exclusive LC | A 3 MIN-VY QUAK LL-OFF |
| 2231 | 1.00 | Exclusive LC | A 3 MAX-NXX QUAK LL-OFF |
| 2232 | 1.00 | Exclusive LC | A 3 MIN-NXX QUAK LL-OFF |
| 2233 | 1.00 | Exclusive LC | A 3 MAX-NYY QUAK LL-OFF |
| 2234 | 1.00 | Exclusive LC | A 3 MIN-NYY QUAK LL-OFF |
| 2235 | 1.00 | Exclusive LC | A 3 MAX-NXY QUAK LL-OFF |
| 2236 | 1.00 | Exclusive LC | A 3 MIN-NXY QUAK LL-OFF |
| 80 | 1.00 | Conditional LC | ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ A1 |
| 81 | 1.00 | Conditional LC | ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ A2 |
| 100 | 1.00 | Exclusive LC | A 4 CRASH_-Y_Pos.1 _DECK |
| 101 | 1.00 | Exclusive LC | A 4 CRASH_-Y_Pos.2 _DECK |
| 102 | 1.00 | Exclusive LC | A 4 CRASH_-Y_Pos.3 _DECK |
| 103 | 1.00 | Exclusive LC | A 4 CRASH_-Y_Pos.4 _DECK |
| 104 | 1.00 | Exclusive LC | A 4 CRASH_-Y_Pos.5 _DECK |
| 105 | 1.00 | Exclusive LC | A 4 CRASH_-Y_Pos.6 _DECK |
| 106 | 1.00 | Exclusive LC | A 4 CRASH_-Y_Pos.7 _DECK |
| 107 | 1.00 | Exclusive LC | A 4 CRASH_-Y_Pos.8 _DECK |
| 108 | 1.00 | Exclusive LC | A 4 CRASH_-Y_Pos.9 _DECK |
| 109 | 1.00 | Exclusive LC | A 4 CRASH_-Y_Pos.10 _DECK |
| 110 | 1.00 | Exclusive LC | A 4 CRASH_-Y_Pos.11 _DECK |
| 111 | 1.00 | Exclusive LC | A 4 CRASH_-Y_Pos.12 _DECK |
| 6015 | 1.00 | Conditional LC | 15 K creep step |
| 6025 | 1.00 | Conditional LC | 25 K creep step |
| 6055 | 1.00 | Conditional LC | 55 K creep step |
| 6060 | 1.00 | Conditional LC | 60 K creep step |
| 6061 | 1.00 | Conditional LC | 61 K creep step |
| 6062 | 1.00 | Conditional LC | 62 K creep step |
| 6063 | 1.00 | Conditional LC | 63 K creep step |
| 6064 | 1.00 | Conditional LC | 64 K creep step |

Generated Loadcases

| Number | Comb | Title |
|--------|------|---------------------|
| 1501 | 1 | MAX-MY BEAM |
| 1502 | 1 | MIN-MY BEAM |
| 1503 | 1 | MAX-VZ BEAM |
| 1504 | 1 | MIN-VZ BEAM |
| 1505 | 1 | MAX-MZ BEAM |
| 1506 | 1 | MIN-MZ BEAM |
| 1507 | 1 | MAX-VY BEAM |
| 1508 | 1 | MIN-VY BEAM |
| 1509 | 1 | MAX-N BEAM |
| 1510 | 1 | MIN-N BEAM |
| 1511 | 1 | MAX-MT BEAM |
| 1512 | 1 | MIN-MT BEAM |
| 2301 | 2 | MAX-MX QUAD ULS-B1 |
| 2302 | 2 | MIN-MX QUAD ULS-B1 |
| 2303 | 2 | MAX-MY QUAD ULS-B1 |
| 2304 | 2 | MIN-MY QUAD ULS-B1 |
| 2305 | 2 | MAX-MXY QUAD ULS-B1 |
| 2306 | 2 | MIN-MXY QUAD ULS-B1 |
| 2301 | 2 | MAX-MX QUAK ULS-B1 |
| 2302 | 2 | MIN-MX QUAK ULS-B1 |
| 2303 | 2 | MAX-MY QUAK ULS-B1 |
| 2304 | 2 | MIN-MY QUAK ULS-B1 |
| 2305 | 2 | MAX-MXY QUAK ULS-B1 |
| 2306 | 2 | MIN-MXY QUAK ULS-B1 |
| 2307 | 2 | MAX-VX QUAD ULS-B1 |
| 2308 | 2 | MIN-VX QUAD ULS-B1 |
| 2307 | 2 | MAX-VX QUAK ULS-B1 |
| 2308 | 2 | MIN-VX QUAK ULS-B1 |
| 2309 | 2 | MAX-VY QUAD ULS-B1 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
COMBINATION ULD-CRASH**Generated Loadcases**

| Number | Comb | Title |
|--------|------|---------------------|
| 2310 | 2 | MIN-VY QUAD ULS-B1 |
| 2309 | 2 | MAX-VY QUAK ULS-B1 |
| 2310 | 2 | MIN-VY QUAK ULS-B1 |
| 2311 | 2 | MAX-NXX QUAD ULS-B1 |
| 2312 | 2 | MIN-NXX QUAD ULS-B1 |
| 2313 | 2 | MAX-NYY QUAD ULS-B1 |
| 2314 | 2 | MIN-NYY QUAD ULS-B1 |
| 2315 | 2 | MAX-NXY QUAD ULS-B1 |
| 2316 | 2 | MIN-NXY QUAD ULS-B1 |
| 2311 | 2 | MAX-NXX QUAK ULS-B1 |
| 2312 | 2 | MIN-NXX QUAK ULS-B1 |
| 2313 | 2 | MAX-NYY QUAK ULS-B1 |
| 2314 | 2 | MIN-NYY QUAK ULS-B1 |
| 2315 | 2 | MAX-NXY QUAK ULS-B1 |
| 2316 | 2 | MIN-NXY QUAK ULS-B1 |

OPISTIKH MELETH/TEXNIKO TA/L=13.00
DESIGN CRASH

Design according to DIN1045-1 2008
Loadcases have been calculated in the Ultimate Limit State
In BEMESS no additional load safety factor is applied.

Load Cases for the Design

Loadcase 2301 MAX-MX QUAK ULS-B1
Loadcase 2302 MIN-MX QUAK ULS-B1
Loadcase 2303 MAX-MY QUAK ULS-B1
Loadcase 2304 MIN-MY QUAK ULS-B1
Loadcase 2305 MAX-MXY QUAK ULS-B1
Loadcase 2306 MIN-MXY QUAK ULS-B1
Loadcase 2307 MAX-VX QUAK ULS-B1
Loadcase 2308 MIN-VX QUAK ULS-B1
Loadcase 2309 MAX-VY QUAK ULS-B1
Loadcase 2310 MIN-VY QUAK ULS-B1
Loadcase 2311 MAX-NXX QUAK ULS-B1
Loadcase 2312 MIN-NXX QUAK ULS-B1
Loadcase 2313 MAX-NYY QUAK ULS-B1
Loadcase 2314 MIN-NYY QUAK ULS-B1
Loadcase 2315 MAX-NXY QUAK ULS-B1
Loadcase 2316 MIN-NXY QUAK ULS-B1

Material (DIN1045-1 2008)

| Mat | f-ck [MPa] | f-cr [MPa] | f-yk [MPa] | f-tk [MPa] | f-ctm [MPa] | N minQ | type |
|-----|---------------|---------------|---------------|---------------|----------------|--------|--------------------|
| B1 | 25.0 | 21.2 | 500.0 | 500.0 | 2.565 | 10.5 | 0.20 mainly static |

Minimum reinforcement: 0.00 p.c. of stat. req. section

Reduction of FC in case of transvers tension = 25.0 [o/o]

Material-safety-factors:

| Mat | concr | SC1 | SC2 | steel | SS1 | SS2 |
|-----|-------|------|------|-------|------|------|
| B1 | | 1.30 | 1.30 | | 1.00 | 1.00 |

Acc. the german DIN Fachberichten a minimum concrete shear capacity $VR_{d,ct}$ is taken into account in the shear design without shear reinforcement.

In shear design the cotangens theta is limited to 1.750 .

At direct supports from the face of the support up to $1.0 \cdot d$ the shear force is reduced.
The maximum shear capacity is checked at the face of the support without reduction.

The punching design has been switched off and must be done separately.
Outside the punching area, the normal slab shear design may increase the, longitudinal reinforcement up to 0.20% [input CTRL...RO_V].

Geometry (axial covers)

| No | he-upper [mm] | hi-upper [mm] | he-lower [mm] | hi-lower [mm] | Elem. height [mm] |
|----|------------------|------------------|------------------|------------------|----------------------|
| 1 | 50 | 70 | 35 | 55 | As saved |

Selection of elements

| Element | from | to | inc | group | GEOMETRY |
|---------|------|------|-----|-------|----------|
| Element | 3001 | 3999 | 1 | - | 1 |
| Element | 8001 | 8999 | 1 | - | 1 |

Reinforcement is saved in the data base file
Number of stored reinforcement-distribution: 524

REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm²/m] upper/lower
General load safety factor - as defined in BEMESS: $\Gamma_f = 1.00$

Shear: stresses $VE_{d,d}$ and $VR_{d,ct/d}$ with d =effective depth = $h-h_m$

Shear index $2m$ = minimum shear reinforcement

| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement main cross | dphi deg | Shr zon | $VE_{d,d}$ [MPa] | Ass [cm ² /m ²] |
|-----|------------|----------|-----------|-----------|----------|-----------------------------|-------------|------------|---------------------|---|
| | | | | | | | | | $VR_{d,ct/d}$ | |
| 3 | 3001 | maximum | 0.25 | 1.40 | 0.36 | 0 | 1 | 0.063 | | |
| | | | | 0.77 | 0.36 | 0 | | 0.529 | | |
| 3 | 3002 | maximum | 0.25 | 1.23 | 0.40 | 0 | 1 | 0.089 | | |
| | | | | 1.04 | 0.33 | 0 | | 0.525 | | |
| 3 | 3003 | maximum | 0.25 | 1.02 | 0.41 | 0 | 1 | 0.093 | | |
| | | | | 0.96 | 0.37 | 0 | | 0.518 | | |
| 3 | 3004 | maximum | 0.25 | 0.82 | 0.37 | 0 | 1 | 0.093 | | |
| | | | | 0.88 | 0.32 | 0 | | 0.517 | | |
| 3 | 3005 | maximum | 0.25 | 0.62 | 0.34 | 0 | 1 | 0.090 | | |
| | | | | 0.81 | 0.30 | 0 | | 0.518 | | |
| 3 | 3006 | maximum | 0.25 | 0.43 | 0.25 | 0 | 1 | 0.083 | | |
| | | | | 0.71 | 0.28 | 0 | | 0.517 | | |
| 3 | 3007 | maximum | 0.25 | 1.44 | 0.77 | 0 | 1 | 0.126 | | |
| | | | | 0.96 | 0.57 | 0 | | 0.526 | | |

OPIΣTIKH MEΛETH/TEXNIKO TA/L=13.00
DESIGN CRASH

REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm²/m] upper/lower
General load safety factor - as defined in BEMESS: $\Gamma = 1.00$
Shear: stresses V_{Ed}/d and $V_{Rd,ct}/d$ with d =effective depth = $h-h_m$
Shear index $2m$ = minimum shear reinforcement

| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement main cross | dphi deg | Shr zon | V_{Ed}/d [MPa] | Ass [cm ² /m ²] |
|-----|------------|----------|-----------|-----------|----------|-----------------------------|-------------|------------|---------------------|---|
| | | | | | | | | | $V_{Rd,ct}/d$ | |
| 3 | 3008 | | maximum | | 0.25 | 1.20 0.77 0 | | 1 | 0.140 | |
| | | | | | | 1.04 0.39 0 | | | 0.516 | |
| 3 | 3009 | | maximum | | 0.25 | 1.03 0.79 0 | | 1 | 0.128 | |
| | | | | | | 1.07 0.36 0 | | | 0.515 | |
| 3 | 3010 | | maximum | | 0.25 | 0.84 0.73 0 | | 1 | 0.121 | |
| | | | | | | 0.94 0.38 0 | | | 0.507 | |
| 3 | 3011 | | maximum | | 0.25 | 0.74 0.66 0 | | 1 | 0.110 | |
| | | | | | | 0.91 0.41 0 | | | 0.512 | |
| 3 | 3012 | | maximum | | 0.25 | 0.48 0.47 0 | | 1 | 0.107 | |
| | | | | | | 0.88 0.35 0 | | | 0.510 | |
| 3 | 3013 | | maximum | | 0.25 | 1.55 1.04 0 | | 1 | 0.163 | |
| | | | | | | 0.78 0.36 0 | | | 0.497 | |
| 3 | 3014 | | maximum | | 0.25 | 1.41 1.04 0 | | 1 | 0.145 | |
| | | | | | | 0.96 0.64 0 | | | 0.500 | |
| 3 | 3015 | | maximum | | 0.25 | 1.25 0.94 0 | | 1 | 0.125 | |
| | | | | | | 1.08 0.60 0 | | | 0.499 | |
| 3 | 3016 | | maximum | | 0.25 | 1.06 0.85 0 | | 1 | 0.108 | |
| | | | | | | 1.16 0.56 0 | | | 0.498 | |
| 3 | 3017 | | maximum | | 0.25 | 0.87 0.72 0 | | 1 | 0.090 | |
| | | | | | | 1.19 0.55 0 | | | 0.498 | |
| 3 | 3018 | | maximum | | 0.25 | 0.70 0.65 0 | | 1 | 0.082 | |
| | | | | | | 1.06 0.52 0 | | | 0.498 | |
| 3 | 3019 | | maximum | | 0.25 | 1.35 0.92 0 | | 1 | 0.065 | |
| | | | | | | 0.68 0.72 0 | | | 0.500 | |
| 3 | 3020 | | maximum | | 0.25 | 1.28 1.01 0 | | 1 | 0.074 | |
| | | | | | | 0.87 0.57 0 | | | 0.499 | |
| 3 | 3021 | | maximum | | 0.25 | 1.14 0.97 0 | | 1 | 0.083 | |
| | | | | | | 0.99 0.53 0 | | | 0.496 | |
| 3 | 3022 | | maximum | | 0.25 | 0.98 0.89 0 | | 1 | 0.085 | |
| | | | | | | 1.03 0.42 0 | | | 0.497 | |
| 3 | 3023 | | maximum | | 0.25 | 0.81 0.81 0 | | 1 | 0.089 | |
| | | | | | | 0.80 0.36 0 | | | 0.498 | |
| 3 | 3024 | | maximum | | 0.25 | 0.59 0.70 0 | | 1 | 0.091 | |
| | | | | | | 0.72 0.36 0 | | | 0.502 | |
| 3 | 3025 | | maximum | | 0.25 | 1.19 0.87 0 | | 1 | 0.136 | |
| | | | | | | 0.79 0.71 0 | | | 0.498 | |
| 3 | 3026 | | maximum | | 0.25 | 1.15 1.20 0 | | 1 | 0.153 | |
| | | | | | | 0.83 0.47 0 | | | 0.496 | |
| 3 | 3027 | | maximum | | 0.25 | 1.04 1.21 0 | | 1 | 0.159 | |
| | | | | | | 0.95 0.39 0 | | | 0.496 | |
| 3 | 3028 | | maximum | | 0.25 | 0.90 1.14 0 | | 1 | 0.157 | |
| | | | | | | 1.00 0.38 0 | | | 0.497 | |
| 3 | 3029 | | maximum | | 0.25 | 0.74 1.07 0 | | 1 | 0.156 | |
| | | | | | | 1.04 0.38 0 | | | 0.497 | |
| 3 | 3030 | | maximum | | 0.25 | 0.61 1.00 0 | | 1 | 0.156 | |
| | | | | | | 0.68 0.36 0 | | | 0.497 | |
| 3 | 3031 | | maximum | | 0.25 | 1.15 1.20 0 | | 1 | 0.038 | |
| | | | | | | 0.56 0.68 0 | | | 0.496 | |
| 3 | 3032 | | maximum | | 0.25 | 1.20 1.26 0 | | 1 | 0.032 | |
| | | | | | | 0.69 0.61 0 | | | 0.496 | |
| 3 | 3033 | | maximum | | 0.25 | 1.07 1.19 0 | | 1 | 0.037 | |
| | | | | | | 0.58 0.64 0 | | | 0.500 | |
| 3 | 3034 | | maximum | | 0.25 | 0.92 1.17 0 | | 1 | 0.033 | |
| | | | | | | 0.64 0.57 0 | | | 0.501 | |
| 3 | 3035 | | maximum | | 0.25 | 0.79 1.08 0 | | 1 | 0.036 | |
| | | | | | | 0.62 0.37 0 | | | 0.506 | |
| 3 | 3036 | | maximum | | 0.25 | 0.68 1.14 0 | | 1 | 0.039 | |
| | | | | | | 0.49 0.27 0 | | | 0.500 | |
| 3 | 3037 | | maximum | | 0.25 | 1.07 1.09 0 | | 1 | 0.034 | |
| | | | | | | 0.85 0.94 0 | | | 0.503 | |
| 3 | 3038 | | maximum | | 0.25 | 1.06 1.01 0 | | 1 | 0.027 | |
| | | | | | | 0.69 0.58 0 | | | 0.510 | |
| 3 | 3039 | | maximum | | 0.25 | 0.97 1.01 0 | | 1 | 0.032 | |
| | | | | | | 0.73 0.46 0 | | | 0.500 | |
| 3 | 3040 | | maximum | | 0.25 | 0.88 1.28 0 | | 1 | 0.033 | |
| | | | | | | 0.57 0.33 0 | | | 0.506 | |
| 3 | 3041 | | maximum | | 0.25 | 0.78 1.34 0 | | 1 | 0.040 | |
| | | | | | | 0.57 0.30 0 | | | 0.500 | |
| 3 | 3042 | | maximum | | 0.25 | 0.69 1.36 0 | | 1 | 0.043 | |
| | | | | | | 0.42 0.30 0 | | | 0.498 | |
| 3 | 3043 | | maximum | | 0.25 | 1.00 1.32 0 | | 1 | 0.131 | |
| | | | | | | 0.85 1.76 0 | | | 0.495 | |
| 3 | 3044 | | maximum | | 0.25 | 1.23 1.25 0 | | 1 | 0.149 | |
| | | | | | | 0.94 1.37 0 | | | 0.505 | |

OPIΣTIKH MEΛETH/TEXNIKO TA/L=13.00
DESIGN CRASH

| REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm2/m] upper/lower | | | | | | | | | | | | |
|---|------------|----------|-----------|-----------|----------|-----------------------------|-------|-------------|------------|----------------|----------|-----------------|
| General load safety factor - as defined in BEMESS: Gamma-f = 1.00 | | | | | | | | | | | | |
| Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm | | | | | | | | | | | | |
| Shear index 2m = minimum shear reinforcement | | | | | | | | | | | | |
| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement main cross | | dphi deg | Shr zon | VEd/d [MPa] | VRd,ct/d | Ass [cm2/m2] |
| 3 | 3045 | maximum | | | 0.25 | 1.22 | 1.50 | 0 | 1 | 0.146 | | |
| | | | | | | 0.80 | 0.82 | 0 | | 0.502 | | |
| 3 | 3046 | maximum | | | 0.25 | 1.13 | 1.65 | 0 | 1 | 0.137 | | |
| | | | | | | 0.76 | 0.40 | 0 | | 0.512 | | |
| 3 | 3047 | maximum | | | 0.25 | 1.02 | 1.64 | 0 | 1 | 0.125 | | |
| | | | | | | 0.94 | 0.73 | 0 | | 0.508 | | |
| 3 | 3048 | maximum | | | 0.25 | 0.94 | 1.81 | 0 | 1 | 0.121 | | |
| | | | | | | 0.94 | 0.74 | 0 | | 0.504 | | |
| 3 | 3049 | maximum | | | 0.25 | 1.25 | 1.76 | 0 | 1 | 0.139 | | |
| | | | | | | 0.91 | 1.21 | 0 | | 0.499 | | |
| 3 | 3050 | maximum | | | 0.25 | 1.28 | 1.99 | 0 | 1 | 0.163 | | |
| | | | | | | 1.11 | 1.38 | 0 | | 0.498 | | |
| 3 | 3051 | maximum | | | 0.25 | 1.30 | 2.58 | 0 | 1 | 0.169 | | |
| | | | | | | 1.17 | 0.91 | 0 | | 0.500 | | |
| 3 | 3052 | maximum | | | 0.25 | 1.20 | 2.79 | 0 | 1 | 0.167 | | |
| | | | | | | 1.10 | 0.65 | 0 | | 0.499 | | |
| 3 | 3053 | maximum | | | 0.25 | 1.16 | 2.81 | 0 | 1 | 0.165 | | |
| | | | | | | 0.95 | 1.00 | 0 | | 0.499 | | |
| 3 | 3054 | maximum | | | 0.25 | 1.08 | 2.74 | 0 | 1 | 0.166 | | |
| | | | | | | 0.93 | 0.97 | 0 | | 0.498 | | |
| 3 | 3055 | maximum | | | 0.25 | 1.53 | 2.51 | 0 | 1 | 0.388 | | |
| | | | | | | 1.30 | 2.97 | 0 | | 0.496 | | |
| 3 | 3056 | maximum | | | 0.25 | 2.12 | 3.47 | 0 | 1 | 0.332 | | |
| | | | | | | 1.42 | 1.72 | 0 | | 0.518 | | |
| 3 | 3057 | maximum | | | 0.25 | 2.00 | 4.21 | 0 | 1 | 0.302 | | |
| | | | | | | 1.33 | 0.73 | 0 | | 0.518 | | |
| 3 | 3058 | maximum | | | 0.25 | 1.85 | 4.38 | 0 | 1 | 0.298 | | |
| | | | | | | 0.75 | 0.66 | 0 | | 0.512 | | |
| 3 | 3059 | maximum | | | 0.25 | 1.76 | 4.37 | 0 | 1 | 0.302 | | |
| | | | | | | 0.66 | 0.58 | 0 | | 0.510 | | |
| 3 | 3060 | maximum | | | 0.25 | 1.71 | 4.18 | 0 | 1 | 0.304 | | |
| | | | | | | 0.74 | 0.71 | 0 | | 0.513 | | |
| 3 | 3061 | maximum | | | 0.25 | 1.83 | 6.09 | 0 | 1 | 0.387 | | |
| | | | | | | 0.64 | 0.24 | 0 | | 0.496 | | |
| 3 | 3062 | maximum | | | 0.25 | 2.01 | 6.72 | 0 | 1 | 0.346 | | |
| | | | | | | 0.70 | 0.29 | 0 | | 0.511 | | |
| 3 | 3063 | maximum | | | 0.25 | 2.17 | 6.90 | 0 | 1 | 0.319 | | |
| | | | | | | 0.50 | 0.28 | 0 | | 0.509 | | |
| 3 | 3064 | maximum | | | 0.25 | 2.22 | 6.78 | 0 | 1 | 0.313 | | |
| | | | | | | 0.44 | 0.28 | 0 | | 0.517 | | |
| 3 | 3065 | maximum | | | 0.25 | 1.94 | 6.60 | 0 | 1 | 0.315 | | |
| | | | | | | 0.64 | 0.42 | 0 | | 0.512 | | |
| 3 | 3066 | maximum | | | 0.25 | 1.88 | 6.53 | 0 | 1 | 0.315 | | |
| | | | | | | 0.65 | 0.46 | 0 | | 0.508 | | |
| 3 | 3067 | maximum | | | 0.25 | 2.55 | 9.52 | 0 | 2 | 0.398 | 6.65 | |
| | | | | | | 0.20 | 0.26 | 0 | | 0.499 | | |
| 3 | 3068 | maximum | | | 0.25 | 2.75 | 10.18 | 0 | 2 | 0.387 | 6.46 | |
| | | | | | | 0.33 | 0.23 | 0 | | 0.518 | | |
| 3 | 3069 | maximum | | | 0.25 | 3.00 | 10.10 | 0 | 1 | 0.359 | | |
| | | | | | | 0.25 | 0.17 | 0 | | 0.514 | | |
| 3 | 3070 | maximum | | | 0.25 | 2.75 | 9.67 | 0 | 1 | 0.353 | | |
| | | | | | | 0.39 | 0.16 | 0 | | 0.510 | | |
| 3 | 3071 | maximum | | | 0.25 | 2.88 | 9.92 | 0 | 1 | 0.358 | | |
| | | | | | | 0.47 | 0.13 | 0 | | 0.507 | | |
| 3 | 3072 | maximum | | | 0.25 | 2.56 | 9.64 | 0 | 1 | 0.359 | | |
| | | | | | | 0.55 | 0.12 | 0 | | 0.506 | | |
| 3 | 3073 | maximum | | | 0.25 | 3.84 | 15.96 | 0 | 1 | 0.323 | | |
| | | | | | | 0.68 | 0.60 | 0 | | 0.544 | | |
| 3 | 3074 | maximum | | | 0.25 | 4.45 | 15.54 | 0 | 1 | 0.139 | | |
| | | | | | | 0.61 | 1.30 | 0 | | 0.498 | | |
| 3 | 3075 | maximum | | | 0.25 | 4.89 | 15.22 | 0 | 1 | 0.139 | | |
| | | | | | | 0.95 | 1.91 | 0 | | 0.522 | | |
| 3 | 3076 | maximum | | | 0.25 | 4.86 | 15.17 | 0 | 1 | 0.140 | | |
| | | | | | | 0.96 | 1.88 | 0 | | 0.510 | | |
| 3 | 3077 | maximum | | | 0.25 | 4.64 | 15.59 | 0 | 1 | 0.147 | | |
| | | | | | | 1.15 | 1.52 | 0 | | 0.503 | | |
| 3 | 3078 | maximum | | | 0.25 | 4.04 | 15.11 | 0 | 1 | 0.144 | | |
| | | | | | | 1.13 | 1.25 | 0 | | 0.534 | | |
| 3 | 3079 | maximum | | | 0.25 | 1.38 | 1.62 | 0 | 1 | 0.371 | | |
| | | | | | | 2.63 | 1.56 | 0 | | 0.531 | | |
| 3 | 3080 | maximum | | | 0.25 | 2.94 | 2.84 | 0 | 2 | 0.548 | 9.16 | |
| | | | | | | 3.51 | 1.98 | 0 | | 0.560 | | |
| 3 | 3081 | maximum | | | 0.25 | 3.23 | 3.03 | 0 | 2 | 0.629 | 10.50 | |
| | | | | | | 3.92 | 2.16 | 0 | | 0.504 | | |

OPISTIKH MELETH/TEXNIKO TA/L=13.00
DESIGN CRASH

REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm²/m] upper/lower
General load safety factor - as defined in BEMESS: $\Gamma_f = 1.00$
Shear: stresses V_{Ed}/d and $V_{Rd,ct}/d$ with d =effective depth = $h-h_m$
Shear index $2m$ = minimum shear reinforcement

| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement main cross | | dphi deg | Shr zon | V_{Ed}/d [MPa] | Ass [cm ² /m ²] |
|-----|------------|----------|-----------|-----------|----------|-----------------------------|------|-------------|------------|---------------------|---|
| | | | | | | | | | | $V_{Rd,ct}/d$ | |
| 3 | 3082 | | maximum | | 0.25 | 3.38 | 3.14 | 0 | 2 | 0.631 | 10.54 |
| | | | | | | 4.13 | 2.18 | 0 | | 0.503 | |
| 3 | 3083 | | maximum | | 0.25 | 3.09 | 2.92 | 0 | 2 | 0.572 | 9.56 |
| | | | | | | 4.07 | 2.62 | 0 | | 0.510 | |
| 3 | 3084 | | maximum | | 0.25 | 2.42 | 2.45 | 0 | 1 | 0.470 | |
| | | | | | | 3.68 | 1.98 | 0 | | 0.512 | |
| 3 | 3085 | | maximum | | 0.25 | 0.37 | 0.20 | 0 | 1 | 0.085 | |
| | | | | | | 0.69 | 0.27 | 0 | | 0.515 | |
| 3 | 3086 | | maximum | | 0.25 | 0.54 | 0.32 | 0 | 1 | 0.089 | |
| | | | | | | 0.77 | 0.28 | 0 | | 0.521 | |
| 3 | 3087 | | maximum | | 0.25 | 0.72 | 0.35 | 0 | 1 | 0.090 | |
| | | | | | | 0.79 | 0.29 | 0 | | 0.516 | |
| 3 | 3088 | | maximum | | 0.25 | 0.90 | 0.38 | 0 | 1 | 0.087 | |
| | | | | | | 0.88 | 0.36 | 0 | | 0.518 | |
| 3 | 3089 | | maximum | | 0.25 | 1.10 | 0.36 | 0 | 1 | 0.082 | |
| | | | | | | 0.82 | 0.32 | 0 | | 0.526 | |
| 3 | 3090 | | maximum | | 0.25 | 1.29 | 0.33 | 0 | 1 | 0.058 | |
| | | | | | | 0.73 | 0.36 | 0 | | 0.530 | |
| 3 | 3091 | | maximum | | 0.25 | 0.43 | 0.49 | 0 | 1 | 0.116 | |
| | | | | | | 0.79 | 0.38 | 0 | | 0.506 | |
| 3 | 3092 | | maximum | | 0.25 | 0.65 | 0.65 | 0 | 1 | 0.125 | |
| | | | | | | 0.86 | 0.39 | 0 | | 0.511 | |
| 3 | 3093 | | maximum | | 0.25 | 0.76 | 0.71 | 0 | 1 | 0.132 | |
| | | | | | | 0.87 | 0.37 | 0 | | 0.511 | |
| 3 | 3094 | | maximum | | 0.25 | 0.93 | 0.75 | 0 | 1 | 0.133 | |
| | | | | | | 0.91 | 0.46 | 0 | | 0.515 | |
| 3 | 3095 | | maximum | | 0.25 | 1.09 | 0.74 | 0 | 1 | 0.138 | |
| | | | | | | 0.90 | 0.39 | 0 | | 0.517 | |
| 3 | 3096 | | maximum | | 0.25 | 1.33 | 0.70 | 0 | 1 | 0.115 | |
| | | | | | | 0.87 | 0.54 | 0 | | 0.527 | |
| 3 | 3097 | | maximum | | 0.25 | 0.66 | 0.64 | 0 | 1 | 0.093 | |
| | | | | | | 1.09 | 0.57 | 0 | | 0.499 | |
| 3 | 3098 | | maximum | | 0.25 | 0.81 | 0.71 | 0 | 1 | 0.109 | |
| | | | | | | 1.11 | 0.55 | 0 | | 0.499 | |
| 3 | 3099 | | maximum | | 0.25 | 0.99 | 0.79 | 0 | 1 | 0.122 | |
| | | | | | | 1.08 | 0.65 | 0 | | 0.499 | |
| 3 | 3100 | | maximum | | 0.25 | 1.16 | 0.92 | 0 | 1 | 0.130 | |
| | | | | | | 1.00 | 0.63 | 0 | | 0.500 | |
| 3 | 3101 | | maximum | | 0.25 | 1.30 | 0.97 | 0 | 1 | 0.141 | |
| | | | | | | 0.89 | 0.66 | 0 | | 0.501 | |
| 3 | 3102 | | maximum | | 0.25 | 1.41 | 0.94 | 0 | 1 | 0.148 | |
| | | | | | | 0.74 | 0.36 | 0 | | 0.498 | |
| 3 | 3103 | | maximum | | 0.25 | 0.56 | 0.70 | 0 | 1 | 0.093 | |
| | | | | | | 0.70 | 0.35 | 0 | | 0.496 | |
| 3 | 3104 | | maximum | | 0.25 | 0.77 | 0.81 | 0 | 1 | 0.092 | |
| | | | | | | 0.75 | 0.35 | 0 | | 0.498 | |
| 3 | 3105 | | maximum | | 0.25 | 0.93 | 0.88 | 0 | 1 | 0.088 | |
| | | | | | | 0.82 | 0.45 | 0 | | 0.498 | |
| 3 | 3106 | | maximum | | 0.25 | 1.07 | 0.94 | 0 | 1 | 0.084 | |
| | | | | | | 0.95 | 0.48 | 0 | | 0.496 | |
| 3 | 3107 | | maximum | | 0.25 | 1.18 | 0.95 | 0 | 1 | 0.073 | |
| | | | | | | 0.85 | 0.47 | 0 | | 0.498 | |
| 3 | 3108 | | maximum | | 0.25 | 1.23 | 0.85 | 0 | 1 | 0.063 | |
| | | | | | | 0.67 | 0.71 | 0 | | 0.498 | |
| 3 | 3109 | | maximum | | 0.25 | 0.59 | 1.04 | 0 | 1 | 0.164 | |
| | | | | | | 0.61 | 0.32 | 0 | | 0.497 | |
| 3 | 3110 | | maximum | | 0.25 | 0.72 | 1.10 | 0 | 1 | 0.167 | |
| | | | | | | 0.73 | 0.35 | 0 | | 0.502 | |
| 3 | 3111 | | maximum | | 0.25 | 0.87 | 1.17 | 0 | 1 | 0.167 | |
| | | | | | | 0.75 | 0.35 | 0 | | 0.498 | |
| 3 | 3112 | | maximum | | 0.25 | 1.00 | 1.23 | 0 | 1 | 0.163 | |
| | | | | | | 0.73 | 0.38 | 0 | | 0.496 | |
| 3 | 3113 | | maximum | | 0.25 | 1.07 | 1.19 | 0 | 1 | 0.151 | |
| | | | | | | 0.82 | 0.54 | 0 | | 0.496 | |
| 3 | 3114 | | maximum | | 0.25 | 1.08 | 0.85 | 0 | 1 | 0.127 | |
| | | | | | | 0.70 | 0.72 | 0 | | 0.502 | |
| 3 | 3115 | | maximum | | 0.25 | 0.67 | 1.10 | 0 | 1 | 0.039 | |
| | | | | | | 0.40 | 0.27 | 0 | | 0.499 | |
| 3 | 3116 | | maximum | | 0.25 | 0.77 | 1.08 | 0 | 1 | 0.035 | |
| | | | | | | 0.59 | 0.32 | 0 | | 0.508 | |
| 3 | 3117 | | maximum | | 0.25 | 0.91 | 1.13 | 0 | 1 | 0.032 | |
| | | | | | | 0.57 | 0.55 | 0 | | 0.501 | |
| 3 | 3118 | | maximum | | 0.25 | 1.05 | 1.19 | 0 | 1 | 0.035 | |
| | | | | | | 0.56 | 0.62 | 0 | | 0.500 | |

OPISTIKH MELETH/TEXNIKO TA/L=13.00
DESIGN CRASH

REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm²/m] upper/lower
General load safety factor - as defined in BEMESS: $\Gamma_f = 1.00$
Shear: stresses V_{Ed}/d and $V_{Rd,ct}/d$ with d =effective depth = $h-h_m$
Shear index $2m$ = minimum shear reinforcement

| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement main cross | dphi deg | Shr zon | V_{Ed}/d [MPa] | Ass [cm ² /m ²] |
|-----|------------|----------|-----------|-----------|----------|-----------------------------|-------------|------------|---------------------|---|
| | | | | | | | | | $V_{Rd,ct}/d$ | |
| 3 | 3119 | maximum | | | 0.25 | 1.13 1.26 | 0 | 1 | 0.030 | |
| | | | | | | 0.55 0.55 | 0 | | 0.498 | |
| 3 | 3120 | maximum | | | 0.25 | 1.03 1.12 | 0 | 1 | 0.038 | |
| | | | | | | 0.56 0.64 | 0 | | 0.496 | |
| 3 | 3121 | maximum | | | 0.25 | 0.71 1.27 | 0 | 1 | 0.043 | |
| | | | | | | 0.38 0.27 | 0 | | 0.498 | |
| 3 | 3122 | maximum | | | 0.25 | 0.78 1.32 | 0 | 1 | 0.039 | |
| | | | | | | 0.50 0.24 | 0 | | 0.500 | |
| 3 | 3123 | maximum | | | 0.25 | 0.85 1.24 | 0 | 1 | 0.032 | |
| | | | | | | 0.55 0.28 | 0 | | 0.506 | |
| 3 | 3124 | maximum | | | 0.25 | 0.95 1.21 | 0 | 1 | 0.030 | |
| | | | | | | 0.59 0.50 | 0 | | 0.499 | |
| 3 | 3125 | maximum | | | 0.25 | 1.03 1.20 | 0 | 1 | 0.025 | |
| | | | | | | 0.60 0.60 | 0 | | 0.505 | |
| 3 | 3126 | maximum | | | 0.25 | 0.98 1.09 | 0 | 1 | 0.035 | |
| | | | | | | 0.85 0.88 | 0 | | 0.506 | |
| 3 | 3127 | maximum | | | 0.25 | 0.96 1.74 | 0 | 1 | 0.129 | |
| | | | | | | 0.91 0.67 | 0 | | 0.505 | |
| 3 | 3128 | maximum | | | 0.25 | 0.99 1.78 | 0 | 1 | 0.139 | |
| | | | | | | 0.74 0.40 | 0 | | 0.502 | |
| 3 | 3129 | maximum | | | 0.25 | 1.08 1.51 | 0 | 1 | 0.147 | |
| | | | | | | 0.71 0.42 | 0 | | 0.505 | |
| 3 | 3130 | maximum | | | 0.25 | 1.18 1.51 | 0 | 1 | 0.150 | |
| | | | | | | 0.78 0.67 | 0 | | 0.508 | |
| 3 | 3131 | maximum | | | 0.25 | 1.24 1.27 | 0 | 1 | 0.146 | |
| | | | | | | 1.03 1.46 | 0 | | 0.513 | |
| 3 | 3132 | maximum | | | 0.25 | 1.02 1.32 | 0 | 1 | 0.118 | |
| | | | | | | 0.97 1.82 | 0 | | 0.514 | |
| 3 | 3133 | maximum | | | 0.25 | 1.09 2.70 | 0 | 1 | 0.173 | |
| | | | | | | 0.95 0.92 | 0 | | 0.498 | |
| 3 | 3134 | maximum | | | 0.25 | 1.15 2.57 | 0 | 1 | 0.178 | |
| | | | | | | 0.92 0.89 | 0 | | 0.498 | |
| 3 | 3135 | maximum | | | 0.25 | 1.24 2.58 | 0 | 1 | 0.177 | |
| | | | | | | 0.80 0.70 | 0 | | 0.498 | |
| 3 | 3136 | maximum | | | 0.25 | 1.26 2.48 | 0 | 1 | 0.169 | |
| | | | | | | 0.88 0.76 | 0 | | 0.498 | |
| 3 | 3137 | maximum | | | 0.25 | 1.24 2.18 | 0 | 1 | 0.162 | |
| | | | | | | 1.17 1.25 | 0 | | 0.497 | |
| 3 | 3138 | maximum | | | 0.25 | 1.25 1.85 | 0 | 1 | 0.132 | |
| | | | | | | 0.85 1.58 | 0 | | 0.501 | |
| 3 | 3139 | maximum | | | 0.25 | 1.78 3.86 | 0 | 1 | 0.303 | |
| | | | | | | 0.71 0.62 | 0 | | 0.518 | |
| 3 | 3140 | maximum | | | 0.25 | 1.83 4.03 | 0 | 1 | 0.305 | |
| | | | | | | 0.64 0.57 | 0 | | 0.513 | |
| 3 | 3141 | maximum | | | 0.25 | 1.89 4.14 | 0 | 1 | 0.311 | |
| | | | | | | 0.89 0.88 | 0 | | 0.509 | |
| 3 | 3142 | maximum | | | 0.25 | 1.82 4.11 | 0 | 1 | 0.320 | |
| | | | | | | 0.77 0.67 | 0 | | 0.511 | |
| 3 | 3143 | maximum | | | 0.25 | 1.97 3.73 | 0 | 1 | 0.333 | |
| | | | | | | 1.04 1.02 | 0 | | 0.525 | |
| 3 | 3144 | maximum | | | 0.25 | 2.04 2.58 | 0 | 1 | 0.365 | |
| | | | | | | 1.58 2.94 | 0 | | 0.496 | |
| 3 | 3145 | maximum | | | 0.25 | 1.93 6.27 | 0 | 1 | 0.316 | |
| | | | | | | 0.63 0.46 | 0 | | 0.503 | |
| 3 | 3146 | maximum | | | 0.25 | 2.09 5.96 | 0 | 1 | 0.319 | |
| | | | | | | 0.63 0.44 | 0 | | 0.507 | |
| 3 | 3147 | maximum | | | 0.25 | 1.93 5.96 | 0 | 1 | 0.325 | |
| | | | | | | 0.84 0.56 | 0 | | 0.511 | |
| 3 | 3148 | maximum | | | 0.25 | 1.94 6.11 | 0 | 1 | 0.335 | |
| | | | | | | 0.40 0.27 | 0 | | 0.517 | |
| 3 | 3149 | maximum | | | 0.25 | 2.32 6.48 | 0 | 1 | 0.344 | |
| | | | | | | 0.61 0.29 | 0 | | 0.508 | |
| 3 | 3150 | maximum | | | 0.25 | 2.32 6.37 | 0 | 1 | 0.368 | |
| | | | | | | 0.99 0.24 | 0 | | 0.496 | |
| 3 | 3151 | maximum | | | 0.25 | 2.31 9.17 | 0 | 1 | 0.359 | |
| | | | | | | 0.55 0.11 | 0 | | 0.516 | |
| 3 | 3152 | maximum | | | 0.25 | 2.27 8.81 | 0 | 1 | 0.362 | |
| | | | | | | 0.46 0.10 | 0 | | 0.522 | |
| 3 | 3153 | maximum | | | 0.25 | 2.41 9.11 | 0 | 1 | 0.369 | |
| | | | | | | 0.38 0.14 | 0 | | 0.512 | |
| 3 | 3154 | maximum | | | 0.25 | 2.57 9.23 | 0 | 1 | 0.379 | |
| | | | | | | 0.35 0.17 | 0 | | 0.507 | |
| 3 | 3155 | maximum | | | 0.25 | 2.62 9.38 | 0 | 1 | 0.386 | |
| | | | | | | 0.32 0.23 | 0 | | 0.512 | |

OPISTIKH MELETH/TEXNIKO TA/L=13.00
DESIGN CRASH

| REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm2/m] | | | | | | | | | | upper/lower | |
|--|---------|---------|--------|--------|-------|---------------|-------|----------|---------|----------------|--------------|
| General load safety factor - as defined in BEMESS: | | | | | | | | | | Gamma-f = 1.00 | |
| Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm | | | | | | | | | | | |
| Shear index 2m = minimum shear reinforcement | | | | | | | | | | | |
| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement | | dphi deg | shr zon | VEd/d [MPa] | Ass [cm2/m2] |
| | | | | | | main | cross | dir | | VRd,ct/d | |
| 3 | 3156 | maximum | | | 0.25 | 3.20 | 9.70 | 0 | 1 | 0.372 | |
| | | | | | | 0.20 | 0.26 | 0 | | 0.499 | |
| 3 | 3157 | maximum | | | 0.25 | 3.15 | 14.02 | 0 | 1 | 0.138 | |
| | | | | | | 1.09 | 1.11 | 0 | | 0.527 | |
| 3 | 3158 | maximum | | | 0.25 | 2.69 | 13.47 | 0 | 1 | 0.137 | |
| | | | | | | 0.92 | 0.91 | 0 | | 0.503 | |
| 3 | 3159 | maximum | | | 0.25 | 3.37 | 14.47 | 0 | 1 | 0.141 | |
| | | | | | | 0.85 | 1.05 | 0 | | 0.524 | |
| 3 | 3160 | maximum | | | 0.25 | 4.05 | 15.39 | 0 | 1 | 0.151 | |
| | | | | | | 0.62 | 1.34 | 0 | | 0.538 | |
| 3 | 3161 | maximum | | | 0.25 | 4.40 | 15.51 | 0 | 1 | 0.163 | |
| | | | | | | 0.70 | 1.56 | 0 | | 0.507 | |
| 3 | 3162 | maximum | | | 0.25 | 4.81 | 15.05 | 0 | 1 | 0.204 | |
| | | | | | | 0.55 | 1.87 | 0 | | 0.518 | |
| 3 | 3163 | maximum | | | 0.25 | 1.73 | 1.96 | 0 | 1 | 0.371 | |
| | | | | | | 2.98 | 1.20 | 0 | | 0.505 | |
| 3 | 3164 | maximum | | | 0.25 | 1.42 | 1.67 | 0 | 1 | 0.310 | |
| | | | | | | 2.58 | 0.97 | 0 | | 0.505 | |
| 3 | 3165 | maximum | | | 0.25 | 1.98 | 2.14 | 0 | 1 | 0.409 | |
| | | | | | | 3.13 | 1.56 | 0 | | 0.520 | |
| 3 | 3166 | maximum | | | 0.25 | 2.53 | 2.61 | 0 | 2 | 0.513 | 8.57 |
| | | | | | | 3.48 | 2.32 | 0 | | 0.521 | |
| 3 | 3167 | maximum | | | 0.25 | 3.00 | 2.99 | 0 | 2 | 0.610 | 10.19 |
| | | | | | | 2.68 | 2.03 | 0 | | 0.496 | |
| 3 | 3168 | maximum | | | 0.25 | 2.77 | 3.48 | 0 | 2 | 0.671 | 11.21 |
| | | | | | | 2.08 | 2.16 | 0 | | 0.529 | |
| 8 | 8001 | maximum | | | 1.20 | 0.36 | 1.81 | 0 | 1 | 0.045 | |
| | | | | | | 0.56 | 2.81 | 0 | | 0.316 | |
| 8 | 8002 | maximum | | | 1.20 | 0.51 | 2.55 | 0 | 1 | 0.090 | |
| | | | | | | 1.28 | 6.40 | 0 | | 0.323 | |
| 8 | 8003 | maximum | | | 1.20 | 0.88 | 4.42 | 0 | 1 | 0.108 | |
| | | | | | | 5.84 | 14.54 | 0 | | 0.364 | |
| 8 | 8004 | maximum | | | 1.20 | 1.81 | 2.51 | 0 | 1 | 0.115 | |
| | | | | | | 1.10 | 5.52 | 0 | | 0.329 | |
| 8 | 8005 | maximum | | | 1.20 | 3.26 | 5.50 | 0 | 1 | 0.117 | |
| | | | | | | 7.13 | 15.59 | 0 | | 0.368 | |
| 8 | 8006 | maximum | | | 1.20 | 0.97 | 2.63 | 0 | 1 | 0.138 | |
| | | | | | | 1.04 | 5.20 | 0 | | 0.327 | |
| 8 | 8007 | maximum | | | 1.20 | 1.06 | 1.84 | 0 | 1 | 0.022 | |
| | | | | | | 0.78 | 3.39 | 0 | | 0.311 | |
| 8 | 8008 | maximum | | | 1.20 | 1.17 | 2.32 | 0 | 1 | 0.142 | |
| | | | | | | 1.88 | 5.71 | 0 | | 0.327 | |
| 8 | 8009 | maximum | | | 1.20 | 1.25 | 1.39 | 0 | 1 | 0.072 | |
| | | | | | | 5.79 | 12.23 | 0 | | 0.334 | |
| 8 | 8010 | maximum | | | 1.20 | 1.44 | 1.81 | 0 | 1 | 0.120 | |
| | | | | | | 1.26 | 5.64 | 0 | | 0.318 | |
| 8 | 8011 | maximum | | | 1.20 | 2.48 | 2.12 | 0 | 1 | 0.061 | |
| | | | | | | 4.73 | 9.73 | 0 | | 0.332 | |
| 8 | 8012 | maximum | | | 1.20 | 2.49 | 1.94 | 0 | 1 | 0.100 | |
| | | | | | | 1.59 | 5.74 | 0 | | 0.325 | |
| 8 | 8013 | maximum | | | 1.20 | 3.81 | 2.93 | 0 | 1 | 0.036 | |
| | | | | | | 3.76 | 8.07 | 0 | | 0.326 | |
| 8 | 8014 | maximum | | | 1.20 | 2.36 | 2.57 | 0 | 1 | 0.087 | |
| | | | | | | 2.35 | 6.12 | 0 | | 0.326 | |
| 8 | 8015 | maximum | | | 1.20 | 4.01 | 2.47 | 0 | 1 | 0.047 | |
| | | | | | | 4.75 | 7.38 | 0 | | 0.324 | |
| 8 | 8016 | maximum | | | 1.20 | 3.27 | 3.38 | 0 | 1 | 0.087 | |
| | | | | | | 1.99 | 5.80 | 0 | | 0.327 | |
| 8 | 8017 | maximum | | | 1.20 | 7.85 | 6.71 | 0 | 1 | 0.053 | |
| | | | | | | 4.56 | 10.27 | 0 | | 0.336 | |
| 8 | 8018 | maximum | | | 1.20 | 1.54 | 3.25 | 0 | 1 | 0.102 | |
| | | | | | | 2.24 | 5.77 | 0 | | 0.328 | |
| 8 | 8019 | maximum | | | 1.20 | 3.81 | 4.19 | 0 | 1 | 0.079 | |
| | | | | | | 4.55 | 11.31 | 0 | | 0.346 | |
| 8 | 8020 | maximum | | | 1.20 | 0.50 | 2.43 | 0 | 1 | 0.126 | |
| | | | | | | 1.09 | 5.43 | 0 | | 0.324 | |
| 8 | 8021 | maximum | | | 1.20 | 2.01 | 4.50 | 0 | 1 | 0.030 | |
| | | | | | | 2.92 | 3.79 | 0 | | 0.316 | |
| 8 | 8022 | maximum | | | 1.20 | 0.86 | 1.66 | 0 | 1 | 0.149 | |
| | | | | | | 1.79 | 5.79 | 0 | | 0.328 | |
| 8 | 8023 | maximum | | | 1.20 | 0.77 | 3.86 | 0 | 1 | 0.115 | |
| | | | | | | 7.66 | 16.45 | 0 | | 0.367 | |
| 8 | 8024 | maximum | | | 1.20 | 0.73 | 1.61 | 0 | 1 | 0.142 | |
| | | | | | | 1.16 | 5.82 | 0 | | 0.326 | |

OPISTIKH MELETH/TEXNIKO TA/L=13.00
DESIGN CRASH

REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm²/m] upper/lower
General load safety factor - as defined in BEMESS: Gamma-f = 1.00
Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm
Shear index 2m = minimum shear reinforcement

| Grp | ELEM No | LC | MAT | GEO No | h [m] | Reinforcement main cross | dphi deg | Shr zon | VEd/d [MPa] | VRd,ct/d [MPa] | Ass [cm ² /m ²] |
|-----|------------|---------|-----|-----------|----------|-----------------------------|-------------|------------|----------------|-------------------|---|
| 8 | 8025 | maximum | | | 1.20 | 2.79 3.41 0 | | 1 | 0.112 | | |
| | | | | | | 6.33 16.09 0 | | | 0.350 | | |
| 8 | 8026 | maximum | | | 1.20 | 1.71 0.34 0 | | 1 | 0.127 | | |
| | | | | | | 1.16 5.78 0 | | | 0.351 | | |
| 8 | 8027 | maximum | | | 1.20 | 2.43 0.49 0 | | 1 | 0.044 | | |
| | | | | | | 2.86 2.68 0 | | | 0.410 | | |
| 8 | 8028 | maximum | | | 1.20 | 0.25 0.05 0 | | 1 | 0.114 | | |
| | | | | | | 1.17 5.84 0 | | | 0.362 | | |
| 8 | 8029 | maximum | | | 1.20 | 0.38 1.88 0 | | 1 | 0.043 | | |
| | | | | | | 0.56 2.79 0 | | | 0.314 | | |
| 8 | 8030 | maximum | | | 1.20 | 0.93 4.66 0 | | 1 | 0.108 | | |
| | | | | | | 5.77 14.34 0 | | | 0.362 | | |
| 8 | 8031 | maximum | | | 1.20 | 0.52 2.60 0 | | 1 | 0.091 | | |
| | | | | | | 1.27 6.36 0 | | | 0.324 | | |
| 8 | 8032 | maximum | | | 1.20 | 1.79 2.62 0 | | 1 | 0.115 | | |
| | | | | | | 1.09 5.43 0 | | | 0.325 | | |
| 8 | 8033 | maximum | | | 1.20 | 3.49 5.83 0 | | 1 | 0.118 | | |
| | | | | | | 7.00 15.40 0 | | | 0.366 | | |
| 8 | 8034 | maximum | | | 1.20 | 1.10 1.92 0 | | 1 | 0.022 | | |
| | | | | | | 0.67 3.19 0 | | | 0.303 | | |
| 8 | 8035 | maximum | | | 1.20 | 1.28 1.48 0 | | 1 | 0.071 | | |
| | | | | | | 5.73 12.20 0 | | | 0.334 | | |
| 8 | 8036 | maximum | | | 1.20 | 0.95 2.74 0 | | 1 | 0.139 | | |
| | | | | | | 1.02 5.10 0 | | | 0.322 | | |
| 8 | 8037 | maximum | | | 1.20 | 1.10 2.43 0 | | 1 | 0.142 | | |
| | | | | | | 1.84 5.64 0 | | | 0.326 | | |
| 8 | 8038 | maximum | | | 1.20 | 1.32 1.88 0 | | 1 | 0.120 | | |
| | | | | | | 1.20 5.62 0 | | | 0.318 | | |
| 8 | 8039 | maximum | | | 1.20 | 2.38 2.25 0 | | 1 | 0.062 | | |
| | | | | | | 4.46 9.60 0 | | | 0.333 | | |
| 8 | 8040 | maximum | | | 1.20 | 3.71 2.86 0 | | 1 | 0.037 | | |
| | | | | | | 3.77 8.09 0 | | | 0.323 | | |
| 8 | 8041 | maximum | | | 1.20 | 2.36 1.93 0 | | 1 | 0.101 | | |
| | | | | | | 1.46 5.75 0 | | | 0.324 | | |
| 8 | 8042 | maximum | | | 1.20 | 2.14 2.37 0 | | 1 | 0.078 | | |
| | | | | | | 2.15 6.12 0 | | | 0.327 | | |
| 8 | 8043 | maximum | | | 1.20 | 3.79 2.55 0 | | 1 | 0.047 | | |
| | | | | | | 4.23 7.38 0 | | | 0.325 | | |
| 8 | 8044 | maximum | | | 1.20 | 7.51 6.64 0 | | 1 | 0.054 | | |
| | | | | | | 4.61 10.37 0 | | | 0.334 | | |
| 8 | 8045 | maximum | | | 1.20 | 3.06 3.32 0 | | 1 | 0.088 | | |
| | | | | | | 2.52 6.19 0 | | | 0.326 | | |
| 8 | 8046 | maximum | | | 1.20 | 0.99 2.97 0 | | 1 | 0.104 | | |
| | | | | | | 1.67 5.80 0 | | | 0.327 | | |
| 8 | 8047 | maximum | | | 1.20 | 2.46 4.01 0 | | 1 | 0.080 | | |
| | | | | | | 4.45 11.41 0 | | | 0.343 | | |
| 8 | 8048 | maximum | | | 1.20 | 0.57 2.86 0 | | 1 | 0.030 | | |
| | | | | | | 1.18 3.83 0 | | | 0.313 | | |
| 8 | 8049 | maximum | | | 1.20 | 0.71 1.56 0 | | 1 | 0.117 | | |
| | | | | | | 7.77 16.66 0 | | | 0.375 | | |
| 8 | 8050 | maximum | | | 1.20 | 0.38 1.92 0 | | 1 | 0.127 | | |
| | | | | | | 1.10 5.48 0 | | | 0.323 | | |
| 8 | 8051 | maximum | | | 1.20 | 0.83 1.33 0 | | 1 | 0.151 | | |
| | | | | | | 1.82 5.86 0 | | | 0.329 | | |
| 8 | 8052 | maximum | | | 1.20 | 0.72 0.49 0 | | 1 | 0.144 | | |
| | | | | | | 1.18 5.89 0 | | | 0.327 | | |
| 8 | 8053 | maximum | | | 1.20 | 6.67 1.95 0 | | 1 | 0.113 | | |
| | | | | | | 6.40 16.28 0 | | | 0.350 | | |
| 8 | 8054 | maximum | | | 1.20 | 1.17 0.23 0 | | 1 | 0.045 | | |
| | | | | | | 1.35 2.70 0 | | | 0.379 | | |
| 8 | 8055 | maximum | | | 1.20 | 1.71 0.34 0 | | 1 | 0.126 | | |
| | | | | | | 1.17 5.85 0 | | | 0.337 | | |
| 8 | 8056 | maximum | | | 1.20 | 0.25 0.05 0 | | 1 | 0.113 | | |
| | | | | | | 1.18 5.91 0 | | | 0.354 | | |

Explanations shear state Shr zon:

1 = check without necessary shear reinforcement

2 = shear reinforcement required

m = minimum shear reinforcement

Acc. DIN 1045-1 10.3.4(2) the leverarm z was limited to d-2*nomc.

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN CRASH

Maximal values of the shear design

Only elements with shear reinforcement are printed.

At punching points punching reinforcement is printed.

| element | ass [cm ² /m ²] | tau [MPa] | acc.VED/VRDmax | acc.cot_theta | min_z [m] |
|---------|---|--------------|----------------|---------------|--------------|
| 3067 | 6.65 | 0.40 | 0.110 | 1.75 | 0.141 |
| 3068 | 6.46 | 0.39 | 0.107 | 1.75 | 0.142 |
| 3080 | 9.16 | 0.55 | 0.152 | 1.75 | 0.145 |
| 3081 | 10.50 | 0.63 | 0.174 | 1.75 | 0.163 |
| 3082 | 10.54 | 0.63 | 0.175 | 1.75 | 0.163 |
| 3083 | 9.56 | 0.57 | 0.158 | 1.75 | 0.145 |
| 3166 | 8.57 | 0.51 | 0.142 | 1.75 | 0.145 |
| 3167 | 10.19 | 0.61 | 0.169 | 1.75 | 0.123 |
| 3168 | 11.21 | 0.67 | 0.183 | 1.75 | 0.123 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Selected Beam Elements

| FROM | TO | INC | X-VALUE | NC | MEMBER | CS0 | CS1 | CS2 | CS3 | CS4 | CS5 |
|-------|-------|-----|---------|----|--------|-----|-----|-----|-----|-----|-----|
| 10001 | | | | | | | | | | | |
| 10005 | | | | | | | | | | | |
| 10006 | | | | | | | | | | | |
| 10009 | | | | | | | | | | | |
| 10010 | | | | | | | | | | | |
| 10014 | | | | | | | | | | | |
| 10016 | | | | | | | | | | | |
| 10020 | | | | | | | | | | | |
| 10021 | | | | | | | | | | | |
| 10024 | | | | | | | | | | | |
| 10025 | | | | | | | | | | | |
| 10029 | | | | | | | | | | | |
| 12000 | 12150 | 1 | | | | | | | | | |

Default design code is DIN Fachbericht 102 Massivbröcken (2003) (Germany)

Klasse(Tab.4.118): D

wind zone : Binnenland

Materials

| | |
|--------|-------------------------|
| No. 1 | C 25/30 (DIN 1045-1) |
| No. 3 | C 25/30 (DIN 1045-1) |
| No. 4 | C 25/30 (DIN 1045-1) |
| No. 5 | C 25/30 (DIN 1045-1) |
| No. 6 | C 25/30 (DIN 1045-1) |
| No. 7 | C 25/30 (DIN 1045-1) |
| No. 8 | C 25/30 (DIN 1045-1) |
| No. 9 | C 25/30 (DIN 1045-1) |
| No. 10 | C 25/30 (DIN 1045-1) |
| No. 12 | BSt 500 SA (DIN 1045-1) |

Reinforcement will be accounted for sectional values as defined in AQUA

Reinforcements saved as design case LCR 515

Considered Load Cases

| No. refer | act on | Title/type of load case | gam-u | gam-f | psi-0 | psi-1 | psi-2 | psi-1' |
|------------|--------|---|-------|-------|-------|-------|-------|-------------|
| 1 part. | CS 1 | I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 2 part. | CS 1 | I.B. ΔΟΚΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 3 part. | CS 1 | I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 11 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 12 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 13 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 14 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 100 part. | CS 1 | CRASH_-Y_Pos.1 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 101 part. | CS 1 | CRASH_-Y_Pos.2 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 102 part. | CS 1 | CRASH_-Y_Pos.3 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 103 part. | CS 1 | CRASH_-Y_Pos.4 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 104 part. | CS 1 | CRASH_-Y_Pos.5 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 105 part. | CS 1 | CRASH_-Y_Pos.6 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 106 part. | CS 1 | CRASH_-Y_Pos.7 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 107 part. | CS 1 | CRASH_-Y_Pos.8 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 108 part. | CS 1 | CRASH_-Y_Pos.9 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 109 part. | CS 1 | CRASH_-Y_Pos.10 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 110 part. | CS 1 | CRASH_-Y_Pos.11 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 111 part. | CS 1 | CRASH_-Y_Pos.12 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 1501 part. | CS 1 | MAX-MY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1502 part. | CS 1 | MIN-MY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1503 part. | CS 1 | MAX-VZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1504 part. | CS 1 | MIN-VZ BEAM | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Considered Load Cases

| No. refer | act on | Title/type of load case | gam-u | gam-f | psi-0 | psi-1 | psi-2 | psi-1' |
|------------|--------|-------------------------|-------|-------|-------|-------|-------|-------------|
| | | L (live loading) | | | | | | |
| 1505 part. | CS 1 | MAX-MZ BEAM | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| | | L (live loading) | | | | | | |
| 1506 part. | CS 1 | MIN-MZ BEAM | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| | | L (live loading) | | | | | | |
| 1507 part. | CS 1 | MAX-VY BEAM | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| | | L (live loading) | | | | | | |
| 1508 part. | CS 1 | MIN-VY BEAM | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| | | L (live loading) | | | | | | |
| 1509 part. | CS 1 | MAX-N BEAM | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| | | L (live loading) | | | | | | |
| 1510 part. | CS 1 | MIN-N BEAM | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| | | L (live loading) | | | | | | |
| 1511 part. | CS 1 | MAX-MT BEAM | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| | | L (live loading) | | | | | | |
| 1512 part. | CS 1 | MIN-MT BEAM | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| | | L (live loading) | | | | | | |

Ultimate Load Design

Design for ultimate loads DIN Fachbericht 102 Massivbröcken (2003)

Biaxial bending, uniaxial stress calculated in y-z axis

Safety factors SC-1 SC-2 SC-S SS-1 SS-2 PIIa

1.30 1.30 1.50 1.00 1.00 7

Strain limits C1 C2 S1 S2 Z1 Z2

max -3.50 -2.00 3.00 25.00 -3.50 25.00

parameters for reinforcements

Minimum reinforcements compression min. reinforcem. maximum-
Bending. Compress. e/d N/Np1 requ. section reforc.
0.00 [cm²] 0.30 [o/o] 3.50 0.0010 0.00 0.15 9.00

Tensile forces in the longitudinal reinforcements due to shear are NOT accounted for.

Material of sections uses Ultimate Limit strain-stress law with global safety factors

Material of reinforcements uses Ultimate Limit strain-stress law without safety factors

| MNo. | temp lev. | Material-safety | max.compr stress | at strain | max.tens stress | at strain | tension-stiffening |
|------|-----------|-----------------|------------------|-----------|-----------------|-----------|--------------------|
| | | [-] | [MPa] | [o/oo] | [MPa] | [o/oo] | [MPa] |
| 1 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 3 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 4 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 5 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 6 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 7 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 8 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 9 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 10 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 12 | 0 | 1.000 | -525.00 | -25.00 | 525.00 | 25.00 | |

Combinations For Ultimate Design

1513 (gross) max_my-1513

MAX + MY :
1.00 * G + 1.00 * L_A + 1.00 * L_B + 1.00 * L_C

1514 (gross) min_my-1514

MIN + MY :
1.00 * G + 1.00 * L_A + 1.00 * L_B + 1.00 * L_C

Shear Design

Design for shear DIN 1045-1 (2003)

Minimum shear factor or tan of inclination of compressive struts 0.57 / 1.72

| MNo | f-cd | tau-rd | sigIIQ | sigIIT | sigIIQ+ | f _{yd} |
|-----|-------|--------|--------|--------|---------|-----------------|
| | [MPa] | [MPa] | [MPa] | [MPa] | [MPa] | [MPa] |
| 1 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 3 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 4 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 5 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 6 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 7 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 8 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 9 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 10 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 12 | | | | | | 500.00 |

Tolerance for exceeding maximum shear or principal compression stress 0.0200

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|-------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 10001 | 0.000 | 8 | 0.03 | 4.25 | | 3.98T | 0.14 | | 0.14 | |
| 10001 | 0.200 | 8 | 0.02 | 3.29 | | 3.29T | | | | |
| 10005 | 0.000 | 8 | 0.15 | 19.83 | | 13.82T | 4.08 | | 1.93 | |
| 10005 | 0.200 | 8 | 0.14 | 18.71 | | 15.67T | 2.64 | | 0.40 | |
| 10006 | 0.000 | 8 | 0.01 | 0.83 | | 0.69T | 0.14 | | | |
| 10006 | 0.400 | 8 | 0.02 | 2.47 | | 1.24T | 0.19 | | 1.04 | |
| 10009 | 0.000 | 8 | 0.02 | 2.00 | | 1.60T | 0.40 | | | |
| 10009 | 0.400 | 8 | 0.02 | 2.01 | | 1.67T | 0.34 | | | |
| 10010 | 0.000 | 8 | 0.13 | 17.21 | | 15.37T | 0.78 | | 1.06 | |
| 10010 | 0.200 | 8 | 0.14 | 18.85 | | 15.31T | | | 3.55 | |
| 10014 | 0.000 | 8 | 0.02 | 3.28 | | 3.28T | | | | |
| 10014 | 0.200 | 8 | 0.03 | 3.60 | | 3.39T | 0.11 | | 0.11 | |
| 10016 | 0.000 | 8 | 0.03 | 4.22 | | 3.94T | 0.14 | | 0.14 | |
| 10016 | 0.200 | 8 | 0.03 | 3.56 | | 3.56T | | | | |
| 10020 | 0.000 | 8 | 0.15 | 19.60 | | 13.74T | 4.01 | | 1.85 | |
| 10020 | 0.200 | 8 | 0.14 | 18.60 | | 15.56T | 2.63 | | 0.40 | |
| 10021 | 0.000 | 8 | 0.01 | 1.92 | | 0.74T | 1.18 | | | |
| 10021 | 0.400 | 8 | 0.02 | 2.44 | | 1.25T | 0.19 | | 1.01 | |
| 10024 | 0.000 | 8 | 0.01 | 1.87 | | 1.50T | 0.37 | | | |
| 10024 | 0.400 | 8 | 0.01 | 1.87 | | 1.53T | 0.34 | | | |
| 10025 | 0.000 | 8 | 0.13 | 16.87 | | 15.05T | 0.75 | | 1.07 | |
| 10025 | 0.200 | 8 | 0.15 | 20.06 | | 16.54T | | | 3.52 | |
| 10029 | 0.000 | 8 | 0.03 | 3.43 | | 3.43T | | | | |
| 10029 | 0.200 | 8 | 0.03 | 3.55 | | 3.35T | 0.10 | | 0.10 | |
| 12001 | 0.000 | 9 | 0.69 | 34.65 | | | 34.65T | | | |
| 12001 | 1.000 | 9 | 0.41 | 20.40 | | | 20.40T | | | |
| 12002 | 0.000 | 9 | 0.41 | 20.40 | | | 20.40T | | | |
| 12002 | 1.000 | 9 | 0.48 | 24.24 | | | 24.24T | | | |
| 12003 | 0.000 | 9 | 0.48 | 24.24 | | | 24.24T | | | |
| 12003 | 1.000 | 9 | 0.98 | 49.36 | | | 49.36T | | | |
| 12004 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12004 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12005 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12005 | 1.000 | 9 | 0.49 | 24.68 | | | 24.68T | | | |
| 12006 | 0.000 | 9 | 0.49 | 24.68 | | | 24.68T | | | |
| 12006 | 1.000 | 9 | 0.97 | 48.95 | | | 48.95T | | | |
| 12007 | 0.000 | 9 | 0.40 | 20.22 | | | 20.22T | | | |
| 12007 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12008 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12008 | 1.000 | 9 | 0.49 | 24.60 | | | 24.60T | | | |
| 12009 | 0.000 | 9 | 0.49 | 24.60 | | | 24.60T | | | |
| 12009 | 1.000 | 9 | 0.97 | 48.90 | | | 48.90T | | | |
| 12010 | 0.000 | 9 | 0.69 | 34.65 | | | 34.65T | | | |
| 12010 | 1.000 | 9 | 0.41 | 20.40 | | | 20.40T | | | |
| 12011 | 0.000 | 9 | 0.41 | 20.40 | | | 20.40T | | | |
| 12011 | 1.000 | 9 | 0.48 | 24.24 | | | 24.24T | | | |
| 12012 | 0.000 | 9 | 0.48 | 24.24 | | | 24.24T | | | |
| 12012 | 1.000 | 9 | 0.97 | 48.90 | | | 48.90T | | | |
| 12013 | 0.000 | 9 | 0.31 | 15.65 | | | 15.65T | | | |
| 12013 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12014 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12014 | 1.000 | 9 | 0.48 | 24.31 | | | 24.31T | | | |
| 12015 | 0.000 | 9 | 0.48 | 24.31 | | | 24.31T | | | |
| 12015 | 1.000 | 9 | 0.97 | 48.95 | | | 48.95T | | | |
| 12016 | 0.000 | 9 | 0.46 | 22.97 | | | 22.97T | | | |
| 12016 | 1.000 | 9 | 0.31 | 15.70 | | | 15.70T | | | |
| 12017 | 0.000 | 9 | 0.31 | 15.70 | | | 15.70T | | | |
| 12017 | 1.000 | 9 | 0.49 | 24.60 | | | 24.60T | | | |
| 12018 | 0.000 | 9 | 0.49 | 24.60 | | | 24.60T | | | |
| 12018 | 1.000 | 9 | 0.98 | 49.36 | | | 49.36T | | | |
| 12019 | 0.000 | 9 | 0.98 | 49.36 | | | 49.36T | | | |
| 12019 | 1.000 | 9 | 1.40 | 70.29 | | | 70.29T | | | |
| 12020 | 0.000 | 9 | 1.40 | 70.23 | | | 70.23T | | | |
| 12020 | 1.000 | 9 | 1.47 | 74.07 | | | 74.07T | | | |
| 12021 | 0.000 | 9 | 1.47 | 74.03 | | | 74.03T | | | |
| 12021 | 1.000 | 9 | 1.31 | 65.97 | | | 65.97T | | | |
| 12022 | 0.000 | 9 | 1.31 | 65.94 | | | 65.94T | | | |
| 12022 | 1.000 | 9 | 1.04 | 52.06 | | | 52.06T | | | |
| 12023 | 0.000 | 9 | 1.04 | 52.04 | | | 52.04T | | | |
| 12023 | 1.000 | 9 | 0.72 | 36.21 | | | 36.21T | | | |
| 12024 | 0.000 | 9 | 0.72 | 36.20 | | | 36.20T | | | |
| 12024 | 1.000 | 9 | 0.42 | 21.35 | | | 21.35T | | | |
| 12025 | 0.000 | 9 | 0.42 | 21.35 | | | 21.35T | | | |
| 12025 | 1.000 | 9 | 0.31 | 15.68 | | | 15.68T | | | |
| 12026 | 0.000 | 9 | 0.31 | 15.68 | | | 15.68T | | | |
| 12026 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue | As-Sum | shift by | Lay-0&5 | Lay-1&6 | Lay-2&7 | Lay-3&8 | Lay-4&9 |
|-------|-------|-----|------|--------|----------|---------|---------|---------|---------|---------|
| | | | [--] | [cm2] | [m] | [cm2] | [cm2] | [cm2] | [cm2] | [cm2] |
| 12027 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12027 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12028 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12028 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12029 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12029 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12030 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12030 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12031 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12031 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12032 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12032 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12033 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12033 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12034 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12034 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12035 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12035 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12036 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12036 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12037 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12037 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12038 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12038 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12039 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12039 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12040 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08 | | | |
| 12040 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08 | | | |
| 12041 | 0.000 | 9 | 0.97 | 48.95 | | | 48.95T | | | |
| 12041 | 1.000 | 9 | 1.39 | 69.85 | | | 69.85T | | | |
| 12042 | 0.000 | 9 | 1.39 | 69.79 | | | 69.79T | | | |
| 12042 | 1.000 | 9 | 1.47 | 73.69 | | | 73.69T | | | |
| 12043 | 0.000 | 9 | 1.47 | 73.65 | | | 73.65T | | | |
| 12043 | 1.000 | 9 | 1.31 | 65.97 | | | 65.97T | | | |
| 12044 | 0.000 | 9 | 1.31 | 65.94 | | | 65.94T | | | |
| 12044 | 1.000 | 9 | 1.04 | 52.05 | | | 52.05T | | | |
| 12045 | 0.000 | 9 | 1.04 | 52.03 | | | 52.03T | | | |
| 12045 | 1.000 | 9 | 0.72 | 36.19 | | | 36.19T | | | |
| 12046 | 0.000 | 9 | 0.72 | 36.19 | | | 36.19T | | | |
| 12046 | 1.000 | 9 | 0.42 | 21.33 | | | 21.33T | | | |
| 12047 | 0.000 | 9 | 0.42 | 21.33 | | | 21.33T | | | |
| 12047 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12048 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12048 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12049 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12049 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12050 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12050 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12051 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12051 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12052 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12052 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12053 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12053 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12054 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12054 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12055 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12055 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12056 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12056 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12057 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12057 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12058 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12058 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12059 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12059 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12060 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12060 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12061 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12061 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12062 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12062 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12063 | 0.000 | 9 | 0.97 | 48.90 | | | 48.90T | | | |
| 12063 | 1.000 | 9 | 1.39 | 69.82 | | | 69.82T | | | |
| 12064 | 0.000 | 9 | 1.39 | 69.76 | | | 69.76T | | | |
| 12064 | 1.000 | 9 | 1.47 | 73.68 | | | 73.68T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|-------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 12065 | 0.000 | 9 | 1.46 | 73.63 | | | 73.63T | | | |
| 12065 | 1.000 | 9 | 1.32 | 66.24 | | | 66.24T | | | |
| 12066 | 0.000 | 9 | 1.32 | 66.21 | | | 66.21T | | | |
| 12066 | 1.000 | 9 | 1.04 | 52.19 | | | 52.19T | | | |
| 12067 | 0.000 | 9 | 1.04 | 52.17 | | | 52.17T | | | |
| 12067 | 1.000 | 9 | 0.72 | 36.21 | | | 36.21T | | | |
| 12068 | 0.000 | 9 | 0.72 | 36.20 | | | 36.20T | | | |
| 12068 | 1.000 | 9 | 0.42 | 21.25 | | | 21.25T | | | |
| 12069 | 0.000 | 9 | 0.42 | 21.24 | | | 21.24T | | | |
| 12069 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12070 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12070 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12071 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12071 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12072 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12072 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12073 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12073 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12074 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12074 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12075 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12075 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12076 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12076 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12077 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12077 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12078 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12078 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12079 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12079 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12080 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12080 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12081 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12081 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12082 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12082 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12083 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12083 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12084 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12084 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12085 | 0.000 | 9 | 0.97 | 48.90 | | | 48.90T | | | |
| 12085 | 1.000 | 9 | 1.39 | 69.82 | | | 69.82T | | | |
| 12086 | 0.000 | 9 | 1.39 | 69.76 | | | 69.76T | | | |
| 12086 | 1.000 | 9 | 1.47 | 73.68 | | | 73.68T | | | |
| 12087 | 0.000 | 9 | 1.46 | 73.63 | | | 73.63T | | | |
| 12087 | 1.000 | 9 | 1.32 | 66.24 | | | 66.24T | | | |
| 12088 | 0.000 | 9 | 1.32 | 66.21 | | | 66.21T | | | |
| 12088 | 1.000 | 9 | 1.04 | 52.06 | | | 52.06T | | | |
| 12089 | 0.000 | 9 | 1.04 | 52.04 | | | 52.04T | | | |
| 12089 | 1.000 | 9 | 0.72 | 36.21 | | | 36.21T | | | |
| 12090 | 0.000 | 9 | 0.72 | 36.20 | | | 36.20T | | | |
| 12090 | 1.000 | 9 | 0.42 | 21.35 | | | 21.35T | | | |
| 12091 | 0.000 | 9 | 0.42 | 21.35 | | | 21.35T | | | |
| 12091 | 1.000 | 9 | 0.31 | 15.36 | | | 15.36T | | | |
| 12092 | 0.000 | 9 | 0.31 | 15.36 | | | 15.36T | | | |
| 12092 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12093 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12093 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12094 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12094 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12095 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12095 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12096 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12096 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12097 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12097 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12098 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12098 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12099 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12099 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12100 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12100 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12101 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12101 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12102 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12102 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue | As-Sum | shift by | Lay-0&5 | Lay-1&6 | Lay-2&7 | Lay-3&8 | Lay-4&9 |
|-------|-------|-----|------|--------|----------|---------|---------|---------|---------|---------|
| | | | [--] | [cm2] | [m] | [cm2] | [cm2] | [cm2] | [cm2] | [cm2] |
| 12103 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12103 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12104 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12104 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12105 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12105 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12106 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08 | | | |
| 12106 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08 | | | |
| 12107 | 0.000 | 9 | 0.97 | 48.95 | | | 48.95T | | | |
| 12107 | 1.000 | 9 | 1.39 | 69.85 | | | 69.85T | | | |
| 12108 | 0.000 | 9 | 1.39 | 69.79 | | | 69.79T | | | |
| 12108 | 1.000 | 9 | 1.47 | 73.69 | | | 73.69T | | | |
| 12109 | 0.000 | 9 | 1.47 | 73.65 | | | 73.65T | | | |
| 12109 | 1.000 | 9 | 1.32 | 66.23 | | | 66.23T | | | |
| 12110 | 0.000 | 9 | 1.32 | 66.21 | | | 66.21T | | | |
| 12110 | 1.000 | 9 | 1.04 | 52.17 | | | 52.17T | | | |
| 12111 | 0.000 | 9 | 1.04 | 52.16 | | | 52.16T | | | |
| 12111 | 1.000 | 9 | 0.72 | 36.19 | | | 36.19T | | | |
| 12112 | 0.000 | 9 | 0.72 | 36.19 | | | 36.19T | | | |
| 12112 | 1.000 | 9 | 0.42 | 21.23 | | | 21.23T | | | |
| 12113 | 0.000 | 9 | 0.42 | 21.23 | | | 21.23T | | | |
| 12113 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12114 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12114 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12115 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12115 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12116 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12116 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12117 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12117 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12118 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12118 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12119 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12119 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12120 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12120 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12121 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12121 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12122 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12122 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12123 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12123 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12124 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12124 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12125 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12125 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12126 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12126 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12127 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12127 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12128 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12128 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12129 | 0.000 | 9 | 0.98 | 49.36 | | | 49.36T | | | |
| 12129 | 1.000 | 9 | 1.40 | 70.29 | | | 70.29T | | | |
| 12130 | 0.000 | 9 | 1.40 | 70.23 | | | 70.23T | | | |
| 12130 | 1.000 | 9 | 1.47 | 74.07 | | | 74.07T | | | |
| 12131 | 0.000 | 9 | 1.47 | 74.03 | | | 74.03T | | | |
| 12131 | 1.000 | 9 | 1.31 | 65.97 | | | 65.97T | | | |
| 12132 | 0.000 | 9 | 1.31 | 65.94 | | | 65.94T | | | |
| 12132 | 1.000 | 9 | 1.04 | 52.06 | | | 52.06T | | | |
| 12133 | 0.000 | 9 | 1.04 | 52.04 | | | 52.04T | | | |
| 12133 | 1.000 | 9 | 0.72 | 36.21 | | | 36.21T | | | |
| 12134 | 0.000 | 9 | 0.72 | 36.20 | | | 36.20T | | | |
| 12134 | 1.000 | 9 | 0.42 | 21.25 | | | 21.25T | | | |
| 12135 | 0.000 | 9 | 0.42 | 21.24 | | | 21.24T | | | |
| 12135 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12136 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12136 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12137 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12137 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12138 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12138 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12139 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12139 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12140 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12140 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μ _{ue} [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|-------|-------|-----|------------------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 12141 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12141 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12142 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12142 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12143 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12143 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12144 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12144 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12145 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12145 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12146 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12146 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12147 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12147 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12148 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12148 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12149 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12149 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12150 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12150 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | Nos | Asl-Mt [cm ² /m] | SLay-0&5 [cm ² /m] | SLay-1&6 [cm ² /m] | SLay-2&7 [cm ² /m] | SLay-3&8 [cm ² /m] | SLay-4&9 [cm ² /m] |
|-------|-------|-----|--------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 10001 | 0.000 | 8 | 0.93 | 1.76 | | | | |
| 10001 | 0.200 | 8 | 0.80 | 1.89 | | | | |
| 10005 | 0.000 | 8 | 3.35 | 5.83 | | | | |
| 10005 | 0.200 | 8 | 3.65 | 6.87 | | | | |
| 10006 | 0.000 | 8 | 0.24 | 5.43 | | | | |
| 10006 | 0.400 | 8 | 0.30 | 5.57 | | | | |
| 10009 | 0.000 | 8 | 0.44 | 4.48 | | | | |
| 10009 | 0.400 | 8 | 0.39 | 4.55 | | | | |
| 10010 | 0.000 | 8 | 3.58 | 7.12 | | | | |
| 10010 | 0.200 | 8 | 3.71 | 8.02 | | | | |
| 10014 | 0.000 | 8 | 0.80 | 1.45 | | | | |
| 10014 | 0.200 | 8 | 0.80 | 1.33 | | | | |
| 10016 | 0.000 | 8 | 0.92 | 1.76 | | | | |
| 10016 | 0.200 | 8 | 0.86 | 1.89 | | | | |
| 10020 | 0.000 | 8 | 3.34 | 5.62 | | | | |
| 10020 | 0.200 | 8 | 3.63 | 6.65 | | | | |
| 10021 | 0.000 | 8 | 0.25 | 5.24 | | | | |
| 10021 | 0.400 | 8 | 0.30 | 5.38 | | | | |
| 10024 | 0.000 | 8 | 0.36 | 3.98 | | | | |
| 10024 | 0.400 | 8 | 0.36 | 4.44 | | | | |
| 10025 | 0.000 | 8 | 3.51 | 7.07 | | | | |
| 10025 | 0.200 | 8 | 4.02 | 8.06 | | | | |
| 10029 | 0.000 | 8 | 0.83 | 1.46 | | | | |
| 10029 | 0.200 | 8 | 0.79 | 1.31 | | | | |
| 12001 | 0.000 | 9 | 0.01 | 5.20 | | | | |
| 12001 | 1.000 | 9 | 0.01 | 5.40 | | | | |
| 12002 | 0.000 | 9 | 0.01 | 5.40 | | | | |
| 12002 | 1.000 | 9 | 0.01 | 6.60 | | | | |
| 12003 | 0.000 | 9 | 0.01 | 6.60 | | | | |
| 12003 | 1.000 | 9 | 0.00 | 9.13 | | | | |
| 12004 | 0.000 | 9 | 0.00 | 5.11 | | | | |
| 12004 | 1.000 | 9 | 0.00 | 5.12 | | | | |
| 12005 | 0.000 | 9 | 0.00 | 5.12 | | | | |
| 12005 | 1.000 | 9 | 0.00 | 6.57 | | | | |
| 12006 | 0.000 | 9 | 0.00 | 6.57 | | | | |
| 12006 | 1.000 | 9 | 0.01 | 10.21 | | | | |
| 12007 | 0.000 | 9 | 0.00 | 5.13 | | | | |
| 12007 | 1.000 | 9 | 0.00 | 5.12 | | | | |
| 12008 | 0.000 | 9 | 0.00 | 5.12 | | | | |
| 12008 | 1.000 | 9 | 0.00 | 6.58 | | | | |
| 12009 | 0.000 | 9 | 0.00 | 6.58 | | | | |
| 12009 | 1.000 | 9 | 0.01 | 9.68 | | | | |
| 12010 | 0.000 | 9 | 0.01 | 5.21 | | | | |
| 12010 | 1.000 | 9 | 0.01 | 5.41 | | | | |
| 12011 | 0.000 | 9 | 0.00 | 5.41 | | | | |
| 12011 | 1.000 | 9 | 0.01 | 6.60 | | | | |
| 12012 | 0.000 | 9 | 0.00 | 6.60 | | | | |
| 12012 | 1.000 | 9 | 0.01 | 9.14 | | | | |
| 12013 | 0.000 | 9 | 0.00 | 5.11 | | | | |
| 12013 | 1.000 | 9 | 0.00 | 5.13 | | | | |
| 12014 | 0.000 | 9 | 0.00 | 5.13 | | | | |
| 12014 | 1.000 | 9 | 0.00 | 6.59 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | Nos | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|------|------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|------|------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|

| | | | | | | | | |
|-------|-------|---|------|-------|--|--|--|--|
| 12015 | 0.000 | 9 | 0.00 | 6.59 | | | | |
| 12015 | 1.000 | 9 | 0.00 | 9.13 | | | | |
| 12016 | 0.000 | 9 | 0.00 | 5.13 | | | | |
| 12016 | 1.000 | 9 | 0.00 | 5.12 | | | | |
| 12017 | 0.000 | 9 | 0.00 | 5.12 | | | | |
| 12017 | 1.000 | 9 | 0.00 | 6.58 | | | | |
| 12018 | 0.000 | 9 | 0.00 | 6.58 | | | | |
| 12018 | 1.000 | 9 | 0.00 | 9.13 | | | | |
| 12019 | 0.000 | 9 | 0.00 | 9.13 | | | | |
| 12019 | 1.000 | 9 | 0.00 | 5.17 | | | | |
| 12020 | 0.000 | 9 | 0.00 | 5.17 | | | | |
| 12020 | 1.000 | 9 | 0.00 | 5.16 | | | | |
| 12021 | 0.000 | 9 | 0.00 | 5.16 | | | | |
| 12021 | 1.000 | 9 | 0.00 | 5.16 | | | | |
| 12022 | 0.000 | 9 | 0.00 | 5.16 | | | | |
| 12022 | 1.000 | 9 | 0.00 | 5.19 | | | | |
| 12023 | 0.000 | 9 | 0.00 | 5.19 | | | | |
| 12023 | 1.000 | 9 | 0.00 | 5.25 | | | | |
| 12024 | 0.000 | 9 | 0.00 | 5.25 | | | | |
| 12024 | 1.000 | 9 | 0.00 | 5.34 | | | | |
| 12025 | 0.000 | 9 | 0.00 | 5.34 | | | | |
| 12025 | 1.000 | 9 | 0.00 | 5.49 | | | | |
| 12026 | 0.000 | 9 | 0.00 | 5.49 | | | | |
| 12026 | 1.000 | 9 | 0.00 | 5.61 | | | | |
| 12027 | 0.000 | 9 | 0.00 | 5.61 | | | | |
| 12027 | 1.000 | 9 | 0.00 | 5.71 | | | | |
| 12028 | 0.000 | 9 | 0.00 | 5.71 | | | | |
| 12028 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12029 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12029 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12030 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12030 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12031 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12031 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12032 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12032 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12033 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12033 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12034 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12034 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12035 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12035 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12036 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12036 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12037 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12037 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12038 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12038 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12039 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12039 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12040 | 0.000 | 9 | 0.00 | 11.73 | | | | |
| 12040 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12041 | 0.000 | 9 | 0.01 | 10.21 | | | | |
| 12041 | 1.000 | 9 | 0.00 | 5.09 | | | | |
| 12042 | 0.000 | 9 | 0.00 | 5.09 | | | | |
| 12042 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12043 | 0.000 | 9 | 0.00 | 5.07 | | | | |
| 12043 | 1.000 | 9 | 0.00 | 5.07 | | | | |
| 12044 | 0.000 | 9 | 0.00 | 5.07 | | | | |
| 12044 | 1.000 | 9 | 0.00 | 5.10 | | | | |
| 12045 | 0.000 | 9 | 0.00 | 5.10 | | | | |
| 12045 | 1.000 | 9 | 0.00 | 5.15 | | | | |
| 12046 | 0.000 | 9 | 0.00 | 5.15 | | | | |
| 12046 | 1.000 | 9 | 0.00 | 5.09 | | | | |
| 12047 | 0.000 | 9 | 0.00 | 5.09 | | | | |
| 12047 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12048 | 0.000 | 9 | 0.00 | 5.05 | | | | |
| 12048 | 1.000 | 9 | 0.00 | 4.84 | | | | |
| 12049 | 0.000 | 9 | 0.00 | 4.84 | | | | |
| 12049 | 1.000 | 9 | 0.00 | 4.64 | | | | |
| 12050 | 0.000 | 9 | 0.00 | 4.64 | | | | |
| 12050 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12051 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12051 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12052 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12052 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12053 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12053 | 1.000 | 9 | 0.00 | 4.58 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | Nos | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|------|------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|------|------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|

| | | | | | | | | |
|-------|-------|---|------|------|--|--|--|--|
| 12054 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12054 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12055 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12055 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12056 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12056 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12057 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12057 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12058 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12058 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12059 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12059 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12060 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12060 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12061 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12061 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12062 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12062 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12063 | 0.000 | 9 | 0.01 | 9.68 | | | | |
| 12063 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12064 | 0.000 | 9 | 0.00 | 5.05 | | | | |
| 12064 | 1.000 | 9 | 0.00 | 5.03 | | | | |
| 12065 | 0.000 | 9 | 0.00 | 5.03 | | | | |
| 12065 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12066 | 0.000 | 9 | 0.00 | 5.05 | | | | |
| 12066 | 1.000 | 9 | 0.00 | 5.02 | | | | |
| 12067 | 0.000 | 9 | 0.00 | 5.02 | | | | |
| 12067 | 1.000 | 9 | 0.00 | 5.03 | | | | |
| 12068 | 0.000 | 9 | 0.00 | 5.03 | | | | |
| 12068 | 1.000 | 9 | 0.00 | 5.07 | | | | |
| 12069 | 0.000 | 9 | 0.00 | 5.07 | | | | |
| 12069 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12070 | 0.000 | 9 | 0.00 | 5.05 | | | | |
| 12070 | 1.000 | 9 | 0.00 | 4.83 | | | | |
| 12071 | 0.000 | 9 | 0.00 | 4.83 | | | | |
| 12071 | 1.000 | 9 | 0.00 | 4.64 | | | | |
| 12072 | 0.000 | 9 | 0.00 | 4.64 | | | | |
| 12072 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12073 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12073 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12074 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12074 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12075 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12075 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12076 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12076 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12077 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12077 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12078 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12078 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12079 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12079 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12080 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12080 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12081 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12081 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12082 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12082 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12083 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12083 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12084 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12084 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12085 | 0.000 | 9 | 0.00 | 9.14 | | | | |
| 12085 | 1.000 | 9 | 0.00 | 5.29 | | | | |
| 12086 | 0.000 | 9 | 0.00 | 5.29 | | | | |
| 12086 | 1.000 | 9 | 0.00 | 5.25 | | | | |
| 12087 | 0.000 | 9 | 0.00 | 5.25 | | | | |
| 12087 | 1.000 | 9 | 0.00 | 5.26 | | | | |
| 12088 | 0.000 | 9 | 0.00 | 5.26 | | | | |
| 12088 | 1.000 | 9 | 0.00 | 5.19 | | | | |
| 12089 | 0.000 | 9 | 0.00 | 5.19 | | | | |
| 12089 | 1.000 | 9 | 0.00 | 5.25 | | | | |
| 12090 | 0.000 | 9 | 0.00 | 5.25 | | | | |
| 12090 | 1.000 | 9 | 0.00 | 5.34 | | | | |
| 12091 | 0.000 | 9 | 0.00 | 5.34 | | | | |
| 12091 | 1.000 | 9 | 0.00 | 5.49 | | | | |
| 12092 | 0.000 | 9 | 0.00 | 5.49 | | | | |
| 12092 | 1.000 | 9 | 0.00 | 5.62 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | NOS | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|-------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 12093 | 0.000 | 9 | 0.00 | 5.62 | | | | |
| 12093 | 1.000 | 9 | 0.00 | 5.71 | | | | |
| 12094 | 0.000 | 9 | 0.00 | 5.71 | | | | |
| 12094 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12095 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12095 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12096 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12096 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12097 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12097 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12098 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12098 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12099 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12099 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12100 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12100 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12101 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12101 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12102 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12102 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12103 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12103 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12104 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12104 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12105 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12105 | 1.000 | 9 | 0.00 | 12.81 | | | | |
| 12106 | 0.000 | 9 | 0.00 | 11.73 | | | | |
| 12106 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12107 | 0.000 | 9 | 0.00 | 9.13 | | | | |
| 12107 | 1.000 | 9 | 0.00 | 5.12 | | | | |
| 12108 | 0.000 | 9 | 0.00 | 5.12 | | | | |
| 12108 | 1.000 | 9 | 0.00 | 5.10 | | | | |
| 12109 | 0.000 | 9 | 0.00 | 5.07 | | | | |
| 12109 | 1.000 | 9 | 0.00 | 5.14 | | | | |
| 12110 | 0.000 | 9 | 0.00 | 5.14 | | | | |
| 12110 | 1.000 | 9 | 0.00 | 5.12 | | | | |
| 12111 | 0.000 | 9 | 0.00 | 5.12 | | | | |
| 12111 | 1.000 | 9 | 0.00 | 5.07 | | | | |
| 12112 | 0.000 | 9 | 0.00 | 5.07 | | | | |
| 12112 | 1.000 | 9 | 0.00 | 5.07 | | | | |
| 12113 | 0.000 | 9 | 0.00 | 5.07 | | | | |
| 12113 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12114 | 0.000 | 9 | 0.00 | 5.05 | | | | |
| 12114 | 1.000 | 9 | 0.00 | 4.83 | | | | |
| 12115 | 0.000 | 9 | 0.00 | 4.83 | | | | |
| 12115 | 1.000 | 9 | 0.00 | 4.64 | | | | |
| 12116 | 0.000 | 9 | 0.00 | 4.64 | | | | |
| 12116 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12117 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12117 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12118 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12118 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12119 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12119 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12120 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12120 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12121 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12121 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12122 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12122 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12123 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12123 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12124 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12124 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12125 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12125 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12126 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12126 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12127 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12127 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12128 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12128 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12129 | 0.000 | 9 | 0.00 | 9.13 | | | | |
| 12129 | 1.000 | 9 | 0.00 | 5.10 | | | | |
| 12130 | 0.000 | 9 | 0.00 | 5.10 | | | | |
| 12130 | 1.000 | 9 | 0.00 | 5.09 | | | | |
| 12131 | 0.000 | 9 | 0.00 | 5.09 | | | | |
| 12131 | 1.000 | 9 | 0.00 | 5.07 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | NoS | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|-------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 12132 | 0.000 | 9 | 0.00 | 5.07 | | | | |
| 12132 | 1.000 | 9 | 0.00 | 5.04 | | | | |
| 12133 | 0.000 | 9 | 0.00 | 5.04 | | | | |
| 12133 | 1.000 | 9 | 0.00 | 5.03 | | | | |
| 12134 | 0.000 | 9 | 0.00 | 5.03 | | | | |
| 12134 | 1.000 | 9 | 0.00 | 5.07 | | | | |
| 12135 | 0.000 | 9 | 0.00 | 5.07 | | | | |
| 12135 | 1.000 | 9 | 0.00 | 5.05 | | | | |
| 12136 | 0.000 | 9 | 0.00 | 5.05 | | | | |
| 12136 | 1.000 | 9 | 0.00 | 4.83 | | | | |
| 12137 | 0.000 | 9 | 0.00 | 4.83 | | | | |
| 12137 | 1.000 | 9 | 0.00 | 4.64 | | | | |
| 12138 | 0.000 | 9 | 0.00 | 4.64 | | | | |
| 12138 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12139 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12139 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12140 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12140 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12141 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12141 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12142 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12142 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12143 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12143 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12144 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12144 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12145 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12145 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12146 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12146 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12147 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12147 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12148 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12148 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12149 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12149 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12150 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12150 | 1.000 | 9 | 0.00 | 4.58 | | | | |

Maximum Degree of Utilization

| | N | Vy | Vz | Mt | My | Mz | Mb | Mt2 | Total | lamda |
|--------------|-------|-------|-------|-------|-------|-------|--------|-------|--------|-------|
| | sig-c | sig-t | tau | sig-* | tend. | As-l | As-v | crack | sigdyn | tau-* |
| Cross sect. | 8 | 0.000 | 0.000 | 0.118 | 0.144 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| DOKOS-4 | | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 20.266 | 0.000 | 0.000 | 0.000 |
| Cross sect. | 9 | 0.000 | 0.000 | 0.212 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 |
| section pile | | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.869 | 0.000 | 0.000 | 0.000 |
| Total system | | 0.000 | 0.000 | 0.212 | 0.144 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| | | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 20.266 | 0.000 | 0.000 | 0.000 |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_DOKOI

Selected Beam Elements

| FROM | TO | INC | X-VALUE | NC | MEMBER | CS0 | CS1 | CS2 | CS3 | CS4 | CS5 |
|------|------|-----|---------|----|---------|-----|-----|-----|-----|-----|-----|
| 1000 | 1060 | 1 | | 1 | bending | 10 | 40 | | | | |
| 2000 | 2020 | 1 | | | | | | | | | |

Default design code is DIN Fachbericht 102 Massivbröcken (2003) (Germany)

Klasse(Tab.4.118): D

wind zone : Binnenland

Materials

No. 1 C 25/30 (DIN 1045-1)
No. 3 C 25/30 (DIN 1045-1)
No. 4 C 25/30 (DIN 1045-1)
No. 5 C 25/30 (DIN 1045-1)
No. 6 C 25/30 (DIN 1045-1)
No. 7 C 25/30 (DIN 1045-1)
No. 8 C 25/30 (DIN 1045-1)
No. 9 C 25/30 (DIN 1045-1)
No. 10 C 25/30 (DIN 1045-1)
No. 12 BSt 500 SA (DIN 1045-1)

Reinforcement will be accounted for sectional values as defined in AQUA
Reinforcements saved as design case LCR 516

Considered Load Cases

| No. refer | act on | Title/type of load case | gam-u | gam-f | psi-0 | psi-1 | psi-2 | psi-1' |
|------------|--------|---|-------|-------|-------|-------|-------|-------------|
| 1 part. | CS 0 | I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 2 part. | CS 0 | I.B. ΔΟΚΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 3 part. | CS 0 | I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 11 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 12 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 13 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 14 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 100 part. | CS 1 | CRASH_-Y_Pos.1 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 101 part. | CS 1 | CRASH_-Y_Pos.2 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 102 part. | CS 1 | CRASH_-Y_Pos.3 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 103 part. | CS 1 | CRASH_-Y_Pos.4 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 104 part. | CS 1 | CRASH_-Y_Pos.5 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 105 part. | CS 1 | CRASH_-Y_Pos.6 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 106 part. | CS 1 | CRASH_-Y_Pos.7 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 107 part. | CS 1 | CRASH_-Y_Pos.8 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 108 part. | CS 1 | CRASH_-Y_Pos.9 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 109 part. | CS 1 | CRASH_-Y_Pos.10 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 110 part. | CS 1 | CRASH_-Y_Pos.11 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 111 part. | CS 1 | CRASH_-Y_Pos.12 _DECK L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 1501 part. | CS 1 | MAX-MY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1502 part. | CS 1 | MIN-MY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1503 part. | CS 1 | MAX-VZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1504 part. | CS 1 | MIN-VZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1505 part. | CS 1 | MAX-MZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1506 part. | CS 1 | MIN-MZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1507 part. | CS 1 | MAX-VY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1508 part. | CS 1 | MIN-VY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1509 part. | CS 1 | MAX-N BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_DOKOI

Considered Load Cases

| No. refer | act on | Title/type of load case | gam-u | gam-f | psi-0 | psi-1 | psi-2 | psi-1' | |
|------------|--------|---|-------|-------|-------|-------|-------|--------|--------|
| 1510 part. | CS 1 | MIN-N BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 | Q exc1 |
| 1511 part. | CS 1 | MAX-MT BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 | Q exc1 |
| 1512 part. | CS 1 | MIN-MT BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 | Q exc1 |
| 5015 part. | CS 0 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | P perm |
| 5025 part. | CS 0 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | P perm |
| 5055 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | P perm |
| 5060 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | P perm |
| 5061 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | P perm |
| 5062 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | P perm |
| 5063 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | P perm |
| 5064 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | P perm |
| 6015 part. | CS 0 | 15 K creep step C (creep + shrinkage) | | | | | | | P perm |
| 6025 part. | CS 0 | 25 K creep step C (creep + shrinkage) | | | | | | | P perm |
| 6055 part. | CS 1 | 55 K creep step C (creep + shrinkage) | | | | | | | P perm |
| 6060 part. | CS 1 | 60 K creep step C (creep + shrinkage) | | | | | | | P perm |
| 6061 part. | CS 1 | 61 K creep step C (creep + shrinkage) | | | | | | | P perm |
| 6062 part. | CS 1 | 62 K creep step C (creep + shrinkage) | | | | | | | P perm |
| 6063 part. | CS 1 | 63 K creep step C (creep + shrinkage) | | | | | | | P perm |
| 6064 part. | CS 1 | 64 K creep step C (creep + shrinkage) | | | | | | | P perm |

Ultimate Load Design

Design for ultimate loads DIN Fachbericht 102 Massivbröcken (2003)

Uniaxial bending due to symmetry

| | | | | | | |
|----------------|-------|-------|------|-------|-------|-------|
| Safety factors | SC-1 | SC-2 | SC-S | SS-1 | SS-2 | PIIa |
| | 1.30 | 1.30 | 1.50 | 1.00 | 1.00 | 7 |
| Strain limits | C1 | C2 | S1 | S2 | Z1 | Z2 |
| max | -3.50 | -2.00 | 3.00 | 25.00 | -3.50 | 25.00 |

parameters for reinforcements

| | | | |
|-------------------------|-------------|------------------|----------------|
| Minimum reinforcements | compression | min. reinforcem. | maximum- |
| Bending. Compress. | e/d | N/Npl | requ. section |
| 0.00 [cm ²] | 0.30 [o/o] | 3.50 0.0010 | 0.00 0.15 9.00 |

Tensile forces in the longitudinal reinforcements due to shear are NOT accounted for.

Material of sections uses Ultimate Limit strain-stress law with global safety factors

Material of reinforcements uses Ultimate Limit strain-stress law without safety factors

| MNo. | temp lev. | Material-safety | max.compr stress [MPa] | at strain [o/oo] | max.tens stress [MPa] | at strain [o/oo] | tension-stiffening [MPa] |
|------|-----------|-----------------|------------------------|------------------|-----------------------|------------------|--------------------------|
| 1 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 3 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 4 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 5 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 6 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 7 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 8 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 9 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 10 | 0 | 1.300 | -16.35 | -2.00 | 0.00 | 0.00 | |
| 12 | 0 | 1.000 | -525.00 | -25.00 | 525.00 | 25.00 | |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_DOKOI

Combinations For Ultimate Design

1515 (CS-1: 1) max_my-1515

MAX + MY :

$$1.00 * G + 1.00 * L_A + 1.00 * L_B + 1.00 * C + 1.00 * L_C$$

1516 (CS-1: 1) min_my-1516

MIN + MY :

$$1.00 * G + 1.00 * L_A + 1.00 * L_B + 1.00 * C + 1.00 * L_C$$

Shear Design

Design for shear DIN 1045-1 (2003)

Minimum shear factor or tan of inclination of compressive struts 0.57 / 1.72
MNO f-cd tau-rd sigIIQ sigIIIT sigIIQ+ fyd

| [MPa] | [MPa] | [MPa] | [MPa] | [MPa] | [MPa] |
|-------|-------|-------|-------|-------|-------|
| 1 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 3 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 4 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 5 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 6 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 7 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 8 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 9 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 10 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 12 | | | | | |

500.00

Tolerance for exceeding maximum shear or principal compression stress 0.0200

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | mue | AS-Sum | shift by | Lay-0&5 | Lay-1&6 | Lay-2&7 | Lay-3&8 | Lay-4&9 |
|------|-------|-----|------|--------|----------|---------|---------|---------|---------|---------|
| | | | [--] | [cm2] | [m] | [cm2] | [cm2] | [cm2] | [cm2] | [cm2] |
| 1001 | 0.000 | 1 | 0.34 | 17.16 | | 3.90T | 3.94 | | 9.32 | |
| 1001 | 0.883 | 1 | 0.30 | 14.81 | | 3.85T | 5.72 | | 5.23 | |
| 1002 | 0.000 | 1 | 0.33 | 16.17 | | 5.29T | 5.65 | | 5.23 | |
| 1002 | 0.883 | 1 | 0.36 | 17.76 | | 5.36T | 10.15 | | 2.24 | |
| 1003 | 0.000 | 1 | 0.37 | 18.31 | | 5.92T | 10.14 | | 2.25 | |
| 1003 | 0.883 | 1 | 0.42 | 20.78 | | 6.98T | 13.80 | | | |
| 1004 | 0.000 | 1 | 0.40 | 20.04 | | 6.22T | 13.79 | | 0.04 | |
| 1004 | 0.883 | 1 | 0.44 | 21.71 | | 5.17T | 16.54 | | | |
| 1005 | 0.000 | 1 | 0.44 | 21.81 | | 5.29T | 16.53 | | | |
| 1005 | 0.883 | 1 | 0.49 | 24.57 | | 6.27T | 18.30 | | | |
| 1006 | 0.000 | 1 | 0.49 | 24.53 | | 6.24T | 18.29 | | | |
| 1006 | 0.883 | 1 | 0.51 | 25.21 | | 6.46T | 18.74 | | | |
| 1007 | 0.000 | 1 | 0.50 | 24.77 | | 6.03T | 18.74 | | | |
| 1007 | 0.883 | 1 | 0.49 | 24.42 | | 6.15T | 18.27 | | | |
| 1008 | 0.000 | 1 | 0.49 | 24.25 | | 5.97T | 18.28 | | | |
| 1008 | 0.883 | 1 | 0.43 | 21.55 | | 5.11T | 16.44 | | | |
| 1009 | 0.000 | 1 | 0.43 | 21.41 | | 4.95T | 16.46 | | | |
| 1009 | 0.883 | 1 | 0.38 | 19.02 | | 5.06T | 13.96 | | | |
| 1010 | 0.000 | 1 | 0.42 | 20.67 | | 6.71T | 13.97 | | | |
| 1010 | 0.883 | 1 | 0.37 | 18.19 | | 5.69T | 10.24 | | 2.25 | |
| 1011 | 0.000 | 1 | 0.36 | 17.66 | | 5.16T | 10.26 | | 2.24 | |
| 1011 | 0.883 | 1 | 0.33 | 16.20 | | 5.10T | 5.87 | | 5.23 | |
| 1012 | 0.000 | 1 | 0.31 | 15.31 | | 4.13T | 5.95 | | 5.23 | |
| 1012 | 0.883 | 1 | 0.35 | 17.53 | | 4.02T | 4.19 | | 9.32 | |
| 1013 | 0.000 | 1 | 0.29 | 14.23 | | 3.28T | 1.82 | | 9.12 | |
| 1013 | 0.883 | 1 | 0.25 | 12.31 | | 3.23T | 3.81 | | 5.26 | |
| 1014 | 0.000 | 1 | 0.28 | 13.86 | | 4.79T | 3.81 | | 5.26 | |
| 1014 | 0.883 | 1 | 0.30 | 15.12 | | 4.84T | 8.03 | | 2.25 | |
| 1015 | 0.000 | 1 | 0.32 | 15.75 | | 5.45T | 8.05 | | 2.25 | |
| 1015 | 0.883 | 1 | 0.36 | 17.86 | | 6.38T | 11.47 | | | |
| 1016 | 0.000 | 1 | 0.37 | 18.28 | | 6.79T | 11.49 | | | |
| 1016 | 0.883 | 1 | 0.37 | 18.62 | | 4.70T | 13.92 | | | |
| 1017 | 0.000 | 1 | 0.39 | 19.52 | | 5.61T | 13.92 | | | |
| 1017 | 0.883 | 1 | 0.42 | 20.72 | | 5.12T | 15.61 | | | |
| 1018 | 0.000 | 1 | 0.43 | 21.48 | | 5.87T | 15.61 | | | |
| 1018 | 0.883 | 1 | 0.37 | 18.39 | | 2.37T | 16.02 | | | |
| 1019 | 0.000 | 1 | 0.37 | 18.40 | | 2.37T | 16.02 | | | |
| 1019 | 0.883 | 1 | 0.44 | 21.90 | | 6.33T | 15.56 | | | |
| 1020 | 0.000 | 1 | 0.42 | 21.11 | | 5.54T | 15.57 | | | |
| 1020 | 0.883 | 1 | 0.39 | 19.51 | | 5.55T | 13.96 | | | |
| 1021 | 0.000 | 1 | 0.37 | 18.53 | | 4.59T | 13.94 | | | |
| 1021 | 0.883 | 1 | 0.36 | 18.03 | | 6.47T | 11.55 | | | |
| 1022 | 0.000 | 1 | 0.36 | 17.67 | | 6.13T | 11.54 | | | |
| 1022 | 0.883 | 1 | 0.31 | 15.54 | | 5.23T | 8.06 | | 2.25 | |
| 1023 | 0.000 | 1 | 0.30 | 14.96 | | 4.67T | 8.04 | | 2.25 | |
| 1023 | 0.883 | 1 | 0.28 | 13.69 | | 4.62T | 3.81 | | 5.26 | |
| 1024 | 0.000 | 1 | 0.24 | 12.18 | | 3.10T | 3.81 | | 5.26 | |
| 1024 | 0.883 | 1 | 0.29 | 14.21 | | 3.16T | 1.93 | | 9.12 | |
| 1025 | 0.000 | 1 | 0.25 | 12.36 | | 2.37T | 0.75 | | 9.23 | |
| 1025 | 0.883 | 1 | 0.23 | 11.63 | | 2.37T | 3.91 | | 5.34 | |

OPISTIKH MELETH/TEXNIKO TA/L=13.00
FASH-2_CRASH_DOKOI

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | mue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 1026 | 0.000 | 1 | 0.27 | 13.26 | | 4.01T | 3.91 | | 5.34 | |
| 1026 | 0.883 | 1 | 0.26 | 12.90 | | 2.66T | 7.99 | | 2.24 | |
| 1027 | 0.000 | 1 | 0.26 | 13.18 | | 2.94T | 7.99 | | 2.24 | |
| 1027 | 0.883 | 1 | 0.32 | 15.71 | | 4.60T | 11.10 | | | |
| 1028 | 0.000 | 1 | 0.30 | 14.80 | | 3.69T | 11.10 | | | |
| 1028 | 0.883 | 1 | 0.38 | 19.03 | | 5.68T | 13.36 | | | |
| 1029 | 0.000 | 1 | 0.36 | 18.04 | | 4.68T | 13.36 | | | |
| 1029 | 0.883 | 1 | 0.35 | 17.27 | | 2.37T | 14.90 | | | |
| 1030 | 0.000 | 1 | 0.42 | 20.75 | | 5.86T | 14.90 | | | |
| 1030 | 0.883 | 1 | 0.35 | 17.64 | | 2.37T | 15.27 | | | |
| 1031 | 0.000 | 1 | 0.35 | 17.64 | | 2.37T | 15.27 | | | |
| 1031 | 0.883 | 1 | 0.42 | 20.99 | | 6.12T | 14.87 | | | |
| 1032 | 0.000 | 1 | 0.35 | 17.25 | | 2.37T | 14.87 | | | |
| 1032 | 0.883 | 1 | 0.35 | 17.30 | | 3.94T | 13.36 | | | |
| 1033 | 0.000 | 1 | 0.39 | 19.47 | | 6.11T | 13.36 | | | |
| 1033 | 0.883 | 1 | 0.28 | 14.10 | | 2.90T | 11.20 | | | |
| 1034 | 0.000 | 1 | 0.31 | 15.22 | | 4.02T | 11.20 | | | |
| 1034 | 0.883 | 1 | 0.28 | 13.81 | | 3.55T | 8.02 | | 2.24 | |
| 1035 | 0.000 | 1 | 0.26 | 13.16 | | 2.90T | 8.02 | | 2.24 | |
| 1035 | 0.883 | 1 | 0.26 | 13.09 | | 3.87T | 3.88 | | 5.34 | |
| 1036 | 0.000 | 1 | 0.23 | 11.59 | | 2.37T | 3.87 | | 5.34 | |
| 1036 | 0.883 | 1 | 0.25 | 12.37 | | 2.37T | 0.76 | | 9.23 | |
| 1037 | 0.000 | 1 | 0.30 | 14.89 | | 3.92T | 1.92 | | 9.05 | |
| 1037 | 0.883 | 1 | 0.27 | 13.65 | | 4.11T | 4.22 | | 5.32 | |
| 1038 | 0.000 | 1 | 0.31 | 15.43 | | 5.91T | 4.20 | | 5.32 | |
| 1038 | 0.883 | 1 | 0.33 | 16.29 | | 5.98T | 8.11 | | 2.20 | |
| 1039 | 0.000 | 1 | 0.34 | 17.06 | | 6.76T | 8.10 | | 2.20 | |
| 1039 | 0.883 | 1 | 0.30 | 14.87 | | 3.89T | 10.98 | | | |
| 1040 | 0.000 | 1 | 0.32 | 15.69 | | 4.73T | 10.97 | | | |
| 1040 | 0.883 | 1 | 0.36 | 17.80 | | 4.70T | 13.09 | | | |
| 1041 | 0.000 | 1 | 0.37 | 18.47 | | 5.38T | 13.09 | | | |
| 1041 | 0.883 | 1 | 0.38 | 19.01 | | 4.50T | 14.50 | | | |
| 1042 | 0.000 | 1 | 0.40 | 19.70 | | 5.20T | 14.50 | | | |
| 1042 | 0.883 | 1 | 0.39 | 19.19 | | 4.34T | 14.84 | | | |
| 1043 | 0.000 | 1 | 0.37 | 18.58 | | 3.75T | 14.84 | | | |
| 1043 | 0.883 | 1 | 0.41 | 20.24 | | 5.74T | 14.50 | | | |
| 1044 | 0.000 | 1 | 0.37 | 18.42 | | 3.92T | 14.49 | | | |
| 1044 | 0.883 | 1 | 0.37 | 18.52 | | 5.45T | 13.07 | | | |
| 1045 | 0.000 | 1 | 0.36 | 17.81 | | 4.73T | 13.08 | | | |
| 1045 | 0.883 | 1 | 0.31 | 15.30 | | 4.21T | 11.10 | | | |
| 1046 | 0.000 | 1 | 0.29 | 14.51 | | 3.41T | 11.11 | | | |
| 1046 | 0.883 | 1 | 0.35 | 17.28 | | 6.93T | 8.15 | | 2.20 | |
| 1047 | 0.000 | 1 | 0.33 | 16.47 | | 6.12T | 8.16 | | 2.20 | |
| 1047 | 0.883 | 1 | 0.31 | 15.52 | | 6.05T | 4.16 | | 5.32 | |
| 1048 | 0.000 | 1 | 0.28 | 13.69 | | 4.20T | 4.17 | | 5.32 | |
| 1048 | 0.883 | 1 | 0.30 | 15.09 | | 4.00T | 2.03 | | 9.05 | |
| 1049 | 0.000 | 1 | 0.48 | 24.08 | | 10.65T | 4.07 | | 9.36 | |
| 1049 | 0.883 | 1 | 0.44 | 21.66 | | 9.56T | 6.80 | | 5.30 | |
| 1050 | 0.000 | 1 | 0.38 | 18.90 | | 7.45T | 6.15 | | 5.30 | |
| 1050 | 0.883 | 1 | 0.49 | 24.27 | | 12.81T | 9.36 | | 2.10 | |
| 1051 | 0.000 | 1 | 0.43 | 21.20 | | 10.50T | 8.59 | | 2.11 | |
| 1051 | 0.883 | 1 | 0.51 | 25.50 | | 14.26T | 11.24 | | | |
| 1052 | 0.000 | 1 | 0.45 | 22.63 | | 11.97T | 10.57 | | 0.08 | |
| 1052 | 0.883 | 1 | 0.55 | 27.24 | | 14.84T | 12.40 | | | |
| 1053 | 0.000 | 1 | 0.51 | 25.26 | | 13.37T | 11.89 | | | |
| 1053 | 0.883 | 1 | 0.57 | 28.21 | | 15.15T | 13.05 | | | |
| 1054 | 0.000 | 1 | 0.54 | 26.66 | | 13.78T | 12.88 | | | |
| 1054 | 0.883 | 1 | 0.56 | 27.81 | | 14.63T | 13.18 | | | |
| 1055 | 0.000 | 1 | 0.34 | 16.75 | | 3.41T | 13.34 | | | |
| 1055 | 0.883 | 1 | 0.54 | 27.01 | | 14.09T | 12.91 | | | |
| 1056 | 0.000 | 1 | 0.34 | 17.03 | | 3.87T | 13.16 | | | |
| 1056 | 0.883 | 1 | 0.52 | 26.05 | | 13.85T | 12.20 | | | |
| 1057 | 0.000 | 1 | 0.43 | 21.25 | | 8.77T | 12.48 | | | |
| 1057 | 0.883 | 1 | 0.48 | 23.70 | | 12.71T | 10.94 | | 0.04 | |
| 1058 | 0.000 | 1 | 0.40 | 19.80 | | 8.54T | 11.26 | | | |
| 1058 | 0.883 | 1 | 0.46 | 22.65 | | 11.50T | 9.04 | | 2.11 | |
| 1059 | 0.000 | 1 | 0.41 | 20.28 | | 8.82T | 9.36 | | 2.10 | |
| 1059 | 0.883 | 1 | 0.41 | 20.56 | | 8.76T | 6.50 | | 5.30 | |
| 1060 | 0.000 | 1 | 0.44 | 21.82 | | 9.74T | 6.78 | | 5.29 | |
| 1060 | 0.883 | 1 | 0.49 | 24.56 | | 11.44T | 3.77 | | 9.36 | |
| 2001 | 0.000 | 2 | 0.22 | 17.44 | | 0.35T | 3.69 | | 13.41 | |
| 2001 | 0.300 | 2 | 0.19 | 15.24 | | 0.24T | 3.90 | | 11.09 | |
| 2002 | 0.000 | 2 | 0.20 | 16.11 | | 1.11T | 3.88 | | 11.12 | |
| 2002 | 0.300 | 2 | 0.18 | 14.61 | | 1.11T | 4.04 | | 9.46 | |
| 2003 | 0.000 | 2 | 0.18 | 14.79 | | 1.04T | 4.29 | | 9.45 | |
| 2003 | 0.300 | 2 | 0.20 | 16.30 | | 1.04T | 4.15 | | 11.12 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_DOKOI

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μ _{ue} [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|------|-------|-----|------------------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 2004 | 0.000 | 2 | 0.20 | 15.66 | | 0.41T | 4.16 | | 11.09 | |
| 2004 | 0.300 | 2 | 0.22 | 17.77 | | 0.41T | 3.96 | | 13.40 | |
| 2005 | 0.000 | 2 | 0.17 | 13.69 | | 0.22T | 1.30 | | 12.17 | |
| 2005 | 0.300 | 2 | 0.16 | 12.67 | | 0.22T | 1.61 | | 10.84 | |
| 2006 | 0.000 | 2 | 0.17 | 13.26 | | 0.78T | 1.61 | | 10.87 | |
| 2006 | 0.300 | 2 | 0.15 | 11.92 | | 0.78T | 1.88 | | 9.26 | |
| 2007 | 0.000 | 2 | 0.15 | 12.07 | | 0.82T | 1.99 | | 9.26 | |
| 2007 | 0.300 | 2 | 0.17 | 13.41 | | 0.82T | 1.72 | | 10.87 | |
| 2008 | 0.000 | 2 | 0.16 | 12.79 | | 0.23T | 1.72 | | 10.84 | |
| 2008 | 0.300 | 2 | 0.17 | 13.80 | | 0.23T | 1.40 | | 12.17 | |
| 2009 | 0.000 | 2 | 0.17 | 13.62 | | 0.52T | 0.68 | | 12.42 | |
| 2009 | 0.300 | 2 | 0.15 | 12.29 | | 0.52T | 0.78 | | 11.00 | |
| 2010 | 0.000 | 2 | 0.15 | 12.08 | | 0.29T | 0.76 | | 11.03 | |
| 2010 | 0.300 | 2 | 0.13 | 10.51 | | 0.30T | 0.84 | | 9.37 | |
| 2011 | 0.000 | 2 | 0.13 | 10.52 | | 0.30T | 0.85 | | 9.37 | |
| 2011 | 0.300 | 2 | 0.15 | 12.08 | | 0.29T | 0.75 | | 11.04 | |
| 2012 | 0.000 | 2 | 0.15 | 12.26 | | 0.49T | 0.77 | | 11.00 | |
| 2012 | 0.300 | 2 | 0.17 | 13.57 | | 0.49T | 0.65 | | 12.42 | |
| 2013 | 0.000 | 2 | 0.22 | 17.27 | | 2.27T | 2.95 | | 12.04 | |
| 2013 | 0.300 | 2 | 0.18 | 14.57 | | 2.16T | 1.67 | | 10.74 | |
| 2014 | 0.000 | 2 | 0.17 | 13.98 | | 1.08T | 2.13 | | 10.77 | |
| 2014 | 0.300 | 2 | 0.14 | 11.54 | | 1.08T | 1.27 | | 9.19 | |
| 2015 | 0.000 | 2 | 0.14 | 11.47 | | 1.10T | 1.18 | | 9.19 | |
| 2015 | 0.300 | 2 | 0.18 | 14.20 | | 1.10T | 2.34 | | 10.77 | |
| 2016 | 0.000 | 2 | 0.19 | 14.99 | | 2.51T | 1.74 | | 10.74 | |
| 2016 | 0.300 | 2 | 0.21 | 17.17 | | 1.99T | 3.14 | | 12.04 | |
| 2017 | 0.000 | 2 | 0.23 | 18.70 | | 3.91T | 2.42 | | 12.36 | |
| 2017 | 0.300 | 2 | 0.22 | 17.48 | | 3.91T | 2.52 | | 11.05 | |
| 2018 | 0.000 | 2 | 0.31 | 25.03 | | 11.20T | 2.75 | | 11.08 | |
| 2018 | 0.300 | 2 | 0.31 | 24.95 | | 11.20T | 4.25 | | 9.50 | |
| 2019 | 0.000 | 2 | 0.19 | 15.48 | | 2.30T | 3.69 | | 9.49 | |
| 2019 | 0.300 | 2 | 0.20 | 16.22 | | 2.31T | 2.84 | | 11.07 | |
| 2020 | 0.000 | 2 | 0.17 | 13.93 | | 0.41T | 2.48 | | 11.05 | |
| 2020 | 0.300 | 2 | 0.18 | 14.80 | | 0.41T | 2.03 | | 12.36 | |

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | Nos | Asl-Mt [cm ² /m] | SLay-0&5 [cm ² /m] | SLay-1&6 [cm ² /m] | SLay-2&7 [cm ² /m] | SLay-3&8 [cm ² /m] | SLay-4&9 [cm ² /m] |
|------|-------|-----|--------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 1001 | 0.000 | 1 | 2.25 | 7.22 | | | | |
| 1001 | 0.883 | 1 | 2.19 | 6.93 | | | | |
| 1002 | 0.000 | 1 | 3.01 | 6.46 | | | | |
| 1002 | 0.883 | 1 | 3.01 | 6.23 | | | | |
| 1003 | 0.000 | 1 | 3.32 | 5.68 | | | | |
| 1003 | 0.883 | 1 | 3.32 | 5.44 | | | | |
| 1004 | 0.000 | 1 | 3.45 | 4.81 | | | | |
| 1004 | 0.883 | 1 | 3.45 | 4.57 | | | | |
| 1005 | 0.000 | 1 | 3.48 | 3.87 | | | | |
| 1005 | 0.883 | 1 | 3.48 | 3.64 | | | | |
| 1006 | 0.000 | 1 | 3.45 | 3.16 | | | | |
| 1006 | 0.883 | 1 | 3.70 | 3.37 | | | | |
| 1007 | 0.000 | 1 | 3.45 | 3.05 | | | | |
| 1007 | 0.883 | 1 | 3.52 | 3.02 | | | | |
| 1008 | 0.000 | 1 | 3.31 | 3.28 | | | | |
| 1008 | 0.883 | 1 | 3.32 | 3.51 | | | | |
| 1009 | 0.000 | 1 | 3.30 | 4.18 | | | | |
| 1009 | 0.883 | 1 | 3.30 | 4.41 | | | | |
| 1010 | 0.000 | 1 | 3.19 | 4.75 | | | | |
| 1010 | 0.883 | 1 | 3.19 | 4.97 | | | | |
| 1011 | 0.000 | 1 | 2.89 | 5.66 | | | | |
| 1011 | 0.883 | 1 | 2.89 | 5.88 | | | | |
| 1012 | 0.000 | 1 | 2.24 | 6.51 | | | | |
| 1012 | 0.883 | 1 | 2.24 | 6.75 | | | | |
| 1013 | 0.000 | 1 | 1.87 | 5.60 | | | | |
| 1013 | 0.883 | 1 | 1.82 | 5.35 | | | | |
| 1014 | 0.000 | 1 | 2.70 | 5.17 | | | | |
| 1014 | 0.883 | 1 | 2.70 | 4.95 | | | | |
| 1015 | 0.000 | 1 | 3.04 | 4.52 | | | | |
| 1015 | 0.883 | 1 | 3.04 | 4.29 | | | | |
| 1016 | 0.000 | 1 | 3.24 | 3.74 | | | | |
| 1016 | 0.883 | 1 | 2.66 | 3.51 | | | | |
| 1017 | 0.000 | 1 | 3.18 | 2.87 | | | | |
| 1017 | 0.883 | 1 | 2.91 | 2.66 | | | | |
| 1018 | 0.000 | 1 | 3.34 | 2.39 | | | | |
| 1018 | 0.883 | 1 | 0.84 | 1.79 | | | | |
| 1019 | 0.000 | 1 | 0.89 | 1.28 | | | | |
| 1019 | 0.883 | 1 | 3.60 | 2.63 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_DOKOI

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | Nos | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1020 | 0.000 | 1 | 3.15 | 2.23 | | | | |
| 1020 | 0.883 | 1 | 3.15 | 2.66 | | | | |
| 1021 | 0.000 | 1 | 2.60 | 2.93 | | | | |
| 1021 | 0.883 | 1 | 3.08 | 3.24 | | | | |
| 1022 | 0.000 | 1 | 2.92 | 3.59 | | | | |
| 1022 | 0.883 | 1 | 2.92 | 3.82 | | | | |
| 1023 | 0.000 | 1 | 2.60 | 4.33 | | | | |
| 1023 | 0.883 | 1 | 2.60 | 4.56 | | | | |
| 1024 | 0.000 | 1 | 1.75 | 5.10 | | | | |
| 1024 | 0.883 | 1 | 1.80 | 5.36 | | | | |
| 1025 | 0.000 | 1 | 0.64 | 4.69 | | | | |
| 1025 | 0.883 | 1 | 0.95 | 4.43 | | | | |
| 1026 | 0.000 | 1 | 2.24 | 4.18 | | | | |
| 1026 | 0.883 | 1 | 1.49 | 3.95 | | | | |
| 1027 | 0.000 | 1 | 1.63 | 3.48 | | | | |
| 1027 | 0.883 | 1 | 2.59 | 3.25 | | | | |
| 1028 | 0.000 | 1 | 2.08 | 2.84 | | | | |
| 1028 | 0.883 | 1 | 3.21 | 2.83 | | | | |
| 1029 | 0.000 | 1 | 2.65 | 2.21 | | | | |
| 1029 | 0.883 | 1 | 0.58 | 1.98 | | | | |
| 1030 | 0.000 | 1 | 3.33 | 2.20 | | | | |
| 1030 | 0.883 | 1 | 0.56 | 1.37 | | | | |
| 1031 | 0.000 | 1 | 0.54 | 1.03 | | | | |
| 1031 | 0.883 | 1 | 3.47 | 2.37 | | | | |
| 1032 | 0.000 | 1 | 0.59 | 1.41 | | | | |
| 1032 | 0.883 | 1 | 2.23 | 1.85 | | | | |
| 1033 | 0.000 | 1 | 3.46 | 3.29 | | | | |
| 1033 | 0.883 | 1 | 1.63 | 2.29 | | | | |
| 1034 | 0.000 | 1 | 2.27 | 2.75 | | | | |
| 1034 | 0.883 | 1 | 1.97 | 2.74 | | | | |
| 1035 | 0.000 | 1 | 1.62 | 3.28 | | | | |
| 1035 | 0.883 | 1 | 2.17 | 3.78 | | | | |
| 1036 | 0.000 | 1 | 0.93 | 3.93 | | | | |
| 1036 | 0.883 | 1 | 0.72 | 3.68 | | | | |
| 1037 | 0.000 | 1 | 2.24 | 4.81 | | | | |
| 1037 | 0.883 | 1 | 2.32 | 4.54 | | | | |
| 1038 | 0.000 | 1 | 3.33 | 4.21 | | | | |
| 1038 | 0.883 | 1 | 3.33 | 3.98 | | | | |
| 1039 | 0.000 | 1 | 3.77 | 4.05 | | | | |
| 1039 | 0.883 | 1 | 2.19 | 3.51 | | | | |
| 1040 | 0.000 | 1 | 2.66 | 3.25 | | | | |
| 1040 | 0.883 | 1 | 2.66 | 3.02 | | | | |
| 1041 | 0.000 | 1 | 3.05 | 2.69 | | | | |
| 1041 | 0.883 | 1 | 2.56 | 2.45 | | | | |
| 1042 | 0.000 | 1 | 2.95 | 2.08 | | | | |
| 1042 | 0.883 | 1 | 2.47 | 2.10 | | | | |
| 1043 | 0.000 | 1 | 2.13 | 1.90 | | | | |
| 1043 | 0.883 | 1 | 3.26 | 2.47 | | | | |
| 1044 | 0.000 | 1 | 2.23 | 2.10 | | | | |
| 1044 | 0.883 | 1 | 3.09 | 2.41 | | | | |
| 1045 | 0.000 | 1 | 2.68 | 2.84 | | | | |
| 1045 | 0.883 | 1 | 2.37 | 2.85 | | | | |
| 1046 | 0.000 | 1 | 1.92 | 3.14 | | | | |
| 1046 | 0.883 | 1 | 3.86 | 4.11 | | | | |
| 1047 | 0.000 | 1 | 3.41 | 3.91 | | | | |
| 1047 | 0.883 | 1 | 3.41 | 4.05 | | | | |
| 1048 | 0.000 | 1 | 2.37 | 3.79 | | | | |
| 1048 | 0.883 | 1 | 2.29 | 3.81 | | | | |
| 1049 | 0.000 | 1 | 5.86 | 5.27 | | | | |
| 1049 | 0.883 | 1 | 5.33 | 6.03 | | | | |
| 1050 | 0.000 | 1 | 4.15 | 4.59 | | | | |
| 1050 | 0.883 | 1 | 7.17 | 7.50 | | | | |
| 1051 | 0.000 | 1 | 5.88 | 4.48 | | | | |
| 1051 | 0.883 | 1 | 8.00 | 7.71 | | | | |
| 1052 | 0.000 | 1 | 6.73 | 4.71 | | | | |
| 1052 | 0.883 | 1 | 8.35 | 7.60 | | | | |
| 1053 | 0.000 | 1 | 7.53 | 5.99 | | | | |
| 1053 | 0.883 | 1 | 8.53 | 7.37 | | | | |
| 1054 | 0.000 | 1 | 7.77 | 6.75 | | | | |
| 1054 | 0.883 | 1 | 8.24 | 7.02 | | | | |
| 1055 | 0.000 | 1 | 1.88 | 1.49 | | | | |
| 1055 | 0.883 | 1 | 7.94 | 6.43 | | | | |
| 1056 | 0.000 | 1 | 2.13 | 1.77 | | | | |
| 1056 | 0.883 | 1 | 7.80 | 5.87 | | | | |
| 1057 | 0.000 | 1 | 4.18 | 4.15 | | | | |
| 1057 | 0.883 | 1 | 7.14 | 4.84 | | | | |
| 1058 | 0.000 | 1 | 4.07 | 4.39 | | | | |
| 1058 | 0.883 | 1 | 6.43 | 4.54 | | | | |

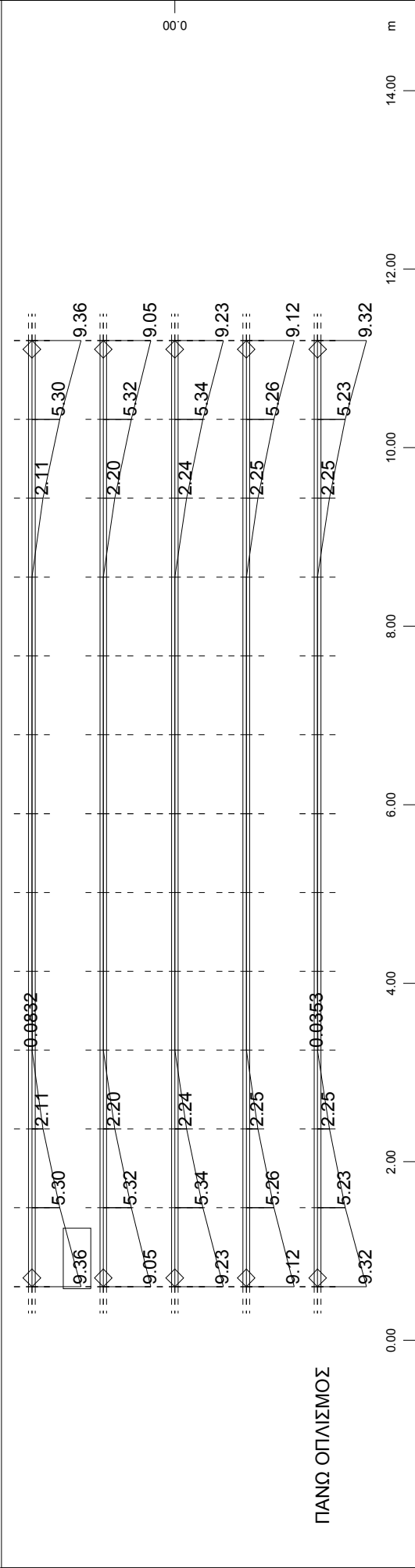
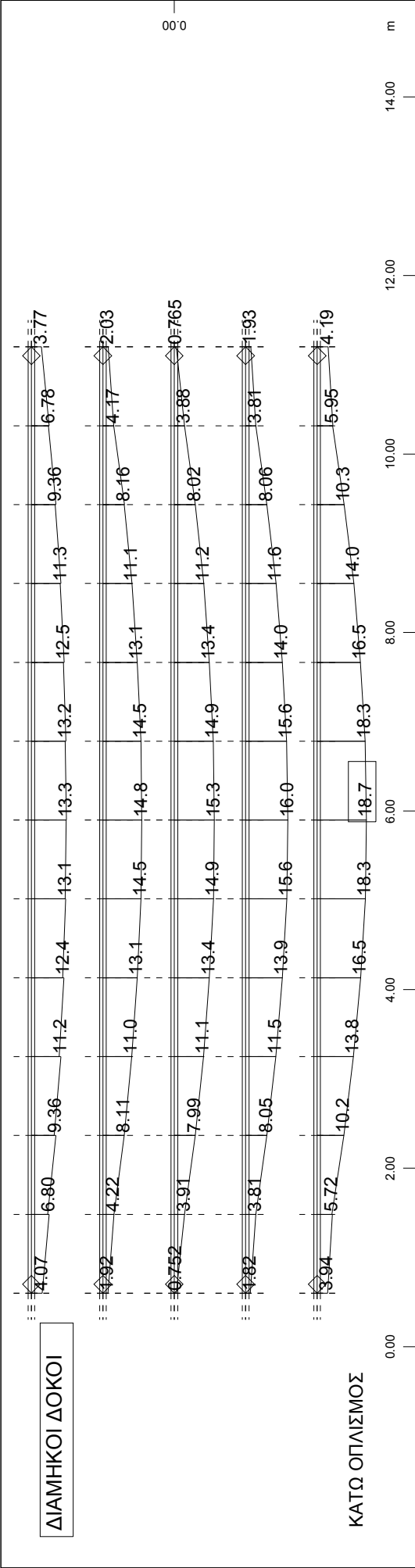
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
FASH-2_CRASH_DOKOI

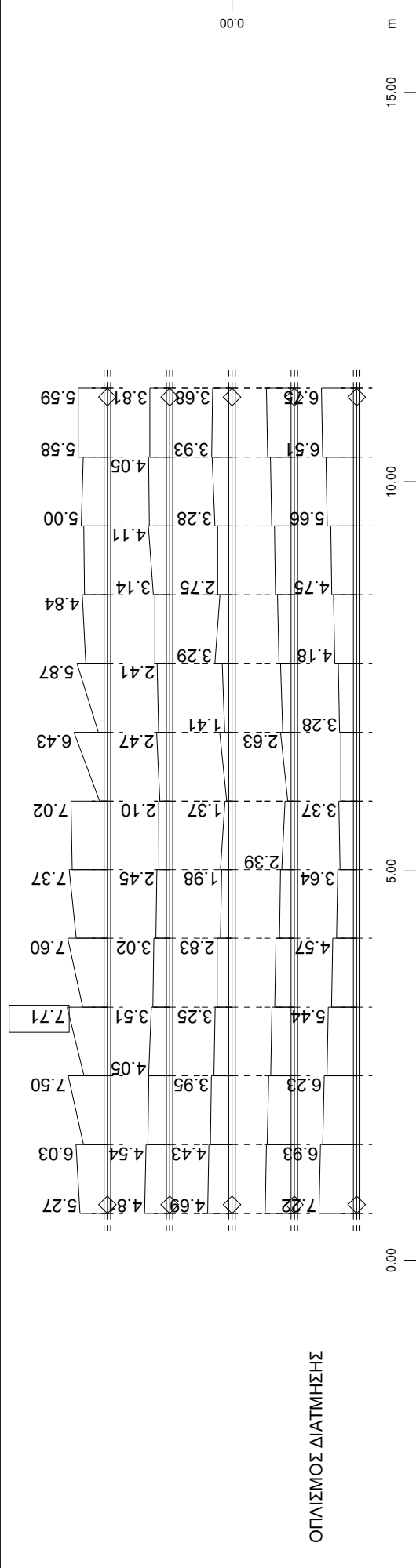
Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | NoS | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1059 | 0.000 | 1 | 4.94 | 5.00 | | | | |
| 1059 | 0.883 | 1 | 4.87 | 4.65 | | | | |
| 1060 | 0.000 | 1 | 5.43 | 5.58 | | | | |
| 1060 | 0.883 | 1 | 5.45 | 5.59 | | | | |
| 2001 | 0.000 | 2 | 0.15 | 6.31 | | | | |
| 2001 | 0.300 | 2 | 0.11 | 6.05 | | | | |
| 2002 | 0.000 | 2 | 0.50 | 6.76 | | | | |
| 2002 | 0.300 | 2 | 0.50 | 6.55 | | | | |
| 2003 | 0.000 | 2 | 0.46 | 5.34 | | | | |
| 2003 | 0.300 | 2 | 0.46 | 5.47 | | | | |
| 2004 | 0.000 | 2 | 0.18 | 5.38 | | | | |
| 2004 | 0.300 | 2 | 0.18 | 5.52 | | | | |
| 2005 | 0.000 | 2 | 0.10 | 4.61 | | | | |
| 2005 | 0.300 | 2 | 0.10 | 4.47 | | | | |
| 2006 | 0.000 | 2 | 0.33 | 5.03 | | | | |
| 2006 | 0.300 | 2 | 0.33 | 4.85 | | | | |
| 2007 | 0.000 | 2 | 0.35 | 4.66 | | | | |
| 2007 | 0.300 | 2 | 0.35 | 4.83 | | | | |
| 2008 | 0.000 | 2 | 0.10 | 4.26 | | | | |
| 2008 | 0.300 | 2 | 0.10 | 4.41 | | | | |
| 2009 | 0.000 | 2 | 0.22 | 4.86 | | | | |
| 2009 | 0.300 | 2 | 0.22 | 4.73 | | | | |
| 2010 | 0.000 | 2 | 0.13 | 5.06 | | | | |
| 2010 | 0.300 | 2 | 0.13 | 4.89 | | | | |
| 2011 | 0.000 | 2 | 0.13 | 3.48 | | | | |
| 2011 | 0.300 | 2 | 0.13 | 3.67 | | | | |
| 2012 | 0.000 | 2 | 0.21 | 3.33 | | | | |
| 2012 | 0.300 | 2 | 0.21 | 3.40 | | | | |
| 2013 | 0.000 | 2 | 0.98 | 5.15 | | | | |
| 2013 | 0.300 | 2 | 0.93 | 4.94 | | | | |
| 2014 | 0.000 | 2 | 0.48 | 5.11 | | | | |
| 2014 | 0.300 | 2 | 0.48 | 4.95 | | | | |
| 2015 | 0.000 | 2 | 0.49 | 3.38 | | | | |
| 2015 | 0.300 | 2 | 0.49 | 3.56 | | | | |
| 2016 | 0.000 | 2 | 1.08 | 4.00 | | | | |
| 2016 | 0.300 | 2 | 0.85 | 4.04 | | | | |
| 2017 | 0.000 | 2 | 1.68 | 3.68 | | | | |
| 2017 | 0.300 | 2 | 1.68 | 3.57 | | | | |
| 2018 | 0.000 | 2 | 3.59 | 5.53 | | | | |
| 2018 | 0.300 | 2 | 3.59 | 5.52 | | | | |
| 2019 | 0.000 | 2 | 0.99 | 3.45 | | | | |
| 2019 | 0.300 | 2 | 0.99 | 3.64 | | | | |
| 2020 | 0.000 | 2 | 0.18 | 2.60 | | | | |
| 2020 | 0.300 | 2 | 0.18 | 3.26 | | | | |

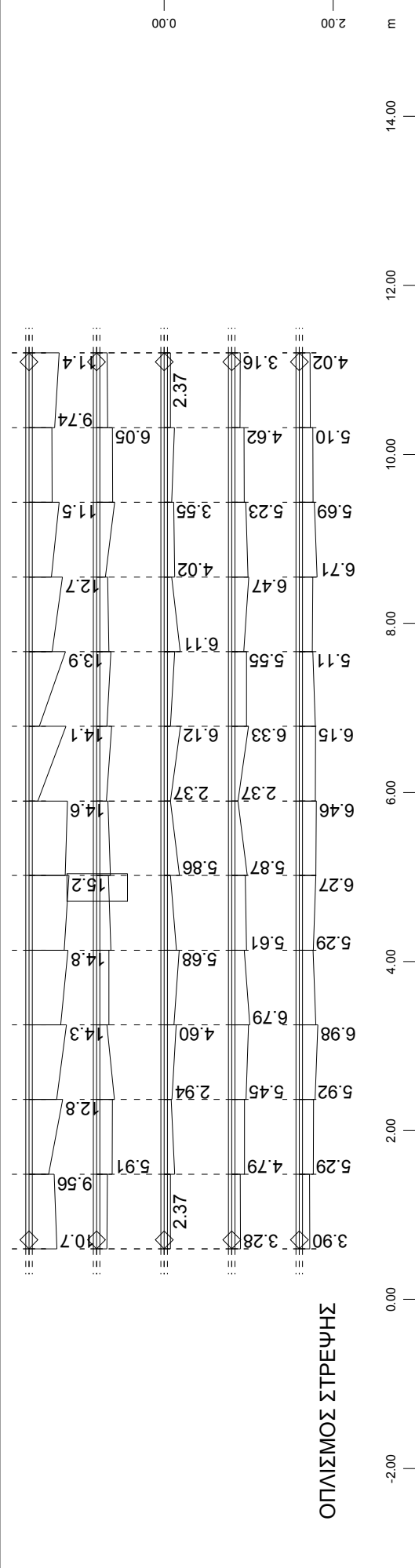
Maximum Degree of Utilization

| | | N sig-c | Vy sig-t | Vz tau | Mt sig-* | My tend. | Mz As-l | Mb As-v | Mt2 crack | Total sigdyn | lamda tau-* |
|--------------|---|------------|-------------|-----------|-------------|-------------|------------|------------|--------------|-----------------|----------------|
| Cross sect. | 1 | 0.000 | 0.000 | 0.208 | 0.765 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| Cross sect. | 2 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 3.751 | 0.000 | 0.000 | 0.000 |
| DOKOS-2 | | 0.000 | 0.000 | 0.076 | 0.240 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.722 | 0.000 | 0.000 | 0.000 |
| Total System | | 0.000 | 0.000 | 0.208 | 0.765 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 3.751 | 0.000 | 0.000 | 0.000 |

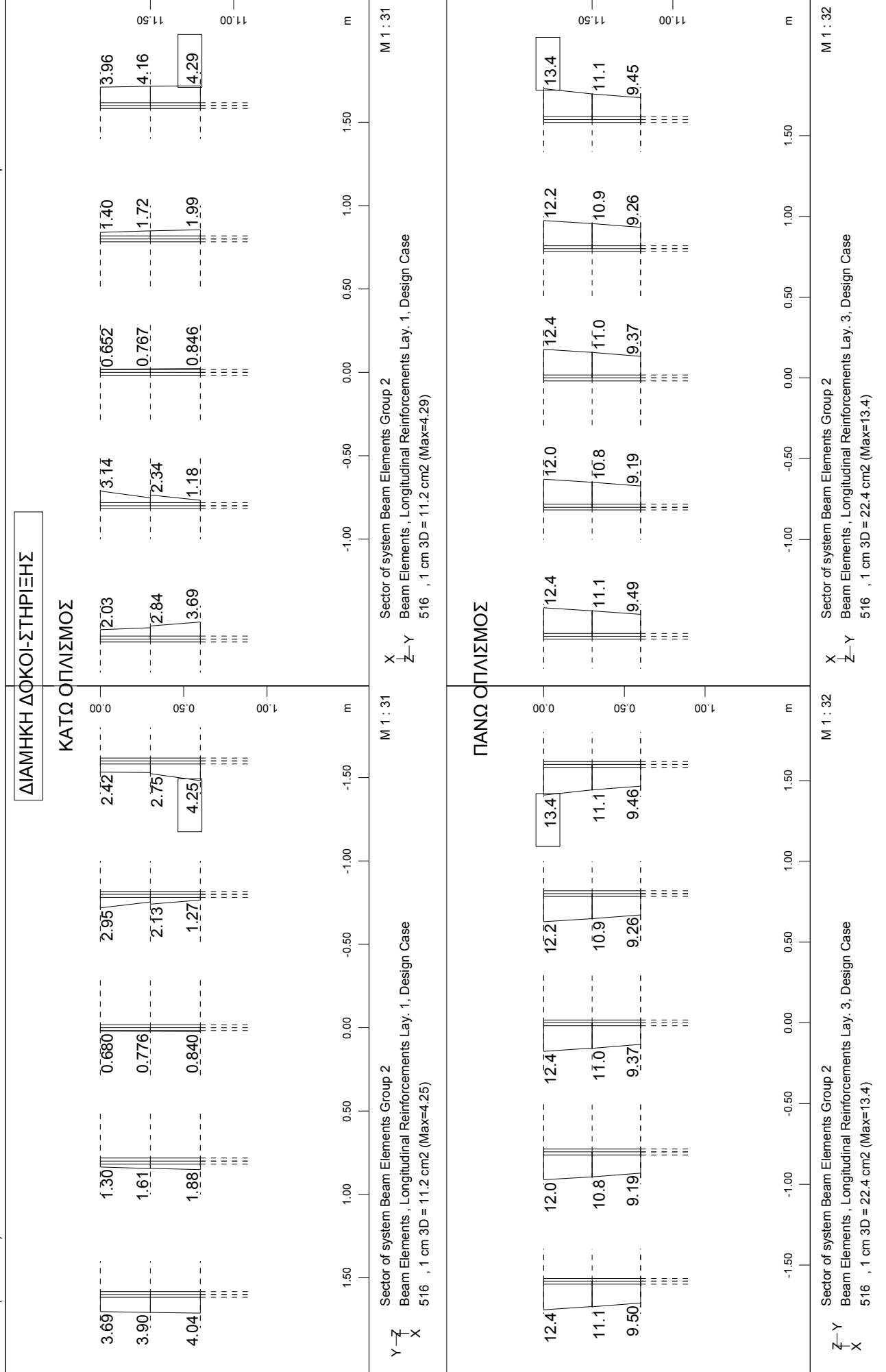


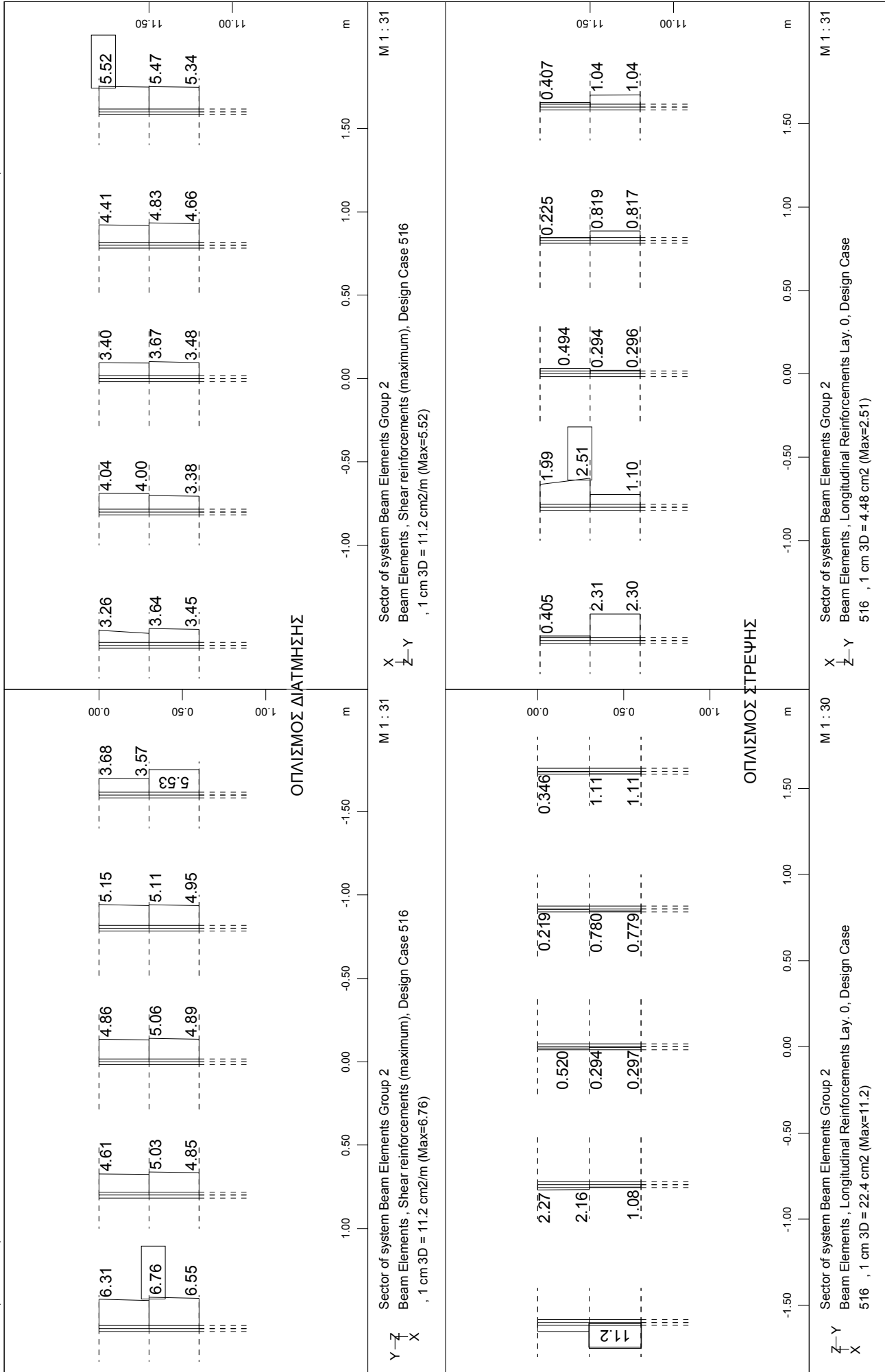


Sector of system Beam Elements Group 1
Beam Elements , Shear reinforcements (maximum), Design Case 516 , 1 cm 3D = 11.2 cm2/m (Max=7.71)

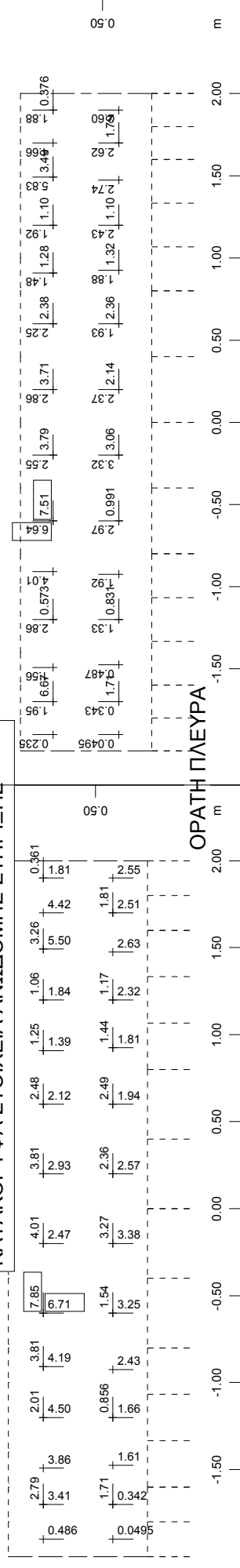


Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 0, Design Case 516 , 1 cm 3D = 22.4 cm2 (Max=15.2)



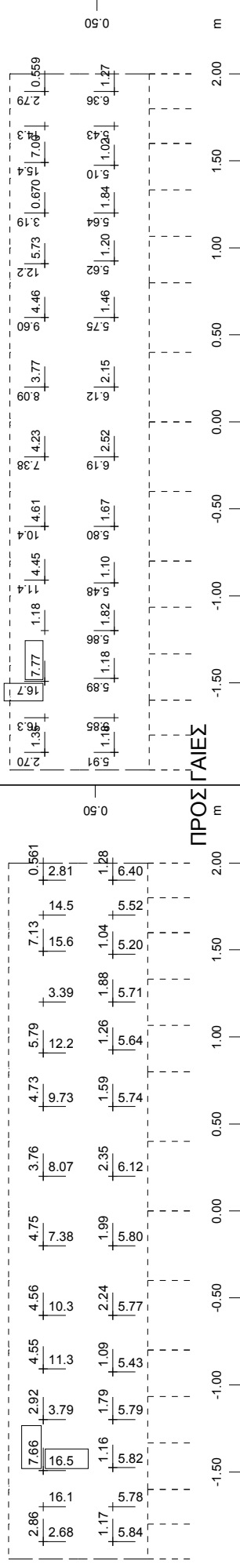


ΚΑΤΑΚΟΡΥΦΑ ΣΤΟΙΧΕΙΑ ΑΝΩΔΟΜΗΣ-ΣΤΗΡΙΞΗΣ



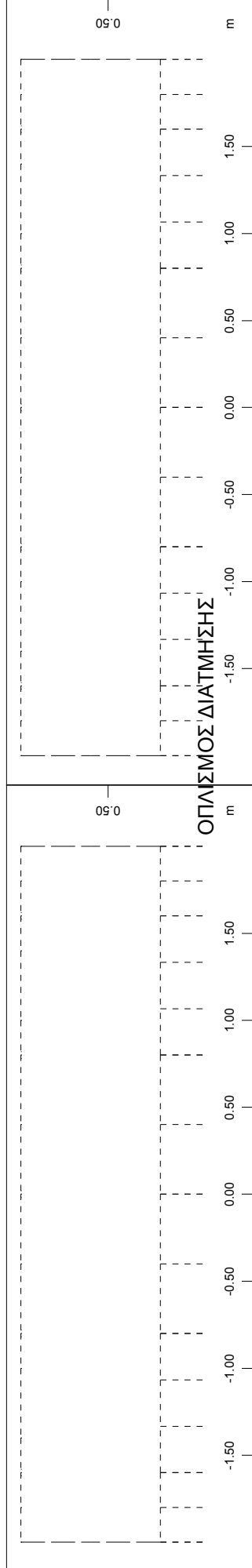
$\begin{matrix} X-Y \\ Z \end{matrix}$ Sector of system Quadrilateral Elements Group 8
 upper Reinforcements in Elements in cm²/m, Design Case 524 ULS
 design (Max=7.85)

$\begin{matrix} X-Y \\ Z \end{matrix}$ Sector of system Quadrilateral Elements Group 8
 upper Reinforcements in Elements in cm²/m, Design Case 524 ULS
 design (Max=7.51)



$\begin{matrix} X-Y \\ Z \end{matrix}$ Sector of system Quadrilateral Elements Group 8
 lower Reinforcements in Elements in cm²/m, Design Case 524 ULS
 design (Max=16.5)

$\begin{matrix} X-Y \\ Z \end{matrix}$ Sector of system Quadrilateral Elements Group 8
 lower Reinforcements in Elements in cm²/m, Design Case 524 ULS
 design (Max=16.7)

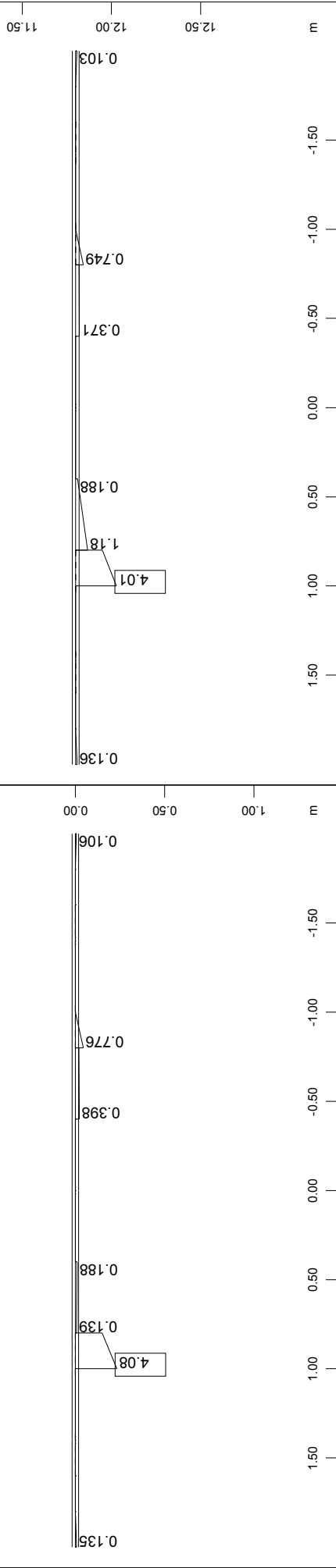


$\begin{matrix} X-Y \\ Z \end{matrix}$ Sector of system Quadrilateral Elements Group 8
 Shear reinforcement from middle of element in cm²/m², Design Case 524 ULS design (Max=0)

$\begin{matrix} X-Y \\ Z \end{matrix}$ Sector of system Quadrilateral Elements Group 8
 Shear reinforcement from middle of element in cm²/m², Design Case 524 ULS design (Max=0)

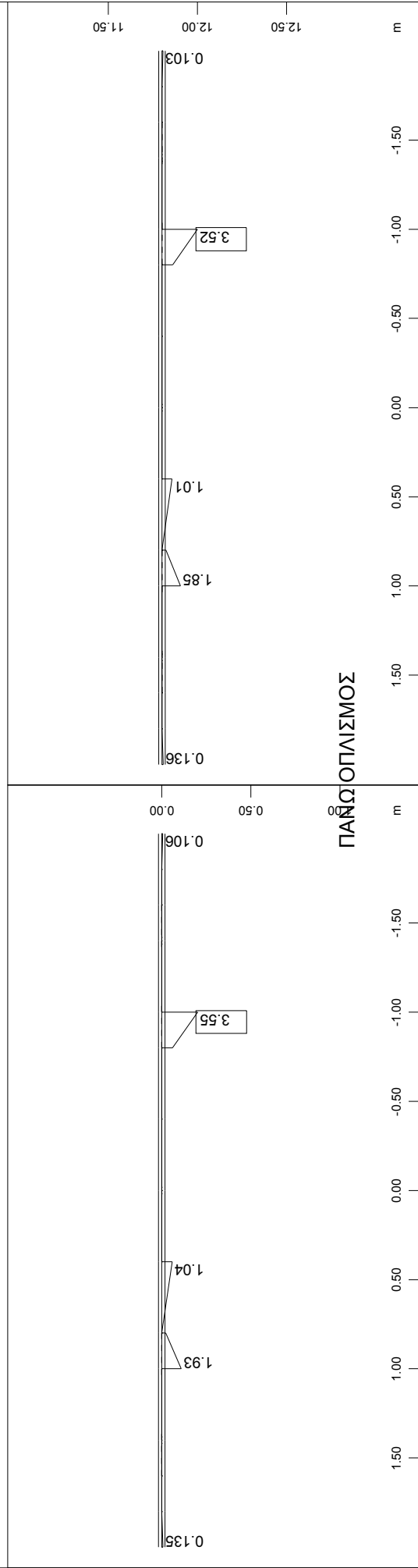
ΠΑΡΑΣΧΟΛΟΓΙΣΜΟΣ

ΚΑΤΩ ΟΠΛΙΣΜΟΣ



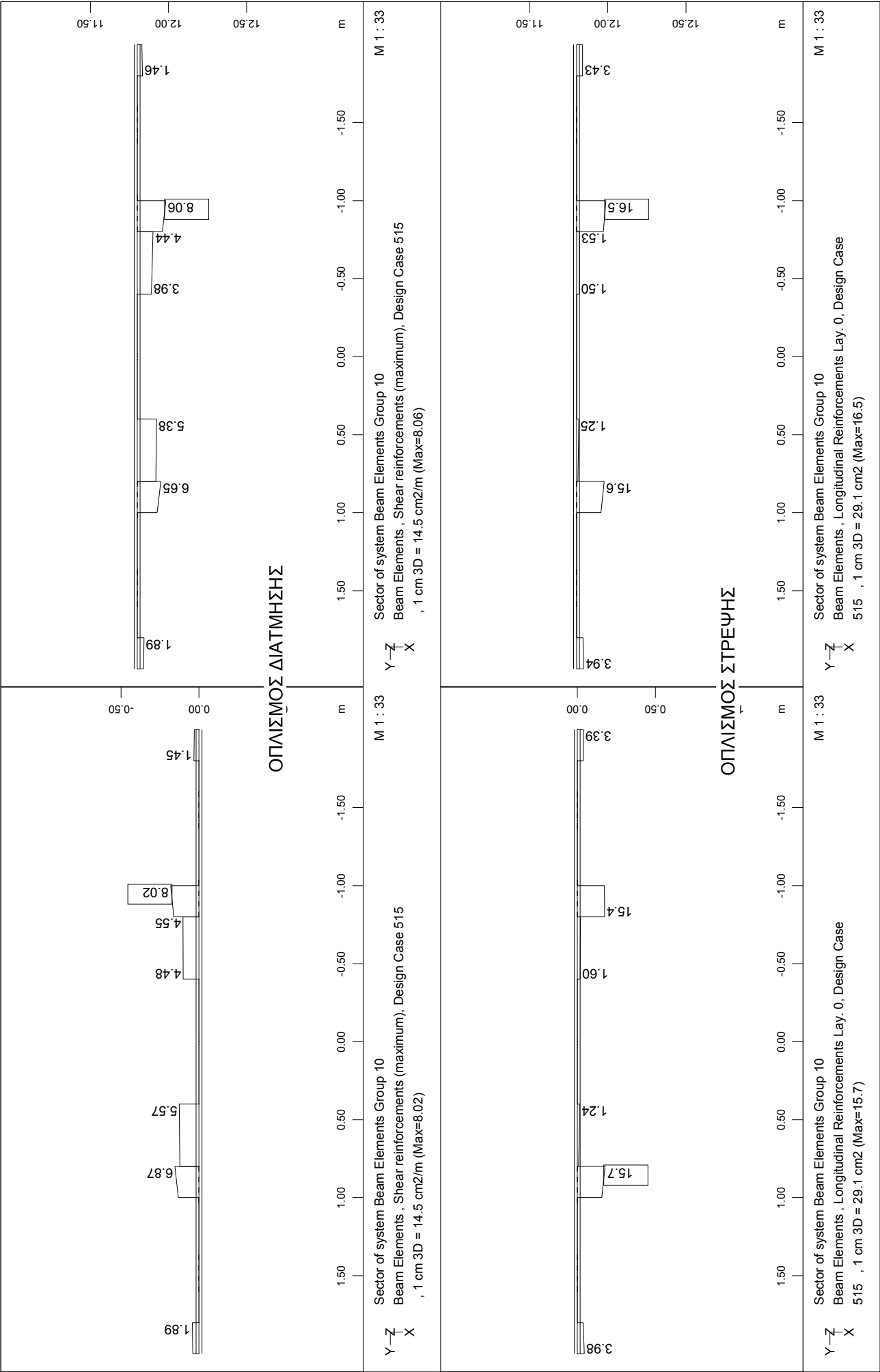
Y-Z
X

Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case
515 , 1 cm 3D = 5.81 cm2 (Max=4.01)

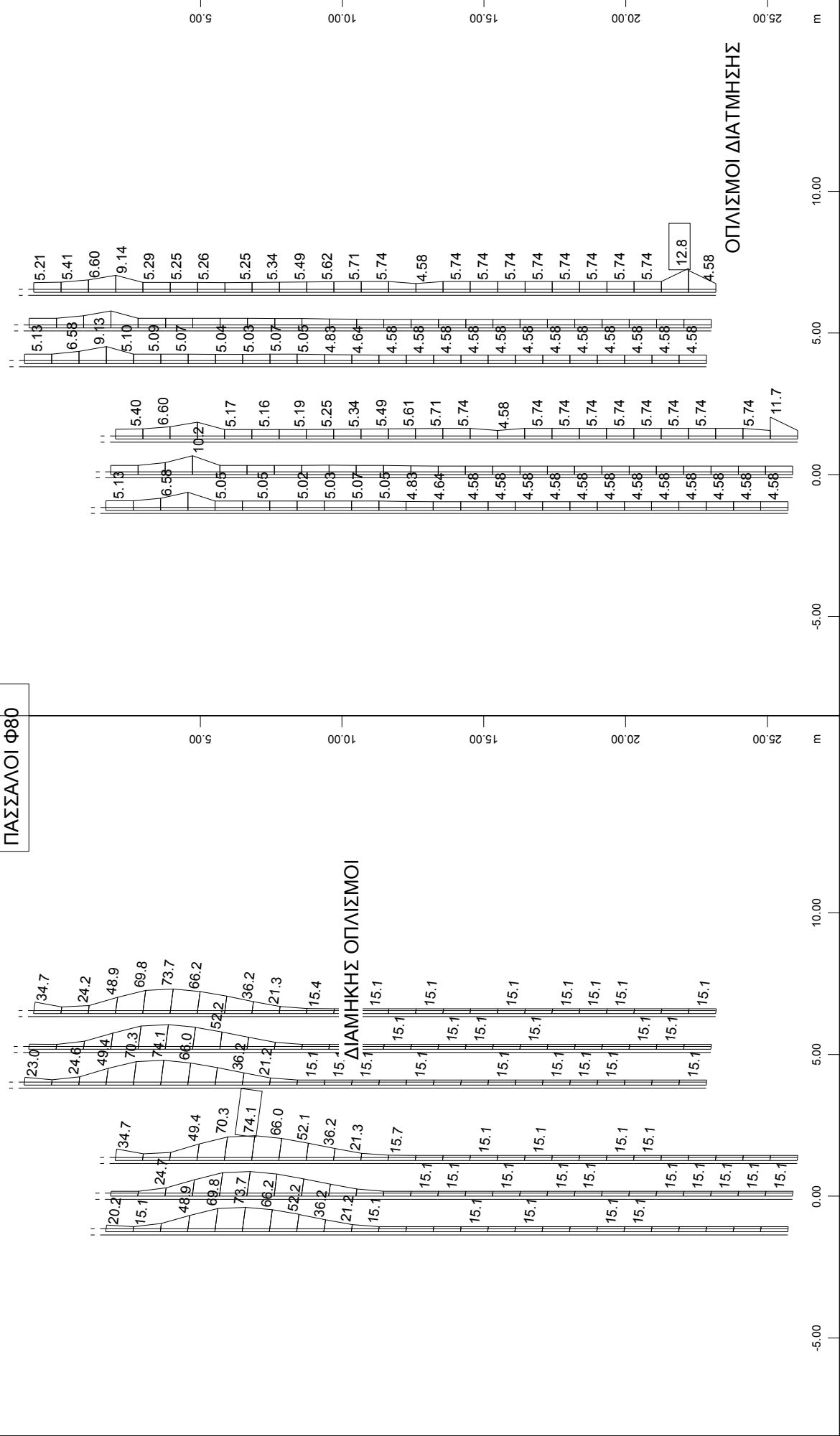


Y-Z
X

Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
515 , 1 cm 3D = 5.81 cm2 (Max=3.52)

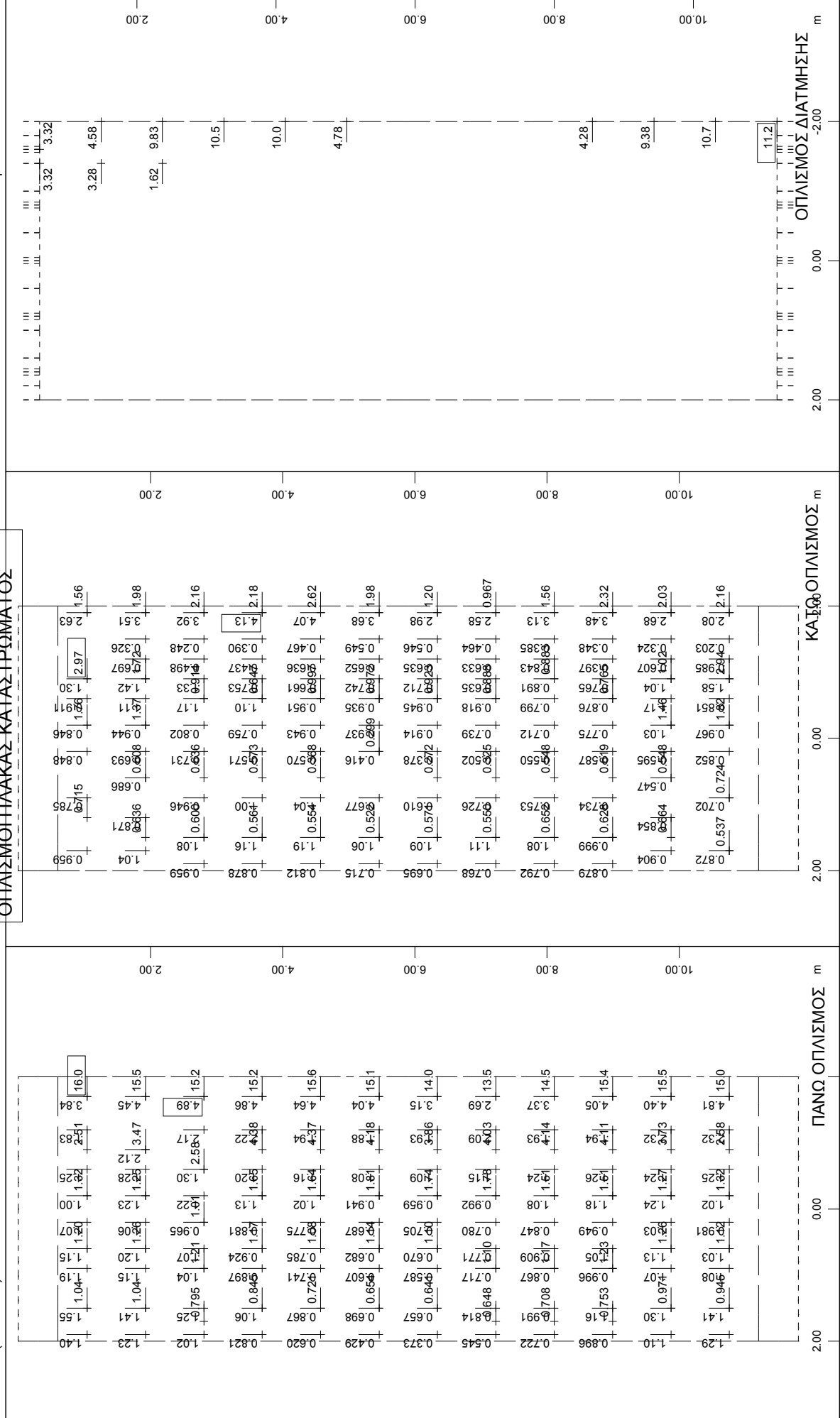


ΠΑΣΣΑΛΟΙ Φ80



| | | |
|--|---|-----------|
| | Sector of system Beam Elements Group 12 | M 1 : 191 |
| | Beam Elements , Longitudinal Reinforcements Lay. 1, Design | X * 0.502 |
| | Case 515 , 1 cm 3D = 145.3 cm2 (Max=74.1) | Y * 0.906 |
| | | Z * 0.962 |
| | Sector of system Beam Elements Group 12 | M 1 : 191 |
| | Beam Elements , Shear reinforcements (maximum), Design Case | X * 0.502 |
| | 515 , 1 cm 3D = 29.1 cm2/m (Max=12.8) | Y * 0.906 |
| | | Z * 0.962 |

ΟΠΛΙΣΜΟΙ ΠΛΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00

9) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ SLS - ΡΗΓΜΑΤΩΣΗ

OPISTIKH MELETH/TEXNIKO TA/L=13.00
SLS(QUASI-PERMANENT)-CRACK w=0.30

Selected Beam Elements

| FROM | TO | INC | X-VALUE | NC | MEMBER | CS0 | CS1 | CS2 | CS3 | CS4 | CS5 |
|-------|------|-----|---------|----|--------|-----|-----|-----|-----|-----|-----|
| 1000 | 1060 | 1 | | 1 | | 10 | 40 | | | | |
| 2000 | 2020 | 1 | | | | | | | | | |
| 10001 | | | | | | | | | | | |
| 10005 | | | | | | | | | | | |
| 10006 | | | | | | | | | | | |
| 10009 | | | | | | | | | | | |
| 10010 | | | | | | | | | | | |
| 10014 | | | | | | | | | | | |
| 10016 | | | | | | | | | | | |
| 10020 | | | | | | | | | | | |
| 10021 | | | | | | | | | | | |
| 10024 | | | | | | | | | | | |
| 10025 | | | | | | | | | | | |
| 10029 | | | | | | | | | | | |

Default design code is DIN Fachbericht 102 Massivbröcken (2003) (Germany)

Klasse(Tab.4.118): D

wind zone : Binnenland

Materials

No. 1 C 25/30 (DIN 1045-1)
No. 3 C 25/30 (DIN 1045-1)
No. 4 C 25/30 (DIN 1045-1)
No. 5 C 25/30 (DIN 1045-1)
No. 6 C 25/30 (DIN 1045-1)
No. 7 C 25/30 (DIN 1045-1)
No. 8 C 25/30 (DIN 1045-1)
No. 9 C 25/30 (DIN 1045-1)
No. 10 C 25/30 (DIN 1045-1)
No. 12 BSt 500 SA (DIN 1045-1)

Reinforcement will be accounted for sectional values as defined in AQUA
Reinforcements saved as design case LCR 508

Considered Load Cases

| No. | refer | act on | Title/type of load case | gam-u | gam-f | psi-0 | psi-1 | psi-2 | psi-1' |
|-----|-------|--------|--|-------|-------|-------|-------|-------|-------------|
| 1 | part. | CS 0 | I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 2 | part. | CS 0 | I.B. ΔΟΚΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 3 | part. | CS 0 | I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 11 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 12 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 13 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 14 | part. | CS 0 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 31 | gross | CS 1 | ΡΥΣΕΙΣ-ΟΔΟΣΤΡΩΣΙΑ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 32 | gross | CS 1 | PEZODROMIO G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 33 | gross | CS 1 | ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50 G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 36 | gross | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 37 | gross | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 38 | gross | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 39 | gross | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 80 | gross | CS 1 | ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ A1 Q (variable load) | 1.50 | 0.00 | 0.70 | 0.50 | 0.30 | 1.00 Q cond |
| 81 | gross | CS 1 | ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ A2 Q (variable load) | 1.50 | 0.00 | 0.70 | 0.50 | 0.30 | 1.00 Q cond |
| 90 | gross | CS 1 | (+ΔTN)+0.75*(+ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 91 | gross | CS 1 | (+ΔTN)+0.75*(-ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 92 | gross | CS 1 | (-ΔTN)+0.75*(+ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 93 | gross | CS 1 | (-ΔTN)+0.75*(-ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 94 | gross | CS 1 | 0.35*(+ΔTN)+(+ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 95 | gross | CS 1 | 0.35*(+ΔTN)+(-ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |

OPIΣTIKH MEΛETH/TECHNIKO TA/L=13.00
SLS(QUASI-PERMANENT)-CRACK w=0.30

Considered Load Cases

| No. refer | act on | Title/type of load case | gam-u | gam-f | psi-0 | psi-1 | psi-2 | psi-1' |
|------------|--------|--|-------|-------|-------|-------|-------|-------------|
| 96 gross | CS 1 | 0.35*(-ΔTN)+(ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 97 gross | CS 1 | 0.35*(-ΔTN)+(-ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 5015 part. | CS 0 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5025 part. | CS 0 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5055 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5060 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5061 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5062 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5063 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5064 part. | CS 1 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 6015 part. | CS 0 | 15 K creep step C (creep + shrinkage) | | | | | | P perm |
| 6025 part. | CS 0 | 25 K creep step C (creep + shrinkage) | | | | | | P perm |
| 6055 part. | CS 1 | 55 K creep step C (creep + shrinkage) | | | | | | P perm |
| 6060 part. | CS 1 | 60 K creep step C (creep + shrinkage) | | | | | | P perm |
| 6061 part. | CS 1 | 61 K creep step C (creep + shrinkage) | | | | | | P perm |
| 6062 part. | CS 1 | 62 K creep step C (creep + shrinkage) | | | | | | P perm |
| 6063 part. | CS 1 | 63 K creep step C (creep + shrinkage) | | | | | | P perm |
| 6064 part. | CS 1 | 64 K creep step C (creep + shrinkage) | | | | | | P perm |

Combinations For Serviceability

1217 (CS-1: 1) max_my-CRACK
MAX + MY :
1.00 * G + 1.00 * L_A + 1.00 * L_B + 1.00 * Q + 1.00 * C + 0.60 * L_C

1218 (CS-1: 1) max_my-CRACK
MIN + MY :
1.00 * G + 1.00 * L_A + 1.00 * L_B + 1.00 * Q + 1.00 * C + 0.60 * L_C

Parameters for nonlinear stresses

Iteration for all forces and moments

Material of sections uses Serviceability strain-stress law without safety factors
Material of reinforcements uses Serviceability strain-stress law without safety factors

| MNO. | temp lev. | Material-safety | max.compr stress | at strain | max.tens stress | at strain | tension-stiffening |
|------|-----------|-----------------|------------------|-----------|-----------------|-----------|--------------------|
| | | [-] | [MPa] | [o/oo] | [MPa] | [o/oo] | [MPa] |
| 1 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 3 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 4 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 5 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 6 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 7 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 8 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 9 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 10 | 0 | 1.000 | -33.00 | -2.20 | 0.00 | 0.00 | |
| 12 | 0 | 1.000 | -550.00 | -25.00 | 550.00 | 25.00 | |

Interaction thin walled normal- and shearstress via Prandtl flow rule

Parameters for nonlinear stress / Crackwidth DIN 1045-1 (neu)

| MNO | design width | bond | load | h-max |
|-----|--------------|-------|------|-------|
| | [mm] | [mm] | [-] | [m] |
| 12 | 0.300 | 0.300 | 0.80 | 0.25 |

check for crack width passed with additional reinforcements

Stiffness is not saved in database

OPISTIKH MELETH/TEKNIKO TA/L=13.00
SLS(QUASI-PERMANENT)-CRACK w=0.30

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | mue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 1001 | 0.000 | 1 | 0.34 | 17.16 | | 3.90T | 3.94 | | 9.32 | |
| 1001 | 0.883 | 1 | 0.30 | 14.81 | | 3.85T | 5.72 | | 5.23 | |
| 1002 | 0.000 | 1 | 0.33 | 16.17 | | 5.29T | 5.65 | | 5.23 | |
| 1002 | 0.883 | 1 | 0.36 | 17.76 | | 5.36T | 10.15 | | 2.24 | |
| 1003 | 0.000 | 1 | 0.37 | 18.31 | | 5.92T | 10.14 | | 2.25 | |
| 1003 | 0.883 | 1 | 0.42 | 20.78 | | 6.98T | 13.80 | | | |
| 1004 | 0.000 | 1 | 0.40 | 20.04 | | 6.22T | 13.79 | | 0.04 | |
| 1004 | 0.883 | 1 | 0.44 | 21.71 | | 5.17T | 16.54 | | | |
| 1005 | 0.000 | 1 | 0.44 | 21.81 | | 5.29T | 16.53 | | | |
| 1005 | 0.883 | 1 | 0.49 | 24.57 | | 6.27T | 18.30 | | | |
| 1006 | 0.000 | 1 | 0.49 | 24.53 | | 6.24T | 18.29 | | | |
| 1006 | 0.883 | 1 | 0.51 | 25.21 | | 6.46T | 18.74 | | | |
| 1007 | 0.000 | 1 | 0.50 | 24.77 | | 6.03T | 18.74 | | | |
| 1007 | 0.883 | 1 | 0.49 | 24.42 | | 6.15T | 18.27 | | | |
| 1008 | 0.000 | 1 | 0.49 | 24.25 | | 5.97T | 18.28 | | | |
| 1008 | 0.883 | 1 | 0.43 | 21.55 | | 5.11T | 16.44 | | | |
| 1009 | 0.000 | 1 | 0.43 | 21.41 | | 4.95T | 16.46 | | | |
| 1009 | 0.883 | 1 | 0.38 | 19.02 | | 5.06T | 13.96 | | | |
| 1010 | 0.000 | 1 | 0.42 | 20.67 | | 6.71T | 13.97 | | | |
| 1010 | 0.883 | 1 | 0.37 | 18.19 | | 5.69T | 10.24 | | 2.25 | |
| 1011 | 0.000 | 1 | 0.36 | 17.66 | | 5.16T | 10.26 | | 2.24 | |
| 1011 | 0.883 | 1 | 0.33 | 16.20 | | 5.10T | 5.87 | | 5.23 | |
| 1012 | 0.000 | 1 | 0.31 | 15.31 | | 4.13T | 5.95 | | 5.23 | |
| 1012 | 0.883 | 1 | 0.35 | 17.53 | | 4.02T | 4.19 | | 9.32 | |
| 1013 | 0.000 | 1 | 0.29 | 14.23 | | 3.28T | 1.82 | | 9.12 | |
| 1013 | 0.883 | 1 | 0.25 | 12.31 | | 3.23T | 3.81 | | 5.26 | |
| 1014 | 0.000 | 1 | 0.28 | 13.86 | | 4.79T | 3.81 | | 5.26 | |
| 1014 | 0.883 | 1 | 0.30 | 15.12 | | 4.84T | 8.03 | | 2.25 | |
| 1015 | 0.000 | 1 | 0.32 | 15.75 | | 5.45T | 8.05 | | 2.25 | |
| 1015 | 0.883 | 1 | 0.36 | 17.86 | | 6.38T | 11.47 | | | |
| 1016 | 0.000 | 1 | 0.37 | 18.28 | | 6.79T | 11.49 | | | |
| 1016 | 0.883 | 1 | 0.37 | 18.62 | | 4.70T | 13.92 | | | |
| 1017 | 0.000 | 1 | 0.39 | 19.52 | | 5.61T | 13.92 | | | |
| 1017 | 0.883 | 1 | 0.42 | 20.72 | | 5.12T | 15.61 | | | |
| 1018 | 0.000 | 1 | 0.43 | 21.48 | | 5.87T | 15.61 | | | |
| 1018 | 0.883 | 1 | 0.37 | 18.39 | | 2.37T | 16.02 | | | |
| 1019 | 0.000 | 1 | 0.37 | 18.40 | | 2.37T | 16.02 | | | |
| 1019 | 0.883 | 1 | 0.44 | 21.90 | | 6.33T | 15.56 | | | |
| 1020 | 0.000 | 1 | 0.42 | 21.11 | | 5.54T | 15.57 | | | |
| 1020 | 0.883 | 1 | 0.39 | 19.51 | | 5.55T | 13.96 | | | |
| 1021 | 0.000 | 1 | 0.37 | 18.53 | | 4.59T | 13.94 | | | |
| 1021 | 0.883 | 1 | 0.36 | 18.03 | | 6.47T | 11.55 | | | |
| 1022 | 0.000 | 1 | 0.36 | 17.67 | | 6.13T | 11.54 | | | |
| 1022 | 0.883 | 1 | 0.31 | 15.54 | | 5.23T | 8.06 | | 2.25 | |
| 1023 | 0.000 | 1 | 0.30 | 14.96 | | 4.67T | 8.04 | | 2.25 | |
| 1023 | 0.883 | 1 | 0.28 | 13.69 | | 4.62T | 3.81 | | 5.26 | |
| 1024 | 0.000 | 1 | 0.24 | 12.18 | | 3.10T | 3.81 | | 5.26 | |
| 1024 | 0.883 | 1 | 0.29 | 14.21 | | 3.16T | 1.93 | | 9.12 | |
| 1025 | 0.000 | 1 | 0.25 | 12.36 | | 2.37T | 0.75 | | 9.23 | |
| 1025 | 0.883 | 1 | 0.23 | 11.63 | | 2.37T | 3.91 | | 5.34 | |
| 1026 | 0.000 | 1 | 0.27 | 13.26 | | 4.01T | 3.91 | | 5.34 | |
| 1026 | 0.883 | 1 | 0.26 | 12.90 | | 2.66T | 7.99 | | 2.24 | |
| 1027 | 0.000 | 1 | 0.26 | 13.18 | | 2.94T | 7.99 | | 2.24 | |
| 1027 | 0.883 | 1 | 0.32 | 15.71 | | 4.60T | 11.10 | | | |
| 1028 | 0.000 | 1 | 0.30 | 14.80 | | 3.69T | 11.10 | | | |
| 1028 | 0.883 | 1 | 0.38 | 19.03 | | 5.68T | 13.36 | | | |
| 1029 | 0.000 | 1 | 0.36 | 18.04 | | 4.68T | 13.36 | | | |
| 1029 | 0.883 | 1 | 0.35 | 17.27 | | 2.37T | 14.90 | | | |
| 1030 | 0.000 | 1 | 0.42 | 20.75 | | 5.86T | 14.90 | | | |
| 1030 | 0.883 | 1 | 0.35 | 17.64 | | 2.37T | 15.27 | | | |
| 1031 | 0.000 | 1 | 0.35 | 17.64 | | 2.37T | 15.27 | | | |
| 1031 | 0.883 | 1 | 0.42 | 20.99 | | 6.12T | 14.87 | | | |
| 1032 | 0.000 | 1 | 0.35 | 17.25 | | 2.37T | 14.87 | | | |
| 1032 | 0.883 | 1 | 0.35 | 17.30 | | 3.94T | 13.36 | | | |
| 1033 | 0.000 | 1 | 0.39 | 19.47 | | 6.11T | 13.36 | | | |
| 1033 | 0.883 | 1 | 0.28 | 14.10 | | 2.90T | 11.20 | | | |
| 1034 | 0.000 | 1 | 0.31 | 15.22 | | 4.02T | 11.20 | | | |
| 1034 | 0.883 | 1 | 0.28 | 13.81 | | 3.55T | 8.02 | | 2.24 | |
| 1035 | 0.000 | 1 | 0.26 | 13.16 | | 2.90T | 8.02 | | 2.24 | |
| 1035 | 0.883 | 1 | 0.26 | 13.09 | | 3.87T | 3.88 | | 5.34 | |
| 1036 | 0.000 | 1 | 0.23 | 11.59 | | 2.37T | 3.87 | | 5.34 | |
| 1036 | 0.883 | 1 | 0.25 | 12.37 | | 2.37T | 0.76 | | 9.23 | |
| 1037 | 0.000 | 1 | 0.30 | 14.89 | | 3.92T | 1.92 | | 9.05 | |
| 1037 | 0.883 | 1 | 0.27 | 13.65 | | 4.11T | 4.22 | | 5.32 | |
| 1038 | 0.000 | 1 | 0.31 | 15.43 | | 5.91T | 4.20 | | 5.32 | |
| 1038 | 0.883 | 1 | 0.33 | 16.29 | | 5.98T | 8.11 | | 2.20 | |

OPIΣTIKH MEΛETH/TECHNIKO TA/L=13.00
SLS(QUASI-PERMANENT)-CRACK w=0.30

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μ _{ue} [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|------|-------|-----|------------------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1039 | 0.000 | 1 | 0.34 | 17.06 | | 6.76T | 8.10 | | | |
| 1039 | 0.883 | 1 | 0.30 | 14.87 | | 3.89T | 10.98 | | | |
| 1040 | 0.000 | 1 | 0.32 | 15.69 | | 4.73T | 10.97 | | | |
| 1040 | 0.883 | 1 | 0.36 | 17.80 | | 4.70T | 13.09 | | | |
| 1041 | 0.000 | 1 | 0.37 | 18.47 | | 5.38T | 13.09 | | | |
| 1041 | 0.883 | 1 | 0.38 | 19.01 | | 4.50T | 14.50 | | | |
| 1042 | 0.000 | 1 | 0.40 | 19.70 | | 5.20T | 14.50 | | | |
| 1042 | 0.883 | 1 | 0.39 | 19.19 | | 4.34T | 14.84 | | | |
| 1043 | 0.000 | 1 | 0.37 | 18.58 | | 3.75T | 14.84 | | | |
| 1043 | 0.883 | 1 | 0.41 | 20.24 | | 5.74T | 14.50 | | | |
| 1044 | 0.000 | 1 | 0.37 | 18.42 | | 3.92T | 14.49 | | | |
| 1044 | 0.883 | 1 | 0.37 | 18.52 | | 5.45T | 13.07 | | | |
| 1045 | 0.000 | 1 | 0.36 | 17.81 | | 4.73T | 13.08 | | | |
| 1045 | 0.883 | 1 | 0.31 | 15.30 | | 4.21T | 11.10 | | | |
| 1046 | 0.000 | 1 | 0.29 | 14.51 | | 3.41T | 11.11 | | | |
| 1046 | 0.883 | 1 | 0.35 | 17.28 | | 6.93T | 8.15 | | 2.20 | |
| 1047 | 0.000 | 1 | 0.33 | 16.47 | | 6.12T | 8.16 | | 2.20 | |
| 1047 | 0.883 | 1 | 0.31 | 15.52 | | 6.05T | 4.16 | | 5.32 | |
| 1048 | 0.000 | 1 | 0.28 | 13.69 | | 4.20T | 4.17 | | 5.32 | |
| 1048 | 0.883 | 1 | 0.30 | 15.09 | | 4.00T | 2.03 | | 9.05 | |
| 1049 | 0.000 | 1 | 0.48 | 24.08 | | 10.65T | 4.07 | | 9.36 | |
| 1049 | 0.883 | 1 | 0.44 | 21.66 | | 9.56T | 6.80 | | 5.30 | |
| 1050 | 0.000 | 1 | 0.38 | 18.90 | | 7.45T | 6.15 | | 5.30 | |
| 1050 | 0.883 | 1 | 0.49 | 24.27 | | 12.81T | 9.36 | | 2.10 | |
| 1051 | 0.000 | 1 | 0.43 | 21.20 | | 10.50T | 8.59 | | 2.11 | |
| 1051 | 0.883 | 1 | 0.51 | 25.50 | | 14.26T | 11.24 | | | |
| 1052 | 0.000 | 1 | 0.45 | 22.63 | | 11.97T | 10.57 | | 0.08 | |
| 1052 | 0.883 | 1 | 0.55 | 27.24 | | 14.84T | 12.40 | | | |
| 1053 | 0.000 | 1 | 0.51 | 25.26 | | 13.37T | 11.89 | | | |
| 1053 | 0.883 | 1 | 0.57 | 28.21 | | 15.15T | 13.05 | | | |
| 1054 | 0.000 | 1 | 0.54 | 26.66 | | 13.78T | 12.88 | | | |
| 1054 | 0.883 | 1 | 0.56 | 27.81 | | 14.63T | 13.18 | | | |
| 1055 | 0.000 | 1 | 0.34 | 16.75 | | 3.41T | 13.34 | | | |
| 1055 | 0.883 | 1 | 0.54 | 27.01 | | 14.09T | 12.91 | | | |
| 1056 | 0.000 | 1 | 0.34 | 17.03 | | 3.87T | 13.16 | | | |
| 1056 | 0.883 | 1 | 0.52 | 26.05 | | 13.85T | 12.20 | | | |
| 1057 | 0.000 | 1 | 0.43 | 21.25 | | 8.77T | 12.48 | | | |
| 1057 | 0.883 | 1 | 0.48 | 23.70 | | 12.71T | 10.94 | | 0.04 | |
| 1058 | 0.000 | 1 | 0.40 | 19.80 | | 8.54T | 11.26 | | | |
| 1058 | 0.883 | 1 | 0.46 | 22.65 | | 11.50T | 9.04 | | 2.11 | |
| 1059 | 0.000 | 1 | 0.41 | 20.28 | | 8.82T | 9.36 | | 2.10 | |
| 1059 | 0.883 | 1 | 0.41 | 20.56 | | 8.76T | 6.50 | | 5.30 | |
| 1060 | 0.000 | 1 | 0.44 | 21.82 | | 9.74T | 6.78 | | 5.29 | |
| 1060 | 0.883 | 1 | 0.49 | 24.56 | | 11.44T | 3.77 | | 9.36 | |
| 2001 | 0.000 | 2 | 0.26 | 20.90 | | 0.43T | 3.69 | | 16.78 | |
| 2001 | 0.300 | 2 | 0.25 | 19.76 | | 0.34T | 3.90 | | 15.51 | |
| 2002 | 0.000 | 2 | 0.26 | 20.50 | | 1.47T | 3.88 | | 15.14 | |
| 2002 | 0.300 | 2 | 0.24 | 19.50 | | 1.58T | 4.04 | | 13.88 | |
| 2003 | 0.000 | 2 | 0.25 | 19.69 | | 1.49T | 4.29 | | 13.91 | |
| 2003 | 0.300 | 2 | 0.26 | 20.70 | | 1.38T | 4.15 | | 15.17 | |
| 2004 | 0.000 | 2 | 0.25 | 20.16 | | 0.57T | 4.16 | | 15.43 | |
| 2004 | 0.300 | 2 | 0.27 | 21.21 | | 0.50T | 3.96 | | 16.74 | |
| 2005 | 0.000 | 2 | 0.22 | 17.89 | | 0.29T | 1.30 | | 16.30 | |
| 2005 | 0.300 | 2 | 0.21 | 17.01 | | 0.31T | 1.61 | | 15.09 | |
| 2006 | 0.000 | 2 | 0.22 | 17.52 | | 1.05T | 1.61 | | 14.86 | |
| 2006 | 0.300 | 2 | 0.21 | 16.81 | | 1.14T | 1.88 | | 13.80 | |
| 2007 | 0.000 | 2 | 0.21 | 16.96 | | 1.19T | 1.99 | | 13.78 | |
| 2007 | 0.300 | 2 | 0.22 | 17.66 | | 1.10T | 1.72 | | 14.85 | |
| 2008 | 0.000 | 2 | 0.21 | 17.13 | | 0.31T | 1.72 | | 15.10 | |
| 2008 | 0.300 | 2 | 0.23 | 18.01 | | 0.30T | 1.40 | | 16.31 | |
| 2009 | 0.000 | 2 | 0.22 | 17.96 | | 0.69T | 0.68 | | 16.59 | |
| 2009 | 0.300 | 2 | 0.21 | 16.76 | | 0.71T | 0.78 | | 15.27 | |
| 2010 | 0.000 | 2 | 0.21 | 16.58 | | 0.41T | 0.76 | | 15.42 | |
| 2010 | 0.300 | 2 | 0.19 | 15.49 | | 0.45T | 0.84 | | 14.20 | |
| 2011 | 0.000 | 2 | 0.19 | 15.50 | | 0.44T | 0.85 | | 14.20 | |
| 2011 | 0.300 | 2 | 0.21 | 16.58 | | 0.41T | 0.75 | | 15.43 | |
| 2012 | 0.000 | 2 | 0.21 | 16.74 | | 0.68T | 0.77 | | 15.29 | |
| 2012 | 0.300 | 2 | 0.22 | 17.91 | | 0.65T | 0.65 | | 16.61 | |
| 2013 | 0.000 | 2 | 0.27 | 21.70 | | 2.86T | 2.95 | | 15.89 | |
| 2013 | 0.300 | 2 | 0.24 | 19.15 | | 2.81T | 1.67 | | 14.67 | |
| 2014 | 0.000 | 2 | 0.23 | 18.78 | | 1.48T | 2.13 | | 15.17 | |
| 2014 | 0.300 | 2 | 0.21 | 16.79 | | 1.59T | 1.27 | | 13.93 | |
| 2015 | 0.000 | 2 | 0.21 | 16.73 | | 1.62T | 1.18 | | 13.93 | |
| 2015 | 0.300 | 2 | 0.24 | 19.00 | | 1.50T | 2.34 | | 15.16 | |
| 2016 | 0.000 | 2 | 0.24 | 19.54 | | 3.21T | 1.74 | | 14.59 | |
| 2016 | 0.300 | 2 | 0.27 | 21.67 | | 2.53T | 3.14 | | 16.00 | |

OPISTIKH MELETH/TEKNIKO TA/L=13.00
SLS(QUASI-PERMANENT)-CRACK w=0.30

Longitudinal Reinforcements Accumulated minimum

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | mue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|-------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 2017 | 0.000 | 2 | 0.30 | 24.11 | | 4.90T | 2.42 | | 16.78 | |
| 2017 | 0.300 | 2 | 0.28 | 22.75 | | 4.94T | 2.52 | | 15.29 | |
| 2018 | 0.000 | 2 | 0.36 | 28.88 | | 12.79T | 2.75 | | 13.34 | |
| 2018 | 0.300 | 2 | 0.34 | 27.51 | | 12.26T | 4.25 | | 11.00 | |
| 2019 | 0.000 | 2 | 0.26 | 20.99 | | 3.21T | 3.69 | | 14.10 | |
| 2019 | 0.300 | 2 | 0.27 | 21.53 | | 3.09T | 2.84 | | 15.61 | |
| 2020 | 0.000 | 2 | 0.24 | 19.53 | | 0.60T | 2.48 | | 16.45 | |
| 2020 | 0.300 | 2 | 0.26 | 20.54 | | 0.58T | 2.03 | | 17.92 | |
| 10001 | 0.000 | 8 | 0.04 | 5.17 | | 4.84T | 0.16 | | 0.16 | |
| 10001 | 0.200 | 8 | 0.51 | 67.49 | | 67.49T | | | | |
| 10005 | 0.000 | 8 | 0.15 | 19.83 | | 13.82T | 4.08 | | 1.93 | |
| 10005 | 0.200 | 8 | 0.14 | 18.71 | | 15.67T | 2.64 | | 0.40 | |
| 10006 | 0.000 | 8 | 0.01 | 0.83 | | 0.69T | 0.14 | | | |
| 10006 | 0.400 | 8 | 0.30 | 39.45 | | 23.26T | 15.15 | | 1.04 | |
| 10009 | 0.000 | 8 | 0.28 | 37.13 | | 21.23T | 15.90 | | | |
| 10009 | 0.400 | 8 | 0.04 | 4.72 | | 2.96T | 1.76 | | | |
| 10010 | 0.000 | 8 | 0.13 | 17.21 | | 15.37T | 0.78 | | 1.06 | |
| 10010 | 0.200 | 8 | 0.14 | 18.85 | | 15.31T | | | 3.55 | |
| 10014 | 0.000 | 8 | 0.51 | 67.02 | | 67.02T | | | | |
| 10014 | 0.200 | 8 | 0.04 | 5.23 | | 4.92T | 0.15 | | 0.15 | |
| 10016 | 0.000 | 8 | 0.04 | 5.27 | | 4.93T | 0.17 | | 0.17 | |
| 10016 | 0.200 | 8 | 0.51 | 67.37 | | 67.37T | | | | |
| 10020 | 0.000 | 8 | 0.15 | 19.60 | | 13.74T | 4.01 | | 1.85 | |
| 10020 | 0.200 | 8 | 0.14 | 18.60 | | 15.56T | 2.63 | | 0.40 | |
| 10021 | 0.000 | 8 | 0.01 | 1.92 | | 0.74T | 1.18 | | | |
| 10021 | 0.400 | 8 | 0.28 | 37.18 | | 21.91T | 14.26 | | 1.01 | |
| 10024 | 0.000 | 8 | 0.28 | 37.17 | | 21.26T | 15.91 | | | |
| 10024 | 0.400 | 8 | 0.04 | 4.77 | | 2.97T | 1.80 | | | |
| 10025 | 0.000 | 8 | 0.13 | 16.87 | | 15.05T | 0.75 | | 1.07 | |
| 10025 | 0.200 | 8 | 0.15 | 20.06 | | 16.54T | | | 3.52 | |
| 10029 | 0.000 | 8 | 0.03 | 3.43 | | 3.43T | | | | |
| 10029 | 0.200 | 8 | 0.05 | 7.23 | | 6.81T | 0.21 | | 0.21 | |

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | Nos | Asl-Mt [cm2/m] | SLay-0&5 [cm2/m] | SLay-1&6 [cm2/m] | SLay-2&7 [cm2/m] | SLay-3&8 [cm2/m] | SLay-4&9 [cm2/m] |
|------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1001 | 0.000 | 1 | 2.25 | 7.22 | | | | |
| 1001 | 0.883 | 1 | 2.19 | 6.93 | | | | |
| 1002 | 0.000 | 1 | 3.01 | 6.46 | | | | |
| 1002 | 0.883 | 1 | 3.01 | 6.23 | | | | |
| 1003 | 0.000 | 1 | 3.32 | 5.68 | | | | |
| 1003 | 0.883 | 1 | 3.32 | 5.44 | | | | |
| 1004 | 0.000 | 1 | 3.45 | 4.81 | | | | |
| 1004 | 0.883 | 1 | 3.45 | 4.57 | | | | |
| 1005 | 0.000 | 1 | 3.48 | 3.87 | | | | |
| 1005 | 0.883 | 1 | 3.48 | 3.64 | | | | |
| 1006 | 0.000 | 1 | 3.45 | 3.16 | | | | |
| 1006 | 0.883 | 1 | 3.70 | 3.37 | | | | |
| 1007 | 0.000 | 1 | 3.45 | 3.05 | | | | |
| 1007 | 0.883 | 1 | 3.52 | 3.02 | | | | |
| 1008 | 0.000 | 1 | 3.31 | 3.28 | | | | |
| 1008 | 0.883 | 1 | 3.32 | 3.51 | | | | |
| 1009 | 0.000 | 1 | 3.30 | 4.18 | | | | |
| 1009 | 0.883 | 1 | 3.30 | 4.41 | | | | |
| 1010 | 0.000 | 1 | 3.19 | 4.75 | | | | |
| 1010 | 0.883 | 1 | 3.19 | 4.97 | | | | |
| 1011 | 0.000 | 1 | 2.89 | 5.66 | | | | |
| 1011 | 0.883 | 1 | 2.89 | 5.88 | | | | |
| 1012 | 0.000 | 1 | 2.24 | 6.51 | | | | |
| 1012 | 0.883 | 1 | 2.24 | 6.75 | | | | |
| 1013 | 0.000 | 1 | 1.87 | 5.60 | | | | |
| 1013 | 0.883 | 1 | 1.82 | 5.35 | | | | |
| 1014 | 0.000 | 1 | 2.70 | 5.17 | | | | |
| 1014 | 0.883 | 1 | 2.70 | 4.95 | | | | |
| 1015 | 0.000 | 1 | 3.04 | 4.52 | | | | |
| 1015 | 0.883 | 1 | 3.04 | 4.29 | | | | |
| 1016 | 0.000 | 1 | 3.24 | 3.74 | | | | |
| 1016 | 0.883 | 1 | 2.66 | 3.51 | | | | |
| 1017 | 0.000 | 1 | 3.18 | 2.87 | | | | |
| 1017 | 0.883 | 1 | 2.91 | 2.66 | | | | |
| 1018 | 0.000 | 1 | 3.34 | 2.39 | | | | |
| 1018 | 0.883 | 1 | 0.84 | 1.79 | | | | |
| 1019 | 0.000 | 1 | 0.89 | 1.28 | | | | |
| 1019 | 0.883 | 1 | 3.60 | 2.63 | | | | |
| 1020 | 0.000 | 1 | 3.15 | 2.23 | | | | |
| 1020 | 0.883 | 1 | 3.15 | 2.66 | | | | |

OPIΣTIKH MEΛETH/TECHNIKO TA/L=13.00
SLS (QUASI-PERMANENT) - CRACK w=0.30

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | NoS | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|------|------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
|------|------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|

| | | | | | | | | |
|------|-------|---|------|------|--|--|--|--|
| 1021 | 0.000 | 1 | 2.60 | 2.93 | | | | |
| 1021 | 0.883 | 1 | 3.08 | 3.24 | | | | |
| 1022 | 0.000 | 1 | 2.92 | 3.59 | | | | |
| 1022 | 0.883 | 1 | 2.92 | 3.82 | | | | |
| 1023 | 0.000 | 1 | 2.60 | 4.33 | | | | |
| 1023 | 0.883 | 1 | 2.60 | 4.56 | | | | |
| 1024 | 0.000 | 1 | 1.75 | 5.10 | | | | |
| 1024 | 0.883 | 1 | 1.80 | 5.36 | | | | |
| 1025 | 0.000 | 1 | 0.64 | 4.69 | | | | |
| 1025 | 0.883 | 1 | 0.95 | 4.43 | | | | |
| 1026 | 0.000 | 1 | 2.24 | 4.18 | | | | |
| 1026 | 0.883 | 1 | 1.49 | 3.95 | | | | |
| 1027 | 0.000 | 1 | 1.63 | 3.48 | | | | |
| 1027 | 0.883 | 1 | 2.59 | 3.25 | | | | |
| 1028 | 0.000 | 1 | 2.08 | 2.84 | | | | |
| 1028 | 0.883 | 1 | 3.21 | 2.83 | | | | |
| 1029 | 0.000 | 1 | 2.65 | 2.21 | | | | |
| 1029 | 0.883 | 1 | 0.58 | 1.98 | | | | |
| 1030 | 0.000 | 1 | 3.33 | 2.20 | | | | |
| 1030 | 0.883 | 1 | 0.56 | 1.37 | | | | |
| 1031 | 0.000 | 1 | 0.54 | 1.03 | | | | |
| 1031 | 0.883 | 1 | 3.47 | 2.37 | | | | |
| 1032 | 0.000 | 1 | 0.59 | 1.41 | | | | |
| 1032 | 0.883 | 1 | 2.23 | 1.85 | | | | |
| 1033 | 0.000 | 1 | 3.46 | 3.29 | | | | |
| 1033 | 0.883 | 1 | 1.63 | 2.29 | | | | |
| 1034 | 0.000 | 1 | 2.27 | 2.75 | | | | |
| 1034 | 0.883 | 1 | 1.97 | 2.74 | | | | |
| 1035 | 0.000 | 1 | 1.62 | 3.28 | | | | |
| 1035 | 0.883 | 1 | 2.17 | 3.78 | | | | |
| 1036 | 0.000 | 1 | 0.93 | 3.93 | | | | |
| 1036 | 0.883 | 1 | 0.72 | 3.68 | | | | |
| 1037 | 0.000 | 1 | 2.24 | 4.81 | | | | |
| 1037 | 0.883 | 1 | 2.32 | 4.54 | | | | |
| 1038 | 0.000 | 1 | 3.33 | 4.21 | | | | |
| 1038 | 0.883 | 1 | 3.33 | 3.98 | | | | |
| 1039 | 0.000 | 1 | 3.77 | 4.05 | | | | |
| 1039 | 0.883 | 1 | 2.19 | 3.51 | | | | |
| 1040 | 0.000 | 1 | 2.66 | 3.25 | | | | |
| 1040 | 0.883 | 1 | 2.66 | 3.02 | | | | |
| 1041 | 0.000 | 1 | 3.05 | 2.69 | | | | |
| 1041 | 0.883 | 1 | 2.56 | 2.45 | | | | |
| 1042 | 0.000 | 1 | 2.95 | 2.08 | | | | |
| 1042 | 0.883 | 1 | 2.47 | 2.10 | | | | |
| 1043 | 0.000 | 1 | 2.13 | 1.90 | | | | |
| 1043 | 0.883 | 1 | 3.26 | 2.47 | | | | |
| 1044 | 0.000 | 1 | 2.23 | 2.10 | | | | |
| 1044 | 0.883 | 1 | 3.09 | 2.41 | | | | |
| 1045 | 0.000 | 1 | 2.68 | 2.84 | | | | |
| 1045 | 0.883 | 1 | 2.37 | 2.85 | | | | |
| 1046 | 0.000 | 1 | 1.92 | 3.14 | | | | |
| 1046 | 0.883 | 1 | 3.86 | 4.11 | | | | |
| 1047 | 0.000 | 1 | 3.41 | 3.91 | | | | |
| 1047 | 0.883 | 1 | 3.41 | 4.05 | | | | |
| 1048 | 0.000 | 1 | 2.37 | 3.79 | | | | |
| 1048 | 0.883 | 1 | 2.29 | 3.81 | | | | |
| 1049 | 0.000 | 1 | 5.86 | 5.27 | | | | |
| 1049 | 0.883 | 1 | 5.33 | 6.03 | | | | |
| 1050 | 0.000 | 1 | 4.15 | 4.59 | | | | |
| 1050 | 0.883 | 1 | 7.17 | 7.50 | | | | |
| 1051 | 0.000 | 1 | 5.88 | 4.48 | | | | |
| 1051 | 0.883 | 1 | 8.00 | 7.71 | | | | |
| 1052 | 0.000 | 1 | 6.73 | 4.71 | | | | |
| 1052 | 0.883 | 1 | 8.35 | 7.60 | | | | |
| 1053 | 0.000 | 1 | 7.53 | 5.99 | | | | |
| 1053 | 0.883 | 1 | 8.53 | 7.37 | | | | |
| 1054 | 0.000 | 1 | 7.77 | 6.75 | | | | |
| 1054 | 0.883 | 1 | 8.24 | 7.02 | | | | |
| 1055 | 0.000 | 1 | 1.88 | 1.49 | | | | |
| 1055 | 0.883 | 1 | 7.94 | 6.43 | | | | |
| 1056 | 0.000 | 1 | 2.13 | 1.77 | | | | |
| 1056 | 0.883 | 1 | 7.80 | 5.87 | | | | |
| 1057 | 0.000 | 1 | 4.18 | 4.15 | | | | |
| 1057 | 0.883 | 1 | 7.14 | 4.84 | | | | |
| 1058 | 0.000 | 1 | 4.07 | 4.39 | | | | |
| 1058 | 0.883 | 1 | 6.43 | 4.54 | | | | |
| 1059 | 0.000 | 1 | 4.94 | 5.00 | | | | |
| 1059 | 0.883 | 1 | 4.87 | 4.65 | | | | |

OPIΣTIKH MEΛETH/TEKNIKO TA/L=13.00
SLS (QUASI-PERMANENT) - CRACK w=0.30

Shear Reinforcements per Cutted Part of Section Accumulated minimum

| Beam | x[m] | NoS | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|-------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1060 | 0.000 | 1 | 5.43 | 5.58 | | | | |
| 1060 | 0.883 | 1 | 5.45 | 5.59 | | | | |
| 2001 | 0.000 | 2 | 0.15 | 6.31 | | | | |
| 2001 | 0.300 | 2 | 0.11 | 6.05 | | | | |
| 2002 | 0.000 | 2 | 0.50 | 6.76 | | | | |
| 2002 | 0.300 | 2 | 0.50 | 6.55 | | | | |
| 2003 | 0.000 | 2 | 0.46 | 5.34 | | | | |
| 2003 | 0.300 | 2 | 0.46 | 5.47 | | | | |
| 2004 | 0.000 | 2 | 0.18 | 5.38 | | | | |
| 2004 | 0.300 | 2 | 0.18 | 5.52 | | | | |
| 2005 | 0.000 | 2 | 0.10 | 4.61 | | | | |
| 2005 | 0.300 | 2 | 0.10 | 4.47 | | | | |
| 2006 | 0.000 | 2 | 0.33 | 5.03 | | | | |
| 2006 | 0.300 | 2 | 0.33 | 4.85 | | | | |
| 2007 | 0.000 | 2 | 0.35 | 4.66 | | | | |
| 2007 | 0.300 | 2 | 0.35 | 4.83 | | | | |
| 2008 | 0.000 | 2 | 0.10 | 4.26 | | | | |
| 2008 | 0.300 | 2 | 0.10 | 4.41 | | | | |
| 2009 | 0.000 | 2 | 0.22 | 4.86 | | | | |
| 2009 | 0.300 | 2 | 0.22 | 4.73 | | | | |
| 2010 | 0.000 | 2 | 0.13 | 5.06 | | | | |
| 2010 | 0.300 | 2 | 0.13 | 4.89 | | | | |
| 2011 | 0.000 | 2 | 0.13 | 3.48 | | | | |
| 2011 | 0.300 | 2 | 0.13 | 3.67 | | | | |
| 2012 | 0.000 | 2 | 0.21 | 3.33 | | | | |
| 2012 | 0.300 | 2 | 0.21 | 3.40 | | | | |
| 2013 | 0.000 | 2 | 0.98 | 5.15 | | | | |
| 2013 | 0.300 | 2 | 0.93 | 4.94 | | | | |
| 2014 | 0.000 | 2 | 0.48 | 5.11 | | | | |
| 2014 | 0.300 | 2 | 0.48 | 4.95 | | | | |
| 2015 | 0.000 | 2 | 0.49 | 3.38 | | | | |
| 2015 | 0.300 | 2 | 0.49 | 3.56 | | | | |
| 2016 | 0.000 | 2 | 1.08 | 4.00 | | | | |
| 2016 | 0.300 | 2 | 0.85 | 4.04 | | | | |
| 2017 | 0.000 | 2 | 1.68 | 3.68 | | | | |
| 2017 | 0.300 | 2 | 1.68 | 3.57 | | | | |
| 2018 | 0.000 | 2 | 3.59 | 5.53 | | | | |
| 2018 | 0.300 | 2 | 3.59 | 5.52 | | | | |
| 2019 | 0.000 | 2 | 0.99 | 3.45 | | | | |
| 2019 | 0.300 | 2 | 0.99 | 3.64 | | | | |
| 2020 | 0.000 | 2 | 0.18 | 2.60 | | | | |
| 2020 | 0.300 | 2 | 0.18 | 3.26 | | | | |
| 10001 | 0.000 | 8 | 0.93 | 1.76 | | | | |
| 10001 | 0.200 | 8 | 0.80 | 1.89 | | | | |
| 10005 | 0.000 | 8 | 3.35 | 5.83 | | | | |
| 10005 | 0.200 | 8 | 3.65 | 6.87 | | | | |
| 10006 | 0.000 | 8 | 0.24 | 5.43 | | | | |
| 10006 | 0.400 | 8 | 0.30 | 5.57 | | | | |
| 10009 | 0.000 | 8 | 0.44 | 4.48 | | | | |
| 10009 | 0.400 | 8 | 0.39 | 4.55 | | | | |
| 10010 | 0.000 | 8 | 3.58 | 7.12 | | | | |
| 10010 | 0.200 | 8 | 3.71 | 8.02 | | | | |
| 10014 | 0.000 | 8 | 0.80 | 1.45 | | | | |
| 10014 | 0.200 | 8 | 0.80 | 1.33 | | | | |
| 10016 | 0.000 | 8 | 0.92 | 1.76 | | | | |
| 10016 | 0.200 | 8 | 0.86 | 1.89 | | | | |
| 10020 | 0.000 | 8 | 3.34 | 5.62 | | | | |
| 10020 | 0.200 | 8 | 3.63 | 6.65 | | | | |
| 10021 | 0.000 | 8 | 0.25 | 5.24 | | | | |
| 10021 | 0.400 | 8 | 0.30 | 5.38 | | | | |
| 10024 | 0.000 | 8 | 0.36 | 3.98 | | | | |
| 10024 | 0.400 | 8 | 0.36 | 4.44 | | | | |
| 10025 | 0.000 | 8 | 3.51 | 7.07 | | | | |
| 10025 | 0.200 | 8 | 4.02 | 8.06 | | | | |
| 10029 | 0.000 | 8 | 0.83 | 1.46 | | | | |
| 10029 | 0.200 | 8 | 0.79 | 1.31 | | | | |

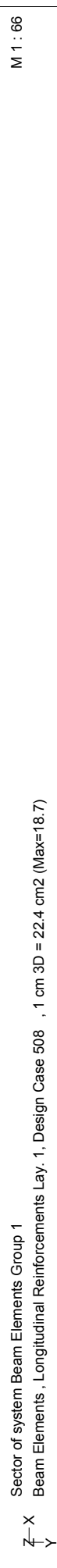
Maximum Degree of Utilization

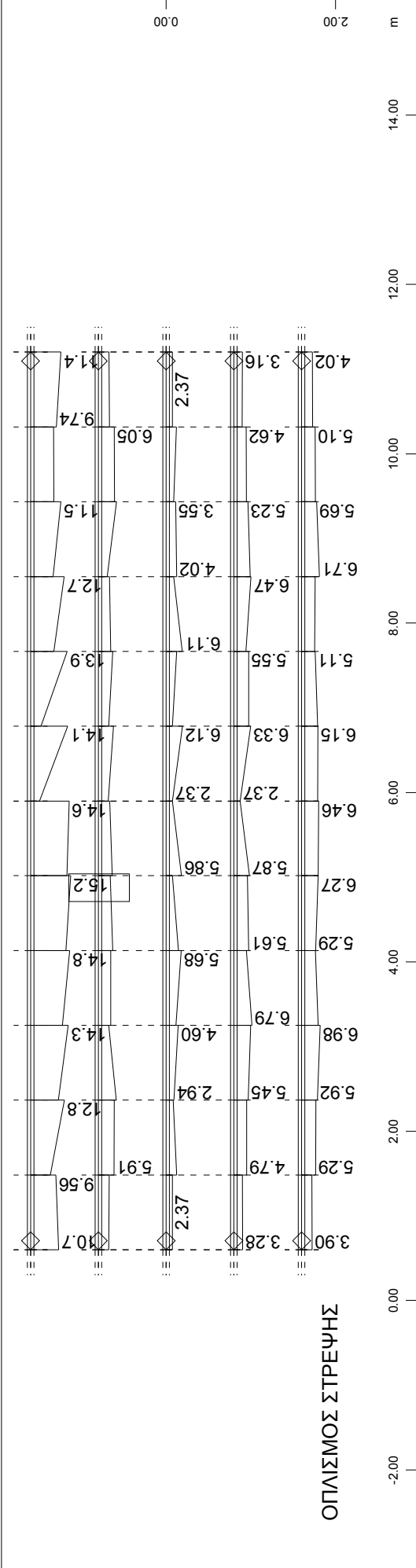
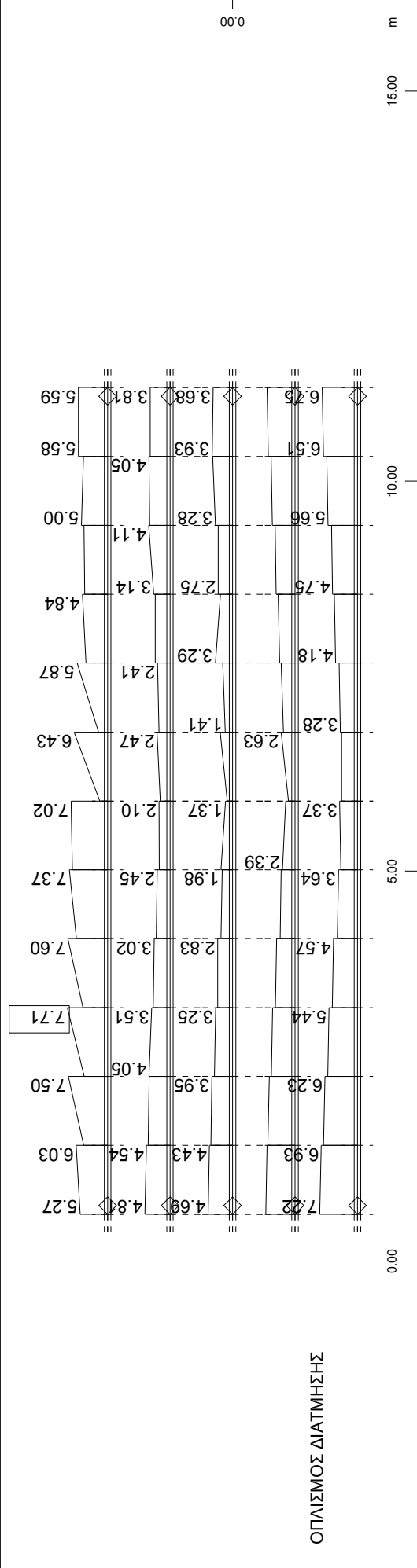
| | | N | Vy | Vz | Mt | My | Mz | Mb | Mt2 | Total | lamda |
|-------------|---|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| | | sig-c | sig-t | tau | sig-* | tend. | As-l | As-v | crack | sigdyn | tau-* |
| Cross sect. | 1 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.802 | 0.000 | 0.000 |
| Cross sect. | 2 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| DOKOS-2 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 2.260 | 0.000 | 0.000 |
| Cross sect. | 8 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| DOKOS-4 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 9.173 | 0.000 | 0.000 |

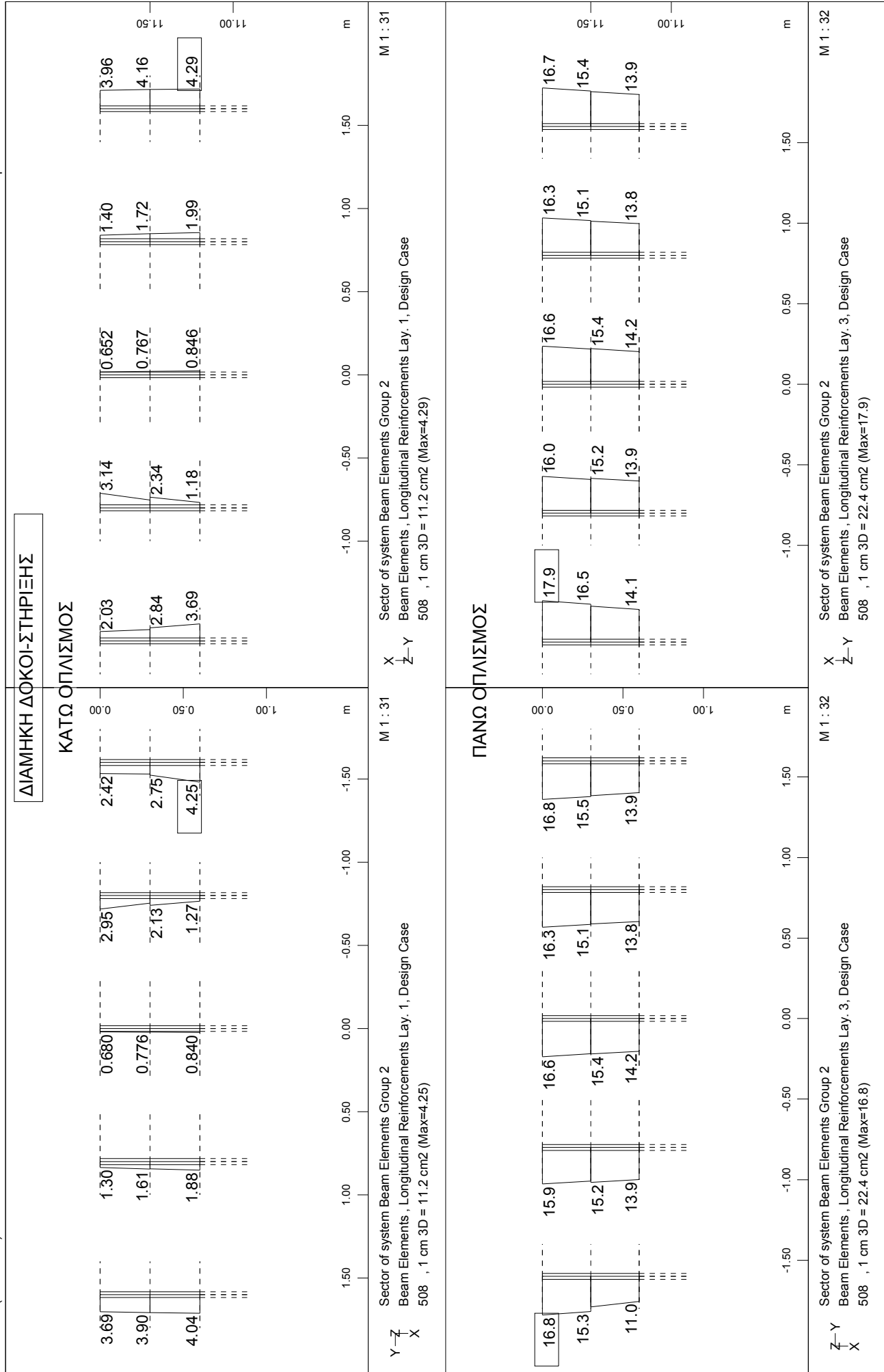
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
SLS (QUASI-PERMANENT) - CRACK $w=0.30$

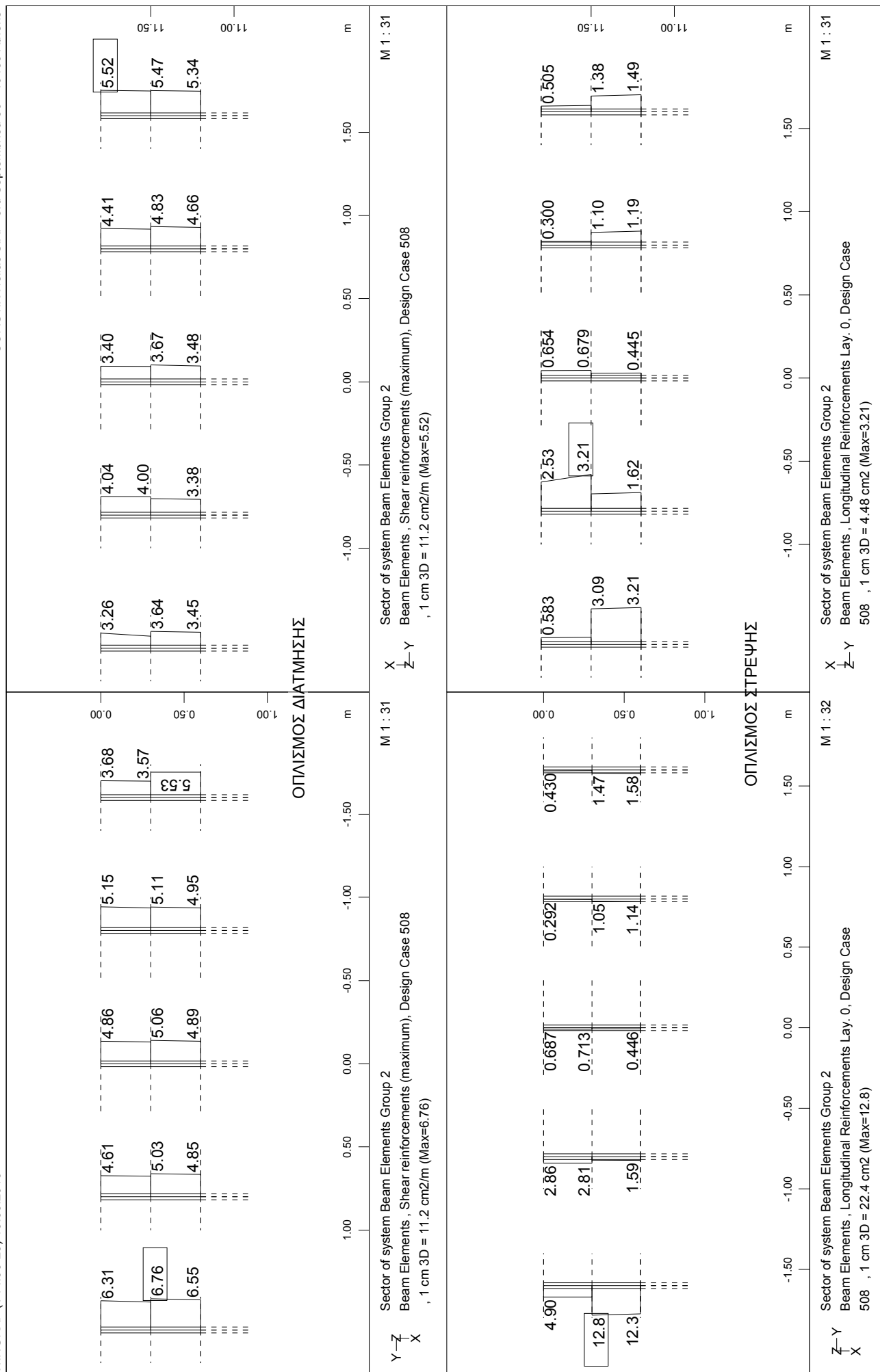
Maximum Degree of Utilization

| | N sig-c | Vy sig-t | Vz tau | Mt sig-* | My tend. | Mz As-l | Mb As-v | Mt2 crack | Total sigdyn | lamda tau-* |
|--------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|
| Total system | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 0.000 | 0.000 9.173 | 0.000 0.000 | 0.000 0.000 |

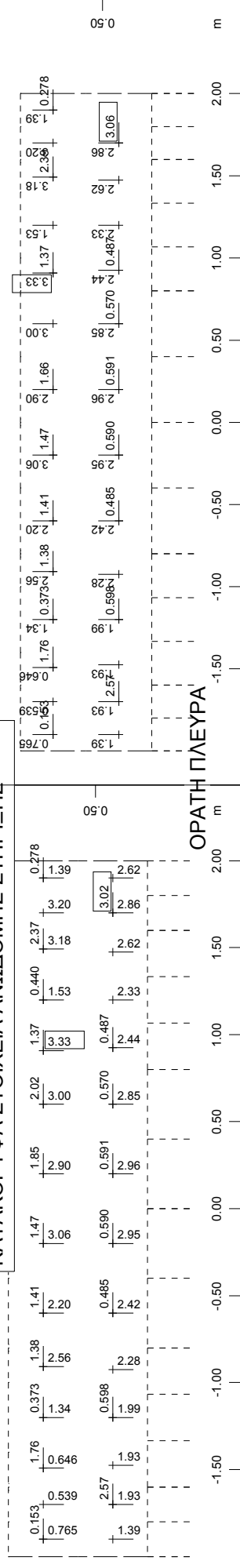




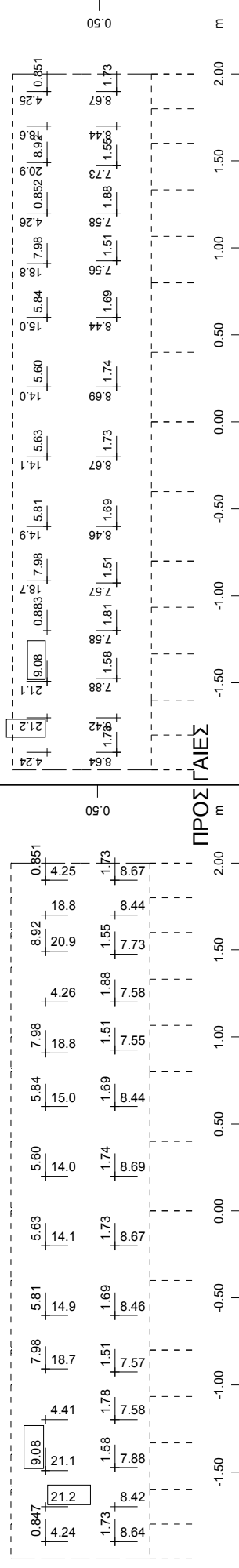




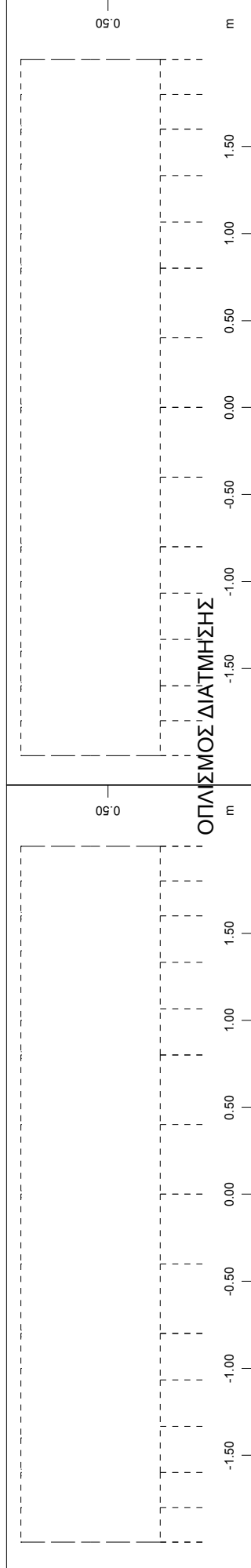
ΚΑΤΑΚΟΡΥΦΑ ΣΤΟΙΧΕΙΑ ΑΝΩΔΟΜΗΣ-ΣΤΗΡΙΞΗΣ





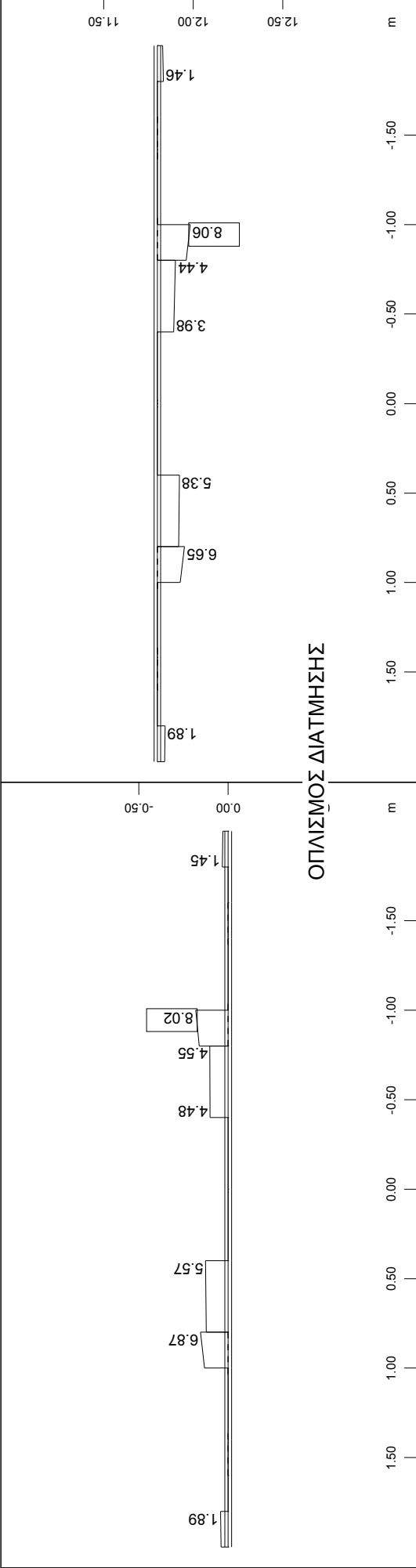
| | M 1 : 34 | M 1 : 36 |
|--|--|--|
| | Sector of system Quadrilateral Elements Group 8 | Sector of system Quadrilateral Elements Group 8 |
| | upper Reinforcements in Elements in cm2/m, Design Case 521 ULS | upper Reinforcements in Elements in cm2/m, Design Case 521 ULS |
| | design (Max=3.33) | design (Max=3.33) |
| | $\begin{matrix} X-Y \\ Z \end{matrix}$ | $\begin{matrix} X-Y \\ Z \end{matrix}$ |



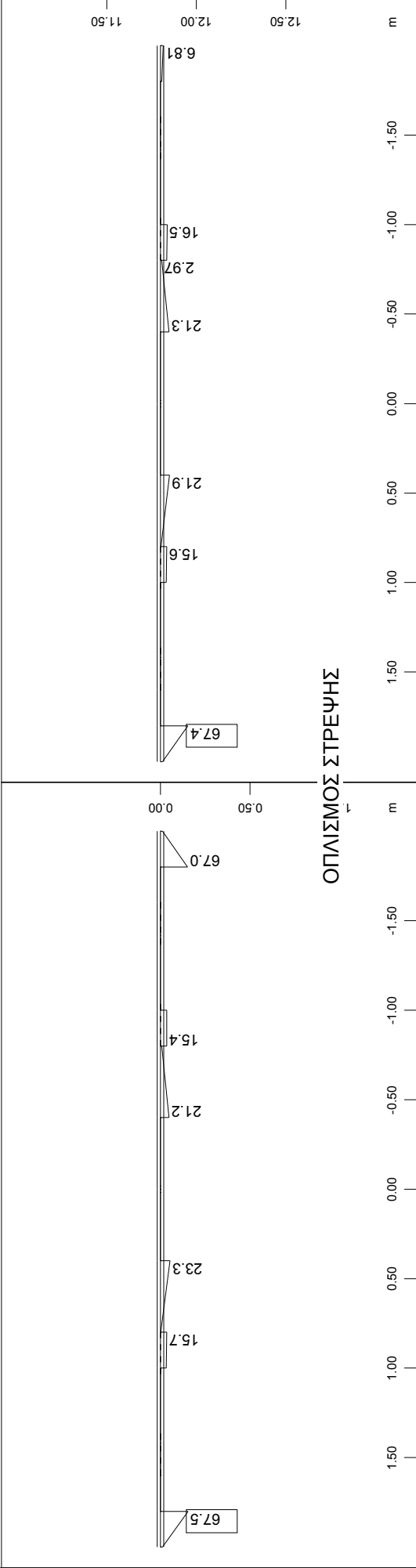
$\begin{matrix} X & - & Y \\ & \diagdown & / \\ & Z \end{matrix}$
 Sector of system Quadrilateral Elements Group 8
 lower Reinforcements in Elements in cm2/m, Design Case 521 ULS
 design (Max=21.2)



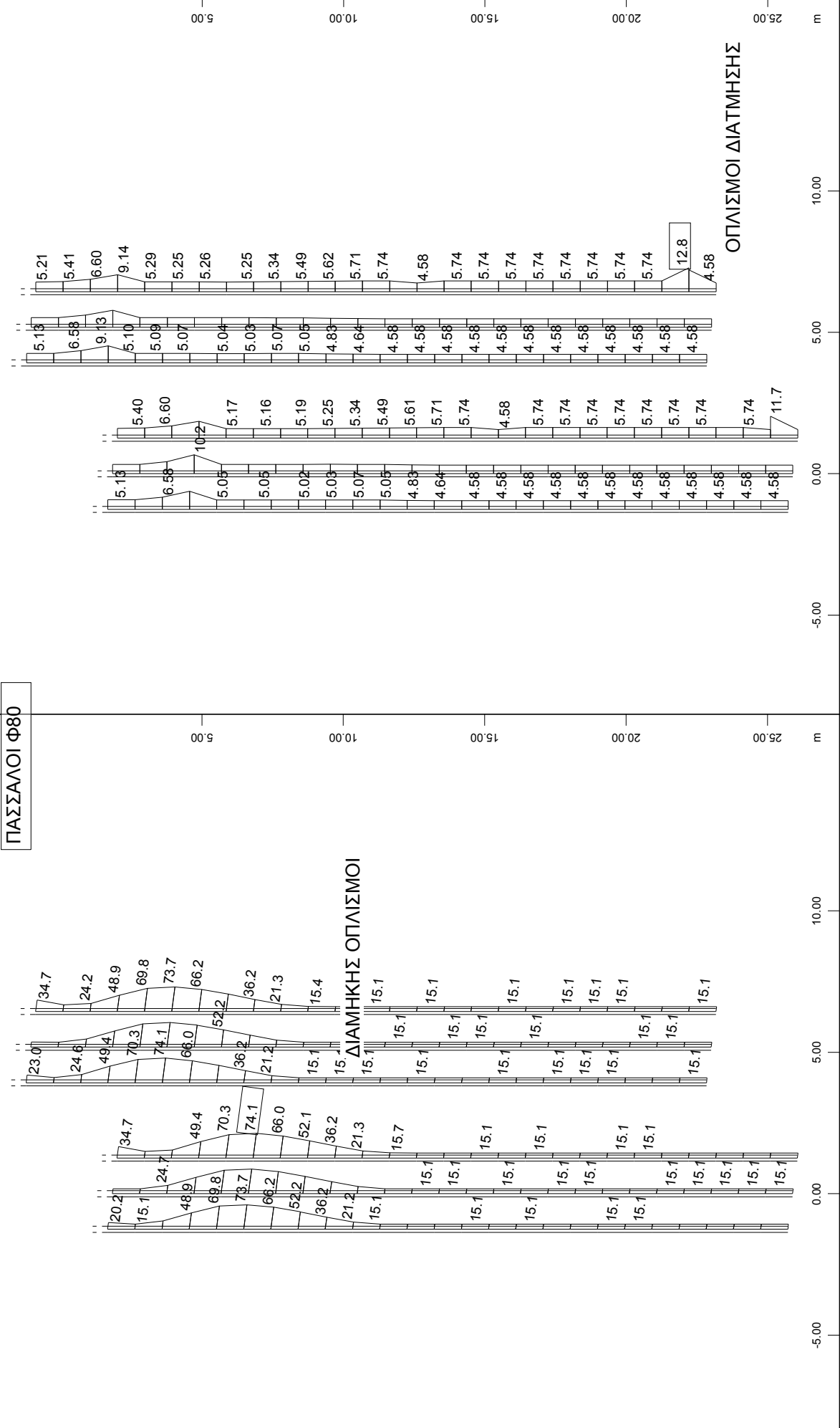


Sector of system Beam Elements Group 10
Beam Elements , Shear reinforcements (maximum), Design Case 508
, 1 cm 3D = 14.5 cm2/m (Max=8.06)

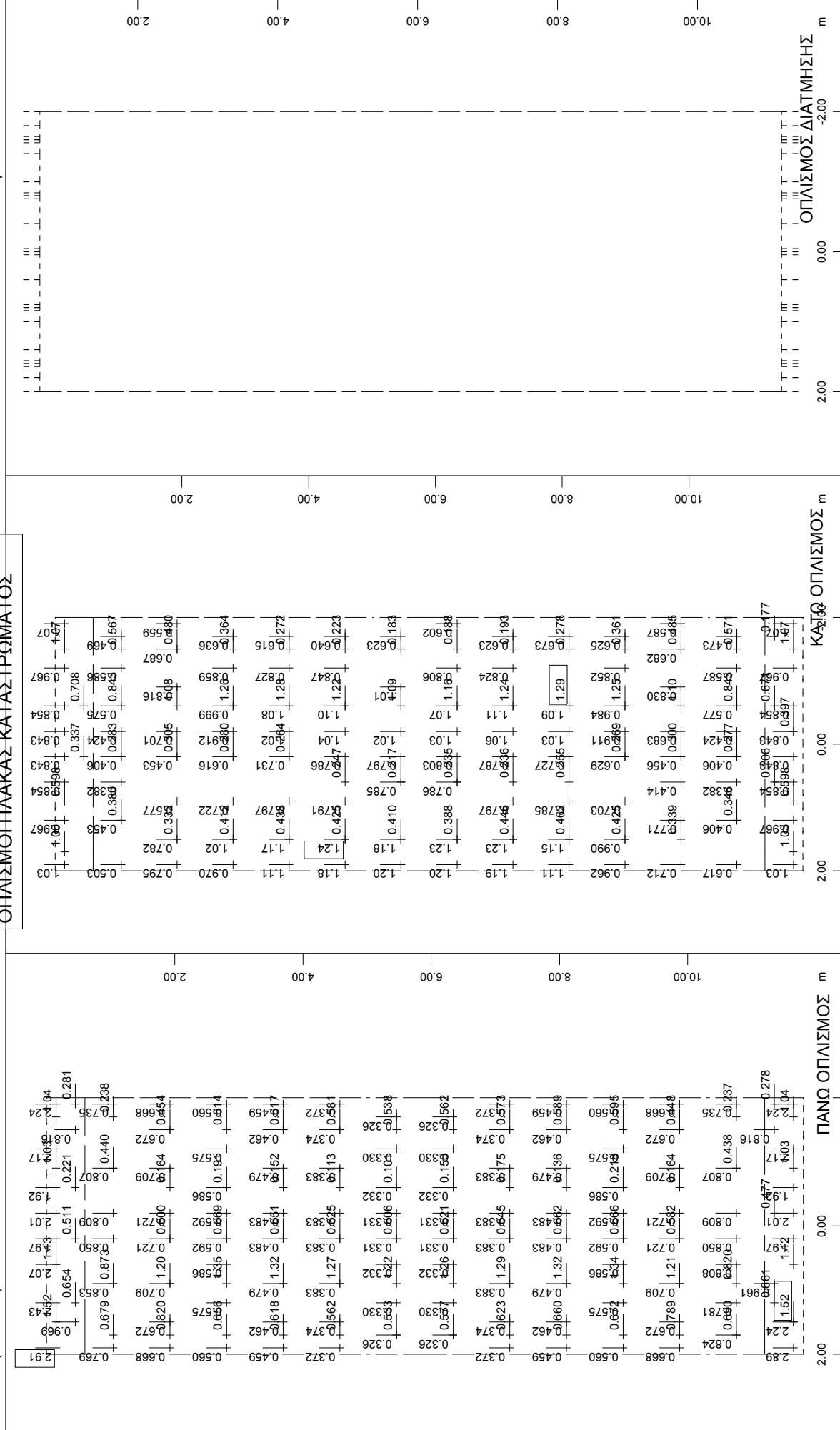


Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 0, Design Case 508 , 1 cm 3D = 145.3 cm2 (Max=67.5)

ΠΑΣΣΑΛΟΙ Φ80



ΟΡΓΑΝΙΣΜΟΙ ΠΛΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ



| | | | | | | |
|--|--|----------|--|-----|---|---|
| | | M 1 : 84 | Sector of system Quadrilateral Elements Group 3.4 upper Reinforcements in Elements in cm2/m, Design Case 521 ULS design (Max=2.91) | Y-Z | Y | Z |
| | | M 1 : 85 | Sector of system Quadrilateral Elements Group 3.4 lower Reinforcements in Elements in cm2/m, Design Case 521 ULS design (Max=1.28) | Y-Z | Y | Z |
| | | M 1 : 77 | Sector of system Quadrilateral Elements Group 3 Shear reinforcement from middle of element in cm2/m2, Design Case 521 ULS design (Max=0) | Y-Z | Y | Z |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
COMBINATION SLS

Combination rule Number 1

COMB.ULS-1-BEAM

Resulting loadcases type Design Combination

Loadcase selection

| Number | factor | type | Title |
|--------|--------|------------------|--------------------------|
| 31 | 1.00 | Exclusive LC AG | ΠΥΣΕΙΣ-ΟΔΟΣΤΡΩΣΙΑ |
| 32 | 1.00 | Combined with LC | PEZODROMIO |
| 33 | 1.00 | Combined with LC | ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50 |
| 31 | 1.00 | Exclusive LC AG | ΠΥΣΕΙΣ-ΟΔΟΣΤΡΩΣΙΑ |
| 32 | 1.00 | Combined with LC | PEZODROMIO |
| 33 | 1.00 | Combined with LC | ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50 |
| 36 | 1.00 | Exclusive LC A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 |
| 37 | 1.00 | Exclusive LC A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 |
| 38 | 1.00 | Exclusive LC A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 |
| 39 | 1.00 | Exclusive LC A 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 |
| 1101 | 1.00 | Exclusive LC A 2 | MAX-MY BEAM |
| 1102 | 1.00 | Exclusive LC A 2 | MIN-MY BEAM |
| 1103 | 1.00 | Exclusive LC A 2 | MAX-VZ BEAM |
| 1104 | 1.00 | Exclusive LC A 2 | MIN-VZ BEAM |
| 1105 | 1.00 | Exclusive LC A 2 | MAX-MZ BEAM |
| 1106 | 1.00 | Exclusive LC A 2 | MIN-MZ BEAM |
| 1107 | 1.00 | Exclusive LC A 2 | MAX-VY BEAM |
| 1108 | 1.00 | Exclusive LC A 2 | MIN-VY BEAM |
| 1109 | 1.00 | Exclusive LC A 2 | MAX-N BEAM |
| 1110 | 1.00 | Exclusive LC A 2 | MIN-N BEAM |
| 1111 | 1.00 | Exclusive LC A 2 | MAX-MT BEAM |
| 1112 | 1.00 | Exclusive LC A 2 | MIN-MT BEAM |
| 1121 | 1.00 | Exclusive LC A 2 | MAX-MY BEAM |
| 1122 | 1.00 | Exclusive LC A 2 | MIN-MY BEAM |
| 1123 | 1.00 | Exclusive LC A 2 | MAX-VZ BEAM |
| 1124 | 1.00 | Exclusive LC A 2 | MIN-VZ BEAM |
| 1125 | 1.00 | Exclusive LC A 2 | MAX-MZ BEAM |
| 1126 | 1.00 | Exclusive LC A 2 | MIN-MZ BEAM |
| 1127 | 1.00 | Exclusive LC A 2 | MAX-VY BEAM |
| 1128 | 1.00 | Exclusive LC A 2 | MIN-VY BEAM |
| 1129 | 1.00 | Exclusive LC A 2 | MAX-N BEAM |
| 1130 | 1.00 | Exclusive LC A 2 | MIN-N BEAM |
| 1131 | 1.00 | Exclusive LC A 2 | MAX-MT BEAM |
| 1132 | 1.00 | Exclusive LC A 2 | MIN-MT BEAM |
| 80 | 1.00 | Conditional LC | ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ A1 |
| 81 | 1.00 | Conditional LC | ΠΙΘΑΝΕΣ ΚΑΘΙΖΗΣΕΙΣ A2 |

Generated Loadcases

| Number | Comb | Title |
|--------|------|-------------|
| 1301 | 1 | MAX-MY BEAM |
| 1302 | 1 | MIN-MY BEAM |
| 1303 | 1 | MAX-VZ BEAM |
| 1304 | 1 | MIN-VZ BEAM |
| 1305 | 1 | MAX-MZ BEAM |
| 1306 | 1 | MIN-MZ BEAM |
| 1307 | 1 | MAX-VY BEAM |
| 1308 | 1 | MIN-VY BEAM |
| 1309 | 1 | MAX-N BEAM |
| 1310 | 1 | MIN-N BEAM |
| 1311 | 1 | MAX-MT BEAM |
| 1312 | 1 | MIN-MT BEAM |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CHARACTERISTIC COMBINATION (0.60*fck), (0.80*fyk)

Selected Beam Elements

| FROM | TO | INC | X-VALUE | NC | MEMBER | CS0 | CS1 | CS2 | CS3 | CS4 | CS5 |
|------|------|-----|---------|----|--------|-----|-----|-----|-----|-----|-----|
| 1000 | 1060 | 1 | | 1 | | 10 | 40 | | | | |
| 2000 | 2020 | 1 | | | | | | | | | |

Default design code is DIN Fachbericht 102 Massivbröcken (2003) (Germany)

Klasse(Tab.4.118): D

wind zone : Binnenland

Materials

No. 1 C 25/30 (DIN 1045-1)
No. 3 C 25/30 (DIN 1045-1)
No. 4 C 25/30 (DIN 1045-1)
No. 5 C 25/30 (DIN 1045-1)
No. 6 C 25/30 (DIN 1045-1)
No. 7 C 25/30 (DIN 1045-1)
No. 8 C 25/30 (DIN 1045-1)
No. 9 C 25/30 (DIN 1045-1)
No. 10 C 25/30 (DIN 1045-1)
No. 12 BSt 500 SA (DIN 1045-1)

Reinforcement will be accounted for sectional values as defined in AQUA
Reinforcements saved as design case LCR 1

Considered Load Cases

| No. refer | act on | Title/type of load case | gam-u | gam-f | psi-0 | psi-1 | psi-2 | psi-1' |
|------------|--------|--|-------|-------|-------|-------|-------|-------------|
| 1 part. | CS 0 | I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 2 part. | CS 0 | I.B. ΔΟΚΩΝ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 3 part. | CS 0 | I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ G (total dead load) | 1.35 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 G perm |
| 11 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 12 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+0.5 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 13 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 14 part. | CS 1 | ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*A1+1.0 L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 90 gross | CS 1 | (+ΔTN)+0.75*(+ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 91 gross | CS 1 | (+ΔTN)+0.75*(-ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 92 gross | CS 1 | (-ΔTN)+0.75*(+ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 93 gross | CS 1 | (-ΔTN)+0.75*(-ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 94 gross | CS 1 | 0.35*(+ΔTN)+(+ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 95 gross | CS 1 | 0.35*(+ΔTN)+(-ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 96 gross | CS 1 | 0.35*(-ΔTN)+(+ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 97 gross | CS 1 | 0.35*(-ΔTN)+(-ΔTM) L_C (Traffic load UIC of EC/DIN-FB) | 1.45 | 0.00 | 0.80 | 0.80 | 0.00 | 1.00 Q exc1 |
| 1301 part. | CS 1 | MAX-MY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1302 part. | CS 1 | MIN-MY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1303 part. | CS 1 | MAX-VZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1304 part. | CS 1 | MIN-VZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1305 part. | CS 1 | MAX-MZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1306 part. | CS 1 | MIN-MZ BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1307 part. | CS 1 | MAX-VY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1308 part. | CS 1 | MIN-VY BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1309 part. | CS 1 | MAX-N BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1310 part. | CS 1 | MIN-N BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1311 part. | CS 1 | MAX-MT BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 1312 part. | CS 1 | MIN-MT BEAM L (live loading) | 1.50 | 0.00 | 0.75 | 0.75 | 0.20 | 0.80 Q exc1 |
| 5015 part. | CS 0 | K creep step C (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |

OPIΣTIKH MEΛETH/TECHNIKO TA/L=13.00
CHARACTERISTIC COMBINATION (0.60*fck), (0.80*fyk)

Considered Load Cases

| No. refer | act on | Title/type of load case | gam-u | gam-f | psi-0 | psi-1 | psi-2 | psi-1' |
|------------|--------|---|-------|-------|-------|-------|-------|-------------|
| 5025 part. | CS 0 | K creep step (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5055 part. | CS 1 | K creep step (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5060 part. | CS 1 | K creep step (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5061 part. | CS 1 | K creep step (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5062 part. | CS 1 | K creep step (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5063 part. | CS 1 | K creep step (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 5064 part. | CS 1 | K creep step (creep + shrinkage) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 P perm |
| 6015 part. | CS 0 | 15 K creep step (creep + shrinkage) | | | | | | P perm |
| 6025 part. | CS 0 | 25 K creep step (creep + shrinkage) | | | | | | P perm |
| 6055 part. | CS 1 | 55 K creep step (creep + shrinkage) | | | | | | P perm |
| 6060 part. | CS 1 | 60 K creep step (creep + shrinkage) | | | | | | P perm |
| 6061 part. | CS 1 | 61 K creep step (creep + shrinkage) | | | | | | P perm |
| 6062 part. | CS 1 | 62 K creep step (creep + shrinkage) | | | | | | P perm |
| 6063 part. | CS 1 | 63 K creep step (creep + shrinkage) | | | | | | P perm |
| 6064 part. | CS 1 | 64 K creep step (creep + shrinkage) | | | | | | P perm |

Combinations For Stress Design

1219 max_my-1219
MAX + MY :
1.00 * G + 1.00 * L_A + 1.00 * L_B + 1.00 * C + 0.60 * L_C
1220 min_my-1220
MIN + MY :
1.00 * G + 1.00 * L_A + 1.00 * L_B + 1.00 * C + 0.60 * L_C

Stresses [MPa]

| Beam | x[m] | NoS | LC | M | A | sig- | sig+ | tau | sig-I | sig-II | sig-s | N/Npl* |
|------|-------|-----|------|---|---|-------|-------|------|-------|--------|--------|--------|
| 1001 | 0.000 | 1 | 1219 | 1 | | -0.95 | 0.70 | 0.50 | 0.41 | -1.14 | 3.05 | |
| | | | | 4 | | -0.64 | -0.13 | 0.00 | | -0.64 | -4.85 | |
| | | 1 | 1220 | 1 | | 0.98 | -3.63 | 1.13 | 1.48 | -3.67 | -26.32 | |
| | | | | 4 | | 3.37 | 1.79 | 0.00 | | -26.32 | -26.32 | |
| | | 1 | 1219 | 1 | | -1.86 | 2.10 | 1.76 | 1.48 | -2.81 | -15.73 | |
| | | | | 4 | | -1.44 | -0.48 | 0.00 | | -1.44 | -27.35 | |
| | 0.883 | 1 | 1220 | 1 | | -0.06 | -2.26 | 0.82 | 0.73 | -2.29 | -15.12 | |
| | | | | 4 | | 2.41 | 1.32 | 0.00 | | -15.12 | -15.12 | |
| | | 1 | 1219 | 1 | | -1.86 | 2.10 | 1.17 | 1.36 | -2.36 | -15.72 | |
| | | | | 4 | | -1.44 | -0.48 | 0.00 | | -1.44 | -27.32 | |
| | | 1 | 1220 | 1 | | -0.06 | -2.26 | 0.77 | 0.69 | -2.29 | -15.12 | |
| | | | | 4 | | 2.41 | 1.32 | 0.00 | | -15.12 | -15.12 | |
| 1002 | 0.000 | 1 | 1219 | 1 | | -2.87 | 3.55 | 1.57 | 2.33 | -3.48 | -28.10 | |
| | | | | 4 | | -2.55 | -1.03 | 0.00 | | -2.55 | -48.87 | |
| | | 1 | 1220 | 1 | | -0.86 | -1.24 | 0.71 | 0.37 | -1.35 | -16.46 | |
| | | | | 4 | | 1.72 | 0.97 | 0.00 | | -20.24 | -20.24 | |
| | | 1 | 1219 | 1 | | -2.86 | 3.55 | 0.97 | 2.29 | -3.13 | -28.09 | |
| | | | | 4 | | -2.55 | -1.03 | 0.00 | | -2.55 | -48.84 | |
| | 0.883 | 1 | 1220 | 1 | | -0.86 | -1.24 | 0.65 | 0.32 | -1.30 | -16.46 | |
| | | | | 4 | | 1.72 | 0.98 | 0.00 | | -20.23 | -20.23 | |
| | | 1 | 1219 | 1 | | -3.62 | 4.63 | 0.90 | 3.00 | -3.81 | -37.57 | |
| | | | | 4 | | -3.37 | -1.43 | 0.00 | | -3.37 | -65.25 | |
| | | 1 | 1220 | 1 | | -1.51 | -0.39 | 0.59 | 0.25 | -1.69 | -25.31 | |
| | | | | 4 | | 1.12 | 0.68 | 0.00 | | -35.16 | -35.16 | |
| 1004 | 0.000 | 1 | 1219 | 1 | | -3.62 | 4.62 | 0.30 | 2.98 | -3.64 | -37.56 | |
| | | | | 4 | | -3.36 | -1.43 | 0.00 | | -3.36 | -65.23 | |
| | | 1 | 1220 | 1 | | -1.51 | -0.39 | 0.53 | 0.20 | -1.66 | -25.30 | |
| | | | | 4 | | 1.12 | 0.68 | 0.00 | | -35.16 | -35.16 | |
| | | 1 | 1219 | 1 | | -4.18 | 5.42 | 0.70 | 3.51 | -4.28 | -44.42 | |
| | | | | 4 | | -3.97 | -1.73 | 0.00 | | -3.97 | -77.14 | |
| | 0.883 | 1 | 1220 | 1 | | -2.02 | 0.29 | 0.47 | 0.16 | -2.10 | -31.84 | |
| | | | | 4 | | 0.62 | 0.43 | 0.00 | | -46.32 | -46.32 | |
| | | 1 | 1219 | 1 | | -4.18 | 5.42 | 0.11 | 3.50 | -4.18 | -44.41 | |
| | | | | 4 | | -3.97 | -1.73 | 0.00 | | -3.97 | -77.12 | |
| | | 1 | 1220 | 1 | | -2.01 | 0.29 | 0.41 | 0.12 | -2.08 | -31.83 | |
| | | | | 4 | | 0.62 | 0.43 | 0.00 | | -46.32 | -46.32 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CHARACTERISTIC COMBINATION (0.60*fck) , (0.80*fyk)

| Stresses | [MPa] | | | | | | | | | | | |
|----------|-------|-----|------|---|---|-------|-------|------|-------|--------|--------|--------|
| Beam | x[m] | NoS | LC | M | A | sig- | sig+ | tau | sig-I | sig-II | sig-s | N/Npl* |
| 1005 | 0.883 | 1 | 1219 | 1 | | -4.50 | 5.91 | 0.52 | 3.83 | -4.55 | -48.42 | |
| | | | | 4 | | -4.32 | -1.90 | 0.00 | | -4.32 | -84.17 | |
| | | | 1220 | 1 | | -2.36 | 0.70 | 0.29 | 0.11 | -2.39 | -36.09 | |
| | | | | 4 | | 0.26 | 0.24 | 0.00 | | | -53.46 | |
| 1006 | 0.000 | 1 | 1219 | 1 | | -4.50 | 5.91 | 0.06 | 3.83 | -4.50 | -48.42 | |
| | | | | 4 | | -4.32 | -1.90 | 0.00 | | -4.32 | -84.16 | |
| | | | 1220 | 1 | | -2.36 | 0.70 | 0.23 | 0.10 | -2.38 | -36.09 | |
| | | | | 4 | | 0.26 | 0.24 | 0.00 | | | -53.46 | |
| | 0.883 | 1 | 1219 | 1 | | -4.59 | 6.04 | 0.38 | 3.91 | -4.62 | -49.70 | |
| | | | | 4 | | -4.41 | -1.94 | 0.00 | | -4.41 | -86.33 | |
| | | | 1220 | 1 | | -2.52 | 0.78 | 0.03 | 0.12 | -2.52 | -37.79 | |
| | | | | 4 | | 0.11 | 0.14 | 0.00 | | | -56.08 | |
| 1007 | 0.000 | 1 | 1219 | 1 | | -4.59 | 6.04 | 0.27 | 3.91 | -4.61 | -49.70 | |
| | | | | 4 | | -4.41 | -1.94 | 0.00 | | -4.41 | -86.34 | |
| | | | 1220 | 1 | | -2.52 | 0.78 | 0.03 | 0.12 | -2.52 | -37.79 | |
| | | | | 4 | | 0.11 | 0.14 | 0.00 | | | -56.08 | |
| | 0.883 | 1 | 1219 | 1 | | -4.49 | 5.91 | 0.19 | 3.82 | -4.50 | -48.40 | |
| | | | | 4 | | -4.32 | -1.89 | 0.00 | | -4.32 | -84.12 | |
| | | | 1220 | 1 | | -2.36 | 0.70 | 0.22 | 0.10 | -2.38 | -36.09 | |
| | | | | 4 | | 0.26 | 0.24 | 0.00 | | | -53.46 | |
| 1008 | 0.000 | 1 | 1219 | 1 | | -4.49 | 5.91 | 0.42 | 3.83 | -4.53 | -48.41 | |
| | | | | 4 | | -4.32 | -1.89 | 0.00 | | -4.32 | -84.13 | |
| | | | 1220 | 1 | | -2.36 | 0.70 | 0.29 | 0.11 | -2.39 | -36.09 | |
| | | | | 4 | | 0.26 | 0.24 | 0.00 | | | -53.46 | |
| | 0.883 | 1 | 1219 | 1 | | -4.17 | 5.40 | 0.47 | 3.49 | -4.21 | -44.36 | |
| | | | | 4 | | -3.95 | -1.72 | 0.00 | | -3.95 | -77.00 | |
| | | | 1220 | 1 | | -2.01 | 0.29 | 0.40 | 0.12 | -2.08 | -31.83 | |
| | | | | 4 | | 0.62 | 0.43 | 0.00 | | | -46.32 | |
| 1009 | 0.000 | 1 | 1219 | 1 | | -4.17 | 5.40 | 0.61 | 3.50 | -4.25 | -44.36 | |
| | | | | 4 | | -3.95 | -1.72 | 0.00 | | -3.95 | -77.01 | |
| | | | 1220 | 1 | | -2.01 | 0.29 | 0.46 | 0.16 | -2.10 | -31.84 | |
| | | | | 4 | | 0.62 | 0.43 | 0.00 | | | -46.32 | |
| | 0.883 | 1 | 1219 | 1 | | -3.65 | 4.67 | 0.68 | 3.02 | -3.75 | -37.70 | |
| | | | | 4 | | -3.41 | -1.45 | 0.00 | | -3.41 | -65.55 | |
| | | | 1220 | 1 | | -1.51 | -0.39 | 0.52 | 0.20 | -1.66 | -25.30 | |
| | | | | 4 | | 1.12 | 0.68 | 0.00 | | | -35.16 | |
| 1010 | 0.000 | 1 | 1219 | 1 | | -3.65 | 4.67 | 1.30 | 3.05 | -4.02 | -37.71 | |
| | | | | 4 | | -3.41 | -1.45 | 0.00 | | -3.41 | -65.56 | |
| | | | 1220 | 1 | | -1.51 | -0.39 | 0.59 | 0.24 | -1.69 | -25.31 | |
| | | | | 4 | | 1.12 | 0.68 | 0.00 | | | -35.16 | |
| | 0.883 | 1 | 1219 | 1 | | -2.88 | 3.57 | 0.89 | 2.31 | -3.10 | -28.16 | |
| | | | | 4 | | -2.58 | -1.04 | 0.00 | | -2.58 | -49.01 | |
| | | | 1220 | 1 | | -0.86 | -1.24 | 0.65 | 0.32 | -1.30 | -16.46 | |
| | | | | 4 | | 1.72 | 0.98 | 0.00 | | | -20.22 | |
| 1011 | 0.000 | 1 | 1219 | 1 | | -2.88 | 3.58 | 1.50 | 2.34 | -3.45 | -28.17 | |
| | | | | 4 | | -2.58 | -1.04 | 0.00 | | -2.58 | -49.04 | |
| | | | 1220 | 1 | | -0.86 | -1.24 | 0.71 | 0.37 | -1.35 | -16.46 | |
| | | | | 4 | | 1.72 | 0.97 | 0.00 | | | -20.24 | |
| | 0.883 | 1 | 1219 | 1 | | -1.86 | 2.10 | 1.09 | 1.35 | -2.31 | -15.72 | |
| | | | | 4 | | -1.44 | -0.48 | 0.00 | | -1.44 | -27.33 | |
| | | | 1220 | 1 | | -0.06 | -2.26 | 0.77 | 0.68 | -2.29 | -15.12 | |
| | | | | 4 | | 2.41 | 1.32 | 0.00 | | | -15.12 | |
| 1012 | 0.000 | 1 | 1219 | 1 | | -1.86 | 2.10 | 1.68 | 1.39 | -2.74 | -15.73 | |
| | | | | 4 | | -1.45 | -0.48 | 0.00 | | -1.45 | -27.36 | |
| | | | 1220 | 1 | | -0.06 | -2.26 | 0.82 | 0.73 | -2.29 | -15.12 | |
| | | | | 4 | | 2.41 | 1.32 | 0.00 | | | -15.12 | |
| | 0.883 | 1 | 1219 | 1 | | -0.95 | 0.70 | 0.50 | 0.41 | -1.14 | 3.05 | |
| | | | | 4 | | -0.64 | -0.13 | 0.00 | | -0.64 | -4.86 | |
| | | | 1220 | 1 | | 0.98 | -3.63 | 1.13 | 1.48 | -3.67 | -26.32 | |
| | | | | 4 | | 3.37 | 1.79 | 0.00 | | | -26.32 | |
| 1013 | 0.000 | 1 | 1219 | 1 | | -0.99 | 0.74 | 0.36 | 0.40 | -1.09 | 3.27 | |
| | | | | 4 | | -0.71 | -0.17 | 0.00 | | -0.71 | -5.31 | |
| | | | 1220 | 1 | | 0.94 | -3.66 | 0.99 | 1.42 | -3.68 | -26.58 | |
| | | | | 4 | | 3.33 | 1.75 | 0.00 | | | -26.58 | |
| | 0.883 | 1 | 1219 | 1 | | -1.71 | 1.68 | 1.18 | 1.04 | -2.25 | -14.91 | |
| | | | | 4 | | -1.11 | -0.34 | 0.00 | | -1.11 | -25.13 | |
| | | | 1220 | 1 | | -0.06 | -2.35 | 0.70 | 0.62 | -2.37 | -15.76 | |
| | | | | 4 | | 2.44 | 1.32 | 0.00 | | | -15.76 | |
| 1014 | 0.000 | 1 | 1219 | 1 | | -1.72 | 1.69 | 0.91 | 1.03 | -2.06 | -14.93 | |
| | | | | 4 | | -1.12 | -0.34 | 0.00 | | -1.12 | -25.17 | |
| | | | 1220 | 1 | | -0.06 | -2.35 | 0.67 | 0.58 | -2.36 | -15.75 | |
| | | | | 4 | | 2.44 | 1.32 | 0.00 | | | -15.75 | |
| | 0.883 | 1 | 1219 | 1 | | -2.67 | 3.01 | 1.13 | 1.91 | -3.03 | -26.98 | |
| | | | | 4 | | -2.11 | -0.83 | 0.00 | | -2.11 | -45.89 | |
| | | | 1220 | 1 | | -0.86 | -1.33 | 0.61 | 0.29 | -1.35 | -16.54 | |
| | | | | 4 | | 1.74 | 0.97 | 0.00 | | | -20.09 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CHARACTERISTIC COMBINATION (0.60*fck) , (0.80*fyk)

| Stresses | [MPa] | | | | | | | | | | | | |
|----------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--|
| Beam | x[m] | NoS | LC | M | A | sig- | sig+ | tau | sig-I | sig-II | sig-s | N/Npl* | |
| 1015 | 0.000 | 1 | 1219 | 1 | | -2.67 | 3.01 | 0.79 | 1.89 | -2.86 | -26.99 | | |
| | | | | 4 | | -2.11 | -0.83 | 0.00 | | -2.11 | -45.92 | | |
| | | | 1220 | 1 | -0.86 | -1.33 | 0.57 | 0.25 | -1.34 | -16.54 | | | |
| | | 4 | | 1.74 | 0.97 | 0.00 | | | -20.09 | | | | |
| | | 0.883 | 1 | 1219 | 1 | | -3.41 | 4.04 | 0.99 | 2.58 | -3.64 | -36.36 | |
| | | | | | 4 | | -2.88 | -1.22 | 0.00 | | -2.88 | -62.03 | |
| | 1220 | | 1 | -1.52 | -0.47 | 0.51 | 0.19 | -1.65 | -25.41 | | | | |
| | 4 | | 1.14 | 0.67 | 0.00 | | | -35.09 | | | | | |
| | 1016 | 0.000 | 1 | 1219 | 1 | | -3.41 | 4.04 | 0.62 | 2.56 | -3.51 | -36.37 | |
| | | | | | 4 | | -2.89 | -1.22 | 0.00 | | -2.89 | -62.06 | |
| | | | 1220 | 1 | -1.52 | -0.47 | 0.46 | 0.16 | -1.63 | -25.41 | | | |
| | | 4 | | 1.14 | 0.67 | 0.00 | | | -35.09 | | | | |
| 0.883 | | 1 | 1219 | 1 | | -3.93 | 4.76 | 0.56 | 3.03 | -4.00 | -42.99 | | |
| | | | | 4 | | -3.42 | -1.48 | 0.00 | | -3.42 | -73.43 | | |
| | 1220 | 1 | -2.03 | 0.22 | 0.40 | 0.11 | -2.09 | -31.97 | | | | | |
| 1017 | 0.000 | 1 | 1219 | 1 | | -3.93 | 4.76 | 0.18 | 3.02 | -3.93 | -42.99 | | |
| | | | | 4 | | -3.42 | -1.48 | 0.00 | | -3.42 | -73.42 | | |
| | | | 1220 | 1 | -2.03 | 0.22 | 0.36 | 0.09 | -2.08 | -31.97 | | | |
| | | 4 | | 0.63 | 0.42 | 0.00 | | | -46.31 | | | | |
| | | 0.883 | 1 | 1219 | 1 | | -4.24 | 5.24 | 0.39 | 3.34 | -4.27 | -46.96 | |
| | | | | | 4 | | -3.75 | -1.64 | 0.00 | | -3.75 | -80.36 | |
| | 1220 | | 1 | -2.38 | 0.63 | 0.25 | 0.07 | -2.40 | -36.25 | | | | |
| | 4 | | 0.26 | 0.22 | 0.00 | | | -53.50 | | | | | |
| | 1018 | 0.000 | 1 | 1219 | 1 | | -4.24 | 5.24 | 0.04 | 3.34 | -4.24 | -46.96 | |
| | | | | | 4 | | -3.75 | -1.64 | 0.00 | | -3.75 | -80.36 | |
| | | | 1220 | 1 | -2.38 | 0.63 | 0.21 | 0.06 | -2.40 | -36.25 | | | |
| | | 4 | | 0.26 | 0.22 | 0.00 | | | -53.50 | | | | |
| 0.883 | | 1 | 1219 | 1 | | -4.33 | 5.35 | 0.26 | 3.42 | -4.35 | -48.22 | | |
| | | | | 4 | | -3.84 | -1.68 | 0.00 | | -3.84 | -82.49 | | |
| | 1220 | 1 | -2.30 | 0.95 | 0.01 | 0.30 | -2.30 | -36.17 | | | | | |
| 4 | | 0.35 | 0.36 | 0.00 | | | -54.33 | | | | | | |
| 1019 | 0.000 | 1 | 1219 | 1 | | -4.33 | 5.35 | 0.20 | 3.41 | -4.34 | -48.22 | | |
| | | | | 4 | | -3.84 | -1.68 | 0.00 | | -3.84 | -82.49 | | |
| | | 1220 | 1 | -2.30 | 0.95 | 0.00 | 0.30 | -2.30 | -36.17 | | | | |
| | 4 | | 0.35 | 0.36 | 0.00 | | | -54.33 | | | | | |
| | 0.883 | 1 | 1219 | 1 | | -4.23 | 5.22 | 0.06 | 3.33 | -4.23 | -46.92 | | |
| | | | | 4 | | -3.74 | -1.63 | 0.00 | | -3.74 | -80.28 | | |
| 1220 | | 1 | -2.38 | 0.63 | 0.21 | 0.06 | -2.40 | -36.25 | | | | | |
| 4 | | 0.26 | 0.22 | 0.00 | | | -53.50 | | | | | | |
| 1020 | 0.000 | 1 | 1219 | 1 | | -4.23 | 5.22 | 0.34 | 3.33 | -4.26 | -46.92 | | |
| | | | | 4 | | -3.74 | -1.63 | 0.00 | | -3.74 | -80.29 | | |
| | | 1220 | 1 | -2.38 | 0.63 | 0.25 | 0.07 | -2.40 | -36.25 | | | | |
| | 4 | | 0.26 | 0.22 | 0.00 | | | -53.50 | | | | | |
| | 0.883 | 1 | 1219 | 1 | | -3.94 | 4.77 | 0.38 | 3.03 | -3.97 | -43.04 | | |
| | | | | 4 | | -3.43 | -1.49 | 0.00 | | -3.43 | -73.53 | | |
| 1220 | | 1 | -2.03 | 0.22 | 0.36 | 0.09 | -2.08 | -31.97 | | | | | |
| 1021 | 0.000 | 1 | 1219 | 1 | | -3.93 | 4.77 | 0.77 | 3.04 | -4.06 | -43.03 | | |
| | | | | 4 | | -3.43 | -1.49 | 0.00 | | -3.43 | -73.50 | | |
| | | | 1220 | 1 | -2.03 | 0.22 | 0.40 | 0.11 | -2.09 | -31.97 | | | |
| | | 4 | | 0.63 | 0.42 | 0.00 | | | -46.31 | | | | |
| | | 0.883 | 1 | 1219 | 1 | | -3.42 | 4.06 | 0.57 | 2.57 | -3.50 | -36.41 | |
| | | | | | 4 | | -2.90 | -1.22 | 0.00 | | -2.90 | -62.15 | |
| | 1220 | | 1 | -1.52 | -0.47 | 0.46 | 0.16 | -1.63 | -25.41 | | | | |
| | 4 | | 1.13 | 0.67 | 0.00 | | | -35.09 | | | | | |
| | 1022 | 0.000 | 1 | 1219 | 1 | | -3.41 | 4.06 | 0.95 | 2.58 | -3.63 | -36.40 | |
| | | | | | 4 | | -2.90 | -1.22 | 0.00 | | -2.90 | -62.13 | |
| | | | 1220 | 1 | -1.52 | -0.47 | 0.51 | 0.19 | -1.65 | -25.41 | | | |
| | | 4 | | 1.13 | 0.67 | 0.00 | | | -35.09 | | | | |
| 0.883 | | 1 | 1219 | 1 | | -2.67 | 3.01 | 0.75 | 1.88 | -2.84 | -26.98 | | |
| | | | | 4 | | -2.11 | -0.83 | 0.00 | | -2.11 | -45.90 | | |
| | 1220 | 1 | -0.87 | -1.33 | 0.57 | 0.25 | -1.34 | -16.54 | | | | | |
| 1023 | 0.000 | 1 | 1219 | 1 | | -2.66 | 3.01 | 1.09 | 1.90 | -3.01 | -26.97 | | |
| | | | | 4 | | -2.11 | -0.83 | 0.00 | | -2.11 | -45.88 | | |
| | | | 1220 | 1 | -0.86 | -1.33 | 0.61 | 0.29 | -1.35 | -16.54 | | | |
| | | 4 | | 1.74 | 0.97 | 0.00 | | | -20.10 | | | | |
| | | 0.883 | 1 | 1219 | 1 | | -1.71 | 1.68 | 0.86 | 1.02 | -2.02 | -14.88 | |
| | | | | | 4 | | -1.10 | -0.33 | 0.00 | | -1.10 | -25.08 | |
| | 1220 | | 1 | -0.06 | -2.35 | 0.67 | 0.58 | -2.36 | -15.75 | | | | |
| | 4 | | 2.44 | 1.32 | 0.00 | | | -15.75 | | | | | |
| | 1024 | 0.000 | 1 | 1219 | 1 | | -1.71 | 1.67 | 1.12 | 1.03 | -2.20 | -14.87 | |
| | | | | | 4 | | -1.10 | -0.33 | 0.00 | | -1.10 | -25.04 | |
| | | | 1220 | 1 | -0.06 | -2.35 | 0.70 | 0.62 | -2.37 | -15.76 | | | |
| | | | 4 | | 2.44 | 1.32 | 0.00 | | | -15.76 | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CHARACTERISTIC COMBINATION (0.60*fck), (0.80*fyk)

| Stresses | [MPa] | | | | | | | | | | | |
|----------|-------|-----|------|---|---|-------|-------|------|-------|--------|--------|--------|
| Beam | x[m] | NoS | LC | M | A | sig- | sig+ | tau | sig-I | sig-II | sig-s | N/Npl* |
| 1024 | 0.883 | 1 | 1219 | 1 | | -0.99 | 0.74 | 0.36 | 0.40 | -1.09 | 3.27 | |
| | | | | 4 | | -0.71 | -0.17 | 0.00 | | -0.71 | -5.30 | |
| | | | 1220 | 1 | | 0.94 | -3.66 | 0.99 | 1.42 | -3.68 | -26.59 | |
| | | | | 4 | | 3.33 | 1.75 | 0.00 | | | -26.59 | |
| 1025 | 0.000 | 1 | 1219 | 1 | | -0.99 | 0.73 | 0.40 | 0.40 | -1.12 | 3.23 | |
| | | | | 4 | | -0.71 | -0.18 | 0.00 | | -0.71 | -5.35 | |
| | | | 1220 | 1 | | 0.95 | -3.73 | 0.96 | 1.45 | -3.74 | -27.02 | |
| | | | | 4 | | 3.36 | 1.77 | 0.00 | | | -27.02 | |
| | 0.883 | 1 | 1219 | 1 | | -1.74 | 1.75 | 1.08 | 1.09 | -2.19 | -15.09 | |
| | | | | 4 | | -1.17 | -0.36 | 0.00 | | -1.17 | -25.55 | |
| | | | 1220 | 1 | | -0.05 | -2.40 | 0.76 | 0.68 | -2.41 | -16.13 | |
| | | | | 4 | | 2.47 | 1.33 | 0.00 | | | -16.13 | |
| 1026 | 0.000 | 1 | 1219 | 1 | | -1.74 | 1.75 | 0.76 | 1.07 | -1.99 | -15.09 | |
| | | | | 4 | | -1.17 | -0.36 | 0.00 | | -1.17 | -25.55 | |
| | | | 1220 | 1 | | -0.05 | -2.40 | 0.75 | 0.67 | -2.41 | -16.12 | |
| | | | | 4 | | 2.46 | 1.33 | 0.00 | | | -16.12 | |
| | 0.883 | 1 | 1219 | 1 | | -2.66 | 3.00 | 0.91 | 1.88 | -2.90 | -26.94 | |
| | | | | 4 | | -2.10 | -0.82 | 0.00 | | -2.10 | -45.81 | |
| | | | 1220 | 1 | | -0.87 | -1.36 | 0.69 | 0.35 | -1.37 | -16.58 | |
| | | | | 4 | | 1.74 | 0.97 | 0.00 | | | -20.08 | |
| 1027 | 0.000 | 1 | 1219 | 1 | | -2.66 | 3.00 | 0.59 | 1.87 | -2.77 | -26.94 | |
| | | | | 4 | | -2.10 | -0.82 | 0.00 | | -2.10 | -45.81 | |
| | | | 1220 | 1 | | -0.87 | -1.36 | 0.66 | 0.32 | -1.37 | -16.58 | |
| | | | | 4 | | 1.74 | 0.97 | 0.00 | | | -20.08 | |
| | 0.883 | 1 | 1219 | 1 | | -3.36 | 3.94 | 0.73 | 2.48 | -3.49 | -36.08 | |
| | | | | 4 | | -2.79 | -1.17 | 0.00 | | -2.79 | -61.38 | |
| | | | 1220 | 1 | | -1.54 | -0.48 | 0.60 | 0.25 | -1.71 | -25.49 | |
| | | | | 4 | | 1.12 | 0.66 | 0.00 | | | -35.17 | |
| 1028 | 0.000 | 1 | 1219 | 1 | | -3.36 | 3.94 | 0.46 | 2.48 | -3.42 | -36.08 | |
| | | | | 4 | | -2.79 | -1.17 | 0.00 | | -2.79 | -61.39 | |
| | | | 1220 | 1 | | -1.54 | -0.48 | 0.55 | 0.21 | -1.69 | -25.49 | |
| | | | | 4 | | 1.12 | 0.66 | 0.00 | | | -35.17 | |
| | 0.883 | 1 | 1219 | 1 | | -3.86 | 4.61 | 0.40 | 2.91 | -3.89 | -42.57 | |
| | | | | 4 | | -3.27 | -1.41 | 0.00 | | -3.27 | -72.45 | |
| | | | 1220 | 1 | | -2.05 | 0.22 | 0.49 | 0.16 | -2.14 | -32.07 | |
| | | | | 4 | | 0.61 | 0.41 | 0.00 | | | -46.44 | |
| 1029 | 0.000 | 1 | 1219 | 1 | | -3.86 | 4.61 | 0.16 | 2.91 | -3.87 | -42.57 | |
| | | | | 4 | | -3.27 | -1.41 | 0.00 | | -3.27 | -72.46 | |
| | | | 1220 | 1 | | -2.05 | 0.22 | 0.42 | 0.12 | -2.12 | -32.07 | |
| | | | | 4 | | 0.61 | 0.41 | 0.00 | | | -46.44 | |
| | 0.883 | 1 | 1219 | 1 | | -4.16 | 5.05 | 0.27 | 3.20 | -4.17 | -46.43 | |
| | | | | 4 | | -3.57 | -1.55 | 0.00 | | -3.57 | -79.14 | |
| | | | 1220 | 1 | | -2.40 | 0.64 | 0.30 | 0.07 | -2.44 | -36.37 | |
| | | | | 4 | | 0.24 | 0.20 | 0.00 | | | -53.67 | |
| 1030 | 0.000 | 1 | 1219 | 1 | | -4.16 | 5.05 | 0.03 | 3.20 | -4.16 | -46.43 | |
| | | | | 4 | | -3.57 | -1.55 | 0.00 | | -3.57 | -79.15 | |
| | | | 1220 | 1 | | -2.40 | 0.64 | 0.23 | 0.06 | -2.42 | -36.37 | |
| | | | | 4 | | 0.24 | 0.20 | 0.00 | | | -53.67 | |
| | 0.883 | 1 | 1219 | 1 | | -4.25 | 5.16 | 0.19 | 3.27 | -4.25 | -47.67 | |
| | | | | 4 | | -3.64 | -1.59 | 0.00 | | -3.64 | -81.21 | |
| | | | 1220 | 1 | | -2.30 | 0.92 | 0.01 | 0.28 | -2.30 | -36.14 | |
| | | | | 4 | | 0.36 | 0.36 | 0.00 | | | -54.22 | |
| 1031 | 0.000 | 1 | 1219 | 1 | | -4.25 | 5.16 | 0.14 | 3.27 | -4.25 | -47.67 | |
| | | | | 4 | | -3.64 | -1.59 | 0.00 | | -3.64 | -81.21 | |
| | | | 1220 | 1 | | -2.30 | 0.92 | 0.01 | 0.28 | -2.30 | -36.14 | |
| | | | | 4 | | 0.36 | 0.36 | 0.00 | | | -54.22 | |
| | 0.883 | 1 | 1219 | 1 | | -4.15 | 5.04 | 0.08 | 3.20 | -4.15 | -46.41 | |
| | | | | 4 | | -3.56 | -1.55 | 0.00 | | -3.56 | -79.10 | |
| | | | 1220 | 1 | | -2.40 | 0.64 | 0.23 | 0.06 | -2.42 | -36.37 | |
| | | | | 4 | | 0.24 | 0.20 | 0.00 | | | -53.67 | |
| 1032 | 0.000 | 1 | 1219 | 1 | | -4.15 | 5.04 | 0.24 | 3.20 | -4.16 | -46.41 | |
| | | | | 4 | | -3.56 | -1.55 | 0.00 | | -3.56 | -79.10 | |
| | | | 1220 | 1 | | -2.40 | 0.64 | 0.30 | 0.07 | -2.44 | -36.37 | |
| | | | | 4 | | 0.24 | 0.20 | 0.00 | | | -53.67 | |
| | 0.883 | 1 | 1219 | 1 | | -3.87 | 4.61 | 0.28 | 2.92 | -3.88 | -42.60 | |
| | | | | 4 | | -3.28 | -1.41 | 0.00 | | -3.28 | -72.51 | |
| | | | 1220 | 1 | | -2.05 | 0.22 | 0.42 | 0.12 | -2.12 | -32.07 | |
| | | | | 4 | | 0.61 | 0.41 | 0.00 | | | -46.44 | |
| 1033 | 0.000 | 1 | 1219 | 1 | | -3.87 | 4.61 | 0.55 | 2.92 | -3.93 | -42.60 | |
| | | | | 4 | | -3.28 | -1.41 | 0.00 | | -3.28 | -72.50 | |
| | | | 1220 | 1 | | -2.05 | 0.22 | 0.48 | 0.16 | -2.14 | -32.07 | |
| | | | | 4 | | 0.61 | 0.41 | 0.00 | | | -46.44 | |
| | 0.883 | 1 | 1219 | 1 | | -3.37 | 3.96 | 0.43 | 2.50 | -3.42 | -36.14 | |
| | | | | 4 | | -2.81 | -1.18 | 0.00 | | -2.81 | -61.54 | |
| | | | 1220 | 1 | | -1.54 | -0.48 | 0.55 | 0.21 | -1.69 | -25.49 | |
| | | | | 4 | | 1.12 | 0.66 | 0.00 | | | -35.17 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CHARACTERISTIC COMBINATION (0.60*fck), (0.80*fyk)

| Stresses | [MPa] | | | | | | | | | | | | |
|----------|-------|-------|------|------|---|-------|-------|-------|-------|--------|--------|--------|--|
| Beam | x[m] | NoS | LC | M | A | sig- | sig+ | tau | sig-I | sig-II | sig-s | N/Npl* | |
| 1034 | 0.000 | 1 | 1219 | 1 | | -3.37 | 3.96 | 0.71 | 2.50 | -3.50 | -36.14 | | |
| | | | | 4 | | -2.81 | -1.18 | 0.00 | | -2.81 | -61.53 | | |
| | | 1 | 1220 | 1 | | -1.54 | -0.48 | 0.60 | 0.25 | -1.71 | -25.49 | | |
| | | | | 4 | | 1.12 | 0.66 | 0.00 | | | -35.17 | | |
| | | 0.883 | 1 | 1219 | 1 | | -2.66 | 3.00 | 0.56 | 1.88 | -2.76 | -26.95 | |
| | | | | | 4 | | -2.10 | -0.83 | 0.00 | | -2.10 | -45.84 | |
| | 0.883 | 1 | 1220 | 1 | | -0.87 | -1.36 | 0.66 | 0.32 | -1.37 | -16.58 | | |
| | | | | 4 | | 1.74 | 0.97 | 0.00 | | | -20.08 | | |
| | | 1 | 1219 | 1 | | -2.66 | 3.00 | 0.88 | 1.88 | -2.89 | -26.95 | | |
| | | | | 4 | | -2.10 | -0.83 | 0.00 | | -2.10 | -45.84 | | |
| | | 1 | 1220 | 1 | | -0.87 | -1.36 | 0.69 | 0.35 | -1.37 | -16.58 | | |
| | | | | 4 | | 1.74 | 0.97 | 0.00 | | | -20.08 | | |
| 1035 | 0.000 | 1 | 1219 | 1 | | -1.73 | 1.74 | 0.73 | 1.06 | -1.96 | -15.04 | | |
| | | | | 4 | | -1.16 | -0.36 | 0.00 | | -1.16 | -25.45 | | |
| | | 1 | 1220 | 1 | | -0.05 | -2.40 | 0.75 | 0.67 | -2.41 | -16.12 | | |
| | | | | 4 | | 2.46 | 1.33 | 0.00 | | | -16.12 | | |
| | | 0.883 | 1 | 1219 | 1 | | -1.73 | 1.74 | 1.04 | 1.08 | -2.16 | -15.04 | |
| | | | | | 4 | | -1.16 | -0.36 | 0.00 | | -1.16 | -25.45 | |
| | 0.883 | 1 | 1220 | 1 | | -0.05 | -2.41 | 0.76 | 0.68 | -2.41 | -16.13 | | |
| | | | | 4 | | 2.47 | 1.33 | 0.00 | | | -16.13 | | |
| | | 0.883 | 1 | 1219 | 1 | | -0.99 | 0.73 | 0.40 | 0.40 | -1.12 | 3.22 | |
| | | | | | 4 | | -0.71 | -0.18 | 0.00 | | -0.71 | -5.35 | |
| | | 1 | 1220 | 1 | | 0.95 | -3.73 | 0.96 | 1.45 | -3.74 | -27.02 | | |
| | | | | 4 | | 3.37 | 1.77 | 0.00 | | | -27.02 | | |
| 1036 | 0.000 | 1 | 1219 | 1 | | -0.94 | 0.66 | 0.56 | 0.43 | -1.18 | -2.75 | | |
| | | | | 4 | | -0.64 | -0.14 | 0.00 | | -0.64 | -4.85 | | |
| | | 1 | 1220 | 1 | | 0.94 | -3.64 | 1.05 | 1.41 | -3.65 | -26.41 | | |
| | | | | 4 | | 3.30 | 1.74 | 0.00 | | | -26.41 | | |
| | | 0.883 | 1 | 1219 | 1 | | -1.75 | 1.82 | 1.04 | 1.14 | -2.17 | -15.17 | |
| | | | | | 4 | | -1.22 | -0.38 | 0.00 | | -1.22 | -25.84 | |
| | 0.883 | 1 | 1220 | 1 | | -0.04 | -2.38 | 0.90 | 0.82 | -2.40 | -15.98 | | |
| | | | | 4 | | 2.46 | 1.33 | 0.00 | | | -15.98 | | |
| | | 0.883 | 1 | 1219 | 1 | | -1.75 | 1.81 | 0.82 | 1.12 | -2.04 | -15.15 | |
| | | | | | 4 | | -1.22 | -0.38 | 0.00 | | -1.22 | -25.81 | |
| | | 1 | 1220 | 1 | | -0.05 | -2.38 | 0.91 | 0.83 | -2.41 | -15.97 | | |
| | | | | 4 | | 2.46 | 1.33 | 0.00 | | | -15.97 | | |
| 1037 | 0.000 | 1 | 1219 | 1 | | -2.65 | 3.02 | 0.87 | 1.90 | -2.87 | -26.87 | | |
| | | | | 4 | | -2.09 | -0.82 | 0.00 | | -2.09 | -45.76 | | |
| | | 1 | 1220 | 1 | | -0.88 | -1.32 | 0.85 | 0.48 | -1.50 | -16.60 | | |
| | | | | 4 | | 1.73 | 0.96 | 0.00 | | | -20.20 | | |
| | | 0.883 | 1 | 1219 | 1 | | -2.65 | 3.01 | 0.64 | 1.88 | -2.78 | -26.86 | |
| | | | | | 4 | | -2.09 | -0.81 | 0.00 | | -2.09 | -45.74 | |
| | 0.883 | 1 | 1220 | 1 | | -0.88 | -1.32 | 0.80 | 0.44 | -1.45 | -16.60 | | |
| | | | | 4 | | 1.73 | 0.96 | 0.00 | | | -20.20 | | |
| | | 0.883 | 1 | 1219 | 1 | | -3.33 | 3.89 | 0.75 | 2.46 | -3.47 | -35.82 | |
| | | | | | 4 | | -2.72 | -1.13 | 0.00 | | -2.72 | -60.91 | |
| | | 1 | 1220 | 1 | | -1.55 | -0.43 | 0.73 | 0.35 | -1.82 | -25.55 | | |
| | | | | 4 | | 1.09 | 0.65 | 0.00 | | | -35.39 | | |
| 1038 | 0.000 | 1 | 1219 | 1 | | -3.33 | 3.89 | 0.46 | 2.45 | -3.38 | -35.82 | | |
| | | | | 4 | | -2.71 | -1.13 | 0.00 | | -2.71 | -60.89 | | |
| | | 1 | 1220 | 1 | | -1.55 | -0.43 | 0.65 | 0.28 | -1.76 | -25.55 | | |
| | | | | 4 | | 1.09 | 0.65 | 0.00 | | | -35.39 | | |
| | | 0.883 | 1 | 1219 | 1 | | -3.81 | 4.53 | 0.39 | 2.86 | -3.85 | -42.22 | |
| | | | | | 4 | | -3.16 | -1.35 | 0.00 | | -3.16 | -71.75 | |
| | 0.883 | 1 | 1220 | 1 | | -2.07 | 0.29 | 0.59 | 0.22 | -2.21 | -32.16 | | |
| | | | | 4 | | 0.57 | 0.39 | 0.00 | | | -46.74 | | |
| | | 0.883 | 1 | 1219 | 1 | | -3.81 | 4.53 | 0.19 | 2.86 | -3.82 | -42.22 | |
| | | | | | 4 | | -3.16 | -1.35 | 0.00 | | -3.16 | -71.75 | |
| | | 1 | 1220 | 1 | | -2.07 | 0.29 | 0.48 | 0.15 | -2.17 | -32.16 | | |
| | | | | 4 | | 0.57 | 0.39 | 0.00 | | | -46.74 | | |
| 1039 | 0.000 | 1 | 1219 | 1 | | -4.10 | 4.93 | 0.25 | 3.13 | -4.11 | -45.99 | | |
| | | | | 4 | | -3.43 | -1.48 | 0.00 | | -3.43 | -78.22 | | |
| | | 1 | 1220 | 1 | | -2.24 | 0.87 | 0.13 | 0.27 | -2.24 | -35.00 | | |
| | | | | 4 | | 0.40 | 0.38 | 0.00 | | | -52.42 | | |
| | | 0.883 | 1 | 1219 | 1 | | -4.10 | 4.93 | 0.07 | 3.13 | -4.10 | -45.99 | |
| | | | | | 4 | | -3.43 | -1.48 | 0.00 | | -3.43 | -78.22 | |
| | 0.883 | 1 | 1220 | 1 | | -2.24 | 0.87 | 0.08 | 0.25 | -2.24 | -35.00 | | |
| | | | | 4 | | 0.40 | 0.38 | 0.00 | | | -52.42 | | |
| | | 0.883 | 1 | 1219 | 1 | | -4.18 | 5.03 | 0.24 | 3.19 | -4.19 | -47.20 | |
| | | | | | 4 | | -3.49 | -1.51 | 0.00 | | -3.49 | -80.22 | |
| | | 1 | 1220 | 1 | | -2.30 | 0.93 | 0.03 | 0.28 | -2.30 | -36.09 | | |
| | | | | 4 | | 0.38 | 0.37 | 0.00 | | | -54.16 | | |
| 1040 | 0.000 | 1 | 1219 | 1 | | -4.18 | 5.03 | 0.16 | 3.19 | -4.19 | -47.19 | | |
| | | | | 4 | | -3.49 | -1.51 | 0.00 | | -3.49 | -80.22 | | |
| | | 1 | 1220 | 1 | | -2.30 | 0.93 | 0.03 | 0.28 | -2.30 | -36.09 | | |
| | | | | 4 | | 0.38 | 0.37 | 0.00 | | | -54.16 | | |
| | | 0.883 | 1 | 1219 | 1 | | -4.18 | 5.03 | 0.16 | 3.19 | -4.19 | -47.19 | |
| | | | | | 4 | | -3.49 | -1.51 | 0.00 | | -3.49 | -80.22 | |
| | 0.883 | 1 | 1220 | 1 | | -2.30 | 0.93 | 0.03 | 0.28 | -2.30 | -36.09 | | |
| | | | | 4 | | 0.38 | 0.37 | 0.00 | | | -54.16 | | |
| | | 0.883 | 1 | 1219 | 1 | | -4.18 | 5.03 | 0.16 | 3.19 | -4.19 | -47.19 | |
| | | | | | 4 | | -3.49 | -1.51 | 0.00 | | -3.49 | -80.22 | |
| | | 1 | 1220 | 1 | | -2.30 | 0.93 | 0.03 | 0.28 | -2.30 | -36.09 | | |
| | | | | 4 | | 0.38 | 0.37 | 0.00 | | | -54.16 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CHARACTERISTIC COMBINATION (0.60*fck), (0.80*fyk)

| Stresses [MPa] | | | | | | | | | | | | |
|----------------|-------|-----|------|---|---|-------|-------|------|-------|--------|--------|--------|
| Beam | x[m] | NoS | LC | M | A | sig- | sig+ | tau | sig-I | sig-II | sig-s | N/Npl* |
| 1043 | 0.883 | 1 | 1219 | 1 | | -4.09 | 4.93 | 0.17 | 3.13 | -4.10 | -45.98 | |
| | | | | 4 | | -3.43 | -1.48 | 0.00 | | -3.43 | -78.21 | |
| | | | 1220 | 1 | | -2.24 | 0.87 | 0.08 | 0.25 | -2.24 | -35.00 | |
| | | | | 4 | | 0.40 | 0.38 | 0.00 | | | -52.42 | |
| 1044 | 0.000 | 1 | 1219 | 1 | | -4.09 | 4.93 | 0.22 | 3.12 | -4.10 | -45.98 | |
| | | | | 4 | | -3.43 | -1.48 | 0.00 | | -3.43 | -78.20 | |
| | | | 1220 | 1 | | -2.24 | 0.87 | 0.13 | 0.27 | -2.24 | -35.00 | |
| | | | | 4 | | 0.40 | 0.38 | 0.00 | | | -52.42 | |
| | 0.883 | 1 | 1219 | 1 | | -3.81 | 4.53 | 0.27 | 2.86 | -3.83 | -42.22 | |
| | | | | 4 | | -3.16 | -1.35 | 0.00 | | -3.16 | -71.75 | |
| | | | 1220 | 1 | | -2.07 | 0.29 | 0.48 | 0.15 | -2.17 | -32.16 | |
| | | | | 4 | | 0.57 | 0.39 | 0.00 | | | -46.74 | |
| 1045 | 0.000 | 1 | 1219 | 1 | | -3.81 | 4.53 | 0.62 | 2.86 | -3.90 | -42.23 | |
| | | | | 4 | | -3.17 | -1.35 | 0.00 | | -3.17 | -71.76 | |
| | | | 1220 | 1 | | -2.07 | 0.29 | 0.58 | 0.22 | -2.21 | -32.16 | |
| | | | | 4 | | 0.57 | 0.39 | 0.00 | | | -46.74 | |
| | 0.883 | 1 | 1219 | 1 | | -3.34 | 3.93 | 0.44 | 2.47 | -3.39 | -35.90 | |
| | | | | 4 | | -2.74 | -1.14 | 0.00 | | -2.74 | -61.10 | |
| | | | 1220 | 1 | | -1.55 | -0.43 | 0.64 | 0.28 | -1.76 | -25.55 | |
| | | | | 4 | | 1.09 | 0.65 | 0.00 | | | -35.39 | |
| 1046 | 0.000 | 1 | 1219 | 1 | | -3.34 | 3.93 | 0.72 | 2.48 | -3.47 | -35.91 | |
| | | | | 4 | | -2.75 | -1.14 | 0.00 | | -2.75 | -61.12 | |
| | | | 1220 | 1 | | -1.55 | -0.43 | 0.73 | 0.35 | -1.82 | -25.55 | |
| | | | | 4 | | 1.09 | 0.65 | 0.00 | | | -35.39 | |
| | 0.883 | 1 | 1219 | 1 | | -2.66 | 3.02 | 0.63 | 1.89 | -2.78 | -26.89 | |
| | | | | 4 | | -2.10 | -0.82 | 0.00 | | -2.10 | -45.81 | |
| | | | 1220 | 1 | | -0.88 | -1.32 | 0.79 | 0.43 | -1.45 | -16.60 | |
| | | | | 4 | | 1.73 | 0.96 | 0.00 | | | -20.20 | |
| 1047 | 0.000 | 1 | 1219 | 1 | | -2.66 | 3.03 | 0.85 | 1.90 | -2.87 | -26.89 | |
| | | | | 4 | | -2.10 | -0.82 | 0.00 | | -2.10 | -45.83 | |
| | | | 1220 | 1 | | -0.88 | -1.32 | 0.85 | 0.48 | -1.50 | -16.60 | |
| | | | | 4 | | 1.73 | 0.96 | 0.00 | | | -20.20 | |
| | 0.883 | 1 | 1219 | 1 | | -1.74 | 1.80 | 0.81 | 1.11 | -2.02 | -15.11 | |
| | | | | 4 | | -1.20 | -0.37 | 0.00 | | -1.20 | -25.71 | |
| | | | 1220 | 1 | | -0.05 | -2.38 | 0.91 | 0.83 | -2.41 | -15.97 | |
| | | | | 4 | | 2.46 | 1.33 | 0.00 | | | -15.97 | |
| 1048 | 0.000 | 1 | 1219 | 1 | | -1.75 | 1.80 | 1.03 | 1.13 | -2.15 | -15.12 | |
| | | | | 4 | | -1.20 | -0.37 | 0.00 | | -1.20 | -25.73 | |
| | | | 1220 | 1 | | -0.04 | -2.38 | 0.90 | 0.82 | -2.40 | -15.98 | |
| | | | | 4 | | 2.46 | 1.33 | 0.00 | | | -15.98 | |
| | 0.883 | 1 | 1219 | 1 | | -0.94 | 0.66 | 0.56 | 0.42 | -1.18 | -2.75 | |
| | | | | 4 | | -0.64 | -0.14 | 0.00 | | -0.64 | -4.85 | |
| | | | 1220 | 1 | | 0.94 | -3.64 | 1.05 | 1.41 | -3.65 | -26.41 | |
| | | | | 4 | | 3.30 | 1.74 | 0.00 | | | -26.41 | |
| 1049 | 0.000 | 1 | 1219 | 1 | | -0.88 | 0.59 | 0.73 | 0.55 | -1.25 | -2.44 | |
| | | | | 4 | | -0.57 | -0.09 | 0.00 | | -0.57 | -4.29 | |
| | | | 1220 | 1 | | 1.01 | -3.63 | 1.20 | 1.46 | -3.65 | -26.22 | |
| | | | | 4 | | 3.35 | 1.79 | 0.00 | | | -26.22 | |
| | 0.883 | 1 | 1219 | 1 | | -1.70 | 1.62 | 0.77 | 1.01 | -1.96 | -14.90 | |
| | | | | 4 | | -1.08 | -0.33 | 0.00 | | -1.08 | -24.94 | |
| | | | 1220 | 1 | | -0.04 | -2.28 | 1.07 | 0.99 | -2.32 | -15.27 | |
| | | | | 4 | | 2.43 | 1.33 | 0.00 | | | -15.27 | |
| 1050 | 0.000 | 1 | 1219 | 1 | | -1.70 | 1.61 | 0.69 | 1.01 | -1.92 | -14.89 | |
| | | | | 4 | | -1.08 | -0.33 | 0.00 | | -1.08 | -24.92 | |
| | | | 1220 | 1 | | -0.04 | -2.29 | 1.01 | 0.93 | -2.33 | -15.28 | |
| | | | | 4 | | 2.43 | 1.33 | 0.00 | | | -15.28 | |
| | 0.883 | 1 | 1219 | 1 | | -2.48 | 2.69 | 0.71 | 1.66 | -2.64 | -25.80 | |
| | | | | 4 | | -1.74 | -0.64 | 0.00 | | -1.74 | -43.43 | |
| | | | 1220 | 1 | | -0.89 | -1.18 | 0.95 | 0.58 | -1.56 | -16.61 | |
| | | | | 4 | | 1.67 | 0.95 | 0.00 | | | -20.58 | |
| 1051 | 0.000 | 1 | 1219 | 1 | | -2.49 | 2.69 | 0.59 | 1.66 | -2.60 | -25.83 | |
| | | | | 4 | | -1.75 | -0.64 | 0.00 | | -1.75 | -43.46 | |
| | | | 1220 | 1 | | -0.89 | -1.19 | 0.86 | 0.50 | -1.48 | -16.60 | |
| | | | | 4 | | 1.67 | 0.95 | 0.00 | | | -20.55 | |
| | 0.883 | 1 | 1219 | 1 | | -3.15 | 3.55 | 0.52 | 2.21 | -3.23 | -34.70 | |
| | | | | 4 | | -2.35 | -0.94 | 0.00 | | -2.35 | -58.45 | |
| | | | 1220 | 1 | | -1.58 | -0.29 | 0.80 | 0.40 | -1.88 | -25.57 | |
| | | | | 4 | | 1.04 | 0.63 | 0.00 | | | -35.79 | |
| 1052 | 0.000 | 1 | 1219 | 1 | | -3.15 | 3.55 | 0.44 | 2.21 | -3.21 | -34.70 | |
| | | | | 4 | | -2.35 | -0.94 | 0.00 | | -2.35 | -58.46 | |
| | | | 1220 | 1 | | -1.58 | -0.29 | 0.69 | 0.32 | -1.81 | -25.57 | |
| | | | | 4 | | 1.04 | 0.64 | 0.00 | | | -35.78 | |
| | 0.883 | 1 | 1219 | 1 | | -3.61 | 4.12 | 0.35 | 2.58 | -3.64 | -40.93 | |
| | | | | 4 | | -2.74 | -1.14 | 0.00 | | -2.74 | -68.91 | |
| | | | 1220 | 1 | | -2.10 | 0.43 | 0.63 | 0.25 | -2.25 | -32.18 | |
| | | | | 4 | | 0.51 | 0.38 | 0.00 | | | -47.12 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CHARACTERISTIC COMBINATION (0.60*fck), (0.80*fyk)

| Stresses | [MPa] | | | | | | | | | | | | |
|----------|-------|-------|------|------|---|-------|-------|-------|-------|--------|--------|--------|--|
| Beam | x[m] | NoS | LC | M | A | sig- | sig+ | tau | sig-I | sig-II | sig-s | N/Npl* | |
| 1053 | 0.000 | 1 | 1219 | 1 | | -3.61 | 4.13 | 0.24 | 2.58 | -3.63 | -40.94 | | |
| | | | | 4 | | -2.74 | -1.14 | 0.00 | | -2.74 | -68.92 | | |
| | | 1 | 1220 | 1 | | -2.10 | 0.43 | 0.50 | 0.17 | -2.20 | -32.17 | | |
| | | | | 4 | | 0.52 | 0.38 | 0.00 | | -2.97 | -47.11 | | |
| | | 0.883 | 1 | 1219 | 1 | | -3.88 | 4.49 | 0.20 | 2.81 | -3.89 | -44.59 | |
| | | | | | 4 | | -2.97 | -1.25 | 0.00 | | -2.97 | -75.13 | |
| | 0.883 | 1 | 1220 | 1 | | -2.23 | 0.90 | 0.14 | 0.30 | -2.24 | -34.86 | | |
| | | | | 4 | | 0.43 | 0.40 | 0.00 | | -2.24 | -52.31 | | |
| | | 1 | 1219 | 1 | | -3.88 | 4.49 | 0.12 | 2.82 | -3.88 | -44.59 | | |
| | | | | 4 | | -2.97 | -1.25 | 0.00 | | -2.97 | -75.13 | | |
| | | 1 | 1220 | 1 | | -2.23 | 0.90 | 0.09 | 0.28 | -2.23 | -34.86 | | |
| | | | | 4 | | 0.43 | 0.40 | 0.00 | | -2.23 | -52.31 | | |
| 1054 | 0.000 | 1 | 1219 | 1 | | -3.88 | 4.49 | 0.12 | 2.82 | -3.88 | -44.59 | | |
| | | | | 4 | | -2.97 | -1.25 | 0.00 | | -2.97 | -75.13 | | |
| | | 1 | 1220 | 1 | | -2.23 | 0.90 | 0.09 | 0.28 | -2.23 | -34.86 | | |
| | | | | 4 | | 0.43 | 0.40 | 0.00 | | -2.23 | -52.31 | | |
| | | 0.883 | 1 | 1219 | 1 | | -3.96 | 4.58 | 0.14 | 2.87 | -3.96 | -45.77 | |
| | | | | | 4 | | -3.02 | -1.28 | 0.00 | | -3.02 | -77.06 | |
| | 0.883 | 1 | 1220 | 1 | | -2.29 | 0.96 | 0.03 | 0.31 | -2.30 | -35.94 | | |
| | | | | 4 | | 0.40 | 0.39 | 0.00 | | -2.30 | -54.02 | | |
| | | 1 | 1219 | 1 | | -3.96 | 4.58 | 0.11 | 2.87 | -3.96 | -45.77 | | |
| | | | | 4 | | -3.02 | -1.28 | 0.00 | | -3.02 | -77.06 | | |
| | | 1 | 1220 | 1 | | -2.29 | 0.96 | 0.03 | 0.31 | -2.30 | -35.94 | | |
| | | | | 4 | | 0.40 | 0.39 | 0.00 | | -2.30 | -54.02 | | |
| 1055 | 0.000 | 1 | 1219 | 1 | | -3.96 | 4.58 | 0.11 | 2.87 | -3.96 | -45.77 | | |
| | | | | 4 | | -3.02 | -1.28 | 0.00 | | -3.02 | -77.06 | | |
| | | 1 | 1220 | 1 | | -2.29 | 0.96 | 0.03 | 0.31 | -2.30 | -35.94 | | |
| | | | | 4 | | 0.40 | 0.39 | 0.00 | | -2.30 | -54.02 | | |
| | | 0.883 | 1 | 1219 | 1 | | -3.87 | 4.48 | 0.13 | 2.81 | -3.88 | -44.57 | |
| | | | | | 4 | | -2.96 | -1.24 | 0.00 | | -2.96 | -75.07 | |
| | 0.883 | 1 | 1220 | 1 | | -2.23 | 0.90 | 0.09 | 0.28 | -2.23 | -34.86 | | |
| | | | | 4 | | 0.43 | 0.40 | 0.00 | | -2.23 | -52.31 | | |
| | | 1 | 1219 | 1 | | -3.87 | 4.48 | 0.21 | 2.81 | -3.88 | -44.57 | | |
| | | | | 4 | | -2.96 | -1.24 | 0.00 | | -2.96 | -75.08 | | |
| | | 1 | 1220 | 1 | | -2.23 | 0.90 | 0.14 | 0.30 | -2.24 | -34.86 | | |
| | | | | 4 | | 0.43 | 0.40 | 0.00 | | -2.24 | -52.31 | | |
| 1056 | 0.000 | 1 | 1219 | 1 | | -3.62 | 4.13 | 0.25 | 2.58 | -3.63 | -40.96 | | |
| | | | | 4 | | -2.75 | -1.14 | 0.00 | | -2.75 | -68.96 | | |
| | | 1 | 1220 | 1 | | -2.10 | 0.43 | 0.50 | 0.17 | -2.20 | -32.17 | | |
| | | | | 4 | | 0.52 | 0.38 | 0.00 | | -2.20 | -47.11 | | |
| | | 0.883 | 1 | 1219 | 1 | | -3.15 | 3.55 | 0.45 | 2.21 | -3.21 | -34.69 | |
| | | | | | 4 | | -2.34 | -0.94 | 0.00 | | -2.34 | -58.44 | |
| | 0.883 | 1 | 1220 | 1 | | -1.58 | -0.29 | 0.69 | 0.32 | -1.81 | -25.57 | | |
| | | | | 4 | | 1.04 | 0.64 | 0.00 | | -1.81 | -35.78 | | |
| | | 1 | 1219 | 1 | | -3.15 | 3.55 | 0.53 | 2.21 | -3.23 | -34.69 | | |
| | | | | 4 | | -2.34 | -0.94 | 0.00 | | -2.34 | -58.43 | | |
| | | 1 | 1220 | 1 | | -1.58 | -0.29 | 0.80 | 0.40 | -1.88 | -25.57 | | |
| | | | | 4 | | 1.04 | 0.63 | 0.00 | | -1.88 | -35.79 | | |
| 1057 | 0.000 | 1 | 1219 | 1 | | -2.49 | 2.70 | 0.59 | 1.67 | -2.60 | -25.85 | | |
| | | | | 4 | | -1.75 | -0.65 | 0.00 | | -1.75 | -43.51 | | |
| | | 1 | 1220 | 1 | | -0.89 | -1.19 | 0.86 | 0.50 | -1.48 | -16.60 | | |
| | | | | 4 | | 1.67 | 0.95 | 0.00 | | -1.48 | -20.55 | | |
| | | 0.883 | 1 | 1219 | 1 | | -2.49 | 2.69 | 0.69 | 1.67 | -2.64 | -25.84 | |
| | | | | | 4 | | -1.75 | -0.65 | 0.00 | | -1.75 | -43.50 | |
| | 0.883 | 1 | 1220 | 1 | | -0.89 | -1.18 | 0.95 | 0.58 | -1.56 | -16.61 | | |
| | | | | 4 | | 1.67 | 0.95 | 0.00 | | -1.56 | -20.58 | | |
| | | 1 | 1219 | 1 | | -1.70 | 1.61 | 0.69 | 1.01 | -1.92 | -14.89 | | |
| | | | | 4 | | -1.08 | -0.33 | 0.00 | | -1.08 | -24.93 | | |
| | | 1 | 1220 | 1 | | -0.04 | -2.29 | 1.01 | 0.93 | -2.33 | -15.28 | | |
| | | | | 4 | | 2.43 | 1.33 | 0.00 | | -2.33 | -15.28 | | |
| 1058 | 0.000 | 1 | 1219 | 1 | | -1.70 | 1.62 | 0.77 | 1.01 | -1.96 | -14.90 | | |
| | | | | 4 | | -1.08 | -0.33 | 0.00 | | -1.08 | -24.94 | | |
| | | 1 | 1220 | 1 | | -0.04 | -2.28 | 1.07 | 0.98 | -2.32 | -15.27 | | |
| | | | | 4 | | 2.43 | 1.33 | 0.00 | | -2.32 | -15.27 | | |
| | | 0.883 | 1 | 1219 | 1 | | -0.88 | 0.59 | 0.73 | 0.55 | -1.25 | -2.44 | |
| | | | | | 4 | | -0.57 | -0.09 | 0.00 | | -0.57 | -4.29 | |
| | 0.883 | 1 | 1220 | 1 | | 1.01 | -3.62 | 1.20 | 1.46 | -3.65 | -26.21 | | |
| | | | | 4 | | 3.35 | 1.79 | 0.00 | | -3.65 | -26.21 | | |
| | | 2 | 1219 | 3 | | -0.21 | 0.15 | 0.15 | 0.13 | -0.21 | 0.26 | | |
| | | | | 3 | | 3.97 | -4.03 | 0.48 | 0.46 | -4.03 | 4.03 | | |
| | | 0.300 | 2 | 1220 | 3 | | -0.40 | 0.33 | 0.15 | 0.13 | -0.40 | 0.40 | |
| | | | | | 3 | | 3.48 | -3.60 | 0.30 | 0.27 | -3.60 | 3.60 | |
| 2002 | 0.000 | 2 | 1219 | 3 | | -0.40 | 0.33 | 0.16 | 0.14 | -0.40 | 0.40 | | |
| | | | | 3 | | 3.49 | -3.60 | 0.37 | 0.34 | -3.60 | 3.60 | | |
| | | 0.300 | 2 | 1219 | 3 | | -0.57 | 0.51 | 0.16 | 0.15 | -0.57 | 0.57 | |
| | | | | | 3 | | 3.12 | -3.23 | 0.35 | 0.32 | -3.23 | 3.23 | |
| | 0.300 | 2 | 1220 | 3 | | -0.57 | 0.51 | 0.16 | 0.15 | -0.57 | 0.57 | | |
| | | | | 3 | | 3.12 | -3.23 | 0.35 | 0.32 | -3.23 | 3.23 | | |
| | | 0.300 | 2 | 1219 | 3 | | -0.40 | 0.33 | 0.16 | 0.14 | -0.40 | 0.40 | |
| | | | | | 3 | | 3.49 | -3.60 | 0.37 | 0.34 | -3.60 | 3.60 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CHARACTERISTIC COMBINATION (0.60*fck), (0.80*fyk)

| Stresses [MPa] | | | | | | | | | | | | |
|----------------|-------|-----|------|---|---|-------|-------|------|-------|--------|-------|--------|
| Beam | x[m] | NoS | LC | M | A | sig- | sig+ | tau | sig-I | sig-II | sig-s | N/Npl* |
| 2004 | 0.000 | 2 | 1219 | 3 | | -0.40 | 0.33 | 0.15 | 0.13 | -0.40 | 0.40 | |
| | | | 1220 | 3 | | 3.48 | -3.60 | 0.30 | 0.27 | -3.60 | 3.60 | |
| | | | 1220 | 3 | | 3.96 | -4.03 | 0.49 | 0.47 | -4.03 | 4.03 | |
| 2005 | 0.000 | 2 | 1219 | 3 | | -0.34 | 0.25 | 0.11 | 0.09 | -0.34 | 0.34 | |
| | | | 1220 | 3 | | 3.73 | -3.89 | 0.30 | 0.26 | -3.89 | 3.89 | |
| | | | 1220 | 3 | | 3.43 | -3.59 | 0.28 | 0.25 | -3.59 | 3.59 | |
| 2006 | 0.000 | 2 | 1219 | 3 | | -0.49 | 0.40 | 0.11 | 0.09 | -0.49 | 0.49 | |
| | | | 1220 | 3 | | 3.44 | -3.60 | 0.34 | 0.30 | -3.60 | 3.60 | |
| | | | 1220 | 3 | | 3.09 | -3.25 | 0.32 | 0.28 | -3.25 | 3.25 | |
| 2007 | 0.000 | 2 | 1219 | 3 | | -0.63 | 0.54 | 0.12 | 0.10 | -0.63 | 0.63 | |
| | | | 1220 | 3 | | 3.09 | -3.25 | 0.32 | 0.28 | -3.25 | 3.25 | |
| | | | 1220 | 3 | | 3.44 | -3.60 | 0.34 | 0.30 | -3.60 | 3.60 | |
| 2008 | 0.000 | 2 | 1219 | 3 | | -0.49 | 0.40 | 0.11 | 0.09 | -0.49 | 0.49 | |
| | | | 1220 | 3 | | 3.44 | -3.60 | 0.29 | 0.25 | -3.60 | 3.60 | |
| | | | 1220 | 3 | | 3.73 | -3.89 | 0.30 | 0.26 | -3.89 | 3.89 | |
| 2009 | 0.000 | 2 | 1219 | 3 | | -0.34 | 0.24 | 0.11 | 0.09 | -0.34 | 0.34 | |
| | | | 1220 | 3 | | 3.81 | -3.98 | 0.32 | 0.28 | -3.98 | 3.98 | |
| | | | 1220 | 3 | | 3.49 | -3.66 | 0.31 | 0.27 | -3.66 | 3.66 | |
| 2010 | 0.000 | 2 | 1219 | 3 | | -0.49 | 0.39 | 0.12 | 0.10 | -0.49 | 0.49 | |
| | | | 1220 | 3 | | 3.50 | -3.67 | 0.35 | 0.30 | -3.67 | 3.67 | |
| | | | 1220 | 3 | | 3.13 | -3.30 | 0.32 | 0.28 | -3.30 | 3.30 | |
| 2011 | 0.000 | 2 | 1219 | 3 | | -0.64 | 0.54 | 0.13 | 0.10 | -0.64 | 0.64 | |
| | | | 1220 | 3 | | 3.13 | -3.30 | 0.32 | 0.28 | -3.30 | 3.30 | |
| | | | 1220 | 3 | | 3.50 | -3.67 | 0.35 | 0.30 | -3.67 | 3.67 | |
| 2012 | 0.000 | 2 | 1219 | 3 | | -0.49 | 0.39 | 0.12 | 0.09 | -0.49 | 0.49 | |
| | | | 1220 | 3 | | 3.49 | -3.66 | 0.31 | 0.27 | -3.66 | 3.66 | |
| | | | 1220 | 3 | | 3.81 | -3.98 | 0.32 | 0.28 | -3.98 | 3.98 | |
| 2013 | 0.000 | 2 | 1219 | 3 | | -0.26 | 0.16 | 0.13 | 0.10 | -0.26 | 0.26 | |
| | | | 1220 | 3 | | 3.69 | -3.85 | 0.29 | 0.26 | -3.85 | 3.85 | |
| | | | 1220 | 3 | | 3.41 | -3.57 | 0.28 | 0.24 | -3.57 | 3.57 | |
| 2014 | 0.000 | 2 | 1219 | 3 | | -0.41 | 0.32 | 0.14 | 0.12 | -0.41 | 0.41 | |
| | | | 1220 | 3 | | 3.42 | -3.57 | 0.34 | 0.30 | -3.57 | 3.57 | |
| | | | 1220 | 3 | | 3.07 | -3.23 | 0.32 | 0.28 | -3.23 | 3.23 | |
| 2015 | 0.000 | 2 | 1219 | 3 | | -0.57 | 0.47 | 0.15 | 0.13 | -0.57 | 0.57 | |
| | | | 1220 | 3 | | 3.07 | -3.23 | 0.32 | 0.28 | -3.23 | 3.23 | |
| | | | 1220 | 3 | | 3.42 | -3.57 | 0.34 | 0.30 | -3.57 | 3.57 | |
| 2016 | 0.000 | 2 | 1219 | 3 | | -0.41 | 0.32 | 0.13 | 0.11 | -0.41 | 0.41 | |
| | | | 1220 | 3 | | 3.41 | -3.57 | 0.28 | 0.24 | -3.57 | 3.57 | |
| | | | 1220 | 3 | | 3.69 | -3.85 | 0.29 | 0.26 | -3.85 | 3.85 | |
| 2017 | 0.000 | 2 | 1219 | 3 | | -0.02 | -0.06 | 0.20 | 0.19 | -0.22 | 0.36 | |
| | | | 1220 | 3 | | 3.75 | -3.86 | 0.31 | 0.28 | -3.86 | 3.86 | |
| | | | 1220 | 3 | | 3.46 | -3.57 | 0.29 | 0.27 | -3.57 | 3.57 | |
| 2018 | 0.000 | 2 | 1219 | 3 | | -0.26 | 0.18 | 0.22 | 0.20 | -0.26 | 0.39 | |
| | | | 1220 | 3 | | 3.47 | -3.57 | 0.37 | 0.34 | -3.57 | 3.57 | |
| | | | 1220 | 3 | | 3.11 | -3.22 | 0.35 | 0.32 | -3.22 | 3.22 | |
| 2019 | 0.000 | 2 | 1219 | 3 | | -0.50 | 0.42 | 0.22 | 0.21 | -0.50 | 0.50 | |
| | | | 1220 | 3 | | 3.11 | -3.22 | 0.35 | 0.32 | -3.22 | 3.22 | |
| | | | 1220 | 3 | | 3.46 | -3.57 | 0.37 | 0.34 | -3.57 | 3.57 | |
| 2020 | 0.000 | 2 | 1219 | 3 | | -0.26 | 0.18 | 0.21 | 0.19 | -0.26 | 0.36 | |
| | | | 1220 | 3 | | 3.46 | -3.56 | 0.29 | 0.27 | -3.56 | 3.56 | |
| | | | 1220 | 3 | | 3.75 | -3.86 | 0.31 | 0.28 | -3.86 | 3.86 | |

| Stresses [MPa] | | | | | | | | | | | | |
|----------------|------|-----|-------|---|---|--------|-------|------|-------|--------|--------|--------|
| Beam | x[m] | NoS | LC | M | A | sig- | sig+ | tau | sig-I | sig-II | sig-s | N/Npl* |
| Total System | | | MIN | 1 | | -4.59 | -3.73 | 0.00 | 0.06 | -1.09 | -2.44 | |
| Total System | | | MAX | 1 | | 1.01 | 6.04 | 1.76 | 3.91 | -4.62 | -49.70 | |
| Total System | | | MIN | 3 | | -0.64 | -4.03 | 0.11 | 0.09 | -0.21 | 0.00 | |
| Total System | | | MAX | 3 | | 3.97 | 0.54 | 0.49 | 0.47 | -4.03 | 0.00 | |
| Total System | | | MIN | 4 | | -4.41 | -1.94 | 0.00 | | | -4.29 | |
| Total System | | | MAX | 4 | | 3.37 | 1.79 | 0.00 | | -4.41 | -86.34 | |
| Total System | | | MIN12 | | | -4.29 | -7.47 | | | | | |
| Total System | | | MAX12 | | | -86.34 | 45.54 | | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CHARACTERISTIC COMBINATION (0.60*fck), (0.80*fyk)

Maximum Degree of Utilization

| | | N sig-c | Vy sig-t | Vz tau | Mt sig-* | My tend. | Mz As-l | Mb As-v | Mt2 crack | Total sigdyn | lamda tau-* |
|--------------|---|------------|-------------|-----------|-------------|-------------|------------|------------|--------------|-----------------|----------------|
| Cross sect. | 1 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | | 0.306 | 0.000 | 0.000 | 0.000 | 0.216 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Cross sect. | 2 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| DOKOS-2 | | 0.269 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| <hr/> | | | | | | | | | | | |
| Total System | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| | | 0.306 | 0.000 | 0.000 | 0.000 | 0.216 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00

10) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ULS-ΣΕΙΣΜΙΚΑ (Q=1.50)

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Load Case 201 ΔΥΝΑΜΕΙΣ ΑΔΡΑΝΕΙΑΣ-[+Ex]

Factor forces and moments 1.000
Factor dead weight DL-XX 0.360
Factor dead weight DL-YY 0.000
Factor dead weight DL-ZZ 0.000
effective construction stage 40 to 40

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------------------|-----------|---------------|
| | | | w[m] x[m] Y[m] Z[m] | | |
| Area | | | 0.000 2.000 0.000 PXX | | 0.004 [MN/m2] |
| | | | 11.800 2.000 0.000 | | 0.004 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | 0.002 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | 0.002 [MN/m2] |
| Area | QGRP 3 | 3.000 | (--) | activated | 89.83 percent |
| | | | 0.000 2.000 0.000 PXX | | 0.004 [MN/m2] |
| | | | 11.800 2.000 0.000 | | 0.004 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | 0.002 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | 0.002 [MN/m2] |
| Area | QGRP 4 | 3.000 | (--) | activated | 10.17 percent |
| | | | 11.800 -2.000 0.000 PXX | | 0.006 [MN/m2] |
| | | | 0.000 -2.000 0.000 | | 0.006 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | 0.006 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | 0.006 [MN/m2] |
| Area | QGRP 3 | 3.000 | (--) | activated | 89.83 percent |
| | | | 11.800 -2.000 0.000 PXX | | 0.006 [MN/m2] |
| | | | 0.000 -2.000 0.000 | | 0.006 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | 0.006 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | 0.006 [MN/m2] |
| Area | QGRP 4 | 3.000 | (--) | activated | 10.17 percent |
| | | | 0.000 2.000 0.000 PXX | | 0.000 [MN/m2] |
| | | | 11.800 2.000 0.000 | | 0.000 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | 0.000 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | 0.000 [MN/m2] |
| Area | QGRP 3 | 3.000 | (--) | activated | 89.83 percent |
| | | | 0.000 2.000 0.000 PXX | | 0.000 [MN/m2] |
| | | | 11.800 2.000 0.000 | | 0.000 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | 0.000 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | 0.000 [MN/m2] |
| Area | QGRP 4 | 3.000 | (--) | activated | 10.17 percent |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1001 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1001 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1002 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1002 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1003 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1003 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1004 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1004 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1005 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1005 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1006 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1006 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1007 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1007 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1008 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1008 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1009 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1009 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1010 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1010 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1011 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1011 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1012 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1012 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1013 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1013 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1014 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1014 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1015 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1015 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1016 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1016 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1017 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1017 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1018 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1018 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1019 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1019 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1020 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1020 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1021 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1021 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1022 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1022 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1023 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1023 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1024 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1024 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1025 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1025 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1026 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1026 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1027 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1027 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1028 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1028 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1029 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1029 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1030 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1030 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1031 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1031 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1032 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1032 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1033 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1033 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1034 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1034 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1035 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1035 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1036 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1036 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1037 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1037 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1038 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1038 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1039 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1039 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1040 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1040 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1041 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1041 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1042 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1042 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1043 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1043 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1044 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1044 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1045 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1045 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1046 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1046 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1047 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1047 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1048 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1048 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1049 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1049 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1050 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1050 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1051 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1051 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1052 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1052 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1053 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1053 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1054 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1054 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1055 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1055 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1056 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1056 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1057 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1057 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1058 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1058 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1059 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1059 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1060 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1060 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |

Loads acting on QUAD-elements

| Elements | from | to | inc | Load Type | Prim LC/CC | Load val. | Dimension | Variation dP/dx | dP/dY | dP/dz |
|----------|------|----|-----|-----------|------------|-----------|-----------|-----------------|-------|-------|
| 3000 | 3999 | 1 | PXX | | | 0.001 | [MN/m2] | | | |
| 4000 | 4999 | 1 | PXX | | | 0.001 | [MN/m2] | | | |

Load Case 202 ΔΥΝΑΜΕΙΣ ΑΔΡΑΝΕΙΑΣ-[+Ey]

Factor forces and moments 1.000
Factor dead weight DL-XX 0.000
Factor dead weight DL-YY 0.360
Factor dead weight DL-ZZ 0.000
effective construction stage 40 to 40

Meshfree Loading

| Kind | Referenceto | Projection w[m] | Coordinates X[m] | Y[m] | Z[m] | Type | Loadvalue |
|------|-------------|-----------------|------------------|-----------|--------|------|---------------|
| Area | | | 0.000 | 2.000 | 0.000 | PYY | 0.004 [MN/m2] |
| | | | 11.800 | 2.000 | 0.000 | | 0.004 [MN/m2] |
| | | | 11.800 | -1.000 | 0.000 | | 0.002 [MN/m2] |
| | | | 0.000 | -1.000 | 0.000 | | 0.002 [MN/m2] |
| | | | (--) | activated | | | 89.83 percent |
| Area | QGRP | 3 | 3.000 | 0.000 | 2.000 | PYY | 0.004 [MN/m2] |
| | | | 11.800 | 2.000 | 0.000 | | 0.004 [MN/m2] |
| | | | 11.800 | -1.000 | 0.000 | | 0.002 [MN/m2] |
| | | | 0.000 | -1.000 | 0.000 | | 0.002 [MN/m2] |
| | | | (--) | activated | | | 10.17 percent |
| Area | QGRP | 4 | 3.000 | 11.800 | -2.000 | PYY | 0.006 [MN/m2] |
| | | | 0.000 | -2.000 | 0.000 | | 0.006 [MN/m2] |
| | | | 0.000 | -1.000 | 0.000 | | 0.006 [MN/m2] |
| | | | 11.800 | -1.000 | 0.000 | | 0.006 [MN/m2] |
| | | | (--) | activated | | | 89.83 percent |
| Area | QGRP | 3 | 3.000 | 11.800 | -2.000 | PYY | 0.006 [MN/m2] |
| | | | 0.000 | -2.000 | 0.000 | | 0.006 [MN/m2] |
| | | | 0.000 | -1.000 | 0.000 | | 0.006 [MN/m2] |
| | | | 11.800 | -1.000 | 0.000 | | 0.006 [MN/m2] |
| | | | (--) | activated | | | 10.17 percent |
| Area | QGRP | 4 | 3.000 | 0.000 | 2.000 | PYY | 0.000 [MN/m2] |
| | | | 11.800 | 2.000 | 0.000 | | 0.000 [MN/m2] |
| | | | 11.800 | -1.000 | 0.000 | | 0.000 [MN/m2] |
| | | | 0.000 | -1.000 | 0.000 | | 0.000 [MN/m2] |
| | | | (--) | activated | | | 89.83 percent |
| Area | QGRP | 3 | 3.000 | 0.000 | 2.000 | PYY | 0.000 [MN/m2] |
| | | | 11.800 | 2.000 | 0.000 | | 0.000 [MN/m2] |
| | | | 11.800 | -1.000 | 0.000 | | 0.000 [MN/m2] |
| | | | 0.000 | -1.000 | 0.000 | | 0.000 [MN/m2] |
| | | | (--) | activated | | | 10.17 percent |
| Area | QGRP | 4 | 3.000 | 0.000 | 2.000 | PYY | 0.000 [MN/m2] |
| | | | 11.800 | 2.000 | 0.000 | | 0.000 [MN/m2] |
| | | | 11.800 | -1.000 | 0.000 | | 0.000 [MN/m2] |
| | | | 0.000 | -1.000 | 0.000 | | 0.000 [MN/m2] |
| | | | (--) | activated | | | 10.17 percent |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1001 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1001 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1002 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1002 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1003 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1003 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1004 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1004 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1005 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1005 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1006 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1006 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1007 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1007 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1008 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1008 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1009 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1009 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1010 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1010 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1011 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1011 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1012 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1012 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1013 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1013 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1014 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1014 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1015 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1015 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1016 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1016 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1017 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1017 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1018 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1018 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1019 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1019 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1020 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1020 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1021 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1021 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1022 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1022 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1023 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1023 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1024 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1024 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1025 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1025 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1026 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1026 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1027 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1027 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1028 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1028 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1029 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1029 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1030 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1030 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1031 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1031 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1032 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1032 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1033 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1033 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1034 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1034 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1035 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1035 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1036 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1036 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1037 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1037 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1038 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1038 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1039 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1039 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1040 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1040 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1041 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1041 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1042 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1042 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1043 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1043 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1044 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1044 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1045 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1045 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1046 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1046 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1047 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1047 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1048 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1048 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1049 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1049 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1050 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1050 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1051 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1051 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1052 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1052 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1053 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1053 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1054 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1054 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1055 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1055 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1056 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1056 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1057 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1057 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1058 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1058 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1059 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1059 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1060 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1060 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |

Loads acting on QUAD-elements

| Elements | from | to | inc | Load Prim Type | LC/CC | Load val. | Dimension | Variation dP/dx | dP/dY | dP/dz |
|----------|------|------|-----|----------------|-------|-----------|-----------|-----------------|-------|-------|
| | 3000 | 3999 | 1 | PYY | | 0.001 | [MN/m2] | | | |
| | 4000 | 4999 | 1 | PYY | | 0.001 | [MN/m2] | | | |

Load Case 203 ΔΥΝΑΜΕΙΣ ΑΔΡΑΝΕΙΑΣ-[+Ez]

Factor forces and moments 1.000
Factor dead weight DL-XX 0.000
Factor dead weight DL-YY 0.000
Factor dead weight DL-ZZ 0.432
effective construction stage 40 to 40

Meshfree Loading

| Kind | Reference | Coordinate | Projection | Coordinates | Type | Load | value | |
|------|-----------|------------|------------|-------------|-----------|-------|-------|---------------|
| | | | w[m] | x[m] | Y[m] | Z[m] | | |
| Area | | | | 0.000 | 2.000 | 0.000 | PG | 0.004 [MN/m2] |
| | | | | 11.800 | 2.000 | 0.000 | | 0.004 [MN/m2] |
| | | | | 11.800 | -1.000 | 0.000 | | 0.002 [MN/m2] |
| | | | | 0.000 | -1.000 | 0.000 | | 0.002 [MN/m2] |
| Area | QGRP | 3 | 3.000 | (--) | activated | | 89.83 | percent |
| | | | | 0.000 | 2.000 | 0.000 | PG | 0.004 [MN/m2] |
| | | | | 11.800 | 2.000 | 0.000 | | 0.004 [MN/m2] |
| | | | | 11.800 | -1.000 | 0.000 | | 0.002 [MN/m2] |
| Area | QGRP | 4 | 3.000 | 0.000 | -1.000 | 0.000 | | 0.002 [MN/m2] |
| | | | | (--) | activated | | 10.17 | percent |
| | | | | 11.800 | -2.000 | 0.000 | PG | 0.007 [MN/m2] |
| | | | | 0.000 | -2.000 | 0.000 | | 0.007 [MN/m2] |
| Area | QGRP | 3 | 3.000 | 0.000 | -1.000 | 0.000 | | 0.007 [MN/m2] |
| | | | | 11.800 | -1.000 | 0.000 | | 0.007 [MN/m2] |
| | | | | (--) | activated | | 89.83 | percent |
| | | | | 11.800 | -2.000 | 0.000 | PG | 0.007 [MN/m2] |
| Area | QGRP | 4 | 3.000 | 0.000 | -2.000 | 0.000 | | 0.007 [MN/m2] |
| | | | | 0.000 | -1.000 | 0.000 | | 0.007 [MN/m2] |
| | | | | 11.800 | -1.000 | 0.000 | | 0.007 [MN/m2] |
| | | | | (--) | activated | | 10.17 | percent |
| Area | QGRP | 3 | 3.000 | 0.000 | 2.000 | 0.000 | PG | 0.000 [MN/m2] |
| | | | | 11.800 | 2.000 | 0.000 | | 0.000 [MN/m2] |
| | | | | 11.800 | -1.000 | 0.000 | | 0.000 [MN/m2] |
| | | | | 0.000 | -1.000 | 0.000 | | 0.000 [MN/m2] |
| Area | QGRP | 4 | 3.000 | (--) | activated | | 89.83 | percent |
| | | | | 0.000 | 2.000 | 0.000 | PG | 0.000 [MN/m2] |
| | | | | 11.800 | 2.000 | 0.000 | | 0.000 [MN/m2] |
| | | | | 11.800 | -1.000 | 0.000 | | 0.000 [MN/m2] |
| Area | QGRP | 3 | 3.000 | 0.000 | -1.000 | 0.000 | | 0.000 [MN/m2] |
| | | | | 0.000 | -1.000 | 0.000 | | 0.000 [MN/m2] |
| | | | | (--) | activated | | 10.17 | percent |
| | | | | 0.000 | 2.000 | 0.000 | PG | 0.000 [MN/m2] |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1001 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1001 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1002 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1002 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1003 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1003 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1004 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1004 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1005 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1005 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1006 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1006 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1007 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1007 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1008 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1008 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1009 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1009 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1010 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1010 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1011 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1011 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1012 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1012 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1013 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1013 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1014 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1014 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1015 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1015 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1016 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1016 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1017 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1017 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1018 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1018 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1019 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1019 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1020 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1020 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1021 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1021 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1022 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1022 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1023 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1023 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1024 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1024 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1025 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1025 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1026 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1026 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1027 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1027 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1028 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1028 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1029 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1029 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1030 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1030 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1031 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1031 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1032 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1032 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1033 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1033 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1034 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1034 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1035 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1035 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1036 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1036 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1037 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1037 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1038 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1038 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1039 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1039 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1040 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1040 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1041 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1041 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1042 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1042 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1043 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1043 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1044 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1044 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1045 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1045 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1046 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1046 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1047 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1047 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1048 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1048 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1049 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1049 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1050 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1050 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1051 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1051 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1052 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1052 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1053 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1053 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1054 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1054 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1055 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1055 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1056 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1056 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1057 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1057 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1058 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1058 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1059 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1059 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1060 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1060 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |

Loads acting on QUAD-elements

| Elements | | | Load Prim | Load | Dimension | Variation | | |
|----------|------|-----|------------|-------|-----------|-----------|-------|-------|
| from | to | inc | Type LC/CC | val. | | dP/dx | dP/dY | dP/dz |
| 3000 | 3999 | 1 | PG | 0.002 | [MN/m2] | | | |
| 4000 | 4999 | 1 | PG | 0.002 | [MN/m2] | | | |

Load Case 204 ΟΜΟΙΟΜΟΡΦΟ ΚΙΝΗΤΩΝ ΣΕΙΣΜ.ΣΥΝΔ.

| | |
|---------------------------|-------------|
| Factor forces and moments | 1.000 |
| Factor dead weight | DL-XX 0.000 |
| Factor dead weight | DL-YY 0.000 |
| Factor dead weight | DL-ZZ 0.000 |

Loads acting on QUAD-elements

| Elements | | | Load Prim | Load | Dimension | Variation | | |
|----------|------|-----|------------|-------|-----------|-----------|-------|-------|
| from | to | inc | Type LC/CC | val. | | dP/dx | dP/dY | dP/dz |
| 3000 | 3999 | 1 | PG | 0.020 | [MN/m2] | | | |
| 4000 | 4999 | 1 | PG | 0.020 | [MN/m2] | | | |

Load Case 205 ΟΜΟΦΟΡΕΣ ΣΕΙΣΜΙΚΕΣ ΘΕΗΣΕΙΣ ΓΑΙΩΝ-[

| | |
|---------------------------|-------------|
| Factor forces and moments | 1.000 |
| Factor dead weight | DL-XX 0.000 |
| Factor dead weight | DL-YY 0.000 |
| Factor dead weight | DL-ZZ 0.000 |

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue | |
|------|-------------|------------|-------------|-----------|-----------|-------------------------|
| | | w[m] | x[m] | y[m] | z[m] | |
| Area | | | 0.000 | 2.000 | 0.000 | PXX 0.023 [MN/m2] |
| | | | 0.000 | 2.000 | 0.800 | 0.023 [MN/m2] |
| | | | 0.000 | -2.000 | 0.800 | 0.023 [MN/m2] |
| | | | 0.000 | -2.000 | 0.000 | 0.023 [MN/m2] |
| Area | QGRP | 8 | 3.000 | activated | | 100.00 percent |
| | | | | 0.000 | 2.000 | PXX 0.023 [MN/m2] |
| | | | | 0.000 | -2.000 | 0.800 0.023 [MN/m2] |
| | | | | 0.000 | -2.000 | 1.350 0.023 [MN/m2] |
| Area | QGRP | 9 | 3.000 | activated | | 100.00 percent |
| | | | | 11.800 | 2.000 | 0.000 PXX 0.023 [MN/m2] |
| | | | | 11.800 | 2.000 | 0.800 0.023 [MN/m2] |
| | | | | 11.800 | -2.000 | 0.800 0.023 [MN/m2] |
| Area | QGRP | 8 | 3.000 | activated | | 100.00 percent |
| | | | | 11.800 | -2.000 | 0.000 0.023 [MN/m2] |
| | | | | 11.800 | -2.000 | 1.350 0.023 [MN/m2] |
| | | | | 11.800 | 2.000 | 1.350 0.023 [MN/m2] |
| Area | QGRP | 9 | 3.000 | activated | | 100.00 percent |
| | | | | 11.800 | 2.000 | 0.800 PXX 0.023 [MN/m2] |
| | | | | 11.800 | -2.000 | 0.800 0.023 [MN/m2] |
| | | | | 11.800 | -2.000 | 1.350 0.023 [MN/m2] |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|-----------------|-------|-------|-------|-------|
| 11001 | PXX | 0.000 | 0.550 | 0.032 | [MN/m] | | | | |
| 11002 | PXX | 0.000 | 0.550 | 0.032 | [MN/m] | | | | |
| 11003 | PXX | 0.000 | 0.550 | 0.032 | [MN/m] | | | | |
| 11004 | PXX | 0.000 | 0.550 | 0.032 | [MN/m] | | | | |
| 11005 | PXX | 0.000 | 0.550 | 0.032 | [MN/m] | | | | |
| 11006 | PXX | 0.000 | 0.550 | 0.032 | [MN/m] | | | | |
| 12001 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12002 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12003 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12004 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12005 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12006 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12007 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12008 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12009 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12010 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12011 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12012 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12013 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12014 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12015 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12016 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12017 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |
| 12018 | PXX | 0.000 | 1.000 | 0.032 | [MN/m] | | | | |

Load Case 711 Unidirectional +EX

| | | |
|---------------------------------------|-----------------|-------|
| Factor forces and moments | | 1.000 |
| Factor dead weight | DL-XX | 0.360 |
| Factor dead weight | DL-YY | 0.000 |
| Factor dead weight | DL-ZZ | 0.000 |
| Loads partially copied from load case | 201 with factor | 1.000 |
| Loads partially copied from load case | 205 with factor | 1.000 |

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|---------------------|-----------|----------------|
| | | w[m] | x[m] y[m] z[m] | | |
| Area | | | 0.000 2.000 0.000 | PXX | 0.004 [MN/m2] |
| | | | 11.800 2.000 0.000 | | 0.004 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | 0.002 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | 0.002 [MN/m2] |
| Area | QGRP 3 | 3.000 | (--) | activated | 89.83 percent |
| | | | 0.000 2.000 0.000 | PXX | 0.004 [MN/m2] |
| | | | 11.800 2.000 0.000 | | 0.004 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | 0.002 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | 0.002 [MN/m2] |
| Area | QGRP 4 | 3.000 | (--) | activated | 10.17 percent |
| | | | 11.800 -2.000 0.000 | PXX | 0.006 [MN/m2] |
| | | | 0.000 -2.000 0.000 | | 0.006 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | 0.006 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | 0.006 [MN/m2] |
| Area | QGRP 3 | 3.000 | (--) | activated | 89.83 percent |
| | | | 11.800 -2.000 0.000 | PXX | 0.006 [MN/m2] |
| | | | 0.000 -2.000 0.000 | | 0.006 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | 0.006 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | 0.006 [MN/m2] |
| Area | QGRP 4 | 3.000 | (--) | activated | 10.17 percent |
| | | | 0.000 2.000 0.000 | PXX | 0.000 [MN/m2] |
| | | | 11.800 2.000 0.000 | | 0.000 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | 0.000 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | 0.000 [MN/m2] |
| Area | QGRP 3 | 3.000 | (--) | activated | 89.83 percent |
| | | | 0.000 2.000 0.000 | PXX | 0.000 [MN/m2] |
| | | | 11.800 2.000 0.000 | | 0.000 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | 0.000 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | 0.000 [MN/m2] |
| Area | QGRP 4 | 3.000 | (--) | activated | 10.17 percent |
| | | | 0.000 2.000 0.000 | PXX | 0.023 [MN/m2] |
| | | | 0.000 2.000 0.800 | | 0.023 [MN/m2] |
| | | | 0.000 -2.000 0.800 | | 0.023 [MN/m2] |
| | | | 0.000 -2.000 0.000 | | 0.023 [MN/m2] |
| Area | QGRP 8 | 3.000 | (--) | activated | 100.00 percent |
| | | | 0.000 2.000 0.800 | PXX | 0.023 [MN/m2] |
| | | | 0.000 -2.000 0.800 | | 0.023 [MN/m2] |
| | | | 0.000 -2.000 1.350 | | 0.023 [MN/m2] |
| | | | 0.000 2.000 1.350 | | 0.023 [MN/m2] |
| Area | QGRP 9 | 3.000 | (--) | activated | 100.00 percent |
| | | | 11.800 2.000 0.000 | PXX | 0.023 [MN/m2] |
| | | | 11.800 2.000 0.800 | | 0.023 [MN/m2] |
| | | | 11.800 -2.000 0.800 | | 0.023 [MN/m2] |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|---------------------|-----------|----------------|
| | | | w[m] x[m] y[m] z[m] | | |
| Area | QGRP | 8 | 3.000 | | 0.023 [MN/m2] |
| | | | | activated | 100.00 percent |
| | | | | PXX | 0.023 [MN/m2] |
| | QGRP | 9 | 3.000 | | 0.023 [MN/m2] |
| | | | | activated | 100.00 percent |
| | | | | | 0.023 [MN/m2] |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|-------|-------|-------|-------|
| 1001 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1001 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1002 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1002 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1003 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1003 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1004 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1004 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1005 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1005 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1006 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1006 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1007 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1007 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1008 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1008 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1009 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1009 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1010 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1010 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1011 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1011 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1012 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1012 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1013 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1013 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1014 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1014 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1015 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1015 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1016 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1016 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1017 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1017 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1018 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1018 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1019 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1019 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1020 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1020 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1021 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1021 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1022 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1022 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1023 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1023 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1024 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1024 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1025 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1025 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1026 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1026 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1027 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1027 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1028 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1028 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1029 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1029 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1030 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1030 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1031 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1031 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1032 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1032 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1033 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1033 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1034 | PXX | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1034 | PXX | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1035 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1035 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1036 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1036 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1037 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1037 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1038 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1038 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1039 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1039 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1040 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1040 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1041 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1041 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1042 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1042 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1043 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1043 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1044 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1044 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1045 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1045 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1046 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1046 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1047 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1047 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1048 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1048 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1049 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1049 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1050 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1050 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1051 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1051 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1052 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1052 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1053 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1053 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1054 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1054 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1055 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1055 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1056 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1056 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1057 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1057 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1058 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1058 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1059 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1059 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1060 | PXX | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1060 | PXX | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 11001 | PXX | 0.000 | 0.550 | 0.032 | | [MN/m] | | | | |
| 11002 | PXX | 0.000 | 0.550 | 0.032 | | [MN/m] | | | | |
| 11003 | PXX | 0.000 | 0.550 | 0.032 | | [MN/m] | | | | |
| 11004 | PXX | 0.000 | 0.550 | 0.032 | | [MN/m] | | | | |
| 11005 | PXX | 0.000 | 0.550 | 0.032 | | [MN/m] | | | | |
| 11006 | PXX | 0.000 | 0.550 | 0.032 | | [MN/m] | | | | |
| 12001 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12002 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12003 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12004 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12005 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12006 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12007 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12008 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12009 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12010 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12011 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12012 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12013 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12014 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12015 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12016 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12017 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |
| 12018 | PXX | 0.000 | 1.000 | 0.032 | | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
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Loads acting on QUAD-elements

| Elements | from | to | inc | Load Prim Type | LC/CC | Load val. | Dimension | Variation dP/dx | dP/dy | dP/dz |
|----------|------|------|-----|----------------|-------|-----------|-----------|-----------------|-------|-------|
| | 3000 | 3999 | 1 | PXX | | 0.001 | [MN/m2] | | | |
| | 4000 | 4999 | 1 | PXX | | 0.001 | [MN/m2] | | | |

Load Case 712 Unidirectional -EX

| | |
|---------------------------------------|------------------------|
| Factor forces and moments | 1.000 |
| Factor dead weight | DL-XX -0.360 |
| Factor dead weight | DL-YY 0.000 |
| Factor dead weight | DL-ZZ 0.000 |
| Loads partially copied from load case | 201 with factor -1.000 |
| Loads partially copied from load case | 205 with factor -1.000 |

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------------------|----------------|-----------|
| | | | w[m] x[m] Y[m] Z[m] | | |
| Area | | | 0.000 2.000 0.000 PXX | -0.004 [MN/m2] | |
| | | | 11.800 2.000 0.000 | -0.004 [MN/m2] | |
| | | | 11.800 -1.000 0.000 | -0.002 [MN/m2] | |
| | | | 0.000 -1.000 0.000 | -0.002 [MN/m2] | |
| Area | QGRP | 3 | 3.000 (--) activated | 89.83 percent | |
| | | | 0.000 2.000 0.000 PXX | -0.004 [MN/m2] | |
| | | | 11.800 2.000 0.000 | -0.004 [MN/m2] | |
| | | | 11.800 -1.000 0.000 | -0.002 [MN/m2] | |
| | | | 0.000 -1.000 0.000 | -0.002 [MN/m2] | |
| Area | QGRP | 4 | 3.000 (--) activated | 10.17 percent | |
| | | | 11.800 -2.000 0.000 PXX | -0.006 [MN/m2] | |
| | | | 0.000 -2.000 0.000 | -0.006 [MN/m2] | |
| | | | 0.000 -1.000 0.000 | -0.006 [MN/m2] | |
| | | | 11.800 -1.000 0.000 | -0.006 [MN/m2] | |
| Area | QGRP | 3 | 3.000 (--) activated | 89.83 percent | |
| | | | 11.800 -2.000 0.000 PXX | -0.006 [MN/m2] | |
| | | | 0.000 -2.000 0.000 | -0.006 [MN/m2] | |
| | | | 0.000 -1.000 0.000 | -0.006 [MN/m2] | |
| | | | 11.800 -1.000 0.000 | -0.006 [MN/m2] | |
| Area | QGRP | 4 | 3.000 (--) activated | 10.17 percent | |
| | | | 0.000 2.000 0.000 PXX | 0.000 [MN/m2] | |
| | | | 11.800 2.000 0.000 | 0.000 [MN/m2] | |
| | | | 11.800 -1.000 0.000 | 0.000 [MN/m2] | |
| | | | 0.000 -1.000 0.000 | 0.000 [MN/m2] | |
| Area | QGRP | 3 | 3.000 (--) activated | 89.83 percent | |
| | | | 0.000 2.000 0.000 PXX | 0.000 [MN/m2] | |
| | | | 11.800 2.000 0.000 | 0.000 [MN/m2] | |
| | | | 11.800 -1.000 0.000 | 0.000 [MN/m2] | |
| | | | 0.000 -1.000 0.000 | 0.000 [MN/m2] | |
| Area | QGRP | 4 | 3.000 (--) activated | 10.17 percent | |
| | | | 0.000 2.000 0.000 PXX | -0.023 [MN/m2] | |
| | | | 0.000 2.000 0.800 | -0.023 [MN/m2] | |
| | | | 0.000 -2.000 0.800 | -0.023 [MN/m2] | |
| | | | 0.000 -2.000 0.000 | -0.023 [MN/m2] | |
| Area | QGRP | 8 | 3.000 activated | 100.00 percent | |
| | | | 0.000 2.000 0.800 PXX | -0.023 [MN/m2] | |
| | | | 0.000 -2.000 0.800 | -0.023 [MN/m2] | |
| | | | 0.000 -2.000 1.350 | -0.023 [MN/m2] | |
| | | | 0.000 2.000 1.350 | -0.023 [MN/m2] | |
| Area | QGRP | 9 | 3.000 activated | 100.00 percent | |
| | | | 11.800 2.000 0.000 PXX | -0.023 [MN/m2] | |
| | | | 11.800 2.000 0.800 | -0.023 [MN/m2] | |
| | | | 11.800 -2.000 0.800 | -0.023 [MN/m2] | |
| | | | 11.800 -2.000 0.000 | -0.023 [MN/m2] | |
| Area | QGRP | 8 | 3.000 activated | 100.00 percent | |
| | | | 11.800 2.000 0.800 PXX | -0.023 [MN/m2] | |
| | | | 11.800 -2.000 0.800 | -0.023 [MN/m2] | |
| | | | 11.800 -2.000 1.350 | -0.023 [MN/m2] | |
| | | | 11.800 2.000 1.350 | -0.023 [MN/m2] | |
| QGRP | 9 | 3.000 | activated | 100.00 percent | |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|-----------------|-------|-------|-------|-------|
| 1001 | PXX | 0.000 | 0.883 | -0.002 | [MN/m] | | | | |
| 1001 | PXX | 0.000 | 0.883 | -0.003 | [MN/m] | | | | |
| 1002 | PXX | 0.000 | 0.883 | -0.002 | [MN/m] | | | | |
| 1002 | PXX | 0.000 | 0.883 | -0.003 | [MN/m] | | | | |
| 1003 | PXX | 0.000 | 0.883 | -0.002 | [MN/m] | | | | |
| 1003 | PXX | 0.000 | 0.883 | -0.003 | [MN/m] | | | | |
| 1004 | PXX | 0.000 | 0.883 | -0.002 | [MN/m] | | | | |
| 1004 | PXX | 0.000 | 0.883 | -0.003 | [MN/m] | | | | |
| 1005 | PXX | 0.000 | 0.883 | -0.002 | [MN/m] | | | | |
| 1005 | PXX | 0.000 | 0.883 | -0.003 | [MN/m] | | | | |
| 1006 | PXX | 0.000 | 0.883 | -0.002 | [MN/m] | | | | |

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Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1006 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1007 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1007 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1008 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1008 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1009 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1009 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1010 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1010 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1011 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1011 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1012 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1012 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1013 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1013 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1014 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1014 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1015 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1015 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1016 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1016 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1017 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1017 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1018 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1018 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1019 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1019 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1020 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1020 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1021 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1021 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1022 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1022 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1023 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1023 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1024 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1024 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1025 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1025 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1026 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1026 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1027 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1027 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1028 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1028 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1029 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1029 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1030 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1030 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1031 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1031 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1032 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1032 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1033 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1033 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1034 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1034 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1035 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1035 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1036 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1036 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1037 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1037 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1038 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1038 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1039 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1039 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1040 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1040 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1041 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1041 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1042 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1042 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1043 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1043 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1044 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1044 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1045 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1045 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |

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Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1046 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1046 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1047 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1047 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1048 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1048 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1049 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1049 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1050 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1050 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1051 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1051 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1052 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1052 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1053 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1053 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1054 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1054 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1055 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1055 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1056 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1056 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1057 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1057 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1058 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1058 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1059 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1059 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1060 | PXX | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1060 | PXX | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 11001 | PXX | 0.000 | 0.550 | -0.032 | | [MN/m] | | | | |
| 11002 | PXX | 0.000 | 0.550 | -0.032 | | [MN/m] | | | | |
| 11003 | PXX | 0.000 | 0.550 | -0.032 | | [MN/m] | | | | |
| 11004 | PXX | 0.000 | 0.550 | -0.032 | | [MN/m] | | | | |
| 11005 | PXX | 0.000 | 0.550 | -0.032 | | [MN/m] | | | | |
| 11006 | PXX | 0.000 | 0.550 | -0.032 | | [MN/m] | | | | |
| 12001 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12002 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12003 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12004 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12005 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12006 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12007 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12008 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12009 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12010 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12011 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12012 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12013 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12014 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12015 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12016 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12017 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |
| 12018 | PXX | 0.000 | 1.000 | -0.032 | | [MN/m] | | | | |

Loads acting on QUAD-elements

| Elements | from | to | inc | Load Prim Type LC/CC | Load val. | Dimension | Variation dP/dx | dP/dY | dP/dz |
|----------|------|------|-----|----------------------|-----------|-----------|-----------------|-------|-------|
| | 3000 | 3999 | 1 | PXX | -0.001 | [MN/m2] | | | |
| | 4000 | 4999 | 1 | PXX | -0.001 | [MN/m2] | | | |

Load Case 714 +EY

Factor forces and moments 1.000
Factor dead weight DL-XX 0.000
Factor dead weight DL-YY 0.360
Factor dead weight DL-ZZ 0.000
Loads partially copied from load case 202 with factor 1.000

Meshfree Loading

| Kind | | Reference | to | Projection | Coordinates | | | | Type | Loadvalue |
|------|------|-----------|----|------------|-------------|--------|--------|-------|------|-------------------------|
| | | | | | W[m] | X[m] | Y[m] | Z[m] | | |
| Area | | | | | | 0.000 | 2.000 | 0.000 | PYY | 0.004 [MN/m2] |
| | | | | | | 11.800 | 2.000 | 0.000 | | 0.004 [MN/m2] |
| | | | | | | 11.800 | -1.000 | 0.000 | | 0.002 [MN/m2] |
| | | | | | | 0.000 | -1.000 | 0.000 | | 0.002 [MN/m2] |
| | | | | | | (--) | | | | activated 89.83 percent |
| Area | QGRP | 3 | | 3.000 | | | | | PYY | 0.004 [MN/m2] |
| | | | | | | 11.800 | 2.000 | 0.000 | | 0.004 [MN/m2] |
| | | | | | | 11.800 | -1.000 | 0.000 | | 0.002 [MN/m2] |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|---------------------|-----------|---------------|
| | | | w[m] x[m] y[m] z[m] | | |
| Area | QGRP | 4 | 3.000 | activated | 0.002 [MN/m2] |
| | | | | | 10.17 percent |
| | | | | | 0.006 [MN/m2] |
| | | | | | 0.006 [MN/m2] |
| | | | | | 0.006 [MN/m2] |
| Area | QGRP | 3 | 3.000 | activated | 89.83 percent |
| | | | | | 0.006 [MN/m2] |
| | | | | | 0.006 [MN/m2] |
| | | | | | 0.006 [MN/m2] |
| | | | | | 0.006 [MN/m2] |
| Area | QGRP | 4 | 3.000 | activated | 10.17 percent |
| | | | | | 0.000 [MN/m2] |
| | | | | | 0.000 [MN/m2] |
| | | | | | 0.000 [MN/m2] |
| | | | | | 0.000 [MN/m2] |
| Area | QGRP | 3 | 3.000 | activated | 89.83 percent |
| | | | | | 0.000 [MN/m2] |
| | | | | | 0.000 [MN/m2] |
| | | | | | 0.000 [MN/m2] |
| | | | | | 0.000 [MN/m2] |
| Area | QGRP | 4 | 3.000 | activated | 10.17 percent |
| | | | | | 0.000 [MN/m2] |
| | | | | | 0.000 [MN/m2] |
| | | | | | 0.000 [MN/m2] |
| | | | | | 0.000 [MN/m2] |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|-------|-------|-------|-------|
| 1001 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1001 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1002 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1002 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1003 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1003 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1004 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1004 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1005 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1005 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1006 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1006 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1007 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1007 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1008 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1008 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1009 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1009 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1010 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1010 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1011 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1011 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1012 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1012 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1013 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1013 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1014 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1014 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1015 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1015 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1016 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1016 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1017 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1017 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1018 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1018 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1019 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1019 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1020 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1020 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1021 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1021 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1022 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1022 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1023 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1023 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1024 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1024 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1025 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1025 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1026 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1026 | PYY | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1027 | PYY | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |

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Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1027 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1028 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1028 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1029 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1029 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1030 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1030 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1031 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1031 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1032 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1032 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1033 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1033 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1034 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1034 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1035 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1035 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1036 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1036 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1037 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1037 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1038 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1038 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1039 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1039 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1040 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1040 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1041 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1041 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1042 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1042 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1043 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1043 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1044 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1044 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1045 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1045 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1046 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1046 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1047 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1047 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1048 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1048 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1049 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1049 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1050 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1050 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1051 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1051 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1052 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1052 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1053 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1053 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1054 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1054 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1055 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1055 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1056 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1056 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1057 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1057 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1058 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1058 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1059 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1059 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1060 | PYY | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1060 | PYY | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |

Loads acting on QUAD-elements

| Elements | from | to | inc | Load Type | Prim LC/CC | Load val. | Dimension | Variation dP/dx | dP/dy | dP/dz |
|----------|------|------|-----|-----------|------------|-----------|-----------|-----------------|-------|-------|
| | 3000 | 3999 | 1 | PYY | | 0.001 | [MN/m2] | | | |
| | 4000 | 4999 | 1 | PYY | | 0.001 | [MN/m2] | | | |

Load Case 715 -EY

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Load Case 715 -EY

Factor forces and moments 1.000
Factor dead weight DL-XX 0.000
Factor dead weight DL-YY -0.360
Factor dead weight DL-ZZ 0.000
Loads partially copied from load case 202 with factor -1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|----------------------|------|----------------|
| | | | w[m] x[m] Y[m] Z[m] | | |
| Area | | | 0.000 2.000 0.000 | PYY | -0.004 [MN/m2] |
| | | | 11.800 2.000 0.000 | | -0.004 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | -0.002 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | -0.002 [MN/m2] |
| Area | QGRP | 3 | 3.000 (--) activated | | 89.83 percent |
| | | | 0.000 2.000 0.000 | PYY | -0.004 [MN/m2] |
| | | | 11.800 2.000 0.000 | | -0.004 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | -0.002 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | -0.002 [MN/m2] |
| Area | QGRP | 4 | 3.000 (--) activated | | 10.17 percent |
| | | | 11.800 -2.000 0.000 | PYY | -0.006 [MN/m2] |
| | | | 0.000 -2.000 0.000 | | -0.006 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | -0.006 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | -0.006 [MN/m2] |
| Area | QGRP | 3 | 3.000 (--) activated | | 89.83 percent |
| | | | 11.800 -2.000 0.000 | PYY | -0.006 [MN/m2] |
| | | | 0.000 -2.000 0.000 | | -0.006 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | -0.006 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | -0.006 [MN/m2] |
| Area | QGRP | 4 | 3.000 (--) activated | | 10.17 percent |
| | | | 0.000 2.000 0.000 | PYY | 0.000 [MN/m2] |
| | | | 11.800 2.000 0.000 | | 0.000 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | 0.000 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | 0.000 [MN/m2] |
| Area | QGRP | 3 | 3.000 (--) activated | | 89.83 percent |
| | | | 0.000 2.000 0.000 | PYY | 0.000 [MN/m2] |
| | | | 11.800 2.000 0.000 | | 0.000 [MN/m2] |
| | | | 11.800 -1.000 0.000 | | 0.000 [MN/m2] |
| | | | 0.000 -1.000 0.000 | | 0.000 [MN/m2] |
| Area | QGRP | 4 | 3.000 (--) activated | | 10.17 percent |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1001 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1001 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1002 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1002 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1003 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1003 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1004 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1004 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1005 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1005 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1006 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1006 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1007 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1007 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1008 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1008 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1009 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1009 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1010 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1010 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1011 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1011 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1012 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1012 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1013 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1013 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1014 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1014 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1015 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1015 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1016 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1016 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1017 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1017 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1018 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1018 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1019 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1019 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1020 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1020 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1021 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1021 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1022 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1022 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1023 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1023 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1024 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1024 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1025 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1025 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1026 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1026 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1027 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1027 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1028 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1028 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1029 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1029 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1030 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1030 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1031 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1031 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1032 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1032 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1033 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1033 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1034 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1034 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1035 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1035 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1036 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1036 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1037 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1037 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1038 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1038 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1039 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1039 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1040 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1040 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1041 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1041 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1042 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1042 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1043 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1043 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1044 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1044 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1045 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1045 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1046 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1046 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1047 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1047 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1048 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1048 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1049 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1049 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1050 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1050 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1051 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1051 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1052 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1052 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1053 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1053 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1054 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1054 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1055 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1055 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1056 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1056 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1057 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1057 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1058 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1058 | PYY | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1059 | PYY | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|-----------------|-------|-------|-------|-------|
| 1059 | PYY | 0.000 | 0.883 | -0.003 | [MN/m] | | | | |
| 1060 | PYY | 0.000 | 0.883 | -0.002 | [MN/m] | | | | |
| 1060 | PYY | 0.000 | 0.883 | -0.003 | [MN/m] | | | | |

Loads acting on QUAD-elements

| Elements from | to | inc | Load Type | Prim LC/CC | Load val. | Dimension | Variation dP/dx | dP/dY | dP/dz |
|---------------|------|-----|-----------|------------|-----------|-----------|-----------------|-------|-------|
| 3000 | 3999 | 1 | PYY | | -0.001 | [MN/m2] | | | |
| 4000 | 4999 | 1 | PYY | | -0.001 | [MN/m2] | | | |

Load Case 716 EZ

Factor forces and moments 1.000
Factor dead weight DL-XX 0.000
Factor dead weight DL-YY 0.000
Factor dead weight DL-ZZ 0.432
Loads partially copied from load case 203 with factor 1.000

Meshfree Loading

| Kind | Referenceto | Projection w[m] | Coordinates X[m] | Y[m] | Z[m] | Type | Loadvalue |
|------|-------------|-----------------|------------------|--------|-----------|-------|------------------|
| Area | QGRP | 3 | 3.000 | 0.000 | 2.000 | 0.000 | PG 0.004 [MN/m2] |
| | | | | 11.800 | 2.000 | 0.000 | 0.004 [MN/m2] |
| | | | | 11.800 | -1.000 | 0.000 | 0.002 [MN/m2] |
| | | | | 0.000 | -1.000 | 0.000 | 0.002 [MN/m2] |
| Area | QGRP | 4 | 3.000 | (--) | activated | | 89.83 percent |
| | | | | 0.000 | 2.000 | 0.000 | PG 0.004 [MN/m2] |
| | | | | 11.800 | 2.000 | 0.000 | 0.004 [MN/m2] |
| | | | | 11.800 | -1.000 | 0.000 | 0.002 [MN/m2] |
| Area | QGRP | 3 | 3.000 | 0.000 | -1.000 | 0.000 | 0.002 [MN/m2] |
| | | | | (--) | activated | | 10.17 percent |
| | | | | 11.800 | -2.000 | 0.000 | PG 0.007 [MN/m2] |
| | | | | 0.000 | -2.000 | 0.000 | 0.007 [MN/m2] |
| Area | QGRP | 4 | 3.000 | 0.000 | -1.000 | 0.000 | 0.007 [MN/m2] |
| | | | | 11.800 | -1.000 | 0.000 | 0.007 [MN/m2] |
| | | | | (--) | activated | | 10.17 percent |
| | | | | 0.000 | 2.000 | 0.000 | PG 0.000 [MN/m2] |
| Area | QGRP | 3 | 3.000 | 11.800 | 2.000 | 0.000 | 0.000 [MN/m2] |
| | | | | 11.800 | -1.000 | 0.000 | 0.000 [MN/m2] |
| | | | | 0.000 | -1.000 | 0.000 | 0.000 [MN/m2] |
| | | | | 11.800 | -1.000 | 0.000 | 0.000 [MN/m2] |
| Area | QGRP | 4 | 3.000 | (--) | activated | | 89.83 percent |
| | | | | 0.000 | 2.000 | 0.000 | PG 0.000 [MN/m2] |
| | | | | 11.800 | 2.000 | 0.000 | 0.000 [MN/m2] |
| | | | | 11.800 | -1.000 | 0.000 | 0.000 [MN/m2] |
| Area | QGRP | 3 | 3.000 | 0.000 | -1.000 | 0.000 | 0.000 [MN/m2] |
| | | | | (--) | activated | | 10.17 percent |
| | | | | 0.000 | 2.000 | 0.000 | PG 0.000 [MN/m2] |
| | | | | 11.800 | 2.000 | 0.000 | 0.000 [MN/m2] |
| Area | QGRP | 4 | 3.000 | 11.800 | -1.000 | 0.000 | 0.000 [MN/m2] |
| | | | | 0.000 | -1.000 | 0.000 | 0.000 [MN/m2] |
| | | | | (--) | activated | | 89.83 percent |
| | | | | 0.000 | 2.000 | 0.000 | PG 0.000 [MN/m2] |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|-----------------|-------|-------|-------|-------|
| 1001 | PG | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1001 | PG | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1002 | PG | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1002 | PG | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1003 | PG | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1003 | PG | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1004 | PG | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1004 | PG | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1005 | PG | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1005 | PG | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1006 | PG | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1006 | PG | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1007 | PG | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1007 | PG | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1008 | PG | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1008 | PG | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1009 | PG | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1009 | PG | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1010 | PG | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1010 | PG | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1011 | PG | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1011 | PG | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1012 | PG | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1012 | PG | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |
| 1013 | PG | 0.000 | 0.883 | 0.002 | [MN/m] | | | | |
| 1013 | PG | 0.000 | 0.883 | 0.003 | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1014 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1014 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1015 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1015 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1016 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1016 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1017 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1017 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1018 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1018 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1019 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1019 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1020 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1020 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1021 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1021 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1022 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1022 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1023 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1023 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1024 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1024 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1025 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1025 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1026 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1026 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1027 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1027 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1028 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1028 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1029 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1029 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1030 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1030 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1031 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1031 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1032 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1032 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1033 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1033 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1034 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1034 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1035 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1035 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1036 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1036 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1037 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1037 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1038 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1038 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1039 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1039 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1040 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1040 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1041 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1041 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1042 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1042 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1043 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1043 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1044 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1044 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1045 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1045 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1046 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1046 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1047 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1047 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1048 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1048 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1049 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1049 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1050 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1050 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1051 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1051 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1052 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1052 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1053 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1053 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1054 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1054 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1055 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1055 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1056 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1056 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1057 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1057 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1058 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1058 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1059 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1059 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |
| 1060 | PG | 0.000 | 0.883 | 0.002 | | [MN/m] | | | | |
| 1060 | PG | 0.000 | 0.883 | 0.003 | | [MN/m] | | | | |

Loads acting on QUAD-elements

| Elements | from | to | inc | Load Prim | Load | Dimension | Variation | dP/dx | dP/dY | dP/dz |
|----------|------|------|-----|------------|-------|-----------|-----------|-------|-------|-------|
| | | | | Type LC/CC | val. | | | | | |
| | 3000 | 3999 | 1 | PG | 0.002 | [MN/m2] | | | | |
| | 4000 | 4999 | 1 | PG | 0.002 | [MN/m2] | | | | |

Load Case 717 -EZ

Factor forces and moments 1.000
Factor dead weight DL-XX 0.000
Factor dead weight DL-YY 0.000
Factor dead weight DL-ZZ -0.432
Loads partially copied from load case 203 with factor -1.000

Meshfree Loading

| Kind | Referenceto | Projection | Coordinates | Type | Loadvalue |
|------|-------------|------------|-------------|--------|-----------|
| | | w[m] | x[m] | Y[m] | Z[m] |
| Area | | | 0.000 | 2.000 | 0.000 |
| | | | 11.800 | 2.000 | 0.000 |
| | | | 11.800 | -1.000 | 0.000 |
| | | | 0.000 | -1.000 | 0.000 |
| Area | QGRP | 3 | 3.000 | (--) | activated |
| | | | 0.000 | 2.000 | 0.000 |
| | | | 11.800 | 2.000 | 0.000 |
| | | | 11.800 | -1.000 | 0.000 |
| | | | 0.000 | -1.000 | 0.000 |
| Area | QGRP | 4 | 3.000 | (--) | activated |
| | | | 11.800 | -2.000 | 0.000 |
| | | | 0.000 | -2.000 | 0.000 |
| | | | 0.000 | -1.000 | 0.000 |
| | | | 11.800 | -1.000 | 0.000 |
| Area | QGRP | 3 | 3.000 | (--) | activated |
| | | | 11.800 | -2.000 | 0.000 |
| | | | 0.000 | -2.000 | 0.000 |
| | | | 0.000 | -1.000 | 0.000 |
| | | | 11.800 | -1.000 | 0.000 |
| Area | QGRP | 4 | 3.000 | (--) | activated |
| | | | 0.000 | 2.000 | 0.000 |
| | | | 11.800 | 2.000 | 0.000 |
| | | | 11.800 | -1.000 | 0.000 |
| | | | 0.000 | -1.000 | 0.000 |
| Area | QGRP | 3 | 3.000 | (--) | activated |
| | | | 0.000 | 2.000 | 0.000 |
| | | | 11.800 | 2.000 | 0.000 |
| | | | 11.800 | -1.000 | 0.000 |
| | | | 0.000 | -1.000 | 0.000 |
| Area | QGRP | 4 | 3.000 | (--) | activated |
| | | | 0.000 | 2.000 | 0.000 |
| | | | 11.800 | 2.000 | 0.000 |
| | | | 11.800 | -1.000 | 0.000 |
| | | | 0.000 | -1.000 | 0.000 |

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1001 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1001 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1002 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1002 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1003 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1003 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1004 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1004 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1005 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1005 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1006 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1006 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1007 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1007 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1008 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1008 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1009 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1009 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1010 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1010 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1011 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1011 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1012 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1012 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1013 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1013 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1014 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1014 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1015 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1015 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1016 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1016 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1017 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1017 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1018 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1018 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1019 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1019 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1020 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1020 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1021 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1021 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1022 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1022 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1023 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1023 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1024 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1024 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1025 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1025 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1026 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1026 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1027 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1027 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1028 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1028 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1029 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1029 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1030 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1030 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1031 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1031 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1032 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1032 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1033 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1033 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1034 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1034 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1035 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1035 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1036 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1036 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1037 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1037 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1038 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1038 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1039 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1039 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1040 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1040 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1041 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1041 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1042 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1042 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1043 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1043 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1044 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1044 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1045 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1045 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1046 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1046 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1047 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Loads acting on Beam-elements

| Number | Type | a[m] | l[m] | Loadval | Loadval | Dimens. | ya[m] | za[m] | ye[m] | ze[m] |
|--------|------|-------|-------|---------|---------|---------|-------|-------|-------|-------|
| 1047 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1048 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1048 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1049 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1049 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1050 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1050 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1051 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1051 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1052 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1052 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1053 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1053 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1054 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1054 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1055 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1055 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1056 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1056 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1057 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1057 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1058 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1058 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1059 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1059 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |
| 1060 | PG | 0.000 | 0.883 | -0.002 | | [MN/m] | | | | |
| 1060 | PG | 0.000 | 0.883 | -0.003 | | [MN/m] | | | | |

Loads acting on QUAD-elements

| Elements | | | Load Prim | Load | Dimension | Variation | | |
|----------|------|-----|------------|--------|-----------|-----------|-------|-------|
| from | to | inc | Type LC/CC | val. | | dP/dx | dP/dY | dP/dZ |
| 3000 | 3999 | 1 | PG | -0.002 | [MN/m2] | | | |
| 4000 | 4999 | 1 | PG | -0.002 | [MN/m2] | | | |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN +Ex)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8101 Unid.-Seismic Combinatio | 2.220 | 0.402 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.003 | energy 401.7166 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 401.8509 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN +Ex)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8103 Unid.-Seismic Combinatio | 2.220 | 0.402 | 3.240 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.002 | energy 391.9405 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 392.0504 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN +Ex)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8105 Unid.-Seismic Combinatio | 2.220 | -0.402 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.003 | energy 401.9994 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 402.1343 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN +Ex)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8107 Unid.-Seismic Combinatio | 2.220 | -0.402 | 3.240 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.002 | energy 392.1588 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 392.2691 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -Ex)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8102 Unid.-Seismic Combinatio | -2.303 | 0.402 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.003 | energy 405.8246 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 405.9723 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -EX)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8104 Unid.-Seismic Combinatio | -2.303 | 0.402 | 3.240 |

Iteration sequence

| | | | | | |
|----------------------|-------|--------|--------------|-------|-------|
| Iteration 1 Residual | 0.003 | energy | 396.0448 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy | 396.1657 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -Ex)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8106 Unid.-Seismic Combinatio | -2.303 | -0.402 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.003 | energy 406.1074 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 406.2556 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -EX)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8108 Unid.-Seismic Combinatio | -2.303 | -0.402 | 3.240 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.003 | energy 396.2631 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 396.3844 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN +Ey)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8201 Unid.-Seismic Combinatio | 0.637 | 1.340 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.002 | energy 369.8273 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 369.8826 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN +Ey)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8203 Unid.-Seismic Combinatio | 0.637 | 1.340 | 3.240 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.002 | energy 360.1228 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 360.1679 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN +Ey)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8205 Unid.-Seismic Combinatio | 0.637 | -1.340 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.002 | energy 370.7699 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 370.8270 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN +Ey)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8207 Unid.-Seismic Combinatio | 0.637 | -1.340 | 3.240 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.002 | energy 360.8504 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 360.8965 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -Ey)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8202 Unid.-Seismic Combinatio | -0.720 | 1.340 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.002 | energy 370.9828 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 371.0421 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -Ey)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8204 Unid.-Seismic Combinatio | -0.720 | 1.340 | 3.240 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.002 | energy 361.2783 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 361.3267 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -Ey)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8206 Unid.-Seismic Combinatio | -0.720 | -1.340 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.002 | energy 371.9254 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 371.9865 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -Ey)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8208 Unid.-Seismic Combinatio | -0.720 | -1.340 | 3.240 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.002 | energy 362.0059 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 362.0554 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN +Ez)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8301 Unid.-Seismic Combinatio | 0.637 | 0.402 | 5.330 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.001 | energy 363.2062 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 363.2245 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN +Ez)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8303 Unid.-Seismic Combinatio | 0.637 | 0.402 | 2.114 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.000 | energy 330.6069 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 330.6157 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN +Ez)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8305 Unid.-Seismic Combinatio | 0.637 | -0.402 | 5.330 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.001 | energy 363.5642 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 363.5834 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN +Ez)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8307 Unid.-Seismic Combinatio | 0.637 | -0.402 | 2.114 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.000 | energy 330.7499 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 330.7589 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -EZ)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8302 Unid.-Seismic Combinatio | -0.720 | 0.402 | 5.330 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.001 | energy 364.3616 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 364.3849 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -EZ)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8304 Unid.-Seismic Combinatio | -0.720 | 0.402 | 2.114 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.001 | energy 331.7624 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 331.7737 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -EZ)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8306 Unid.-Seismic Combinatio | -0.720 | -0.402 | 5.330 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.001 | energy 364.7197 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 364.7438 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -EZ)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 8308 Unid.-Seismic Combinatio | -0.720 | -0.402 | 2.114 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.001 | energy 331.9054 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 331.9168 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
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Design according to DIN1045-1 2008
Loadcases have been calculated in the Ultimate Limit State
In BEMESS no additional load safety factor is applied.

Load Cases for the Design

| | | |
|---------------|----------------------------------|--------------------------|
| Loadcase 8101 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8102 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8103 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8104 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8105 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8106 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8107 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8108 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8201 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8202 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8203 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8204 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8205 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8206 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8207 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8301 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8302 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8303 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8304 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8305 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8306 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8307 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 8308 | Unid.-Seismic Combinatio + Nodal | reaction punching design |

Material (DIN1045-1 2008)

| Mat | f-ck [MPa] | f-cr [MPa] | f-yk [MPa] | f-tk [MPa] | f-ctm [MPa] | N minQ [-] | type |
|-----|---------------|---------------|---------------|---------------|----------------|---------------|---------------|
| 1 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 3 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 4 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 5 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 6 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 7 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 8 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 9 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |
| 10 | 25.0 | 21.2 | | | 2.565 | 7.5 0.20 | mainly static |

Minimum reinforcement: 0.00 p.c. of stat. req. section
12 500.0 525.0

Reduction of FC in case of transvers tension = 25.0 [o/o]

Material-safety-factors:

| Mat | concr | SC1 | SC2 | steel | SS1 | SS2 |
|-----|-------|------|------|-------|------|-----|
| 1 | | 1.50 | 1.50 | | | |
| 3 | | 1.50 | 1.50 | | | |
| 4 | | 1.50 | 1.50 | | | |
| 5 | | 1.50 | 1.50 | | | |
| 6 | | 1.50 | 1.50 | | | |
| 7 | | 1.50 | 1.50 | | | |
| 8 | | 1.50 | 1.50 | | | |
| 9 | | 1.50 | 1.50 | | | |
| 10 | | 1.50 | 1.50 | | | |
| 12 | | | | 1.15 | 1.15 | |

Acc. the german DIN Fachberichten a minimum concrete shear capacity VRd,ct is taken into account in the shear design without shear reinforcement.

In shear design the cotangens theta is limited to 1.750 .

At direct supports from the face of the support up to 1.0*d the shear force is reduced.
The maximum shear capacity is checked at the face of the support without reduction.

The punching design has been switched off and must be done separately.
Outside the punching area, the normal slab shear design may increase the, longitudinal reinforcement up to 0.20% [input CTRL...RO_V].

Geometry (axial covers)

| No | he-upper [mm] | hi-upper [mm] | he-lower [mm] | hi-lower [mm] | Elem. height [mm] |
|----|------------------|------------------|------------------|------------------|----------------------|
| 1 | 50 | 70 | 35 | 55 | As saved |

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Selection of elements

| | from | to | inc | group | GEOMETRY |
|---------|------|------|-----|-------|----------|
| Element | 3001 | 3999 | 1 | - | 1 |
| Element | 4001 | 4999 | 1 | - | 1 |
| Element | 8001 | 8999 | 1 | - | 1 |

Reinforcement is saved in the data base file
Number of stored reinforcement-distribution: 522

REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm²/m] upper/lower
General load safety factor - as defined in BEMESS: Gamma-f = 1.00
Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm
Shear index 2m = minimum shear reinforcement

| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement main cross | dphi deg | shr zon | VEd/d [MPa] | VRd,ct/d [MPa] | Ass [cm ² /m ²] |
|-----|------------|----------|-----------|-----------|----------|-----------------------------|-------------|------------|----------------|-------------------|---|
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| 3 | 3001 | | | MBW | 0.25 | 1.39 0.28 | 0 | 1 | 0.078 | | |
| | | | | | | 0.78 0.16 | 0 | | 0.495 | | |
| 3 | 3002 | | | maximum | 0.25 | 0.31 0.06 | 0 | 1 | 0.058 | | |
| | | | | | | 1.55 0.31 | 0 | | 0.495 | | |
| 3 | 3003 | | | maximum | 0.25 | 0.02 | 0 | 1 | 0.049 | | |
| | | | | | | 2.03 0.41 | 0 | | 0.495 | | |
| 3 | 3004 | | | maximum | 0.25 | 0.02 | 0 | 1 | 0.038 | | |
| | | | | | | 2.36 0.47 | 0 | | 0.495 | | |
| 3 | 3005 | | | maximum | 0.25 | 0.02 | 0 | 1 | 0.027 | | |
| | | | | | | 2.51 0.50 | 0 | | 0.496 | | |
| 3 | 3006 | | | maximum | 0.25 | 0.02 | 0 | 1 | 0.017 | | |
| | | | | | | 2.61 0.52 | 0 | | 0.496 | | |
| 3 | 3007 | | | maximum | 0.25 | 1.39 0.28 | 0 | 1 | 0.053 | | |
| | | | | | | 0.86 0.17 | 0 | | 0.495 | | |
| 3 | 3008 | | | maximum | 0.25 | 0.33 0.14 | 0 | 1 | 0.056 | | |
| | | | | | | 1.53 0.31 | 0 | | 0.496 | | |
| 3 | 3009 | | | maximum | 0.25 | 0.02 0.11 | 0 | 1 | 0.045 | | |
| | | | | | | 2.03 0.41 | 0 | | 0.496 | | |
| 3 | 3010 | | | maximum | 0.25 | 0.02 0.11 | 0 | 1 | 0.038 | | |
| | | | | | | 2.36 0.47 | 0 | | 0.496 | | |
| 3 | 3011 | | | maximum | 0.25 | 0.02 0.11 | 0 | 1 | 0.033 | | |
| | | | | | | 2.52 0.50 | 0 | | 0.496 | | |
| 3 | 3012 | | | maximum | 0.25 | 0.02 0.11 | 0 | 1 | 0.029 | | |
| | | | | | | 2.60 0.52 | 0 | | 0.496 | | |
| 3 | 3013 | | | maximum | 0.25 | 1.41 0.43 | 0 | 1 | 0.078 | | |
| | | | | | | 0.84 0.17 | 0 | | 0.496 | | |
| 3 | 3014 | | | maximum | 0.25 | 0.37 0.20 | 0 | 1 | 0.048 | | |
| | | | | | | 1.52 0.30 | 0 | | 0.495 | | |
| 3 | 3015 | | | maximum | 0.25 | 0.03 0.15 | 0 | 1 | 0.038 | | |
| | | | | | | 2.04 0.41 | 0 | | 0.495 | | |
| 3 | 3016 | | | maximum | 0.25 | 0.03 0.15 | 0 | 1 | 0.031 | | |
| | | | | | | 2.38 0.48 | 0 | | 0.496 | | |
| 3 | 3017 | | | maximum | 0.25 | 0.03 0.15 | 0 | 1 | 0.027 | | |
| | | | | | | 2.53 0.51 | 0 | | 0.496 | | |
| 3 | 3018 | | | maximum | 0.25 | 0.03 0.15 | 0 | 1 | 0.025 | | |
| | | | | | | 2.60 0.52 | 0 | | 0.496 | | |
| 3 | 3019 | | | maximum | 0.25 | 1.41 0.59 | 0 | 1 | 0.081 | | |
| | | | | | | 0.75 0.15 | 0 | | 0.495 | | |
| 3 | 3020 | | | maximum | 0.25 | 0.42 0.37 | 0 | 1 | 0.062 | | |
| | | | | | | 1.51 0.30 | 0 | | 0.495 | | |
| 3 | 3021 | | | maximum | 0.25 | 0.05 0.23 | 0 | 1 | 0.046 | | |
| | | | | | | 2.01 0.40 | 0 | | 0.495 | | |
| 3 | 3022 | | | maximum | 0.25 | 0.03 0.15 | 0 | 1 | 0.034 | | |
| | | | | | | 2.35 0.47 | 0 | | 0.495 | | |
| 3 | 3023 | | | maximum | 0.25 | 0.02 0.10 | 0 | 1 | 0.023 | | |
| | | | | | | 2.51 0.50 | 0 | | 0.496 | | |
| 3 | 3024 | | | maximum | 0.25 | 0.02 0.08 | 0 | 1 | 0.014 | | |
| | | | | | | 2.61 0.52 | 0 | | 0.496 | | |
| 3 | 3025 | | | maximum | 0.25 | 1.55 0.94 | 0 | 1 | 0.090 | | |
| | | | | | | 0.79 0.16 | 0 | | 0.496 | | |
| 3 | 3026 | | | maximum | 0.25 | 0.52 0.76 | 0 | 1 | 0.080 | | |
| | | | | | | 1.51 0.30 | 0 | | 0.496 | | |
| 3 | 3027 | | | maximum | 0.25 | 0.09 0.44 | 0 | 1 | 0.058 | | |
| | | | | | | 2.04 0.41 | 0 | | 0.496 | | |
| 3 | 3028 | | | maximum | 0.25 | 0.06 0.30 | 0 | 1 | 0.047 | | |
| | | | | | | 2.38 0.48 | 0 | | 0.496 | | |
| 3 | 3029 | | | maximum | 0.25 | 0.04 0.20 | 0 | 1 | 0.038 | | |
| | | | | | | 2.53 0.51 | 0 | | 0.496 | | |
| 3 | 3030 | | | maximum | 0.25 | 0.03 0.16 | 0 | 1 | 0.033 | | |
| | | | | | | 2.60 0.52 | 0 | | 0.496 | | |
| 3 | 3031 | | | maximum | 0.25 | 1.55 0.95 | 0 | 1 | 0.066 | | |
| | | | | | | 0.75 0.15 | 0 | | 0.495 | | |
| 3 | 3032 | | | maximum | 0.25 | 0.48 0.72 | 0 | 1 | 0.050 | | |
| | | | | | | 1.49 0.30 | 0 | | 0.495 | | |

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REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm²/m] upper/lower
General load safety factor - as defined in BEMESS: $\Gamma = 1.00$
Shear: stresses V_{Ed}/d and $VR_{d,ct}/d$ with d =effective depth = $h-h_m$
Shear index $2m$ = minimum shear reinforcement

| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement main cross | dphi deg | Shr zon | V_{Ed}/d [MPa] | Ass [cm ² /m ²] |
|-----|------------|----------|-----------|-----------|----------|-----------------------------|-------------|------------|---------------------|---|
| | | | | | | | | | $VR_{d,ct}/d$ | |
| 3 | 3033 | | maximum | | 0.25 | 0.11 0.54 | 0 | 1 | 0.040 | |
| | | | | | | 1.99 0.40 | 0 | | 0.495 | |
| 3 | 3034 | | maximum | | 0.25 | 0.08 0.41 | 0 | 1 | 0.032 | |
| | | | | | | 2.34 0.47 | 0 | | 0.495 | |
| 3 | 3035 | | maximum | | 0.25 | 0.06 0.32 | 0 | 1 | 0.025 | |
| | | | | | | 2.50 0.50 | 0 | | 0.496 | |
| 3 | 3036 | | maximum | | 0.25 | 0.05 0.26 | 0 | 1 | 0.020 | |
| | | | | | | 2.59 0.52 | 0 | | 0.496 | |
| 3 | 3037 | | maximum | | 0.25 | 1.60 1.12 | 0 | 1 | 0.064 | |
| | | | | | | 0.76 0.15 | 0 | | 0.495 | |
| 3 | 3038 | | maximum | | 0.25 | 0.59 1.01 | 0 | 1 | 0.064 | |
| | | | | | | 1.49 0.30 | 0 | | 0.495 | |
| 3 | 3039 | | maximum | | 0.25 | 0.14 0.71 | 0 | 1 | 0.051 | |
| | | | | | | 2.01 0.40 | 0 | | 0.495 | |
| 3 | 3040 | | maximum | | 0.25 | 0.10 0.51 | 0 | 1 | 0.040 | |
| | | | | | | 2.36 0.47 | 0 | | 0.495 | |
| 3 | 3041 | | maximum | | 0.25 | 0.07 0.36 | 0 | 1 | 0.029 | |
| | | | | | | 2.87 0.57 | 0 | | 0.496 | |
| 3 | 3042 | | maximum | | 0.25 | 0.05 0.27 | 0 | 1 | 0.020 | |
| | | | | | | 2.60 0.52 | 0 | | 0.496 | |
| 3 | 3043 | | maximum | | 0.25 | 1.70 1.20 | 0 | 1 | 0.055 | |
| | | | | | | 0.73 0.15 | 0 | | 0.495 | |
| 3 | 3044 | | maximum | | 0.25 | 0.56 0.98 | 0 | 1 | 0.058 | |
| | | | | | | 1.50 0.30 | 0 | | 0.495 | |
| 3 | 3045 | | maximum | | 0.25 | 0.15 0.73 | 0 | 1 | 0.050 | |
| | | | | | | 2.01 0.40 | 0 | | 0.495 | |
| 3 | 3046 | | maximum | | 0.25 | 0.11 0.56 | 0 | 1 | 0.044 | |
| | | | | | | 2.35 0.47 | 0 | | 0.495 | |
| 3 | 3047 | | maximum | | 0.25 | 0.08 0.42 | 0 | 1 | 0.038 | |
| | | | | | | 2.57 0.51 | 0 | | 0.495 | |
| 3 | 3048 | | maximum | | 0.25 | 0.07 0.36 | 0 | 1 | 0.035 | |
| | | | | | | 2.60 0.52 | 0 | | 0.495 | |
| 3 | 3049 | | maximum | | 0.25 | 1.68 1.11 | 0 | 1 | 0.059 | |
| | | | | | | 0.74 0.15 | 0 | | 0.495 | |
| 3 | 3050 | | maximum | | 0.25 | 0.59 0.93 | 0 | 1 | 0.051 | |
| | | | | | | 1.51 0.30 | 0 | | 0.495 | |
| 3 | 3051 | | maximum | | 0.25 | 0.12 0.60 | 0 | 1 | 0.042 | |
| | | | | | | 2.06 0.41 | 0 | | 0.495 | |
| 3 | 3052 | | maximum | | 0.25 | 0.09 0.43 | 0 | 1 | 0.034 | |
| | | | | | | 2.43 0.49 | 0 | | 0.495 | |
| 3 | 3053 | | maximum | | 0.25 | 0.06 0.29 | 0 | 1 | 0.025 | |
| | | | | | | 2.58 0.52 | 0 | | 0.496 | |
| 3 | 3054 | | maximum | | 0.25 | 0.05 0.23 | 0 | 1 | 0.017 | |
| | | | | | | 2.65 0.53 | 0 | | 0.496 | |
| 3 | 3055 | | maximum | | 0.25 | 1.75 1.08 | 0 | 1 | 0.087 | |
| | | | | | | 0.72 0.14 | 0 | | 0.496 | |
| 3 | 3056 | | maximum | | 0.25 | 0.52 0.80 | 0 | 1 | 0.086 | |
| | | | | | | 1.53 0.31 | 0 | | 0.496 | |
| 3 | 3057 | | maximum | | 0.25 | 0.10 0.52 | 0 | 1 | 0.074 | |
| | | | | | | 2.06 0.41 | 0 | | 0.496 | |
| 3 | 3058 | | maximum | | 0.25 | 0.08 0.38 | 0 | 1 | 0.071 | |
| | | | | | | 2.62 0.52 | 0 | | 0.496 | |
| 3 | 3059 | | maximum | | 0.25 | 0.06 0.29 | 0 | 1 | 0.067 | |
| | | | | | | 2.57 0.51 | 0 | | 0.496 | |
| 3 | 3060 | | maximum | | 0.25 | 0.05 0.25 | 0 | 1 | 0.064 | |
| | | | | | | 2.66 0.53 | 0 | | 0.496 | |
| 3 | 3061 | | maximum | | 0.25 | 1.61 0.77 | 0 | 1 | 0.073 | |
| | | | | | | 0.74 0.15 | 0 | | 0.495 | |
| 3 | 3062 | | maximum | | 0.25 | 0.52 0.52 | 0 | 1 | 0.063 | |
| | | | | | | 1.62 0.32 | 0 | | 0.495 | |
| 3 | 3063 | | maximum | | 0.25 | 0.05 0.26 | 0 | 1 | 0.054 | |
| | | | | | | 2.16 0.43 | 0 | | 0.495 | |
| 3 | 3064 | | maximum | | 0.25 | 0.03 0.13 | 0 | 1 | 0.044 | |
| | | | | | | 2.50 0.50 | 0 | | 0.495 | |
| 3 | 3065 | | maximum | | 0.25 | 0.02 0.08 | 0 | 1 | 0.035 | |
| | | | | | | 2.65 0.53 | 0 | | 0.495 | |
| 3 | 3066 | | maximum | | 0.25 | 0.01 0.05 | 0 | 1 | 0.030 | |
| | | | | | | 2.74 0.55 | 0 | | 0.495 | |
| 3 | 3067 | | maximum | | 0.25 | 1.61 0.68 | 0 | 1 | 0.069 | |
| | | | | | | 0.89 0.18 | 0 | | 0.496 | |
| 3 | 3068 | | maximum | | 0.25 | 0.56 0.47 | 0 | 1 | 0.052 | |
| | | | | | | 1.68 0.34 | 0 | | 0.495 | |
| 3 | 3069 | | maximum | | 0.25 | 0.04 0.18 | 0 | 1 | 0.040 | |
| | | | | | | 2.24 0.45 | 0 | | 0.495 | |

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REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm²/m] upper/lower
General load safety factor - as defined in BEMESS: $\Gamma = 1.00$
Shear: stresses V_{Ed}/d and $VR_{d,ct}/d$ with d =effective depth = $h-h_m$
Shear index $2m$ = minimum shear reinforcement

| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement | | dphi deg | Shr zon | V_{Ed}/d [MPa] | Ass [cm ² /m ²] |
|-----|------------|----------|-----------|-----------|----------|---------------|-------|-------------|------------|---------------------|---|
| | | | | | | main | cross | dir | | $VR_{d,ct}/d$ | |
| 3 | 3070 | | maximum | | 0.25 | 0.02 | 0.10 | 0 | 1 | 0.032 | |
| | | | | | | 2.58 | 0.52 | 0 | | 0.496 | |
| 3 | 3071 | | maximum | | 0.25 | 0.01 | 0.05 | 0 | 1 | 0.024 | |
| | | | | | | 2.72 | 0.54 | 0 | | 0.496 | |
| 3 | 3072 | | maximum | | 0.25 | | 0.02 | 0 | 1 | 0.018 | |
| | | | | | | 2.78 | 0.56 | 0 | | 0.497 | |
| 3 | 3073 | | maximum | | 0.25 | 1.64 | 0.33 | 0 | 1 | 0.068 | |
| | | | | | | 0.73 | 0.15 | 0 | | 0.495 | |
| 3 | 3074 | | maximum | | 0.25 | 0.44 | 0.30 | 0 | 1 | 0.072 | |
| | | | | | | 1.60 | 0.32 | 0 | | 0.496 | |
| 3 | 3075 | | maximum | | 0.25 | 0.03 | 0.16 | 0 | 1 | 0.059 | |
| | | | | | | 2.31 | 0.46 | 0 | | 0.496 | |
| 3 | 3076 | | maximum | | 0.25 | 0.03 | 0.15 | 0 | 1 | 0.051 | |
| | | | | | | 2.47 | 0.49 | 0 | | 0.496 | |
| 3 | 3077 | | maximum | | 0.25 | 0.03 | 0.14 | 0 | 1 | 0.045 | |
| | | | | | | 2.63 | 0.53 | 0 | | 0.496 | |
| 3 | 3078 | | maximum | | 0.25 | 0.03 | 0.14 | 0 | 1 | 0.041 | |
| | | | | | | 2.73 | 0.55 | 0 | | 0.496 | |
| 3 | 3079 | | maximum | | 0.25 | 1.56 | 0.31 | 0 | 1 | 0.100 | |
| | | | | | | 0.77 | 0.16 | 0 | | 0.495 | |
| 3 | 3080 | | maximum | | 0.25 | 0.41 | 0.15 | 0 | 1 | 0.085 | |
| | | | | | | 1.59 | 0.32 | 0 | | 0.495 | |
| 3 | 3081 | | maximum | | 0.25 | 0.01 | 0.04 | 0 | 1 | 0.070 | |
| | | | | | | 2.13 | 0.43 | 0 | | 0.495 | |
| 3 | 3082 | | maximum | | 0.25 | 0.01 | 0.03 | 0 | 1 | 0.055 | |
| | | | | | | 2.48 | 0.50 | 0 | | 0.495 | |
| 3 | 3083 | | maximum | | 0.25 | 0.01 | 0.03 | 0 | 1 | 0.039 | |
| | | | | | | 2.64 | 0.53 | 0 | | 0.495 | |
| 3 | 3084 | | maximum | | 0.25 | 0.01 | 0.03 | 0 | 1 | 0.022 | |
| | | | | | | 2.75 | 0.55 | 0 | | 0.496 | |
| 3 | 3085 | | maximum | | 0.25 | | 0.02 | 0 | 1 | 0.017 | |
| | | | | | | 2.62 | 0.52 | 0 | | 0.496 | |
| 3 | 3086 | | maximum | | 0.25 | | 0.02 | 0 | 1 | 0.027 | |
| | | | | | | 2.52 | 0.50 | 0 | | 0.496 | |
| 3 | 3087 | | maximum | | 0.25 | | 0.02 | 0 | 1 | 0.037 | |
| | | | | | | 2.37 | 0.47 | 0 | | 0.495 | |
| 3 | 3088 | | maximum | | 0.25 | | 0.02 | 0 | 1 | 0.048 | |
| | | | | | | 2.05 | 0.41 | 0 | | 0.495 | |
| 3 | 3089 | | maximum | | 0.25 | 0.28 | 0.06 | 0 | 1 | 0.058 | |
| | | | | | | 1.59 | 0.32 | 0 | | 0.495 | |
| 3 | 3090 | | maximum | | 0.25 | 1.35 | 0.27 | 0 | 1 | 0.077 | |
| | | | | | | 0.83 | 0.17 | 0 | | 0.495 | |
| 3 | 3091 | | maximum | | 0.25 | 0.02 | 0.11 | 0 | 1 | 0.029 | |
| | | | | | | 2.61 | 0.52 | 0 | | 0.496 | |
| 3 | 3092 | | maximum | | 0.25 | 0.02 | 0.11 | 0 | 1 | 0.032 | |
| | | | | | | 2.53 | 0.51 | 0 | | 0.496 | |
| 3 | 3093 | | maximum | | 0.25 | 0.02 | 0.11 | 0 | 1 | 0.038 | |
| | | | | | | 2.38 | 0.48 | 0 | | 0.496 | |
| 3 | 3094 | | maximum | | 0.25 | 0.02 | 0.11 | 0 | 1 | 0.045 | |
| | | | | | | 2.05 | 0.41 | 0 | | 0.496 | |
| 3 | 3095 | | maximum | | 0.25 | 0.30 | 0.14 | 0 | 1 | 0.056 | |
| | | | | | | 1.57 | 0.31 | 0 | | 0.496 | |
| 3 | 3096 | | maximum | | 0.25 | 1.35 | 0.27 | 0 | 1 | 0.053 | |
| | | | | | | 0.90 | 0.18 | 0 | | 0.495 | |
| 3 | 3097 | | maximum | | 0.25 | 0.03 | 0.15 | 0 | 1 | 0.025 | |
| | | | | | | 2.60 | 0.52 | 0 | | 0.496 | |
| 3 | 3098 | | maximum | | 0.25 | 0.03 | 0.15 | 0 | 1 | 0.027 | |
| | | | | | | 2.54 | 0.51 | 0 | | 0.496 | |
| 3 | 3099 | | maximum | | 0.25 | 0.03 | 0.15 | 0 | 1 | 0.031 | |
| | | | | | | 2.39 | 0.48 | 0 | | 0.496 | |
| 3 | 3100 | | maximum | | 0.25 | 0.03 | 0.15 | 0 | 1 | 0.037 | |
| | | | | | | 2.07 | 0.41 | 0 | | 0.495 | |
| 3 | 3101 | | maximum | | 0.25 | 0.34 | 0.20 | 0 | 1 | 0.048 | |
| | | | | | | 1.56 | 0.31 | 0 | | 0.495 | |
| 3 | 3102 | | maximum | | 0.25 | 1.38 | 0.43 | 0 | 1 | 0.078 | |
| | | | | | | 0.89 | 0.18 | 0 | | 0.496 | |
| 3 | 3103 | | maximum | | 0.25 | 0.02 | 0.08 | 0 | 1 | 0.014 | |
| | | | | | | 2.61 | 0.52 | 0 | | 0.496 | |
| 3 | 3104 | | maximum | | 0.25 | 0.02 | 0.10 | 0 | 1 | 0.023 | |
| | | | | | | 2.52 | 0.50 | 0 | | 0.496 | |
| 3 | 3105 | | maximum | | 0.25 | 0.03 | 0.15 | 0 | 1 | 0.034 | |
| | | | | | | 2.37 | 0.47 | 0 | | 0.495 | |
| 3 | 3106 | | maximum | | 0.25 | 0.05 | 0.23 | 0 | 1 | 0.046 | |
| | | | | | | 2.03 | 0.41 | 0 | | 0.495 | |

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| REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm2/m] upper/lower | | | | | | | | | | | |
|---|------------|----------|----------------|-----------|----------|---------------|-------|-------------|------------|----------------|-----------------|
| General load safety factor - as defined in BEMESS: Gamma-f = 1.00 | | | | | | | | | | | |
| Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm | | | | | | | | | | | |
| Shear index 2m = minimum shear reinforcement | | | | | | | | | | | |
| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement | | dphi deg | shr zon | VEd/d [MPa] | Ass [cm2/m2] |
| | | | | | | main | cross | dir | | VRd,ct/d | |
| 3 | 3107 | | MBW maximum | | 0.25 | 0.39 | 0.37 | 0 | 1 | 0.062 | |
| | | | | | | 1.55 | 0.31 | 0 | | 0.495 | |
| 3 | 3108 | | maximum | | 0.25 | 1.38 | 0.59 | 0 | 1 | 0.081 | |
| | | | | | | 0.79 | 0.16 | 0 | | 0.495 | |
| 3 | 3109 | | maximum | | 0.25 | 0.03 | 0.16 | 0 | 1 | 0.032 | |
| | | | | | | 2.60 | 0.52 | 0 | | 0.496 | |
| 3 | 3110 | | maximum | | 0.25 | 0.04 | 0.20 | 0 | 1 | 0.037 | |
| | | | | | | 2.54 | 0.51 | 0 | | 0.496 | |
| 3 | 3111 | | maximum | | 0.25 | 0.06 | 0.30 | 0 | 1 | 0.047 | |
| | | | | | | 2.40 | 0.48 | 0 | | 0.496 | |
| 3 | 3112 | | maximum | | 0.25 | 0.10 | 0.52 | 0 | 1 | 0.058 | |
| | | | | | | 2.06 | 0.41 | 0 | | 0.496 | |
| 3 | 3113 | | maximum | | 0.25 | 0.49 | 0.76 | 0 | 1 | 0.080 | |
| | | | | | | 1.55 | 0.31 | 0 | | 0.496 | |
| 3 | 3114 | | maximum | | 0.25 | 1.51 | 0.94 | 0 | 1 | 0.090 | |
| | | | | | | 0.84 | 0.17 | 0 | | 0.496 | |
| 3 | 3115 | | maximum | | 0.25 | 0.05 | 0.26 | 0 | 1 | 0.020 | |
| | | | | | | 2.59 | 0.52 | 0 | | 0.496 | |
| 3 | 3116 | | maximum | | 0.25 | 0.06 | 0.32 | 0 | 1 | 0.025 | |
| | | | | | | 2.51 | 0.50 | 0 | | 0.496 | |
| 3 | 3117 | | maximum | | 0.25 | 0.08 | 0.41 | 0 | 1 | 0.031 | |
| | | | | | | 2.36 | 0.47 | 0 | | 0.495 | |
| 3 | 3118 | | maximum | | 0.25 | 0.11 | 0.53 | 0 | 1 | 0.040 | |
| | | | | | | 2.02 | 0.40 | 0 | | 0.495 | |
| 3 | 3119 | | maximum | | 0.25 | 0.45 | 0.72 | 0 | 1 | 0.050 | |
| | | | | | | 1.53 | 0.31 | 0 | | 0.495 | |
| 3 | 3120 | | maximum | | 0.25 | 1.52 | 0.95 | 0 | 1 | 0.065 | |
| | | | | | | 0.79 | 0.16 | 0 | | 0.495 | |
| 3 | 3121 | | maximum | | 0.25 | 0.05 | 0.27 | 0 | 1 | 0.020 | |
| | | | | | | 2.61 | 0.52 | 0 | | 0.496 | |
| 3 | 3122 | | maximum | | 0.25 | 0.07 | 0.36 | 0 | 1 | 0.029 | |
| | | | | | | 2.89 | 0.58 | 0 | | 0.496 | |
| 3 | 3123 | | maximum | | 0.25 | 0.10 | 0.51 | 0 | 1 | 0.040 | |
| | | | | | | 2.38 | 0.48 | 0 | | 0.495 | |
| 3 | 3124 | | maximum | | 0.25 | 0.14 | 0.70 | 0 | 1 | 0.050 | |
| | | | | | | 2.04 | 0.41 | 0 | | 0.495 | |
| 3 | 3125 | | maximum | | 0.25 | 0.56 | 1.01 | 0 | 1 | 0.064 | |
| | | | | | | 1.53 | 0.31 | 0 | | 0.495 | |
| 3 | 3126 | | maximum | | 0.25 | 1.57 | 1.12 | 0 | 1 | 0.064 | |
| | | | | | | 0.80 | 0.16 | 0 | | 0.495 | |
| 3 | 3127 | | maximum | | 0.25 | 0.07 | 0.35 | 0 | 1 | 0.035 | |
| | | | | | | 2.61 | 0.52 | 0 | | 0.495 | |
| 3 | 3128 | | maximum | | 0.25 | 0.08 | 0.42 | 0 | 1 | 0.037 | |
| | | | | | | 2.69 | 0.54 | 0 | | 0.495 | |
| 3 | 3129 | | maximum | | 0.25 | 0.11 | 0.55 | 0 | 1 | 0.044 | |
| | | | | | | 2.37 | 0.47 | 0 | | 0.495 | |
| 3 | 3130 | | maximum | | 0.25 | 0.19 | 0.94 | 0 | 1 | 0.050 | |
| | | | | | | 2.04 | 0.41 | 0 | | 0.495 | |
| 3 | 3131 | | maximum | | 0.25 | 0.53 | 0.97 | 0 | 1 | 0.058 | |
| | | | | | | 1.54 | 0.31 | 0 | | 0.495 | |
| 3 | 3132 | | maximum | | 0.25 | 1.67 | 1.19 | 0 | 1 | 0.055 | |
| | | | | | | 0.77 | 0.15 | 0 | | 0.495 | |
| 3 | 3133 | | maximum | | 0.25 | 0.05 | 0.23 | 0 | 1 | 0.016 | |
| | | | | | | 2.65 | 0.53 | 0 | | 0.496 | |
| 3 | 3134 | | maximum | | 0.25 | 0.06 | 0.29 | 0 | 1 | 0.025 | |
| | | | | | | 2.59 | 0.52 | 0 | | 0.496 | |
| 3 | 3135 | | maximum | | 0.25 | 0.08 | 0.42 | 0 | 1 | 0.033 | |
| | | | | | | 2.45 | 0.49 | 0 | | 0.495 | |
| 3 | 3136 | | maximum | | 0.25 | 0.15 | 0.74 | 0 | 1 | 0.042 | |
| | | | | | | 2.13 | 0.43 | 0 | | 0.495 | |
| 3 | 3137 | | maximum | | 0.25 | 0.56 | 0.92 | 0 | 1 | 0.051 | |
| | | | | | | 1.55 | 0.31 | 0 | | 0.495 | |
| 3 | 3138 | | maximum | | 0.25 | 1.64 | 1.10 | 0 | 1 | 0.058 | |
| | | | | | | 0.79 | 0.16 | 0 | | 0.495 | |
| 3 | 3139 | | maximum | | 0.25 | 0.05 | 0.25 | 0 | 1 | 0.064 | |
| | | | | | | 2.66 | 0.53 | 0 | | 0.496 | |
| 3 | 3140 | | maximum | | 0.25 | 0.06 | 0.29 | 0 | 1 | 0.067 | |
| | | | | | | 2.58 | 0.52 | 0 | | 0.496 | |
| 3 | 3141 | | maximum | | 0.25 | 0.08 | 0.38 | 0 | 1 | 0.071 | |
| | | | | | | 2.84 | 0.57 | 0 | | 0.496 | |
| 3 | 3142 | | maximum | | 0.25 | 0.10 | 0.51 | 0 | 1 | 0.073 | |
| | | | | | | 2.09 | 0.42 | 0 | | 0.496 | |
| 3 | 3143 | | maximum | | 0.25 | 0.49 | 0.79 | 0 | 1 | 0.085 | |
| | | | | | | 1.57 | 0.31 | 0 | | 0.496 | |

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| REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm2/m] upper/lower | | | | | | | | | | | |
|---|---------|-------|---------|--------|-------|---------------|-------|----------|---------|-------------|--------------|
| General load safety factor - as defined in BEMESS: Gamma-f = 1.00 | | | | | | | | | | | |
| Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm | | | | | | | | | | | |
| Shear index 2m = minimum shear reinforcement | | | | | | | | | | | |
| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement | | dphi deg | shr zon | VEd/d [MPa] | Ass [cm2/m2] |
| | | | | | | main | cross | dir | | VRd,ct/d | |
| 3 | 3144 | | MBW | | 0.25 | 1.71 | 1.07 | 0 | 1 | 0.087 | |
| | | | maximum | | | 0.77 | 0.15 | 0 | | 0.496 | |
| 3 | 3145 | | maximum | | 0.25 | 0.01 | 0.05 | 0 | 1 | 0.030 | |
| | | | | | | 2.74 | 0.55 | 0 | | 0.495 | |
| 3 | 3146 | | maximum | | 0.25 | 0.02 | 0.08 | 0 | 1 | 0.035 | |
| | | | | | | 2.66 | 0.53 | 0 | | 0.495 | |
| 3 | 3147 | | maximum | | 0.25 | 0.03 | 0.13 | 0 | 1 | 0.044 | |
| | | | | | | 2.52 | 0.50 | 0 | | 0.495 | |
| 3 | 3148 | | maximum | | 0.25 | 0.05 | 0.25 | 0 | 1 | 0.053 | |
| | | | | | | 2.18 | 0.44 | 0 | | 0.495 | |
| 3 | 3149 | | maximum | | 0.25 | 0.49 | 0.52 | 0 | 1 | 0.063 | |
| | | | | | | 1.66 | 0.33 | 0 | | 0.495 | |
| 3 | 3150 | | maximum | | 0.25 | 1.58 | 0.76 | 0 | 1 | 0.072 | |
| | | | | | | 0.79 | 0.16 | 0 | | 0.495 | |
| 3 | 3151 | | maximum | | 0.25 | 0.01 | 0.03 | 0 | 1 | 0.018 | |
| | | | | | | 2.78 | 0.56 | 0 | | 0.497 | |
| 3 | 3152 | | maximum | | 0.25 | 0.01 | 0.05 | 0 | 1 | 0.023 | |
| | | | | | | 2.73 | 0.55 | 0 | | 0.496 | |
| 3 | 3153 | | maximum | | 0.25 | 0.02 | 0.10 | 0 | 1 | 0.031 | |
| | | | | | | 2.60 | 0.52 | 0 | | 0.496 | |
| 3 | 3154 | | maximum | | 0.25 | 0.04 | 0.18 | 0 | 1 | 0.040 | |
| | | | | | | 2.27 | 0.45 | 0 | | 0.495 | |
| 3 | 3155 | | maximum | | 0.25 | 0.53 | 0.47 | 0 | 1 | 0.051 | |
| | | | | | | 1.71 | 0.34 | 0 | | 0.495 | |
| 3 | 3156 | | maximum | | 0.25 | 1.58 | 0.68 | 0 | 1 | 0.070 | |
| | | | | | | 0.93 | 0.19 | 0 | | 0.495 | |
| 3 | 3157 | | maximum | | 0.25 | 0.03 | 0.14 | 0 | 1 | 0.040 | |
| | | | | | | 2.73 | 0.55 | 0 | | 0.496 | |
| 3 | 3158 | | maximum | | 0.25 | 0.03 | 0.14 | 0 | 1 | 0.044 | |
| | | | | | | 2.63 | 0.53 | 0 | | 0.496 | |
| 3 | 3159 | | maximum | | 0.25 | 0.03 | 0.15 | 0 | 1 | 0.051 | |
| | | | | | | 2.49 | 0.50 | 0 | | 0.496 | |
| 3 | 3160 | | maximum | | 0.25 | 0.03 | 0.16 | 0 | 1 | 0.058 | |
| | | | | | | 2.16 | 0.43 | 0 | | 0.496 | |
| 3 | 3161 | | maximum | | 0.25 | 0.41 | 0.30 | 0 | 1 | 0.071 | |
| | | | | | | 1.64 | 0.33 | 0 | | 0.496 | |
| 3 | 3162 | | maximum | | 0.25 | 1.61 | 0.33 | 0 | 1 | 0.068 | |
| | | | | | | 0.77 | 0.15 | 0 | | 0.495 | |
| 3 | 3163 | | maximum | | 0.25 | 0.01 | 0.03 | 0 | 1 | 0.022 | |
| | | | | | | 2.76 | 0.55 | 0 | | 0.496 | |
| 3 | 3164 | | maximum | | 0.25 | 0.01 | 0.03 | 0 | 1 | 0.038 | |
| | | | | | | 2.66 | 0.53 | 0 | | 0.495 | |
| 3 | 3165 | | maximum | | 0.25 | 0.01 | 0.03 | 0 | 1 | 0.054 | |
| | | | | | | 2.50 | 0.50 | 0 | | 0.495 | |
| 3 | 3166 | | maximum | | 0.25 | 0.01 | 0.04 | 0 | 1 | 0.070 | |
| | | | | | | 2.16 | 0.43 | 0 | | 0.495 | |
| 3 | 3167 | | maximum | | 0.25 | 0.38 | 0.15 | 0 | 1 | 0.084 | |
| | | | | | | 1.63 | 0.33 | 0 | | 0.495 | |
| 3 | 3168 | | maximum | | 0.25 | 1.52 | 0.30 | 0 | 1 | 0.100 | |
| | | | | | | 0.82 | 0.16 | 0 | | 0.495 | |
| 4 | 4001 | | maximum | | 0.25 | 6.74 | 1.35 | 0 | 1 | | |
| | | | | | | 0.48 | 0.11 | 0 | | 0.497 | |
| 4 | 4002 | | maximum | | 0.25 | 2.63 | 0.53 | 0 | 1 | 0.333 | |
| | | | | | | 0.23 | 0.16 | 0 | | 0.495 | |
| 4 | 4003 | | maximum | | 0.25 | 5.24 | 1.45 | 0 | 1 | 0.402 | |
| | | | | | | 0.18 | 0.42 | 0 | | 0.495 | |
| 4 | 4004 | | maximum | | 0.25 | 2.31 | 0.46 | 0 | 1 | 0.282 | |
| | | | | | | 0.09 | 0.43 | 0 | | 0.496 | |
| 4 | 4005 | | maximum | | 0.25 | 5.31 | 1.67 | 0 | 2 | 0.658 | 12.63 |
| | | | | | | 0.20 | 0.17 | 0 | | 0.496 | |
| 4 | 4006 | | maximum | | 0.25 | 2.42 | 0.70 | 0 | 1 | 0.418 | |
| | | | | | | 0.10 | 0.14 | 0 | | 0.496 | |
| 4 | 4007 | | maximum | | 0.25 | 6.45 | 2.15 | 0 | 1 | | |
| | | | | | | 0.23 | 0.05 | 0 | | 0.497 | |
| 4 | 4008 | | maximum | | 0.25 | 2.51 | 0.99 | 0 | 1 | 0.255 | |
| | | | | | | 0.15 | 0.03 | 0 | | 0.495 | |
| 4 | 4009 | | maximum | | 0.25 | 5.34 | 2.20 | 0 | 2 | 0.574 | 11.03 |
| | | | | | | 0.01 | | 0 | | 0.495 | |
| 4 | 4010 | | maximum | | 0.25 | 2.63 | 1.25 | 0 | 1 | 0.313 | |
| | | | | | | 0.05 | 0.01 | 0 | | 0.496 | |
| 4 | 4011 | | maximum | | 0.25 | 5.66 | 2.47 | 0 | 2 | 0.497 | 9.55 |
| | | | | | | 0.09 | 0.02 | 0 | | 0.496 | |
| 4 | 4012 | | maximum | | 0.25 | 2.61 | 1.21 | 0 | 1 | 0.251 | |
| | | | | | | 0.05 | 0.01 | 0 | | 0.495 | |

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| REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm ² /m] upper/lower | | | | | | | | | |
|--|---------|-----------|--------|-------|---------------|-------|----------|---------|--|
| General load safety factor - as defined in BEMESS: Gamma-f = 1.00 | | | | | | | | | |
| Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm | | | | | | | | | |
| Shear index 2m = minimum shear reinforcement | | | | | | | | | |
| Grp | ELEM No | LC MAT No | GEO No | h [m] | Reinforcement | | dphi deg | Shr zon | Ass [cm ² /m ²] |
| | | | | | main | cross | | | |
| | | MBW | | | | | | | |
| 4 | 4013 | maximum | | 0.25 | 5.66 | 2.51 | 0 | 1 | 0.491 |
| | | | | | 0.04 | 0.01 | 0 | | 0.495 |
| 4 | 4014 | maximum | | 0.25 | 2.71 | 1.40 | 0 | 1 | 0.223 |
| | | | | | 0.05 | 0.01 | 0 | | 0.495 |
| 4 | 4015 | maximum | | 0.25 | 5.63 | 2.28 | 0 | 2 | 0.521 |
| | | | | | 0.05 | 0.01 | 0 | | 0.495 |
| 4 | 4016 | maximum | | 0.25 | 2.78 | 1.36 | 0 | 1 | 0.250 |
| | | | | | 0.03 | 0.01 | 0 | | 0.495 |
| 4 | 4017 | maximum | | 0.25 | 5.85 | 2.79 | 0 | 1 | 0.476 |
| | | | | | | | 0 | | 0.495 |
| 4 | 4018 | maximum | | 0.25 | 2.69 | 1.36 | 0 | 1 | 0.230 |
| | | | | | 0.01 | | 0 | | 0.495 |
| 4 | 4019 | maximum | | 0.25 | 5.40 | 1.90 | 0 | 2 | 0.662 |
| | | | | | | | 0 | | 0.495 |
| 4 | 4020 | maximum | | 0.25 | 2.76 | 1.22 | 0 | 1 | 0.350 |
| | | | | | | | 0 | | 0.496 |
| 4 | 4021 | maximum | | 0.25 | 6.79 | 2.32 | 0 | 1 | |
| | | | | | 0.08 | 0.02 | 0 | | 0.497 |
| 4 | 4022 | maximum | | 0.25 | 2.74 | 1.15 | 0 | 1 | 0.254 |
| | | | | | 0.07 | 0.01 | 0 | | 0.495 |
| 4 | 4023 | maximum | | 0.25 | 5.72 | 2.23 | 0 | 2 | 0.608 |
| | | | | | | | 0 | | 0.495 |
| 4 | 4024 | maximum | | 0.25 | 2.57 | 1.06 | 0 | 1 | 0.391 |
| | | | | | | | 0 | | 0.496 |
| 4 | 4025 | maximum | | 0.25 | 5.49 | 1.17 | 0 | 2 | 0.515 |
| | | | | | 0.14 | 0.72 | 0 | | 0.495 |
| 4 | 4026 | maximum | | 0.25 | 2.48 | 0.50 | 0 | 1 | 0.308 |
| | | | | | 0.11 | 0.55 | 0 | | 0.496 |
| 4 | 4027 | maximum | | 0.25 | 7.27 | 1.45 | 0 | 1 | |
| | | | | | 0.25 | 0.18 | 0 | | 0.497 |
| 4 | 4028 | maximum | | 0.25 | 2.81 | 0.56 | 0 | 1 | 0.376 |
| | | | | | 0.22 | 0.21 | 0 | | 0.495 |
| 4 | 4029 | maximum | | 0.25 | 2.58 | 0.52 | 0 | 1 | 0.324 |
| | | | | | 0.29 | 0.16 | 0 | | 0.495 |
| 4 | 4030 | maximum | | 0.25 | 6.56 | 1.31 | 0 | 1 | |
| | | | | | 0.64 | 0.13 | 0 | | 0.497 |
| 4 | 4031 | maximum | | 0.25 | 2.27 | 0.45 | 0 | 1 | 0.273 |
| | | | | | 0.14 | 0.41 | 0 | | 0.496 |
| 4 | 4032 | maximum | | 0.25 | 5.12 | 1.43 | 0 | 1 | 0.389 |
| | | | | | 0.30 | 0.40 | 0 | | 0.496 |
| 4 | 4033 | maximum | | 0.25 | 2.38 | 0.70 | 0 | 1 | 0.408 |
| | | | | | 0.15 | 0.14 | 0 | | 0.496 |
| 4 | 4034 | maximum | | 0.25 | 5.19 | 1.63 | 0 | 2 | 0.645 |
| | | | | | 0.36 | 0.17 | 0 | | 0.495 |
| 4 | 4035 | maximum | | 0.25 | 2.47 | 0.98 | 0 | 1 | 0.249 |
| | | | | | 0.21 | 0.04 | 0 | | 0.495 |
| 4 | 4036 | maximum | | 0.25 | 6.29 | 2.11 | 0 | 1 | |
| | | | | | 0.37 | 0.07 | 0 | | 0.497 |
| 4 | 4037 | maximum | | 0.25 | 2.58 | 1.25 | 0 | 1 | 0.302 |
| | | | | | 0.10 | 0.02 | 0 | | 0.496 |
| 4 | 4038 | maximum | | 0.25 | 5.22 | 2.18 | 0 | 2 | 0.559 |
| | | | | | 0.11 | 0.02 | 0 | | 0.496 |
| 4 | 4039 | maximum | | 0.25 | 2.57 | 1.21 | 0 | 1 | 0.245 |
| | | | | | 0.10 | 0.02 | 0 | | 0.495 |
| 4 | 4040 | maximum | | 0.25 | 5.54 | 2.44 | 0 | 1 | 0.485 |
| | | | | | 0.18 | 0.04 | 0 | | 0.495 |
| 4 | 4041 | maximum | | 0.25 | 2.66 | 1.39 | 0 | 1 | 0.217 |
| | | | | | 0.14 | 0.03 | 0 | | 0.495 |
| 4 | 4042 | maximum | | 0.25 | 5.54 | 2.48 | 0 | 1 | 0.478 |
| | | | | | 0.14 | 0.03 | 0 | | 0.495 |
| 4 | 4043 | maximum | | 0.25 | 2.74 | 1.36 | 0 | 1 | 0.243 |
| | | | | | 0.09 | 0.02 | 0 | | 0.495 |
| 4 | 4044 | maximum | | 0.25 | 5.50 | 2.24 | 0 | 2 | 0.507 |
| | | | | | 0.16 | 0.03 | 0 | | 0.496 |
| 4 | 4045 | maximum | | 0.25 | 2.65 | 1.36 | 0 | 1 | 0.224 |
| | | | | | 0.06 | 0.01 | 0 | | 0.495 |
| 4 | 4046 | maximum | | 0.25 | 5.72 | 2.74 | 0 | 1 | 0.463 |
| | | | | | 0.09 | 0.02 | 0 | | 0.495 |
| 4 | 4047 | maximum | | 0.25 | 2.71 | 1.21 | 0 | 1 | 0.339 |
| | | | | | 0.06 | 0.01 | 0 | | 0.496 |
| 4 | 4048 | maximum | | 0.25 | 5.28 | 1.87 | 0 | 2 | 0.647 |
| | | | | | 0.10 | 0.02 | 0 | | 0.495 |
| 4 | 4049 | maximum | | 0.25 | 2.69 | 1.14 | 0 | 1 | 0.248 |
| | | | | | 0.13 | 0.03 | 0 | | 0.495 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ

| REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm ² /m] upper/lower | | | | | | | | | |
|--|---------|-----------|--------|-------|---------------|-------|----------|-------------|--|
| General load safety factor - as defined in BEMESS: Gamma-f = 1.00 | | | | | | | | | |
| Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm | | | | | | | | | |
| Shear index 2m = minimum shear reinforcement | | | | | | | | | |
| Grp | ELEM No | LC MAT No | GEO No | h [m] | Reinforcement | | dphi deg | Shr zon | Ass [cm ² /m ²] |
| | | | | | main | cross | dir | VEd/d [MPa] | VRd,ct/d |
| 4 | 4050 | maximum | | 0.25 | 6.63 | 2.27 | 0 | 1 | |
| | | | | | 0.22 | 0.04 | 0 | 0.497 | |
| 4 | 4051 | maximum | | 0.25 | 2.53 | 1.06 | 0 | 1 | |
| | | | | | 0.03 | 0.01 | 0 | 0.496 | |
| 4 | 4052 | maximum | | 0.25 | 5.60 | 2.19 | 0 | 2 | |
| | | | | | 0.01 | | 0 | 0.594 | 11.41 |
| 4 | 4053 | maximum | | 0.25 | 2.45 | 0.49 | 0 | 1 | |
| | | | | | 0.11 | 0.53 | 0 | 0.495 | |
| 4 | 4054 | maximum | | 0.25 | 5.37 | 1.15 | 0 | 2 | |
| | | | | | 0.18 | 0.71 | 0 | 0.502 | 9.65 |
| 4 | 4055 | maximum | | 0.25 | 2.77 | 0.55 | 0 | 1 | |
| | | | | | 0.28 | 0.21 | 0 | 0.495 | |
| 4 | 4056 | maximum | | 0.25 | 7.09 | 1.42 | 0 | 1 | |
| | | | | | 0.40 | 0.20 | 0 | 0.497 | |
| 8 | 8001 | maximum | | 1.20 | 2.43 | 5.27 | 0 | 1 | |
| | | | | | 3.67 | 13.11 | 0 | 0.101 | |
| 8 | 8002 | maximum | | 1.20 | 2.44 | 12.22 | 0 | 1 | |
| | | | | | 5.97 | 29.87 | 0 | 0.294 | |
| 8 | 8003 | maximum | | 1.20 | 6.27 | 10.04 | 0 | 1 | |
| | | | | | 23.55 | 55.08 | 0 | 0.160 | |
| 8 | 8004 | maximum | | 1.20 | 4.47 | 6.75 | 0 | 1 | |
| | | | | | 5.05 | 25.26 | 0 | 0.317 | |
| 8 | 8005 | maximum | | 1.20 | 9.57 | 5.40 | 0 | 1 | |
| | | | | | 23.64 | 49.98 | 0 | 0.178 | |
| 8 | 8006 | maximum | | 1.20 | 0.36 | 1.80 | 0 | 1 | |
| | | | | | 3.63 | 18.13 | 0 | 0.360 | |
| 8 | 8007 | maximum | | 1.20 | 7.06 | 3.03 | 0 | 1 | |
| | | | | | 6.35 | 9.74 | 0 | 0.206 | |
| 8 | 8008 | maximum | | 1.20 | 0.33 | 1.64 | 0 | 1 | |
| | | | | | 3.59 | 17.97 | 0 | 0.313 | |
| 8 | 8009 | maximum | | 1.20 | 7.98 | 6.35 | 0 | 1 | |
| | | | | | 25.66 | 47.15 | 0 | 0.207 | |
| 8 | 8010 | maximum | | 1.20 | 0.33 | 1.64 | 0 | 1 | |
| | | | | | 3.50 | 17.50 | 0 | 0.362 | |
| 8 | 8011 | maximum | | 1.20 | 8.81 | 6.21 | 0 | 1 | |
| | | | | | 19.61 | 37.01 | 0 | 0.240 | |
| 8 | 8012 | maximum | | 1.20 | 0.55 | 2.77 | 0 | 1 | |
| | | | | | 4.10 | 20.51 | 0 | 0.345 | |
| 8 | 8013 | maximum | | 1.20 | 6.90 | 5.26 | 0 | 1 | |
| | | | | | 17.70 | 34.74 | 0 | 0.080 | |
| 8 | 8014 | maximum | | 1.20 | 1.03 | 5.14 | 0 | 1 | |
| | | | | | 4.77 | 23.87 | 0 | 0.316 | |
| 8 | 8015 | maximum | | 1.20 | 6.94 | 5.19 | 0 | 1 | |
| | | | | | 17.32 | 34.42 | 0 | 0.282 | |
| 8 | 8016 | maximum | | 1.20 | 1.00 | 5.02 | 0 | 1 | |
| | | | | | 4.82 | 24.11 | 0 | 0.358 | |
| 8 | 8017 | maximum | | 1.20 | 9.26 | 6.22 | 0 | 1 | |
| | | | | | 20.29 | 38.07 | 0 | 0.137 | |
| 8 | 8018 | maximum | | 1.20 | 0.49 | 2.46 | 0 | 1 | |
| | | | | | 4.19 | 20.93 | 0 | 0.350 | |
| 8 | 8019 | maximum | | 1.20 | 7.61 | 5.73 | 0 | 1 | |
| | | | | | 25.67 | 47.76 | 0 | 0.323 | |
| 8 | 8020 | maximum | | 1.20 | 0.26 | 1.30 | 0 | 1 | |
| | | | | | 3.57 | 17.85 | 0 | 0.372 | |
| 8 | 8021 | maximum | | 1.20 | 8.16 | 2.83 | 0 | 1 | |
| | | | | | 5.78 | 9.70 | 0 | 0.372 | |
| 8 | 8022 | maximum | | 1.20 | 0.23 | 1.16 | 0 | 1 | |
| | | | | | 3.65 | 18.27 | 0 | 0.132 | |
| 8 | 8023 | maximum | | 1.20 | 10.53 | 4.83 | 0 | 1 | |
| | | | | | 25.23 | 52.53 | 0 | 0.330 | |
| 8 | 8024 | maximum | | 1.20 | 0.22 | 1.11 | 0 | 1 | |
| | | | | | 3.70 | 18.51 | 0 | 0.373 | |
| 8 | 8025 | maximum | | 1.20 | 5.72 | 8.20 | 0 | 1 | |
| | | | | | 24.39 | 57.11 | 0 | 0.097 | |
| 8 | 8026 | maximum | | 1.20 | 4.75 | 6.02 | 0 | 1 | |
| | | | | | 5.07 | 25.34 | 0 | 0.311 | |
| 8 | 8027 | maximum | | 1.20 | 2.39 | 4.74 | 0 | 1 | |
| | | | | | 3.72 | 13.15 | 0 | 0.107 | |
| 8 | 8028 | maximum | | 1.20 | 2.27 | 11.34 | 0 | 1 | |
| | | | | | 6.03 | 30.14 | 0 | 0.295 | |
| 8 | 8029 | maximum | | 1.20 | 2.45 | 5.42 | 0 | 1 | |
| | | | | | 3.64 | 12.84 | 0 | 0.195 | |
| 8 | 8030 | maximum | | 1.20 | 6.90 | 11.71 | 0 | 1 | |
| | | | | | 22.93 | 53.32 | 0 | 0.317 | |
| | | | | | | | | 0.098 | |
| | | | | | | | | 0.291 | |
| | | | | | | | | 0.175 | |
| | | | | | | | | 0.356 | |

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REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm²/m] upper/lower
General load safety factor - as defined in BEMESS: Gamma-f = 1.00
Shear: stresses V_{Ed}/d and $VR_{d,ct}/d$ with d =effective depth = $h-h_m$
Shear index $2m$ = minimum shear reinforcement

| Grp | ELEM No | LC MAT No | GEO No | h [m] | Reinforcement | | dphi deg | Shr zon | V_{Ed}/d [MPa] | Ass [cm ² /m ²] |
|-----|---------|-----------|--------|-------|---------------|-------|----------|---------|------------------|--|
| | | | | | main | cross | dir | | $VR_{d,ct}/d$ | |
| 8 | 8031 | maximum | | 1.20 | 2.52 | 12.61 | 0 | 1 | 0.160 | |
| | | | | | 5.84 | 29.18 | 0 | | 0.317 | |
| 8 | 8032 | maximum | | 1.20 | 4.33 | 7.62 | 0 | 1 | 0.202 | |
| | | | | | 4.91 | 24.54 | 0 | | 0.314 | |
| 8 | 8033 | maximum | | 1.20 | 9.58 | 7.00 | 0 | 1 | 0.205 | |
| | | | | | 22.89 | 48.14 | 0 | | 0.358 | |
| 8 | 8034 | maximum | | 1.20 | 7.18 | 3.59 | 0 | 1 | 0.080 | |
| | | | | | 6.53 | 9.48 | 0 | | 0.314 | |
| 8 | 8035 | maximum | | 1.20 | 8.72 | 7.82 | 0 | 1 | 0.135 | |
| | | | | | 25.16 | 45.55 | 0 | | 0.346 | |
| 8 | 8036 | maximum | | 1.20 | 0.51 | 2.55 | 0 | 1 | 0.235 | |
| | | | | | 3.50 | 17.48 | 0 | | 0.347 | |
| 8 | 8037 | maximum | | 1.20 | 0.47 | 2.37 | 0 | 1 | 0.277 | |
| | | | | | 3.47 | 17.33 | 0 | | 0.366 | |
| 8 | 8038 | maximum | | 1.20 | 0.46 | 2.29 | 0 | 1 | 0.315 | |
| | | | | | 3.36 | 16.81 | 0 | | 0.373 | |
| 8 | 8039 | maximum | | 1.20 | 9.01 | 6.63 | 0 | 1 | 0.133 | |
| | | | | | 19.30 | 35.72 | 0 | | 0.329 | |
| 8 | 8040 | maximum | | 1.20 | 7.00 | 6.23 | 0 | 1 | 0.113 | |
| | | | | | 17.38 | 33.61 | 0 | | 0.324 | |
| 8 | 8041 | maximum | | 1.20 | 0.69 | 3.43 | 0 | 1 | 0.200 | |
| | | | | | 3.93 | 19.66 | 0 | | 0.393 | |
| 8 | 8042 | maximum | | 1.20 | 1.19 | 5.94 | 0 | 1 | 0.182 | |
| | | | | | 4.62 | 23.08 | 0 | | 0.399 | |
| 8 | 8043 | maximum | | 1.20 | 6.90 | 6.32 | 0 | 1 | 0.126 | |
| | | | | | 17.04 | 33.42 | 0 | | 0.327 | |
| 8 | 8044 | maximum | | 1.20 | 9.15 | 6.36 | 0 | 1 | 0.127 | |
| | | | | | 19.78 | 36.79 | 0 | | 0.332 | |
| 8 | 8045 | maximum | | 1.20 | 1.17 | 5.87 | 0 | 1 | 0.184 | |
| | | | | | 4.67 | 23.34 | 0 | | 0.399 | |
| 8 | 8046 | maximum | | 1.20 | 0.66 | 3.28 | 0 | 1 | 0.208 | |
| | | | | | 4.05 | 20.23 | 0 | | 0.394 | |
| 8 | 8047 | maximum | | 1.20 | 8.18 | 7.21 | 0 | 1 | 0.138 | |
| | | | | | 25.00 | 46.16 | 0 | | 0.348 | |
| 8 | 8048 | maximum | | 1.20 | 8.13 | 3.34 | 0 | 1 | 0.097 | |
| | | | | | 5.79 | 9.40 | 0 | | 0.311 | |
| 8 | 8049 | maximum | | 1.20 | 10.47 | 5.45 | 0 | 1 | 0.216 | |
| | | | | | 24.47 | 50.70 | 0 | | 0.370 | |
| 8 | 8050 | maximum | | 1.20 | 0.40 | 2.01 | 0 | 1 | 0.323 | |
| | | | | | 3.44 | 17.22 | 0 | | 0.373 | |
| 8 | 8051 | maximum | | 1.20 | 0.38 | 1.89 | 0 | 1 | 0.295 | |
| | | | | | 3.52 | 17.62 | 0 | | 0.363 | |
| 8 | 8052 | maximum | | 1.20 | 0.36 | 1.80 | 0 | 1 | 0.257 | |
| | | | | | 3.56 | 17.79 | 0 | | 0.344 | |
| 8 | 8053 | maximum | | 1.20 | 6.28 | 9.80 | 0 | 1 | 0.185 | |
| | | | | | 23.69 | 55.28 | 0 | | 0.366 | |
| 8 | 8054 | maximum | | 1.20 | 2.40 | 4.82 | 0 | 1 | 0.103 | |
| | | | | | 3.68 | 12.85 | 0 | | 0.296 | |
| 8 | 8055 | maximum | | 1.20 | 4.70 | 6.88 | 0 | 1 | 0.220 | |
| | | | | | 4.95 | 24.75 | 0 | | 0.313 | |
| 8 | 8056 | maximum | | 1.20 | 2.29 | 11.46 | 0 | 1 | 0.194 | |
| | | | | | 5.87 | 29.36 | 0 | | 0.318 | |

Explanations shear state Shr zon:

1 = check without necessary shear reinforcement

2 = shear reinforcement required

m = minimum shear reinforcement

Acc. DIN 1045-1 10.3.4(2) the leverarm z was limited to $d-2 \cdot n_{omc}$.

Maximum Reinforcement [cm²/m]

(stored in data base file with reinforcement-distribution-no. 522)

| Grp | Element | upper:As | Ast | dir | lower:As | Ast | dir | Ass[cm ² /m ²] | AssE[cm ²] |
|-----|---------|----------|------|-----|----------|------|-----|---------------------------------------|------------------------|
| 3 | 3001 | 1.39 | 0.28 | 0 | 0.78 | 0.16 | 0 | | |
| 3 | 3002 | 0.31 | 0.06 | 0 | 1.55 | 0.31 | 0 | | |
| 3 | 3003 | | 0.02 | 0 | 2.03 | 0.41 | 0 | | |
| 3 | 3004 | | 0.02 | 0 | 2.36 | 0.47 | 0 | | |
| 3 | 3005 | | 0.02 | 0 | 2.51 | 0.50 | 0 | | |
| 3 | 3006 | | 0.02 | 0 | 2.61 | 0.52 | 0 | | |
| 3 | 3007 | 1.39 | 0.28 | 0 | 0.86 | 0.17 | 0 | | |
| 3 | 3008 | 0.33 | 0.14 | 0 | 1.53 | 0.31 | 0 | | |
| 3 | 3009 | 0.02 | 0.11 | 0 | 2.03 | 0.41 | 0 | | |
| 3 | 3010 | 0.02 | 0.11 | 0 | 2.36 | 0.47 | 0 | | |
| 3 | 3011 | 0.02 | 0.11 | 0 | 2.52 | 0.50 | 0 | | |
| 3 | 3012 | 0.02 | 0.11 | 0 | 2.60 | 0.52 | 0 | | |

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Maximum Reinforcement [cm2/m]

(stored in data base file with reinforcement-distribution-no. 522)

| Grp | Element | upper:As | Ast | dir | lower:As | Ast | dir | Ass[cm2/m2] | Asse[cm2] |
|-----|---------|----------|------|-----|----------|------|-----|-------------|-----------|
| 3 | 3013 | 1.41 | 0.43 | 0 | 0.84 | 0.17 | 0 | | |
| 3 | 3014 | 0.37 | 0.20 | 0 | 1.52 | 0.30 | 0 | | |
| 3 | 3015 | 0.03 | 0.15 | 0 | 2.04 | 0.41 | 0 | | |
| 3 | 3016 | 0.03 | 0.15 | 0 | 2.38 | 0.48 | 0 | | |
| 3 | 3017 | 0.03 | 0.15 | 0 | 2.53 | 0.51 | 0 | | |
| 3 | 3018 | 0.03 | 0.15 | 0 | 2.60 | 0.52 | 0 | | |
| 3 | 3019 | 1.41 | 0.59 | 0 | 0.75 | 0.15 | 0 | | |
| 3 | 3020 | 0.42 | 0.37 | 0 | 1.51 | 0.30 | 0 | | |
| 3 | 3021 | 0.05 | 0.23 | 0 | 2.01 | 0.40 | 0 | | |
| 3 | 3022 | 0.03 | 0.15 | 0 | 2.35 | 0.47 | 0 | | |
| 3 | 3023 | 0.02 | 0.10 | 0 | 2.51 | 0.50 | 0 | | |
| 3 | 3024 | 0.02 | 0.08 | 0 | 2.61 | 0.52 | 0 | | |
| 3 | 3025 | 1.55 | 0.94 | 0 | 0.79 | 0.16 | 0 | | |
| 3 | 3026 | 0.52 | 0.76 | 0 | 1.51 | 0.30 | 0 | | |
| 3 | 3027 | 0.09 | 0.44 | 0 | 2.04 | 0.41 | 0 | | |
| 3 | 3028 | 0.06 | 0.30 | 0 | 2.38 | 0.48 | 0 | | |
| 3 | 3029 | 0.04 | 0.20 | 0 | 2.53 | 0.51 | 0 | | |
| 3 | 3030 | 0.03 | 0.16 | 0 | 2.60 | 0.52 | 0 | | |
| 3 | 3031 | 1.55 | 0.95 | 0 | 0.75 | 0.15 | 0 | | |
| 3 | 3032 | 0.48 | 0.72 | 0 | 1.49 | 0.30 | 0 | | |
| 3 | 3033 | 0.11 | 0.54 | 0 | 1.99 | 0.40 | 0 | | |
| 3 | 3034 | 0.08 | 0.41 | 0 | 2.34 | 0.47 | 0 | | |
| 3 | 3035 | 0.06 | 0.32 | 0 | 2.50 | 0.50 | 0 | | |
| 3 | 3036 | 0.05 | 0.26 | 0 | 2.59 | 0.52 | 0 | | |
| 3 | 3037 | 1.60 | 1.12 | 0 | 0.76 | 0.15 | 0 | | |
| 3 | 3038 | 0.59 | 1.01 | 0 | 1.49 | 0.30 | 0 | | |
| 3 | 3039 | 0.14 | 0.71 | 0 | 2.01 | 0.40 | 0 | | |
| 3 | 3040 | 0.10 | 0.51 | 0 | 2.36 | 0.47 | 0 | | |
| 3 | 3041 | 0.07 | 0.36 | 0 | 2.87 | 0.57 | 0 | | |
| 3 | 3042 | 0.05 | 0.27 | 0 | 2.60 | 0.52 | 0 | | |
| 3 | 3043 | 1.70 | 1.20 | 0 | 0.73 | 0.15 | 0 | | |
| 3 | 3044 | 0.56 | 0.98 | 0 | 1.50 | 0.30 | 0 | | |
| 3 | 3045 | 0.15 | 0.73 | 0 | 2.01 | 0.40 | 0 | | |
| 3 | 3046 | 0.11 | 0.56 | 0 | 2.35 | 0.47 | 0 | | |
| 3 | 3047 | 0.08 | 0.42 | 0 | 2.57 | 0.51 | 0 | | |
| 3 | 3048 | 0.07 | 0.36 | 0 | 2.60 | 0.52 | 0 | | |
| 3 | 3049 | 1.68 | 1.11 | 0 | 0.74 | 0.15 | 0 | | |
| 3 | 3050 | 0.59 | 0.93 | 0 | 1.51 | 0.30 | 0 | | |
| 3 | 3051 | 0.12 | 0.60 | 0 | 2.06 | 0.41 | 0 | | |
| 3 | 3052 | 0.09 | 0.43 | 0 | 2.43 | 0.49 | 0 | | |
| 3 | 3053 | 0.06 | 0.29 | 0 | 2.58 | 0.52 | 0 | | |
| 3 | 3054 | 0.05 | 0.23 | 0 | 2.65 | 0.53 | 0 | | |
| 3 | 3055 | 1.75 | 1.08 | 0 | 0.72 | 0.14 | 0 | | |
| 3 | 3056 | 0.52 | 0.80 | 0 | 1.53 | 0.31 | 0 | | |
| 3 | 3057 | 0.10 | 0.52 | 0 | 2.06 | 0.41 | 0 | | |
| 3 | 3058 | 0.08 | 0.38 | 0 | 2.62 | 0.52 | 0 | | |
| 3 | 3059 | 0.06 | 0.29 | 0 | 2.57 | 0.51 | 0 | | |
| 3 | 3060 | 0.05 | 0.25 | 0 | 2.66 | 0.53 | 0 | | |
| 3 | 3061 | 1.61 | 0.77 | 0 | 0.74 | 0.15 | 0 | | |
| 3 | 3062 | 0.52 | 0.52 | 0 | 1.62 | 0.32 | 0 | | |
| 3 | 3063 | 0.05 | 0.26 | 0 | 2.16 | 0.43 | 0 | | |
| 3 | 3064 | 0.03 | 0.13 | 0 | 2.50 | 0.50 | 0 | | |
| 3 | 3065 | 0.02 | 0.08 | 0 | 2.65 | 0.53 | 0 | | |
| 3 | 3066 | 0.01 | 0.05 | 0 | 2.74 | 0.55 | 0 | | |
| 3 | 3067 | 1.61 | 0.68 | 0 | 0.89 | 0.18 | 0 | | |
| 3 | 3068 | 0.56 | 0.47 | 0 | 1.68 | 0.34 | 0 | | |
| 3 | 3069 | 0.04 | 0.18 | 0 | 2.24 | 0.45 | 0 | | |
| 3 | 3070 | 0.02 | 0.10 | 0 | 2.58 | 0.52 | 0 | | |
| 3 | 3071 | 0.01 | 0.05 | 0 | 2.72 | 0.54 | 0 | | |
| 3 | 3072 | | 0.02 | 0 | 2.78 | 0.56 | 0 | | |
| 3 | 3073 | 1.64 | 0.33 | 0 | 0.73 | 0.15 | 0 | | |
| 3 | 3074 | 0.44 | 0.30 | 0 | 1.60 | 0.32 | 0 | | |
| 3 | 3075 | 0.03 | 0.16 | 0 | 2.31 | 0.46 | 0 | | |
| 3 | 3076 | 0.03 | 0.15 | 0 | 2.47 | 0.49 | 0 | | |
| 3 | 3077 | 0.03 | 0.14 | 0 | 2.63 | 0.53 | 0 | | |
| 3 | 3078 | 0.03 | 0.14 | 0 | 2.73 | 0.55 | 0 | | |
| 3 | 3079 | 1.56 | 0.31 | 0 | 0.77 | 0.16 | 0 | | |
| 3 | 3080 | 0.41 | 0.15 | 0 | 1.59 | 0.32 | 0 | | |
| 3 | 3081 | 0.01 | 0.04 | 0 | 2.13 | 0.43 | 0 | | |
| 3 | 3082 | 0.01 | 0.03 | 0 | 2.48 | 0.50 | 0 | | |
| 3 | 3083 | 0.01 | 0.03 | 0 | 2.64 | 0.53 | 0 | | |
| 3 | 3084 | 0.01 | 0.03 | 0 | 2.75 | 0.55 | 0 | | |
| 3 | 3085 | | 0.02 | 0 | 2.62 | 0.52 | 0 | | |
| 3 | 3086 | | 0.02 | 0 | 2.52 | 0.50 | 0 | | |
| 3 | 3087 | | 0.02 | 0 | 2.37 | 0.47 | 0 | | |
| 3 | 3088 | | 0.02 | 0 | 2.05 | 0.41 | 0 | | |
| 3 | 3089 | 0.28 | 0.06 | 0 | 1.59 | 0.32 | 0 | | |
| 3 | 3090 | 1.35 | 0.27 | 0 | 0.83 | 0.17 | 0 | | |

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Maximum Reinforcement [cm2/m]

(stored in data base file with reinforcement-distribution-no. 522)

| Grp | Element | upper:As | Ast | dir | lower:As | Ast | dir | Ass[cm2/m2] | AssE[cm2] |
|-----|---------|----------|------|-----|----------|------|-----|-------------|-----------|
| 3 | 3091 | 0.02 | 0.11 | 0 | 2.61 | 0.52 | 0 | | |
| 3 | 3092 | 0.02 | 0.11 | 0 | 2.53 | 0.51 | 0 | | |
| 3 | 3093 | 0.02 | 0.11 | 0 | 2.38 | 0.48 | 0 | | |
| 3 | 3094 | 0.02 | 0.11 | 0 | 2.05 | 0.41 | 0 | | |
| 3 | 3095 | 0.30 | 0.14 | 0 | 1.57 | 0.31 | 0 | | |
| 3 | 3096 | 1.35 | 0.27 | 0 | 0.90 | 0.18 | 0 | | |
| 3 | 3097 | 0.03 | 0.15 | 0 | 2.60 | 0.52 | 0 | | |
| 3 | 3098 | 0.03 | 0.15 | 0 | 2.54 | 0.51 | 0 | | |
| 3 | 3099 | 0.03 | 0.15 | 0 | 2.39 | 0.48 | 0 | | |
| 3 | 3100 | 0.03 | 0.15 | 0 | 2.07 | 0.41 | 0 | | |
| 3 | 3101 | 0.34 | 0.20 | 0 | 1.56 | 0.31 | 0 | | |
| 3 | 3102 | 1.38 | 0.43 | 0 | 0.89 | 0.18 | 0 | | |
| 3 | 3103 | 0.02 | 0.08 | 0 | 2.61 | 0.52 | 0 | | |
| 3 | 3104 | 0.02 | 0.10 | 0 | 2.52 | 0.50 | 0 | | |
| 3 | 3105 | 0.03 | 0.15 | 0 | 2.37 | 0.47 | 0 | | |
| 3 | 3106 | 0.05 | 0.23 | 0 | 2.03 | 0.41 | 0 | | |
| 3 | 3107 | 0.39 | 0.37 | 0 | 1.55 | 0.31 | 0 | | |
| 3 | 3108 | 1.38 | 0.59 | 0 | 0.79 | 0.16 | 0 | | |
| 3 | 3109 | 0.03 | 0.16 | 0 | 2.60 | 0.52 | 0 | | |
| 3 | 3110 | 0.04 | 0.20 | 0 | 2.54 | 0.51 | 0 | | |
| 3 | 3111 | 0.06 | 0.30 | 0 | 2.40 | 0.48 | 0 | | |
| 3 | 3112 | 0.10 | 0.52 | 0 | 2.06 | 0.41 | 0 | | |
| 3 | 3113 | 0.49 | 0.76 | 0 | 1.55 | 0.31 | 0 | | |
| 3 | 3114 | 1.51 | 0.94 | 0 | 0.84 | 0.17 | 0 | | |
| 3 | 3115 | 0.05 | 0.26 | 0 | 2.59 | 0.52 | 0 | | |
| 3 | 3116 | 0.06 | 0.32 | 0 | 2.51 | 0.50 | 0 | | |
| 3 | 3117 | 0.08 | 0.41 | 0 | 2.36 | 0.47 | 0 | | |
| 3 | 3118 | 0.11 | 0.53 | 0 | 2.02 | 0.40 | 0 | | |
| 3 | 3119 | 0.45 | 0.72 | 0 | 1.53 | 0.31 | 0 | | |
| 3 | 3120 | 1.52 | 0.95 | 0 | 0.79 | 0.16 | 0 | | |
| 3 | 3121 | 0.05 | 0.27 | 0 | 2.61 | 0.52 | 0 | | |
| 3 | 3122 | 0.07 | 0.36 | 0 | 2.89 | 0.58 | 0 | | |
| 3 | 3123 | 0.10 | 0.51 | 0 | 2.38 | 0.48 | 0 | | |
| 3 | 3124 | 0.14 | 0.70 | 0 | 2.04 | 0.41 | 0 | | |
| 3 | 3125 | 0.56 | 1.01 | 0 | 1.53 | 0.31 | 0 | | |
| 3 | 3126 | 1.57 | 1.12 | 0 | 0.80 | 0.16 | 0 | | |
| 3 | 3127 | 0.07 | 0.35 | 0 | 2.61 | 0.52 | 0 | | |
| 3 | 3128 | 0.08 | 0.42 | 0 | 2.69 | 0.54 | 0 | | |
| 3 | 3129 | 0.11 | 0.55 | 0 | 2.37 | 0.47 | 0 | | |
| 3 | 3130 | 0.19 | 0.94 | 0 | 2.04 | 0.41 | 0 | | |
| 3 | 3131 | 0.53 | 0.97 | 0 | 1.54 | 0.31 | 0 | | |
| 3 | 3132 | 1.67 | 1.19 | 0 | 0.77 | 0.15 | 0 | | |
| 3 | 3133 | 0.05 | 0.23 | 0 | 2.65 | 0.53 | 0 | | |
| 3 | 3134 | 0.06 | 0.29 | 0 | 2.59 | 0.52 | 0 | | |
| 3 | 3135 | 0.08 | 0.42 | 0 | 2.45 | 0.49 | 0 | | |
| 3 | 3136 | 0.15 | 0.74 | 0 | 2.13 | 0.43 | 0 | | |
| 3 | 3137 | 0.56 | 0.92 | 0 | 1.55 | 0.31 | 0 | | |
| 3 | 3138 | 1.64 | 1.10 | 0 | 0.79 | 0.16 | 0 | | |
| 3 | 3139 | 0.05 | 0.25 | 0 | 2.66 | 0.53 | 0 | | |
| 3 | 3140 | 0.06 | 0.29 | 0 | 2.58 | 0.52 | 0 | | |
| 3 | 3141 | 0.08 | 0.38 | 0 | 2.84 | 0.57 | 0 | | |
| 3 | 3142 | 0.10 | 0.51 | 0 | 2.09 | 0.42 | 0 | | |
| 3 | 3143 | 0.49 | 0.79 | 0 | 1.57 | 0.31 | 0 | | |
| 3 | 3144 | 1.71 | 1.07 | 0 | 0.77 | 0.15 | 0 | | |
| 3 | 3145 | 0.01 | 0.05 | 0 | 2.74 | 0.55 | 0 | | |
| 3 | 3146 | 0.02 | 0.08 | 0 | 2.66 | 0.53 | 0 | | |
| 3 | 3147 | 0.03 | 0.13 | 0 | 2.52 | 0.50 | 0 | | |
| 3 | 3148 | 0.05 | 0.25 | 0 | 2.18 | 0.44 | 0 | | |
| 3 | 3149 | 0.49 | 0.52 | 0 | 1.66 | 0.33 | 0 | | |
| 3 | 3150 | 1.58 | 0.76 | 0 | 0.79 | 0.16 | 0 | | |
| 3 | 3151 | 0.01 | 0.03 | 0 | 2.78 | 0.56 | 0 | | |
| 3 | 3152 | 0.01 | 0.05 | 0 | 2.73 | 0.55 | 0 | | |
| 3 | 3153 | 0.02 | 0.10 | 0 | 2.60 | 0.52 | 0 | | |
| 3 | 3154 | 0.04 | 0.18 | 0 | 2.27 | 0.45 | 0 | | |
| 3 | 3155 | 0.53 | 0.47 | 0 | 1.71 | 0.34 | 0 | | |
| 3 | 3156 | 1.58 | 0.68 | 0 | 0.93 | 0.19 | 0 | | |
| 3 | 3157 | 0.03 | 0.14 | 0 | 2.73 | 0.55 | 0 | | |
| 3 | 3158 | 0.03 | 0.14 | 0 | 2.63 | 0.53 | 0 | | |
| 3 | 3159 | 0.03 | 0.15 | 0 | 2.49 | 0.50 | 0 | | |
| 3 | 3160 | 0.03 | 0.16 | 0 | 2.16 | 0.43 | 0 | | |
| 3 | 3161 | 0.41 | 0.30 | 0 | 1.64 | 0.33 | 0 | | |
| 3 | 3162 | 1.61 | 0.33 | 0 | 0.77 | 0.15 | 0 | | |
| 3 | 3163 | 0.01 | 0.03 | 0 | 2.76 | 0.55 | 0 | | |
| 3 | 3164 | 0.01 | 0.03 | 0 | 2.66 | 0.53 | 0 | | |
| 3 | 3165 | 0.01 | 0.03 | 0 | 2.50 | 0.50 | 0 | | |
| 3 | 3166 | 0.01 | 0.04 | 0 | 2.16 | 0.43 | 0 | | |
| 3 | 3167 | 0.38 | 0.15 | 0 | 1.63 | 0.33 | 0 | | |
| 3 | 3168 | 1.52 | 0.30 | 0 | 0.82 | 0.16 | 0 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ

Maximum Reinforcement [cm2/m]

(stored in data base file with reinforcement-distribution-no. 522)

| Grp | Element | upper:As | Ast | dir | lower:As | Ast | dir | Ass[cm2/m2] | Asse[cm2] |
|-----|---------|----------|-------|-----|----------|-------|-----|-------------|-----------|
| 4 | 4001 | 6.74 | 1.35 | 0 | 0.48 | 0.11 | 0 | | |
| 4 | 4002 | 2.63 | 0.53 | 0 | 0.23 | 0.16 | 0 | | |
| 4 | 4003 | 5.24 | 1.45 | 0 | 0.18 | 0.42 | 0 | | |
| 4 | 4004 | 2.31 | 0.46 | 0 | 0.09 | 0.43 | 0 | | |
| 4 | 4005 | 5.31 | 1.67 | 0 | 0.20 | 0.17 | 0 | 12.63 | 0.76 |
| 4 | 4006 | 2.42 | 0.70 | 0 | 0.10 | 0.14 | 0 | | |
| 4 | 4007 | 6.45 | 2.15 | 0 | 0.23 | | 0 | | |
| 4 | 4008 | 2.51 | 0.99 | 0 | 0.15 | | 0 | | |
| 4 | 4009 | 5.34 | 2.20 | 0 | | | 0 | 11.03 | 0.66 |
| 4 | 4010 | 2.63 | 1.25 | 0 | 0.05 | | 0 | | |
| 4 | 4011 | 5.66 | 2.47 | 0 | 0.09 | | 0 | 9.55 | 1.15 |
| 4 | 4012 | 2.61 | 1.21 | 0 | 0.05 | | 0 | | |
| 4 | 4013 | 5.66 | 2.51 | 0 | | | 0 | | |
| 4 | 4014 | 2.71 | 1.40 | 0 | | | 0 | | |
| 4 | 4015 | 5.63 | 2.28 | 0 | | | 0 | 10.00 | 1.20 |
| 4 | 4016 | 2.78 | 1.36 | 0 | | | 0 | | |
| 4 | 4017 | 5.85 | 2.79 | 0 | | | 0 | | |
| 4 | 4018 | 2.69 | 1.36 | 0 | | | 0 | | |
| 4 | 4019 | 5.40 | 1.90 | 0 | | | 0 | 12.72 | 0.76 |
| 4 | 4020 | 2.76 | 1.22 | 0 | | | 0 | | |
| 4 | 4021 | 6.79 | 2.32 | 0 | 0.08 | | 0 | | |
| 4 | 4022 | 2.74 | 1.15 | 0 | 0.07 | | 0 | | |
| 4 | 4023 | 5.72 | 2.23 | 0 | | | 0 | 11.68 | 0.70 |
| 4 | 4024 | 2.57 | 1.06 | 0 | | | 0 | | |
| 4 | 4025 | 5.49 | 1.17 | 0 | 0.14 | 0.72 | 0 | 9.90 | 0.59 |
| 4 | 4026 | 2.48 | 0.50 | 0 | 0.11 | 0.55 | 0 | | |
| 4 | 4027 | 7.27 | 1.45 | 0 | 0.25 | 0.18 | 0 | | |
| 4 | 4028 | 2.81 | 0.56 | 0 | 0.22 | 0.21 | 0 | | |
| 4 | 4029 | 2.58 | 0.52 | 0 | 0.29 | 0.16 | 0 | | |
| 4 | 4030 | 6.56 | 1.31 | 0 | 0.64 | 0.13 | 0 | | |
| 4 | 4031 | 2.27 | 0.45 | 0 | 0.14 | 0.41 | 0 | | |
| 4 | 4032 | 5.12 | 1.43 | 0 | 0.30 | 0.40 | 0 | | |
| 4 | 4033 | 2.38 | 0.70 | 0 | 0.15 | 0.14 | 0 | | |
| 4 | 4034 | 5.19 | 1.63 | 0 | 0.36 | 0.17 | 0 | 12.39 | 0.74 |
| 4 | 4035 | 2.47 | 0.98 | 0 | 0.21 | | 0 | | |
| 4 | 4036 | 6.29 | 2.11 | 0 | 0.37 | 0.07 | 0 | | |
| 4 | 4037 | 2.58 | 1.25 | 0 | 0.10 | | 0 | | |
| 4 | 4038 | 5.22 | 2.18 | 0 | 0.11 | | 0 | 10.74 | 0.64 |
| 4 | 4039 | 2.57 | 1.21 | 0 | 0.10 | | 0 | | |
| 4 | 4040 | 5.54 | 2.44 | 0 | 0.18 | | 0 | | |
| 4 | 4041 | 2.66 | 1.39 | 0 | 0.14 | | 0 | | |
| 4 | 4042 | 5.54 | 2.48 | 0 | 0.14 | | 0 | | |
| 4 | 4043 | 2.74 | 1.36 | 0 | 0.09 | | 0 | | |
| 4 | 4044 | 5.50 | 2.24 | 0 | 0.16 | | 0 | 9.74 | 1.17 |
| 4 | 4045 | 2.65 | 1.36 | 0 | 0.06 | | 0 | | |
| 4 | 4046 | 5.72 | 2.74 | 0 | 0.09 | | 0 | | |
| 4 | 4047 | 2.71 | 1.21 | 0 | 0.06 | | 0 | | |
| 4 | 4048 | 5.28 | 1.87 | 0 | 0.10 | | 0 | 12.43 | 0.75 |
| 4 | 4049 | 2.69 | 1.14 | 0 | 0.13 | | 0 | | |
| 4 | 4050 | 6.63 | 2.27 | 0 | 0.22 | | 0 | | |
| 4 | 4051 | 2.53 | 1.06 | 0 | | | 0 | | |
| 4 | 4052 | 5.60 | 2.19 | 0 | | | 0 | 11.41 | 0.68 |
| 4 | 4053 | 2.45 | 0.49 | 0 | 0.11 | 0.53 | 0 | | |
| 4 | 4054 | 5.37 | 1.15 | 0 | 0.18 | 0.71 | 0 | 9.65 | 0.58 |
| 4 | 4055 | 2.77 | 0.55 | 0 | 0.28 | 0.21 | 0 | | |
| 4 | 4056 | 7.09 | 1.42 | 0 | 0.40 | 0.20 | 0 | | |
| 8 | 8001 | 2.43 | 5.27 | 0 | 3.67 | 13.11 | 0 | | |
| 8 | 8002 | 2.44 | 12.22 | 0 | 5.97 | 29.87 | 0 | | |
| 8 | 8003 | 6.27 | 10.04 | 0 | 23.55 | 55.08 | 0 | | |
| 8 | 8004 | 4.47 | 6.75 | 0 | 5.05 | 25.26 | 0 | | |
| 8 | 8005 | 9.57 | 5.40 | 0 | 23.64 | 49.98 | 0 | | |
| 8 | 8006 | 0.36 | 1.80 | 0 | 3.63 | 18.13 | 0 | | |
| 8 | 8007 | 7.06 | 3.03 | 0 | 6.35 | 9.74 | 0 | | |
| 8 | 8008 | 0.33 | 1.64 | 0 | 3.59 | 17.97 | 0 | | |
| 8 | 8009 | 7.98 | 6.35 | 0 | 25.66 | 47.15 | 0 | | |
| 8 | 8010 | 0.33 | 1.64 | 0 | 3.50 | 17.50 | 0 | | |
| 8 | 8011 | 8.81 | 6.21 | 0 | 19.61 | 37.01 | 0 | | |
| 8 | 8012 | 0.55 | 2.77 | 0 | 4.10 | 20.51 | 0 | | |
| 8 | 8013 | 6.90 | 5.26 | 0 | 17.70 | 34.74 | 0 | | |
| 8 | 8014 | 1.03 | 5.14 | 0 | 4.77 | 23.87 | 0 | | |
| 8 | 8015 | 6.94 | 5.19 | 0 | 17.32 | 34.42 | 0 | | |
| 8 | 8016 | 1.00 | 5.02 | 0 | 4.82 | 24.11 | 0 | | |
| 8 | 8017 | 9.26 | 6.22 | 0 | 20.29 | 38.07 | 0 | | |
| 8 | 8018 | 0.49 | 2.46 | 0 | 4.19 | 20.93 | 0 | | |
| 8 | 8019 | 7.61 | 5.73 | 0 | 25.67 | 47.76 | 0 | | |
| 8 | 8020 | 0.26 | 1.30 | 0 | 3.57 | 17.85 | 0 | | |
| 8 | 8021 | 8.16 | 2.83 | 0 | 5.78 | 9.70 | 0 | | |
| 8 | 8022 | 0.23 | 1.16 | 0 | 3.65 | 18.27 | 0 | | |

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Maximum Reinforcement [cm²/m]

(stored in data base file with reinforcement-distribution-no. 522)

| Grp | Element | upper:As | Ast | dir | lower:As | Ast | dir | Ass[cm ² /m ²] | AssE[cm ²] |
|-----|---------|----------|-------|-----|----------|-------|-----|---------------------------------------|------------------------|
| 8 | 8023 | 10.53 | 4.83 | 0 | 25.23 | 52.53 | 0 | | |
| 8 | 8024 | 0.22 | 1.11 | 0 | 3.70 | 18.51 | 0 | | |
| 8 | 8025 | 5.72 | 8.20 | 0 | 24.39 | 57.11 | 0 | | |
| 8 | 8026 | 4.75 | 6.02 | 0 | 5.07 | 25.34 | 0 | | |
| 8 | 8027 | 2.39 | 4.74 | 0 | 3.72 | 13.15 | 0 | | |
| 8 | 8028 | 2.27 | 11.34 | 0 | 6.03 | 30.14 | 0 | | |
| 8 | 8029 | 2.45 | 5.42 | 0 | 3.64 | 12.84 | 0 | | |
| 8 | 8030 | 6.90 | 11.71 | 0 | 22.93 | 53.32 | 0 | | |
| 8 | 8031 | 2.52 | 12.61 | 0 | 5.84 | 29.18 | 0 | | |
| 8 | 8032 | 4.33 | 7.62 | 0 | 4.91 | 24.54 | 0 | | |
| 8 | 8033 | 9.58 | 7.00 | 0 | 22.89 | 48.14 | 0 | | |
| 8 | 8034 | 7.18 | 3.59 | 0 | 6.53 | 9.48 | 0 | | |
| 8 | 8035 | 8.72 | 7.82 | 0 | 25.16 | 45.55 | 0 | | |
| 8 | 8036 | 0.51 | 2.55 | 0 | 3.50 | 17.48 | 0 | | |
| 8 | 8037 | 0.47 | 2.37 | 0 | 3.47 | 17.33 | 0 | | |
| 8 | 8038 | 0.46 | 2.29 | 0 | 3.36 | 16.81 | 0 | | |
| 8 | 8039 | 9.01 | 6.63 | 0 | 19.30 | 35.72 | 0 | | |
| 8 | 8040 | 7.00 | 6.23 | 0 | 17.38 | 33.61 | 0 | | |
| 8 | 8041 | 0.69 | 3.43 | 0 | 3.93 | 19.66 | 0 | | |
| 8 | 8042 | 1.19 | 5.94 | 0 | 4.62 | 23.08 | 0 | | |
| 8 | 8043 | 6.90 | 6.32 | 0 | 17.04 | 33.42 | 0 | | |
| 8 | 8044 | 9.15 | 6.36 | 0 | 19.78 | 36.79 | 0 | | |
| 8 | 8045 | 1.17 | 5.87 | 0 | 4.67 | 23.34 | 0 | | |
| 8 | 8046 | 0.66 | 3.28 | 0 | 4.05 | 20.23 | 0 | | |
| 8 | 8047 | 8.18 | 7.21 | 0 | 25.00 | 46.16 | 0 | | |
| 8 | 8048 | 8.13 | 3.34 | 0 | 5.79 | 9.40 | 0 | | |
| 8 | 8049 | 10.47 | 5.45 | 0 | 24.47 | 50.70 | 0 | | |
| 8 | 8050 | 0.40 | 2.01 | 0 | 3.44 | 17.22 | 0 | | |
| 8 | 8051 | 0.38 | 1.89 | 0 | 3.52 | 17.62 | 0 | | |
| 8 | 8052 | 0.36 | 1.80 | 0 | 3.56 | 17.79 | 0 | | |
| 8 | 8053 | 6.28 | 9.80 | 0 | 23.69 | 55.28 | 0 | | |
| 8 | 8054 | 2.40 | 4.82 | 0 | 3.68 | 12.85 | 0 | | |
| 8 | 8055 | 4.70 | 6.88 | 0 | 4.95 | 24.75 | 0 | | |
| 8 | 8056 | 2.29 | 11.46 | 0 | 5.87 | 29.36 | 0 | | |

REINFORCEMENT INDEX [kg netto]: 0.095 (Upper)
 0.271 (Lower)
 0.008 (Shear)

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ

Maximal values of the shear design

Only elements with shear reinforcement are printed.

At punching points punching reinforcement is printed.

| element | ass [cm ² /m ²] | tau [MPa] | acc.VED/VRDmax | acc.cot_theta | min_z [m] |
|---------|---|--------------|----------------|---------------|--------------|
| 4005 | 12.63 | 0.66 | 0.210 | 1.75 | 0.182 |
| 4009 | 11.03 | 0.57 | 0.183 | 1.75 | 0.145 |
| 4011 | 9.55 | 0.50 | 0.159 | 1.75 | 0.145 |
| 4015 | 10.00 | 0.52 | 0.166 | 1.75 | 0.181 |
| 4019 | 12.72 | 0.66 | 0.212 | 1.75 | 0.182 |
| 4023 | 11.68 | 0.61 | 0.194 | 1.75 | 0.181 |
| 4025 | 9.90 | 0.52 | 0.164 | 1.75 | 0.180 |
| 4034 | 12.39 | 0.64 | 0.206 | 1.75 | 0.182 |
| 4038 | 10.74 | 0.56 | 0.179 | 1.75 | 0.145 |
| 4044 | 9.74 | 0.51 | 0.162 | 1.75 | 0.181 |
| 4048 | 12.43 | 0.65 | 0.207 | 1.75 | 0.182 |
| 4052 | 11.41 | 0.59 | 0.190 | 1.75 | 0.145 |
| 4054 | 9.65 | 0.50 | 0.160 | 1.75 | 0.145 |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
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Selected Beam Elements

| FROM | TO | INC | X-VALUE | NC | MEMBER | CS0 | CS1 | CS2 | CS3 | CS4 | CS5 |
|-------|-------|-----|---------|----|--------|-----|-----|-----|-----|-----|-----|
| 10001 | | | | | | | | | | | |
| 10005 | | | | | | | | | | | |
| 10006 | | | | | | | | | | | |
| 10009 | | | | | | | | | | | |
| 10010 | | | | | | | | | | | |
| 10014 | | | | | | | | | | | |
| 10016 | | | | | | | | | | | |
| 10020 | | | | | | | | | | | |
| 10021 | | | | | | | | | | | |
| 10024 | | | | | | | | | | | |
| 10025 | | | | | | | | | | | |
| 10029 | | | | | | | | | | | |
| 12000 | 12150 | 1 | | | | | | | | | |

Default design code is DIN Fachbericht 102 Massivbröcken (2003) (Germany)
Klasse(Tab.4.118): D

Materials

No. 1 C 25/30 (DIN 1045-1)
No. 3 C 25/30 (DIN 1045-1)
No. 4 C 25/30 (DIN 1045-1)
No. 5 C 25/30 (DIN 1045-1)
No. 6 C 25/30 (DIN 1045-1)
No. 7 C 25/30 (DIN 1045-1)
No. 8 C 25/30 (DIN 1045-1)
No. 9 C 25/30 (DIN 1045-1)
No. 10 C 25/30 (DIN 1045-1)
No. 12 BSt 500 SA (DIN 1045-1)

Reinforcement will be accounted for sectional values as defined in AQUA
Reinforcements saved as design case LCR 509

Considered Load Cases

| | | | | | |
|------|------|------|------|------|------|
| 8101 | 8102 | 8103 | 8104 | 8105 | 8106 |
| 8107 | 8108 | 8201 | 8202 | 8203 | 8204 |
| 8205 | 8206 | 8207 | 8301 | 8302 | 8303 |
| 8304 | 8305 | 8306 | 8307 | 8308 | |

Ultimate Load Design

Design for ultimate loads DIN Fachbericht 102 Massivbröcken (2003)

Biaxial bending, uniaxial stress calculated in y-z axis

Safety factors SC-1 SC-2 SC-S SS-1 SS-2 PIIa

1.50 1.50 1.50 1.15 1.15 7

Strain limits C1 C2 S1 S2 Z1 Z2

max -3.50 -2.00 3.00 25.00 -3.50 25.00

parameters for reinforcements

Minimum reinforcements compression min. reinforcem. maximum-
Bending. Compress. e/d N/Npl requ. section reforc.
0.00 [cm²] 0.30 [o/o] 3.50 0.0010 0.00 0.15 9.00

Tensile forces in the longitudinal reinforcements due to shear are NOT accounted for.

Material of sections uses Ultimate Limit strain-stress law with global safety factors

Material of reinforcements uses Ultimate Limit strain-stress law with global safety factors

| MNO. | temp lev. | Material-safety | max.compr stress | at strain | max.tens stress | at strain | tension-stiffening |
|------|-----------|-----------------|------------------|-----------|-----------------|-----------|--------------------|
| | | [-] | [MPa] | [o/oo] | [MPa] | [o/oo] | [MPa] |
| 1 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 3 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 4 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 5 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 6 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 7 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 8 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 9 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 10 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 12 | 0 | 1.150 | -456.52 | -25.00 | 456.52 | 25.00 | |

Shear Design

Design for shear DIN 1045-1 (2003)

Minimum shear factor or tan of inclination of compressive struts 0.57 / 1.72

| MNO | f-cd | tau-rd | sigIIQ | sigIIT | sigIIQ+ | f _{yd} |
|-----|-------|--------|--------|--------|---------|-----------------|
| | [MPa] | [MPa] | [MPa] | [MPa] | [MPa] | [MPa] |
| 1 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 3 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 4 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 5 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 6 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN_ΣΕΙΣΜΙΚΑ_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Design

Design for shear DIN 1045-1 (2003)

Minimum shear factor or tan of inclination of compressive struts 0.57 / 1.72
MNO f-cd tau-rd sigIIQ sigIIT sigIIQ+ fyd
[MPa] [MPa] [MPa] [MPa] [MPa] [MPa]

| | | | | | |
|----|-------|------|-------|------|-------|
| 7 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 8 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 9 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 10 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 |
| 12 | | | | | |

434.78

Tolerance for exceeding maximum shear or principal compression stress 0.0200

Longitudinal Reinforcements LCR 509

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | mue | As-Sum | shift by | Lay-0&5 | Lay-1&6 | Lay-2&7 | Lay-3&8 | Lay-4&9 |
|-------|-------|-----|------|--------|----------|---------|---------|---------|---------|---------|
| | | | [--] | [cm2] | [m] | [cm2] | [cm2] | [cm2] | [cm2] | [cm2] |
| 10001 | 0.000 | 8 | 0.29 | 38.75 | | 19.10T | 9.82 | | 9.83 | |
| 10001 | 0.200 | 8 | 0.04 | 5.31 | | 5.31T | | | | |
| 10005 | 0.000 | 8 | 0.64 | 84.66 | | 53.50T | 7.93 | | 23.23 | |
| 10005 | 0.200 | 8 | 0.61 | 80.19 | | 53.49T | 5.36 | | 21.34 | |
| 10006 | 0.000 | 8 | 0.02 | 3.04 | | 2.15T | | | 0.89 | |
| 10006 | 0.400 | 8 | 0.03 | 4.45 | | 2.42T | | | 2.02 | |
| 10009 | 0.000 | 8 | 0.03 | 4.10 | | 2.09T | | | 2.01 | |
| 10009 | 0.400 | 8 | 0.02 | 2.63 | | 1.83T | | | 0.80 | |
| 10010 | 0.000 | 8 | 0.61 | 80.02 | | 53.22T | 5.46 | | 21.35 | |
| 10010 | 0.200 | 8 | 0.64 | 84.41 | | 53.22T | 7.98 | | 23.21 | |
| 10014 | 0.000 | 8 | 0.04 | 5.36 | | 5.36T | | | | |
| 10014 | 0.200 | 8 | 0.29 | 38.87 | | 19.20T | 9.83 | | 9.83 | |
| 10016 | 0.000 | 8 | 0.29 | 38.50 | | 18.82T | 9.84 | | 9.84 | |
| 10016 | 0.200 | 8 | 0.04 | 5.14 | | 5.14T | | | | |
| 10020 | 0.000 | 8 | 0.63 | 83.69 | | 52.31T | 7.92 | | 23.46 | |
| 10020 | 0.200 | 8 | 0.60 | 79.28 | | 52.30T | 5.34 | | 21.64 | |
| 10021 | 0.000 | 8 | 0.01 | 1.93 | | 1.93T | | | | |
| 10021 | 0.400 | 8 | 0.03 | 3.94 | | 2.35T | | | 1.59 | |
| 10024 | 0.000 | 8 | 0.03 | 4.17 | | 2.02T | | | 2.15 | |
| 10024 | 0.400 | 8 | 0.02 | 2.70 | | 1.80T | | | 0.90 | |
| 10025 | 0.000 | 8 | 0.60 | 78.78 | | 51.91T | 5.45 | | 21.42 | |
| 10025 | 0.200 | 8 | 0.63 | 83.16 | | 51.92T | 7.98 | | 23.26 | |
| 10029 | 0.000 | 8 | 0.04 | 5.37 | | 5.37T | | | | |
| 10029 | 0.200 | 8 | 0.30 | 39.69 | | 19.28T | 10.20 | | 10.21 | |
| 12001 | 0.000 | 9 | 2.18 | 109.57 | | | 109.57T | | | |
| 12001 | 1.000 | 9 | 1.39 | 69.99 | | | 69.99T | | | |
| 12002 | 0.000 | 9 | 1.39 | 70.03 | | | 70.03T | | | |
| 12002 | 1.000 | 9 | 0.66 | 33.11 | | | 33.11T | | | |
| 12003 | 0.000 | 9 | 0.66 | 33.21 | | | 33.21T | | | |
| 12003 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12004 | 0.000 | 9 | 2.19 | 110.07 | | | 110.07T | | | |
| 12004 | 1.000 | 9 | 1.38 | 69.47 | | | 69.47T | | | |
| 12005 | 0.000 | 9 | 1.38 | 69.51 | | | 69.51T | | | |
| 12005 | 1.000 | 9 | 0.63 | 31.61 | | | 31.61T | | | |
| 12006 | 0.000 | 9 | 0.63 | 31.73 | | | 31.73T | | | |
| 12006 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12007 | 0.000 | 9 | 2.19 | 110.10 | | | 110.10T | | | |
| 12007 | 1.000 | 9 | 1.40 | 70.17 | | | 70.17T | | | |
| 12008 | 0.000 | 9 | 1.40 | 70.21 | | | 70.21T | | | |
| 12008 | 1.000 | 9 | 0.66 | 32.94 | | | 32.94T | | | |
| 12009 | 0.000 | 9 | 0.66 | 33.04 | | | 33.04T | | | |
| 12009 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12010 | 0.000 | 9 | 2.09 | 105.05 | | | 105.05T | | | |
| 12010 | 1.000 | 9 | 1.33 | 66.94 | | | 66.94T | | | |
| 12011 | 0.000 | 9 | 1.33 | 66.97 | | | 66.97T | | | |
| 12011 | 1.000 | 9 | 0.63 | 31.62 | | | 31.62T | | | |
| 12012 | 0.000 | 9 | 0.63 | 31.70 | | | 31.70T | | | |
| 12012 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12013 | 0.000 | 9 | 2.10 | 105.40 | | | 105.40T | | | |
| 12013 | 1.000 | 9 | 1.32 | 66.31 | | | 66.31T | | | |
| 12014 | 0.000 | 9 | 1.32 | 66.35 | | | 66.35T | | | |
| 12014 | 1.000 | 9 | 0.60 | 30.05 | | | 30.05T | | | |
| 12015 | 0.000 | 9 | 0.60 | 30.16 | | | 30.16T | | | |
| 12015 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12016 | 0.000 | 9 | 2.10 | 105.57 | | | 105.57T | | | |
| 12016 | 1.000 | 9 | 1.34 | 67.12 | | | 67.12T | | | |
| 12017 | 0.000 | 9 | 1.34 | 67.15 | | | 67.15T | | | |
| 12017 | 1.000 | 9 | 0.63 | 31.45 | | | 31.45T | | | |
| 12018 | 0.000 | 9 | 0.63 | 31.54 | | | 31.54T | | | |
| 12018 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12019 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12019 | 1.000 | 9 | 0.38 | 19.09 | | | 19.09T | | | |
| 12020 | 0.000 | 9 | 0.38 | 19.09 | | | 19.09T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN_ΣΕΙΣΜΙΚΑ_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements LCR 509

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|-------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 12020 | 1.000 | 9 | 0.46 | 22.90 | | | 22.90T | | | |
| 12021 | 0.000 | 9 | 0.46 | 22.90 | | | 22.90T | | | |
| 12021 | 1.000 | 9 | 0.49 | 24.62 | | | 24.62T | | | |
| 12022 | 0.000 | 9 | 0.49 | 24.62 | | | 24.62T | | | |
| 12022 | 1.000 | 9 | 0.45 | 22.50 | | | 22.50T | | | |
| 12023 | 0.000 | 9 | 0.45 | 22.50 | | | 22.50T | | | |
| 12023 | 1.000 | 9 | 0.36 | 18.29 | | | 18.29T | | | |
| 12024 | 0.000 | 9 | 0.36 | 18.29 | | | 18.29T | | | |
| 12024 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12025 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12025 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12026 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12026 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12027 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12027 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12028 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12028 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12029 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12029 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12030 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12030 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12031 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12031 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12032 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12032 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12033 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12033 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12034 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12034 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12035 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12035 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12036 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12036 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12037 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12037 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12038 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12038 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12039 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12039 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12040 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12040 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12041 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12041 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12042 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12042 | 1.000 | 9 | 0.39 | 19.85 | | | 19.85T | | | |
| 12043 | 0.000 | 9 | 0.39 | 19.85 | | | 19.85T | | | |
| 12043 | 1.000 | 9 | 0.43 | 21.55 | | | 21.55T | | | |
| 12044 | 0.000 | 9 | 0.43 | 21.55 | | | 21.55T | | | |
| 12044 | 1.000 | 9 | 0.39 | 19.40 | | | 19.40T | | | |
| 12045 | 0.000 | 9 | 0.39 | 19.40 | | | 19.40T | | | |
| 12045 | 1.000 | 9 | 0.30 | 15.16 | | | 15.16T | | | |
| 12046 | 0.000 | 9 | 0.30 | 15.16 | | | 15.16T | | | |
| 12046 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12047 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12047 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12048 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12048 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12049 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12049 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12050 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12050 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12051 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12051 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12052 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12052 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12053 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12053 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12054 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12054 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12055 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12055 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12056 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12056 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12057 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12057 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12058 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN_ΣΕΙΣΜΙΚΑ_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements LCR 509

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|-------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 12058 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12059 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12059 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12060 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12060 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12061 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12061 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12062 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12062 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12063 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12063 | 1.000 | 9 | 0.36 | 17.97 | | | 17.97T | | | |
| 12064 | 0.000 | 9 | 0.36 | 17.97 | | | 17.97T | | | |
| 12064 | 1.000 | 9 | 0.44 | 22.16 | | | 22.16T | | | |
| 12065 | 0.000 | 9 | 0.44 | 22.16 | | | 22.16T | | | |
| 12065 | 1.000 | 9 | 0.48 | 23.91 | | | 23.91T | | | |
| 12066 | 0.000 | 9 | 0.48 | 23.91 | | | 23.91T | | | |
| 12066 | 1.000 | 9 | 0.43 | 21.82 | | | 21.82T | | | |
| 12067 | 0.000 | 9 | 0.43 | 21.82 | | | 21.82T | | | |
| 12067 | 1.000 | 9 | 0.35 | 17.61 | | | 17.61T | | | |
| 12068 | 0.000 | 9 | 0.35 | 17.61 | | | 17.61T | | | |
| 12068 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12069 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12069 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12070 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12070 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12071 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12071 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12072 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12072 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12073 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12073 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12074 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12074 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12075 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12075 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12076 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12076 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12077 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12077 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12078 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12078 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12079 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12079 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12080 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12080 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12081 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12081 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12082 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12082 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12083 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12083 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12084 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12084 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12085 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12085 | 1.000 | 9 | 0.36 | 17.97 | | | 17.97T | | | |
| 12086 | 0.000 | 9 | 0.36 | 17.97 | | | 17.97T | | | |
| 12086 | 1.000 | 9 | 0.48 | 24.26 | | | 24.26T | | | |
| 12087 | 0.000 | 9 | 0.48 | 24.26 | | | 24.26T | | | |
| 12087 | 1.000 | 9 | 0.52 | 26.18 | | | 26.18T | | | |
| 12088 | 0.000 | 9 | 0.52 | 26.18 | | | 26.18T | | | |
| 12088 | 1.000 | 9 | 0.48 | 24.01 | | | 24.01T | | | |
| 12089 | 0.000 | 9 | 0.48 | 24.01 | | | 24.01T | | | |
| 12089 | 1.000 | 9 | 0.39 | 19.60 | | | 19.60T | | | |
| 12090 | 0.000 | 9 | 0.39 | 19.60 | | | 19.60T | | | |
| 12090 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12091 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12091 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12092 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12092 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12093 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12093 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12094 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12094 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12095 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12095 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12096 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN_ΣΕΙΣΜΙΚΑ_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements LCR 509

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|-------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 12096 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12097 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12097 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12098 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12098 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12099 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12099 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12100 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12100 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12101 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12101 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12102 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12102 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12103 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12103 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12104 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12104 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12105 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12105 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12106 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12106 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12107 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12107 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12108 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12108 | 1.000 | 9 | 0.42 | 21.23 | | | 21.23T | | | |
| 12109 | 0.000 | 9 | 0.42 | 21.23 | | | 21.23T | | | |
| 12109 | 1.000 | 9 | 0.46 | 23.13 | | | 23.13T | | | |
| 12110 | 0.000 | 9 | 0.46 | 23.13 | | | 23.13T | | | |
| 12110 | 1.000 | 9 | 0.42 | 20.94 | | | 20.94T | | | |
| 12111 | 0.000 | 9 | 0.42 | 20.94 | | | 20.94T | | | |
| 12111 | 1.000 | 9 | 0.33 | 16.50 | | | 16.50T | | | |
| 12112 | 0.000 | 9 | 0.33 | 16.50 | | | 16.50T | | | |
| 12112 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12113 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12113 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12114 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12114 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12115 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12115 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12116 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12116 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12117 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12117 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12118 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12118 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12119 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12119 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12120 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12120 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12121 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12121 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12122 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12122 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12123 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12123 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12124 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12124 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12125 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12125 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12126 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12126 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12127 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12127 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12128 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12128 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12129 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12129 | 1.000 | 9 | 0.37 | 18.52 | | | 18.52T | | | |
| 12130 | 0.000 | 9 | 0.37 | 18.52 | | | 18.52T | | | |
| 12130 | 1.000 | 9 | 0.47 | 23.53 | | | 23.53T | | | |
| 12131 | 0.000 | 9 | 0.47 | 23.53 | | | 23.53T | | | |
| 12131 | 1.000 | 9 | 0.51 | 25.48 | | | 25.48T | | | |
| 12132 | 0.000 | 9 | 0.51 | 25.48 | | | 25.48T | | | |
| 12132 | 1.000 | 9 | 0.46 | 23.34 | | | 23.34T | | | |
| 12133 | 0.000 | 9 | 0.46 | 23.34 | | | 23.34T | | | |
| 12133 | 1.000 | 9 | 0.38 | 18.93 | | | 18.93T | | | |
| 12134 | 0.000 | 9 | 0.38 | 18.93 | | | 18.93T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN_ΣΕΙΣΜΙΚΑ_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements LCR 509

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μ _{ue} [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|-------|-------|-----|------------------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 12134 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12135 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12135 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12136 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12136 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12137 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12137 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12138 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12138 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12139 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12139 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12140 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12140 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12141 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12141 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12142 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12142 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12143 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12143 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12144 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12144 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12145 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12145 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12146 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12146 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12147 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12147 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12148 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12148 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12149 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12149 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12150 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12150 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |

Shear Reinforcements per Cutted Part of Section LCR 509

| Beam | x[m] | Nos | Asl-Mt [cm ² /m] | SLay-0&5 [cm ² /m] | SLay-1&6 [cm ² /m] | SLay-2&7 [cm ² /m] | SLay-3&8 [cm ² /m] | SLay-4&9 [cm ² /m] |
|-------|-------|-----|--------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| 10001 | 0.000 | 8 | 2.25 | 9.82 | | | | |
| 10001 | 0.200 | 8 | 2.25 | 9.92 | | | | |
| 10005 | 0.000 | 8 | 10.15 | 11.49 | | | | |
| 10005 | 0.200 | 8 | 10.15 | 11.59 | | | | |
| 10006 | 0.000 | 8 | 0.85 | 5.90 | | | | |
| 10006 | 0.400 | 8 | 0.85 | 6.10 | | | | |
| 10009 | 0.000 | 8 | 0.73 | 6.09 | | | | |
| 10009 | 0.400 | 8 | 0.73 | 5.89 | | | | |
| 10010 | 0.000 | 8 | 10.07 | 11.65 | | | | |
| 10010 | 0.200 | 8 | 10.07 | 11.57 | | | | |
| 10014 | 0.000 | 8 | 2.27 | 10.01 | | | | |
| 10014 | 0.200 | 8 | 2.27 | 9.92 | | | | |
| 10016 | 0.000 | 8 | 2.18 | 9.82 | | | | |
| 10016 | 0.200 | 8 | 2.18 | 9.92 | | | | |
| 10020 | 0.000 | 8 | 9.83 | 11.57 | | | | |
| 10020 | 0.200 | 8 | 9.83 | 11.65 | | | | |
| 10021 | 0.000 | 8 | 0.83 | 2.86 | | | | |
| 10021 | 0.400 | 8 | 0.83 | 6.12 | | | | |
| 10024 | 0.000 | 8 | 0.71 | 6.11 | | | | |
| 10024 | 0.400 | 8 | 0.71 | 5.91 | | | | |
| 10025 | 0.000 | 8 | 9.75 | 11.48 | | | | |
| 10025 | 0.200 | 8 | 9.75 | 11.41 | | | | |
| 10029 | 0.000 | 8 | 2.20 | 10.09 | | | | |
| 10029 | 0.200 | 8 | 2.20 | 10.00 | | | | |
| 12001 | 0.000 | 9 | 0.00 | 10.18 | | | | |
| 12001 | 1.000 | 9 | 0.00 | 10.53 | | | | |
| 12002 | 0.000 | 9 | 0.00 | 10.52 | | | | |
| 12002 | 1.000 | 9 | 0.00 | 10.64 | | | | |
| 12003 | 0.000 | 9 | 0.00 | 10.64 | | | | |
| 12003 | 1.000 | 9 | 0.00 | 10.04 | | | | |
| 12004 | 0.000 | 9 | 0.00 | 10.27 | | | | |
| 12004 | 1.000 | 9 | 0.00 | 10.61 | | | | |
| 12005 | 0.000 | 9 | 0.00 | 10.61 | | | | |
| 12005 | 1.000 | 9 | 0.00 | 10.72 | | | | |
| 12006 | 0.000 | 9 | 0.00 | 10.72 | | | | |
| 12006 | 1.000 | 9 | 0.00 | 9.21 | | | | |
| 12007 | 0.000 | 9 | 0.00 | 10.23 | | | | |
| 12007 | 1.000 | 9 | 0.00 | 10.57 | | | | |
| 12008 | 0.000 | 9 | 0.00 | 10.57 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN_ΣΕΙΣΜΙΚΑ_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Reinforcements per Cutted Part of Section LCR 509

| Beam | x[m] | Nos | Asl-Mt [cm2/m] | SLay-0&5 [cm2/m] | SLay-1&6 [cm2/m] | SLay-2&7 [cm2/m] | SLay-3&8 [cm2/m] | SLay-4&9 [cm2/m] |
|-------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 12008 | 1.000 | 9 | 0.00 | 10.69 | | | | |
| 12009 | 0.000 | 9 | 0.00 | 10.69 | | | | |
| 12009 | 1.000 | 9 | 0.00 | 9.72 | | | | |
| 12010 | 0.000 | 9 | 0.00 | 9.91 | | | | |
| 12010 | 1.000 | 9 | 0.00 | 10.19 | | | | |
| 12011 | 0.000 | 9 | 0.00 | 10.19 | | | | |
| 12011 | 1.000 | 9 | 0.00 | 10.26 | | | | |
| 12012 | 0.000 | 9 | 0.00 | 10.26 | | | | |
| 12012 | 1.000 | 9 | 0.00 | 10.63 | | | | |
| 12013 | 0.000 | 9 | 0.00 | 9.99 | | | | |
| 12013 | 1.000 | 9 | 0.00 | 10.27 | | | | |
| 12014 | 0.000 | 9 | 0.00 | 10.27 | | | | |
| 12014 | 1.000 | 9 | 0.00 | 10.33 | | | | |
| 12015 | 0.000 | 9 | 0.00 | 10.33 | | | | |
| 12015 | 1.000 | 9 | 0.00 | 8.81 | | | | |
| 12016 | 0.000 | 9 | 0.00 | 9.96 | | | | |
| 12016 | 1.000 | 9 | 0.00 | 10.24 | | | | |
| 12017 | 0.000 | 9 | 0.00 | 10.24 | | | | |
| 12017 | 1.000 | 9 | 0.00 | 10.31 | | | | |
| 12018 | 0.000 | 9 | 0.00 | 10.30 | | | | |
| 12018 | 1.000 | 9 | 0.00 | 9.32 | | | | |
| 12019 | 0.000 | 9 | 0.00 | 10.04 | | | | |
| 12019 | 1.000 | 9 | 0.00 | 5.49 | | | | |
| 12020 | 0.000 | 9 | 0.00 | 5.49 | | | | |
| 12020 | 1.000 | 9 | 0.00 | 5.28 | | | | |
| 12021 | 0.000 | 9 | 0.00 | 5.28 | | | | |
| 12021 | 1.000 | 9 | 0.00 | 5.27 | | | | |
| 12022 | 0.000 | 9 | 0.00 | 5.27 | | | | |
| 12022 | 1.000 | 9 | 0.00 | 5.31 | | | | |
| 12023 | 0.000 | 9 | 0.00 | 5.31 | | | | |
| 12023 | 1.000 | 9 | 0.00 | 5.37 | | | | |
| 12024 | 0.000 | 9 | 0.00 | 5.37 | | | | |
| 12024 | 1.000 | 9 | 0.00 | 5.49 | | | | |
| 12025 | 0.000 | 9 | 0.00 | 5.49 | | | | |
| 12025 | 1.000 | 9 | 0.00 | 5.61 | | | | |
| 12026 | 0.000 | 9 | 0.00 | 5.61 | | | | |
| 12026 | 1.000 | 9 | 0.00 | 5.69 | | | | |
| 12027 | 0.000 | 9 | 0.00 | 5.69 | | | | |
| 12027 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12028 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12028 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12029 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12029 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12030 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12030 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12031 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12031 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12032 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12032 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12033 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12033 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12034 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12034 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12035 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12035 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12036 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12036 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12037 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12037 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12038 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12038 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12039 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12039 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12040 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12040 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12041 | 0.000 | 9 | 0.00 | 9.23 | | | | |
| 12041 | 1.000 | 9 | 0.00 | 5.22 | | | | |
| 12042 | 0.000 | 9 | 0.00 | 5.22 | | | | |
| 12042 | 1.000 | 9 | 0.00 | 5.16 | | | | |
| 12043 | 0.000 | 9 | 0.00 | 5.16 | | | | |
| 12043 | 1.000 | 9 | 0.00 | 5.14 | | | | |
| 12044 | 0.000 | 9 | 0.00 | 5.14 | | | | |
| 12044 | 1.000 | 9 | 0.00 | 5.16 | | | | |
| 12045 | 0.000 | 9 | 0.00 | 5.16 | | | | |
| 12045 | 1.000 | 9 | 0.00 | 5.21 | | | | |
| 12046 | 0.000 | 9 | 0.00 | 5.21 | | | | |
| 12046 | 1.000 | 9 | 0.00 | 5.17 | | | | |
| 12047 | 0.000 | 9 | 0.00 | 5.17 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN_ΣΕΙΣΜΙΚΑ_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Reinforcements per Cutted Part of Section LCR 509

| Beam | x[m] | Nos | Asl-Mt [cm2/m] | SLay-0&5 [cm2/m] | SLay-1&6 [cm2/m] | SLay-2&7 [cm2/m] | SLay-3&8 [cm2/m] | SLay-4&9 [cm2/m] |
|-------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 12047 | 1.000 | 9 | 0.00 | 5.11 | | | | |
| 12048 | 0.000 | 9 | 0.00 | 5.11 | | | | |
| 12048 | 1.000 | 9 | 0.00 | 4.97 | | | | |
| 12049 | 0.000 | 9 | 0.00 | 4.97 | | | | |
| 12049 | 1.000 | 9 | 0.00 | 4.74 | | | | |
| 12050 | 0.000 | 9 | 0.00 | 4.74 | | | | |
| 12050 | 1.000 | 9 | 0.00 | 4.62 | | | | |
| 12051 | 0.000 | 9 | 0.00 | 4.62 | | | | |
| 12051 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12052 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12052 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12053 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12053 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12054 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12054 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12055 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12055 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12056 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12056 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12057 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12057 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12058 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12058 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12059 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12059 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12060 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12060 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12061 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12061 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12062 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12062 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12063 | 0.000 | 9 | 0.00 | 9.74 | | | | |
| 12063 | 1.000 | 9 | 0.00 | 5.41 | | | | |
| 12064 | 0.000 | 9 | 0.00 | 5.41 | | | | |
| 12064 | 1.000 | 9 | 0.00 | 5.29 | | | | |
| 12065 | 0.000 | 9 | 0.00 | 5.29 | | | | |
| 12065 | 1.000 | 9 | 0.00 | 5.28 | | | | |
| 12066 | 0.000 | 9 | 0.00 | 5.28 | | | | |
| 12066 | 1.000 | 9 | 0.00 | 5.31 | | | | |
| 12067 | 0.000 | 9 | 0.00 | 5.31 | | | | |
| 12067 | 1.000 | 9 | 0.00 | 5.37 | | | | |
| 12068 | 0.000 | 9 | 0.00 | 5.37 | | | | |
| 12068 | 1.000 | 9 | 0.00 | 5.49 | | | | |
| 12069 | 0.000 | 9 | 0.00 | 5.49 | | | | |
| 12069 | 1.000 | 9 | 0.00 | 5.61 | | | | |
| 12070 | 0.000 | 9 | 0.00 | 5.61 | | | | |
| 12070 | 1.000 | 9 | 0.00 | 5.69 | | | | |
| 12071 | 0.000 | 9 | 0.00 | 5.69 | | | | |
| 12071 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12072 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12072 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12073 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12073 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12074 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12074 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12075 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12075 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12076 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12076 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12077 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12077 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12078 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12078 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12079 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12079 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12080 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12080 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12081 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12081 | 1.000 | 9 | 0.00 | 4.64 | | | | |
| 12082 | 0.000 | 9 | 0.00 | 4.64 | | | | |
| 12082 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12083 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12083 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12084 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12084 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12085 | 0.000 | 9 | 0.00 | 10.63 | | | | |
| 12085 | 1.000 | 9 | 0.00 | 5.55 | | | | |
| 12086 | 0.000 | 9 | 0.00 | 5.55 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN_ΣΕΙΣΜΙΚΑ_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Reinforcements per Cutted Part of Section LCR 509

| Beam | x[m] | NOS | Asl-Mt [cm2/m] | SLay-0&5 [cm2/m] | SLay-1&6 [cm2/m] | SLay-2&7 [cm2/m] | SLay-3&8 [cm2/m] | SLay-4&9 [cm2/m] |
|-------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 12086 | 1.000 | 9 | 0.00 | 5.29 | | | | |
| 12087 | 0.000 | 9 | 0.00 | 5.29 | | | | |
| 12087 | 1.000 | 9 | 0.00 | 5.28 | | | | |
| 12088 | 0.000 | 9 | 0.00 | 5.28 | | | | |
| 12088 | 1.000 | 9 | 0.00 | 5.29 | | | | |
| 12089 | 0.000 | 9 | 0.00 | 5.29 | | | | |
| 12089 | 1.000 | 9 | 0.00 | 5.35 | | | | |
| 12090 | 0.000 | 9 | 0.00 | 5.35 | | | | |
| 12090 | 1.000 | 9 | 0.00 | 5.46 | | | | |
| 12091 | 0.000 | 9 | 0.00 | 5.46 | | | | |
| 12091 | 1.000 | 9 | 0.00 | 5.60 | | | | |
| 12092 | 0.000 | 9 | 0.00 | 5.60 | | | | |
| 12092 | 1.000 | 9 | 0.00 | 5.68 | | | | |
| 12093 | 0.000 | 9 | 0.00 | 5.68 | | | | |
| 12093 | 1.000 | 9 | 0.00 | 5.73 | | | | |
| 12094 | 0.000 | 9 | 0.00 | 5.73 | | | | |
| 12094 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12095 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12095 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12096 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12096 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12097 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12097 | 1.000 | 9 | 0.00 | 5.09 | | | | |
| 12098 | 0.000 | 9 | 0.00 | 5.09 | | | | |
| 12098 | 1.000 | 9 | 0.00 | 4.94 | | | | |
| 12099 | 0.000 | 9 | 0.00 | 4.94 | | | | |
| 12099 | 1.000 | 9 | 0.00 | 4.76 | | | | |
| 12100 | 0.000 | 9 | 0.00 | 4.76 | | | | |
| 12100 | 1.000 | 9 | 0.00 | 4.66 | | | | |
| 12101 | 0.000 | 9 | 0.00 | 4.66 | | | | |
| 12101 | 1.000 | 9 | 0.00 | 4.61 | | | | |
| 12102 | 0.000 | 9 | 0.00 | 4.61 | | | | |
| 12102 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12103 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12103 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12104 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12104 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12105 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12105 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12106 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12106 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12107 | 0.000 | 9 | 0.00 | 8.83 | | | | |
| 12107 | 1.000 | 9 | 0.00 | 5.22 | | | | |
| 12108 | 0.000 | 9 | 0.00 | 5.22 | | | | |
| 12108 | 1.000 | 9 | 0.00 | 5.16 | | | | |
| 12109 | 0.000 | 9 | 0.00 | 5.16 | | | | |
| 12109 | 1.000 | 9 | 0.00 | 5.15 | | | | |
| 12110 | 0.000 | 9 | 0.00 | 5.15 | | | | |
| 12110 | 1.000 | 9 | 0.00 | 5.15 | | | | |
| 12111 | 0.000 | 9 | 0.00 | 5.15 | | | | |
| 12111 | 1.000 | 9 | 0.00 | 5.19 | | | | |
| 12112 | 0.000 | 9 | 0.00 | 5.19 | | | | |
| 12112 | 1.000 | 9 | 0.00 | 5.18 | | | | |
| 12113 | 0.000 | 9 | 0.00 | 5.18 | | | | |
| 12113 | 1.000 | 9 | 0.00 | 5.13 | | | | |
| 12114 | 0.000 | 9 | 0.00 | 5.13 | | | | |
| 12114 | 1.000 | 9 | 0.00 | 5.01 | | | | |
| 12115 | 0.000 | 9 | 0.00 | 5.01 | | | | |
| 12115 | 1.000 | 9 | 0.00 | 4.78 | | | | |
| 12116 | 0.000 | 9 | 0.00 | 4.78 | | | | |
| 12116 | 1.000 | 9 | 0.00 | 4.63 | | | | |
| 12117 | 0.000 | 9 | 0.00 | 4.63 | | | | |
| 12117 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12118 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12118 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12119 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12119 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12120 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12120 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12121 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12121 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12122 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12122 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12123 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12123 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12124 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12124 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12125 | 0.000 | 9 | 0.00 | 4.58 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN_ΣΕΙΣΜΙΚΑ_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Reinforcements per Cutted Part of Section LCR 509

| Beam | x[m] | NoS | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|-------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 12125 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12126 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12126 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12127 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12127 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12128 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12128 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12129 | 0.000 | 9 | 0.00 | 9.33 | | | | |
| 12129 | 1.000 | 9 | 0.00 | 5.39 | | | | |
| 12130 | 0.000 | 9 | 0.00 | 5.39 | | | | |
| 12130 | 1.000 | 9 | 0.00 | 5.30 | | | | |
| 12131 | 0.000 | 9 | 0.00 | 5.30 | | | | |
| 12131 | 1.000 | 9 | 0.00 | 5.28 | | | | |
| 12132 | 0.000 | 9 | 0.00 | 5.28 | | | | |
| 12132 | 1.000 | 9 | 0.00 | 5.30 | | | | |
| 12133 | 0.000 | 9 | 0.00 | 5.30 | | | | |
| 12133 | 1.000 | 9 | 0.00 | 5.36 | | | | |
| 12134 | 0.000 | 9 | 0.00 | 5.36 | | | | |
| 12134 | 1.000 | 9 | 0.00 | 5.48 | | | | |
| 12135 | 0.000 | 9 | 0.00 | 5.48 | | | | |
| 12135 | 1.000 | 9 | 0.00 | 5.60 | | | | |
| 12136 | 0.000 | 9 | 0.00 | 5.60 | | | | |
| 12136 | 1.000 | 9 | 0.00 | 5.68 | | | | |
| 12137 | 0.000 | 9 | 0.00 | 5.68 | | | | |
| 12137 | 1.000 | 9 | 0.00 | 5.73 | | | | |
| 12138 | 0.000 | 9 | 0.00 | 5.73 | | | | |
| 12138 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12139 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12139 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12140 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12140 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12141 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12141 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12142 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12142 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12143 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12143 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12144 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12144 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12145 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12145 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12146 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12146 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12147 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12147 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12148 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12148 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12149 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12149 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12150 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12150 | 1.000 | 9 | 0.00 | 4.58 | | | | |

Maximum Degree of Utilization

| | | N sig-c | Vy sig-t | Vz tau | Mt sig-* | My tend. | Mz As-l | Mb As-v | Mt2 crack | Total sigdyn | lamda tau-* |
|--------------|---|------------|-------------|-----------|-------------|-------------|------------|------------|--------------|-----------------|----------------|
| Cross sect. | 8 | 0.000 | 0.000 | 0.120 | 0.429 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 |
| DOKOS-4 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Cross sect. | 9 | 0.000 | 0.000 | 0.291 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.002 | 0.000 |
| section pile | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Total system | | 0.000 | 0.000 | 0.291 | 0.429 | 0.000 | 0.000 | 0.000 | 0.000 | 1.002 | 0.000 |
| | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN_ΣΕΙΣΜΙΚΑ_ΔΟΚΟΙ

Selected Beam Elements

| FROM | TO | INC | X-VALUE | NC | MEMBER | CS0 | CS1 | CS2 | CS3 | CS4 | CS5 |
|------|------|-----|---------|----|---------|-----|-----|-----|-----|-----|-----|
| 1000 | 1060 | 1 | | 1 | bending | 10 | 40 | | | | |
| 2000 | 2020 | 1 | | | | | | | | | |

Default design code is DIN Fachbericht 102 Massivbröcken (2003) (Germany)
Klasse(Tab.4.118): D

Materials

No. 1 C 25/30 (DIN 1045-1)
No. 3 C 25/30 (DIN 1045-1)
No. 4 C 25/30 (DIN 1045-1)
No. 5 C 25/30 (DIN 1045-1)
No. 6 C 25/30 (DIN 1045-1)
No. 7 C 25/30 (DIN 1045-1)
No. 8 C 25/30 (DIN 1045-1)
No. 9 C 25/30 (DIN 1045-1)
No. 10 C 25/30 (DIN 1045-1)
No. 12 BSt 500 SA (DIN 1045-1)

Reinforcement will be accounted for sectional values as defined in AQUA
Reinforcements saved as design case LCR 510

Considered Load Cases

| | | | | | |
|------|------|------|------|------|------|
| 8101 | 8102 | 8103 | 8104 | 8105 | 8106 |
| 8107 | 8108 | 8201 | 8202 | 8203 | 8204 |
| 8205 | 8206 | 8207 | 8301 | 8302 | 8303 |
| 8304 | 8305 | 8306 | 8307 | 8308 | |

Ultimate Load Design

Design for ultimate loads DIN Fachbericht 102 Massivbröcken (2003)
Uniaxial bending due to symmetry

| | | | | | | |
|----------------|-------|-------|------|-------|-------|-------|
| Safety factors | SC-1 | SC-2 | SC-S | SS-1 | SS-2 | PIIa |
| | 1.50 | 1.50 | 1.50 | 1.15 | 1.15 | 7 |
| Strain limits | C1 | C2 | S1 | S2 | Z1 | Z2 |
| max | -3.50 | -2.00 | 3.00 | 25.00 | -3.50 | 25.00 |

parameters for reinforcements

| | | | |
|-------------------------|-------------|------------------|----------------|
| Minimum reinforcements | compression | min. reinforcem. | maximum- |
| Bending. | Compress. | e/d N/Npl | requ. section |
| 0.00 [cm ²] | 0.30 [o/o] | 3.50 0.0010 | 0.00 0.15 9.00 |

Tensile forces in the longitudinal reinforcements due to shear are NOT accounted for.

Material of sections uses Ultimate Limit strain-stress law with global safety factors

Material of reinforcements uses Ultimate Limit strain-stress law with global safety factors

| MNO. | temp lev. | Material-safety | max.compr stress | at strain | max.tens stress | at strain | tension-stiffening |
|------|-----------|-----------------|------------------|-----------|-----------------|-----------|--------------------|
| | | [-] | [MPa] | [o/oo] | [MPa] | [o/oo] | [MPa] |
| 1 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 3 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 4 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 5 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 6 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 7 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 8 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 9 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 10 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 12 | 0 | 1.150 | -456.52 | -25.00 | 456.52 | 25.00 | |

Shear Design

Design for shear DIN 1045-1 (2003)

Minimum shear factor or tan of inclination of compressive struts 0.57 / 1.72

| MNO | f-cd | tau-rd | sigIIQ | sigIIT | sigIIQ+ | f _{yd} |
|-----|-------|--------|--------|--------|---------|-----------------|
| | [MPa] | [MPa] | [MPa] | [MPa] | [MPa] | [MPa] |
| 1 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 3 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 4 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 5 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 6 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 7 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 8 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 9 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 10 | 14.17 | 0.10 | 10.62 | 7.44 | 10.62 | |
| 12 | | | | | | 434.78 |

Tolerance for exceeding maximum shear or principal compression stress 0.0200

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN_ΣΕΙΣΜΙΚΑ_ΔΟΚΟΙ

Longitudinal Reinforcements LCR 510

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|------|-------|-----|------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 1001 | 0.000 | 1 | 0.50 | 24.88 | | 2.37T | 3.14 | | 19.37 | |
| 1001 | 0.883 | 1 | 0.42 | 21.14 | | 2.37T | 3.48 | | 15.29 | |
| 1002 | 0.000 | 1 | 0.43 | 21.19 | | 2.37T | 3.45 | | 15.36 | |
| 1002 | 0.883 | 1 | 0.36 | 17.76 | | 2.37T | 3.59 | | 11.79 | |
| 1003 | 0.000 | 1 | 0.36 | 17.82 | | 2.37T | 3.58 | | 11.87 | |
| 1003 | 0.883 | 1 | 0.29 | 14.24 | | 2.37T | 3.25 | | 8.62 | |
| 1004 | 0.000 | 1 | 0.29 | 14.30 | | 2.37T | 3.23 | | 8.70 | |
| 1004 | 0.883 | 1 | 0.22 | 10.77 | | 2.37T | 2.42 | 0.12 | 5.79 | 0.04 |
| | | | | | | 0.03 | | | | |
| 1005 | 0.000 | 1 | 0.22 | 10.82 | | 2.37T | 2.40 | 0.12 | 5.86 | 0.04 |
| | | | | | | 0.03 | | | | |
| 1005 | 0.883 | 1 | 0.15 | 7.68 | | 2.37T | 1.11 | 0.05 | 3.98 | 0.09 |
| | | | | | | 0.09 | | | | |
| 1006 | 0.000 | 1 | 0.15 | 7.68 | | 2.37T | 1.09 | 0.04 | 4.00 | 0.09 |
| | | | | | | 0.09 | | | | |
| 1006 | 0.883 | 1 | 0.13 | 6.44 | | 2.37T | 0.80 | | 3.27 | |
| 1007 | 0.000 | 1 | 0.13 | 6.44 | | 2.37T | 0.80 | | 3.27 | |
| 1007 | 0.883 | 1 | 0.15 | 7.44 | | 2.37T | 1.17 | | 3.90 | |
| 1008 | 0.000 | 1 | 0.15 | 7.62 | | 2.37T | 1.18 | | 3.88 | 0.05 |
| | | | | | | 0.14 | | | | |
| 1008 | 0.883 | 1 | 0.21 | 10.21 | | 2.37T | 2.19 | 0.03 | 5.38 | 0.11 |
| | | | | | | 0.12 | | | | |
| 1009 | 0.000 | 1 | 0.20 | 10.16 | | 2.37T | 2.21 | 0.04 | 5.31 | 0.11 |
| | | | | | | 0.12 | | | | |
| 1009 | 0.883 | 1 | 0.28 | 13.73 | | 2.37T | 3.16 | | 8.20 | |
| 1010 | 0.000 | 1 | 0.27 | 13.68 | | 2.37T | 3.18 | | 8.13 | |
| 1010 | 0.883 | 1 | 0.35 | 17.44 | | 2.37T | 3.68 | | 11.38 | |
| 1011 | 0.000 | 1 | 0.35 | 17.38 | | 2.37T | 3.70 | | 11.31 | |
| 1011 | 0.883 | 1 | 0.42 | 21.03 | | 2.37T | 3.74 | | 14.91 | |
| 1012 | 0.000 | 1 | 0.42 | 20.99 | | 2.37T | 3.77 | | 14.84 | |
| 1012 | 0.883 | 1 | 0.50 | 24.78 | | 2.37T | 3.72 | | 18.69 | |
| 1013 | 0.000 | 1 | 0.49 | 24.60 | | 2.37T | 2.72 | | 19.51 | |
| 1013 | 0.883 | 1 | 0.41 | 20.46 | | 2.37T | 3.08 | | 15.00 | |
| 1014 | 0.000 | 1 | 0.41 | 20.51 | | 2.37T | 3.06 | | 15.07 | |
| 1014 | 0.883 | 1 | 0.34 | 16.88 | | 2.37T | 3.20 | | 11.31 | |
| 1015 | 0.000 | 1 | 0.34 | 16.94 | | 2.37T | 3.18 | | 11.38 | |
| 1015 | 0.883 | 1 | 0.27 | 13.27 | | 2.37T | 2.85 | | 8.05 | |
| 1016 | 0.000 | 1 | 0.27 | 13.33 | | 2.37T | 2.83 | | 8.12 | |
| 1016 | 0.883 | 1 | 0.19 | 9.59 | | 2.37T | 2.02 | | 5.19 | |
| 1017 | 0.000 | 1 | 0.19 | 9.65 | | 2.37T | 2.01 | | 5.26 | |
| 1017 | 0.883 | 1 | 0.13 | 6.49 | | 2.37T | 0.72 | | 3.39 | |
| 1018 | 0.000 | 1 | 0.13 | 6.50 | | 2.37T | 0.71 | | 3.42 | |
| 1018 | 0.883 | 1 | 0.11 | 5.46 | | 2.37T | 0.40 | | 2.69 | |
| 1019 | 0.000 | 1 | 0.11 | 5.46 | | 2.37T | 0.40 | | 2.69 | |
| 1019 | 0.883 | 1 | 0.13 | 6.46 | | 2.37T | 0.77 | | 3.31 | |
| 1020 | 0.000 | 1 | 0.13 | 6.44 | | 2.37T | 0.78 | | 3.29 | |
| 1020 | 0.883 | 1 | 0.18 | 8.96 | | 2.37T | 1.80 | | 4.78 | |
| 1021 | 0.000 | 1 | 0.18 | 8.90 | | 2.37T | 1.82 | | 4.71 | |
| 1021 | 0.883 | 1 | 0.26 | 12.77 | | 2.37T | 2.77 | | 7.63 | |
| 1022 | 0.000 | 1 | 0.26 | 12.72 | | 2.37T | 2.78 | | 7.56 | |
| 1022 | 0.883 | 1 | 0.33 | 16.57 | | 2.37T | 3.29 | | 10.91 | |
| 1023 | 0.000 | 1 | 0.33 | 16.51 | | 2.37T | 3.31 | | 10.83 | |
| 1023 | 0.883 | 1 | 0.41 | 20.38 | | 2.37T | 3.36 | | 14.64 | |
| 1024 | 0.000 | 1 | 0.41 | 20.33 | | 2.37T | 3.39 | | 14.57 | |
| 1024 | 0.883 | 1 | 0.49 | 24.49 | | 2.37T | 3.30 | | 18.81 | |
| 1025 | 0.000 | 1 | 0.50 | 24.76 | | 2.37T | 2.43 | | 19.96 | |
| 1025 | 0.883 | 1 | 0.41 | 20.25 | | 2.37T | 2.76 | | 15.12 | |
| 1026 | 0.000 | 1 | 0.41 | 20.29 | | 2.37T | 2.73 | | 15.18 | |
| 1026 | 0.883 | 1 | 0.33 | 16.46 | | 2.37T | 2.92 | | 11.17 | |
| 1027 | 0.000 | 1 | 0.33 | 16.52 | | 2.37T | 2.90 | | 11.25 | |
| 1027 | 0.883 | 1 | 0.26 | 12.76 | | 2.37T | 2.62 | | 7.77 | |
| 1028 | 0.000 | 1 | 0.26 | 12.81 | | 2.37T | 2.60 | | 7.84 | |
| 1028 | 0.883 | 1 | 0.18 | 9.04 | | 2.37T | 1.83 | | 4.84 | |
| 1029 | 0.000 | 1 | 0.18 | 9.10 | | 2.37T | 1.82 | | 4.91 | |
| 1029 | 0.883 | 1 | 0.12 | 5.98 | | 2.37T | 0.56 | | 3.05 | |
| 1030 | 0.000 | 1 | 0.12 | 6.00 | | 2.37T | 0.55 | | 3.07 | |
| 1030 | 0.883 | 1 | 0.10 | 4.98 | | 2.37T | 0.27 | | 2.34 | |
| 1031 | 0.000 | 1 | 0.10 | 4.98 | | 2.37T | 0.27 | | 2.34 | |
| 1031 | 0.883 | 1 | 0.12 | 5.97 | | 2.37T | 0.63 | | 2.97 | |
| 1032 | 0.000 | 1 | 0.12 | 5.96 | | 2.37T | 0.63 | | 2.95 | |
| 1032 | 0.883 | 1 | 0.17 | 8.42 | | 2.37T | 1.61 | | 4.43 | |
| 1033 | 0.000 | 1 | 0.17 | 8.36 | | 2.37T | 1.63 | | 4.36 | |
| 1033 | 0.883 | 1 | 0.25 | 12.26 | | 2.37T | 2.54 | | 7.35 | |
| 1034 | 0.000 | 1 | 0.25 | 12.21 | | 2.37T | 2.55 | | 7.28 | |
| 1034 | 0.883 | 1 | 0.32 | 16.16 | | 2.37T | 3.01 | | 10.78 | |
| 1035 | 0.000 | 1 | 0.32 | 16.10 | | 2.37T | 3.03 | | 10.70 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN_ΣΕΙΣΜΙΚΑ_ΔΟΚΟΙ

Longitudinal Reinforcements LCR 510

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 1035 | 0.883 | 1 | 0.41 | 20.17 | | 2.37T | 3.04 | | 14.76 | |
| 1036 | 0.000 | 1 | 0.40 | 20.13 | | 2.37T | 3.07 | | 14.69 | |
| 1036 | 0.883 | 1 | 0.49 | 24.62 | | 2.37T | 3.03 | | 19.22 | |
| 1037 | 0.000 | 1 | 0.50 | 24.78 | | 2.37T | 2.55 | | 19.86 | |
| 1037 | 0.883 | 1 | 0.41 | 20.50 | | 2.37T | 2.98 | | 15.15 | |
| 1038 | 0.000 | 1 | 0.41 | 20.56 | | 2.37T | 2.95 | | 15.23 | |
| 1038 | 0.883 | 1 | 0.34 | 16.94 | | 2.37T | 3.21 | | 11.35 | |
| 1039 | 0.000 | 1 | 0.34 | 17.00 | | 2.37T | 3.19 | | 11.44 | |
| 1039 | 0.883 | 1 | 0.27 | 13.34 | | 2.37T | 2.94 | | 8.03 | |
| 1040 | 0.000 | 1 | 0.27 | 13.40 | | 2.37T | 2.92 | | 8.11 | |
| 1040 | 0.883 | 1 | 0.19 | 9.67 | | 2.37T | 2.15 | | 5.14 | |
| 1041 | 0.000 | 1 | 0.20 | 9.73 | | 2.37T | 2.14 | | 5.21 | |
| 1041 | 0.883 | 1 | 0.13 | 6.67 | | 2.37T | 0.88 | | 3.41 | |
| 1042 | 0.000 | 1 | 0.13 | 6.69 | | 2.37T | 0.88 | | 3.44 | |
| 1042 | 0.883 | 1 | 0.11 | 5.70 | | 2.37T | 0.62 | | 2.71 | |
| 1043 | 0.000 | 1 | 0.11 | 5.70 | | 2.37T | 0.62 | | 2.71 | |
| 1043 | 0.883 | 1 | 0.13 | 6.69 | | 2.37T | 0.98 | | 3.33 | |
| 1044 | 0.000 | 1 | 0.13 | 6.67 | | 2.37T | 0.98 | | 3.31 | |
| 1044 | 0.883 | 1 | 0.18 | 9.03 | | 2.37T | 1.93 | | 4.73 | |
| 1045 | 0.000 | 1 | 0.18 | 8.97 | | 2.37T | 1.94 | | 4.65 | |
| 1045 | 0.883 | 1 | 0.26 | 12.84 | | 2.37T | 2.85 | | 7.62 | |
| 1046 | 0.000 | 1 | 0.26 | 12.78 | | 2.37T | 2.87 | | 7.54 | |
| 1046 | 0.883 | 1 | 0.33 | 16.64 | | 2.37T | 3.30 | | 10.96 | |
| 1047 | 0.000 | 1 | 0.33 | 16.57 | | 2.37T | 3.32 | | 10.88 | |
| 1047 | 0.883 | 1 | 0.41 | 20.44 | | 2.37T | 3.26 | | 14.80 | |
| 1048 | 0.000 | 1 | 0.41 | 20.39 | | 2.37T | 3.29 | | 14.72 | |
| 1048 | 0.883 | 1 | 0.50 | 24.67 | | 2.37T | 3.14 | | 19.16 | |
| 1049 | 0.000 | 1 | 0.51 | 25.28 | | 2.37T | 2.88 | | 20.02 | |
| 1049 | 0.883 | 1 | 0.43 | 21.25 | | 2.37T | 3.40 | | 15.47 | |
| 1050 | 0.000 | 1 | 0.43 | 21.32 | | 2.37T | 3.37 | | 15.58 | |
| 1050 | 0.883 | 1 | 0.36 | 17.91 | | 2.37T | 3.72 | | 11.81 | |
| 1051 | 0.000 | 1 | 0.36 | 17.99 | | 2.37T | 3.69 | | 11.93 | |
| 1051 | 0.883 | 1 | 0.29 | 14.41 | | 2.37T | 3.49 | | 8.55 | |
| 1052 | 0.000 | 1 | 0.29 | 14.49 | | 2.37T | 3.46 | | 8.66 | |
| 1052 | 0.883 | 1 | 0.22 | 11.08 | | 2.37T | 2.71 | 0.05 | 5.68 | 0.13 |
| | | | | | | 0.14 | | | | |
| 1053 | 0.000 | 1 | 0.22 | 11.15 | | 2.37T | 2.69 | 0.04 | 5.78 | 0.13 |
| | | | | | | 0.13 | | | | |
| 1053 | 0.883 | 1 | 0.16 | 7.90 | | 2.37T | 1.51 | | 4.02 | |
| 1054 | 0.000 | 1 | 0.16 | 7.92 | | 2.37T | 1.50 | | 4.05 | |
| 1054 | 0.883 | 1 | 0.14 | 7.15 | | 2.37T | 1.24 | 0.07 | 3.32 | 0.08 |
| | | | | | | 0.08 | | | | |
| 1055 | 0.000 | 1 | 0.14 | 7.15 | | 2.37T | 1.24 | 0.07 | 3.32 | 0.08 |
| | | | | | | 0.08 | | | | |
| 1055 | 0.883 | 1 | 0.16 | 7.92 | | 2.37T | 1.60 | | 3.95 | |
| 1056 | 0.000 | 1 | 0.16 | 7.90 | | 2.37T | 1.61 | | 3.92 | |
| 1056 | 0.883 | 1 | 0.20 | 10.12 | | 2.37T | 2.46 | | 5.28 | |
| 1057 | 0.000 | 1 | 0.20 | 10.04 | | 2.37T | 2.49 | | 5.18 | |
| 1057 | 0.883 | 1 | 0.28 | 14.08 | | 2.37T | 3.38 | 0.18 | 8.15 | |
| 1058 | 0.000 | 1 | 0.28 | 14.02 | | 2.37T | 3.41 | 0.19 | 8.04 | |
| 1058 | 0.883 | 1 | 0.35 | 17.60 | | 2.37T | 3.79 | | 11.44 | |
| 1059 | 0.000 | 1 | 0.35 | 17.52 | | 2.37T | 3.82 | | 11.32 | |
| 1059 | 0.883 | 1 | 0.43 | 21.19 | | 2.37T | 3.67 | | 15.14 | |
| 1060 | 0.000 | 1 | 0.42 | 21.12 | | 2.37T | 3.71 | | 15.04 | |
| 1060 | 0.883 | 1 | 0.51 | 25.18 | | 2.37T | 3.46 | | 19.34 | |
| 2001 | 0.000 | 2 | 0.32 | 25.63 | | 0.79T | 3.03 | | 21.81 | |
| 2001 | 0.300 | 2 | 0.31 | 24.61 | | 0.79T | 3.12 | | 20.70 | |
| 2002 | 0.000 | 2 | 0.31 | 24.48 | | 0.58T | 3.12 | | 20.78 | |
| 2002 | 0.300 | 2 | 0.29 | 23.14 | | 0.58T | 3.22 | | 19.34 | |
| 2003 | 0.000 | 2 | 0.29 | 23.30 | | 0.60T | 3.77 | | 18.93 | |
| 2003 | 0.300 | 2 | 0.31 | 24.70 | | 0.60T | 3.75 | | 20.35 | |
| 2004 | 0.000 | 2 | 0.31 | 24.81 | | 0.79T | 3.75 | | 20.27 | |
| 2004 | 0.300 | 2 | 0.32 | 25.48 | | 0.79T | 3.66 | | 21.03 | |
| 2005 | 0.000 | 2 | 0.32 | 25.89 | | 0.78T | 2.52 | | 22.59 | |
| 2005 | 0.300 | 2 | 0.31 | 24.59 | | 0.78T | 2.65 | | 21.16 | |
| 2006 | 0.000 | 2 | 0.31 | 24.49 | | 0.60T | 2.65 | | 21.24 | |
| 2006 | 0.300 | 2 | 0.29 | 22.88 | | 0.60T | 2.80 | | 19.48 | |
| 2007 | 0.000 | 2 | 0.29 | 23.04 | | 0.60T | 3.36 | | 19.09 | |
| 2007 | 0.300 | 2 | 0.31 | 24.70 | | 0.59T | 3.30 | | 20.81 | |
| 2008 | 0.000 | 2 | 0.31 | 24.80 | | 0.78T | 3.30 | | 20.72 | |
| 2008 | 0.300 | 2 | 0.32 | 25.72 | | 0.78T | 3.16 | | 21.79 | |
| 2009 | 0.000 | 2 | 0.33 | 26.45 | | 0.78T | 2.31 | | 23.36 | |
| 2009 | 0.300 | 2 | 0.31 | 24.93 | | 0.78T | 2.39 | | 21.76 | |
| 2010 | 0.000 | 2 | 0.31 | 24.91 | | 0.67T | 2.39 | | 21.85 | |
| 2010 | 0.300 | 2 | 0.29 | 23.12 | | 0.67T | 2.52 | | 19.93 | |
| 2011 | 0.000 | 2 | 0.29 | 23.28 | | 0.67T | 3.09 | | 19.52 | |

OPIΣTIKH MEΛETH/TEKHNIKO TA/L=13.00
DESIGN_ΣΕΙΣΜΙΚΑ_ΔΟΚΟΙ

Longitudinal Reinforcements LCR 510

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 2011 | 0.300 | 2 | 0.31 | 25.13 | | 0.67T | 3.06 | | 21.40 | |
| 2012 | 0.000 | 2 | 0.31 | 25.16 | | 0.79T | 3.06 | | 21.31 | |
| 2012 | 0.300 | 2 | 0.33 | 26.27 | | 0.78T | 2.97 | | 22.52 | |
| 2013 | 0.000 | 2 | 0.33 | 26.27 | | 0.89T | 2.29 | | 23.09 | |
| 2013 | 0.300 | 2 | 0.31 | 24.93 | | 0.89T | 2.44 | | 21.60 | |
| 2014 | 0.000 | 2 | 0.31 | 24.95 | | 0.83T | 2.44 | | 21.68 | |
| 2014 | 0.300 | 2 | 0.29 | 23.28 | | 0.84T | 2.62 | | 19.83 | |
| 2015 | 0.000 | 2 | 0.29 | 23.47 | | 0.83T | 3.19 | | 19.45 | |
| 2015 | 0.300 | 2 | 0.31 | 25.18 | | 0.83T | 3.10 | | 21.25 | |
| 2016 | 0.000 | 2 | 0.31 | 25.16 | | 0.89T | 3.10 | | 21.17 | |
| 2016 | 0.300 | 2 | 0.33 | 26.10 | | 0.89T | 2.94 | | 22.27 | |
| 2017 | 0.000 | 2 | 0.33 | 26.50 | | 1.04T | 2.57 | | 22.89 | |
| 2017 | 0.300 | 2 | 0.32 | 25.35 | | 1.04T | 2.74 | | 21.58 | |
| 2018 | 0.000 | 2 | 0.32 | 25.33 | | 0.92T | 2.74 | | 21.67 | |
| 2018 | 0.300 | 2 | 0.30 | 23.85 | | 0.93T | 2.95 | | 19.98 | |
| 2019 | 0.000 | 2 | 0.30 | 24.04 | | 0.93T | 3.51 | | 19.60 | |
| 2019 | 0.300 | 2 | 0.32 | 25.54 | | 0.93T | 3.39 | | 21.23 | |
| 2020 | 0.000 | 2 | 0.32 | 25.57 | | 1.04T | 3.38 | | 21.14 | |
| 2020 | 0.300 | 2 | 0.33 | 26.34 | | 1.04T | 3.19 | | 22.11 | |

Shear Reinforcements per Cutted Part of Section LCR 510

| Beam | x[m] | Nos | As1-Mt [cm2/m] | SLay-0&5 [cm2/m] | SLay-1&6 [cm2/m] | SLay-2&7 [cm2/m] | SLay-3&8 [cm2/m] | SLay-4&9 [cm2/m] |
|------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1001 | 0.000 | 1 | 0.55 | 3.28 | | | | |
| 1001 | 0.883 | 1 | 0.55 | 3.09 | | | | |
| 1002 | 0.000 | 1 | 0.35 | 3.03 | | | | |
| 1002 | 0.883 | 1 | 0.35 | 2.85 | | | | |
| 1003 | 0.000 | 1 | 0.24 | 2.73 | | | | |
| 1003 | 0.883 | 1 | 0.24 | 2.54 | | | | |
| 1004 | 0.000 | 1 | 0.17 | 2.42 | | | | |
| 1004 | 0.883 | 1 | 0.17 | 2.23 | | | | |
| 1005 | 0.000 | 1 | 0.10 | 2.09 | | | | |
| 1005 | 0.883 | 1 | 0.10 | 1.90 | | | | |
| 1006 | 0.000 | 1 | 0.04 | 1.75 | | | | |
| 1006 | 0.883 | 1 | 0.04 | 1.56 | | | | |
| 1007 | 0.000 | 1 | 0.03 | 1.50 | | | | |
| 1007 | 0.883 | 1 | 0.03 | 1.70 | | | | |
| 1008 | 0.000 | 1 | 0.09 | 1.85 | | | | |
| 1008 | 0.883 | 1 | 0.09 | 2.06 | | | | |
| 1009 | 0.000 | 1 | 0.16 | 2.20 | | | | |
| 1009 | 0.883 | 1 | 0.16 | 2.40 | | | | |
| 1010 | 0.000 | 1 | 0.23 | 2.53 | | | | |
| 1010 | 0.883 | 1 | 0.23 | 2.74 | | | | |
| 1011 | 0.000 | 1 | 0.33 | 2.85 | | | | |
| 1011 | 0.883 | 1 | 0.33 | 3.05 | | | | |
| 1012 | 0.000 | 1 | 0.54 | 3.11 | | | | |
| 1012 | 0.883 | 1 | 0.54 | 3.36 | | | | |
| 1013 | 0.000 | 1 | 0.53 | 3.52 | | | | |
| 1013 | 0.883 | 1 | 0.53 | 3.33 | | | | |
| 1014 | 0.000 | 1 | 0.36 | 3.22 | | | | |
| 1014 | 0.883 | 1 | 0.36 | 3.03 | | | | |
| 1015 | 0.000 | 1 | 0.36 | 2.92 | | | | |
| 1015 | 0.883 | 1 | 0.36 | 2.73 | | | | |
| 1016 | 0.000 | 1 | 0.31 | 2.58 | | | | |
| 1016 | 0.883 | 1 | 0.31 | 2.39 | | | | |
| 1017 | 0.000 | 1 | 0.24 | 2.21 | | | | |
| 1017 | 0.883 | 1 | 0.24 | 2.02 | | | | |
| 1018 | 0.000 | 1 | 0.14 | 1.81 | | | | |
| 1018 | 0.883 | 1 | 0.14 | 1.62 | | | | |
| 1019 | 0.000 | 1 | 0.14 | 1.57 | | | | |
| 1019 | 0.883 | 1 | 0.14 | 1.77 | | | | |
| 1020 | 0.000 | 1 | 0.24 | 1.98 | | | | |
| 1020 | 0.883 | 1 | 0.24 | 2.18 | | | | |
| 1021 | 0.000 | 1 | 0.31 | 2.37 | | | | |
| 1021 | 0.883 | 1 | 0.31 | 2.57 | | | | |
| 1022 | 0.000 | 1 | 0.36 | 2.73 | | | | |
| 1022 | 0.883 | 1 | 0.36 | 2.94 | | | | |
| 1023 | 0.000 | 1 | 0.37 | 3.04 | | | | |
| 1023 | 0.883 | 1 | 0.37 | 3.24 | | | | |
| 1024 | 0.000 | 1 | 0.52 | 3.36 | | | | |
| 1024 | 0.883 | 1 | 0.52 | 3.64 | | | | |
| 1025 | 0.000 | 1 | 0.73 | 3.90 | | | | |
| 1025 | 0.883 | 1 | 0.73 | 3.71 | | | | |
| 1026 | 0.000 | 1 | 0.55 | 3.50 | | | | |
| 1026 | 0.883 | 1 | 0.55 | 3.31 | | | | |
| 1027 | 0.000 | 1 | 0.50 | 3.10 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN_ΣΕΙΣΜΙΚΑ_ΔΟΚΟΙ

Shear Reinforcements per Cutted Part of Section LCR 510

| Beam | x[m] | Nos | Asl-Mt [cm2/m] | SLay-0&5 [cm2/m] | SLay-1&6 [cm2/m] | SLay-2&7 [cm2/m] | SLay-3&8 [cm2/m] | SLay-4&9 [cm2/m] |
|------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1027 | 0.883 | 1 | 0.50 | 2.92 | | | | |
| 1028 | 0.000 | 1 | 0.40 | 2.68 | | | | |
| 1028 | 0.883 | 1 | 0.40 | 2.49 | | | | |
| 1029 | 0.000 | 1 | 0.27 | 2.25 | | | | |
| 1029 | 0.883 | 1 | 0.27 | 2.06 | | | | |
| 1030 | 0.000 | 1 | 0.12 | 1.80 | | | | |
| 1030 | 0.883 | 1 | 0.12 | 1.62 | | | | |
| 1031 | 0.000 | 1 | 0.12 | 1.56 | | | | |
| 1031 | 0.883 | 1 | 0.12 | 1.77 | | | | |
| 1032 | 0.000 | 1 | 0.27 | 2.02 | | | | |
| 1032 | 0.883 | 1 | 0.27 | 2.22 | | | | |
| 1033 | 0.000 | 1 | 0.40 | 2.47 | | | | |
| 1033 | 0.883 | 1 | 0.40 | 2.67 | | | | |
| 1034 | 0.000 | 1 | 0.49 | 2.91 | | | | |
| 1034 | 0.883 | 1 | 0.49 | 3.11 | | | | |
| 1035 | 0.000 | 1 | 0.55 | 3.32 | | | | |
| 1035 | 0.883 | 1 | 0.55 | 3.52 | | | | |
| 1036 | 0.000 | 1 | 0.73 | 3.73 | | | | |
| 1036 | 0.883 | 1 | 0.73 | 4.02 | | | | |
| 1037 | 0.000 | 1 | 1.02 | 4.04 | | | | |
| 1037 | 0.883 | 1 | 1.02 | 3.85 | | | | |
| 1038 | 0.000 | 1 | 0.76 | 3.56 | | | | |
| 1038 | 0.883 | 1 | 0.76 | 3.37 | | | | |
| 1039 | 0.000 | 1 | 0.66 | 3.13 | | | | |
| 1039 | 0.883 | 1 | 0.66 | 2.95 | | | | |
| 1040 | 0.000 | 1 | 0.52 | 2.70 | | | | |
| 1040 | 0.883 | 1 | 0.52 | 2.51 | | | | |
| 1041 | 0.000 | 1 | 0.33 | 2.26 | | | | |
| 1041 | 0.883 | 1 | 0.33 | 2.07 | | | | |
| 1042 | 0.000 | 1 | 0.11 | 1.80 | | | | |
| 1042 | 0.883 | 1 | 0.11 | 1.61 | | | | |
| 1043 | 0.000 | 1 | 0.11 | 1.56 | | | | |
| 1043 | 0.883 | 1 | 0.11 | 1.76 | | | | |
| 1044 | 0.000 | 1 | 0.32 | 2.03 | | | | |
| 1044 | 0.883 | 1 | 0.32 | 2.23 | | | | |
| 1045 | 0.000 | 1 | 0.52 | 2.49 | | | | |
| 1045 | 0.883 | 1 | 0.52 | 2.69 | | | | |
| 1046 | 0.000 | 1 | 0.66 | 2.94 | | | | |
| 1046 | 0.883 | 1 | 0.66 | 3.15 | | | | |
| 1047 | 0.000 | 1 | 0.75 | 3.38 | | | | |
| 1047 | 0.883 | 1 | 0.75 | 3.58 | | | | |
| 1048 | 0.000 | 1 | 1.02 | 3.87 | | | | |
| 1048 | 0.883 | 1 | 1.02 | 4.14 | | | | |
| 1049 | 0.000 | 1 | 1.30 | 4.03 | | | | |
| 1049 | 0.883 | 1 | 1.30 | 3.84 | | | | |
| 1050 | 0.000 | 1 | 1.13 | 3.73 | | | | |
| 1050 | 0.883 | 1 | 1.13 | 3.54 | | | | |
| 1051 | 0.000 | 1 | 0.96 | 3.34 | | | | |
| 1051 | 0.883 | 1 | 0.96 | 3.15 | | | | |
| 1052 | 0.000 | 1 | 0.75 | 2.90 | | | | |
| 1052 | 0.883 | 1 | 0.75 | 2.71 | | | | |
| 1053 | 0.000 | 1 | 0.48 | 2.41 | | | | |
| 1053 | 0.883 | 1 | 0.48 | 2.22 | | | | |
| 1054 | 0.000 | 1 | 0.22 | 1.91 | | | | |
| 1054 | 0.883 | 1 | 0.22 | 1.72 | | | | |
| 1055 | 0.000 | 1 | 0.21 | 1.66 | | | | |
| 1055 | 0.883 | 1 | 0.21 | 1.86 | | | | |
| 1056 | 0.000 | 1 | 0.48 | 2.18 | | | | |
| 1056 | 0.883 | 1 | 0.48 | 2.39 | | | | |
| 1057 | 0.000 | 1 | 0.74 | 2.68 | | | | |
| 1057 | 0.883 | 1 | 0.74 | 2.89 | | | | |
| 1058 | 0.000 | 1 | 0.95 | 3.14 | | | | |
| 1058 | 0.883 | 1 | 0.95 | 3.35 | | | | |
| 1059 | 0.000 | 1 | 1.12 | 3.55 | | | | |
| 1059 | 0.883 | 1 | 1.12 | 3.76 | | | | |
| 1060 | 0.000 | 1 | 1.30 | 3.87 | | | | |
| 1060 | 0.883 | 1 | 1.30 | 4.13 | | | | |
| 2001 | 0.000 | 2 | 0.35 | 1.80 | | | | |
| 2001 | 0.300 | 2 | 0.35 | 1.80 | | | | |
| 2002 | 0.000 | 2 | 0.25 | 1.52 | | | | |
| 2002 | 0.300 | 2 | 0.25 | 1.52 | | | | |
| 2003 | 0.000 | 2 | 0.27 | 1.69 | | | | |
| 2003 | 0.300 | 2 | 0.27 | 3.30 | | | | |
| 2004 | 0.000 | 2 | 0.35 | 1.76 | | | | |
| 2004 | 0.300 | 2 | 0.35 | 1.76 | | | | |
| 2005 | 0.000 | 2 | 0.34 | 2.20 | | | | |
| 2005 | 0.300 | 2 | 0.34 | 2.20 | | | | |
| 2006 | 0.000 | 2 | 0.27 | 3.35 | | | | |

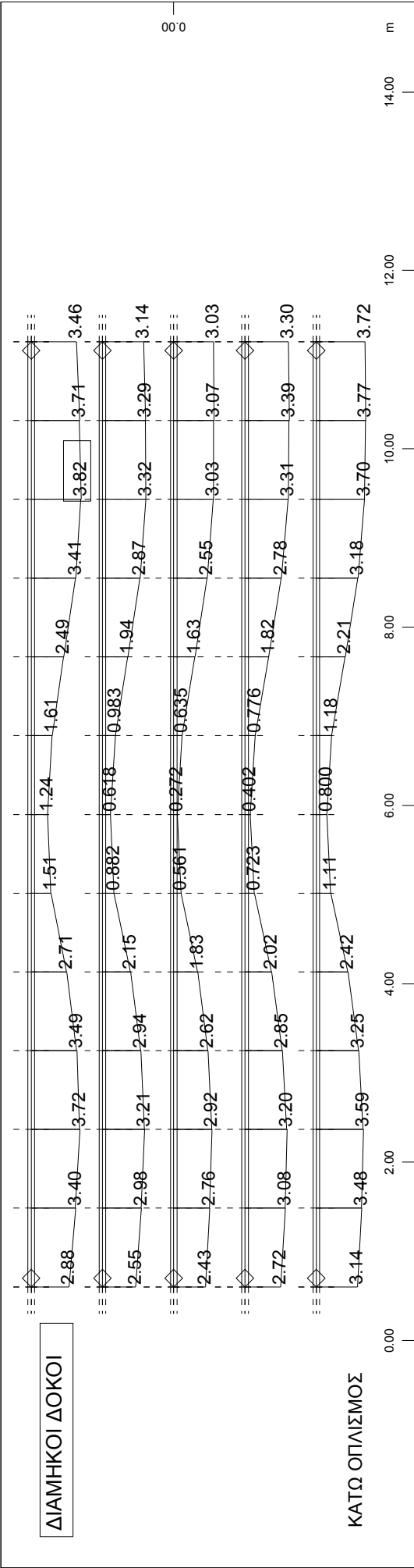
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN_ΣΕΙΣΜΙΚΑ_ΔΟΚΟΙ

Shear Reinforcements per Cutted Part of Section LCR 510

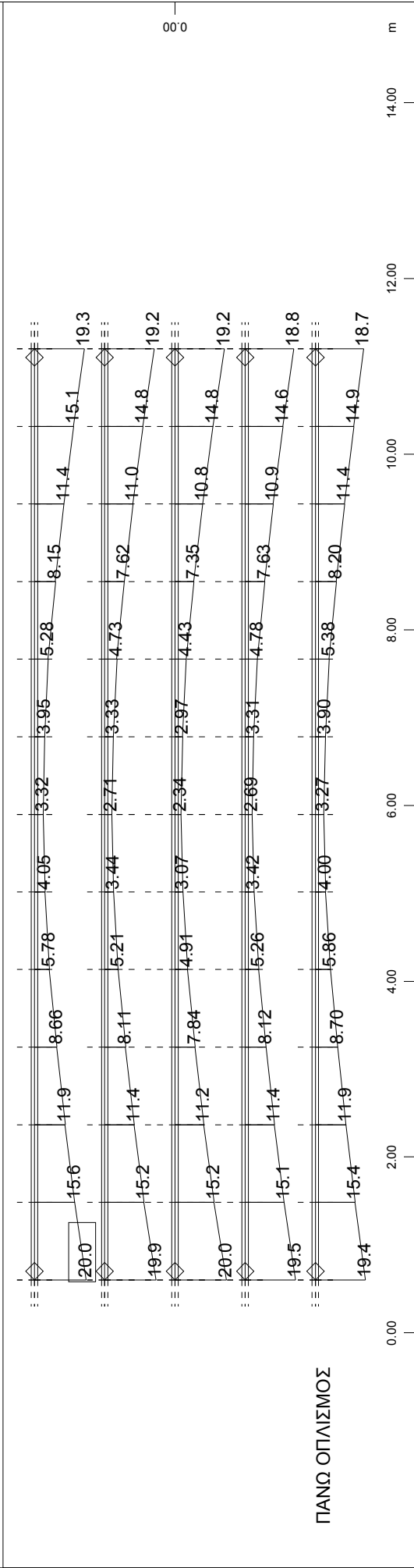
| Beam | x[m] | NoS | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 2006 | 0.300 | 2 | 0.27 | 3.35 | | | | |
| 2007 | 0.000 | 2 | 0.26 | 3.48 | | | | |
| 2007 | 0.300 | 2 | 0.26 | 3.82 | | | | |
| 2008 | 0.000 | 2 | 0.34 | 3.16 | | | | |
| 2008 | 0.300 | 2 | 0.34 | 3.42 | | | | |
| 2009 | 0.000 | 2 | 0.34 | 2.33 | | | | |
| 2009 | 0.300 | 2 | 0.34 | 2.33 | | | | |
| 2010 | 0.000 | 2 | 0.29 | 3.56 | | | | |
| 2010 | 0.300 | 2 | 0.29 | 3.56 | | | | |
| 2011 | 0.000 | 2 | 0.29 | 3.69 | | | | |
| 2011 | 0.300 | 2 | 0.29 | 4.06 | | | | |
| 2012 | 0.000 | 2 | 0.34 | 3.48 | | | | |
| 2012 | 0.300 | 2 | 0.34 | 3.74 | | | | |
| 2013 | 0.000 | 2 | 0.39 | 2.32 | | | | |
| 2013 | 0.300 | 2 | 0.39 | 2.32 | | | | |
| 2014 | 0.000 | 2 | 0.37 | 3.54 | | | | |
| 2014 | 0.300 | 2 | 0.37 | 3.54 | | | | |
| 2015 | 0.000 | 2 | 0.37 | 3.66 | | | | |
| 2015 | 0.300 | 2 | 0.37 | 4.02 | | | | |
| 2016 | 0.000 | 2 | 0.39 | 3.28 | | | | |
| 2016 | 0.300 | 2 | 0.39 | 3.55 | | | | |
| 2017 | 0.000 | 2 | 0.45 | 2.16 | | | | |
| 2017 | 0.300 | 2 | 0.45 | 2.16 | | | | |
| 2018 | 0.000 | 2 | 0.40 | 3.27 | | | | |
| 2018 | 0.300 | 2 | 0.40 | 3.27 | | | | |
| 2019 | 0.000 | 2 | 0.40 | 3.39 | | | | |
| 2019 | 0.300 | 2 | 0.40 | 3.72 | | | | |
| 2020 | 0.000 | 2 | 0.45 | 2.12 | | | | |
| 2020 | 0.300 | 2 | 0.45 | 3.22 | | | | |

Maximum Degree of Utilization

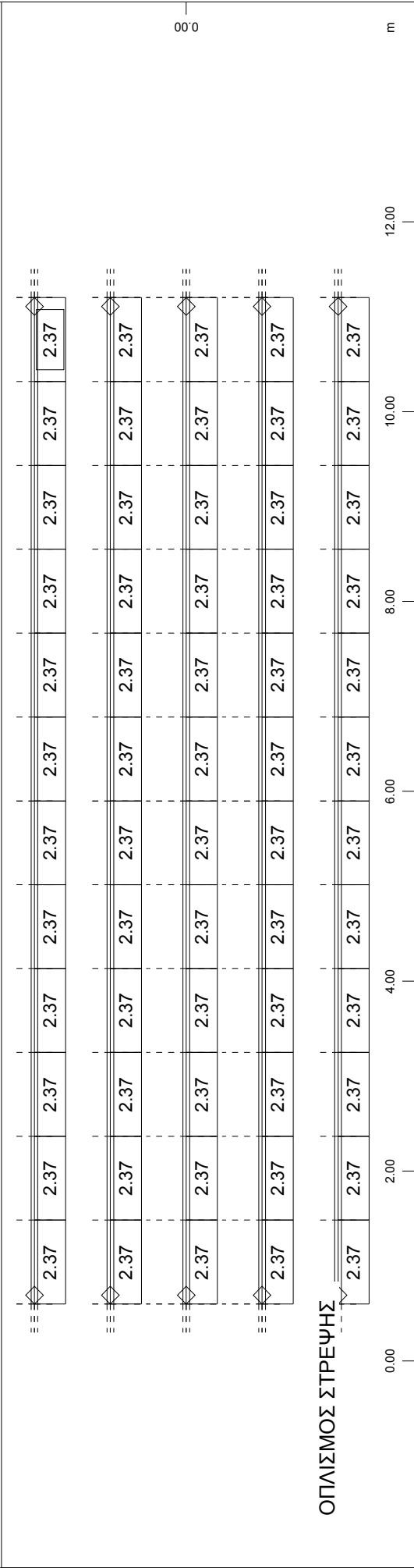
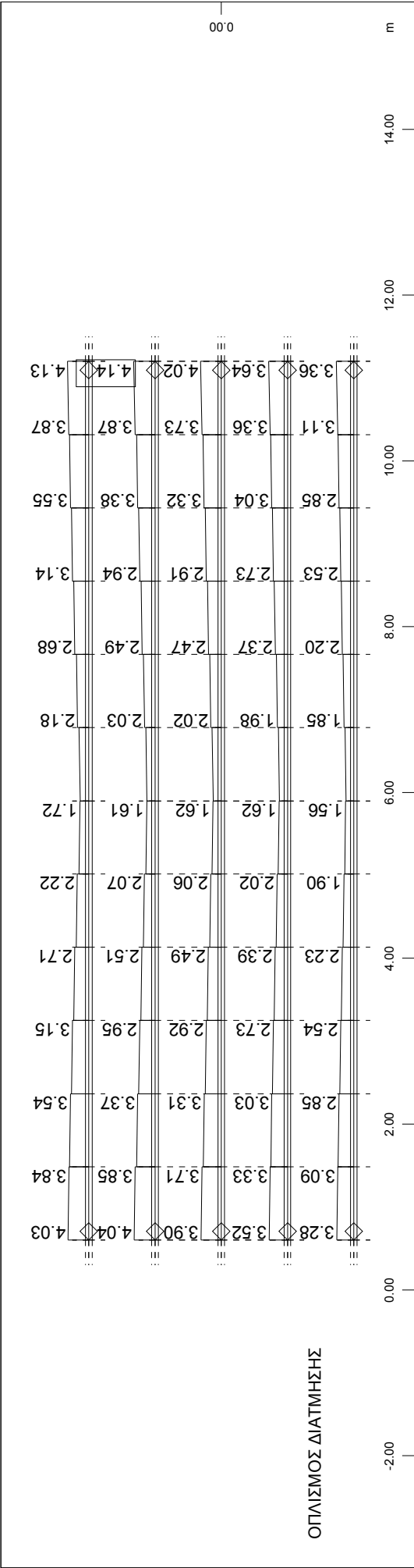
| | | N sig-c | Vy sig-t | Vz tau | Mt sig-* | My tend. | Mz As-l | Mb As-v | Mt2 crack | Total sigdyn | lamda tau-* |
|--------------|---|------------|-------------|-----------|-------------|-------------|------------|------------|--------------|-----------------|----------------|
| Cross sect. | 1 | 0.000 | 0.000 | 0.249 | 0.102 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| Cross sect. | 2 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 | 0.000 | 0.000 | 0.000 |
| DOKOS-2 | | 0.000 | 0.000 | 0.083 | 0.026 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Total system | | 0.000 | 0.000 | 0.249 | 0.102 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 | 0.000 | 0.000 | 0.000 |



Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 510 , 1 cm 3D = 4.48 cm2 (Max=3.82)

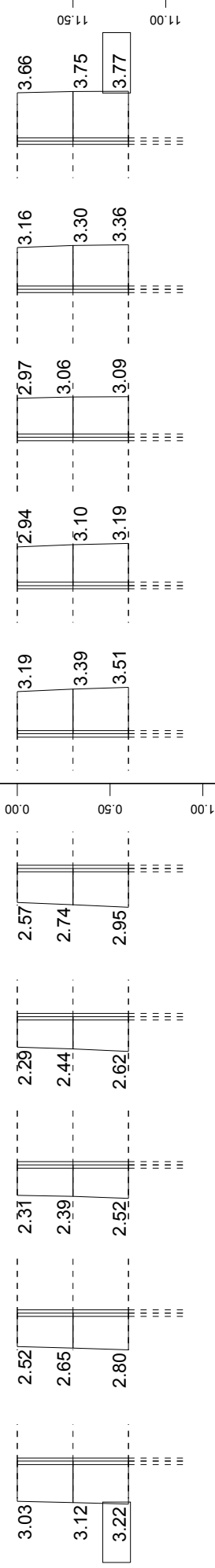


Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case 510 , 1 cm 3D = 22.4 cm2 (Max=20.0)



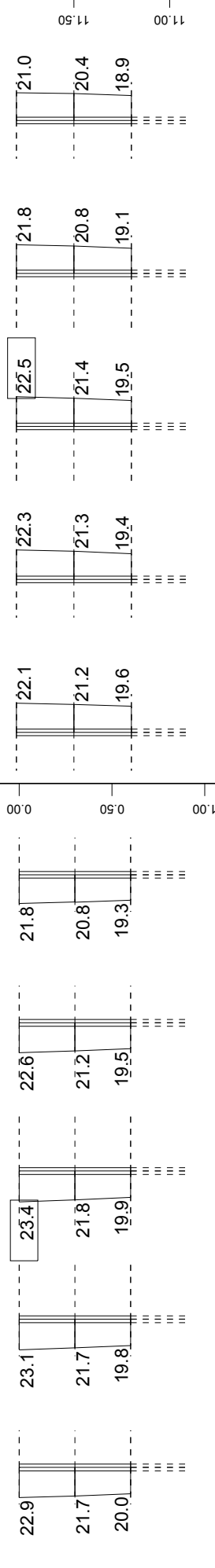
ΔΙΑΜΗΚΗ ΔΟΚΟΙ-ΣΤΗΡΙΞΗΣ

ΚΑΤΩ ΟΠΛΙΣΜΟΣ

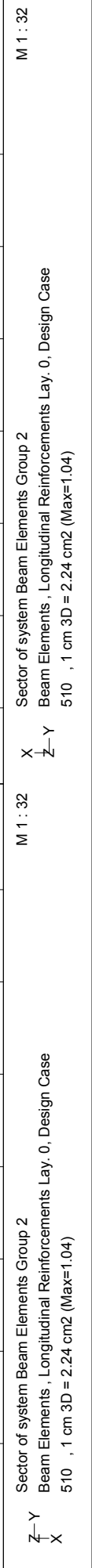
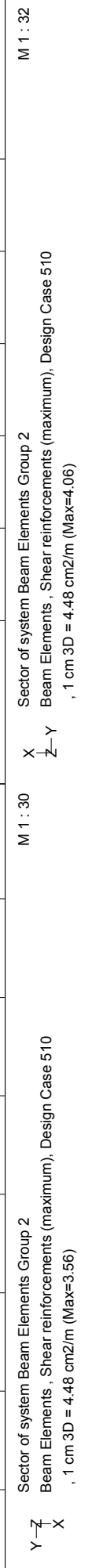


Y-Z X Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case
510 , 1 cm 3D = 4.48 cm2 (Max=3.22) M 1 : 32

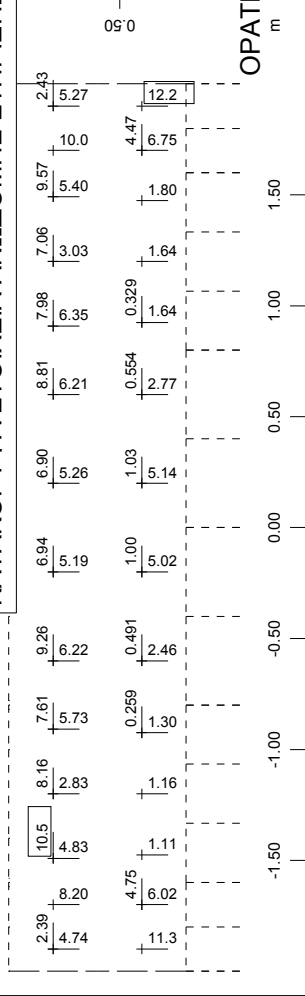
ΠΑΝΩ ΟΠΛΙΣΜΟΣ



Z-Y X Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
510 , 1 cm 3D = 44.8 cm2 (Max=23.4) M 1 : 32



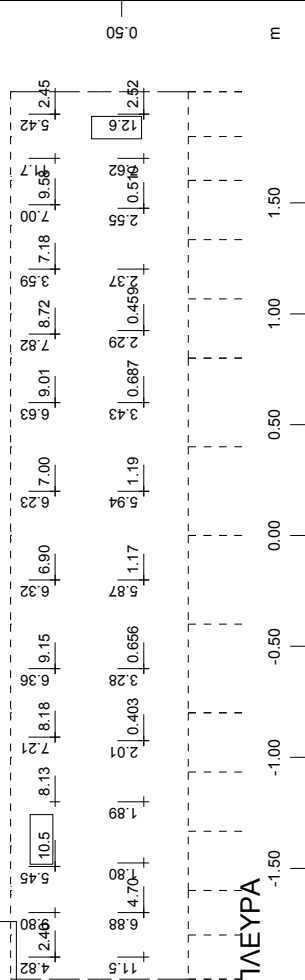
ΚΑΤΑΚΟΡΥΦΑ ΣΤΟΙΧΕΙΑ ΑΝΩΔΟΜΗΣ-ΣΤΗΡΙΞΗΣ



Sector of system Quadrilateral Elements Group 8
upper Reinforcements in Elements in cm2/m, Design Case 522 ULS
design (Max=12.2)

M 1 : 34

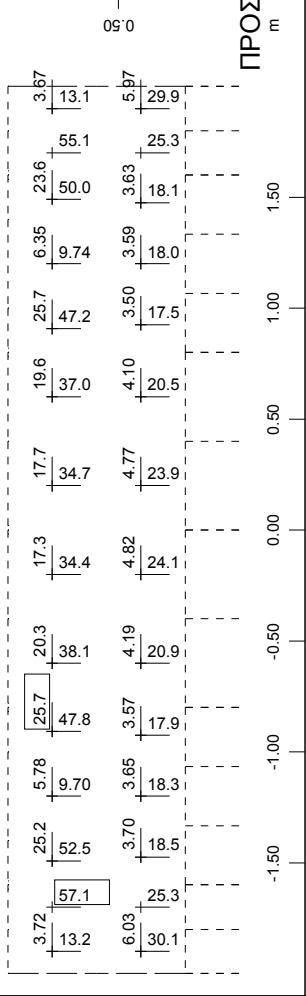
ΟΡΑΤΗ ΠΛΕΥΡΑ



Sector of system Quadrilateral Elements Group 8
upper Reinforcements in Elements in cm2/m, Design Case 522 ULS
design (Max=12.6)

M 1 : 34

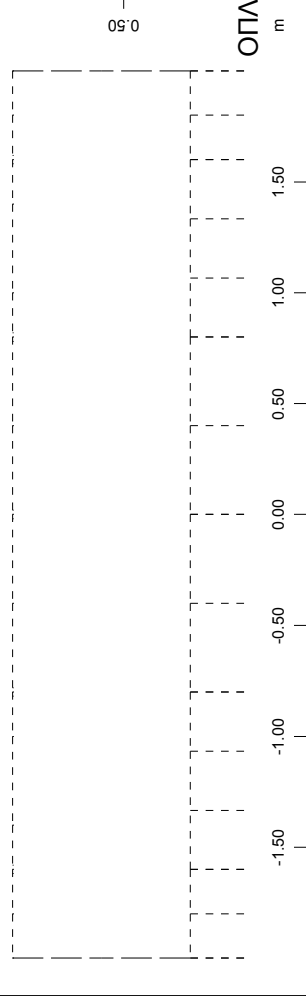
ΠΡΟΣ ΓΑΙΕΣ



Sector of system Quadrilateral Elements Group 8
lower Reinforcements in Elements in cm2/m, Design Case 522 ULS
design (Max=57.1)

M 1 : 34

ΟΠΛΙΣΜΟΣ ΔΙΑΤΜΗΣΗΣ

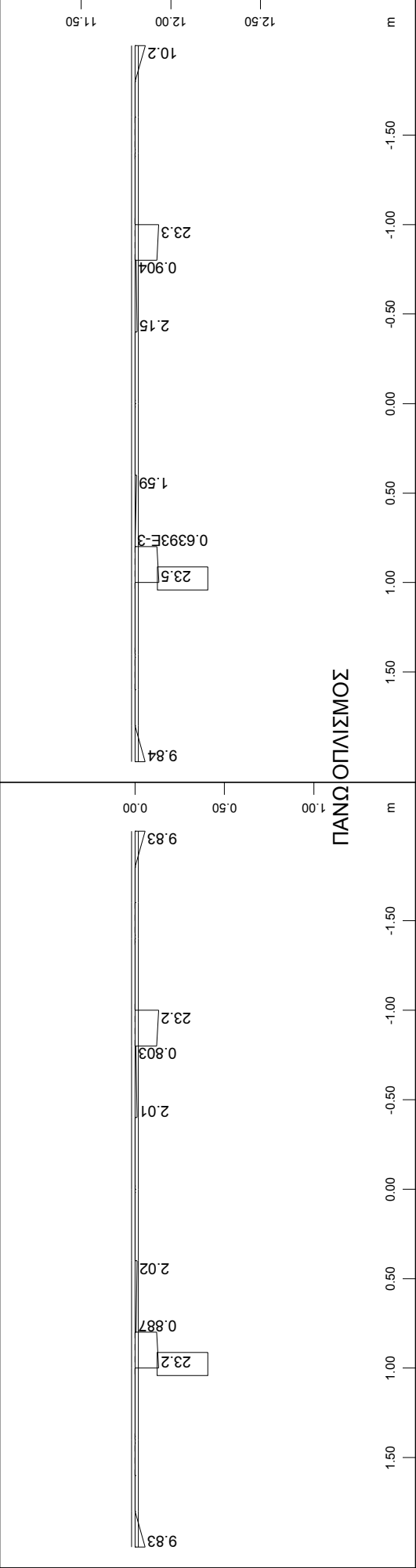
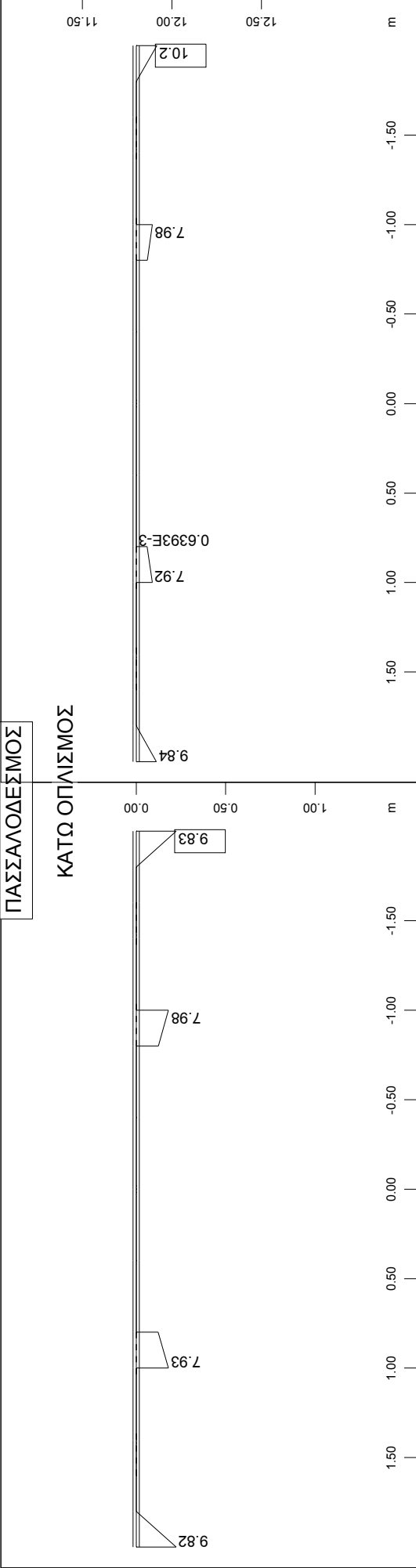


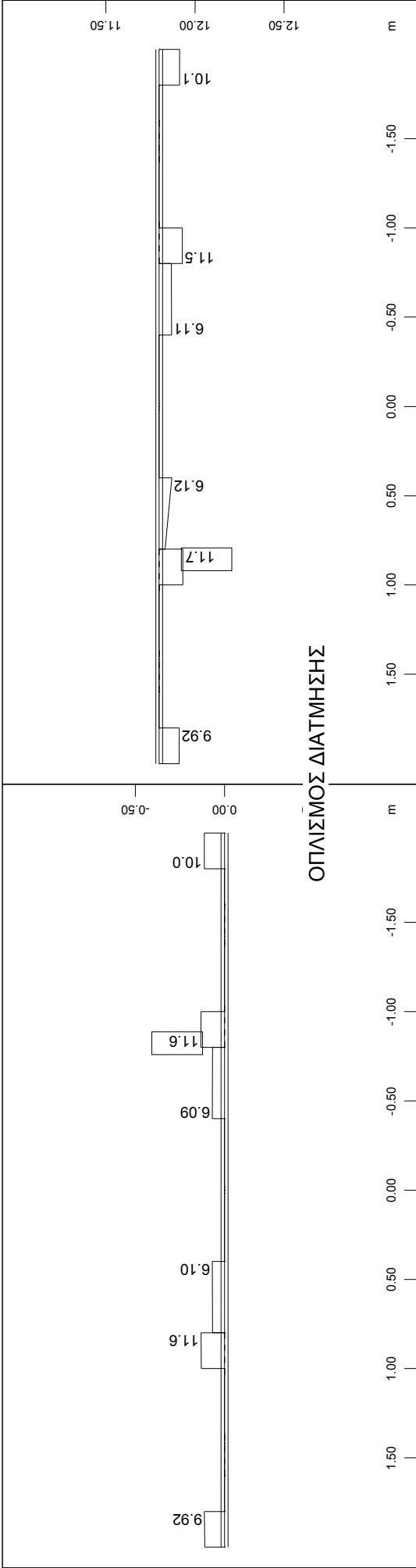
Sector of system Quadrilateral Elements Group 8
Shear reinforcement from middle of element in cm2/m2, Design Case 522 ULS design (Max=0)

M 1 : 34

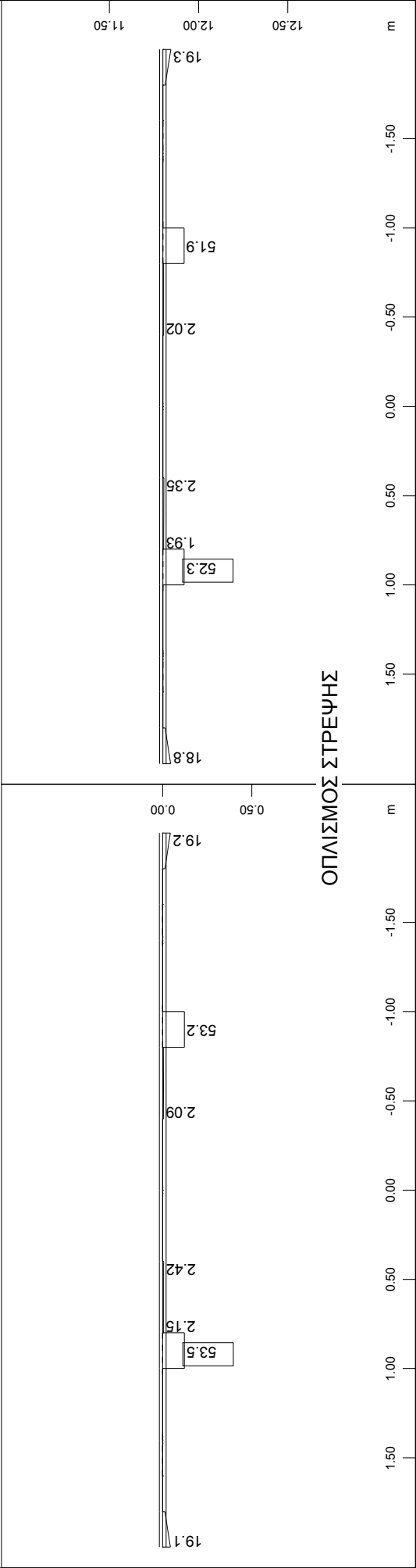
Sector of system Quadrilateral Elements Group 8
Shear reinforcement from middle of element in cm2/m2, Design Case 522 ULS design (Max=0)

M 1 : 34



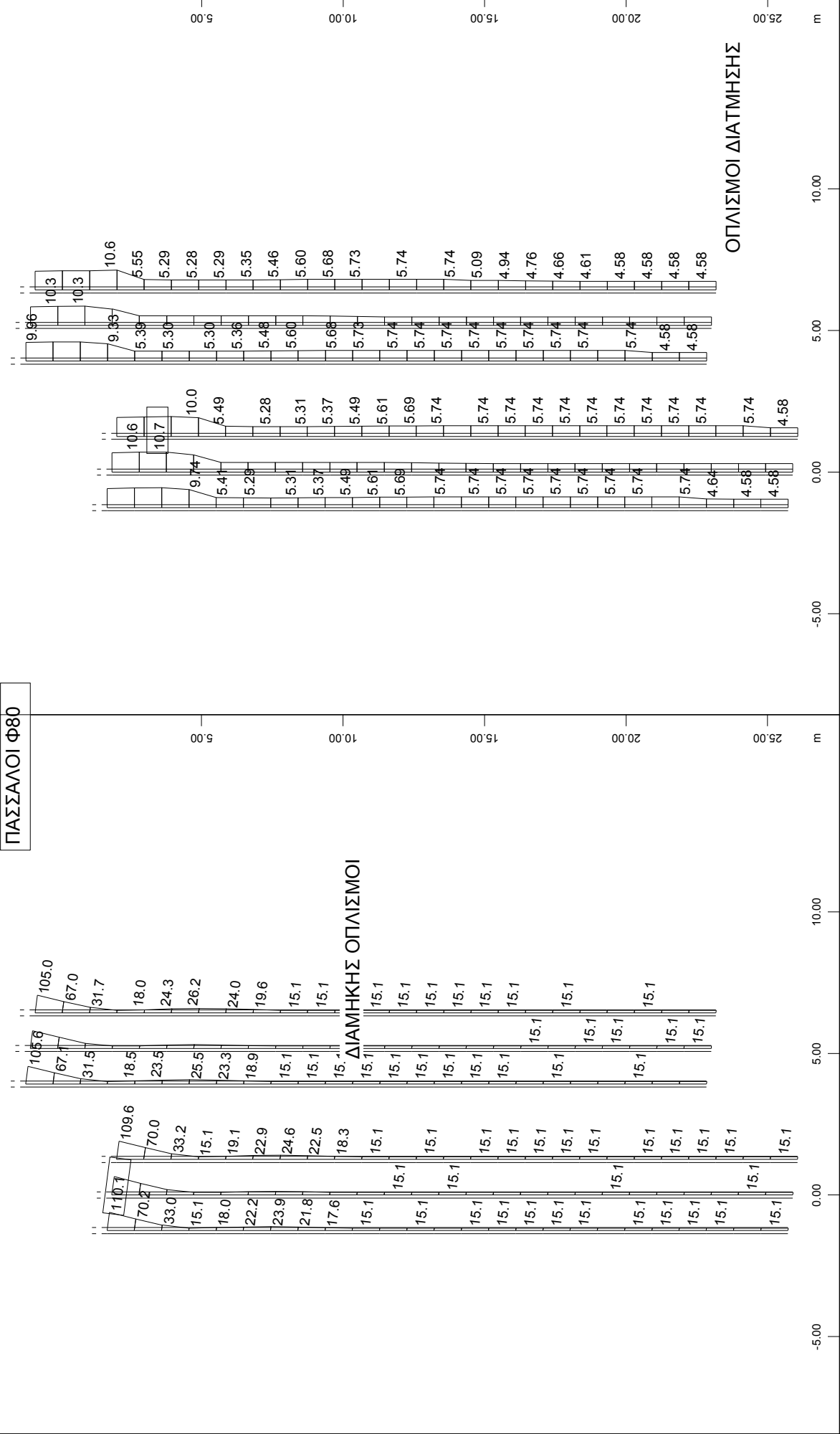


Sector of system Beam Elements Group 10
Beam Elements , Shear reinforcements (maximum), Design Case 509
, 1 cm 3D = 29.1 cm2/m (Max=11.7)

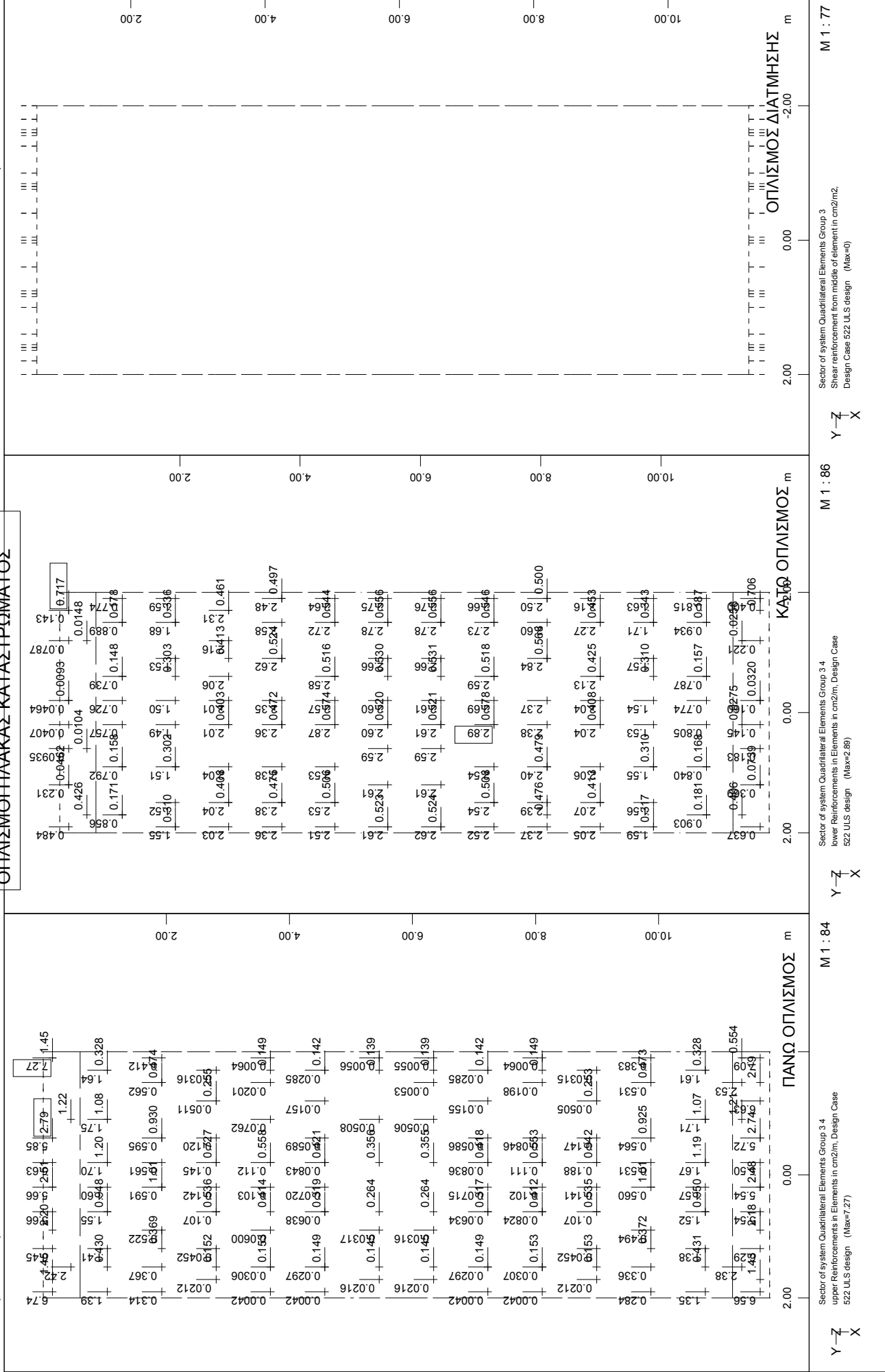


Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 0, Design Case 509 , 1 cm 3D = 145.3 cm2 (Max=53.5)

ΠΑΣΣΑΛΟΙ Φ80



ΟΠΑΙΣΜΟΙ ΠΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ



p. 342

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/L=13.00

11) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ULS-ΣΕΙΣΜΙΚΑ (Q=1.00, γBd1=1.25)

OPISTIKH MELETH/TEXNIKO TA/L=13.00
SEISMIC COMBINATIONS (MAIN +Ex) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9101 Unid.-Seismic Combinatio | 3.351 | 0.603 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.005 | energy 477.4897 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 477.7957 e/f | 0.000 | 1.001 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
SEISMIC COMBINATIONS (MAIN +Ex) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9103 Unid.-Seismic Combinatio | 3.351 | 0.603 | 3.240 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.004 | energy 467.7261 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 467.9768 e/f | 0.000 | 1.001 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

OPISTIKH MELETH/TEXNIKO TA/L=13.00
SEISMIC COMBINATIONS (MAIN +Ex) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9105 Unid.-Seismic Combinatio | 3.351 | -0.603 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.005 | energy 477.9139 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 478.2209 e/f | 0.000 | 1.001 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
 SEISMIC COMBINATIONS (MAIN +Ex) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
 Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
 Only linear material properties are used for:
 QUAD- and BRIQ-elements
 Truss-, cable-, Beam-, pile- und boundaryelements
 Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9107 Unid.-Seismic Combinatio | 3.351 | -0.603 | 3.240 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.005 | energy 468.0535 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 468.3049 e/f | 0.000 | 1.001 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
SEISMIC COMBINATIONS (MAIN -Ex) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9102 Unid.-Seismic Combinatio | -3.433 | 0.603 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.005 | energy 483.2671 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 483.5935 e/f | 0.000 | 1.001 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
SEISMIC COMBINATIONS (MAIN -Ex) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9104 Unid.-Seismic Combinatio | -3.433 | 0.603 | 3.240 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.005 | energy 473.5034 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 473.7709 e/f | 0.000 | 1.001 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
SEISMIC COMBINATIONS (MAIN -Ex) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9106 Unid.-Seismic Combinatio | -3.433 | -0.603 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.005 | energy 483.6913 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 484.0187 e/f | 0.000 | 1.001 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
SEISMIC COMBINATIONS (MAIN -Ex) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9108 Unid.-Seismic Combinatio | -3.433 | -0.603 | 3.240 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.005 | energy 473.8309 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 474.0990 e/f | 0.000 | 1.001 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
 SEISMIC COMBINATIONS (MAIN +Ey) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
 Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
 Only linear material properties are used for:
 QUAD- and BRIQ-elements
 Truss-, cable-, Beam-, pile- und boundaryelements
 Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9201 Unid.-Seismic Combinatio | 0.976 | 2.010 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.004 | energy 404.3980 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 404.5235 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
SEISMIC COMBINATIONS (MAIN +Ey) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9203 Unid.-Seismic Combinatio | 0.976 | 2.010 | 3.240 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.004 | energy 394.7473 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 394.8497 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
SEISMIC COMBINATIONS (MAIN +Ey) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9205 Unid.-Seismic Combinatio | 0.976 | -2.010 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.004 | energy 405.8119 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 405.9402 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
SEISMIC COMBINATIONS (MAIN +Ey) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9207 Unid.-Seismic Combinatio | 0.976 | -2.010 | 3.240 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.004 | energy 395.8386 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 395.9428 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
SEISMIC COMBINATIONS (MAIN -Ey) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9202 Unid.-Seismic Combinatio | -1.059 | 2.010 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.004 | energy 406.1313 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 406.2629 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
SEISMIC COMBINATIONS (MAIN -Ey) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9204 Unid.-Seismic Combinatio | -1.059 | 2.010 | 3.240 |

Iteration sequence

| | | | | | |
|----------------------|-------|--------|--------------|-------|-------|
| Iteration 1 Residual | 0.004 | energy | 396.4805 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy | 396.5880 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
SEISMIC COMBINATIONS (MAIN -Ey) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9206 Unid.-Seismic Combinatio | -1.059 | -2.010 | 4.205 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.004 | energy 407.5451 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 407.6795 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
 SEISMIC COMBINATIONS (MAIN -Ey) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
 Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
 Only linear material properties are used for:
 QUAD- and BRIQ-elements
 Truss-, cable-, Beam-, pile- und boundaryelements
 Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9208 Unid.-Seismic Combinatio | -1.059 | -2.010 | 3.240 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.004 | energy 397.5718 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 397.6810 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

OPISTIKH MELETH/TEXNIKO TA/L=13.00
SEISMIC COMBINATIONS (MAIN +Ez) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9301 Unid.-Seismic Combinatio | 0.976 | 0.603 | 5.330 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.001 | energy 372.0461 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 372.0878 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

OPISTIKH MELETH/TEXNIKO TA/L=13.00
SEISMIC COMBINATIONS (MAIN +Ez) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9303 Unid.-Seismic Combinatio | 0.976 | 0.603 | 2.114 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.001 | energy 339.5006 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 339.5211 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
 SEISMIC COMBINATIONS (MAIN +Ez) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
 Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
 Only linear material properties are used for:
 QUAD- and BRIQ-elements
 Truss-, cable-, Beam-, pile- und boundaryelements
 Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9305 Unid.-Seismic Combinatio | 0.976 | -0.603 | 5.330 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.001 | energy 372.5832 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 372.6261 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

OPISTIKH MELETH/TEXNIKO TA/L=13.00
SEISMIC COMBINATIONS (MAIN +Ez) (Q=1.0)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9307 Unid.-Seismic Combinatio | 0.976 | -0.603 | 2.114 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.001 | energy 339.7151 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 339.7359 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -EZ)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9302 Unid.-Seismic Combinatio | -1.059 | 0.603 | 5.330 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.002 | energy 373.7794 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 373.8284 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -EZ)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9304 Unid.-Seismic Combinatio | -1.059 | 0.603 | 2.114 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.001 | energy 341.2339 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 341.2581 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -EZ)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9306 Unid.-Seismic Combinatio | -1.059 | -0.603 | 5.330 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.002 | energy 374.3164 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 374.3668 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
CALCULATION OF SEISMIC COMBINATIONS (MAIN -Ez)

Analysis parameters

Calculation with nonlinear material properties

Nonlinear material properties are used for:
Springelements[CRAC,YIEL,MUE,GAP], pilebedding, QUAD-bedding
Only linear material properties are used for:
QUAD- and BRIQ-elements
Truss-, cable-, Beam-, pile- und boundaryelements
Beamelements

Sum of Loads

| LC Title | PXX[MN] | PYY[MN] | PZZ[MN] |
|-------------------------------|---------|---------|---------|
| 9308 Unid.-Seismic Combinatio | -1.059 | -0.603 | 2.114 |

Iteration sequence

| | | | | |
|----------------------|-------|---------------------|-------|-------|
| Iteration 1 Residual | 0.001 | energy 341.4484 e/f | 0.000 | 1.000 |
| Iteration 2 Residual | 0.000 | energy 341.4729 e/f | 0.000 | 1.000 |

Statistic nonlinear effects:

| | |
|--|---|
| Statistic nonlinear effects of spring elements: no of elem.: | 6 |
| Number of longitudinal springs: | 6 |
| Number of torsional springs: | 0 |
| No nonlinear effects detected | |

| | |
|---|---|
| Statistic beam elements: number of checked elements : | 0 |
| Number of yielding elements[DEHN KSV PL/PLD]: | 0 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ-γBd1

Design according to DIN1045-1 2008
Loadcases have been calculated in the Ultimate Limit State
In BEMESS no additional load safety factor is applied.

Load Cases for the Design

| | | |
|---------------|----------------------------------|--------------------------|
| Loadcase 9101 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9102 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9103 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9104 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9105 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9106 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9107 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9108 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9201 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9202 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9203 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9204 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9205 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9206 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9207 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9301 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9302 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9303 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9304 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9305 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9306 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9307 | Unid.-Seismic Combinatio + Nodal | reaction punching design |
| Loadcase 9308 | Unid.-Seismic Combinatio + Nodal | reaction punching design |

Material (DIN1045-1 2008)

| Mat | f-ck | f-cr | f-yk | f-tk | f-ctm | N min | type |
|-----|-------|-------|-------|-------|-------|-------|--------------------|
| | [MPa] | [MPa] | [MPa] | [MPa] | [MPa] | [-] | [-] |
| B1 | 25.0 | 21.2 | 500.0 | 500.0 | 2.565 | 10.5 | 0.20 mainly static |

Minimum reinforcement: 0.00 p.c. of stat. req. section

Reduction of FC in case of transvers tension = 25.0 [o/o]

Material-safety-factors:

| Mat | concr | SC1 | SC2 | steel | SS1 | SS2 |
|-----|-------|------|------|-------|------|------|
| B1 | | 1.88 | 1.88 | | 1.15 | 1.15 |

Acc. the german DIN Fachberichten a minimum concrete shear capacity VRd,ct is taken into account in the shear design without shear reinforcement.

In shear design the cotangens theta is limited to 1.750 .

At direct supports from the face of the support up to 1.0*d the shear force is reduced. The maximum shear capacity is checked at the face of the support without reduction.

The punching design has been switched off and must be done separately.
Outside the punching area, the normal slab shear design may increase the, longitudinal reinforcement up to 0.20% [input CTRL...RO_V].

Geometry (axial covers)

| No | he-upper | hi-upper | he-lower | hi-lower | Elem. height |
|----|----------|----------|----------|----------|--------------|
| | [mm] | [mm] | [mm] | [mm] | [mm] |
| 1 | 50 | 70 | 35 | 55 | As saved |

Selection of elements

| | from | to | inc | group | GEOMETRY |
|---------|------|------|-----|-------|----------|
| Element | 3001 | 3999 | 1 | - | 1 |
| Element | 4001 | 4999 | 1 | - | 1 |
| Element | 8001 | 8999 | 1 | - | 1 |

Reinforcement is saved in the data base file
Number of stored reinforcement-distribution: 523

REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm²/m] upper/lower
General load safety factor - as defined in BEMESS: Gamma-f = 1.00

Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm

Shear index 2m = minimum shear reinforcement

| Grp | ELEM No | LC MAT | GEO No | h [m] | Reinforcement main cross | dphi deg | Shr zon | VEd/d [MPa] | VRd,ct/d [cm ² /m ²] | Ass |
|-----|---------|---------|--------|-------|--------------------------|----------|---------|-------------|---|-----|
| 3 | 3001 | maximum | 0.25 | 2.04 | 0.41 | 0 | 1 | 0.085 | | |
| | | | | 1.36 | 0.27 | 0 | | 0.495 | | |
| 3 | 3002 | maximum | 0.25 | 0.82 | 0.16 | 0 | 1 | 0.064 | | |
| | | | | 2.08 | 0.42 | 0 | | 0.495 | | |
| 3 | 3003 | maximum | 0.25 | 0.02 | 0.02 | 0 | 1 | 0.054 | | |
| | | | | 2.49 | 0.50 | 0 | | 0.495 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ-γBd1

| REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm2/m] | | | | | | | | | | upper/lower | |
|--|------------|----------|-----------|-----------|----------|---------------|-------|-------------|------------|----------------|-----------------|
| General load safety factor - as defined in BEMESS: | | | | | | | | | | Gamma-f = 1.00 | |
| Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm | | | | | | | | | | | |
| Shear index 2m = minimum shear reinforcement | | | | | | | | | | | |
| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement | | dphi deg | Shr zon | VEd/d [MPa] | Ass [cm2/m2] |
| | | | | | | main | cross | dir | | VRd,ct/d | |
| 3 | 3004 | | maximum | | 0.25 | | 0.02 | 0 | | 1 | 0.043 |
| | | | | | | 2.74 | 0.55 | 0 | | | 0.495 |
| 3 | 3005 | | maximum | | 0.25 | | 0.02 | 0 | | 1 | 0.032 |
| | | | | | | 2.81 | 0.56 | 0 | | | 0.496 |
| 3 | 3006 | | maximum | | 0.25 | | 0.02 | 0 | | 1 | 0.022 |
| | | | | | | 2.78 | 0.56 | 0 | | | 0.496 |
| 3 | 3007 | | maximum | | 0.25 | 2.04 | 0.41 | 0 | | 1 | 0.058 |
| | | | | | | 1.46 | 0.29 | 0 | | | 0.495 |
| 3 | 3008 | | maximum | | 0.25 | 0.87 | 0.19 | 0 | | 1 | 0.061 |
| | | | | | | 2.06 | 0.41 | 0 | | | 0.496 |
| 3 | 3009 | | maximum | | 0.25 | 0.02 | 0.11 | 0 | | 1 | 0.048 |
| | | | | | | 2.48 | 0.50 | 0 | | | 0.496 |
| 3 | 3010 | | maximum | | 0.25 | 0.02 | 0.11 | 0 | | 1 | 0.041 |
| | | | | | | 2.74 | 0.55 | 0 | | | 0.496 |
| 3 | 3011 | | maximum | | 0.25 | 0.02 | 0.11 | 0 | | 1 | 0.034 |
| | | | | | | 2.81 | 0.56 | 0 | | | 0.496 |
| 3 | 3012 | | maximum | | 0.25 | 0.02 | 0.11 | 0 | | 1 | 0.029 |
| | | | | | | 2.76 | 0.55 | 0 | | | 0.496 |
| 3 | 3013 | | maximum | | 0.25 | 2.09 | 0.61 | 0 | | 1 | 0.095 |
| | | | | | | 1.48 | 0.30 | 0 | | | 0.496 |
| 3 | 3014 | | maximum | | 0.25 | 0.91 | 0.25 | 0 | | 1 | 0.054 |
| | | | | | | 2.07 | 0.41 | 0 | | | 0.495 |
| 3 | 3015 | | maximum | | 0.25 | 0.04 | 0.19 | 0 | | 1 | 0.043 |
| | | | | | | 2.51 | 0.50 | 0 | | | 0.495 |
| 3 | 3016 | | maximum | | 0.25 | 0.04 | 0.20 | 0 | | 1 | 0.034 |
| | | | | | | 2.76 | 0.55 | 0 | | | 0.496 |
| 3 | 3017 | | maximum | | 0.25 | 0.04 | 0.20 | 0 | | 1 | 0.029 |
| | | | | | | 2.83 | 0.57 | 0 | | | 0.496 |
| 3 | 3018 | | maximum | | 0.25 | 0.04 | 0.19 | 0 | | 1 | 0.026 |
| | | | | | | 2.76 | 0.55 | 0 | | | 0.496 |
| 3 | 3019 | | maximum | | 0.25 | 2.05 | 0.72 | 0 | | 1 | 0.094 |
| | | | | | | 1.31 | 0.26 | 0 | | | 0.495 |
| 3 | 3020 | | maximum | | 0.25 | 0.95 | 0.45 | 0 | | 1 | 0.070 |
| | | | | | | 2.05 | 0.41 | 0 | | | 0.495 |
| 3 | 3021 | | maximum | | 0.25 | 0.06 | 0.28 | 0 | | 1 | 0.053 |
| | | | | | | 2.48 | 0.50 | 0 | | | 0.495 |
| 3 | 3022 | | maximum | | 0.25 | 0.04 | 0.19 | 0 | | 1 | 0.039 |
| | | | | | | 2.74 | 0.55 | 0 | | | 0.496 |
| 3 | 3023 | | maximum | | 0.25 | 0.03 | 0.13 | 0 | | 1 | 0.028 |
| | | | | | | 2.80 | 0.56 | 0 | | | 0.496 |
| 3 | 3024 | | maximum | | 0.25 | 0.02 | 0.11 | 0 | | 1 | 0.018 |
| | | | | | | 2.77 | 0.55 | 0 | | | 0.496 |
| 3 | 3025 | | maximum | | 0.25 | 2.27 | 1.19 | 0 | | 1 | 0.103 |
| | | | | | | 1.50 | 0.30 | 0 | | | 0.496 |
| 3 | 3026 | | maximum | | 0.25 | 1.10 | 0.96 | 0 | | 1 | 0.091 |
| | | | | | | 2.07 | 0.41 | 0 | | | 0.496 |
| 3 | 3027 | | maximum | | 0.25 | 0.12 | 0.60 | 0 | | 1 | 0.064 |
| | | | | | | 2.52 | 0.50 | 0 | | | 0.496 |
| 3 | 3028 | | maximum | | 0.25 | 0.08 | 0.38 | 0 | | 1 | 0.053 |
| | | | | | | 2.77 | 0.55 | 0 | | | 0.496 |
| 3 | 3029 | | maximum | | 0.25 | 0.05 | 0.25 | 0 | | 1 | 0.041 |
| | | | | | | 2.82 | 0.56 | 0 | | | 0.496 |
| 3 | 3030 | | maximum | | 0.25 | 0.03 | 0.17 | 0 | | 1 | 0.034 |
| | | | | | | 2.76 | 0.55 | 0 | | | 0.496 |
| 3 | 3031 | | maximum | | 0.25 | 2.27 | 1.17 | 0 | | 1 | 0.077 |
| | | | | | | 1.35 | 0.27 | 0 | | | 0.495 |
| 3 | 3032 | | maximum | | 0.25 | 1.04 | 0.87 | 0 | | 1 | 0.056 |
| | | | | | | 2.07 | 0.41 | 0 | | | 0.495 |
| 3 | 3033 | | maximum | | 0.25 | 0.13 | 0.67 | 0 | | 1 | 0.046 |
| | | | | | | 2.48 | 0.50 | 0 | | | 0.495 |
| 3 | 3034 | | maximum | | 0.25 | 0.10 | 0.51 | 0 | | 1 | 0.036 |
| | | | | | | 2.74 | 0.55 | 0 | | | 0.495 |
| 3 | 3035 | | maximum | | 0.25 | 0.08 | 0.38 | 0 | | 1 | 0.029 |
| | | | | | | 2.79 | 0.56 | 0 | | | 0.496 |
| 3 | 3036 | | maximum | | 0.25 | 0.06 | 0.30 | 0 | | 1 | 0.024 |
| | | | | | | 2.74 | 0.55 | 0 | | | 0.496 |
| 3 | 3037 | | maximum | | 0.25 | 2.32 | 1.39 | 0 | | 1 | 0.072 |
| | | | | | | 1.43 | 0.29 | 0 | | | 0.495 |
| 3 | 3038 | | maximum | | 0.25 | 1.17 | 1.25 | 0 | | 1 | 0.072 |
| | | | | | | 2.09 | 0.42 | 0 | | | 0.496 |
| 3 | 3039 | | maximum | | 0.25 | 0.19 | 0.95 | 0 | | 1 | 0.057 |
| | | | | | | 2.54 | 0.51 | 0 | | | 0.496 |
| 3 | 3040 | | maximum | | 0.25 | 0.13 | 0.64 | 0 | | 1 | 0.046 |
| | | | | | | 2.79 | 0.56 | 0 | | | 0.496 |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ-γBd1

REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm²/m] upper/lower
General load safety factor - as defined in BEMESS: Gamma-f = 1.00
Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm
Shear index 2m = minimum shear reinforcement

| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement | | dphi deg | Shr zon | VEd/d [MPa] | VRd,ct/d | Ass [cm ² /m ²] |
|-----|------------|----------|-----------|-----------|----------|---------------|-------|-------------|------------|----------------|----------|---|
| | | | | | | main | cross | dir | | | | |
| 3 | 3041 | | | maximum | 0.25 | 0.09 | 0.44 | 0 | 1 | 0.034 | | |
| | | | | | | 2.95 | 0.59 | 0 | | | 0.496 | |
| 3 | 3042 | | | maximum | 0.25 | 0.06 | 0.29 | 0 | 1 | 0.024 | | |
| | | | | | | 2.76 | 0.55 | 0 | | | 0.496 | |
| 3 | 3043 | | | maximum | 0.25 | 2.44 | 1.49 | 0 | 1 | 0.060 | | |
| | | | | | | 1.33 | 0.27 | 0 | | | 0.495 | |
| 3 | 3044 | | | maximum | 0.25 | 1.13 | 1.19 | 0 | 1 | 0.066 | | |
| | | | | | | 2.12 | 0.42 | 0 | | | 0.496 | |
| 3 | 3045 | | | maximum | 0.25 | 0.18 | 0.91 | 0 | 1 | 0.056 | | |
| | | | | | | 2.53 | 0.51 | 0 | | | 0.496 | |
| 3 | 3046 | | | maximum | 0.25 | 0.14 | 0.68 | 0 | 1 | 0.050 | | |
| | | | | | | 2.77 | 0.55 | 0 | | | 0.496 | |
| 3 | 3047 | | | maximum | 0.25 | 0.10 | 0.50 | 0 | 1 | 0.042 | | |
| | | | | | | 3.34 | 0.67 | 0 | | | 0.496 | |
| 3 | 3048 | | | maximum | 0.25 | 0.08 | 0.38 | 0 | 1 | 0.037 | | |
| | | | | | | 2.76 | 0.55 | 0 | | | 0.496 | |
| 3 | 3049 | | | maximum | 0.25 | 2.38 | 1.33 | 0 | 1 | 0.067 | | |
| | | | | | | 1.37 | 0.27 | 0 | | | 0.495 | |
| 3 | 3050 | | | maximum | 0.25 | 1.16 | 1.12 | 0 | 1 | 0.057 | | |
| | | | | | | 2.11 | 0.42 | 0 | | | 0.495 | |
| 3 | 3051 | | | maximum | 0.25 | 0.16 | 0.78 | 0 | 1 | 0.048 | | |
| | | | | | | 2.59 | 0.52 | 0 | | | 0.495 | |
| 3 | 3052 | | | maximum | 0.25 | 0.11 | 0.53 | 0 | 1 | 0.039 | | |
| | | | | | | 2.85 | 0.57 | 0 | | | 0.496 | |
| 3 | 3053 | | | maximum | 0.25 | 0.07 | 0.36 | 0 | 1 | 0.030 | | |
| | | | | | | 2.90 | 0.58 | 0 | | | 0.497 | |
| 3 | 3054 | | | maximum | 0.25 | 0.06 | 0.29 | 0 | 1 | 0.021 | | |
| | | | | | | 2.81 | 0.56 | 0 | | | 0.497 | |
| 3 | 3055 | | | maximum | 0.25 | 2.48 | 1.32 | 0 | 1 | 0.102 | | |
| | | | | | | 1.35 | 0.27 | 0 | | | 0.496 | |
| 3 | 3056 | | | maximum | 0.25 | 1.06 | 0.94 | 0 | 1 | 0.096 | | |
| | | | | | | 2.13 | 0.43 | 0 | | | 0.497 | |
| 3 | 3057 | | | maximum | 0.25 | 0.16 | 0.81 | 0 | 1 | 0.078 | | |
| | | | | | | 2.55 | 0.51 | 0 | | | 0.497 | |
| 3 | 3058 | | | maximum | 0.25 | 0.09 | 0.46 | 0 | 1 | 0.073 | | |
| | | | | | | 3.09 | 0.62 | 0 | | | 0.497 | |
| 3 | 3059 | | | maximum | 0.25 | 0.07 | 0.33 | 0 | 1 | 0.068 | | |
| | | | | | | 2.86 | 0.57 | 0 | | | 0.496 | |
| 3 | 3060 | | | maximum | 0.25 | 0.05 | 0.27 | 0 | 1 | 0.065 | | |
| | | | | | | 2.82 | 0.56 | 0 | | | 0.496 | |
| 3 | 3061 | | | maximum | 0.25 | 2.28 | 0.91 | 0 | 1 | 0.085 | | |
| | | | | | | 1.34 | 0.27 | 0 | | | 0.495 | |
| 3 | 3062 | | | maximum | 0.25 | 1.06 | 0.61 | 0 | 1 | 0.071 | | |
| | | | | | | 2.18 | 0.44 | 0 | | | 0.495 | |
| 3 | 3063 | | | maximum | 0.25 | 0.07 | 0.36 | 0 | 1 | 0.060 | | |
| | | | | | | 2.64 | 0.53 | 0 | | | 0.495 | |
| 3 | 3064 | | | maximum | 0.25 | 0.04 | 0.18 | 0 | 1 | 0.050 | | |
| | | | | | | 2.90 | 0.58 | 0 | | | 0.495 | |
| 3 | 3065 | | | maximum | 0.25 | 0.02 | 0.12 | 0 | 1 | 0.039 | | |
| | | | | | | 2.95 | 0.59 | 0 | | | 0.495 | |
| 3 | 3066 | | | maximum | 0.25 | 0.02 | 0.09 | 0 | 1 | 0.031 | | |
| | | | | | | 2.90 | 0.58 | 0 | | | 0.495 | |
| 3 | 3067 | | | maximum | 0.25 | 2.27 | 0.82 | 0 | 1 | 0.084 | | |
| | | | | | | 1.52 | 0.30 | 0 | | | 0.496 | |
| 3 | 3068 | | | maximum | 0.25 | 1.12 | 0.55 | 0 | 1 | 0.056 | | |
| | | | | | | 2.23 | 0.45 | 0 | | | 0.496 | |
| 3 | 3069 | | | maximum | 0.25 | 0.06 | 0.31 | 0 | 1 | 0.045 | | |
| | | | | | | 2.72 | 0.54 | 0 | | | 0.496 | |
| 3 | 3070 | | | maximum | 0.25 | 0.03 | 0.17 | 0 | 1 | 0.035 | | |
| | | | | | | 2.97 | 0.59 | 0 | | | 0.496 | |
| 3 | 3071 | | | maximum | 0.25 | 0.02 | 0.11 | 0 | 1 | 0.027 | | |
| | | | | | | 3.02 | 0.60 | 0 | | | 0.496 | |
| 3 | 3072 | | | maximum | 0.25 | 0.02 | 0.08 | 0 | 1 | 0.021 | | |
| | | | | | | 2.95 | 0.59 | 0 | | | 0.497 | |
| 3 | 3073 | | | maximum | 0.25 | 2.34 | 0.47 | 0 | 1 | 0.071 | | |
| | | | | | | 1.30 | 0.26 | 0 | | | 0.495 | |
| 3 | 3074 | | | maximum | 0.25 | 0.97 | 0.32 | 0 | 1 | 0.075 | | |
| | | | | | | 2.13 | 0.43 | 0 | | | 0.497 | |
| 3 | 3075 | | | maximum | 0.25 | 0.03 | 0.17 | 0 | 1 | 0.060 | | |
| | | | | | | 2.57 | 0.51 | 0 | | | 0.497 | |
| 3 | 3076 | | | maximum | 0.25 | 0.03 | 0.16 | 0 | 1 | 0.052 | | |
| | | | | | | 2.83 | 0.57 | 0 | | | 0.497 | |
| 3 | 3077 | | | maximum | 0.25 | 0.03 | 0.15 | 0 | 1 | 0.045 | | |
| | | | | | | 2.91 | 0.58 | 0 | | | 0.497 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ-γBd1

| REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm2/m] | | | | | | | | | | upper/lower | |
|--|------------|----------|-----------|-----------|----------|---------------|-------|-------------|------------|----------------|-----------------|
| General load safety factor - as defined in BEMESS: | | | | | | | | | | Gamma-f = 1.00 | |
| Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm | | | | | | | | | | | |
| Shear index 2m = minimum shear reinforcement | | | | | | | | | | | |
| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement | | dphi deg | shr zon | VEd/d [MPa] | Ass [cm2/m2] |
| | | | | | | main | cross | dir | | VRd,ct/d | |
| 3 | 3078 | maximum | | | 0.25 | 0.03 | 0.15 | 0 | 1 | 0.041 | |
| | | | | | | 2.90 | 0.58 | 0 | | 0.497 | |
| 3 | 3079 | maximum | | | 0.25 | 2.23 | 0.45 | 0 | 1 | 0.109 | |
| | | | | | | 1.31 | 0.26 | 0 | | 0.495 | |
| 3 | 3080 | maximum | | | 0.25 | 0.93 | 0.19 | 0 | 1 | 0.090 | |
| | | | | | | 2.15 | 0.43 | 0 | | 0.495 | |
| 3 | 3081 | maximum | | | 0.25 | 0.01 | 0.06 | 0 | 1 | 0.076 | |
| | | | | | | 2.60 | 0.52 | 0 | | 0.495 | |
| 3 | 3082 | maximum | | | 0.25 | 0.01 | 0.03 | 0 | 1 | 0.061 | |
| | | | | | | 2.87 | 0.57 | 0 | | 0.495 | |
| 3 | 3083 | maximum | | | 0.25 | 0.01 | 0.03 | 0 | 1 | 0.044 | |
| | | | | | | 2.93 | 0.59 | 0 | | 0.496 | |
| 3 | 3084 | maximum | | | 0.25 | 0.01 | 0.03 | 0 | 1 | 0.028 | |
| | | | | | | 2.92 | 0.58 | 0 | | 0.496 | |
| 3 | 3085 | maximum | | | 0.25 | | 0.02 | 0 | 1 | 0.021 | |
| | | | | | | 2.78 | 0.56 | 0 | | 0.496 | |
| 3 | 3086 | maximum | | | 0.25 | | 0.02 | 0 | 1 | 0.031 | |
| | | | | | | 2.82 | 0.56 | 0 | | 0.496 | |
| 3 | 3087 | maximum | | | 0.25 | | 0.02 | 0 | 1 | 0.042 | |
| | | | | | | 2.76 | 0.55 | 0 | | 0.496 | |
| 3 | 3088 | maximum | | | 0.25 | | 0.02 | 0 | 1 | 0.053 | |
| | | | | | | 2.52 | 0.50 | 0 | | 0.495 | |
| 3 | 3089 | maximum | | | 0.25 | 0.77 | 0.15 | 0 | 1 | 0.063 | |
| | | | | | | 2.13 | 0.43 | 0 | | 0.495 | |
| 3 | 3090 | maximum | | | 0.25 | 1.98 | 0.40 | 0 | 1 | 0.085 | |
| | | | | | | 1.42 | 0.28 | 0 | | 0.495 | |
| 3 | 3091 | maximum | | | 0.25 | 0.02 | 0.11 | 0 | 1 | 0.029 | |
| | | | | | | 2.77 | 0.55 | 0 | | 0.496 | |
| 3 | 3092 | maximum | | | 0.25 | 0.02 | 0.11 | 0 | 1 | 0.034 | |
| | | | | | | 2.83 | 0.57 | 0 | | 0.496 | |
| 3 | 3093 | maximum | | | 0.25 | 0.02 | 0.11 | 0 | 1 | 0.041 | |
| | | | | | | 2.77 | 0.55 | 0 | | 0.496 | |
| 3 | 3094 | maximum | | | 0.25 | 0.02 | 0.11 | 0 | 1 | 0.048 | |
| | | | | | | 2.52 | 0.50 | 0 | | 0.496 | |
| 3 | 3095 | maximum | | | 0.25 | 0.82 | 0.19 | 0 | 1 | 0.061 | |
| | | | | | | 2.11 | 0.42 | 0 | | 0.496 | |
| 3 | 3096 | maximum | | | 0.25 | 1.98 | 0.40 | 0 | 1 | 0.057 | |
| | | | | | | 1.51 | 0.30 | 0 | | 0.495 | |
| 3 | 3097 | maximum | | | 0.25 | 0.04 | 0.19 | 0 | 1 | 0.026 | |
| | | | | | | 2.76 | 0.55 | 0 | | 0.496 | |
| 3 | 3098 | maximum | | | 0.25 | 0.04 | 0.20 | 0 | 1 | 0.029 | |
| | | | | | | 2.84 | 0.57 | 0 | | 0.496 | |
| 3 | 3099 | maximum | | | 0.25 | 0.04 | 0.20 | 0 | 1 | 0.034 | |
| | | | | | | 2.79 | 0.56 | 0 | | 0.496 | |
| 3 | 3100 | maximum | | | 0.25 | 0.04 | 0.20 | 0 | 1 | 0.043 | |
| | | | | | | 2.55 | 0.51 | 0 | | 0.495 | |
| 3 | 3101 | maximum | | | 0.25 | 0.85 | 0.25 | 0 | 1 | 0.054 | |
| | | | | | | 2.11 | 0.42 | 0 | | 0.495 | |
| 3 | 3102 | maximum | | | 0.25 | 2.03 | 0.61 | 0 | 1 | 0.094 | |
| | | | | | | 1.54 | 0.31 | 0 | | 0.496 | |
| 3 | 3103 | maximum | | | 0.25 | 0.02 | 0.11 | 0 | 1 | 0.018 | |
| | | | | | | 2.77 | 0.55 | 0 | | 0.496 | |
| 3 | 3104 | maximum | | | 0.25 | 0.03 | 0.13 | 0 | 1 | 0.028 | |
| | | | | | | 2.82 | 0.56 | 0 | | 0.496 | |
| 3 | 3105 | maximum | | | 0.25 | 0.04 | 0.19 | 0 | 1 | 0.039 | |
| | | | | | | 2.77 | 0.55 | 0 | | 0.496 | |
| 3 | 3106 | maximum | | | 0.25 | 0.06 | 0.28 | 0 | 1 | 0.052 | |
| | | | | | | 2.52 | 0.50 | 0 | | 0.495 | |
| 3 | 3107 | maximum | | | 0.25 | 0.90 | 0.45 | 0 | 1 | 0.070 | |
| | | | | | | 2.10 | 0.42 | 0 | | 0.495 | |
| 3 | 3108 | maximum | | | 0.25 | 2.00 | 0.71 | 0 | 1 | 0.094 | |
| | | | | | | 1.37 | 0.27 | 0 | | 0.495 | |
| 3 | 3109 | maximum | | | 0.25 | 0.03 | 0.17 | 0 | 1 | 0.034 | |
| | | | | | | 2.76 | 0.55 | 0 | | 0.496 | |
| 3 | 3110 | maximum | | | 0.25 | 0.05 | 0.25 | 0 | 1 | 0.040 | |
| | | | | | | 2.83 | 0.57 | 0 | | 0.496 | |
| 3 | 3111 | maximum | | | 0.25 | 0.08 | 0.38 | 0 | 1 | 0.052 | |
| | | | | | | 2.80 | 0.56 | 0 | | 0.496 | |
| 3 | 3112 | maximum | | | 0.25 | 0.12 | 0.59 | 0 | 1 | 0.064 | |
| | | | | | | 2.56 | 0.51 | 0 | | 0.496 | |
| 3 | 3113 | maximum | | | 0.25 | 1.05 | 0.96 | 0 | 1 | 0.090 | |
| | | | | | | 2.12 | 0.42 | 0 | | 0.496 | |
| 3 | 3114 | maximum | | | 0.25 | 2.20 | 1.19 | 0 | 1 | 0.104 | |
| | | | | | | 1.57 | 0.31 | 0 | | 0.496 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ-γBd1

| REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm2/m] upper/lower | | | | | | | | | | | |
|---|------------|----------|-----------|-----------|----------|---------------|-------|-------------|------------|----------------|-----------------|
| General load safety factor - as defined in BEMESS: Gamma-f = 1.00 | | | | | | | | | | | |
| Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm | | | | | | | | | | | |
| Shear index 2m = minimum shear reinforcement | | | | | | | | | | | |
| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement | | dphi deg | shr zon | VEd/d [MPa] | Ass [cm2/m2] |
| | | | | | | main | cross | dir | | VRd,ct/d | |
| 3 | 3115 | | maximum | | 0.25 | 0.06 | 0.30 | 0 | 1 | 0.024 | |
| | | | | | | 2.75 | 0.55 | 0 | | 0.496 | |
| 3 | 3116 | | maximum | | 0.25 | 0.08 | 0.38 | 0 | 1 | 0.029 | |
| | | | | | | 2.81 | 0.56 | 0 | | 0.496 | |
| 3 | 3117 | | maximum | | 0.25 | 0.10 | 0.50 | 0 | 1 | 0.036 | |
| | | | | | | 2.76 | 0.55 | 0 | | 0.495 | |
| 3 | 3118 | | maximum | | 0.25 | 0.13 | 0.66 | 0 | 1 | 0.046 | |
| | | | | | | 2.52 | 0.50 | 0 | | 0.495 | |
| 3 | 3119 | | maximum | | 0.25 | 0.99 | 0.87 | 0 | 1 | 0.056 | |
| | | | | | | 2.12 | 0.42 | 0 | | 0.495 | |
| 3 | 3120 | | maximum | | 0.25 | 2.21 | 1.17 | 0 | 1 | 0.076 | |
| | | | | | | 1.40 | 0.28 | 0 | | 0.495 | |
| 3 | 3121 | | maximum | | 0.25 | 0.06 | 0.29 | 0 | 1 | 0.024 | |
| | | | | | | 2.77 | 0.55 | 0 | | 0.496 | |
| 3 | 3122 | | maximum | | 0.25 | 0.09 | 0.43 | 0 | 1 | 0.034 | |
| | | | | | | 2.97 | 0.59 | 0 | | 0.496 | |
| 3 | 3123 | | maximum | | 0.25 | 0.13 | 0.63 | 0 | 1 | 0.045 | |
| | | | | | | 2.82 | 0.56 | 0 | | 0.496 | |
| 3 | 3124 | | maximum | | 0.25 | 0.18 | 0.91 | 0 | 1 | 0.056 | |
| | | | | | | 2.58 | 0.52 | 0 | | 0.496 | |
| 3 | 3125 | | maximum | | 0.25 | 1.11 | 1.24 | 0 | 1 | 0.072 | |
| | | | | | | 2.14 | 0.43 | 0 | | 0.496 | |
| 3 | 3126 | | maximum | | 0.25 | 2.26 | 1.38 | 0 | 1 | 0.072 | |
| | | | | | | 1.49 | 0.30 | 0 | | 0.495 | |
| 3 | 3127 | | maximum | | 0.25 | 0.08 | 0.38 | 0 | 1 | 0.037 | |
| | | | | | | 2.77 | 0.55 | 0 | | 0.496 | |
| 3 | 3128 | | maximum | | 0.25 | 0.10 | 0.49 | 0 | 1 | 0.042 | |
| | | | | | | 3.36 | 0.67 | 0 | | 0.496 | |
| 3 | 3129 | | maximum | | 0.25 | 0.13 | 0.67 | 0 | 1 | 0.049 | |
| | | | | | | 2.80 | 0.56 | 0 | | 0.496 | |
| 3 | 3130 | | maximum | | 0.25 | 0.18 | 0.90 | 0 | 1 | 0.055 | |
| | | | | | | 2.57 | 0.51 | 0 | | 0.496 | |
| 3 | 3131 | | maximum | | 0.25 | 1.08 | 1.18 | 0 | 1 | 0.065 | |
| | | | | | | 2.18 | 0.44 | 0 | | 0.496 | |
| 3 | 3132 | | maximum | | 0.25 | 2.37 | 1.48 | 0 | 1 | 0.060 | |
| | | | | | | 1.39 | 0.28 | 0 | | 0.495 | |
| 3 | 3133 | | maximum | | 0.25 | 0.06 | 0.28 | 0 | 1 | 0.021 | |
| | | | | | | 2.82 | 0.56 | 0 | | 0.497 | |
| 3 | 3134 | | maximum | | 0.25 | 0.07 | 0.36 | 0 | 1 | 0.030 | |
| | | | | | | 2.92 | 0.58 | 0 | | 0.497 | |
| 3 | 3135 | | maximum | | 0.25 | 0.10 | 0.52 | 0 | 1 | 0.039 | |
| | | | | | | 2.88 | 0.58 | 0 | | 0.496 | |
| 3 | 3136 | | maximum | | 0.25 | 0.15 | 0.76 | 0 | 1 | 0.047 | |
| | | | | | | 2.63 | 0.53 | 0 | | 0.495 | |
| 3 | 3137 | | maximum | | 0.25 | 1.11 | 1.11 | 0 | 1 | 0.056 | |
| | | | | | | 2.16 | 0.43 | 0 | | 0.495 | |
| 3 | 3138 | | maximum | | 0.25 | 2.32 | 1.31 | 0 | 1 | 0.066 | |
| | | | | | | 1.44 | 0.29 | 0 | | 0.495 | |
| 3 | 3139 | | maximum | | 0.25 | 0.05 | 0.27 | 0 | 1 | 0.065 | |
| | | | | | | 2.83 | 0.57 | 0 | | 0.496 | |
| 3 | 3140 | | maximum | | 0.25 | 0.07 | 0.33 | 0 | 1 | 0.068 | |
| | | | | | | 2.87 | 0.57 | 0 | | 0.496 | |
| 3 | 3141 | | maximum | | 0.25 | 0.09 | 0.45 | 0 | 1 | 0.073 | |
| | | | | | | 3.12 | 0.62 | 0 | | 0.497 | |
| 3 | 3142 | | maximum | | 0.25 | 0.13 | 0.63 | 0 | 1 | 0.077 | |
| | | | | | | 2.59 | 0.52 | 0 | | 0.497 | |
| 3 | 3143 | | maximum | | 0.25 | 1.01 | 0.93 | 0 | 1 | 0.095 | |
| | | | | | | 2.18 | 0.44 | 0 | | 0.497 | |
| 3 | 3144 | | maximum | | 0.25 | 2.42 | 1.31 | 0 | 1 | 0.101 | |
| | | | | | | 1.41 | 0.28 | 0 | | 0.496 | |
| 3 | 3145 | | maximum | | 0.25 | 0.02 | 0.09 | 0 | 1 | 0.031 | |
| | | | | | | 2.91 | 0.58 | 0 | | 0.495 | |
| 3 | 3146 | | maximum | | 0.25 | 0.02 | 0.12 | 0 | 1 | 0.039 | |
| | | | | | | 2.96 | 0.59 | 0 | | 0.495 | |
| 3 | 3147 | | maximum | | 0.25 | 0.04 | 0.18 | 0 | 1 | 0.049 | |
| | | | | | | 2.93 | 0.59 | 0 | | 0.495 | |
| 3 | 3148 | | maximum | | 0.25 | 0.07 | 0.35 | 0 | 1 | 0.059 | |
| | | | | | | 2.67 | 0.53 | 0 | | 0.495 | |
| 3 | 3149 | | maximum | | 0.25 | 1.01 | 0.61 | 0 | 1 | 0.070 | |
| | | | | | | 2.23 | 0.45 | 0 | | 0.495 | |
| 3 | 3150 | | maximum | | 0.25 | 2.22 | 0.90 | 0 | 1 | 0.085 | |
| | | | | | | 1.40 | 0.28 | 0 | | 0.495 | |
| 3 | 3151 | | maximum | | 0.25 | 0.02 | 0.09 | 0 | 1 | 0.020 | |
| | | | | | | 2.96 | 0.59 | 0 | | 0.497 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ-γBd1

| REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm2/m] upper/lower | | | | | | | | | | | | |
|---|------------|----------|-----------|-----------|----------|-----------------------------|------|-------------|------------|----------------|----------------------|-----|
| General load safety factor - as defined in BEMESS: Gamma-f = 1.00 | | | | | | | | | | | | |
| Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm | | | | | | | | | | | | |
| Shear index 2m = minimum shear reinforcement | | | | | | | | | | | | |
| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement main cross | | dphi deg | Shr zon | VEd/d [MPa] | VRd,ct/d [cm2/m2] | Ass |
| 3 | 3152 | maximum | | | 0.25 | 0.02 | 0.11 | 0 | 1 | 0.027 | | |
| | | | | | | 3.03 | 0.61 | 0 | | 0.496 | | |
| 3 | 3153 | maximum | | | 0.25 | 0.03 | 0.17 | 0 | 1 | 0.035 | | |
| | | | | | | 3.00 | 0.60 | 0 | | 0.496 | | |
| 3 | 3154 | maximum | | | 0.25 | 0.06 | 0.30 | 0 | 1 | 0.045 | | |
| | | | | | | 2.75 | 0.55 | 0 | | 0.496 | | |
| 3 | 3155 | maximum | | | 0.25 | 1.07 | 0.55 | 0 | 1 | 0.056 | | |
| | | | | | | 2.28 | 0.46 | 0 | | 0.496 | | |
| 3 | 3156 | maximum | | | 0.25 | 2.21 | 0.80 | 0 | 1 | 0.085 | | |
| | | | | | | 1.57 | 0.31 | 0 | | 0.496 | | |
| 3 | 3157 | maximum | | | 0.25 | 0.03 | 0.15 | 0 | 1 | 0.041 | | |
| | | | | | | 2.91 | 0.58 | 0 | | 0.497 | | |
| 3 | 3158 | maximum | | | 0.25 | 0.03 | 0.15 | 0 | 1 | 0.045 | | |
| | | | | | | 2.93 | 0.59 | 0 | | 0.497 | | |
| 3 | 3159 | maximum | | | 0.25 | 0.03 | 0.16 | 0 | 1 | 0.052 | | |
| | | | | | | 2.86 | 0.57 | 0 | | 0.497 | | |
| 3 | 3160 | maximum | | | 0.25 | 0.03 | 0.17 | 0 | 1 | 0.059 | | |
| | | | | | | 2.61 | 0.52 | 0 | | 0.497 | | |
| 3 | 3161 | maximum | | | 0.25 | 0.91 | 0.31 | 0 | 1 | 0.074 | | |
| | | | | | | 2.18 | 0.44 | 0 | | 0.497 | | |
| 3 | 3162 | maximum | | | 0.25 | 2.27 | 0.45 | 0 | 1 | 0.072 | | |
| | | | | | | 1.35 | 0.27 | 0 | | 0.495 | | |
| 3 | 3163 | maximum | | | 0.25 | 0.01 | 0.03 | 0 | 1 | 0.027 | | |
| | | | | | | 2.93 | 0.59 | 0 | | 0.496 | | |
| 3 | 3164 | maximum | | | 0.25 | 0.01 | 0.03 | 0 | 1 | 0.044 | | |
| | | | | | | 2.95 | 0.59 | 0 | | 0.496 | | |
| 3 | 3165 | maximum | | | 0.25 | 0.01 | 0.03 | 0 | 1 | 0.060 | | |
| | | | | | | 2.90 | 0.58 | 0 | | 0.495 | | |
| 3 | 3166 | maximum | | | 0.25 | 0.01 | 0.05 | 0 | 1 | 0.076 | | |
| | | | | | | 2.64 | 0.53 | 0 | | 0.495 | | |
| 3 | 3167 | maximum | | | 0.25 | 0.88 | 0.18 | 0 | 1 | 0.089 | | |
| | | | | | | 2.19 | 0.44 | 0 | | 0.495 | | |
| 3 | 3168 | maximum | | | 0.25 | 2.17 | 0.43 | 0 | 1 | 0.109 | | |
| | | | | | | 1.36 | 0.27 | 0 | | 0.495 | | |
| 4 | 4001 | maximum | | | 0.25 | 9.18 | 1.84 | 0 | 1 | | | |
| | | | | | | 2.18 | 0.44 | 0 | | 0.497 | | |
| 4 | 4002 | maximum | | | 0.25 | 3.54 | 0.71 | 0 | 1 | 0.412 | | |
| | | | | | | 0.92 | 0.23 | 0 | | 0.495 | | |
| 4 | 4003 | maximum | | | 0.25 | 7.04 | 1.99 | 0 | 2 | 0.513 | 9.85 | |
| | | | | | | 1.51 | 0.64 | 0 | | 0.495 | | |
| 4 | 4004 | maximum | | | 0.25 | 3.07 | 0.61 | 0 | 1 | 0.369 | | |
| | | | | | | 0.68 | 0.62 | 0 | | 0.496 | | |
| 4 | 4005 | maximum | | | 0.25 | 7.14 | 2.26 | 0 | 2 | 0.822 | 15.80 | |
| | | | | | | 1.51 | 0.44 | 0 | | 0.495 | | |
| 4 | 4006 | maximum | | | 0.25 | 3.22 | 0.98 | 0 | 2 | 0.534 | 10.26 | |
| | | | | | | 0.73 | 0.34 | 0 | | 0.496 | | |
| 4 | 4007 | maximum | | | 0.25 | 8.72 | 2.83 | 0 | 1 | | | |
| | | | | | | 1.80 | 0.36 | 0 | | 0.497 | | |
| 4 | 4008 | maximum | | | 0.25 | 3.37 | 1.23 | 0 | 1 | 0.309 | | |
| | | | | | | 0.79 | 0.16 | 0 | | 0.495 | | |
| 4 | 4009 | maximum | | | 0.25 | 7.15 | 2.87 | 0 | 2 | 0.723 | 13.89 | |
| | | | | | | 1.36 | 0.27 | 0 | | 0.495 | | |
| 4 | 4010 | maximum | | | 0.25 | 3.50 | 1.58 | 0 | 1 | 0.410 | | |
| | | | | | | 0.71 | 0.14 | 0 | | 0.496 | | |
| 4 | 4011 | maximum | | | 0.25 | 7.62 | 3.26 | 0 | 2 | 0.621 | 11.94 | |
| | | | | | | 1.49 | 0.30 | 0 | | 0.495 | | |
| 4 | 4012 | maximum | | | 0.25 | 3.47 | 1.50 | 0 | 1 | 0.318 | | |
| | | | | | | 0.69 | 0.14 | 0 | | 0.496 | | |
| 4 | 4013 | maximum | | | 0.25 | 7.61 | 3.27 | 0 | 2 | 0.616 | 11.84 | |
| | | | | | | 1.42 | 0.28 | 0 | | 0.495 | | |
| 4 | 4014 | maximum | | | 0.25 | 3.61 | 1.74 | 0 | 1 | 0.284 | | |
| | | | | | | 0.72 | 0.14 | 0 | | 0.495 | | |
| 4 | 4015 | maximum | | | 0.25 | 7.56 | 3.00 | 0 | 2 | 0.648 | 12.45 | |
| | | | | | | 1.45 | 0.29 | 0 | | 0.495 | | |
| 4 | 4016 | maximum | | | 0.25 | 3.69 | 1.71 | 0 | 1 | 0.313 | | |
| | | | | | | 0.69 | 0.14 | 0 | | 0.495 | | |
| 4 | 4017 | maximum | | | 0.25 | 7.83 | 3.62 | 0 | 2 | 0.598 | 11.50 | |
| | | | | | | 1.36 | 0.27 | 0 | | 0.495 | | |
| 4 | 4018 | maximum | | | 0.25 | 3.53 | 1.64 | 0 | 1 | 0.294 | | |
| | | | | | | 0.65 | 0.13 | 0 | | 0.495 | | |
| 4 | 4019 | maximum | | | 0.25 | 7.22 | 2.53 | 0 | 2 | 0.815 | 15.65 | |
| | | | | | | 1.33 | 0.30 | 0 | | 0.495 | | |
| 4 | 4020 | maximum | | | 0.25 | 3.64 | 1.54 | 0 | 1 | 0.451 | | |
| | | | | | | 0.75 | 0.15 | 0 | | 0.496 | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ-γBd1

| REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm2/m] upper/lower | | | | | | | | | | | |
|---|---------|---------|--------|--------|-------|---------------|-------|----------|---------|-------------|--------------|
| General load safety factor - as defined in BEMESS: Gamma-f = 1.00 | | | | | | | | | | | |
| Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm | | | | | | | | | | | |
| Shear index 2m = minimum shear reinforcement | | | | | | | | | | | |
| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement | | dphi deg | shr zon | VEd/d [MPa] | Ass [cm2/m2] |
| | | | | | | main | cross | dir | | VRd,ct/d | |
| 4 | 4021 | maximum | | | 0.25 | 9.10 | 3.01 | 0 | 1 | | |
| | | | | | | 1.65 | 0.33 | 0 | | 0.497 | |
| 4 | 4022 | maximum | | | 0.25 | 3.62 | 1.41 | 0 | 1 | 0.308 | |
| | | | | | | 0.73 | 0.15 | 0 | | 0.496 | |
| 4 | 4023 | maximum | | | 0.25 | 7.62 | 2.92 | 0 | 2 | 0.773 | 14.84 |
| | | | | | | 1.41 | 0.28 | 0 | | 0.495 | |
| 4 | 4024 | maximum | | | 0.25 | 3.37 | 1.38 | 0 | 2 | 0.507 | 9.75 |
| | | | | | | 0.64 | 0.18 | 0 | | 0.496 | |
| 4 | 4025 | maximum | | | 0.25 | 7.34 | 1.69 | 0 | 2 | 0.634 | 12.18 |
| | | | | | | 1.64 | 0.99 | 0 | | 0.495 | |
| 4 | 4026 | maximum | | | 0.25 | 3.23 | 0.65 | 0 | 1 | 0.398 | |
| | | | | | | 0.68 | 0.76 | 0 | | 0.496 | |
| 4 | 4027 | maximum | | | 0.25 | 9.79 | 1.96 | 0 | 1 | | |
| | | | | | | 1.97 | 0.42 | 0 | | 0.498 | |
| 4 | 4028 | maximum | | | 0.25 | 3.73 | 0.75 | 0 | 1 | 0.457 | |
| | | | | | | 0.94 | 0.28 | 0 | | 0.495 | |
| 4 | 4029 | maximum | | | 0.25 | 3.46 | 0.69 | 0 | 1 | 0.403 | |
| | | | | | | 0.99 | 0.22 | 0 | | 0.495 | |
| 4 | 4030 | maximum | | | 0.25 | 8.97 | 1.79 | 0 | 1 | | |
| | | | | | | 2.35 | 0.47 | 0 | | 0.497 | |
| 4 | 4031 | maximum | | | 0.25 | 3.01 | 0.60 | 0 | 1 | 0.360 | |
| | | | | | | 0.74 | 0.60 | 0 | | 0.496 | |
| 4 | 4032 | maximum | | | 0.25 | 6.89 | 1.95 | 0 | 2 | 0.501 | 9.63 |
| | | | | | | 1.64 | 0.63 | 0 | | 0.495 | |
| 4 | 4033 | maximum | | | 0.25 | 3.15 | 0.98 | 0 | 2 | 0.524 | 10.07 |
| | | | | | | 0.80 | 0.34 | 0 | | 0.496 | |
| 4 | 4034 | maximum | | | 0.25 | 6.99 | 2.22 | 0 | 2 | 0.809 | 15.54 |
| | | | | | | 1.65 | 0.48 | 0 | | 0.495 | |
| 4 | 4035 | maximum | | | 0.25 | 3.29 | 1.22 | 0 | 1 | 0.304 | |
| | | | | | | 0.86 | 0.17 | 0 | | 0.495 | |
| 4 | 4036 | maximum | | | 0.25 | 8.53 | 2.78 | 0 | 1 | | |
| | | | | | | 1.95 | 0.39 | 0 | | 0.497 | |
| 4 | 4037 | maximum | | | 0.25 | 3.42 | 1.58 | 0 | 1 | 0.400 | |
| | | | | | | 0.78 | 0.16 | 0 | | 0.496 | |
| 4 | 4038 | maximum | | | 0.25 | 7.00 | 2.84 | 0 | 2 | 0.708 | 13.61 |
| | | | | | | 1.48 | 0.30 | 0 | | 0.495 | |
| 4 | 4039 | maximum | | | 0.25 | 3.40 | 1.49 | 0 | 1 | 0.312 | |
| | | | | | | 0.75 | 0.15 | 0 | | 0.496 | |
| 4 | 4040 | maximum | | | 0.25 | 7.46 | 3.21 | 0 | 2 | 0.610 | 11.71 |
| | | | | | | 1.63 | 0.33 | 0 | | 0.495 | |
| 4 | 4041 | maximum | | | 0.25 | 3.53 | 1.73 | 0 | 1 | 0.279 | |
| | | | | | | 0.79 | 0.16 | 0 | | 0.495 | |
| 4 | 4042 | maximum | | | 0.25 | 7.45 | 3.23 | 0 | 2 | 0.605 | 11.61 |
| | | | | | | 1.56 | 0.31 | 0 | | 0.495 | |
| 4 | 4043 | maximum | | | 0.25 | 3.61 | 1.69 | 0 | 1 | 0.307 | |
| | | | | | | 0.75 | 0.15 | 0 | | 0.495 | |
| 4 | 4044 | maximum | | | 0.25 | 7.40 | 2.96 | 0 | 2 | 0.635 | 12.20 |
| | | | | | | 1.58 | 0.32 | 0 | | 0.495 | |
| 4 | 4045 | maximum | | | 0.25 | 3.46 | 1.62 | 0 | 1 | 0.288 | |
| | | | | | | 0.72 | 0.14 | 0 | | 0.495 | |
| 4 | 4046 | maximum | | | 0.25 | 7.67 | 3.56 | 0 | 2 | 0.586 | 11.26 |
| | | | | | | 1.50 | 0.30 | 0 | | 0.495 | |
| 4 | 4047 | maximum | | | 0.25 | 3.57 | 1.52 | 0 | 1 | 0.441 | |
| | | | | | | 0.72 | 0.14 | 0 | | 0.496 | |
| 4 | 4048 | maximum | | | 0.25 | 7.07 | 2.48 | 0 | 2 | 0.800 | 15.37 |
| | | | | | | 1.46 | 0.34 | 0 | | 0.495 | |
| 4 | 4049 | maximum | | | 0.25 | 3.54 | 1.39 | 0 | 1 | 0.302 | |
| | | | | | | 0.79 | 0.16 | 0 | | 0.496 | |
| 4 | 4050 | maximum | | | 0.25 | 8.90 | 2.96 | 0 | 1 | | |
| | | | | | | 1.81 | 0.36 | 0 | | 0.497 | |
| 4 | 4051 | maximum | | | 0.25 | 3.30 | 1.38 | 0 | 2 | 0.497 | 9.54 |
| | | | | | | 0.72 | 0.18 | 0 | | 0.496 | |
| 4 | 4052 | maximum | | | 0.25 | 7.46 | 2.88 | 0 | 2 | 0.757 | 14.55 |
| | | | | | | 1.41 | 0.28 | 0 | | 0.495 | |
| 4 | 4053 | maximum | | | 0.25 | 3.17 | 0.63 | 0 | 1 | 0.390 | |
| | | | | | | 0.72 | 0.75 | 0 | | 0.496 | |
| 4 | 4054 | maximum | | | 0.25 | 7.18 | 1.65 | 0 | 2 | 0.623 | 11.96 |
| | | | | | | 1.50 | 0.98 | 0 | | 0.495 | |
| 4 | 4055 | maximum | | | 0.25 | 3.65 | 0.73 | 0 | 1 | 0.449 | |
| | | | | | | 1.01 | 0.28 | 0 | | 0.495 | |
| 4 | 4056 | maximum | | | 0.25 | 9.57 | 1.91 | 0 | 1 | | |
| | | | | | | 2.14 | 0.44 | 0 | | 0.498 | |
| 8 | 8001 | maximum | | | 1.20 | 3.41 | 9.34 | 0 | 1 | 0.135 | |
| | | | | | | 4.52 | 17.05 | 0 | | 0.294 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ-γBd1

| REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm2/m] | | | | | | | | | | upper/lower | |
|--|------------|----------|-----------|-----------|----------|-----------------------------|-------|-------------|------------|----------------|-----------------|
| General load safety factor - as defined in BEMESS: | | | | | | | | | | Gamma-f = 1.00 | |
| Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm | | | | | | | | | | | |
| Shear index 2m = minimum shear reinforcement | | | | | | | | | | | |
| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement main cross | | dphi deg | shr zon | VEd/d [MPa] | Ass [cm2/m2] |
| | | | | | | | | | | VRd,ct/d | |
| 8 | 8002 | maximum | | | 1.20 | 4.22 | 21.09 | 0 | 1 | 0.196 | |
| | | | | | | 7.90 | 39.48 | 0 | | 0.316 | |
| 8 | 8003 | maximum | | | 1.20 | 13.20 | 27.76 | 0 | 1 | 0.221 | |
| | | | | | | 31.93 | 76.82 | 0 | | 0.406 | |
| 8 | 8004 | maximum | | | 1.20 | 5.92 | 15.91 | 0 | 1 | 0.251 | |
| | | | | | | 6.73 | 33.64 | 0 | | 0.308 | |
| 8 | 8005 | maximum | | | 1.20 | 13.85 | 23.04 | 0 | 1 | 0.269 | |
| | | | | | | 33.19 | 71.75 | 0 | | 0.409 | |
| 8 | 8006 | maximum | | | 1.20 | 1.90 | 9.48 | 0 | 1 | 0.296 | |
| | | | | | | 5.23 | 26.13 | 0 | | 0.348 | |
| 8 | 8007 | maximum | | | 1.20 | 9.39 | 6.51 | 0 | 1 | 0.120 | |
| | | | | | | 6.98 | 13.20 | 0 | | 0.317 | |
| 8 | 8008 | maximum | | | 1.20 | 1.85 | 9.25 | 0 | 2m | 0.347 | 4.92 |
| | | | | | | 5.19 | 25.96 | 0 | | 0.375 | |
| 8 | 8009 | maximum | | | 1.20 | 15.19 | 22.62 | 0 | 1 | 0.165 | |
| | | | | | | 34.04 | 66.34 | 0 | | 0.395 | |
| 8 | 8010 | maximum | | | 1.20 | 1.81 | 9.06 | 0 | 2 | 0.402 | 5.64 |
| | | | | | | 5.02 | 25.09 | 0 | | 0.383 | |
| 8 | 8011 | maximum | | | 1.20 | 14.30 | 18.85 | 0 | 1 | 0.178 | |
| | | | | | | 25.66 | 52.13 | 0 | | 0.353 | |
| 8 | 8012 | maximum | | | 1.20 | 2.21 | 11.03 | 0 | 1 | 0.242 | |
| | | | | | | 5.86 | 29.31 | 0 | | 0.406 | |
| 8 | 8013 | maximum | | | 1.20 | 11.76 | 17.94 | 0 | 1 | 0.154 | |
| | | | | | | 23.30 | 48.82 | 0 | | 0.338 | |
| 8 | 8014 | maximum | | | 1.20 | 2.83 | 14.13 | 0 | 1 | 0.235 | |
| | | | | | | 6.65 | 33.25 | 0 | | 0.412 | |
| 8 | 8015 | maximum | | | 1.20 | 11.40 | 17.85 | 0 | 1 | 0.167 | |
| | | | | | | 22.79 | 48.40 | 0 | | 0.342 | |
| 8 | 8016 | maximum | | | 1.20 | 2.80 | 14.01 | 0 | 1 | 0.237 | |
| | | | | | | 6.71 | 33.56 | 0 | | 0.411 | |
| 8 | 8017 | maximum | | | 1.20 | 14.72 | 18.52 | 0 | 1 | 0.173 | |
| | | | | | | 26.52 | 53.42 | 0 | | 0.360 | |
| 8 | 8018 | maximum | | | 1.20 | 2.14 | 10.70 | 0 | 1 | 0.251 | |
| | | | | | | 5.97 | 29.84 | 0 | | 0.406 | |
| 8 | 8019 | maximum | | | 1.20 | 14.66 | 21.97 | 0 | 1 | 0.168 | |
| | | | | | | 33.98 | 67.05 | 0 | | 0.396 | |
| 8 | 8020 | maximum | | | 1.20 | 1.74 | 8.71 | 0 | 2 | 0.408 | 5.73 |
| | | | | | | 5.10 | 25.52 | 0 | | 0.384 | |
| 8 | 8021 | maximum | | | 1.20 | 11.24 | 6.37 | 0 | 1 | 0.140 | |
| | | | | | | 6.23 | 13.15 | 0 | | 0.313 | |
| 8 | 8022 | maximum | | | 1.20 | 1.76 | 8.81 | 0 | 2 | 0.369 | 5.19 |
| | | | | | | 5.24 | 26.21 | 0 | | 0.374 | |
| 8 | 8023 | maximum | | | 1.20 | 14.42 | 21.80 | 0 | 1 | 0.285 | |
| | | | | | | 35.43 | 75.15 | 0 | | 0.421 | |
| 8 | 8024 | maximum | | | 1.20 | 1.77 | 8.84 | 0 | 1 | 0.320 | |
| | | | | | | 5.32 | 26.59 | 0 | | 0.348 | |
| 8 | 8025 | maximum | | | 1.20 | 12.71 | 26.06 | 0 | 1 | 0.234 | |
| | | | | | | 32.98 | 79.43 | 0 | | 0.417 | |
| 8 | 8026 | maximum | | | 1.20 | 6.24 | 15.21 | 0 | 1 | 0.270 | |
| | | | | | | 6.79 | 33.94 | 0 | | 0.316 | |
| 8 | 8027 | maximum | | | 1.20 | 3.61 | 8.72 | 0 | 1 | 0.143 | |
| | | | | | | 4.57 | 17.12 | 0 | | 0.298 | |
| 8 | 8028 | maximum | | | 1.20 | 4.03 | 20.17 | 0 | 1 | 0.243 | |
| | | | | | | 7.98 | 39.88 | 0 | | 0.312 | |
| 8 | 8029 | maximum | | | 1.20 | 3.51 | 9.80 | 0 | 1 | 0.132 | |
| | | | | | | 4.48 | 16.77 | 0 | | 0.293 | |
| 8 | 8030 | maximum | | | 1.20 | 13.90 | 29.60 | 0 | 1 | 0.218 | |
| | | | | | | 31.27 | 74.92 | 0 | | 0.402 | |
| 8 | 8031 | maximum | | | 1.20 | 4.42 | 22.11 | 0 | 1 | 0.196 | |
| | | | | | | 7.75 | 38.75 | 0 | | 0.316 | |
| 8 | 8032 | maximum | | | 1.20 | 5.85 | 16.85 | 0 | 1 | 0.247 | |
| | | | | | | 6.58 | 32.89 | 0 | | 0.306 | |
| 8 | 8033 | maximum | | | 1.20 | 14.56 | 24.77 | 0 | 1 | 0.267 | |
| | | | | | | 32.39 | 69.77 | 0 | | 0.405 | |
| 8 | 8034 | maximum | | | 1.20 | 9.60 | 6.95 | 0 | 1 | 0.119 | |
| | | | | | | 7.16 | 12.94 | 0 | | 0.316 | |
| 8 | 8035 | maximum | | | 1.20 | 16.01 | 24.22 | 0 | 1 | 0.164 | |
| | | | | | | 33.53 | 64.66 | 0 | | 0.391 | |
| 8 | 8036 | maximum | | | 1.20 | 2.06 | 10.32 | 0 | 1 | 0.291 | |
| | | | | | | 5.09 | 25.43 | 0 | | 0.348 | |
| 8 | 8037 | maximum | | | 1.20 | 2.01 | 10.06 | 0 | 1 | 0.342 | |
| | | | | | | 5.05 | 25.25 | 0 | | 0.376 | |
| 8 | 8038 | maximum | | | 1.20 | 1.96 | 9.78 | 0 | 2 | 0.395 | 5.54 |
| | | | | | | 4.87 | 24.37 | 0 | | 0.384 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ-γBd1

| REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm2/m] upper/lower | | | | | | | | | | | | |
|---|------------|----------|-----------|-----------|----------|-----------------------------|-------|-------------|------------|----------------|-------------------|-----------------|
| General load safety factor - as defined in BEMESS: Gamma-f = 1.00 | | | | | | | | | | | | |
| Shear: stresses VEd/d and VRd,ct/d with d=effective depth = h-hm | | | | | | | | | | | | |
| Shear index 2m = minimum shear reinforcement | | | | | | | | | | | | |
| Grp | ELEM No | LC No | MAT No | GEO No | h [m] | Reinforcement main cross | | dphi deg | Shr zon | VEd/d [MPa] | VRd,ct/d [MPa] | Ass [cm2/m2] |
| 8 | 8039 | maximum | | | 1.20 | 14.96 | 20.11 | 0 | 1 | 0.178 | | |
| | | | | | | 25.35 | 50.80 | 0 | | 0.349 | | |
| 8 | 8040 | maximum | | | 1.20 | 12.29 | 19.12 | 0 | 1 | 0.154 | | |
| | | | | | | 22.95 | 47.57 | 0 | | 0.335 | | |
| 8 | 8041 | maximum | | | 1.20 | 2.35 | 11.77 | 0 | 1 | 0.239 | | |
| | | | | | | 5.68 | 28.39 | 0 | | 0.408 | | |
| 8 | 8042 | maximum | | | 1.20 | 3.00 | 15.00 | 0 | 1 | 0.232 | | |
| | | | | | | 6.48 | 32.40 | 0 | | 0.413 | | |
| 8 | 8043 | maximum | | | 1.20 | 11.96 | 19.14 | 0 | 1 | 0.167 | | |
| | | | | | | 22.47 | 47.25 | 0 | | 0.339 | | |
| 8 | 8044 | maximum | | | 1.20 | 15.19 | 19.81 | 0 | 1 | 0.173 | | |
| | | | | | | 26.01 | 52.10 | 0 | | 0.356 | | |
| 8 | 8045 | maximum | | | 1.20 | 2.99 | 14.93 | 0 | 1 | 0.234 | | |
| | | | | | | 6.54 | 32.72 | 0 | | 0.412 | | |
| 8 | 8046 | maximum | | | 1.20 | 2.32 | 11.60 | 0 | 1 | 0.248 | | |
| | | | | | | 5.82 | 29.08 | 0 | | 0.406 | | |
| 8 | 8047 | maximum | | | 1.20 | 15.30 | 23.59 | 0 | 1 | 0.166 | | |
| | | | | | | 33.28 | 65.35 | 0 | | 0.392 | | |
| 8 | 8048 | maximum | | | 1.20 | 11.12 | 6.73 | 0 | 1 | 0.140 | | |
| | | | | | | 6.18 | 12.84 | 0 | | 0.312 | | |
| 8 | 8049 | maximum | | | 1.20 | 15.12 | 23.55 | 0 | 1 | 0.283 | | |
| | | | | | | 34.61 | 73.17 | 0 | | 0.417 | | |
| 8 | 8050 | maximum | | | 1.20 | 1.90 | 9.49 | 0 | 2 | 0.400 | | 5.62 |
| | | | | | | 4.97 | 24.86 | 0 | | 0.384 | | |
| 8 | 8051 | maximum | | | 1.20 | 1.92 | 9.61 | 0 | 2 | 0.364 | | 5.11 |
| | | | | | | 5.10 | 25.51 | 0 | | 0.377 | | |
| 8 | 8052 | maximum | | | 1.20 | 1.92 | 9.60 | 0 | 1 | 0.315 | | |
| | | | | | | 5.16 | 25.82 | 0 | | 0.348 | | |
| 8 | 8053 | maximum | | | 1.20 | 13.34 | 27.81 | 0 | 1 | 0.231 | | |
| | | | | | | 32.24 | 77.45 | 0 | | 0.413 | | |
| 8 | 8054 | maximum | | | 1.20 | 3.75 | 9.14 | 0 | 1 | 0.139 | | |
| | | | | | | 4.53 | 16.80 | 0 | | 0.297 | | |
| 8 | 8055 | maximum | | | 1.20 | 6.18 | 16.14 | 0 | 1 | 0.266 | | |
| | | | | | | 6.65 | 33.24 | 0 | | 0.315 | | |
| 8 | 8056 | maximum | | | 1.20 | 4.21 | 21.07 | 0 | 1 | 0.243 | | |
| | | | | | | 7.81 | 39.05 | 0 | | 0.312 | | |

Explanations shear state Shr zon:
1 = check without necessary shear reinforcement
2 = shear reinforcement required
m = minimum shear reinforcement
Acc. DIN 1045-1 10.3.4(2) the leverarm z was limited to d-2*nomc.

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ-γBd1

Maximal values of the shear design

Only elements with shear reinforcement are printed.

At punching points punching reinforcement is printed.

| element | ass [cm ² /m ²] | tau [MPa] | acc.VED/VRDmax | acc.cot_theta | min_z [m] |
|---------|---|--------------|----------------|---------------|--------------|
| 4003 | 9.85 | 0.51 | 0.205 | 1.75 | 0.178 |
| 4005 | 15.80 | 0.82 | 0.328 | 1.75 | 0.177 |
| 4006 | 10.26 | 0.53 | 0.213 | 1.75 | 0.182 |
| 4009 | 13.89 | 0.72 | 0.289 | 1.75 | 0.177 |
| 4011 | 11.94 | 0.62 | 0.248 | 1.75 | 0.175 |
| 4013 | 11.84 | 0.62 | 0.246 | 1.75 | 0.175 |
| 4015 | 12.45 | 0.65 | 0.259 | 1.75 | 0.175 |
| 4017 | 11.50 | 0.60 | 0.239 | 1.75 | 0.175 |
| 4019 | 15.65 | 0.81 | 0.325 | 1.75 | 0.177 |
| 4023 | 14.84 | 0.77 | 0.308 | 1.75 | 0.145 |
| 4024 | 9.75 | 0.51 | 0.203 | 1.75 | 0.145 |
| 4025 | 12.18 | 0.63 | 0.253 | 1.75 | 0.145 |
| 4032 | 9.63 | 0.50 | 0.200 | 1.75 | 0.178 |
| 4033 | 10.07 | 0.52 | 0.209 | 1.75 | 0.182 |
| 4034 | 15.54 | 0.81 | 0.323 | 1.75 | 0.177 |
| 4038 | 13.61 | 0.71 | 0.283 | 1.75 | 0.177 |
| 4040 | 11.71 | 0.61 | 0.243 | 1.75 | 0.176 |
| 4042 | 11.61 | 0.60 | 0.241 | 1.75 | 0.176 |
| 4044 | 12.20 | 0.63 | 0.253 | 1.75 | 0.176 |
| 4046 | 11.26 | 0.59 | 0.234 | 1.75 | 0.175 |
| 4048 | 15.37 | 0.80 | 0.319 | 1.75 | 0.177 |
| 4051 | 9.54 | 0.50 | 0.198 | 1.75 | 0.145 |
| 4052 | 14.55 | 0.76 | 0.302 | 1.75 | 0.177 |
| 4054 | 11.96 | 0.62 | 0.249 | 1.75 | 0.145 |
| 8008 | 4.92 | 0.35 | 0.098 | 1.75 | 1.066 |
| 8010 | 5.64 | 0.40 | 0.112 | 1.75 | 1.067 |
| 8020 | 5.73 | 0.41 | 0.113 | 1.75 | 1.065 |
| 8022 | 5.19 | 0.37 | 0.104 | 1.75 | 1.063 |
| 8038 | 5.54 | 0.39 | 0.109 | 1.75 | 1.068 |
| 8050 | 5.62 | 0.40 | 0.111 | 1.75 | 1.067 |
| 8051 | 5.11 | 0.36 | 0.102 | 1.75 | 1.065 |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Selected Beam Elements

| FROM | TO | INC | X-VALUE | NC | MEMBER | CS0 | CS1 | CS2 | CS3 | CS4 | CS5 |
|-------|-------|-----|---------|----|--------|-----|-----|-----|-----|-----|-----|
| 10001 | | | | | | | | | | | |
| 10005 | | | | | | | | | | | |
| 10006 | | | | | | | | | | | |
| 10009 | | | | | | | | | | | |
| 10010 | | | | | | | | | | | |
| 10014 | | | | | | | | | | | |
| 10016 | | | | | | | | | | | |
| 10020 | | | | | | | | | | | |
| 10021 | | | | | | | | | | | |
| 10024 | | | | | | | | | | | |
| 10025 | | | | | | | | | | | |
| 10029 | | | | | | | | | | | |
| 12000 | 12150 | 1 | | | | | | | | | |

Default design code is DIN Fachbericht 102 Massivbröcken (2003) (Germany)
Klasse(Tab.4.118): D

Materials

No. 1 C 25/30 (DIN 1045-1)
No. 3 C 25/30 (DIN 1045-1)
No. 4 C 25/30 (DIN 1045-1)
No. 5 C 25/30 (DIN 1045-1)
No. 6 C 25/30 (DIN 1045-1)
No. 7 C 25/30 (DIN 1045-1)
No. 8 C 25/30 (DIN 1045-1)
No. 9 C 25/30 (DIN 1045-1)
No. 10 C 25/30 (DIN 1045-1)
No. 12 BSt 500 SA (DIN 1045-1)

Reinforcement will be accounted for sectional values as defined in AQUA
Reinforcements saved as design case LCR 511

Considered Load Cases

| | | | | | |
|------|------|------|------|------|------|
| 9101 | 9102 | 9103 | 9104 | 9105 | 9106 |
| 9107 | 9108 | 9201 | 9202 | 9203 | 9204 |
| 9205 | 9206 | 9207 | 9301 | 9302 | 9303 |
| 9304 | 9305 | 9306 | 9307 | 9308 | |

Ultimate Load Design

Design for ultimate loads DIN Fachbericht 102 Massivbröcken (2003)

Biaxial bending, uniaxial stress calculated in y-z axis

Safety factors SC-1 SC-2 SC-S SS-1 SS-2 PIIa

1.50 1.50 1.88 1.15 1.15 7

Strain limits C1 C2 S1 S2 Z1 Z2

max -3.50 -2.00 3.00 25.00 -3.50 25.00

parameters for reinforcements

Minimum reinforcements compression min. reinforcem. maximum-
Bending. Compress. e/d N/Npl requ. section reforc.
0.00 [cm²] 0.30 [o/o] 3.50 0.0010 0.00 0.15 9.00

Tensile forces in the longitudinal reinforcements due to shear are NOT accounted for.

Material of sections uses Ultimate Limit strain-stress law with global safety factors

Material of reinforcements uses Ultimate Limit strain-stress law with global safety factors

| MNo. | temp lev. | Material-safety | max.compr stress | at strain | max.tens stress | at strain | tension-stiffening |
|------|-----------|-----------------|------------------|-----------|-----------------|-----------|--------------------|
| | | [-] | [MPa] | [o/oo] | [MPa] | [o/oo] | [MPa] |
| 1 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 3 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 4 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 5 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 6 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 7 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 8 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 9 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 10 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 12 | 0 | 1.150 | -456.52 | -25.00 | 456.52 | 25.00 | |

Shear Design

Design for shear DIN 1045-1 (2003)

Minimum shear factor or tan of inclination of compressive struts 0.57 / 1.72

| MNo | f-cd | tau-rd | sigIIQ | sigIIT | sigIIQ+ | f _{yd} |
|-----|-------|--------|--------|--------|---------|-----------------|
| | [MPa] | [MPa] | [MPa] | [MPa] | [MPa] | [MPa] |
| 1 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 | |
| 3 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 | |
| 4 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 | |
| 5 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 | |
| 6 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Design

Design for shear DIN 1045-1 (2003)

Minimum shear factor or tan of inclination of compressive struts 0.57 / 1.72
MNO f-cd tau-rd sigIIQ sigIIT sigIIQ+ fyd
[MPa] [MPa] [MPa] [MPa] [MPa] [MPa]

| | | | | | |
|----|-------|------|------|------|------|
| 7 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 |
| 8 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 |
| 9 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 |
| 10 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 |
| 12 | | | | | |

434.78

Tolerance for exceeding maximum shear or principal compression stress 0.0200

Longitudinal Reinforcements LCR 511

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | mue | As-Sum | shift by | Lay-0&5 | Lay-1&6 | Lay-2&7 | Lay-3&8 | Lay-4&9 |
|-------|-------|-----|------|--------|----------|---------|---------|---------|---------|---------|
| | | | [m] | [cm2] | [m] | [cm2] | [cm2] | [cm2] | [cm2] | [cm2] |
| 10001 | 0.000 | 8 | 0.31 | 41.55 | | 21.86T | 9.84 | | 9.84 | |
| 10001 | 0.200 | 8 | 0.05 | 6.87 | | 6.87T | | | | |
| 10005 | 0.000 | 8 | 0.78 | 103.07 | | 65.92T | 10.10 | | 27.05 | |
| 10005 | 0.200 | 8 | 0.72 | 95.43 | | 65.91T | 6.63 | | 22.88 | |
| 10006 | 0.000 | 8 | 0.03 | 4.28 | | 2.68T | | | 1.60 | |
| 10006 | 0.400 | 8 | 0.04 | 5.93 | | 3.13T | | | 2.80 | |
| 10009 | 0.000 | 8 | 0.04 | 5.61 | | 2.83T | | | 2.78 | |
| 10009 | 0.400 | 8 | 0.03 | 3.90 | | 2.39T | | | 1.50 | |
| 10010 | 0.000 | 8 | 0.72 | 95.47 | | 65.75T | 6.75 | | 22.97 | |
| 10010 | 0.200 | 8 | 0.78 | 102.94 | | 65.76T | 10.16 | | 27.03 | |
| 10014 | 0.000 | 8 | 0.05 | 6.93 | | 6.93T | | | | |
| 10014 | 0.200 | 8 | 0.32 | 41.68 | | 21.97T | 9.85 | | 9.85 | |
| 10016 | 0.000 | 8 | 0.31 | 41.31 | | 21.59T | 9.86 | | 9.86 | |
| 10016 | 0.200 | 8 | 0.05 | 6.71 | | 6.71T | | | | |
| 10020 | 0.000 | 8 | 0.77 | 102.15 | | 64.79T | 10.08 | | 27.27 | |
| 10020 | 0.200 | 8 | 0.72 | 94.60 | | 64.78T | 6.61 | | 23.20 | |
| 10021 | 0.000 | 8 | 0.02 | 2.51 | | 2.51T | | | | |
| 10021 | 0.400 | 8 | 0.04 | 5.43 | | 3.06T | | | 2.37 | |
| 10024 | 0.000 | 8 | 0.04 | 5.69 | | 2.76T | | | 2.92 | |
| 10024 | 0.400 | 8 | 0.03 | 3.99 | | 2.38T | | | 1.61 | |
| 10025 | 0.000 | 8 | 0.71 | 94.27 | | 64.51T | 6.75 | | 23.01 | |
| 10025 | 0.200 | 8 | 0.77 | 101.76 | | 64.52T | 10.16 | | 27.08 | |
| 10029 | 0.000 | 8 | 0.05 | 7.00 | | 7.00T | | | | |
| 10029 | 0.200 | 8 | 0.32 | 42.51 | | 22.06T | 10.22 | | 10.22 | |
| 12001 | 0.000 | 9 | 3.05 | 153.41 | | | 153.41T | | | |
| 12001 | 1.000 | 9 | 2.00 | 100.44 | | | 100.44T | | | |
| 12002 | 0.000 | 9 | 2.00 | 100.52 | | | 100.52T | | | |
| 12002 | 1.000 | 9 | 0.98 | 49.02 | | | 49.02T | | | |
| 12003 | 0.000 | 9 | 0.98 | 49.18 | | | 49.18T | | | |
| 12003 | 1.000 | 9 | 0.40 | 20.00 | | | 20.00T | | | |
| 12004 | 0.000 | 9 | 3.08 | 154.57 | | | 154.57T | | | |
| 12004 | 1.000 | 9 | 1.99 | 100.06 | | | 100.06T | | | |
| 12005 | 0.000 | 9 | 1.99 | 100.18 | | | 100.18T | | | |
| 12005 | 1.000 | 9 | 0.93 | 46.92 | | | 46.92T | | | |
| 12006 | 0.000 | 9 | 0.94 | 47.17 | | | 47.17T | | | |
| 12006 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12007 | 0.000 | 9 | 3.07 | 154.39 | | | 154.39T | | | |
| 12007 | 1.000 | 9 | 2.01 | 100.94 | | | 100.94T | | | |
| 12008 | 0.000 | 9 | 2.01 | 101.03 | | | 101.03T | | | |
| 12008 | 1.000 | 9 | 0.98 | 49.05 | | | 49.05T | | | |
| 12009 | 0.000 | 9 | 0.98 | 49.22 | | | 49.22T | | | |
| 12009 | 1.000 | 9 | 0.38 | 18.90 | | | 18.90T | | | |
| 12010 | 0.000 | 9 | 2.96 | 148.88 | | | 148.88T | | | |
| 12010 | 1.000 | 9 | 1.94 | 97.37 | | | 97.37T | | | |
| 12011 | 0.000 | 9 | 1.94 | 97.44 | | | 97.44T | | | |
| 12011 | 1.000 | 9 | 0.95 | 47.55 | | | 47.55T | | | |
| 12012 | 0.000 | 9 | 0.95 | 47.70 | | | 47.70T | | | |
| 12012 | 1.000 | 9 | 0.38 | 19.20 | | | 19.20T | | | |
| 12013 | 0.000 | 9 | 2.98 | 149.88 | | | 149.88T | | | |
| 12013 | 1.000 | 9 | 1.93 | 96.87 | | | 96.87T | | | |
| 12014 | 0.000 | 9 | 1.93 | 96.98 | | | 96.98T | | | |
| 12014 | 1.000 | 9 | 0.90 | 45.38 | | | 45.38T | | | |
| 12015 | 0.000 | 9 | 0.91 | 45.61 | | | 45.61T | | | |
| 12015 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12016 | 0.000 | 9 | 2.98 | 149.85 | | | 149.85T | | | |
| 12016 | 1.000 | 9 | 1.95 | 97.87 | | | 97.87T | | | |
| 12017 | 0.000 | 9 | 1.95 | 97.95 | | | 97.95T | | | |
| 12017 | 1.000 | 9 | 0.95 | 47.57 | | | 47.57T | | | |
| 12018 | 0.000 | 9 | 0.95 | 47.74 | | | 47.74T | | | |
| 12018 | 1.000 | 9 | 0.38 | 18.98 | | | 18.98T | | | |
| 12019 | 0.000 | 9 | 0.40 | 20.16 | | | 20.16T | | | |
| 12019 | 1.000 | 9 | 0.65 | 32.46 | | | 32.46T | | | |
| 12020 | 0.000 | 9 | 0.65 | 32.46 | | | 32.46T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements LCR 511

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | μue [-] | As-Sum [cm ²] | shift by [m] | Lay-0&5 [cm ²] | Lay-1&6 [cm ²] | Lay-2&7 [cm ²] | Lay-3&8 [cm ²] | Lay-4&9 [cm ²] |
|-------|-------|-----|------------|------------------------------|-----------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| 12020 | 1.000 | 9 | 0.78 | 39.18 | | | 39.18T | | | |
| 12021 | 0.000 | 9 | 0.78 | 39.18 | | | 39.18T | | | |
| 12021 | 1.000 | 9 | 0.86 | 43.08 | | | 43.08T | | | |
| 12022 | 0.000 | 9 | 0.86 | 43.08 | | | 43.08T | | | |
| 12022 | 1.000 | 9 | 0.80 | 40.44 | | | 40.44T | | | |
| 12023 | 0.000 | 9 | 0.80 | 40.44 | | | 40.44T | | | |
| 12023 | 1.000 | 9 | 0.68 | 34.09 | | | 34.09T | | | |
| 12024 | 0.000 | 9 | 0.68 | 34.09 | | | 34.09T | | | |
| 12024 | 1.000 | 9 | 0.52 | 26.36 | | | 26.36T | | | |
| 12025 | 0.000 | 9 | 0.52 | 26.36 | | | 26.36T | | | |
| 12025 | 1.000 | 9 | 0.38 | 18.97 | | | 18.97T | | | |
| 12026 | 0.000 | 9 | 0.38 | 18.97 | | | 18.97T | | | |
| 12026 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12027 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12027 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12028 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12028 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12029 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12029 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12030 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12030 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12031 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12031 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12032 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12032 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12033 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12033 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12034 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12034 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12035 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12035 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12036 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12036 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12037 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12037 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12038 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12038 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12039 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12039 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12040 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08 | | | |
| 12040 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08 | | | |
| 12041 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12041 | 1.000 | 9 | 0.43 | 21.52 | | | 21.52T | | | |
| 12042 | 0.000 | 9 | 0.43 | 21.52 | | | 21.52T | | | |
| 12042 | 1.000 | 9 | 0.69 | 34.66 | | | 34.66T | | | |
| 12043 | 0.000 | 9 | 0.69 | 34.66 | | | 34.66T | | | |
| 12043 | 1.000 | 9 | 0.77 | 38.65 | | | 38.65T | | | |
| 12044 | 0.000 | 9 | 0.77 | 38.65 | | | 38.65T | | | |
| 12044 | 1.000 | 9 | 0.72 | 35.99 | | | 35.99T | | | |
| 12045 | 0.000 | 9 | 0.72 | 35.99 | | | 35.99T | | | |
| 12045 | 1.000 | 9 | 0.59 | 29.57 | | | 29.57T | | | |
| 12046 | 0.000 | 9 | 0.59 | 29.57 | | | 29.57T | | | |
| 12046 | 1.000 | 9 | 0.43 | 21.76 | | | 21.76T | | | |
| 12047 | 0.000 | 9 | 0.43 | 21.76 | | | 21.76T | | | |
| 12047 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12048 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12048 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12049 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12049 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12050 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12050 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12051 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12051 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12052 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12052 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12053 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12053 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12054 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12054 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12055 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12055 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12056 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12056 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12057 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12057 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12058 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements LCR 511

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|-------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 12058 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12059 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12059 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12060 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12060 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12061 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12061 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12062 | 0.000 | 9 | 0.30 | 15.08 | | 15.08' | | | | |
| 12062 | 1.000 | 9 | 0.30 | 15.08 | | 15.08' | | | | |
| 12063 | 0.000 | 9 | 0.38 | 19.04 | | 19.04T | | | | |
| 12063 | 1.000 | 9 | 0.62 | 31.24 | | 31.24T | | | | |
| 12064 | 0.000 | 9 | 0.62 | 31.24 | | 31.24T | | | | |
| 12064 | 1.000 | 9 | 0.76 | 38.40 | | 38.40T | | | | |
| 12065 | 0.000 | 9 | 0.76 | 38.40 | | 38.40T | | | | |
| 12065 | 1.000 | 9 | 0.84 | 42.37 | | 42.37T | | | | |
| 12066 | 0.000 | 9 | 0.84 | 42.37 | | 42.37T | | | | |
| 12066 | 1.000 | 9 | 0.79 | 39.76 | | 39.76T | | | | |
| 12067 | 0.000 | 9 | 0.79 | 39.76 | | 39.76T | | | | |
| 12067 | 1.000 | 9 | 0.66 | 33.41 | | 33.41T | | | | |
| 12068 | 0.000 | 9 | 0.66 | 33.41 | | 33.41T | | | | |
| 12068 | 1.000 | 9 | 0.51 | 25.68 | | 25.68T | | | | |
| 12069 | 0.000 | 9 | 0.51 | 25.68 | | 25.68T | | | | |
| 12069 | 1.000 | 9 | 0.36 | 18.28 | | 18.28T | | | | |
| 12070 | 0.000 | 9 | 0.36 | 18.28 | | 18.28T | | | | |
| 12070 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12071 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12071 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12072 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12072 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12073 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12073 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12074 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12074 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12075 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12075 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12076 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12076 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12077 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12077 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12078 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12078 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12079 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12079 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12080 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12080 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12081 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12081 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12082 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12082 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12083 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12083 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12084 | 0.000 | 9 | 0.30 | 15.08 | | 15.08 | | | | |
| 12084 | 1.000 | 9 | 0.30 | 15.08 | | 15.08 | | | | |
| 12085 | 0.000 | 9 | 0.38 | 19.25 | | 19.25T | | | | |
| 12085 | 1.000 | 9 | 0.62 | 31.31 | | 31.31T | | | | |
| 12086 | 0.000 | 9 | 0.62 | 31.31 | | 31.31T | | | | |
| 12086 | 1.000 | 9 | 0.81 | 40.67 | | 40.67T | | | | |
| 12087 | 0.000 | 9 | 0.81 | 40.67 | | 40.67T | | | | |
| 12087 | 1.000 | 9 | 0.89 | 44.79 | | 44.79T | | | | |
| 12088 | 0.000 | 9 | 0.89 | 44.79 | | 44.79T | | | | |
| 12088 | 1.000 | 9 | 0.84 | 42.10 | | 42.10T | | | | |
| 12089 | 0.000 | 9 | 0.84 | 42.10 | | 42.10T | | | | |
| 12089 | 1.000 | 9 | 0.71 | 35.53 | | 35.53T | | | | |
| 12090 | 0.000 | 9 | 0.71 | 35.53 | | 35.53T | | | | |
| 12090 | 1.000 | 9 | 0.55 | 27.52 | | 27.52T | | | | |
| 12091 | 0.000 | 9 | 0.55 | 27.52 | | 27.52T | | | | |
| 12091 | 1.000 | 9 | 0.39 | 19.72 | | 19.72T | | | | |
| 12092 | 0.000 | 9 | 0.39 | 19.72 | | 19.72T | | | | |
| 12092 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12093 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12093 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12094 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12094 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12095 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12095 | 1.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |
| 12096 | 0.000 | 9 | 0.30 | 15.08 | | 15.08T | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements LCR 511

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|-------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 12096 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12097 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12097 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12098 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12098 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12099 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12099 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12100 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12100 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12101 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12101 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12102 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12102 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12103 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12103 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12104 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12104 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12105 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12105 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12106 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08 | | | |
| 12106 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08 | | | |
| 12107 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12107 | 1.000 | 9 | 0.45 | 22.42 | | | 22.42T | | | |
| 12108 | 0.000 | 9 | 0.45 | 22.42 | | | 22.42T | | | |
| 12108 | 1.000 | 9 | 0.72 | 36.17 | | | 36.17T | | | |
| 12109 | 0.000 | 9 | 0.72 | 36.17 | | | 36.17T | | | |
| 12109 | 1.000 | 9 | 0.80 | 40.39 | | | 40.39T | | | |
| 12110 | 0.000 | 9 | 0.80 | 40.39 | | | 40.39T | | | |
| 12110 | 1.000 | 9 | 0.75 | 37.68 | | | 37.68T | | | |
| 12111 | 0.000 | 9 | 0.75 | 37.68 | | | 37.68T | | | |
| 12111 | 1.000 | 9 | 0.62 | 31.04 | | | 31.04T | | | |
| 12112 | 0.000 | 9 | 0.62 | 31.04 | | | 31.04T | | | |
| 12112 | 1.000 | 9 | 0.46 | 22.93 | | | 22.93T | | | |
| 12113 | 0.000 | 9 | 0.46 | 22.93 | | | 22.93T | | | |
| 12113 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12114 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12114 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12115 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12115 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12116 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12116 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12117 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12117 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12118 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12118 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12119 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12119 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12120 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12120 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12121 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12121 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12122 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12122 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12123 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12123 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12124 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12124 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12125 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12125 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12126 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12126 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12127 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12127 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12128 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12128 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08' | | | |
| 12129 | 0.000 | 9 | 0.38 | 19.12 | | | 19.12T | | | |
| 12129 | 1.000 | 9 | 0.63 | 31.75 | | | 31.75T | | | |
| 12130 | 0.000 | 9 | 0.63 | 31.75 | | | 31.75T | | | |
| 12130 | 1.000 | 9 | 0.79 | 39.90 | | | 39.90T | | | |
| 12131 | 0.000 | 9 | 0.79 | 39.90 | | | 39.90T | | | |
| 12131 | 1.000 | 9 | 0.88 | 44.09 | | | 44.09T | | | |
| 12132 | 0.000 | 9 | 0.88 | 44.09 | | | 44.09T | | | |
| 12132 | 1.000 | 9 | 0.82 | 41.43 | | | 41.43T | | | |
| 12133 | 0.000 | 9 | 0.82 | 41.43 | | | 41.43T | | | |
| 12133 | 1.000 | 9 | 0.69 | 34.86 | | | 34.86T | | | |
| 12134 | 0.000 | 9 | 0.69 | 34.86 | | | 34.86T | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Longitudinal Reinforcements LCR 511

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|-------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 12134 | 1.000 | 9 | 0.53 | 26.83 | | | 26.83T | | | |
| 12135 | 0.000 | 9 | 0.53 | 26.83 | | | 26.83T | | | |
| 12135 | 1.000 | 9 | 0.38 | 19.02 | | | 19.02T | | | |
| 12136 | 0.000 | 9 | 0.38 | 19.02 | | | 19.02T | | | |
| 12136 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12137 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12137 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12138 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12138 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12139 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12139 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12140 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12140 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12141 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12141 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12142 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12142 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12143 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12143 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12144 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12144 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12145 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12145 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12146 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12146 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12147 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12147 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12148 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12148 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12149 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12149 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08T | | | |
| 12150 | 0.000 | 9 | 0.30 | 15.08 | | | 15.08 | | | |
| 12150 | 1.000 | 9 | 0.30 | 15.08 | | | 15.08 | | | |

Shear Reinforcements per Cutted Part of Section LCR 511

| Beam | x[m] | Nos | Asl-Mt [cm2/m] | SLay-0&5 [cm2/m] | SLay-1&6 [cm2/m] | SLay-2&7 [cm2/m] | SLay-3&8 [cm2/m] | SLay-4&9 [cm2/m] |
|-------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 10001 | 0.000 | 8 | 2.92 | 10.40 | | | | |
| 10001 | 0.200 | 8 | 2.92 | 10.50 | | | | |
| 10005 | 0.000 | 8 | 13.12 | 14.79 | | | | |
| 10005 | 0.200 | 8 | 13.12 | 14.89 | | | | |
| 10006 | 0.000 | 8 | 1.10 | 8.22 | | | | |
| 10006 | 0.400 | 8 | 1.10 | 8.42 | | | | |
| 10009 | 0.000 | 8 | 0.99 | 8.41 | | | | |
| 10009 | 0.400 | 8 | 0.99 | 8.21 | | | | |
| 10010 | 0.000 | 8 | 13.07 | 14.94 | | | | |
| 10010 | 0.200 | 8 | 13.07 | 14.87 | | | | |
| 10014 | 0.000 | 8 | 2.94 | 10.60 | | | | |
| 10014 | 0.200 | 8 | 2.94 | 10.50 | | | | |
| 10016 | 0.000 | 8 | 2.85 | 10.41 | | | | |
| 10016 | 0.200 | 8 | 2.85 | 10.51 | | | | |
| 10020 | 0.000 | 8 | 12.82 | 14.87 | | | | |
| 10020 | 0.200 | 8 | 12.82 | 14.94 | | | | |
| 10021 | 0.000 | 8 | 1.08 | 8.24 | | | | |
| 10021 | 0.400 | 8 | 1.08 | 8.43 | | | | |
| 10024 | 0.000 | 8 | 0.97 | 8.43 | | | | |
| 10024 | 0.400 | 8 | 0.97 | 8.23 | | | | |
| 10025 | 0.000 | 8 | 12.76 | 14.78 | | | | |
| 10025 | 0.200 | 8 | 12.76 | 14.71 | | | | |
| 10029 | 0.000 | 8 | 2.87 | 10.68 | | | | |
| 10029 | 0.200 | 8 | 2.87 | 10.58 | | | | |
| 12001 | 0.000 | 9 | 0.00 | 12.62 | | | | |
| 12001 | 1.000 | 9 | 0.00 | 13.53 | | | | |
| 12002 | 0.000 | 9 | 0.00 | 13.53 | | | | |
| 12002 | 1.000 | 9 | 0.00 | 14.25 | | | | |
| 12003 | 0.000 | 9 | 0.00 | 14.25 | | | | |
| 12003 | 1.000 | 9 | 0.00 | 16.16 | | | | |
| 12004 | 0.000 | 9 | 0.00 | 12.74 | | | | |
| 12004 | 1.000 | 9 | 0.00 | 13.64 | | | | |
| 12005 | 0.000 | 9 | 0.00 | 13.64 | | | | |
| 12005 | 1.000 | 9 | 0.00 | 14.35 | | | | |
| 12006 | 0.000 | 9 | 0.00 | 14.35 | | | | |
| 12006 | 1.000 | 9 | 0.00 | 13.17 | | | | |
| 12007 | 0.000 | 9 | 0.00 | 12.69 | | | | |
| 12007 | 1.000 | 9 | 0.00 | 13.61 | | | | |
| 12008 | 0.000 | 9 | 0.00 | 13.61 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Reinforcements per Cutted Part of Section LCR 511

| Beam | x[m] | NOS | Asl-Mt [cm2/m] | SLay-0&5 [cm2/m] | SLay-1&6 [cm2/m] | SLay-2&7 [cm2/m] | SLay-3&8 [cm2/m] | SLay-4&9 [cm2/m] |
|-------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 12008 | 1.000 | 9 | 0.00 | 14.32 | | | | |
| 12009 | 0.000 | 9 | 0.00 | 14.32 | | | | |
| 12009 | 1.000 | 9 | 0.00 | 16.22 | | | | |
| 12010 | 0.000 | 9 | 0.00 | 12.36 | | | | |
| 12010 | 1.000 | 9 | 0.00 | 13.21 | | | | |
| 12011 | 0.000 | 9 | 0.00 | 13.21 | | | | |
| 12011 | 1.000 | 9 | 0.00 | 13.88 | | | | |
| 12012 | 0.000 | 9 | 0.00 | 13.88 | | | | |
| 12012 | 1.000 | 9 | 0.00 | 16.76 | | | | |
| 12013 | 0.000 | 9 | 0.00 | 12.48 | | | | |
| 12013 | 1.000 | 9 | 0.00 | 13.32 | | | | |
| 12014 | 0.000 | 9 | 0.00 | 13.32 | | | | |
| 12014 | 1.000 | 9 | 0.00 | 13.97 | | | | |
| 12015 | 0.000 | 9 | 0.00 | 13.97 | | | | |
| 12015 | 1.000 | 9 | 0.00 | 12.88 | | | | |
| 12016 | 0.000 | 9 | 0.00 | 12.44 | | | | |
| 12016 | 1.000 | 9 | 0.00 | 13.29 | | | | |
| 12017 | 0.000 | 9 | 0.00 | 13.29 | | | | |
| 12017 | 1.000 | 9 | 0.00 | 13.95 | | | | |
| 12018 | 0.000 | 9 | 0.00 | 13.95 | | | | |
| 12018 | 1.000 | 9 | 0.00 | 16.81 | | | | |
| 12019 | 0.000 | 9 | 0.00 | 16.16 | | | | |
| 12019 | 1.000 | 9 | 0.00 | 8.76 | | | | |
| 12020 | 0.000 | 9 | 0.00 | 8.76 | | | | |
| 12020 | 1.000 | 9 | 0.00 | 5.36 | | | | |
| 12021 | 0.000 | 9 | 0.00 | 5.36 | | | | |
| 12021 | 1.000 | 9 | 0.00 | 5.36 | | | | |
| 12022 | 0.000 | 9 | 0.00 | 5.36 | | | | |
| 12022 | 1.000 | 9 | 0.00 | 5.39 | | | | |
| 12023 | 0.000 | 9 | 0.00 | 5.39 | | | | |
| 12023 | 1.000 | 9 | 0.00 | 5.48 | | | | |
| 12024 | 0.000 | 9 | 0.00 | 5.48 | | | | |
| 12024 | 1.000 | 9 | 0.00 | 5.58 | | | | |
| 12025 | 0.000 | 9 | 0.00 | 5.58 | | | | |
| 12025 | 1.000 | 9 | 0.00 | 5.66 | | | | |
| 12026 | 0.000 | 9 | 0.00 | 5.66 | | | | |
| 12026 | 1.000 | 9 | 0.00 | 5.71 | | | | |
| 12027 | 0.000 | 9 | 0.00 | 5.71 | | | | |
| 12027 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12028 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12028 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12029 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12029 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12030 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12030 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12031 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12031 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12032 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12032 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12033 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12033 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12034 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12034 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12035 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12035 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12036 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12036 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12037 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12037 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12038 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12038 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12039 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12039 | 1.000 | 9 | 0.00 | 11.07 | | | | |
| 12040 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12040 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12041 | 0.000 | 9 | 0.00 | 13.21 | | | | |
| 12041 | 1.000 | 9 | 0.00 | 7.92 | | | | |
| 12042 | 0.000 | 9 | 0.00 | 7.92 | | | | |
| 12042 | 1.000 | 9 | 0.00 | 5.20 | | | | |
| 12043 | 0.000 | 9 | 0.00 | 5.20 | | | | |
| 12043 | 1.000 | 9 | 0.00 | 5.20 | | | | |
| 12044 | 0.000 | 9 | 0.00 | 5.20 | | | | |
| 12044 | 1.000 | 9 | 0.00 | 5.18 | | | | |
| 12045 | 0.000 | 9 | 0.00 | 5.18 | | | | |
| 12045 | 1.000 | 9 | 0.00 | 5.16 | | | | |
| 12046 | 0.000 | 9 | 0.00 | 5.16 | | | | |
| 12046 | 1.000 | 9 | 0.00 | 5.16 | | | | |
| 12047 | 0.000 | 9 | 0.00 | 5.16 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Reinforcements per Cutted Part of Section LCR 511

| Beam | x[m] | Nos | As1-Mt [cm2/m] | SLay-0&5 [cm2/m] | SLay-1&6 [cm2/m] | SLay-2&7 [cm2/m] | SLay-3&8 [cm2/m] | SLay-4&9 [cm2/m] |
|-------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 12047 | 1.000 | 9 | 0.00 | 5.23 | | | | |
| 12048 | 0.000 | 9 | 0.00 | 5.23 | | | | |
| 12048 | 1.000 | 9 | 0.00 | 5.19 | | | | |
| 12049 | 0.000 | 9 | 0.00 | 5.19 | | | | |
| 12049 | 1.000 | 9 | 0.00 | 5.08 | | | | |
| 12050 | 0.000 | 9 | 0.00 | 5.08 | | | | |
| 12050 | 1.000 | 9 | 0.00 | 4.80 | | | | |
| 12051 | 0.000 | 9 | 0.00 | 4.80 | | | | |
| 12051 | 1.000 | 9 | 0.00 | 4.59 | | | | |
| 12052 | 0.000 | 9 | 0.00 | 4.59 | | | | |
| 12052 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12053 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12053 | 1.000 | 9 | 0.00 | 4.59 | | | | |
| 12054 | 0.000 | 9 | 0.00 | 4.59 | | | | |
| 12054 | 1.000 | 9 | 0.00 | 4.60 | | | | |
| 12055 | 0.000 | 9 | 0.00 | 4.60 | | | | |
| 12055 | 1.000 | 9 | 0.00 | 4.60 | | | | |
| 12056 | 0.000 | 9 | 0.00 | 4.60 | | | | |
| 12056 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12057 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12057 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12058 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12058 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12059 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12059 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12060 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12060 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12061 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12061 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12062 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12062 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12063 | 0.000 | 9 | 0.00 | 16.22 | | | | |
| 12063 | 1.000 | 9 | 0.00 | 8.73 | | | | |
| 12064 | 0.000 | 9 | 0.00 | 8.73 | | | | |
| 12064 | 1.000 | 9 | 0.00 | 5.37 | | | | |
| 12065 | 0.000 | 9 | 0.00 | 5.37 | | | | |
| 12065 | 1.000 | 9 | 0.00 | 5.36 | | | | |
| 12066 | 0.000 | 9 | 0.00 | 5.36 | | | | |
| 12066 | 1.000 | 9 | 0.00 | 5.39 | | | | |
| 12067 | 0.000 | 9 | 0.00 | 5.39 | | | | |
| 12067 | 1.000 | 9 | 0.00 | 5.48 | | | | |
| 12068 | 0.000 | 9 | 0.00 | 5.48 | | | | |
| 12068 | 1.000 | 9 | 0.00 | 5.58 | | | | |
| 12069 | 0.000 | 9 | 0.00 | 5.58 | | | | |
| 12069 | 1.000 | 9 | 0.00 | 5.66 | | | | |
| 12070 | 0.000 | 9 | 0.00 | 5.66 | | | | |
| 12070 | 1.000 | 9 | 0.00 | 5.71 | | | | |
| 12071 | 0.000 | 9 | 0.00 | 5.71 | | | | |
| 12071 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12072 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12072 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12073 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12073 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12074 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12074 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12075 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12075 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12076 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12076 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12077 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12077 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12078 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12078 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12079 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12079 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12080 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12080 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12081 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12081 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12082 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12082 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12083 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12083 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12084 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12084 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12085 | 0.000 | 9 | 0.00 | 16.76 | | | | |
| 12085 | 1.000 | 9 | 0.00 | 8.48 | | | | |
| 12086 | 0.000 | 9 | 0.00 | 8.48 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Reinforcements per Cutted Part of Section LCR 511

| Beam | x[m] | NOS | Asl-Mt [cm2/m] | SLay-0&5 [cm2/m] | SLay-1&6 [cm2/m] | SLay-2&7 [cm2/m] | SLay-3&8 [cm2/m] | SLay-4&9 [cm2/m] |
|-------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 12086 | 1.000 | 9 | 0.00 | 5.34 | | | | |
| 12087 | 0.000 | 9 | 0.00 | 5.34 | | | | |
| 12087 | 1.000 | 9 | 0.00 | 5.33 | | | | |
| 12088 | 0.000 | 9 | 0.00 | 5.33 | | | | |
| 12088 | 1.000 | 9 | 0.00 | 5.36 | | | | |
| 12089 | 0.000 | 9 | 0.00 | 5.36 | | | | |
| 12089 | 1.000 | 9 | 0.00 | 5.44 | | | | |
| 12090 | 0.000 | 9 | 0.00 | 5.44 | | | | |
| 12090 | 1.000 | 9 | 0.00 | 5.56 | | | | |
| 12091 | 0.000 | 9 | 0.00 | 5.56 | | | | |
| 12091 | 1.000 | 9 | 0.00 | 5.64 | | | | |
| 12092 | 0.000 | 9 | 0.00 | 5.64 | | | | |
| 12092 | 1.000 | 9 | 0.00 | 5.70 | | | | |
| 12093 | 0.000 | 9 | 0.00 | 5.70 | | | | |
| 12093 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12094 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12094 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12095 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12095 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12096 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12096 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12097 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12097 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12098 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12098 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12099 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12099 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12100 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12100 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12101 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12101 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12102 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12102 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12103 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12103 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12104 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12104 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12105 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12105 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12106 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12106 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12107 | 0.000 | 9 | 0.00 | 12.88 | | | | |
| 12107 | 1.000 | 9 | 0.00 | 7.65 | | | | |
| 12108 | 0.000 | 9 | 0.00 | 7.65 | | | | |
| 12108 | 1.000 | 9 | 0.00 | 5.22 | | | | |
| 12109 | 0.000 | 9 | 0.00 | 5.22 | | | | |
| 12109 | 1.000 | 9 | 0.00 | 5.21 | | | | |
| 12110 | 0.000 | 9 | 0.00 | 5.21 | | | | |
| 12110 | 1.000 | 9 | 0.00 | 5.20 | | | | |
| 12111 | 0.000 | 9 | 0.00 | 5.20 | | | | |
| 12111 | 1.000 | 9 | 0.00 | 5.17 | | | | |
| 12112 | 0.000 | 9 | 0.00 | 5.17 | | | | |
| 12112 | 1.000 | 9 | 0.00 | 5.15 | | | | |
| 12113 | 0.000 | 9 | 0.00 | 5.15 | | | | |
| 12113 | 1.000 | 9 | 0.00 | 5.24 | | | | |
| 12114 | 0.000 | 9 | 0.00 | 5.24 | | | | |
| 12114 | 1.000 | 9 | 0.00 | 5.20 | | | | |
| 12115 | 0.000 | 9 | 0.00 | 5.20 | | | | |
| 12115 | 1.000 | 9 | 0.00 | 5.11 | | | | |
| 12116 | 0.000 | 9 | 0.00 | 5.11 | | | | |
| 12116 | 1.000 | 9 | 0.00 | 4.84 | | | | |
| 12117 | 0.000 | 9 | 0.00 | 4.84 | | | | |
| 12117 | 1.000 | 9 | 0.00 | 4.60 | | | | |
| 12118 | 0.000 | 9 | 0.00 | 4.60 | | | | |
| 12118 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12119 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12119 | 1.000 | 9 | 0.00 | 4.60 | | | | |
| 12120 | 0.000 | 9 | 0.00 | 4.60 | | | | |
| 12120 | 1.000 | 9 | 0.00 | 4.61 | | | | |
| 12121 | 0.000 | 9 | 0.00 | 4.61 | | | | |
| 12121 | 1.000 | 9 | 0.00 | 4.60 | | | | |
| 12122 | 0.000 | 9 | 0.00 | 4.60 | | | | |
| 12122 | 1.000 | 9 | 0.00 | 4.59 | | | | |
| 12123 | 0.000 | 9 | 0.00 | 4.59 | | | | |
| 12123 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12124 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12124 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12125 | 0.000 | 9 | 0.00 | 4.58 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Shear Reinforcements per Cutted Part of Section LCR 511

| Beam | x[m] | NoS | Asl-Mt [cm2/m] | Slay-0&5 [cm2/m] | Slay-1&6 [cm2/m] | Slay-2&7 [cm2/m] | Slay-3&8 [cm2/m] | Slay-4&9 [cm2/m] |
|-------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 12125 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12126 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12126 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12127 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12127 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12128 | 0.000 | 9 | 0.00 | 4.58 | | | | |
| 12128 | 1.000 | 9 | 0.00 | 4.58 | | | | |
| 12129 | 0.000 | 9 | 0.00 | 16.81 | | | | |
| 12129 | 1.000 | 9 | 0.00 | 8.45 | | | | |
| 12130 | 0.000 | 9 | 0.00 | 8.45 | | | | |
| 12130 | 1.000 | 9 | 0.00 | 5.34 | | | | |
| 12131 | 0.000 | 9 | 0.00 | 5.34 | | | | |
| 12131 | 1.000 | 9 | 0.00 | 5.33 | | | | |
| 12132 | 0.000 | 9 | 0.00 | 5.33 | | | | |
| 12132 | 1.000 | 9 | 0.00 | 5.36 | | | | |
| 12133 | 0.000 | 9 | 0.00 | 5.36 | | | | |
| 12133 | 1.000 | 9 | 0.00 | 5.44 | | | | |
| 12134 | 0.000 | 9 | 0.00 | 5.44 | | | | |
| 12134 | 1.000 | 9 | 0.00 | 5.56 | | | | |
| 12135 | 0.000 | 9 | 0.00 | 5.56 | | | | |
| 12135 | 1.000 | 9 | 0.00 | 5.64 | | | | |
| 12136 | 0.000 | 9 | 0.00 | 5.64 | | | | |
| 12136 | 1.000 | 9 | 0.00 | 5.70 | | | | |
| 12137 | 0.000 | 9 | 0.00 | 5.70 | | | | |
| 12137 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12138 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12138 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12139 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12139 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12140 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12140 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12141 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12141 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12142 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12142 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12143 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12143 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12144 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12144 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12145 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12145 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12146 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12146 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12147 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12147 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12148 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12148 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12149 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12149 | 1.000 | 9 | 0.00 | 5.74 | | | | |
| 12150 | 0.000 | 9 | 0.00 | 5.74 | | | | |
| 12150 | 1.000 | 9 | 0.00 | 4.58 | | | | |

Maximum Degree of Utilization

| | | N sig-c | Vy sig-t | Vz tau | Mt sig-* | My tend. | Mz As-l | Mb As-v | Mt2 crack | Total sigdyn | lamda tau-* |
|--------------|---|------------|-------------|-----------|-------------|-------------|------------|------------|--------------|-----------------|----------------|
| Cross sect. | 8 | 0.000 | 0.000 | 0.197 | 0.694 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 |
| DOKOS-4 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Cross sect. | 9 | 0.000 | 0.000 | 0.499 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.003 | 0.000 |
| section pile | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Total system | | 0.000 | 0.000 | 0.499 | 0.694 | 0.000 | 0.000 | 0.000 | 0.000 | 1.003 | 0.000 |
| | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΔΟΚΟΙ

Selected Beam Elements

| FROM | TO | INC | X-VALUE | NC | MEMBER | CS0 | CS1 | CS2 | CS3 | CS4 | CS5 |
|------|------|-----|---------|----|---------|-----|-----|-----|-----|-----|-----|
| 1000 | 1060 | 1 | | 1 | bending | 10 | 40 | | | | |
| 2000 | 2020 | 1 | | | | | | | | | |

Default design code is DIN Fachbericht 102 Massivbröcken (2003) (Germany)
Klasse(Tab.4.118): D

Materials

No. 1 C 25/30 (DIN 1045-1)
No. 3 C 25/30 (DIN 1045-1)
No. 4 C 25/30 (DIN 1045-1)
No. 5 C 25/30 (DIN 1045-1)
No. 6 C 25/30 (DIN 1045-1)
No. 7 C 25/30 (DIN 1045-1)
No. 8 C 25/30 (DIN 1045-1)
No. 9 C 25/30 (DIN 1045-1)
No. 10 C 25/30 (DIN 1045-1)
No. 12 BSt 500 SA (DIN 1045-1)

Reinforcement will be accounted for sectional values as defined in AQUA
Reinforcements saved as design case LCR 512

Considered Load Cases

| | | | | | |
|------|------|------|------|------|------|
| 9101 | 9102 | 9103 | 9104 | 9105 | 9106 |
| 9107 | 9108 | 9201 | 9202 | 9203 | 9204 |
| 9205 | 9206 | 9207 | 9301 | 9302 | 9303 |
| 9304 | 9305 | 9306 | 9307 | 9308 | |

Ultimate Load Design

Design for ultimate loads DIN Fachbericht 102 Massivbröcken (2003)
Uniaxial bending due to symmetry

| | | | | | | |
|----------------|-------|-------|------|-------|-------|-------|
| Safety factors | SC-1 | SC-2 | SC-S | SS-1 | SS-2 | PIIa |
| | 1.50 | 1.50 | 1.88 | 1.15 | 1.15 | 7 |
| Strain limits | C1 | C2 | S1 | S2 | Z1 | Z2 |
| max | -3.50 | -2.00 | 3.00 | 25.00 | -3.50 | 25.00 |

parameters for reinforcements

| | | | |
|-------------------------|-------------|------------------|----------------|
| Minimum reinforcements | compression | min. reinforcem. | maximum- |
| Bending. | Compress. | e/d N/Npl | requ. section |
| 0.00 [cm ²] | 0.30 [o/o] | 3.50 0.0010 | 0.00 0.15 9.00 |

Tensile forces in the longitudinal reinforcements due to shear are NOT accounted for.

Material of sections uses Ultimate Limit strain-stress law with global safety factors

Material of reinforcements uses Ultimate Limit strain-stress law with global safety factors

| MNO. | temp lev. | Material-safety | max.compr stress | at strain | max.tens stress | at strain | tension-stiffening |
|------|-----------|-----------------|------------------|-----------|-----------------|-----------|--------------------|
| | | [-] | [MPa] | [o/oo] | [MPa] | [o/oo] | [MPa] |
| 1 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 3 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 4 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 5 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 6 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 7 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 8 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 9 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 10 | 0 | 1.500 | -14.17 | -2.00 | 0.00 | 0.00 | |
| 12 | 0 | 1.150 | -456.52 | -25.00 | 456.52 | 25.00 | |

Shear Design

Design for shear DIN 1045-1 (2003)

Minimum shear factor or tan of inclination of compressive struts 0.57 / 1.72

| MNO | f-cd | tau-rd | sigIIQ | sigIIT | sigIIQ+ | fyd |
|-----|-------|--------|--------|--------|---------|-------|
| | [MPa] | [MPa] | [MPa] | [MPa] | [MPa] | [MPa] |
| 1 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 | |
| 3 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 | |
| 4 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 | |
| 5 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 | |
| 6 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 | |
| 7 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 | |
| 8 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 | |
| 9 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 | |
| 10 | 11.33 | 0.08 | 8.50 | 5.95 | 8.50 | |
| 12 | | | | | | |

434.78

Tolerance for exceeding maximum shear or principal compression stress 0.0200

OPIΣTIKH MEΛETH/TECHNIKO TA/L=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΔΟΚΟΙ

Longitudinal Reinforcements LCR 512

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | NoS | μue [-] | AS-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 1001 | 0.000 | 1 | 0.76 | 37.73 | | 2.37T | 9.40 | | 25.96 | |
| 1001 | 0.883 | 1 | 0.63 | 31.43 | | 2.37T | 8.58 | | 20.47 | |
| 1002 | 0.000 | 1 | 0.63 | 31.50 | | 2.37T | 8.55 | | 20.57 | |
| 1002 | 0.883 | 1 | 0.53 | 26.58 | | 2.37T | 7.62 | 0.63 | 15.91 | 0.04 |
| 1003 | 0.000 | 1 | 0.54 | 26.65 | | 2.37T | 7.60 | 0.62 | 16.02 | 0.04 |
| 1003 | 0.883 | 1 | 0.43 | 21.25 | | 2.37T | 6.19 | 0.30 | 11.71 | 0.34 |
| | | | | | | 0.34 | | | | |
| 1004 | 0.000 | 1 | 0.43 | 21.32 | | 2.37T | 6.17 | 0.29 | 11.81 | 0.34 |
| | | | | | | 0.34 | | | | |
| 1004 | 0.883 | 1 | 0.31 | 15.64 | | 2.37T | 4.30 | 0.17 | 7.88 | 0.45 |
| | | | | | | 0.48 | | | | |
| 1005 | 0.000 | 1 | 0.32 | 15.70 | | 2.37T | 4.28 | 0.14 | 7.98 | 0.45 |
| | | | | | | 0.48 | | | | |
| 1005 | 0.883 | 1 | 0.20 | 9.75 | | 2.37T | 1.95 | 0.19 | 4.44 | 0.39 |
| | | | | | | 0.41 | | | | |
| 1006 | 0.000 | 1 | 0.20 | 9.81 | | 2.37T | 1.93 | 0.18 | 4.53 | 0.39 |
| | | | | | | 0.41 | | | | |
| 1006 | 0.883 | 1 | 0.15 | 7.58 | | 2.37T | 1.03 | 0.41 | 3.45 | 0.17 |
| | | | | | | 0.15 | | | | |
| 1007 | 0.000 | 1 | 0.15 | 7.58 | | 2.37T | 1.03 | 0.41 | 3.45 | 0.17 |
| | | | | | | 0.15 | | | | |
| 1007 | 0.883 | 1 | 0.20 | 9.85 | | 2.37T | 2.03 | 0.13 | 4.43 | 0.43 |
| | | | | | | 0.45 | | | | |
| 1008 | 0.000 | 1 | 0.20 | 9.79 | | 2.37T | 2.05 | 0.15 | 4.34 | 0.43 |
| | | | | | | 0.45 | | | | |
| 1008 | 0.883 | 1 | 0.33 | 16.32 | | 2.37T | 4.48 | 0.60 | 7.78 | 0.49 |
| | | | | | | 0.60 | | | | |
| 1009 | 0.000 | 1 | 0.33 | 16.29 | | 2.37T | 4.50 | 0.61 | 7.67 | 0.53 |
| | | | | | | 0.60 | | | | |
| 1009 | 0.883 | 1 | 0.44 | 21.89 | | 2.37T | 6.48 | 0.63 | 11.50 | 0.44 |
| | | | | | | 0.47 | | | | |
| 1010 | 0.000 | 1 | 0.44 | 21.83 | | 2.37T | 6.50 | 0.64 | 11.39 | 0.45 |
| | | | | | | 0.47 | | | | |
| 1010 | 0.883 | 1 | 0.54 | 26.83 | | 2.37T | 8.01 | 0.46 | 15.59 | 0.21 |
| | | | | | | 0.18 | | | | |
| 1011 | 0.000 | 1 | 0.54 | 26.75 | | 2.37T | 8.03 | 0.47 | 15.48 | 0.21 |
| | | | | | | 0.18 | | | | |
| 1011 | 0.883 | 1 | 0.63 | 31.47 | | 2.37T | 9.06 | | 20.03 | |
| 1012 | 0.000 | 1 | 0.63 | 31.40 | | 2.37T | 9.09 | | 19.93 | |
| 1012 | 0.883 | 1 | 0.76 | 37.64 | | 2.37T | 10.01 | | 25.25 | |
| 1013 | 0.000 | 1 | 0.76 | 37.66 | | 2.37T | 9.03 | | 26.25 | |
| 1013 | 0.883 | 1 | 0.62 | 30.68 | | 2.37T | 8.16 | | 20.15 | |
| 1014 | 0.000 | 1 | 0.62 | 30.76 | | 2.37T | 8.12 | | 20.26 | |
| 1014 | 0.883 | 1 | 0.50 | 24.85 | | 2.37T | 7.13 | | 15.34 | |
| 1015 | 0.000 | 1 | 0.50 | 24.94 | | 2.37T | 7.12 | | 15.45 | |
| 1015 | 0.883 | 1 | 0.38 | 19.08 | | 2.37T | 5.67 | | 11.03 | |
| 1016 | 0.000 | 1 | 0.39 | 19.16 | | 2.37T | 5.65 | | 11.14 | |
| 1016 | 0.883 | 1 | 0.27 | 13.31 | | 2.37T | 3.77 | | 7.17 | |
| 1017 | 0.000 | 1 | 0.27 | 13.40 | | 2.37T | 3.75 | | 7.27 | |
| 1017 | 0.883 | 1 | 0.15 | 7.56 | | 2.37T | 1.43 | | 3.75 | |
| 1018 | 0.000 | 1 | 0.15 | 7.61 | | 2.37T | 1.42 | | 3.82 | |
| 1018 | 0.883 | 1 | 0.11 | 5.64 | | 2.37T | 0.50 | | 2.77 | |
| 1019 | 0.000 | 1 | 0.11 | 5.64 | | 2.37T | 0.50 | | 2.77 | |
| 1019 | 0.883 | 1 | 0.15 | 7.61 | | 2.37T | 1.52 | | 3.72 | |
| 1020 | 0.000 | 1 | 0.15 | 7.56 | | 2.37T | 1.53 | | 3.65 | |
| 1020 | 0.883 | 1 | 0.27 | 13.40 | | 2.37T | 3.96 | | 7.06 | |
| 1021 | 0.000 | 1 | 0.27 | 13.31 | | 2.37T | 3.97 | | 6.96 | |
| 1021 | 0.883 | 1 | 0.39 | 19.16 | | 2.37T | 5.96 | | 10.82 | |
| 1022 | 0.000 | 1 | 0.38 | 19.07 | | 2.37T | 5.98 | | 10.72 | |
| 1022 | 0.883 | 1 | 0.50 | 24.93 | | 2.37T | 7.53 | | 15.02 | |
| 1023 | 0.000 | 1 | 0.50 | 24.83 | | 2.37T | 7.55 | | 14.91 | |
| 1023 | 0.883 | 1 | 0.62 | 30.72 | | 2.37T | 8.64 | | 19.70 | |
| 1024 | 0.000 | 1 | 0.62 | 30.65 | | 2.37T | 8.68 | | 19.60 | |
| 1024 | 0.883 | 1 | 0.76 | 37.56 | | 2.37T | 9.65 | | 25.54 | |
| 1025 | 0.000 | 1 | 0.76 | 38.06 | | 2.37T | 8.80 | | 26.88 | |
| 1025 | 0.883 | 1 | 0.61 | 30.54 | | 2.37T | 7.82 | | 20.35 | |
| 1026 | 0.000 | 1 | 0.62 | 30.60 | | 2.37T | 7.79 | | 20.44 | |
| 1026 | 0.883 | 1 | 0.49 | 24.34 | | 2.37T | 6.79 | | 15.18 | |
| 1027 | 0.000 | 1 | 0.49 | 24.43 | | 2.37T | 6.77 | | 15.29 | |
| 1027 | 0.883 | 1 | 0.37 | 18.41 | | 2.37T | 5.35 | | 10.68 | |
| 1028 | 0.000 | 1 | 0.37 | 18.49 | | 2.37T | 5.33 | | 10.79 | |
| 1028 | 0.883 | 1 | 0.25 | 12.59 | | 2.37T | 3.48 | | 6.73 | |
| 1029 | 0.000 | 1 | 0.25 | 12.68 | | 2.37T | 3.47 | | 6.84 | |
| 1029 | 0.883 | 1 | 0.14 | 6.87 | | 2.37T | 1.17 | | 3.33 | |
| 1030 | 0.000 | 1 | 0.14 | 6.89 | | 2.37T | 1.16 | | 3.36 | |
| 1030 | 0.883 | 1 | 0.10 | 4.99 | | 2.37T | 0.28 | | 2.34 | |

OPIΣTIKH MEΛETH/TECHNIKO TA/L=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΔΟΚΟΙ

Longitudinal Reinforcements LCR 512

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 1031 | 0.000 | 1 | 0.10 | 4.99 | | 2.37T | 0.28 | | 2.34 | |
| 1031 | 0.883 | 1 | 0.14 | 6.89 | | 2.37T | 1.26 | | 3.26 | |
| 1032 | 0.000 | 1 | 0.14 | 6.87 | | 2.37T | 1.27 | | 3.23 | |
| 1032 | 0.883 | 1 | 0.25 | 12.67 | | 2.37T | 3.67 | | 6.63 | |
| 1033 | 0.000 | 1 | 0.25 | 12.59 | | 2.37T | 3.68 | | 6.53 | |
| 1033 | 0.883 | 1 | 0.37 | 18.49 | | 2.37T | 5.64 | | 10.47 | |
| 1034 | 0.000 | 1 | 0.37 | 18.40 | | 2.37T | 5.66 | | 10.37 | |
| 1034 | 0.883 | 1 | 0.49 | 24.42 | | 2.37T | 7.19 | | 14.85 | |
| 1035 | 0.000 | 1 | 0.49 | 24.32 | | 2.37T | 7.21 | | 14.74 | |
| 1035 | 0.883 | 1 | 0.61 | 30.54 | | 2.37T | 8.31 | | 19.85 | |
| 1036 | 0.000 | 1 | 0.61 | 30.48 | | 2.37T | 8.35 | | 19.76 | |
| 1036 | 0.883 | 1 | 0.76 | 37.96 | | 2.37T | 9.44 | | 26.14 | |
| 1037 | 0.000 | 1 | 0.76 | 37.92 | | 2.37T | 8.89 | | 26.66 | |
| 1037 | 0.883 | 1 | 0.62 | 30.79 | | 2.37T | 8.08 | | 20.33 | |
| 1038 | 0.000 | 1 | 0.62 | 30.86 | | 2.37T | 8.05 | | 20.44 | |
| 1038 | 0.883 | 1 | 0.50 | 24.93 | | 2.37T | 7.16 | | 15.40 | |
| 1039 | 0.000 | 1 | 0.50 | 25.03 | | 2.37T | 7.14 | | 15.51 | |
| 1039 | 0.883 | 1 | 0.39 | 19.16 | | 2.37T | 5.77 | | 11.02 | |
| 1040 | 0.000 | 1 | 0.39 | 19.25 | | 2.37T | 5.75 | | 11.13 | |
| 1040 | 0.883 | 1 | 0.27 | 13.39 | | 2.37T | 3.90 | | 7.12 | |
| 1041 | 0.000 | 1 | 0.27 | 13.48 | | 2.37T | 3.88 | | 7.22 | |
| 1041 | 0.883 | 1 | 0.15 | 7.71 | | 2.37T | 1.57 | | 3.77 | |
| 1042 | 0.000 | 1 | 0.16 | 7.73 | | 2.37T | 1.55 | | 3.80 | |
| 1042 | 0.883 | 1 | 0.12 | 5.87 | | 2.37T | 0.71 | | 2.79 | |
| 1043 | 0.000 | 1 | 0.12 | 5.87 | | 2.37T | 0.71 | | 2.79 | |
| 1043 | 0.883 | 1 | 0.16 | 7.73 | | 2.37T | 1.66 | | 3.70 | |
| 1044 | 0.000 | 1 | 0.15 | 7.71 | | 2.37T | 1.67 | | 3.67 | |
| 1044 | 0.883 | 1 | 0.27 | 13.48 | | 2.37T | 4.09 | | 7.02 | |
| 1045 | 0.000 | 1 | 0.27 | 13.39 | | 2.37T | 4.10 | | 6.91 | |
| 1045 | 0.883 | 1 | 0.39 | 19.24 | | 2.37T | 6.05 | | 10.81 | |
| 1046 | 0.000 | 1 | 0.38 | 19.15 | | 2.37T | 6.07 | | 10.70 | |
| 1046 | 0.883 | 1 | 0.50 | 25.01 | | 2.37T | 7.55 | | 15.09 | |
| 1047 | 0.000 | 1 | 0.50 | 24.92 | | 2.37T | 7.57 | | 14.97 | |
| 1047 | 0.883 | 1 | 0.62 | 30.82 | | 2.37T | 8.57 | | 19.88 | |
| 1048 | 0.000 | 1 | 0.62 | 30.74 | | 2.37T | 8.60 | | 19.77 | |
| 1048 | 0.883 | 1 | 0.76 | 37.83 | | 2.37T | 9.51 | | 25.94 | |
| 1049 | 0.000 | 1 | 0.78 | 38.79 | | 2.85T | 9.23 | | 26.72 | |
| 1049 | 0.883 | 1 | 0.65 | 32.14 | | 2.88T | 8.60 | | 20.66 | |
| 1050 | 0.000 | 1 | 0.64 | 31.73 | | 2.37T | 8.55 | | 20.81 | |
| 1050 | 0.883 | 1 | 0.55 | 27.54 | | 3.02T | 7.81 | 0.66 | 15.92 | 0.09 |
| | | | | | | 0.03 | | | | |
| 1051 | 0.000 | 1 | 0.55 | 27.18 | | 2.58T | 7.77 | 0.65 | 16.08 | 0.08 |
| | | | | | | 0.03 | | | | |
| 1051 | 0.883 | 1 | 0.44 | 21.95 | | 2.45T | 6.47 | 0.56 | 11.62 | 0.41 |
| | | | | | | 0.43 | | | | |
| 1052 | 0.000 | 1 | 0.44 | 21.90 | | 2.37T | 6.44 | 0.48 | 11.78 | 0.41 |
| | | | | | | 0.42 | | | | |
| 1052 | 0.883 | 1 | 0.33 | 16.57 | | 2.37T | 4.62 | 0.64 | 7.75 | 0.56 |
| | | | | | | 0.62 | | | | |
| 1053 | 0.000 | 1 | 0.34 | 16.67 | | 2.37T | 4.58 | 0.63 | 7.91 | 0.56 |
| | | | | | | 0.63 | | | | |
| 1053 | 0.883 | 1 | 0.21 | 10.21 | | 2.37T | 2.26 | 0.02 | 4.48 | 0.51 |
| | | | | | | 0.56 | | | | |
| 1054 | 0.000 | 1 | 0.21 | 10.21 | | 2.37T | 2.23 | | 4.53 | 0.51 |
| | | | | | | 0.56 | | | | |
| 1054 | 0.883 | 1 | 0.17 | 8.24 | | 2.37T | 1.48 | 0.32 | 3.51 | 0.28 |
| | | | | | | 0.28 | | | | |
| 1055 | 0.000 | 1 | 0.17 | 8.24 | | 2.37T | 1.48 | 0.32 | 3.51 | 0.28 |
| | | | | | | 0.28 | | | | |
| 1055 | 0.883 | 1 | 0.20 | 9.96 | | 2.37T | 2.34 | | 4.43 | 0.21 |
| | | | | | | 0.61 | | | | |
| 1056 | 0.000 | 1 | 0.21 | 10.33 | | 2.37T | 2.37 | | 4.38 | 0.58 |
| | | | | | | 0.63 | | | | |
| 1056 | 0.883 | 1 | 0.30 | 14.86 | | 2.37T | 4.79 | | 7.70 | |
| 1057 | 0.000 | 1 | 0.30 | 14.74 | | 2.37T | 4.82 | | 7.54 | |
| 1057 | 0.883 | 1 | 0.44 | 21.76 | | 2.37T | 6.74 | 0.09 | 11.47 | 0.52 |
| | | | | | | 0.56 | | | | |
| 1058 | 0.000 | 1 | 0.44 | 21.68 | | 2.39T | 6.78 | 0.12 | 11.31 | 0.52 |
| | | | | | | 0.56 | | | | |
| 1058 | 0.883 | 1 | 0.55 | 27.28 | | 2.52T | 8.18 | 0.49 | 15.66 | 0.23 |
| | | | | | | 0.21 | | | | |
| 1059 | 0.000 | 1 | 0.56 | 27.62 | | 2.96T | 8.22 | 0.50 | 15.49 | 0.24 |
| | | | | | | 0.21 | | | | |
| 1059 | 0.883 | 1 | 0.64 | 31.70 | | 2.37T | 9.06 | | 20.26 | |
| 1060 | 0.000 | 1 | 0.65 | 32.12 | | 2.89T | 9.11 | | 20.11 | |
| 1060 | 0.883 | 1 | 0.78 | 38.69 | | 2.85T | 9.84 | | 26.01 | |

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΔΟΚΟΙ

Longitudinal Reinforcements LCR 512

Note: Layer includes reinforcements for torsion if followed by T

Note: Layer has only compression reinforcements if followed by a quote

| Beam | x[m] | Nos | μue [-] | As-Sum [cm2] | shift by [m] | Lay-0&5 [cm2] | Lay-1&6 [cm2] | Lay-2&7 [cm2] | Lay-3&8 [cm2] | Lay-4&9 [cm2] |
|------|-------|-----|------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|
| 2001 | 0.000 | 2 | 0.50 | 39.97 | | 1.17T | 9.73 | | 29.07 | |
| 2001 | 0.300 | 2 | 0.48 | 38.55 | | 1.17T | 9.67 | | 27.71 | |
| 2002 | 0.000 | 2 | 0.48 | 38.37 | | 0.85T | 9.69 | | 27.82 | |
| 2002 | 0.300 | 2 | 0.45 | 36.23 | | 0.85T | 9.46 | | 25.93 | |
| 2003 | 0.000 | 2 | 0.45 | 36.16 | | 0.87T | 10.07 | | 25.22 | |
| 2003 | 0.300 | 2 | 0.48 | 38.28 | | 0.87T | 10.33 | | 27.08 | |
| 2004 | 0.000 | 2 | 0.48 | 38.45 | | 1.16T | 10.32 | | 26.97 | |
| 2004 | 0.300 | 2 | 0.50 | 39.86 | | 1.16T | 10.39 | | 28.30 | |
| 2005 | 0.000 | 2 | 0.51 | 40.65 | | 1.17T | 9.37 | | 30.11 | |
| 2005 | 0.300 | 2 | 0.49 | 38.83 | | 1.17T | 9.31 | | 28.35 | |
| 2006 | 0.000 | 2 | 0.48 | 38.68 | | 0.89T | 9.33 | | 28.46 | |
| 2006 | 0.300 | 2 | 0.45 | 36.21 | | 0.89T | 9.10 | | 26.22 | |
| 2007 | 0.000 | 2 | 0.45 | 36.11 | | 0.89T | 9.72 | | 25.50 | |
| 2007 | 0.300 | 2 | 0.48 | 38.57 | | 0.89T | 9.98 | | 27.70 | |
| 2008 | 0.000 | 2 | 0.48 | 38.73 | | 1.17T | 9.97 | | 27.59 | |
| 2008 | 0.300 | 2 | 0.51 | 40.54 | | 1.17T | 10.05 | | 29.32 | |
| 2009 | 0.000 | 2 | 0.52 | 41.60 | | 1.16T | 9.31 | | 31.13 | |
| 2009 | 0.300 | 2 | 0.49 | 39.46 | | 1.17T | 9.15 | | 29.14 | |
| 2010 | 0.000 | 2 | 0.49 | 39.39 | | 0.96T | 9.17 | | 29.26 | |
| 2010 | 0.300 | 2 | 0.46 | 36.70 | | 0.97T | 8.88 | | 26.86 | |
| 2011 | 0.000 | 2 | 0.46 | 36.60 | | 0.97T | 9.52 | | 26.11 | |
| 2011 | 0.300 | 2 | 0.49 | 39.28 | | 0.97T | 9.84 | | 28.47 | |
| 2012 | 0.000 | 2 | 0.49 | 39.34 | | 1.17T | 9.82 | | 28.35 | |
| 2012 | 0.300 | 2 | 0.52 | 41.48 | | 1.17T | 10.01 | | 30.30 | |
| 2013 | 0.000 | 2 | 0.51 | 41.12 | | 1.29T | 9.17 | | 30.66 | |
| 2013 | 0.300 | 2 | 0.49 | 39.27 | | 1.30T | 9.13 | | 28.84 | |
| 2014 | 0.000 | 2 | 0.49 | 39.23 | | 1.13T | 9.15 | | 28.95 | |
| 2014 | 0.300 | 2 | 0.46 | 36.71 | | 1.13T | 8.95 | | 26.63 | |
| 2015 | 0.000 | 2 | 0.46 | 36.61 | | 1.13T | 9.58 | | 25.90 | |
| 2015 | 0.300 | 2 | 0.49 | 39.11 | | 1.13T | 9.81 | | 28.18 | |
| 2016 | 0.000 | 2 | 0.49 | 39.16 | | 1.30T | 9.79 | | 28.07 | |
| 2016 | 0.300 | 2 | 0.51 | 41.00 | | 1.30T | 9.85 | | 29.85 | |
| 2017 | 0.000 | 2 | 0.51 | 41.12 | | 1.53T | 9.37 | | 30.23 | |
| 2017 | 0.300 | 2 | 0.49 | 39.60 | | 1.53T | 9.41 | | 28.66 | |
| 2018 | 0.000 | 2 | 0.49 | 39.48 | | 1.28T | 9.42 | | 28.78 | |
| 2018 | 0.300 | 2 | 0.47 | 37.24 | | 1.29T | 9.29 | | 26.66 | |
| 2019 | 0.000 | 2 | 0.46 | 37.15 | | 1.29T | 9.91 | | 25.95 | |
| 2019 | 0.300 | 2 | 0.49 | 39.38 | | 1.29T | 10.06 | | 28.03 | |
| 2020 | 0.000 | 2 | 0.49 | 39.50 | | 1.54T | 10.05 | | 27.91 | |
| 2020 | 0.300 | 2 | 0.51 | 41.01 | | 1.53T | 10.02 | | 29.45 | |

Shear Reinforcements per Cutted Part of Section LCR 512

| Beam | x[m] | Nos | Asl-Mt [cm2/m] | SLay-0&5 [cm2/m] | SLay-1&6 [cm2/m] | SLay-2&7 [cm2/m] | SLay-3&8 [cm2/m] | SLay-4&9 [cm2/m] |
|------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1001 | 0.000 | 1 | 0.78 | 4.01 | | | | |
| 1001 | 0.883 | 1 | 0.78 | 3.82 | | | | |
| 1002 | 0.000 | 1 | 0.47 | 3.76 | | | | |
| 1002 | 0.883 | 1 | 0.47 | 3.57 | | | | |
| 1003 | 0.000 | 1 | 0.33 | 3.46 | | | | |
| 1003 | 0.883 | 1 | 0.33 | 3.27 | | | | |
| 1004 | 0.000 | 1 | 0.23 | 3.14 | | | | |
| 1004 | 0.883 | 1 | 0.23 | 2.95 | | | | |
| 1005 | 0.000 | 1 | 0.14 | 2.81 | | | | |
| 1005 | 0.883 | 1 | 0.14 | 2.62 | | | | |
| 1006 | 0.000 | 1 | 0.05 | 2.47 | | | | |
| 1006 | 0.883 | 1 | 0.05 | 2.28 | | | | |
| 1007 | 0.000 | 1 | 0.04 | 2.20 | | | | |
| 1007 | 0.883 | 1 | 0.04 | 2.39 | | | | |
| 1008 | 0.000 | 1 | 0.13 | 2.55 | | | | |
| 1008 | 0.883 | 1 | 0.13 | 2.73 | | | | |
| 1009 | 0.000 | 1 | 0.22 | 2.88 | | | | |
| 1009 | 0.883 | 1 | 0.22 | 3.06 | | | | |
| 1010 | 0.000 | 1 | 0.32 | 3.19 | | | | |
| 1010 | 0.883 | 1 | 0.32 | 3.38 | | | | |
| 1011 | 0.000 | 1 | 0.46 | 3.49 | | | | |
| 1011 | 0.883 | 1 | 0.46 | 3.68 | | | | |
| 1012 | 0.000 | 1 | 0.77 | 3.74 | | | | |
| 1012 | 0.883 | 1 | 0.77 | 3.93 | | | | |
| 1013 | 0.000 | 1 | 0.75 | 4.29 | | | | |
| 1013 | 0.883 | 1 | 0.75 | 4.10 | | | | |
| 1014 | 0.000 | 1 | 0.45 | 3.96 | | | | |
| 1014 | 0.883 | 1 | 0.45 | 3.78 | | | | |
| 1015 | 0.000 | 1 | 0.43 | 3.68 | | | | |
| 1015 | 0.883 | 1 | 0.43 | 3.49 | | | | |
| 1016 | 0.000 | 1 | 0.37 | 3.33 | | | | |
| 1016 | 0.883 | 1 | 0.37 | 3.15 | | | | |

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΔΟΚΟΙ

Shear Reinforcements per Cutted Part of Section LCR 512

| Beam | x[m] | NoS | Asl-Mt [cm2/m] | SLay-0&5 [cm2/m] | SLay-1&6 [cm2/m] | SLay-2&7 [cm2/m] | SLay-3&8 [cm2/m] | SLay-4&9 [cm2/m] |
|------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1017 | 0.000 | 1 | 0.29 | 2.95 | | | | |
| 1017 | 0.883 | 1 | 0.29 | 2.77 | | | | |
| 1018 | 0.000 | 1 | 0.18 | 2.56 | | | | |
| 1018 | 0.883 | 1 | 0.18 | 2.37 | | | | |
| 1019 | 0.000 | 1 | 0.18 | 2.30 | | | | |
| 1019 | 0.883 | 1 | 0.18 | 2.49 | | | | |
| 1020 | 0.000 | 1 | 0.29 | 2.69 | | | | |
| 1020 | 0.883 | 1 | 0.29 | 2.88 | | | | |
| 1021 | 0.000 | 1 | 0.37 | 3.07 | | | | |
| 1021 | 0.883 | 1 | 0.37 | 3.26 | | | | |
| 1022 | 0.000 | 1 | 0.44 | 3.42 | | | | |
| 1022 | 0.883 | 1 | 0.44 | 3.61 | | | | |
| 1023 | 0.000 | 1 | 0.46 | 3.71 | | | | |
| 1023 | 0.883 | 1 | 0.46 | 3.89 | | | | |
| 1024 | 0.000 | 1 | 0.75 | 4.03 | | | | |
| 1024 | 0.883 | 1 | 0.75 | 4.22 | | | | |
| 1025 | 0.000 | 1 | 0.96 | 4.73 | | | | |
| 1025 | 0.883 | 1 | 0.96 | 4.54 | | | | |
| 1026 | 0.000 | 1 | 0.64 | 4.28 | | | | |
| 1026 | 0.883 | 1 | 0.64 | 4.09 | | | | |
| 1027 | 0.000 | 1 | 0.56 | 3.86 | | | | |
| 1027 | 0.883 | 1 | 0.56 | 3.68 | | | | |
| 1028 | 0.000 | 1 | 0.45 | 3.43 | | | | |
| 1028 | 0.883 | 1 | 0.45 | 3.24 | | | | |
| 1029 | 0.000 | 1 | 0.30 | 2.98 | | | | |
| 1029 | 0.883 | 1 | 0.30 | 2.79 | | | | |
| 1030 | 0.000 | 1 | 0.15 | 2.53 | | | | |
| 1030 | 0.883 | 1 | 0.15 | 2.35 | | | | |
| 1031 | 0.000 | 1 | 0.15 | 2.27 | | | | |
| 1031 | 0.883 | 1 | 0.15 | 2.46 | | | | |
| 1032 | 0.000 | 1 | 0.30 | 2.72 | | | | |
| 1032 | 0.883 | 1 | 0.30 | 2.91 | | | | |
| 1033 | 0.000 | 1 | 0.45 | 3.16 | | | | |
| 1033 | 0.883 | 1 | 0.45 | 3.35 | | | | |
| 1034 | 0.000 | 1 | 0.56 | 3.60 | | | | |
| 1034 | 0.883 | 1 | 0.56 | 3.79 | | | | |
| 1035 | 0.000 | 1 | 0.64 | 4.02 | | | | |
| 1035 | 0.883 | 1 | 0.64 | 4.20 | | | | |
| 1036 | 0.000 | 1 | 0.96 | 4.46 | | | | |
| 1036 | 0.883 | 1 | 0.96 | 4.65 | | | | |
| 1037 | 0.000 | 1 | 1.26 | 4.85 | | | | |
| 1037 | 0.883 | 1 | 1.26 | 4.66 | | | | |
| 1038 | 0.000 | 1 | 0.85 | 4.31 | | | | |
| 1038 | 0.883 | 1 | 0.85 | 4.12 | | | | |
| 1039 | 0.000 | 1 | 0.72 | 3.87 | | | | |
| 1039 | 0.883 | 1 | 0.72 | 3.68 | | | | |
| 1040 | 0.000 | 1 | 0.56 | 3.43 | | | | |
| 1040 | 0.883 | 1 | 0.56 | 3.24 | | | | |
| 1041 | 0.000 | 1 | 0.35 | 2.98 | | | | |
| 1041 | 0.883 | 1 | 0.35 | 2.79 | | | | |
| 1042 | 0.000 | 1 | 0.13 | 2.52 | | | | |
| 1042 | 0.883 | 1 | 0.13 | 2.34 | | | | |
| 1043 | 0.000 | 1 | 0.12 | 2.26 | | | | |
| 1043 | 0.883 | 1 | 0.12 | 2.45 | | | | |
| 1044 | 0.000 | 1 | 0.35 | 2.72 | | | | |
| 1044 | 0.883 | 1 | 0.35 | 2.91 | | | | |
| 1045 | 0.000 | 1 | 0.56 | 3.17 | | | | |
| 1045 | 0.883 | 1 | 0.56 | 3.36 | | | | |
| 1046 | 0.000 | 1 | 0.71 | 3.61 | | | | |
| 1046 | 0.883 | 1 | 0.71 | 3.79 | | | | |
| 1047 | 0.000 | 1 | 0.85 | 4.05 | | | | |
| 1047 | 0.883 | 1 | 0.85 | 4.24 | | | | |
| 1048 | 0.000 | 1 | 1.26 | 4.58 | | | | |
| 1048 | 0.883 | 1 | 1.26 | 4.77 | | | | |
| 1049 | 0.000 | 1 | 1.60 | 4.79 | | | | |
| 1049 | 0.883 | 1 | 1.60 | 4.61 | | | | |
| 1050 | 0.000 | 1 | 1.29 | 4.49 | | | | |
| 1050 | 0.883 | 1 | 1.29 | 4.30 | | | | |
| 1051 | 0.000 | 1 | 1.07 | 4.10 | | | | |
| 1051 | 0.883 | 1 | 1.07 | 3.91 | | | | |
| 1052 | 0.000 | 1 | 0.83 | 3.66 | | | | |
| 1052 | 0.883 | 1 | 0.83 | 3.47 | | | | |
| 1053 | 0.000 | 1 | 0.53 | 3.18 | | | | |
| 1053 | 0.883 | 1 | 0.53 | 2.99 | | | | |
| 1054 | 0.000 | 1 | 0.27 | 2.67 | | | | |
| 1054 | 0.883 | 1 | 0.27 | 2.48 | | | | |
| 1055 | 0.000 | 1 | 0.26 | 2.40 | | | | |
| 1055 | 0.883 | 1 | 0.26 | 2.59 | | | | |

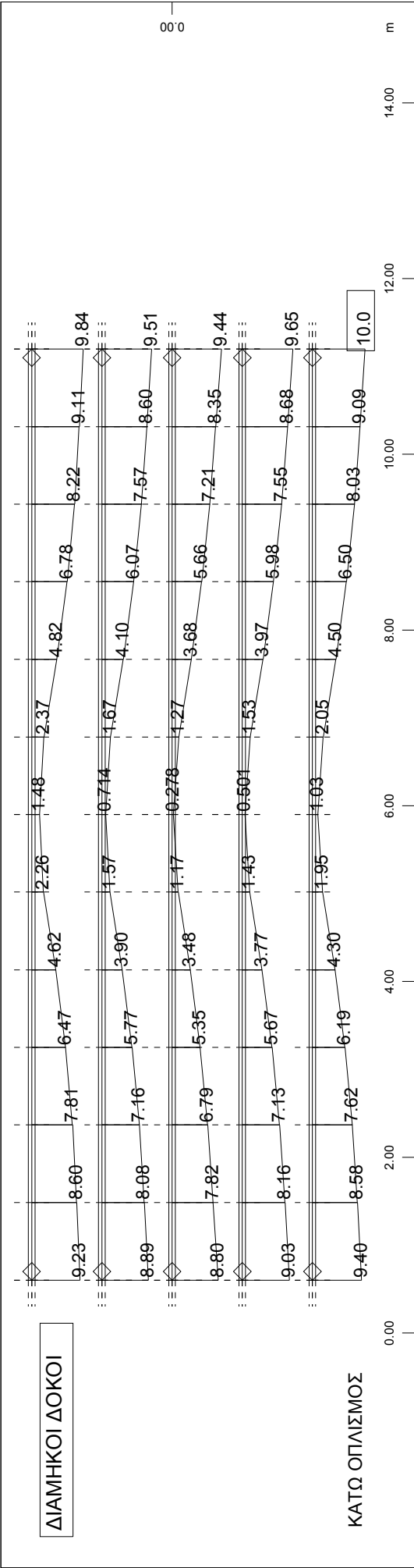
OPIΣTIKH MEΛETH/TECHNIKO TA/L=13.00
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΔΟΚΟΙ

Shear Reinforcements per Cutted Part of Section LCR 512

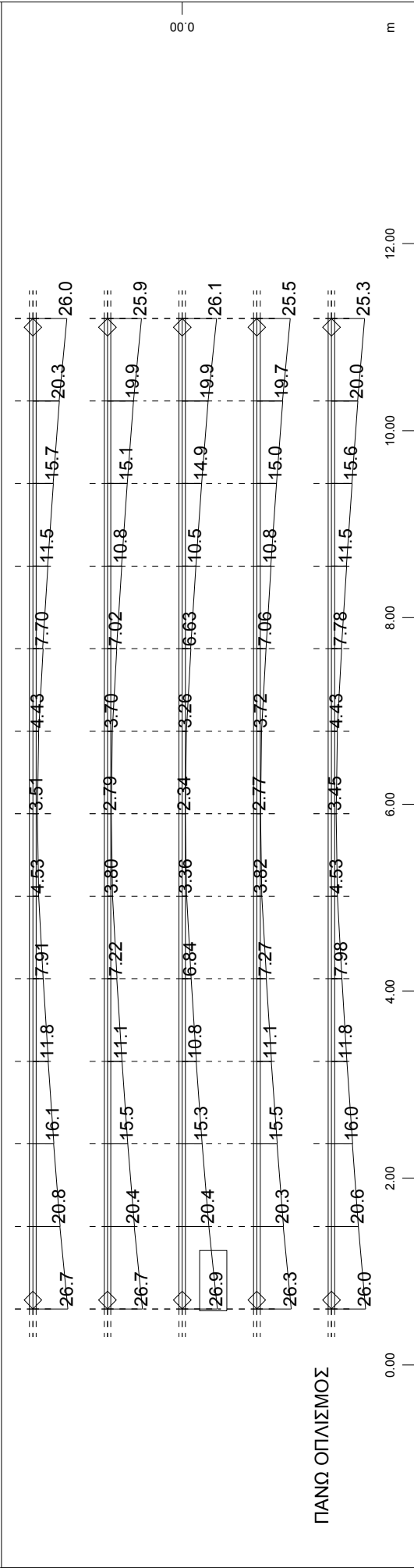
| Beam | x[m] | NoS | Asl-Mt [cm2/m] | SLay-0&5 [cm2/m] | SLay-1&6 [cm2/m] | SLay-2&7 [cm2/m] | SLay-3&8 [cm2/m] | SLay-4&9 [cm2/m] |
|------|-------|-----|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1056 | 0.000 | 1 | 0.53 | 2.91 | | | | |
| 1056 | 0.883 | 1 | 0.53 | 3.10 | | | | |
| 1057 | 0.000 | 1 | 0.82 | 3.39 | | | | |
| 1057 | 0.883 | 1 | 0.82 | 3.58 | | | | |
| 1058 | 0.000 | 1 | 1.07 | 3.83 | | | | |
| 1058 | 0.883 | 1 | 1.07 | 4.02 | | | | |
| 1059 | 0.000 | 1 | 1.28 | 4.23 | | | | |
| 1059 | 0.883 | 1 | 1.28 | 4.41 | | | | |
| 1060 | 0.000 | 1 | 1.60 | 4.53 | | | | |
| 1060 | 0.883 | 1 | 1.60 | 4.72 | | | | |
| 2001 | 0.000 | 2 | 0.52 | 2.02 | | | | |
| 2001 | 0.300 | 2 | 0.52 | 2.02 | | | | |
| 2002 | 0.000 | 2 | 0.38 | 3.48 | | | | |
| 2002 | 0.300 | 2 | 0.38 | 3.48 | | | | |
| 2003 | 0.000 | 2 | 0.39 | 3.42 | | | | |
| 2003 | 0.300 | 2 | 0.39 | 3.42 | | | | |
| 2004 | 0.000 | 2 | 0.52 | 1.98 | | | | |
| 2004 | 0.300 | 2 | 0.52 | 1.98 | | | | |
| 2005 | 0.000 | 2 | 0.51 | 3.19 | | | | |
| 2005 | 0.300 | 2 | 0.51 | 3.18 | | | | |
| 2006 | 0.000 | 2 | 0.40 | 4.06 | | | | |
| 2006 | 0.300 | 2 | 0.40 | 4.05 | | | | |
| 2007 | 0.000 | 2 | 0.39 | 3.99 | | | | |
| 2007 | 0.300 | 2 | 0.39 | 3.99 | | | | |
| 2008 | 0.000 | 2 | 0.51 | 3.13 | | | | |
| 2008 | 0.300 | 2 | 0.51 | 3.14 | | | | |
| 2009 | 0.000 | 2 | 0.50 | 3.58 | | | | |
| 2009 | 0.300 | 2 | 0.50 | 3.56 | | | | |
| 2010 | 0.000 | 2 | 0.42 | 4.33 | | | | |
| 2010 | 0.300 | 2 | 0.42 | 4.31 | | | | |
| 2011 | 0.000 | 2 | 0.42 | 4.23 | | | | |
| 2011 | 0.300 | 2 | 0.42 | 4.25 | | | | |
| 2012 | 0.000 | 2 | 0.50 | 3.50 | | | | |
| 2012 | 0.300 | 2 | 0.50 | 3.52 | | | | |
| 2013 | 0.000 | 2 | 0.56 | 3.32 | | | | |
| 2013 | 0.300 | 2 | 0.56 | 3.30 | | | | |
| 2014 | 0.000 | 2 | 0.50 | 4.26 | | | | |
| 2014 | 0.300 | 2 | 0.50 | 4.24 | | | | |
| 2015 | 0.000 | 2 | 0.50 | 4.18 | | | | |
| 2015 | 0.300 | 2 | 0.50 | 4.18 | | | | |
| 2016 | 0.000 | 2 | 0.56 | 3.25 | | | | |
| 2016 | 0.300 | 2 | 0.56 | 3.26 | | | | |
| 2017 | 0.000 | 2 | 0.66 | 2.88 | | | | |
| 2017 | 0.300 | 2 | 0.66 | 2.87 | | | | |
| 2018 | 0.000 | 2 | 0.55 | 3.87 | | | | |
| 2018 | 0.300 | 2 | 0.55 | 3.87 | | | | |
| 2019 | 0.000 | 2 | 0.55 | 3.81 | | | | |
| 2019 | 0.300 | 2 | 0.55 | 3.81 | | | | |
| 2020 | 0.000 | 2 | 0.66 | 2.83 | | | | |
| 2020 | 0.300 | 2 | 0.66 | 2.84 | | | | |

Maximum Degree of Utilization

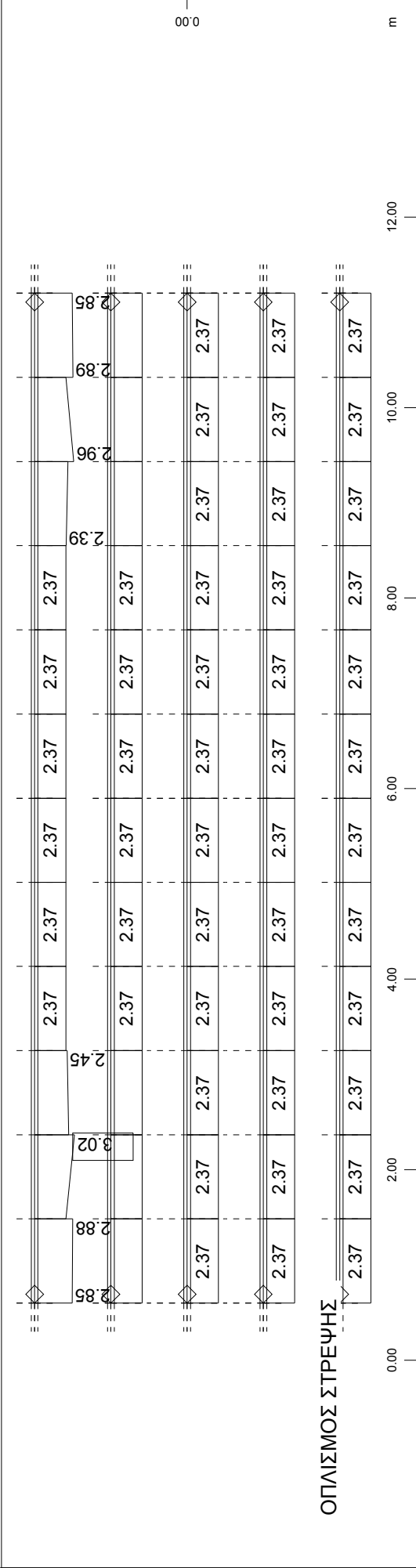
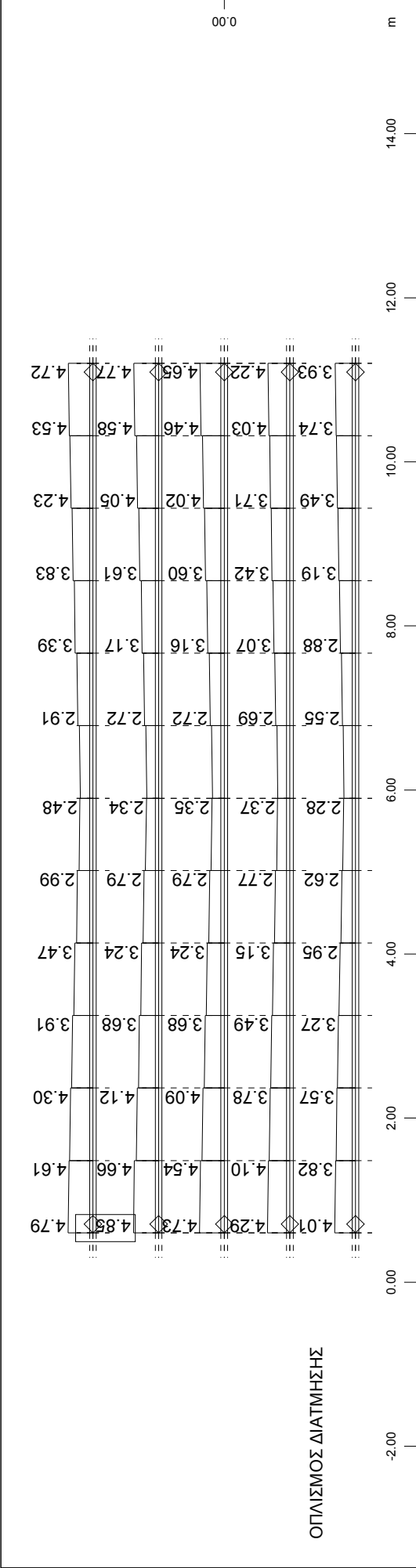
| | | N sig-c | Vy sig-t | Vz tau | Mt sig-* | My tend. | Mz As-l | Mb As-v | Mt2 crack | Total sigdyn | lamda tau-* |
|--------------|---|------------|-------------|-----------|-------------|-------------|------------|------------|--------------|-----------------|----------------|
| Cross sect. | 1 | 0.000 | 0.000 | 0.366 | 0.156 | 0.000 | 0.000 | 0.000 | 0.000 | 1.003 | 0.000 |
| Cross sect. | 2 | 0.000 | 0.000 | 0.110 | 0.048 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 |
| DOKOS-2 | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| <hr/> | | | | | | | | | | | |
| Total System | | 0.000 | 0.000 | 0.366 | 0.156 | 0.000 | 0.000 | 0.000 | 0.000 | 1.003 | 0.000 |
| | | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 1.001 | 0.000 | 0.000 | 0.000 | 0.000 |



Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 512 , 1 cm 3D = 11.2 cm2 (Max=10.0)

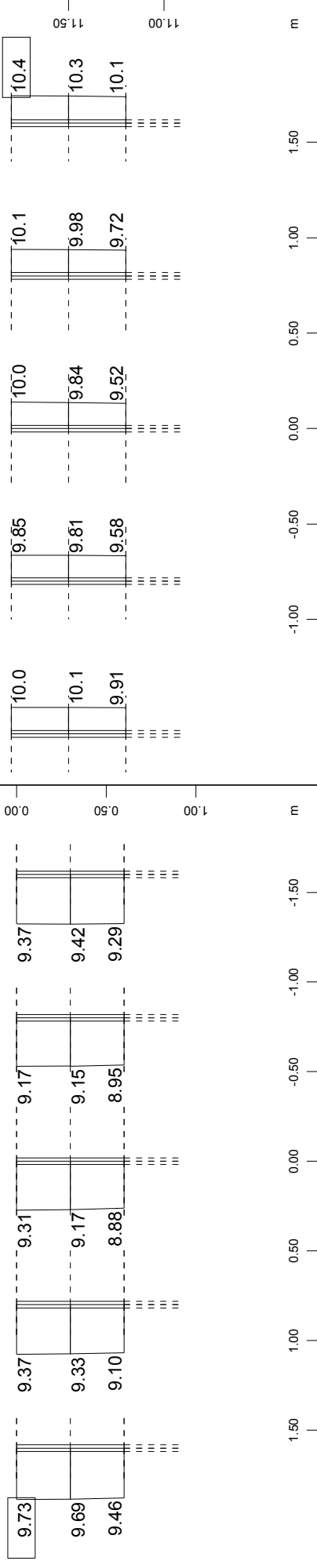


Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case 512 , 1 cm 3D = 44.8 cm2 (Max=26.9)



ΔΙΑΜΗΚΗ ΔΟΚΟΙ-ΣΤΗΡΙΞΗΣ

ΚΑΤΩ ΟΠΛΙΣΜΟΣ



Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case
512 , 1 cm 3D = 11.2 cm2 (Max=9.73)

M 1 : 33

X

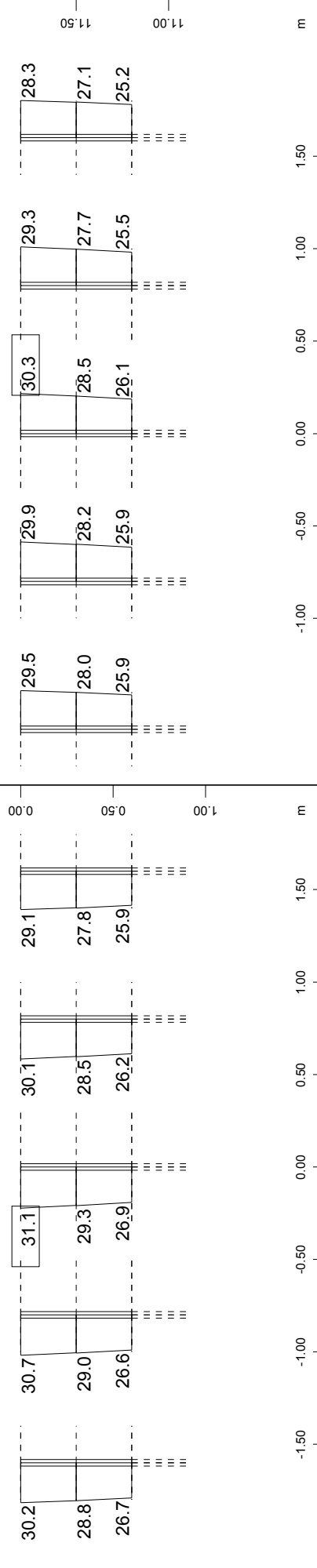
Sector of system Beam Elements Group 2

Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case

512 , 1 cm 3D = 22.4 cm2 (Max=10.4)

M 1 : 31

ΠΑΝΩ ΟΠΛΙΣΜΟΣ



Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
512 , 1 cm 3D = 44.8 cm2 (Max=31.1)

M 1 : 32

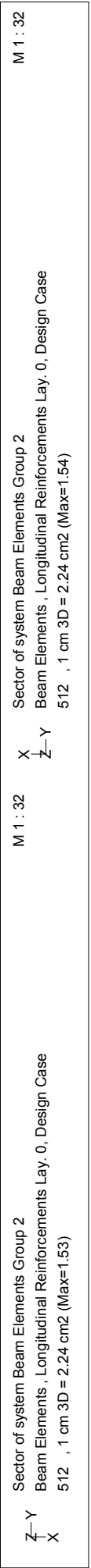
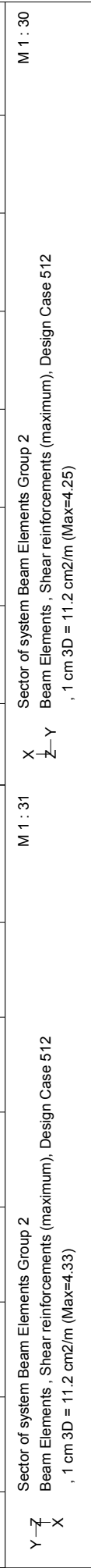
X

Sector of system Beam Elements Group 2

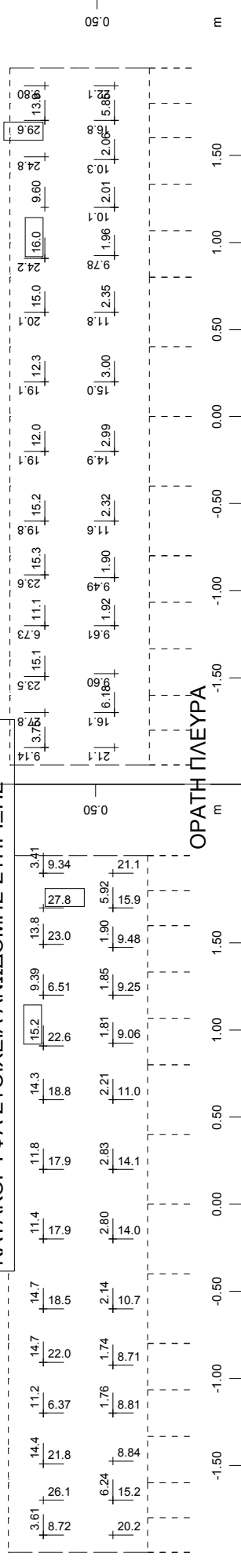
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case

512 , 1 cm 3D = 44.8 cm2 (Max=30.3)

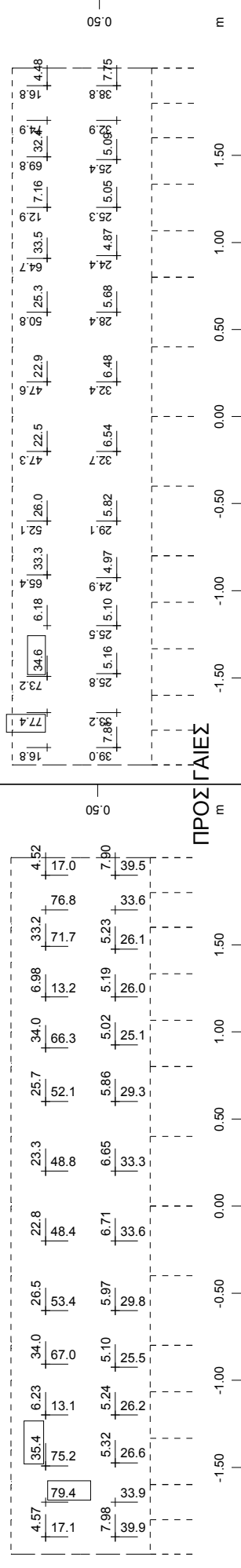
M 1 : 32



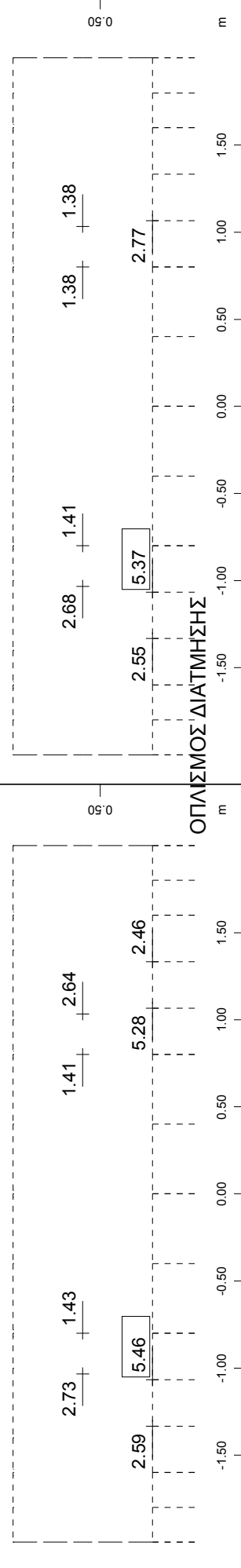
ΚΑΤΑΚΟΡΥΦΑ ΣΤΟΙΧΕΙΑ ΑΝΩΔΟΜΗΣ-ΣΤΗΡΙΞΗΣ



Χ-Υ
Z
M 1 : 34
Sector of system Quadrilateral Elements Group 8
upper Reinforcements in Elements in cm2/m, Design Case 523 ULS
design (Max=29.6)



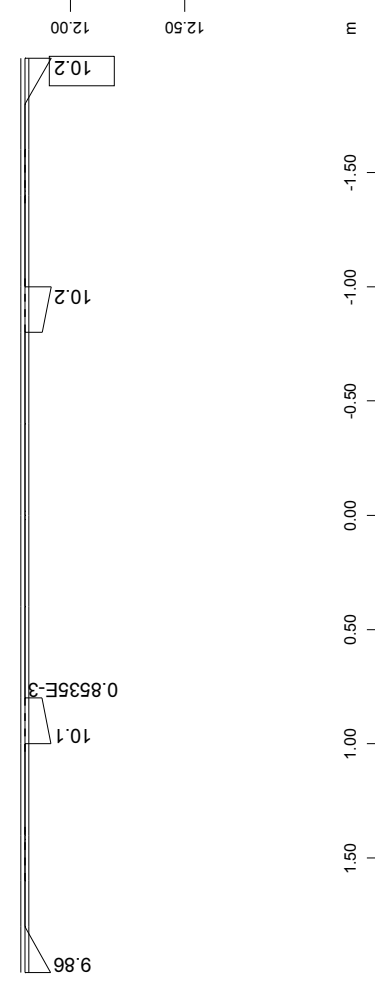
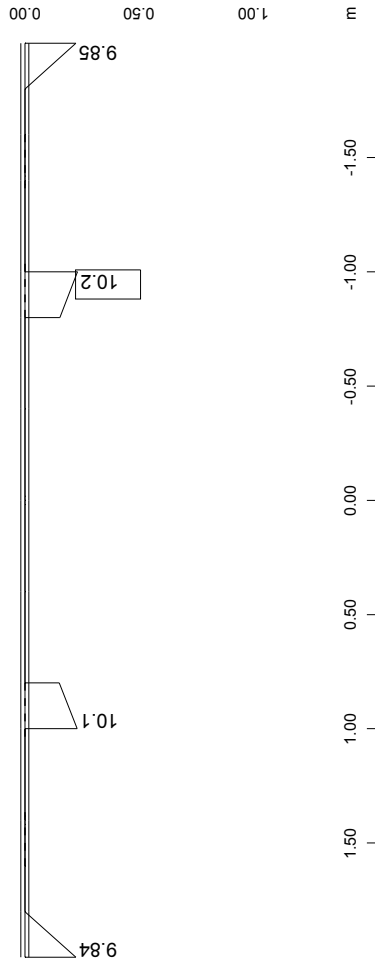
Χ-Υ
Z
M 1 : 34
Sector of system Quadrilateral Elements Group 8
lower Reinforcements in Elements in cm2/m, Design Case 523 ULS
design (Max=77.4)



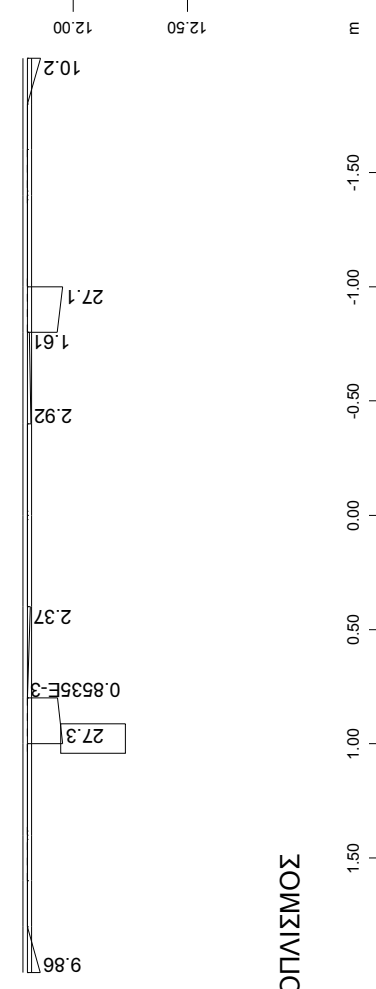
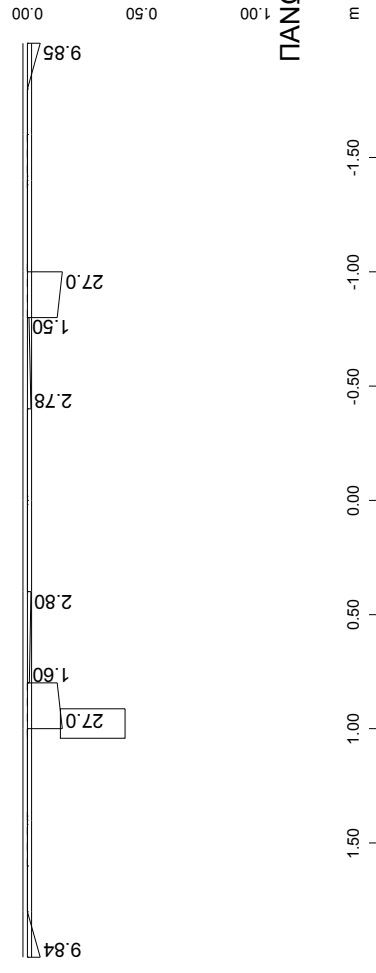
Χ-Υ
Z
M 1 : 34
Sector of system Quadrilateral Elements Group 8
Shear reinforcement from middle of element in cm2/m2, Design
Case 523 ULS design (Max=5.37)

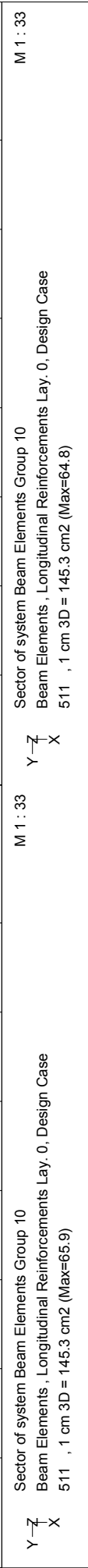
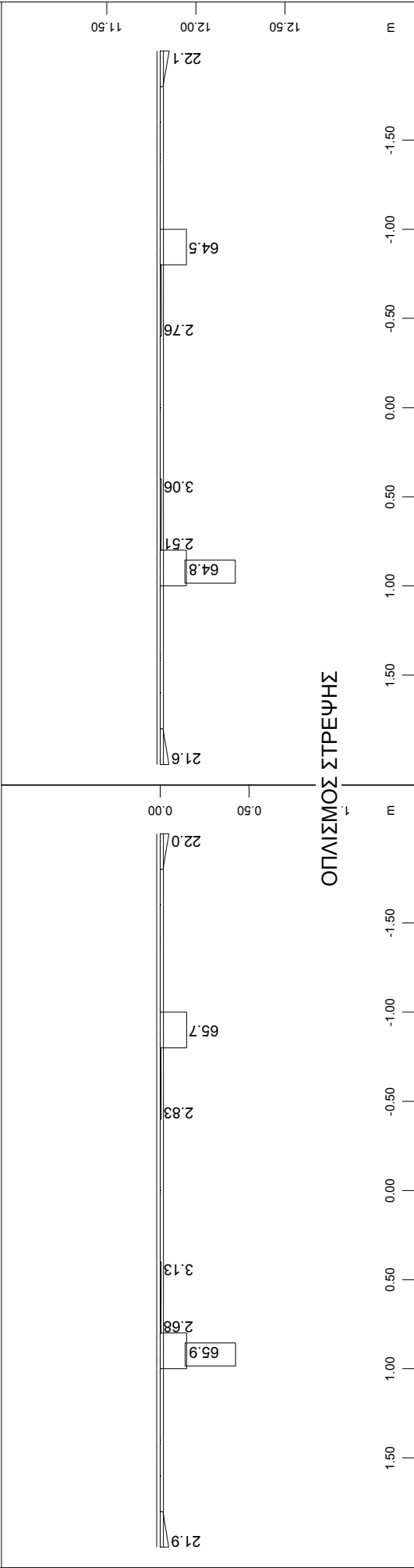
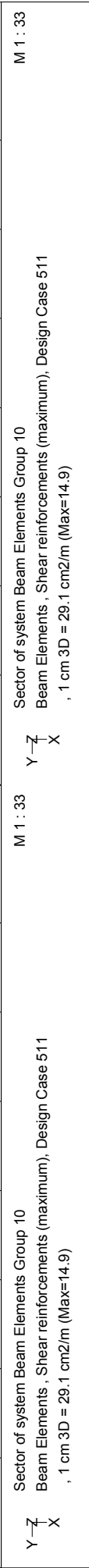
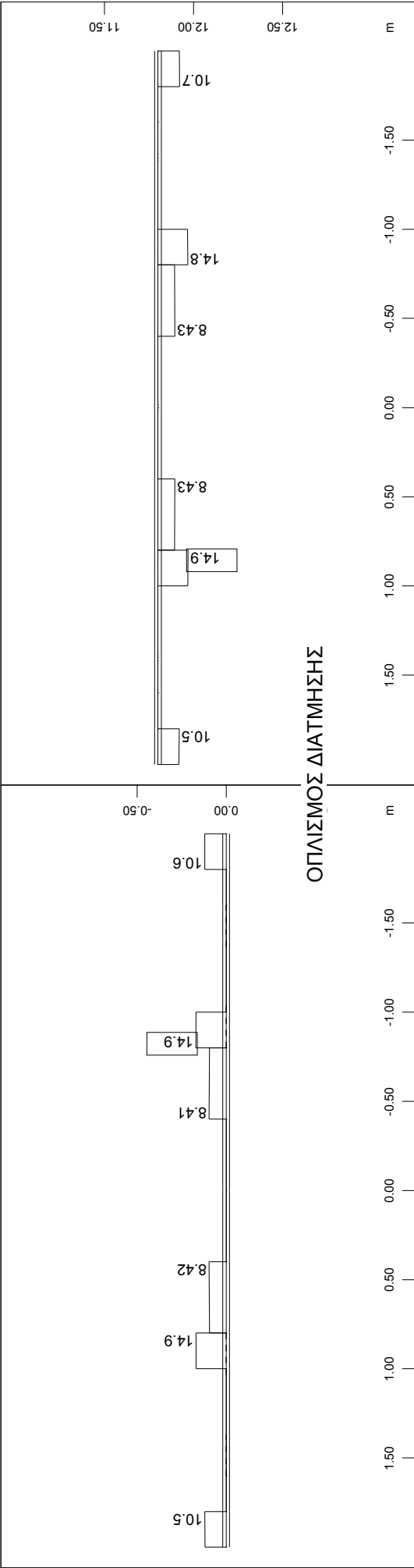
ΠΑΡΑΣΧΟΛΟΓΕΣ

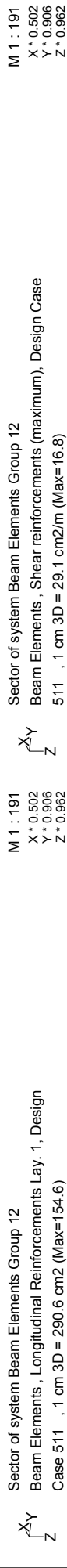
ΚΑΤΩ ΟΠΛΙΣΜΟΣ



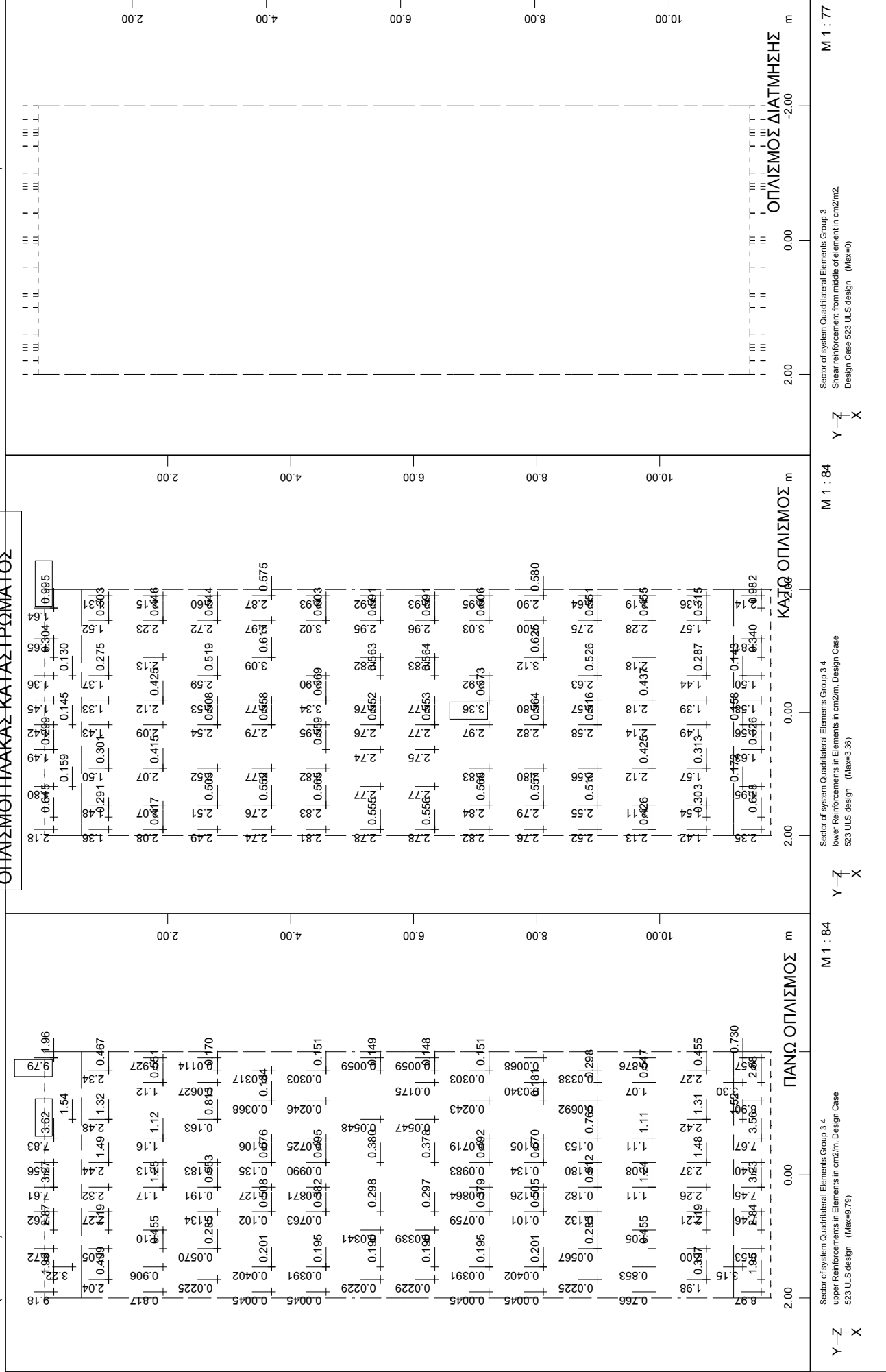
ΠΑΝΩ ΟΠΛΙΣΜΟΣ







ΟΡΛΙΣΜΟΙ ΠΛΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
ΠΕΡΙΒΑΛΛΟΥΣΑ ΟΠΛΙΣΜΩΝ ΣΤΑΤΙΚΩΝ ΚΑΙ ΣΕΙΣΜΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

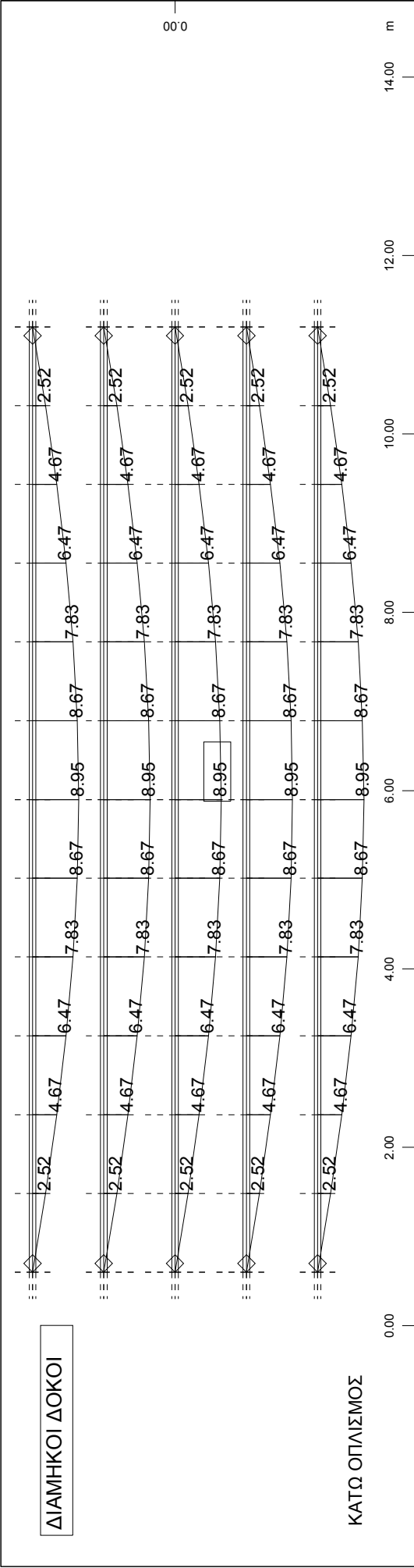
Maximum of reinforcement-distributions

The reinforcement maximum was build out of the numbers of reinforcement-distributions:
521 , 522 , 523
and stored as new reinforcement-distribution 525 .

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/L=13.00

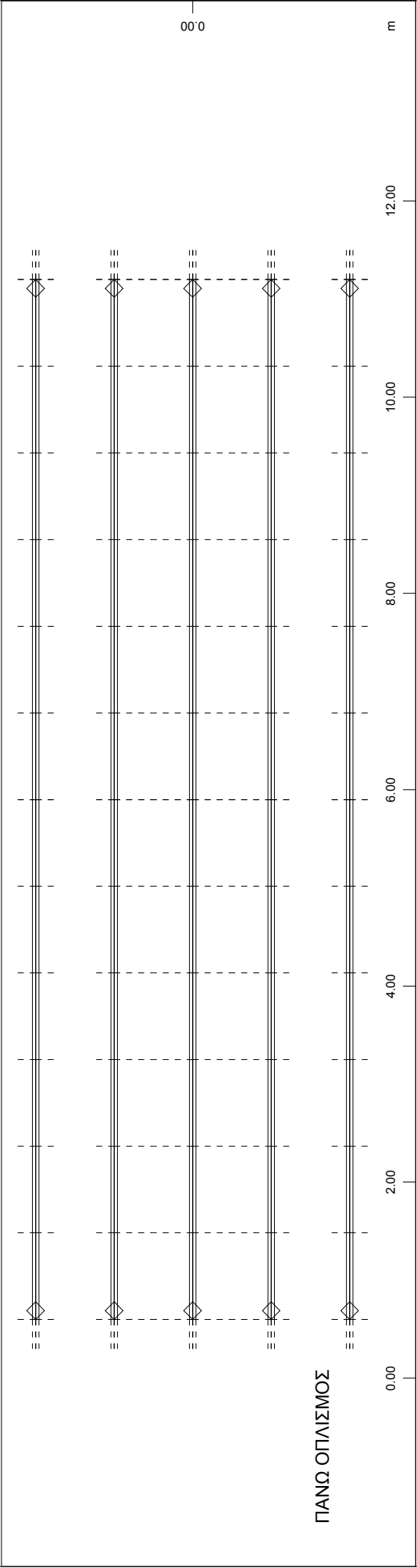
12) ΣΥΝΟΠΤΙΚΑ ΑΠΟΤΕΛΕΣΜΑΤΑ ΜΕ ΕΛΑΤΗΡΙΑΚΕΣ ΣΤΑΘΕΡΕΣ ΠΑΣΣΑΛΩΝ x5

5. 5) ΦΑΣΗ-1 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ ULS-ΣΤΑΤΙΚΑ



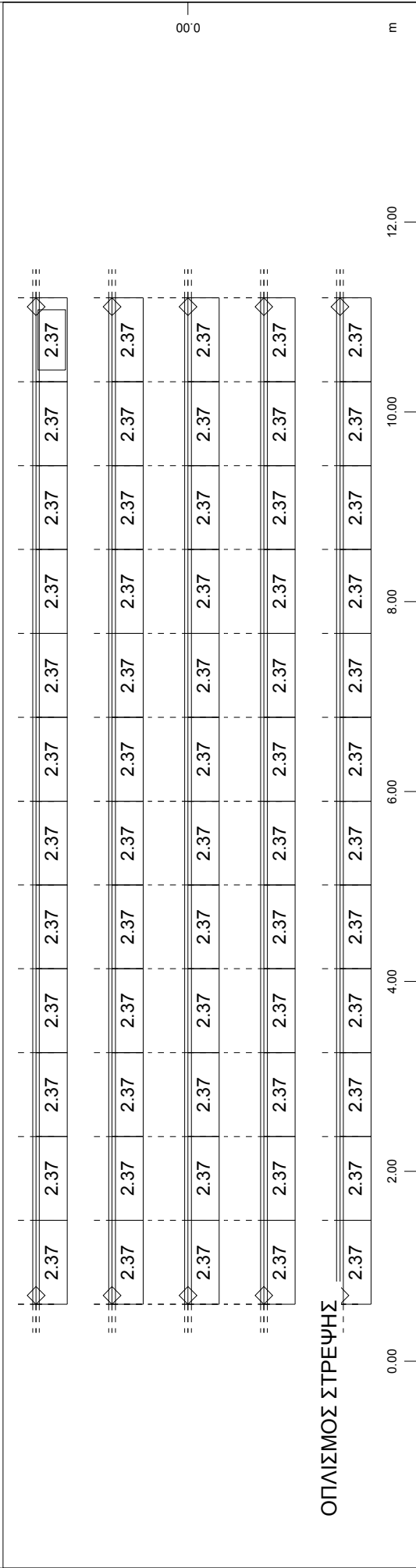
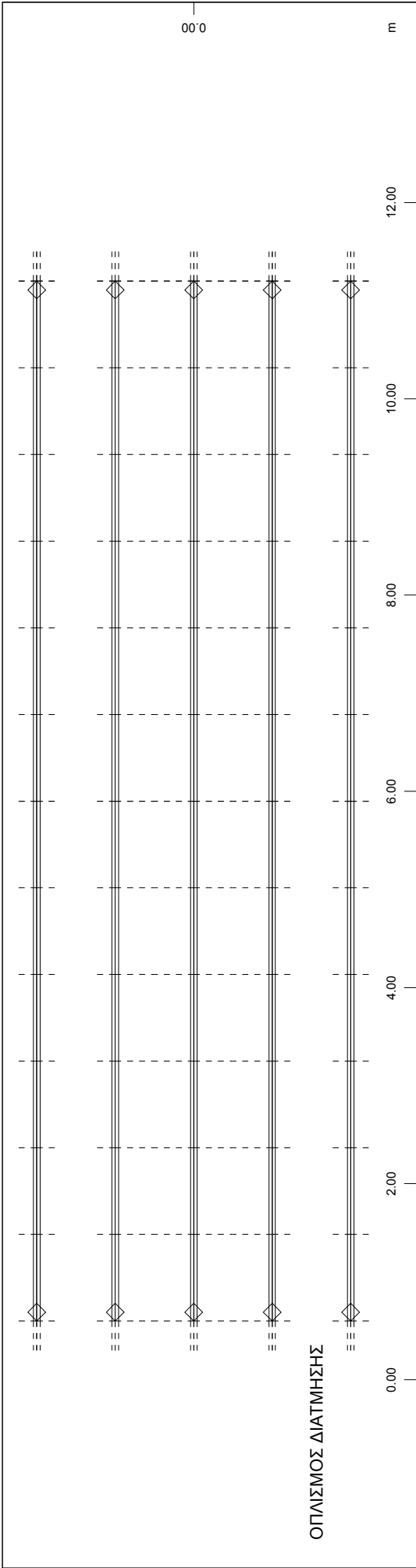
Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 502 , 1 cm 3D = 11.2 cm2 (Max=8.95)

Z-X
Y



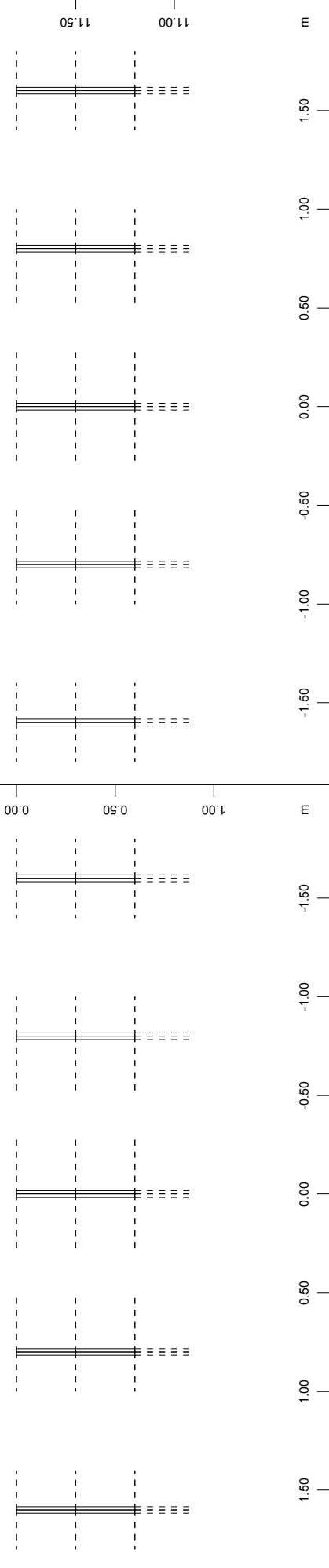
Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case 502 , 1 cm 3D = 0 cm2 (Max=0)

Z-X
Y

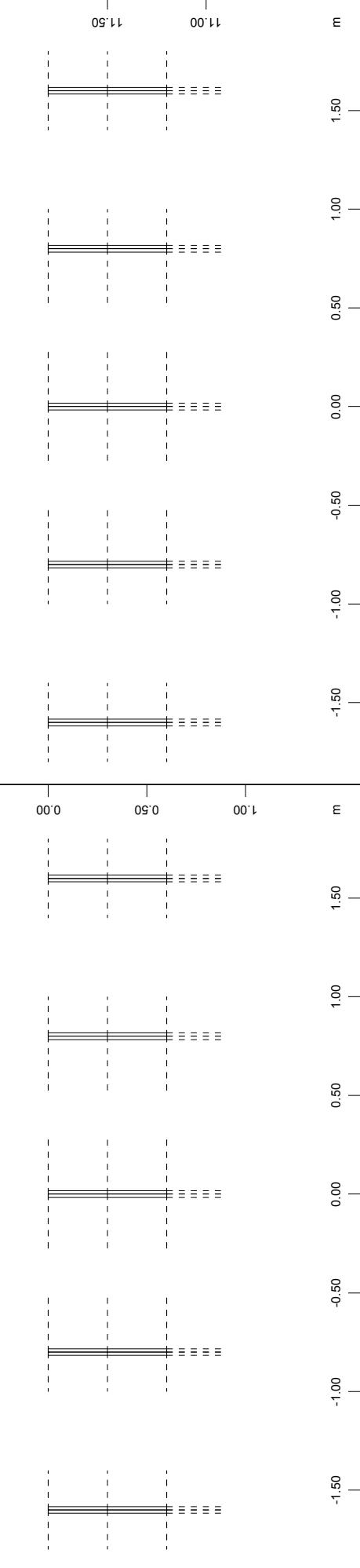


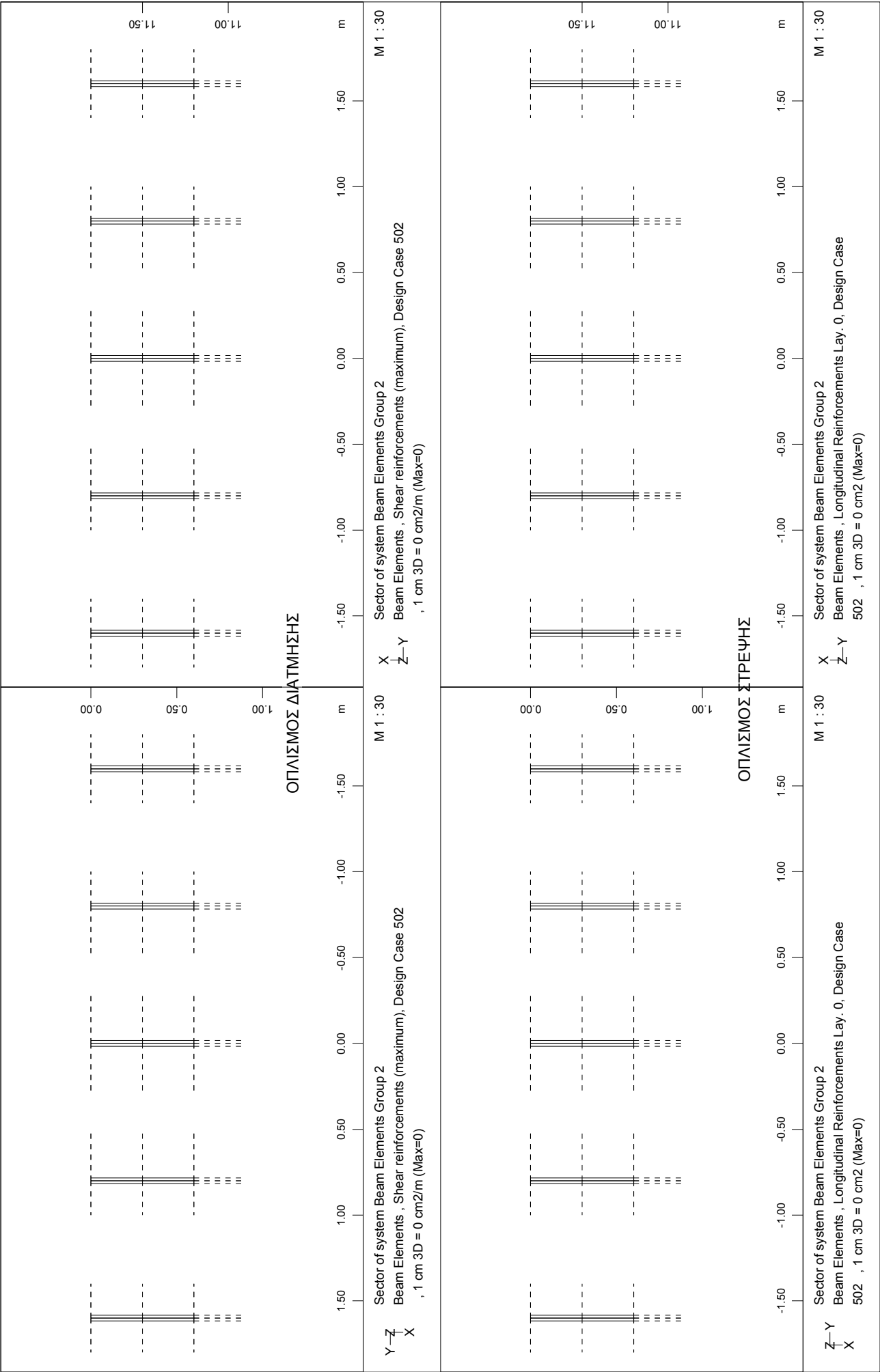
ΔΙΑΜΗΚΗ ΔΟΚΟΙ-ΣΤΗΡΙΞΗΣ

ΚΑΤΩ ΟΠΛΙΣΜΟΣ



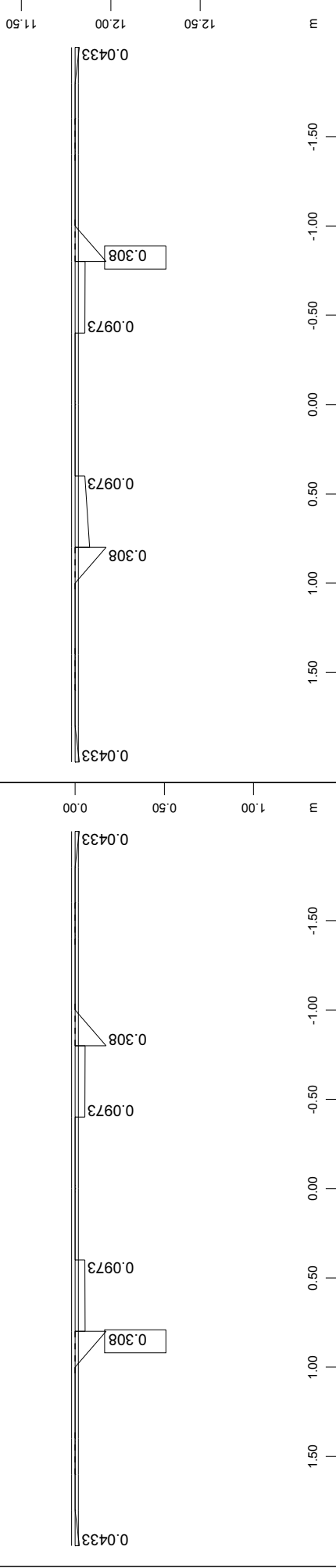
ΠΑΝΩ ΟΠΛΙΣΜΟΣ





ΠΑΣΣΑΛΟΔΕΣΜΟΣ

ΚΑΤΩ ΟΠΛΙΣΜΟΣ



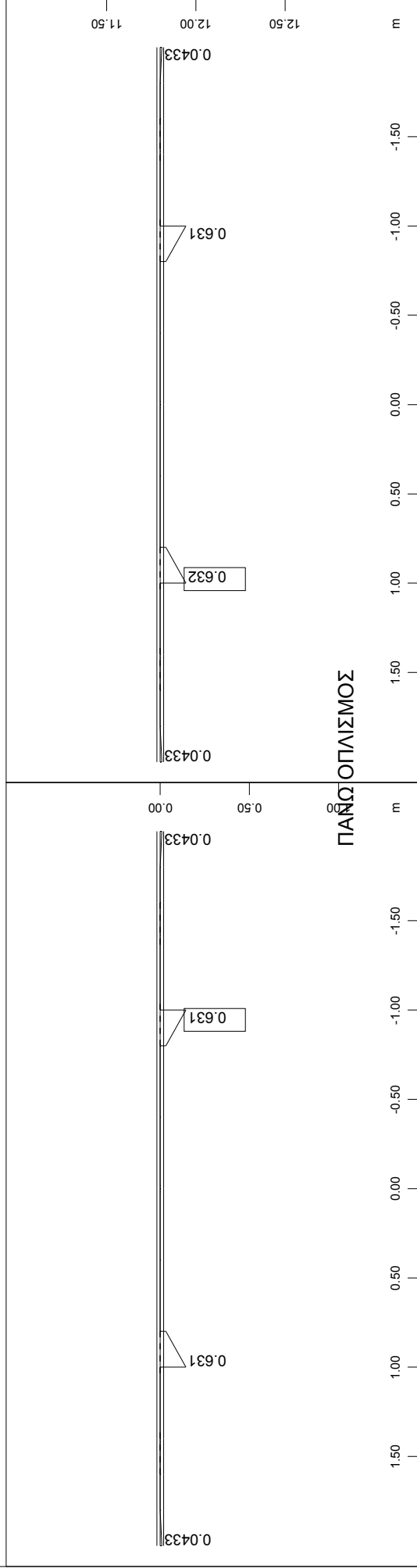
Y-Z
X

M 1 : 33

$$\begin{array}{c} \text{Z} \text{---} \text{X} \\ | \\ \text{Y} \end{array}$$

M 1 : 33

Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case
501 , 1 cm 3D = 0.581 cm2 (Max=0.308)



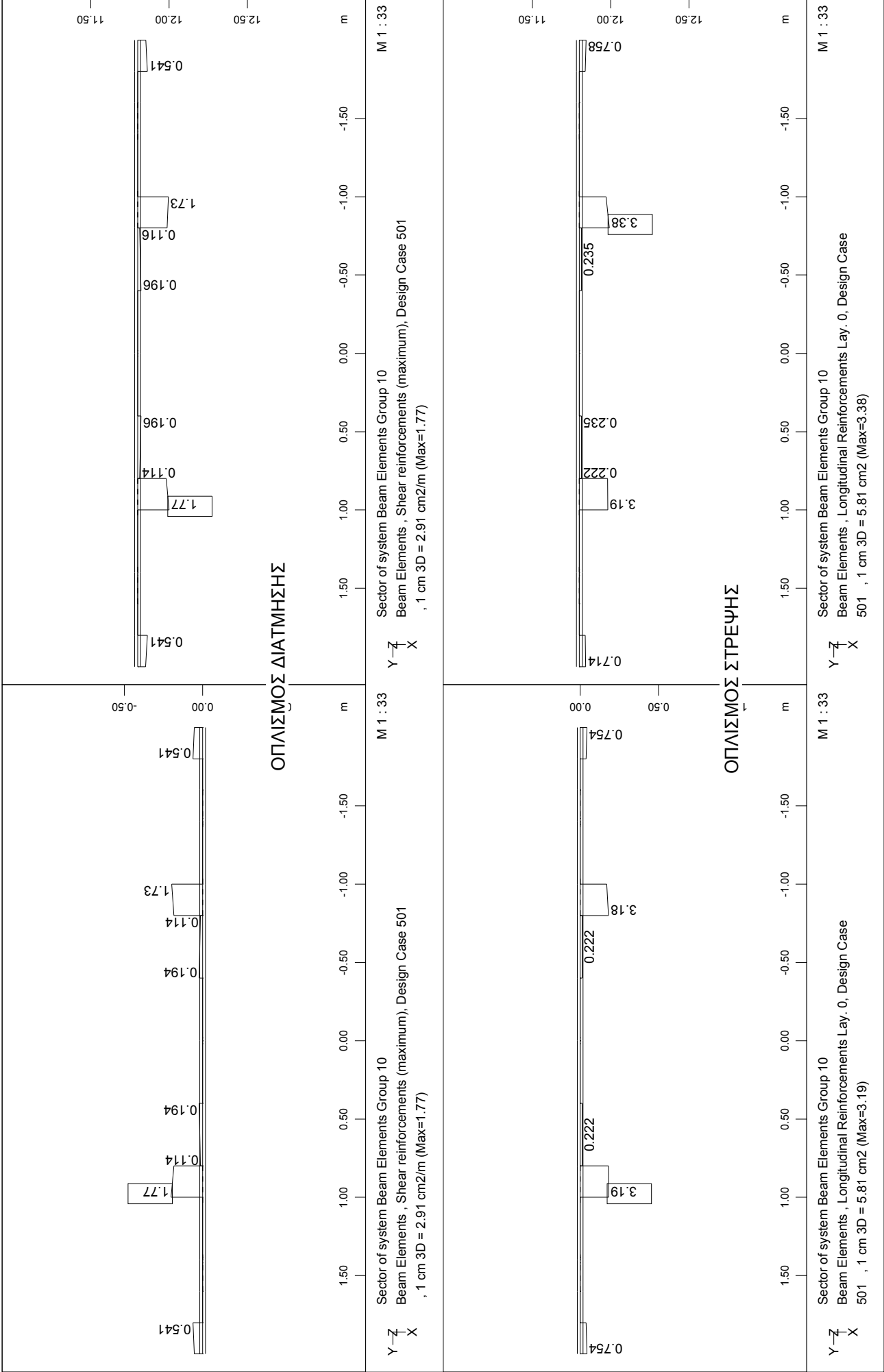
Y-Z
X

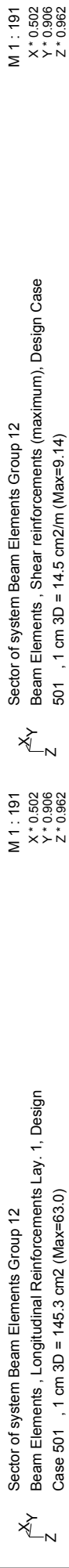
M 1 : 33

$$\begin{array}{c} \text{Z} - \text{X} \\ | \\ \text{Y} \end{array}$$

M 1 : 33

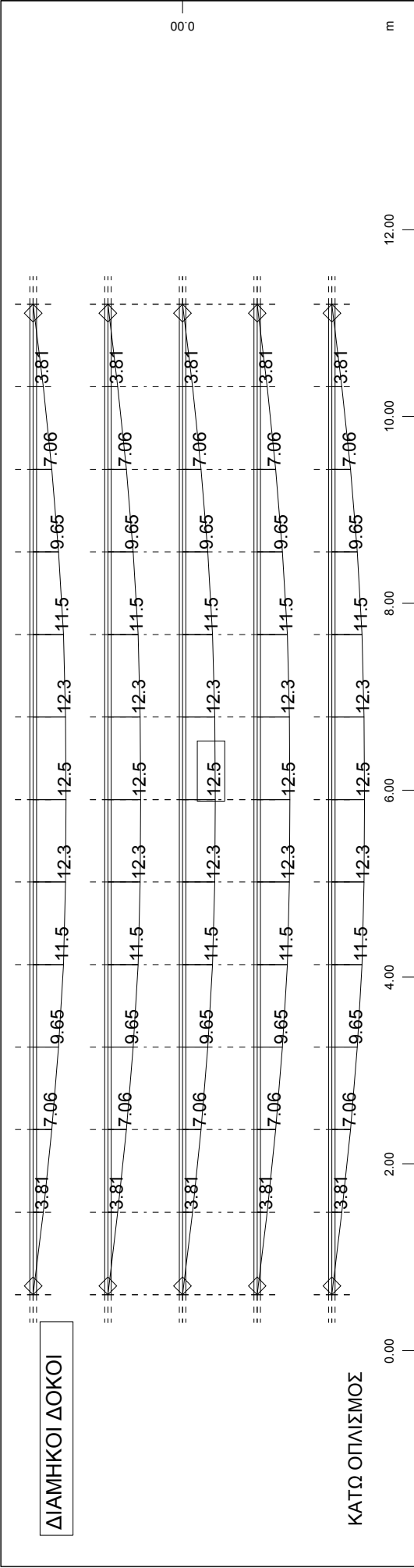
Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
501 , 1 cm 3D = 1.45 cm² (Max=0.632)





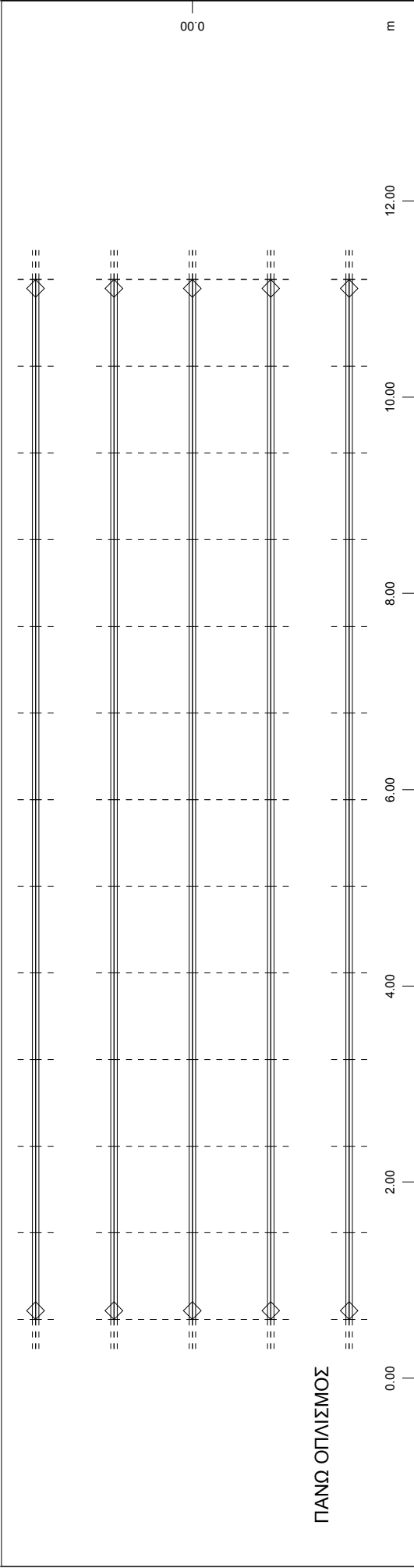
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/L=13.00

6) ΦΑΣΗ-1 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ SLS



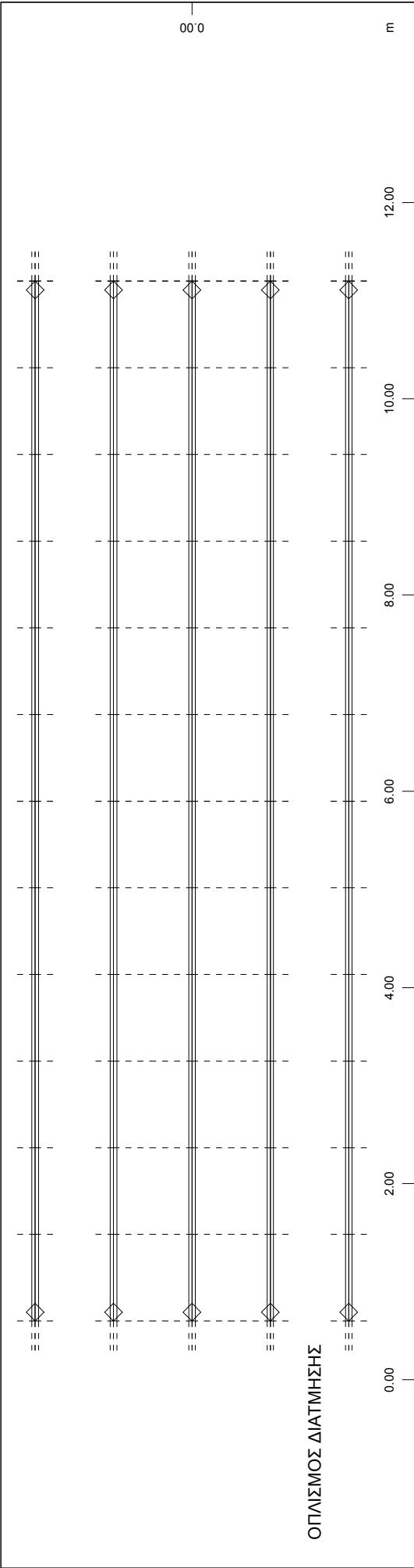
Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 503 , 1 cm 3D = 22.4 cm2 (Max=12.5)

Z-X
Y



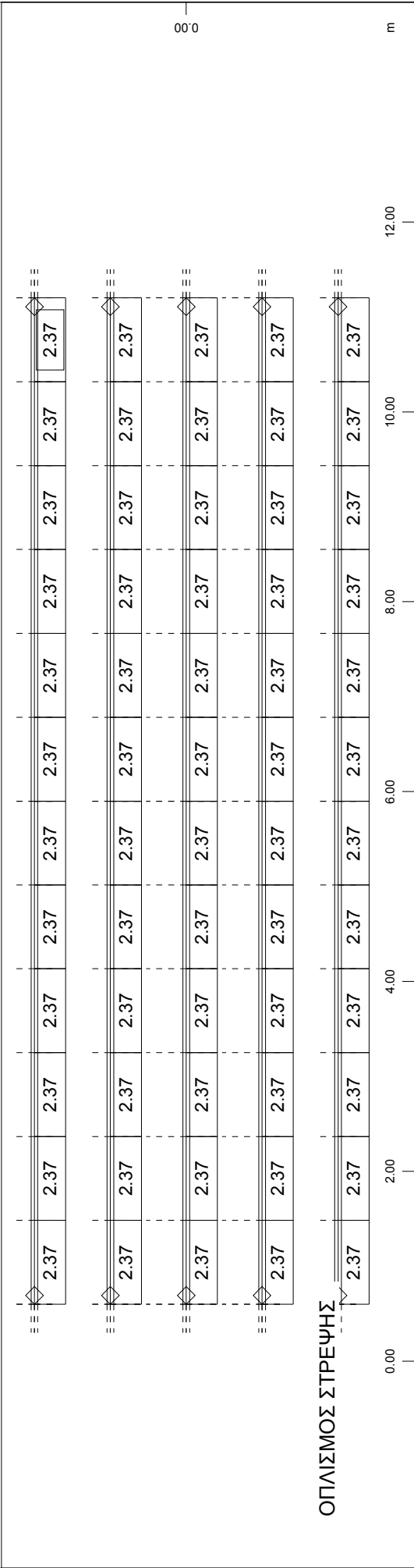
Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case 503 , 1 cm 3D = 0 cm2 (Max=0)

Z-X
Y



ΟΠΛΙΣΜΟΣ ΔΙΑΤΜΗΣΗΣ

Sector of system Beam Elements Group 1
Beam Elements , Shear reinforcements (maximum), Design Case 503 , 1 cm 3D = 0 cm2/m (Max=0)

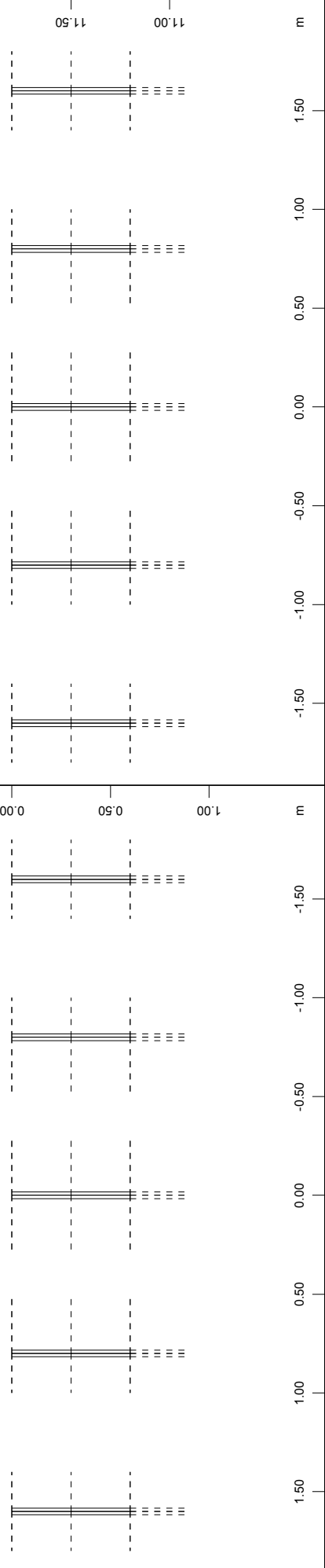


ΟΠΛΙΣΜΟΣ ΣΤΡΕΨΗΣ

Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 0, Design Case 503 , 1 cm 3D = 4.48 cm2 (Max=2.37)

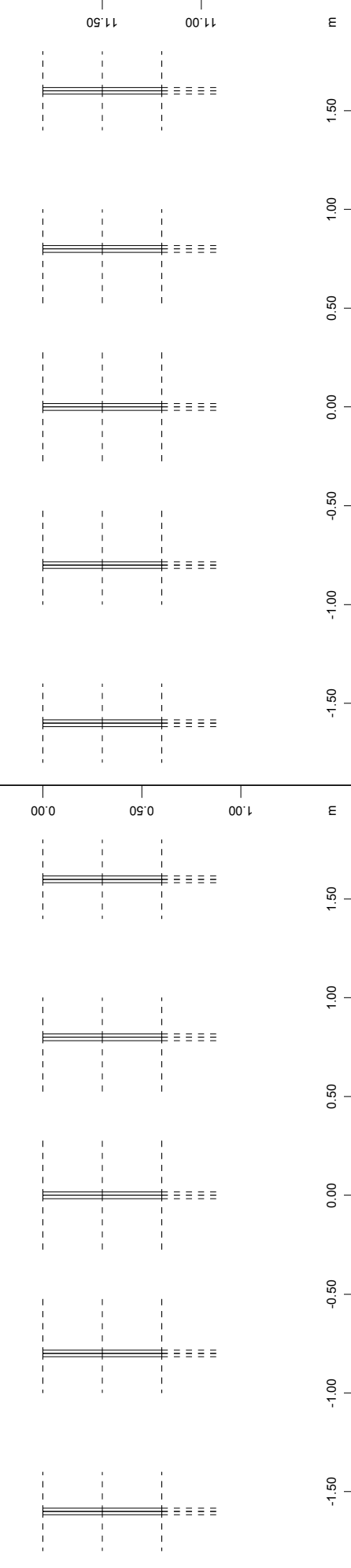
ΔΙΑΜΗΚΗ ΔΟΚΟΙ-ΣΤΗΡΙΞΗΣ

ΚΑΤΩ ΟΠΛΙΣΜΟΣ

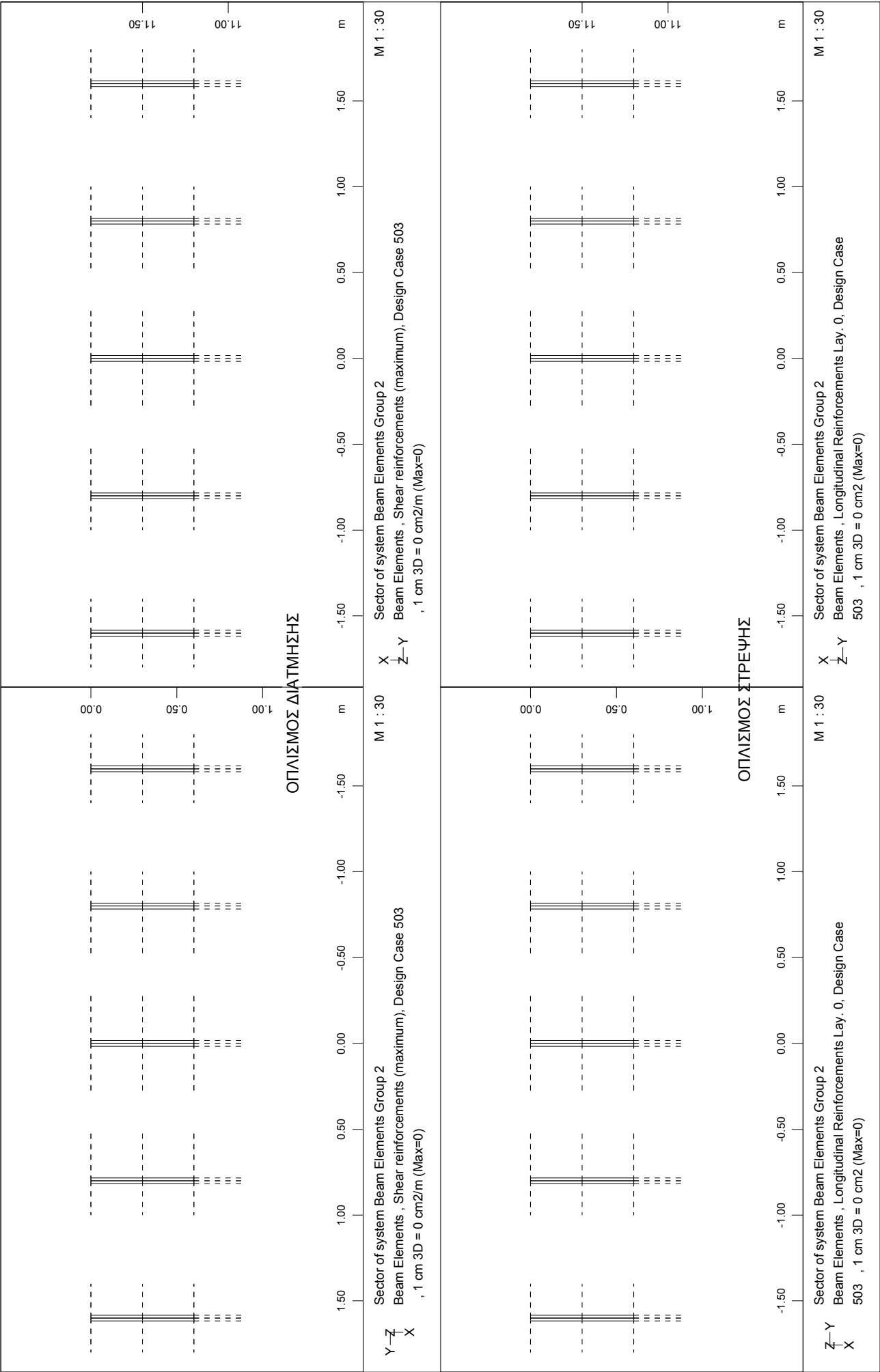


Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case
503 , 1 cm 3D = 0 cm2 (Max=0)
M 1 : 30

ΠΑΝΩ ΟΠΛΙΣΜΟΣ

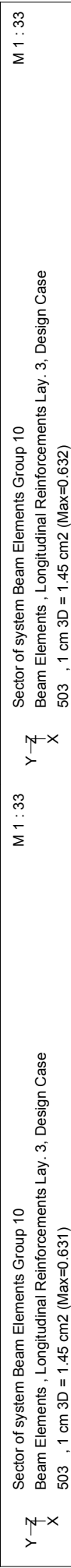
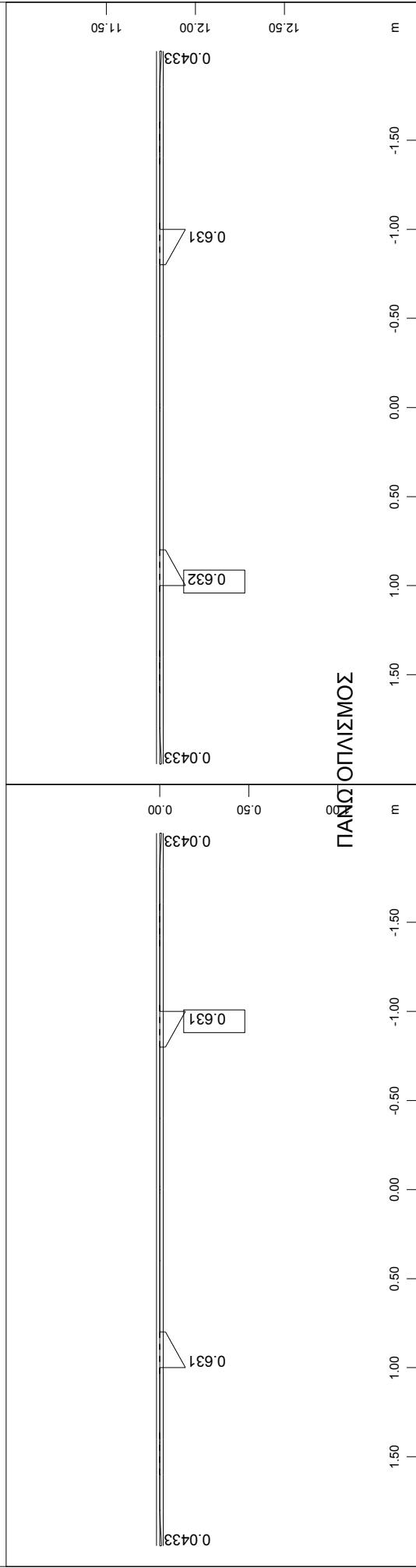
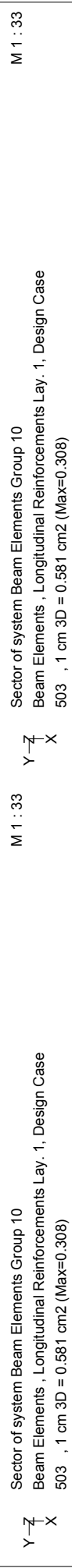
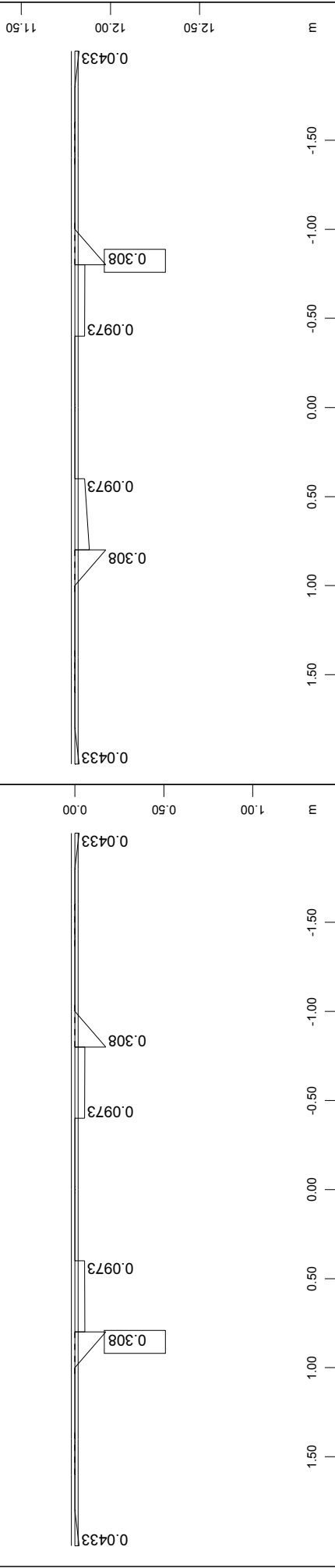


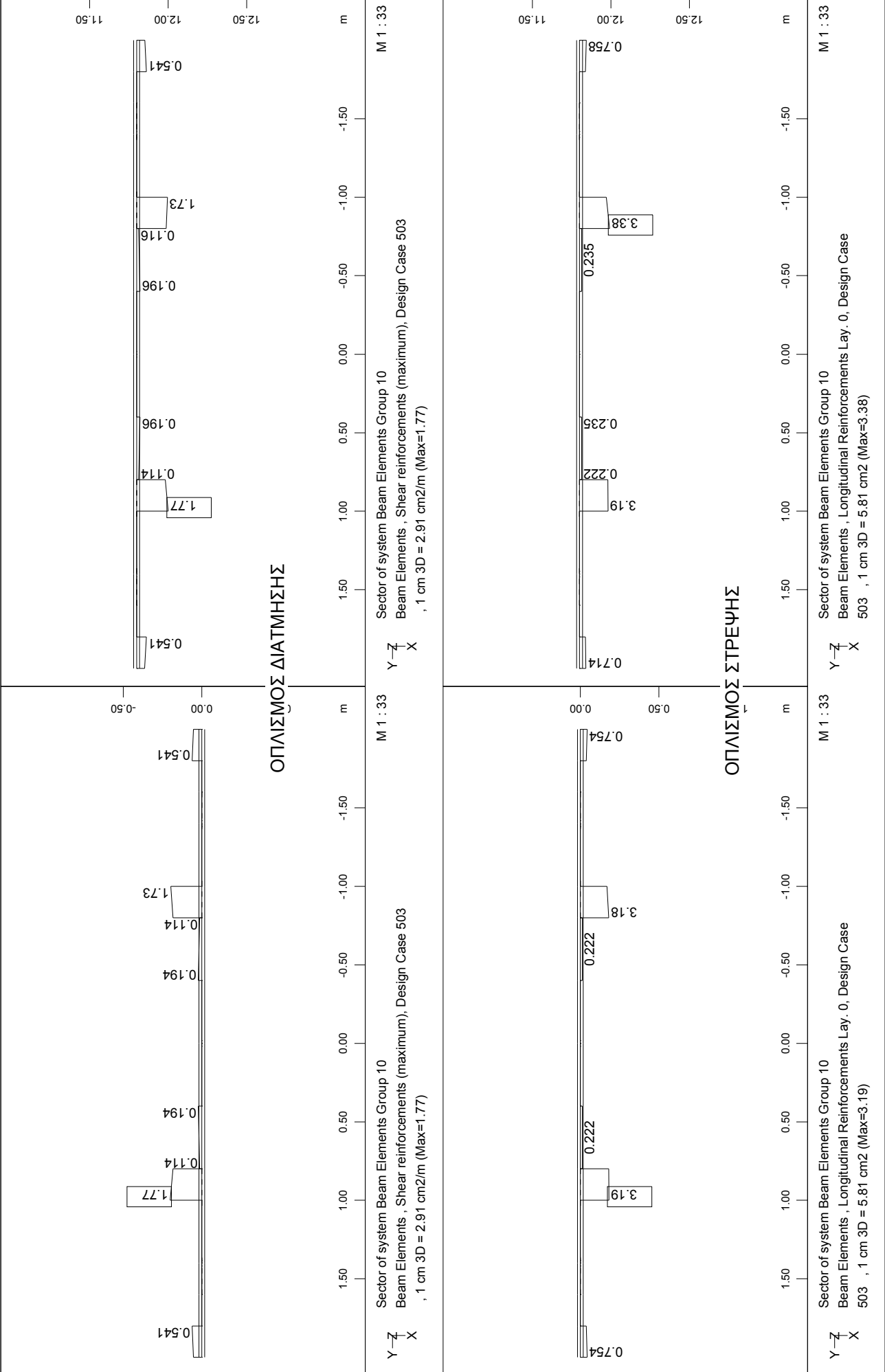
Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
503 , 1 cm 3D = 0 cm2 (Max=0)
M 1 : 30



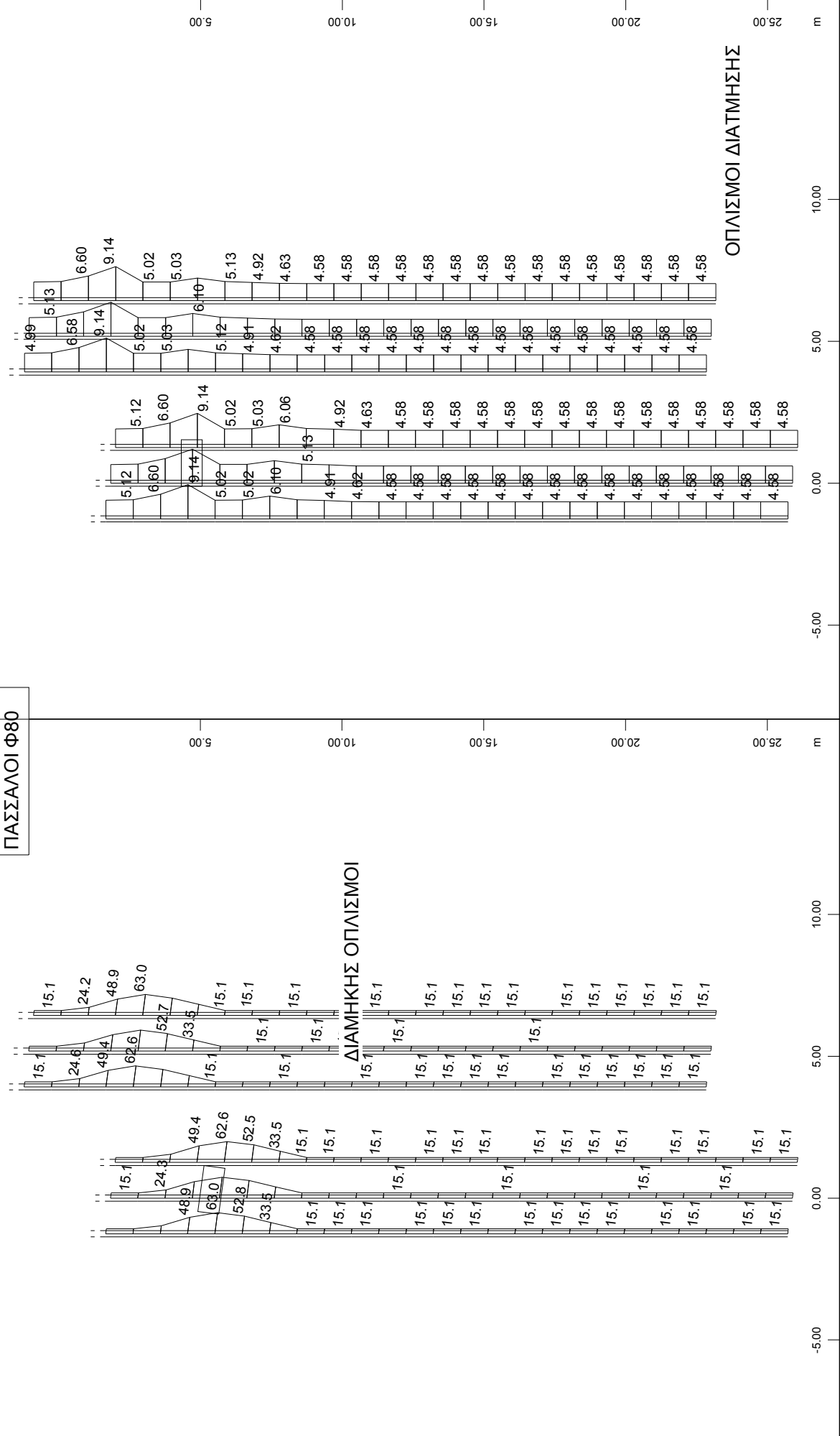
ΠΑΡΑΣΧΟΛΟΓΕΣΜΟΣ

ΚΑΤΩ ΟΠΛΙΣΜΟΣ





ΠΑΣΣΑΛΟΙ Φ80

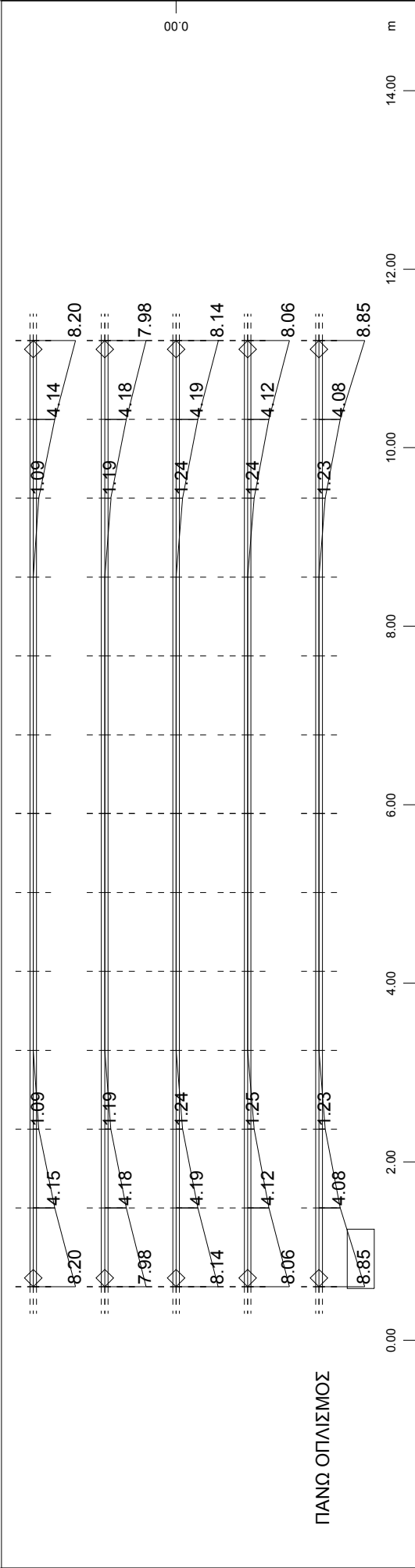
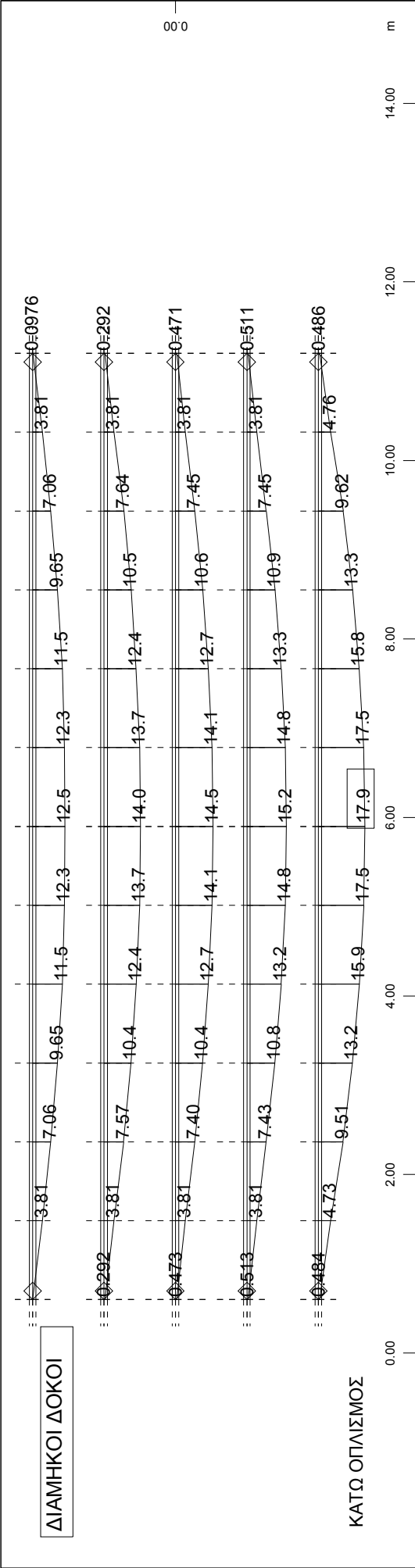


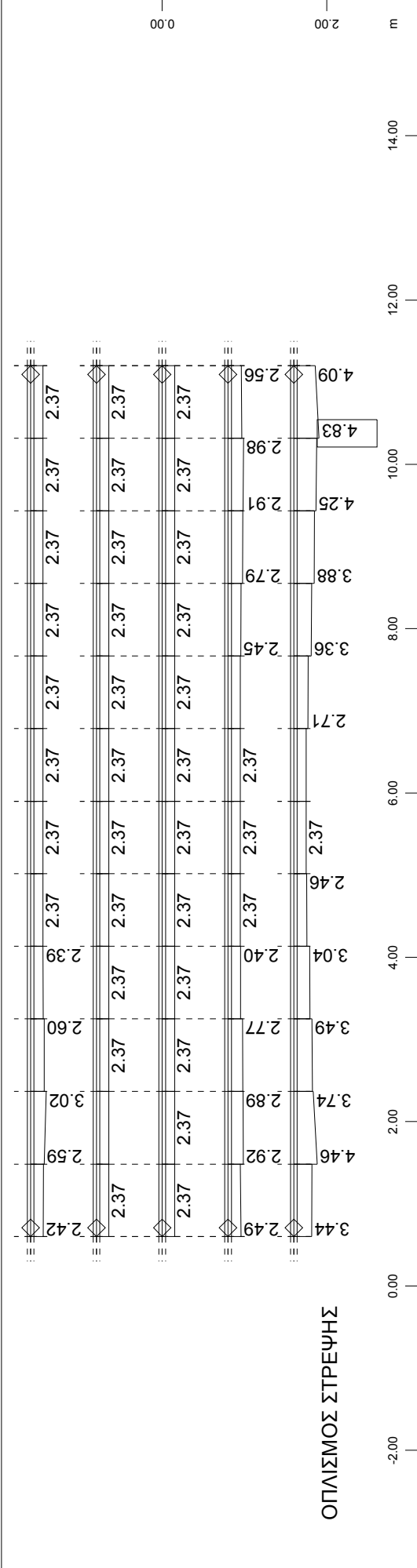
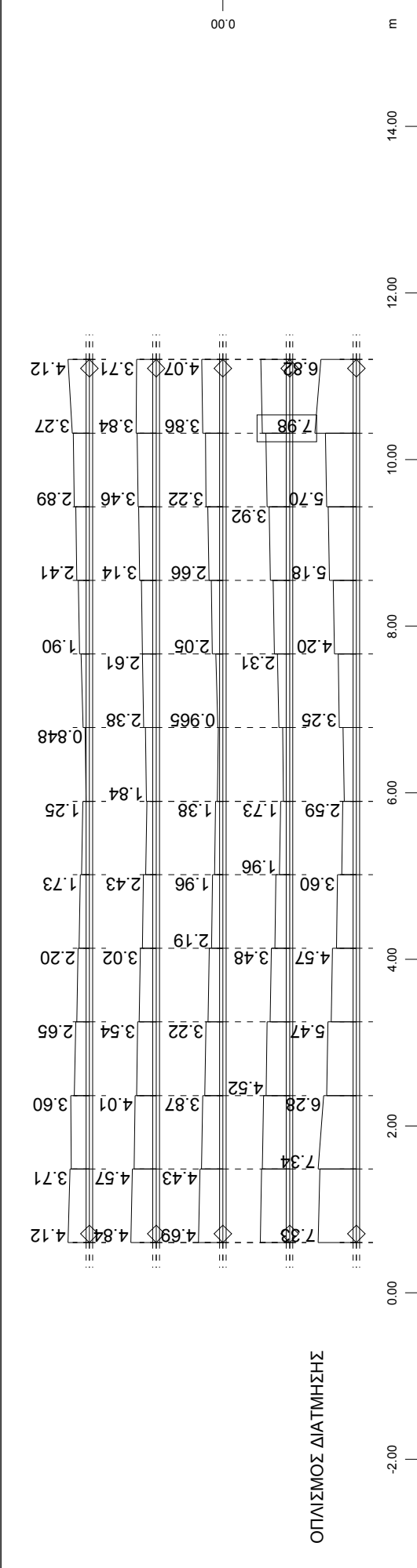
| | | |
|--|--|-----------|
| | Sector of system Beam Elements Group 12 | M 1 : 191 |
| | Beam Elements , Longitudinal Reinforcements Lay. 1, Design | X * 0.502 |
| | Case 503 , 1 cm 3D = 145.3 cm2 (Max=63.0) | Y * 0.906 |
| | | Z * 0.962 |

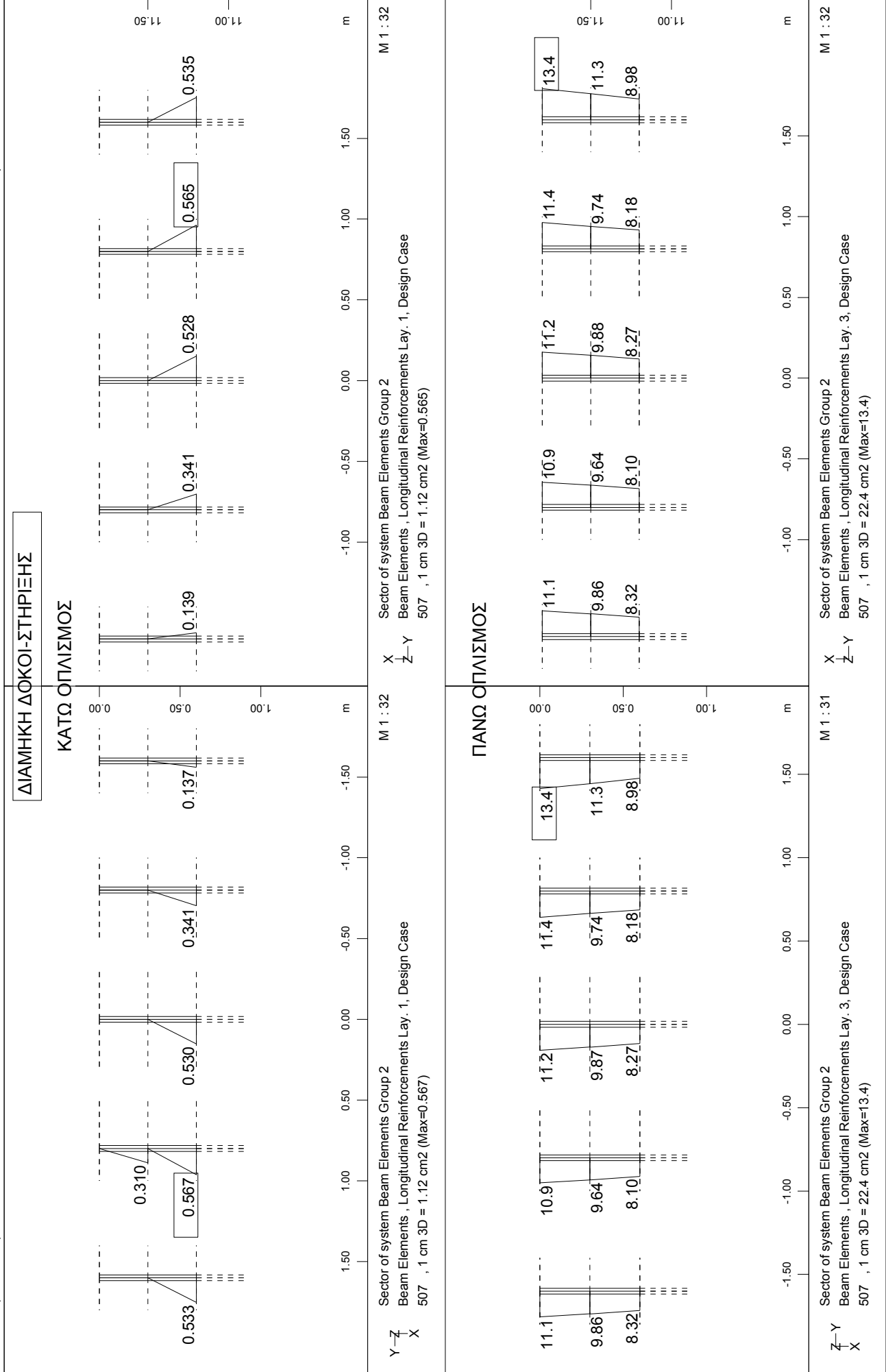
| | | |
|--|---|-----------|
| | Sector of system Beam Elements Group 12 | M 1 : 191 |
| | Beam Elements , Shear reinforcements (maximum), Design Case | X * 0.502 |
| | 503 , 1 cm 3D = 14.5 cm2/m (Max=9.14) | Y * 0.906 |
| | | Z * 0.962 |

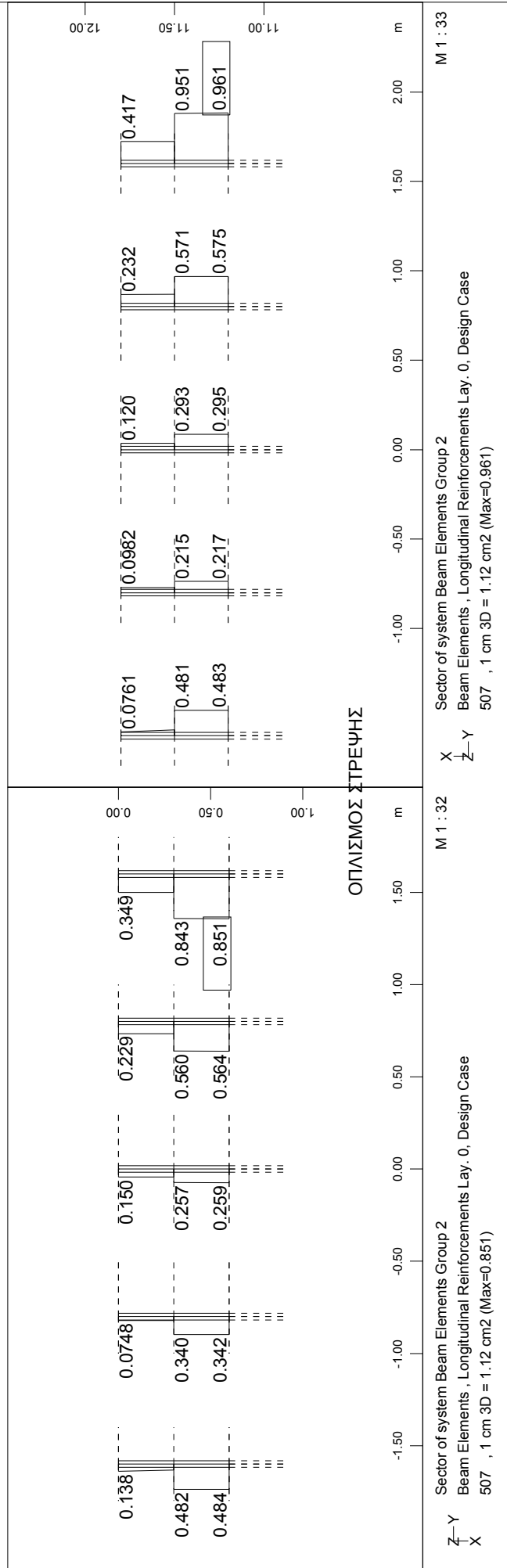
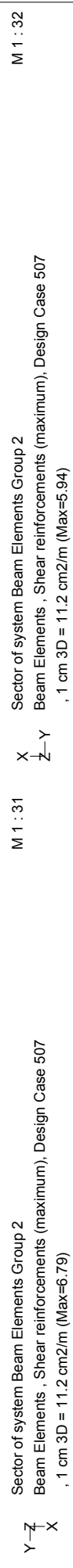
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/L=13.00

7) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ ULS-STATIKA

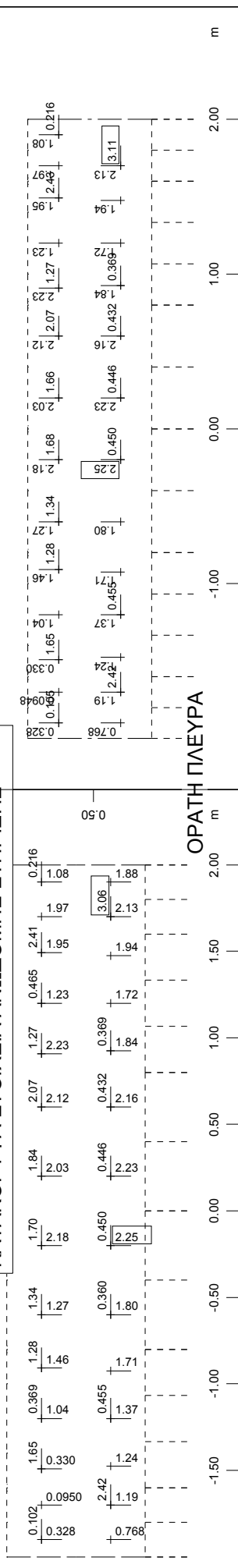




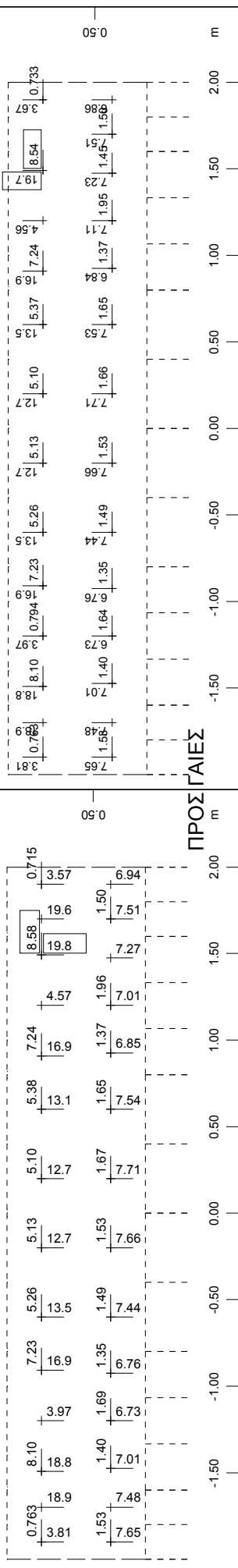




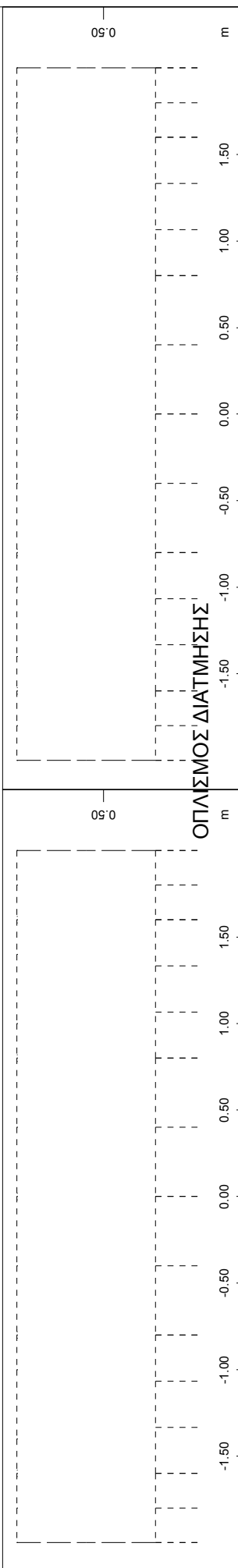
ΚΑΤΑΚΟΡΥΦΑ ΣΤΟΙΧΕΙΑ ΑΝΩΔΟΜΗΣ-ΣΤΗΡΙΞΗΣ



Sector of system Quadrilateral Elements Group 8
upper Reinforcements in Elements in cm2/m, Design Case 521 ULS
design (Max=3.06)



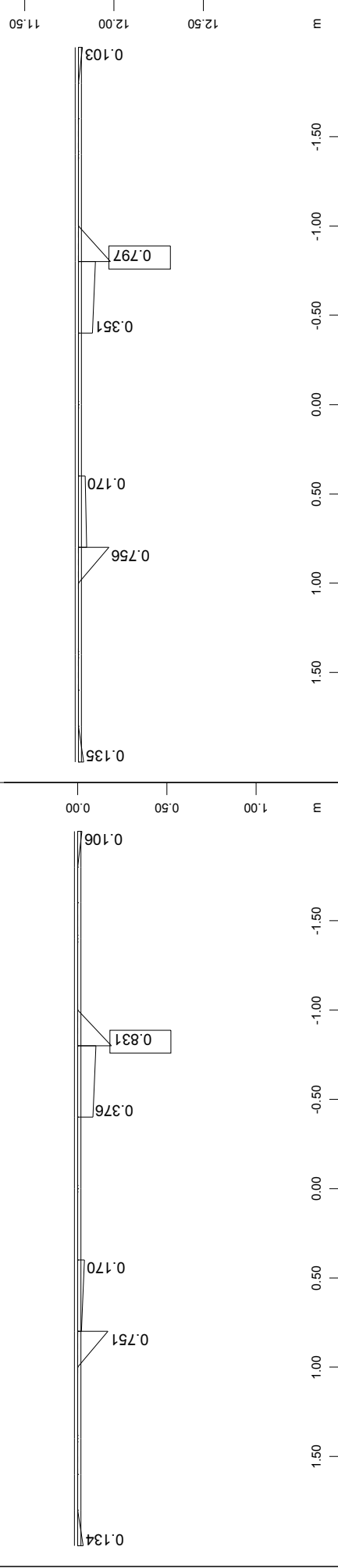
Sector of system Quadrilateral Elements Group 8
lower Reinforcements in Elements in cm2/m, Design Case 521 ULS
design (Max=19.8)



Sector of system Quadrilateral Elements Group 8
Shear reinforcement from middle of element in cm2/m2, Design Case 521 ULS design (Max=0)

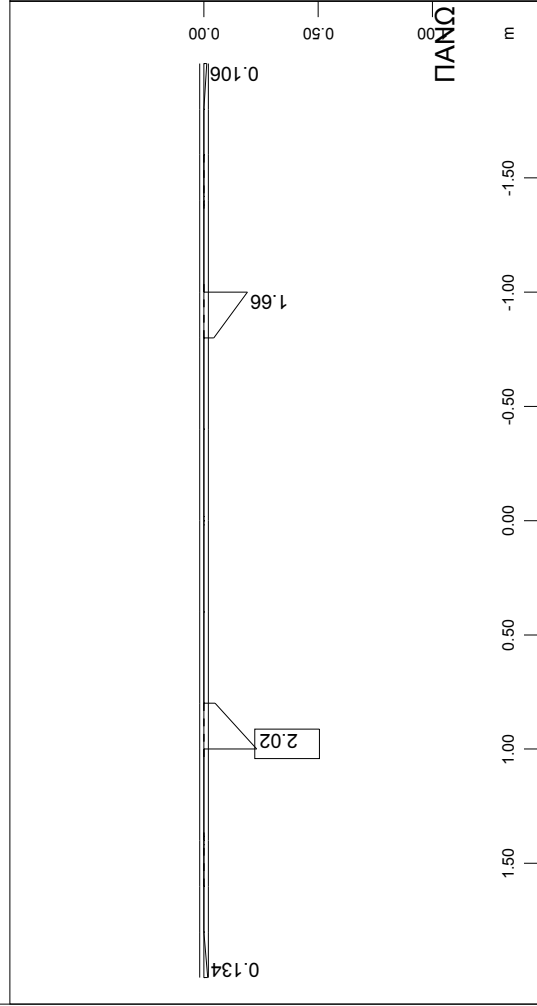
ΠΑΡΑΣΑΛΟΔΕΣΜΟΣ

ΚΑΤΩ ΟΠΛΙΣΜΟΣ



Y-Z
X

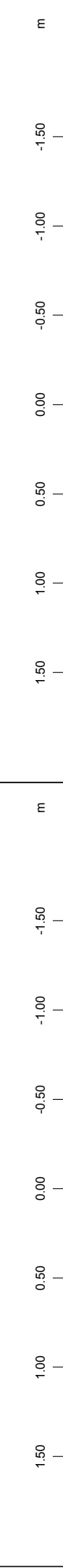
Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case
506 , 1 cm 3D = 1.45 cm2 (Max=0.797)



Y-Z
X

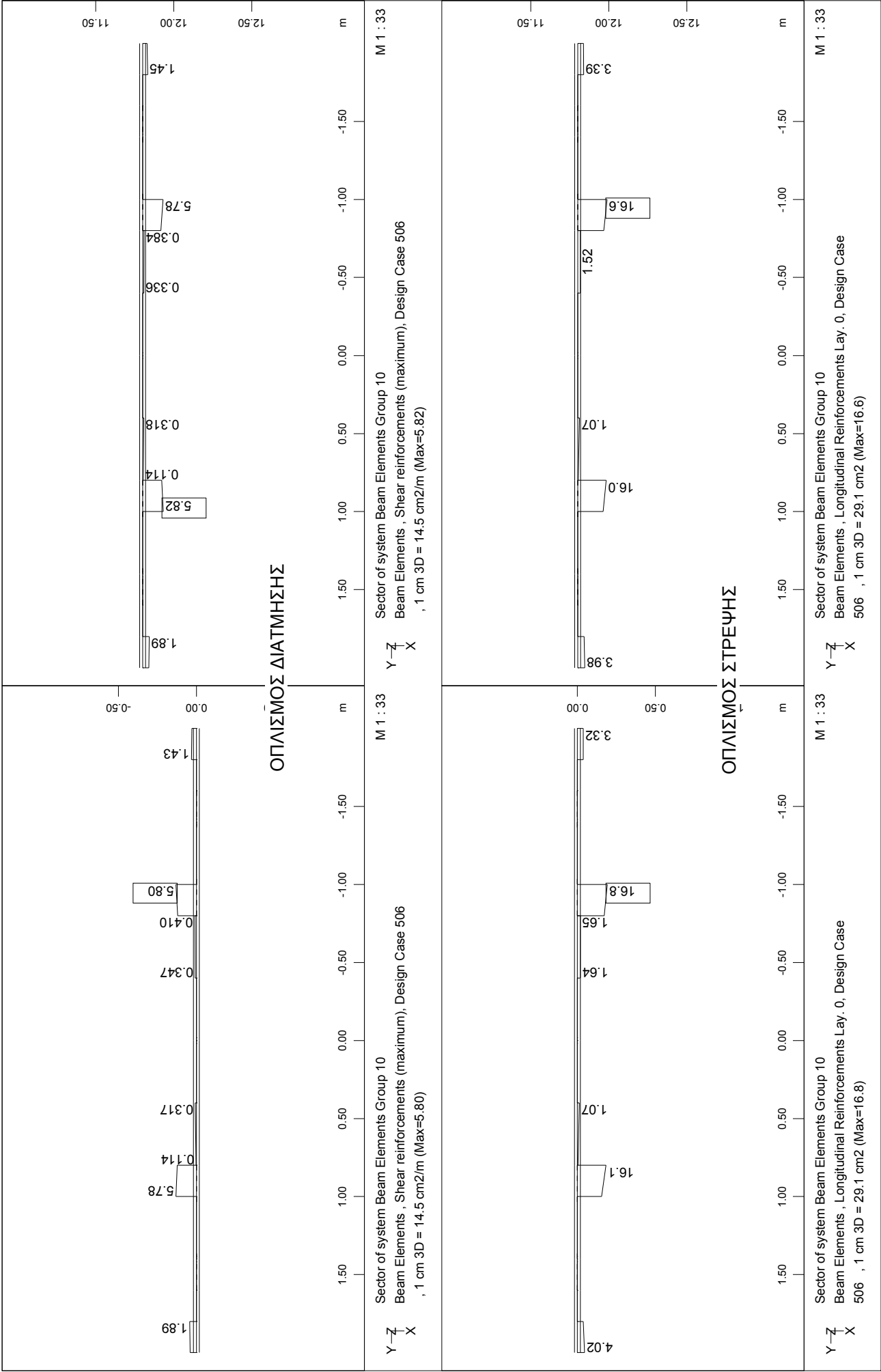
Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
506 , 1 cm 3D = 2.91 cm2 (Max=1.98)

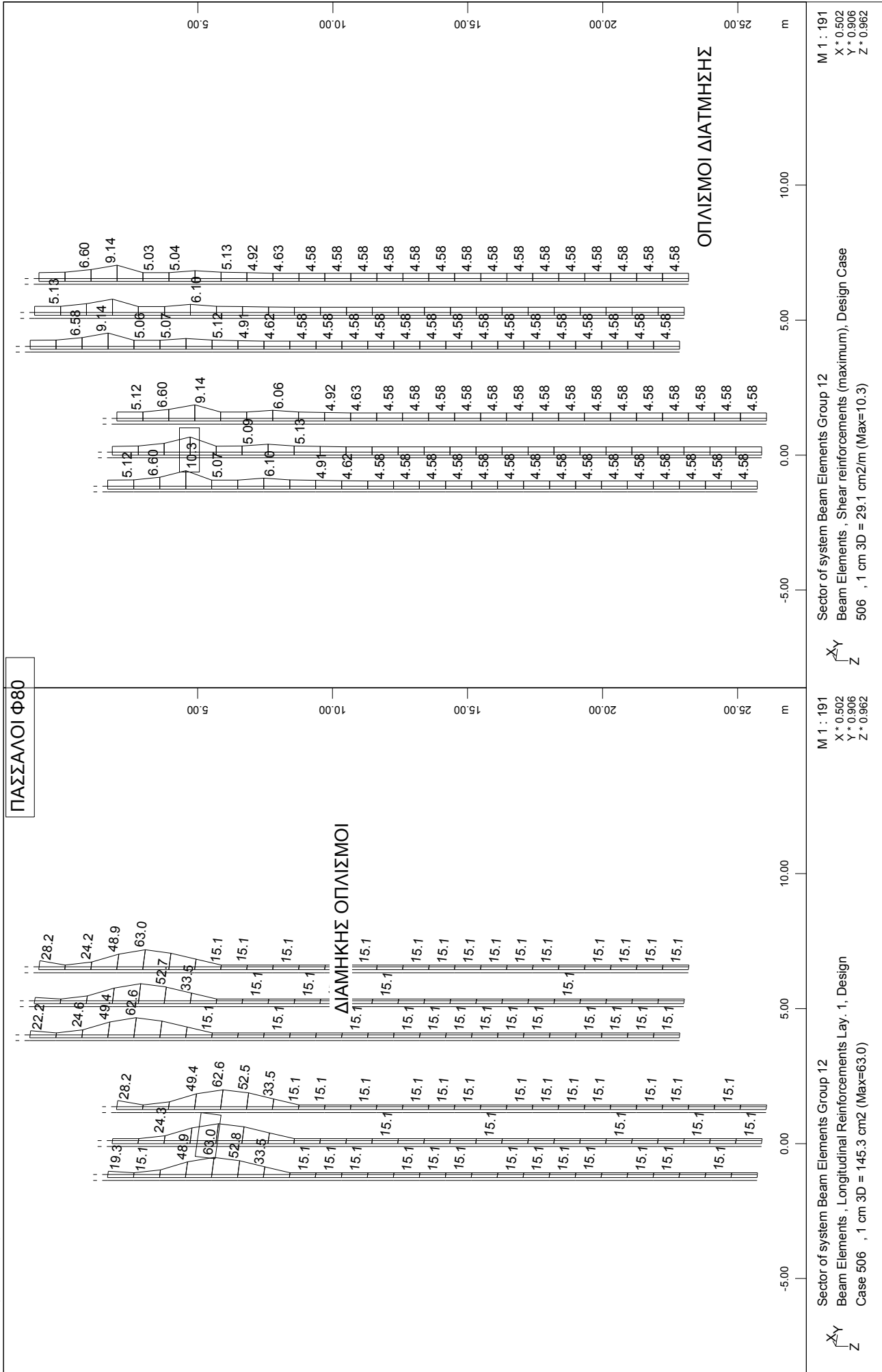
ΠΑΝΩ ΟΠΛΙΣΜΟΣ



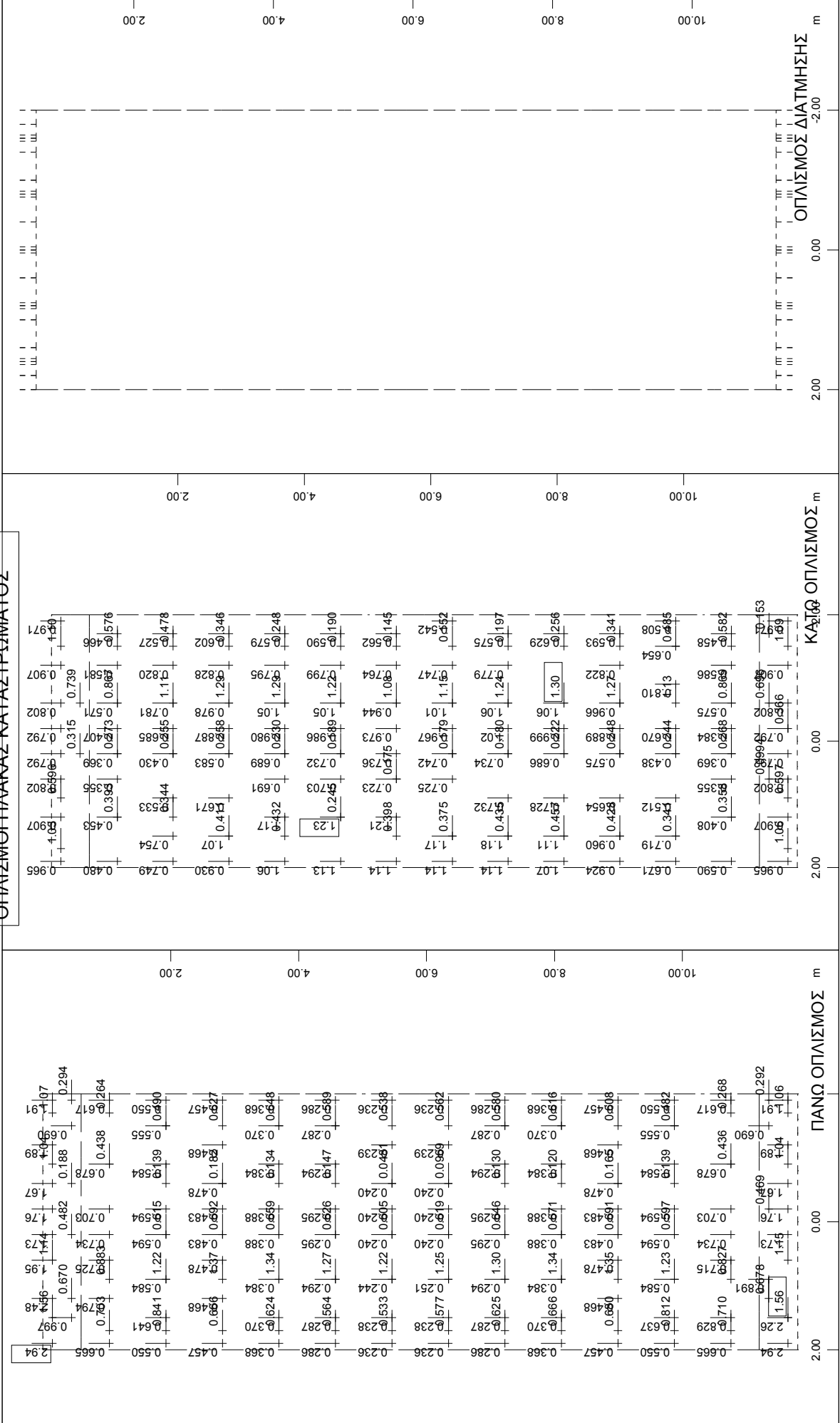
Y-Z
X

Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
506 , 1 cm 3D = 2.91 cm2 (Max=1.98)





ΟΠΛΙΣΜΟΙ ΠΛΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ



Sector of system Quadrilateral Elements Group 3.4
upper Reinforcements in Elements in cm2/m, Design Case 521 ULS design (Max=2.94)

Sector of system Quadrilateral Elements Group 3.4
lower Reinforcements in Elements in cm2/m, Design Case 521 ULS design (Max=1.30)

Sector of system Quadrilateral Elements Group 3
Shear reinforcement from middle of element in cm2/m2, Design Case 521 ULS design (Max=0)

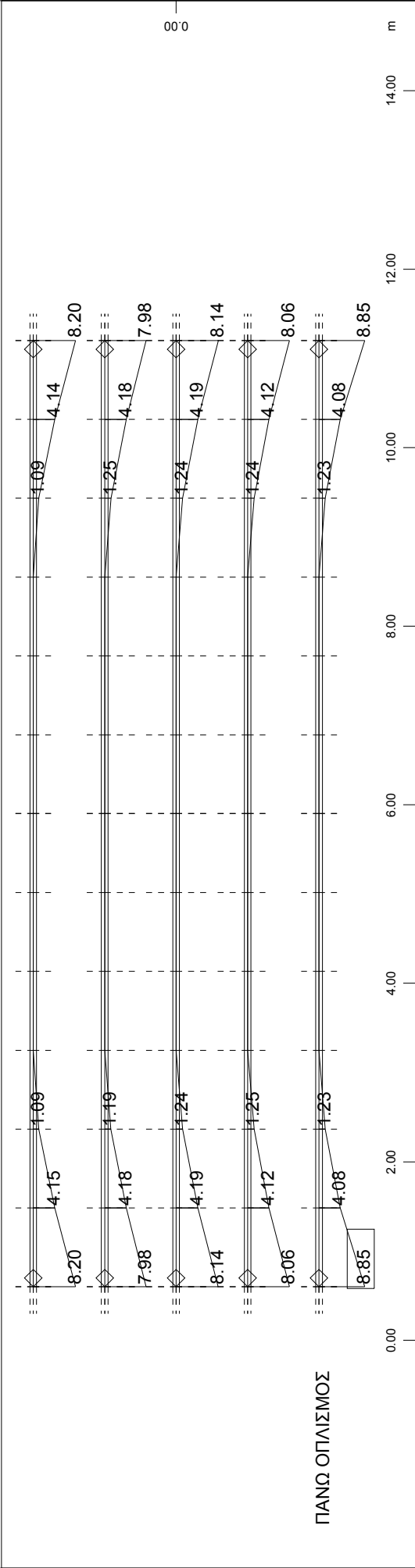
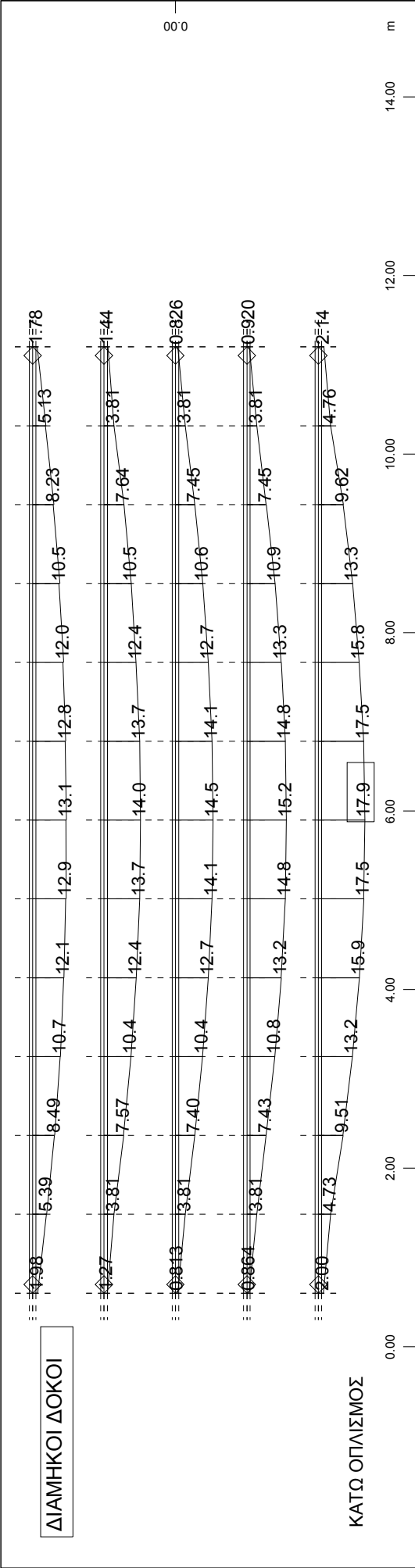
M 1 : 84

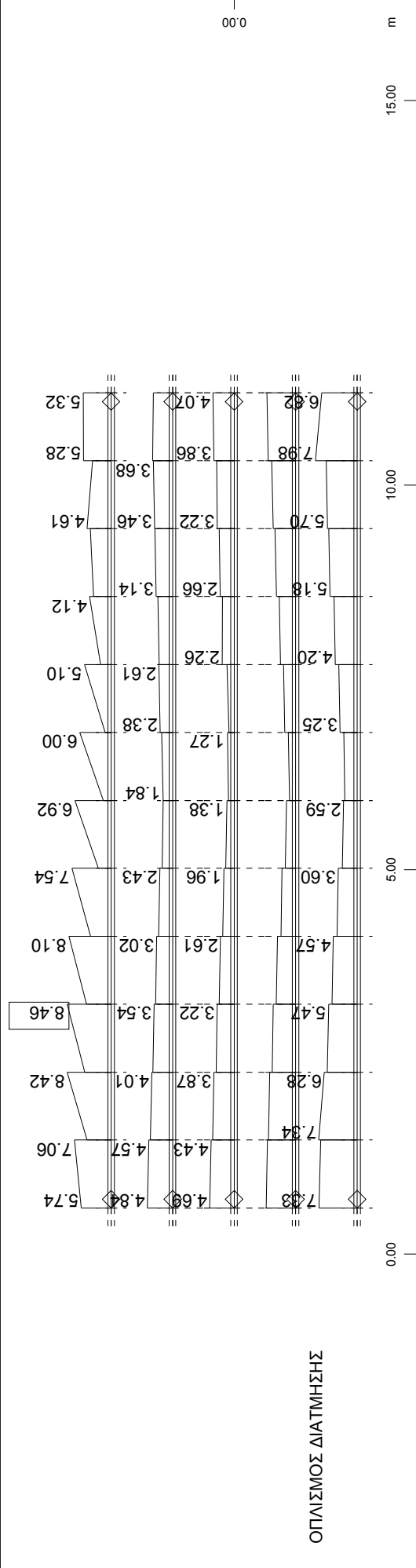
M 1 : 85

M 1 : 77

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/L=13.00

8) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ ULS-ΠΡΟΣΚΡΟΥΣΗΣ

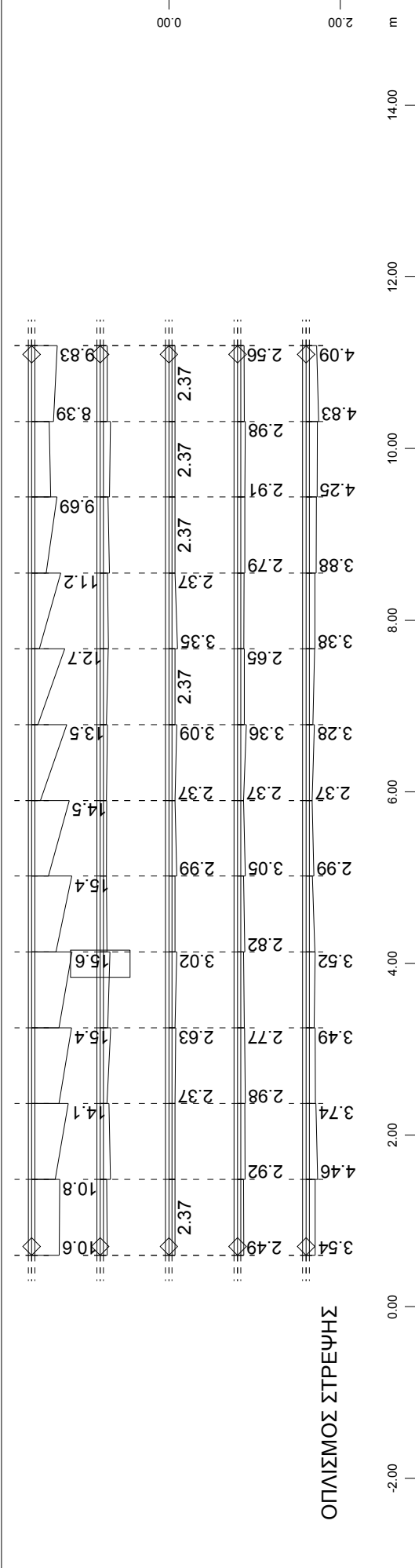




M 1 : 77

Sector of system Beam Elements Group 1
Beam Elements , Shear reinforcements (maximum), Design Case 5/16 , 1 cm 3D = 11.2 cm²/m (Max=8.46)

↑ Z-X
↓



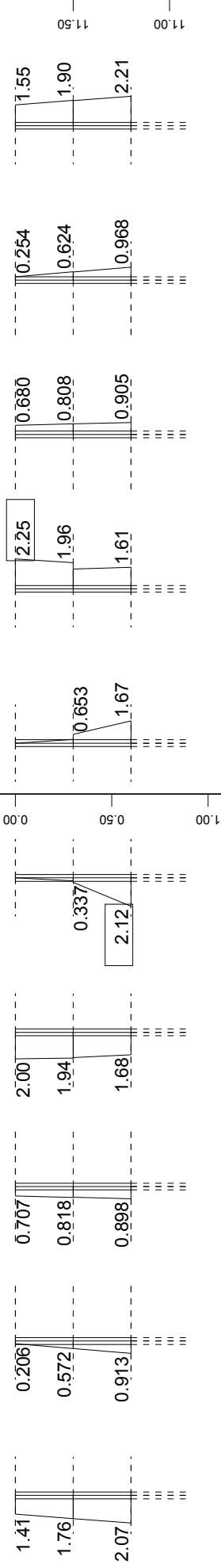
M 1 : 69

Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 0, Design Case 5/16 , 1 cm 3D = 22.4 cm² (Max=15.6)

↑ Z-X
↓

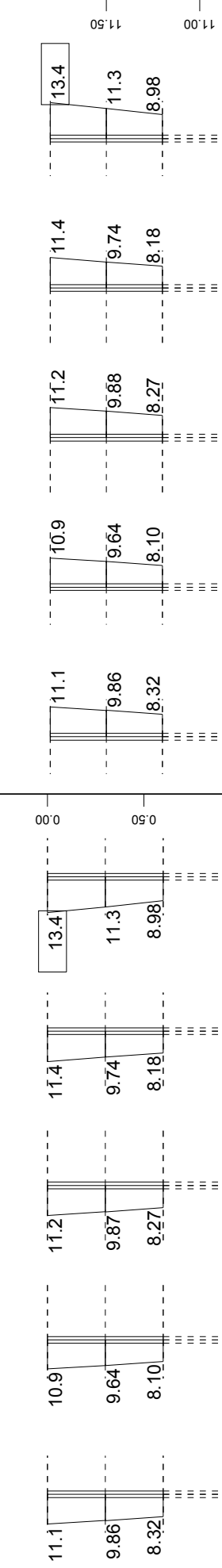
ΔΙΑΜΗΚΗ ΔΟΚΟΙ-ΣΤΗΡΙΞΗΣ

ΚΑΤΩ ΟΠΛΙΣΜΟΣ

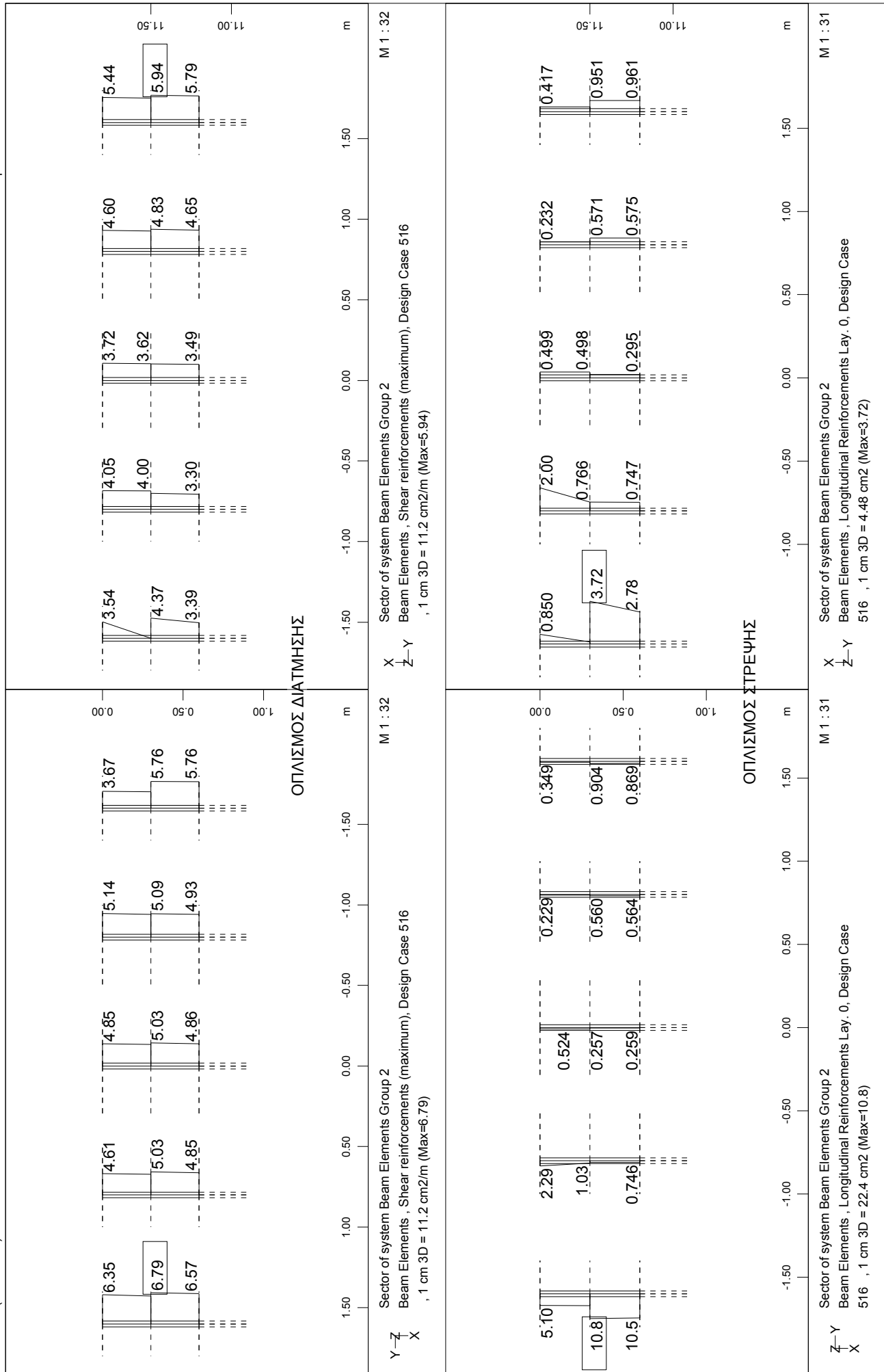


Y-Z X Sector of system Beam Elements Group 2 Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 516 , 1 cm 3D = 4.48 cm2 (Max=2.12) M 1 : 31

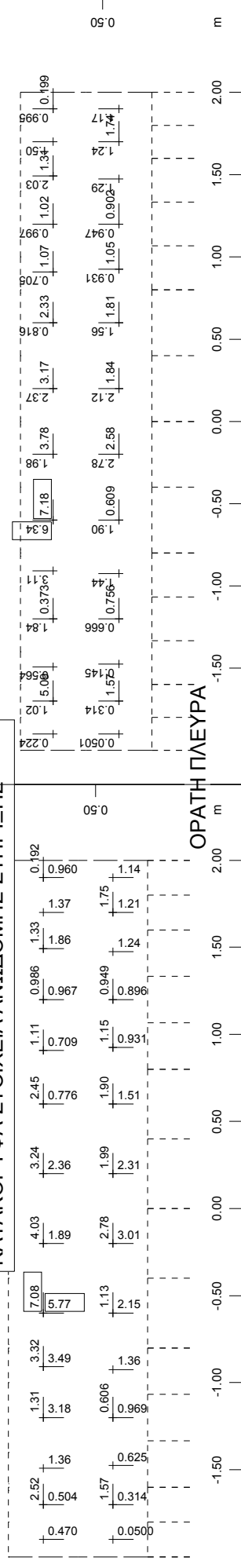
ΠΑΝΩ ΟΠΛΙΣΜΟΣ



Z-Y X Sector of system Beam Elements Group 2 Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case 516 , 1 cm 3D = 22.4 cm2 (Max=13.4) M 1 : 32

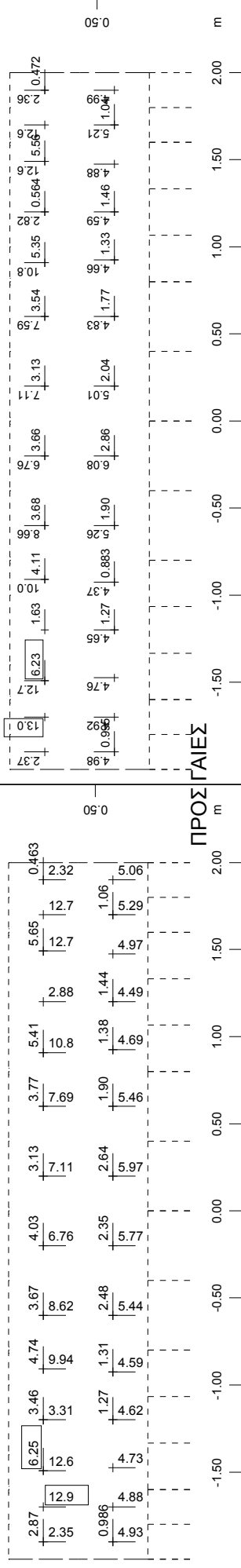


ΚΑΤΑΚΟΡΥΦΑ ΣΤΟΙΧΕΙΑ ΑΝΩΔΟΜΗΣ-ΣΤΗΡΙΞΗΣ



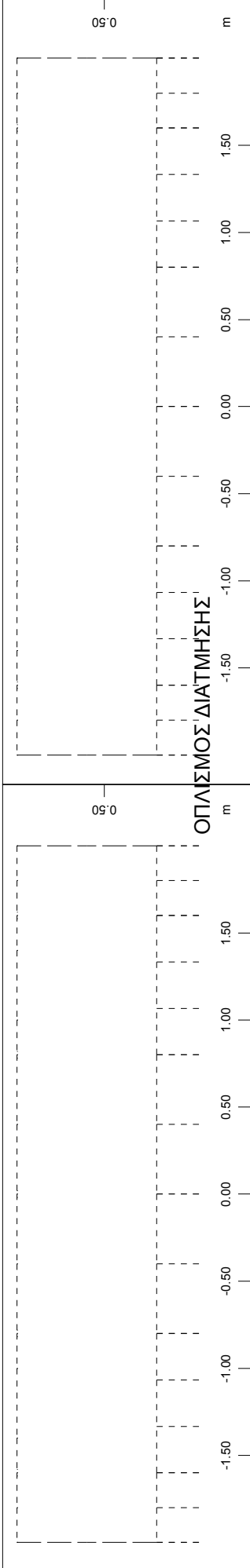
Sector of system Quadrilateral Elements Group 8
upper Reinforcements in Elements in cm2/m, Design Case 524 ULS
design (Max=7.08)

M 1 : 34



Sector of system Quadrilateral Elements Group 8
lower Reinforcements in Elements in cm2/m, Design Case 524 ULS
design (Max=12.9)

M 1 : 34

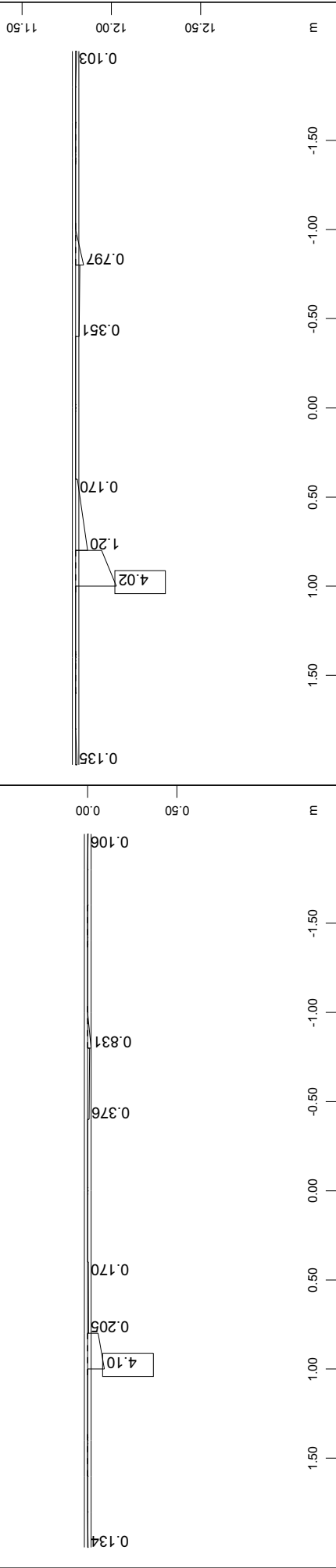


Sector of system Quadrilateral Elements Group 8
Shear reinforcement from middle of element in cm2/m2, Design Case 524 ULS design (Max=0)

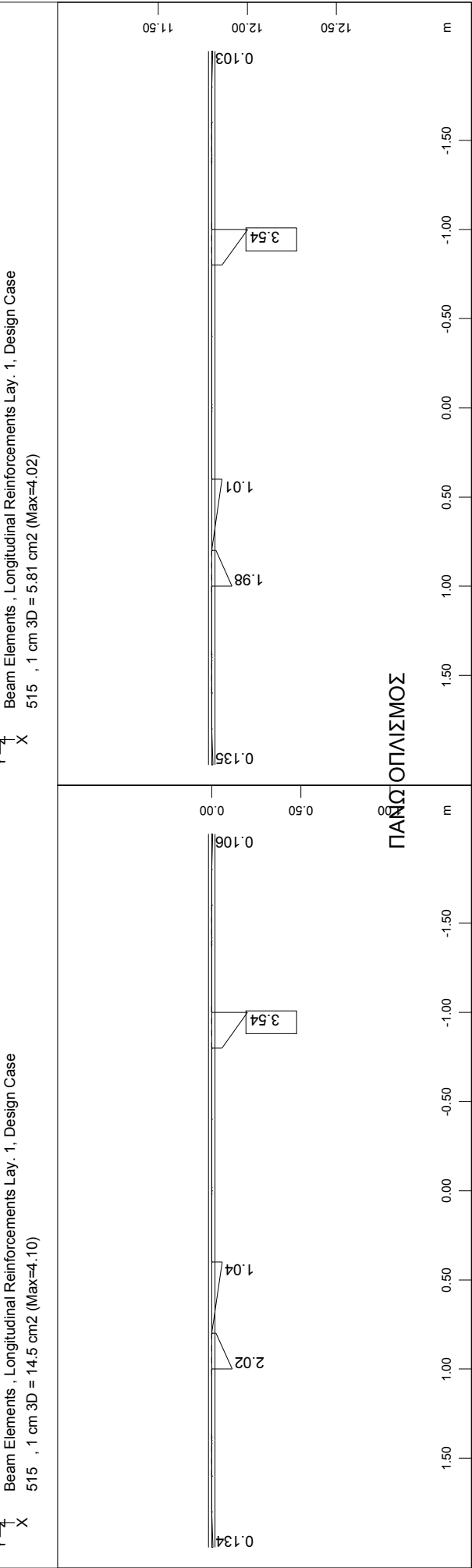
M 1 : 34

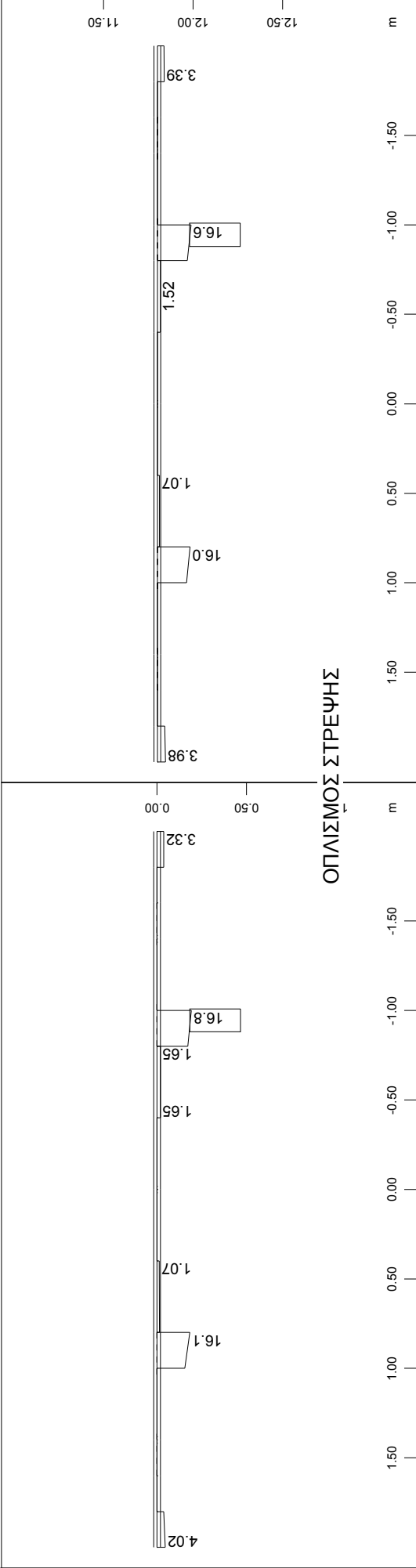
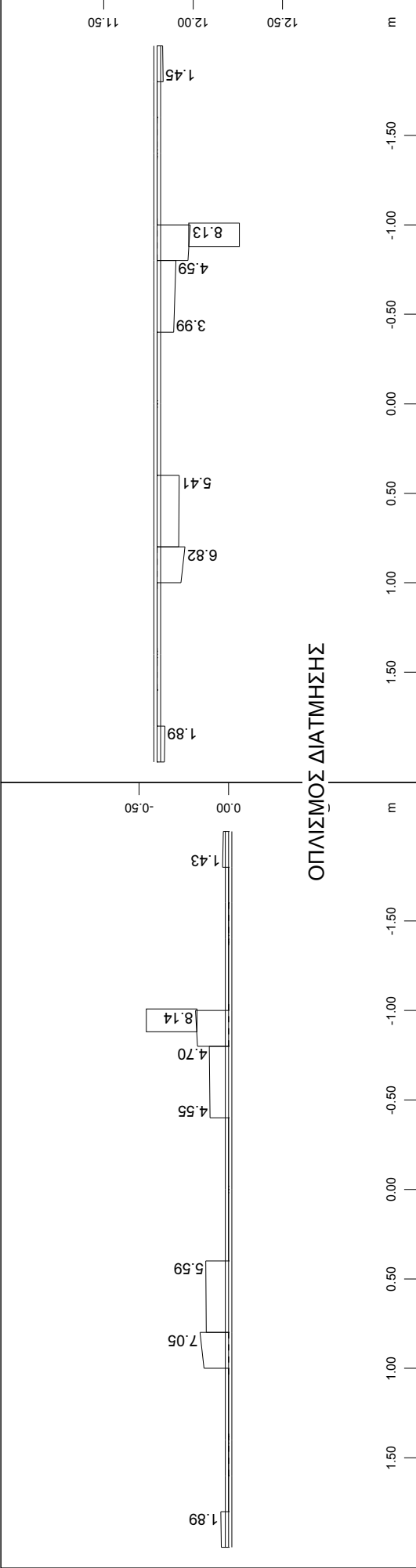
ΠΑΡΑΣΧΟΛΟΓΕΣΜΟΣ

ΚΑΤΩ ΟΠΛΙΣΜΟΣ

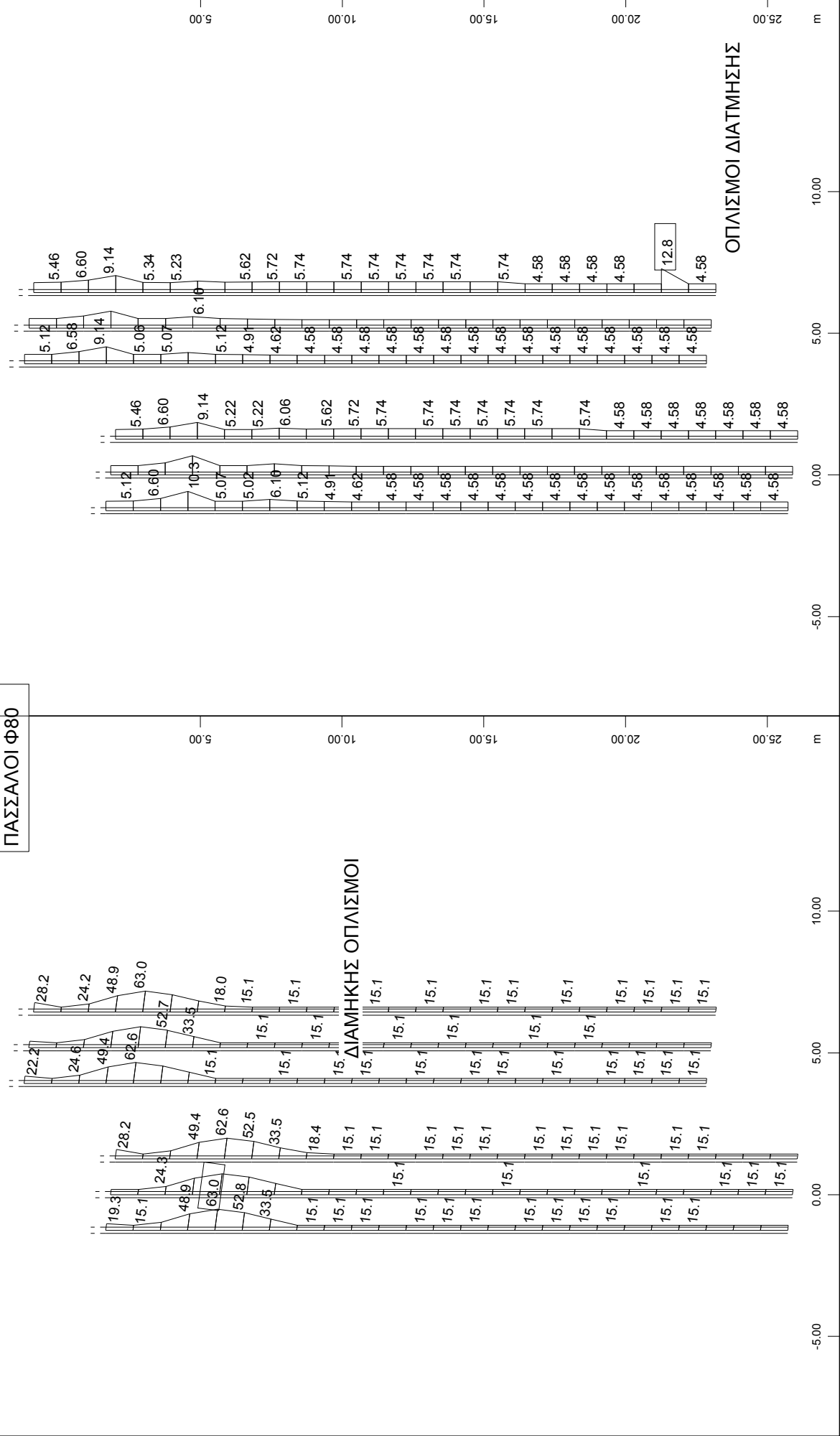


M1:33





ΠΑΣΣΑΛΟΙ Φ80



M 1 : 191
X * 0.502
Y * 0.906
Z * 0.962

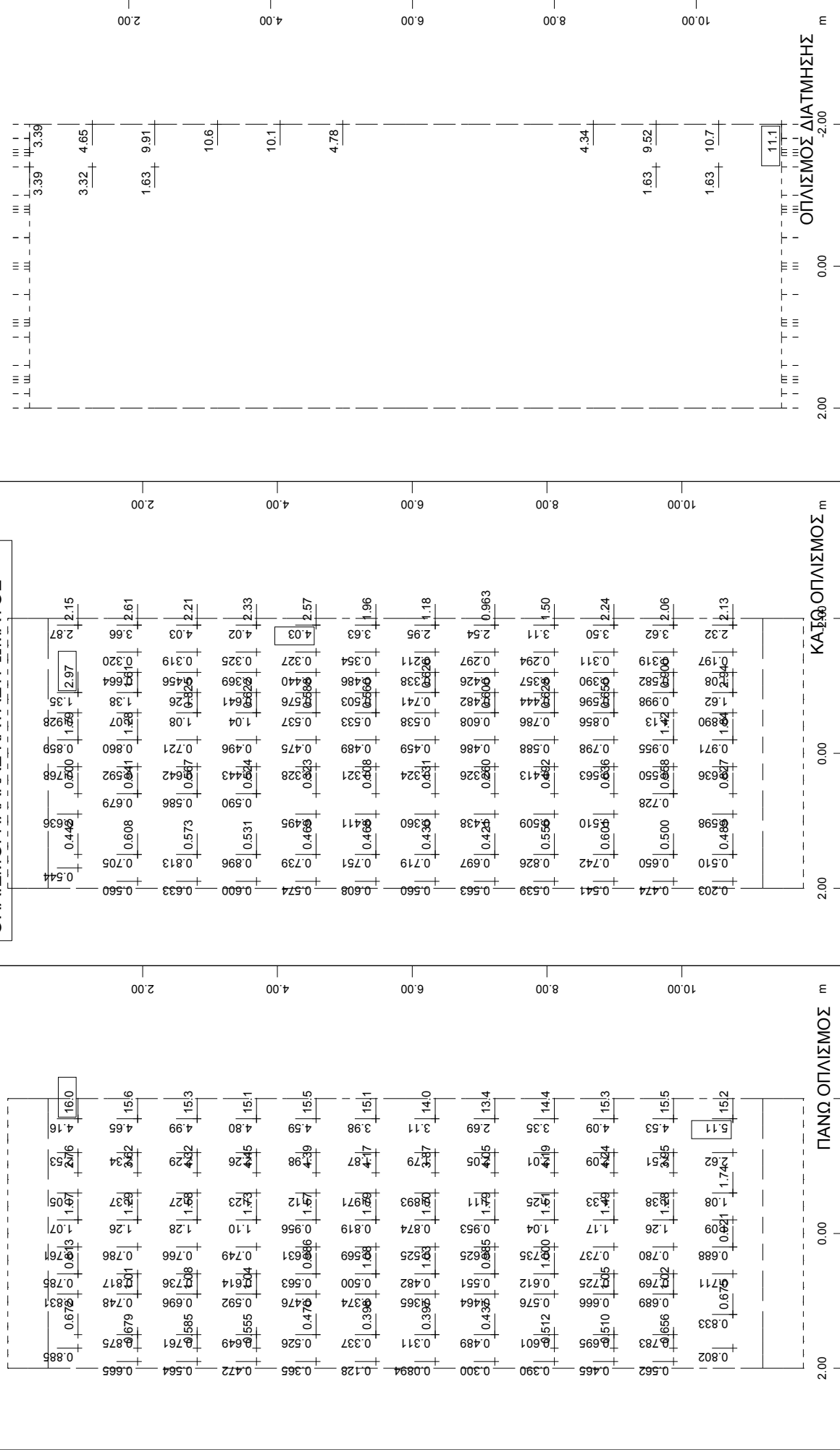
Sector of system Beam Elements Group 12
Beam Elements , Shear reinforcements (maximum), Design Case
515 , 1 cm 3D = 29.1 cm2/m (Max=12.8)

M 1 : 191
X * 0.502
Y * 0.906
Z * 0.962

Sector of system Beam Elements Group 12
Beam Elements , Longitudinal Reinforcements Lay. 1, Design
Case 515 , 1 cm 3D = 145.3 cm2 (Max=63.0)

p. 438

ΟΡΓΑΝΙΣΜΟΙ ΠΛΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ



Sector of system Quadrilateral Elements Group 3
Shear reinforcement from middle of element in cm²/m²,
Design Case 524 ULS design (Max=11.1)

M 1 : 81

Sector of system Quadrilateral Elements Group 3 4
lower Reinforcements in Elements in cm2/m, Design Case
524 ULS design (Max=4.03)

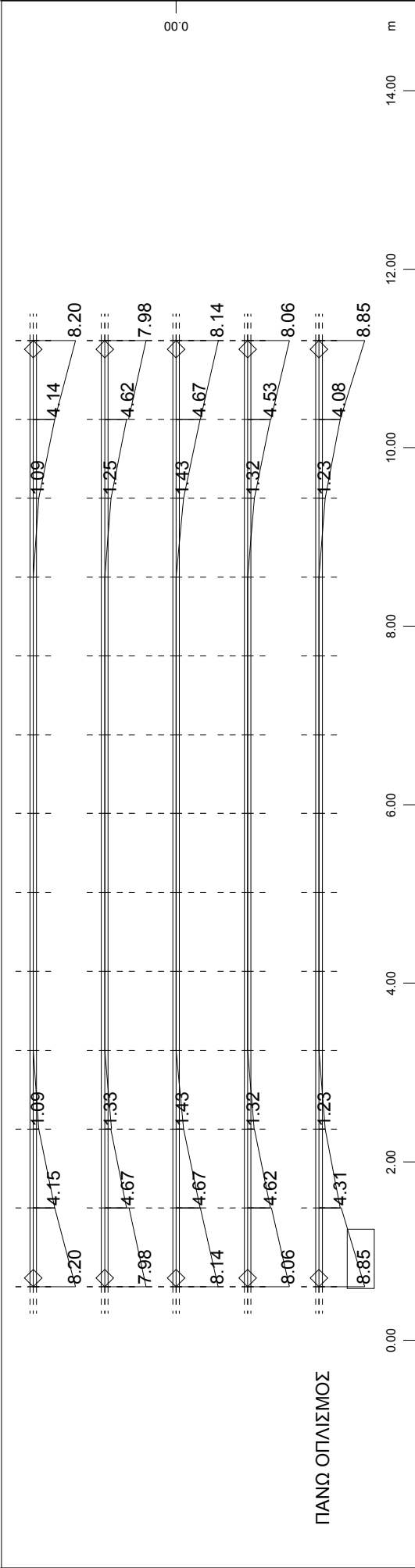
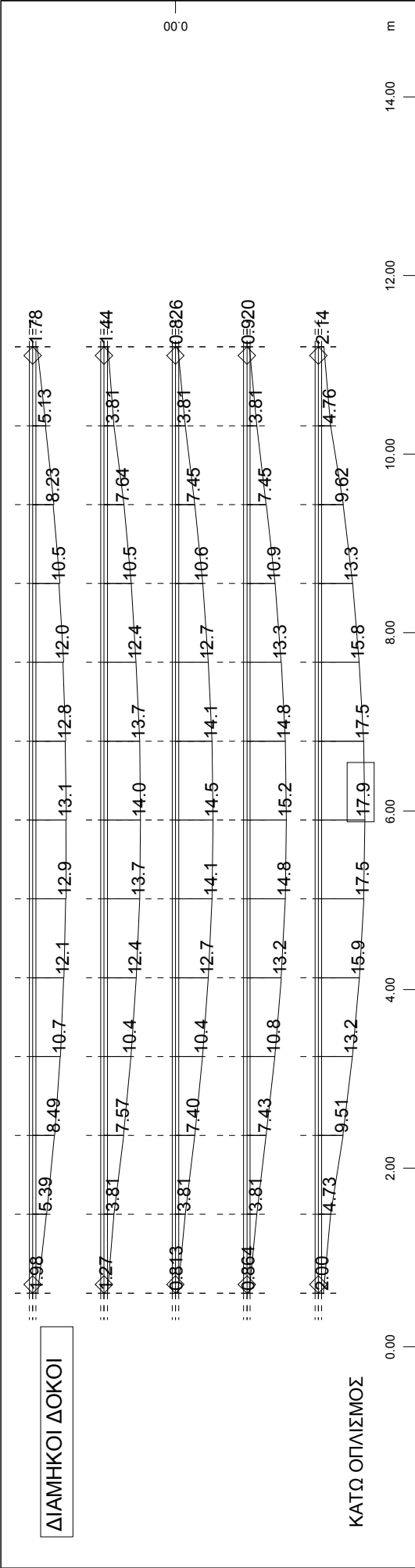
M 1 : 81

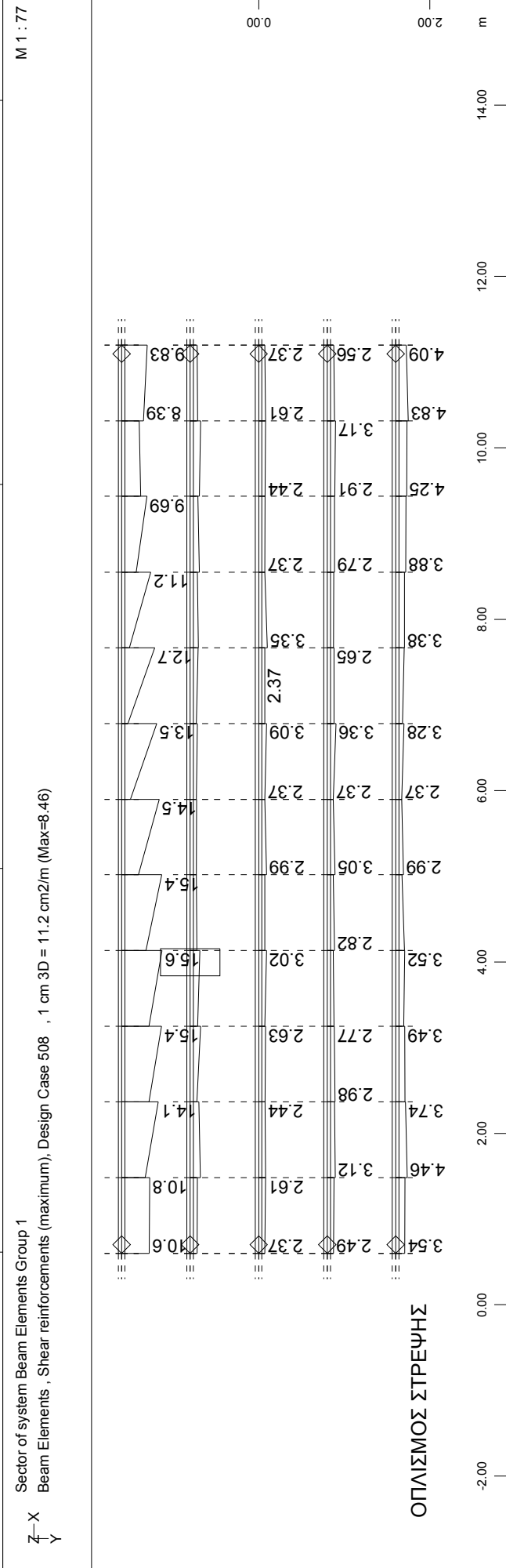
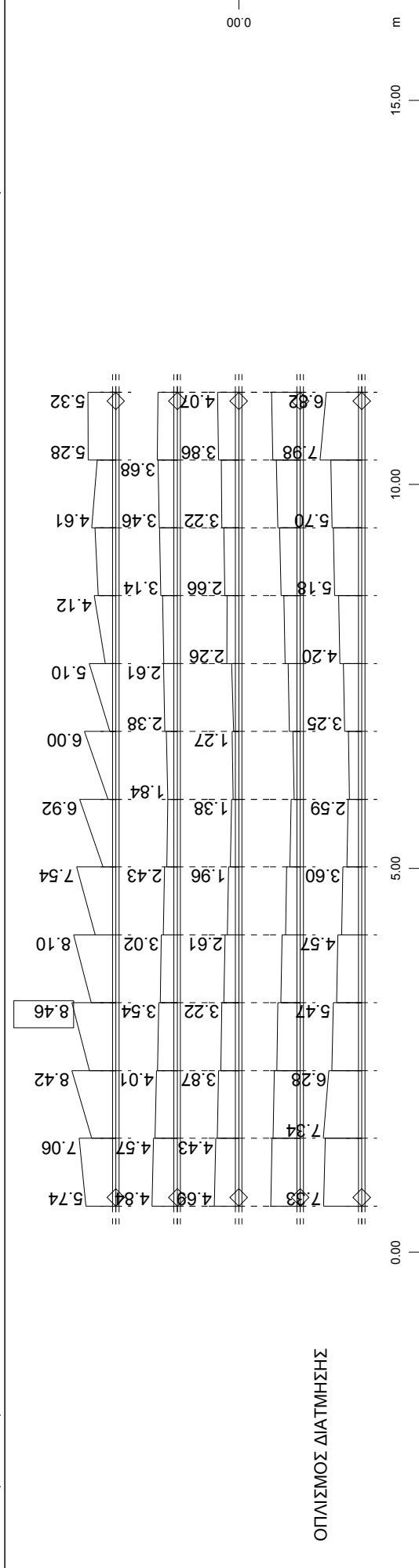
Sector of system Quadrilateral Elements Group 3 4
upper Reinforcements in Elements in cm2/m, Design Case
524 ULS design (Max=16.0)

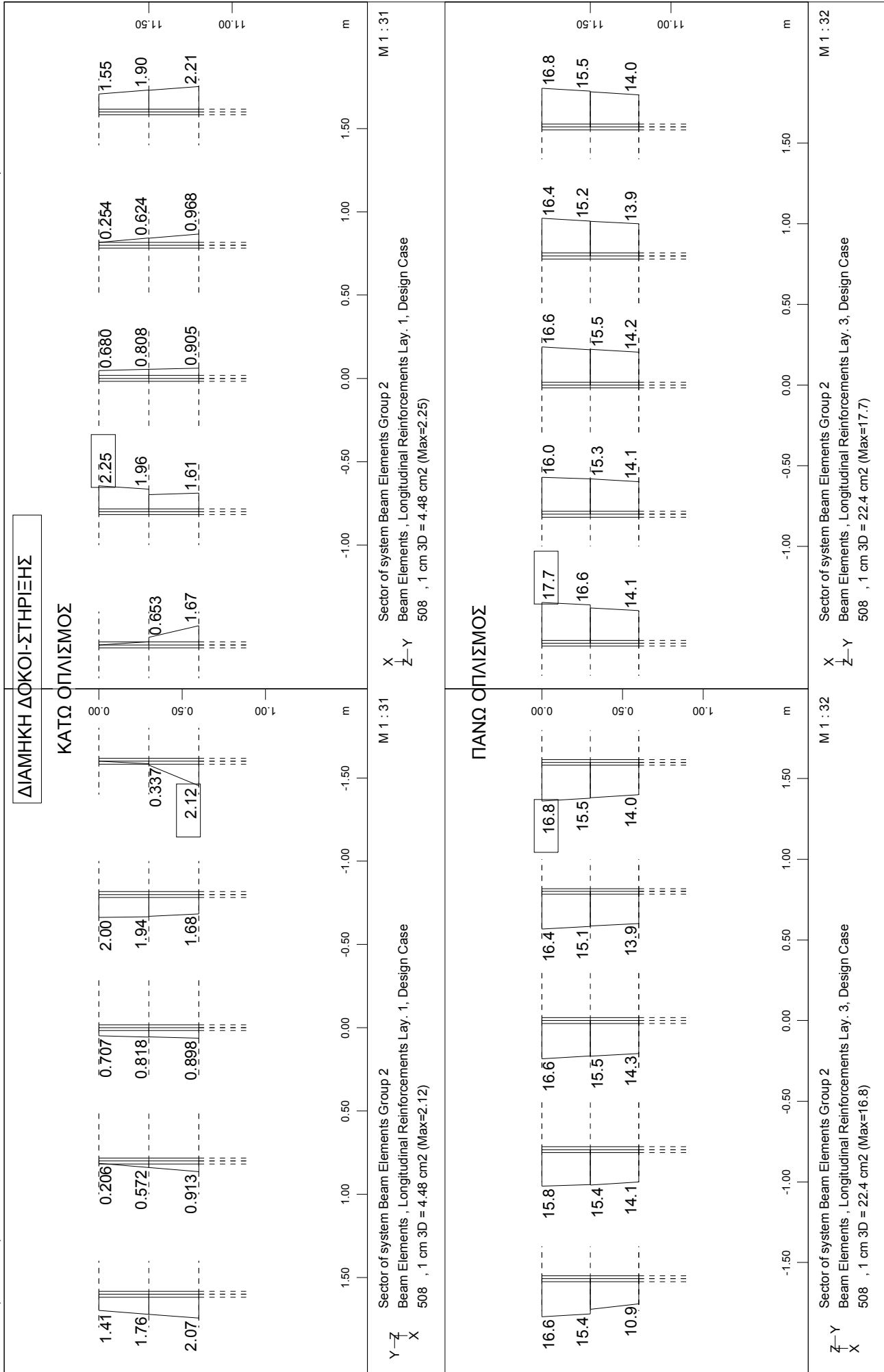
$$Y \rightarrow Z$$

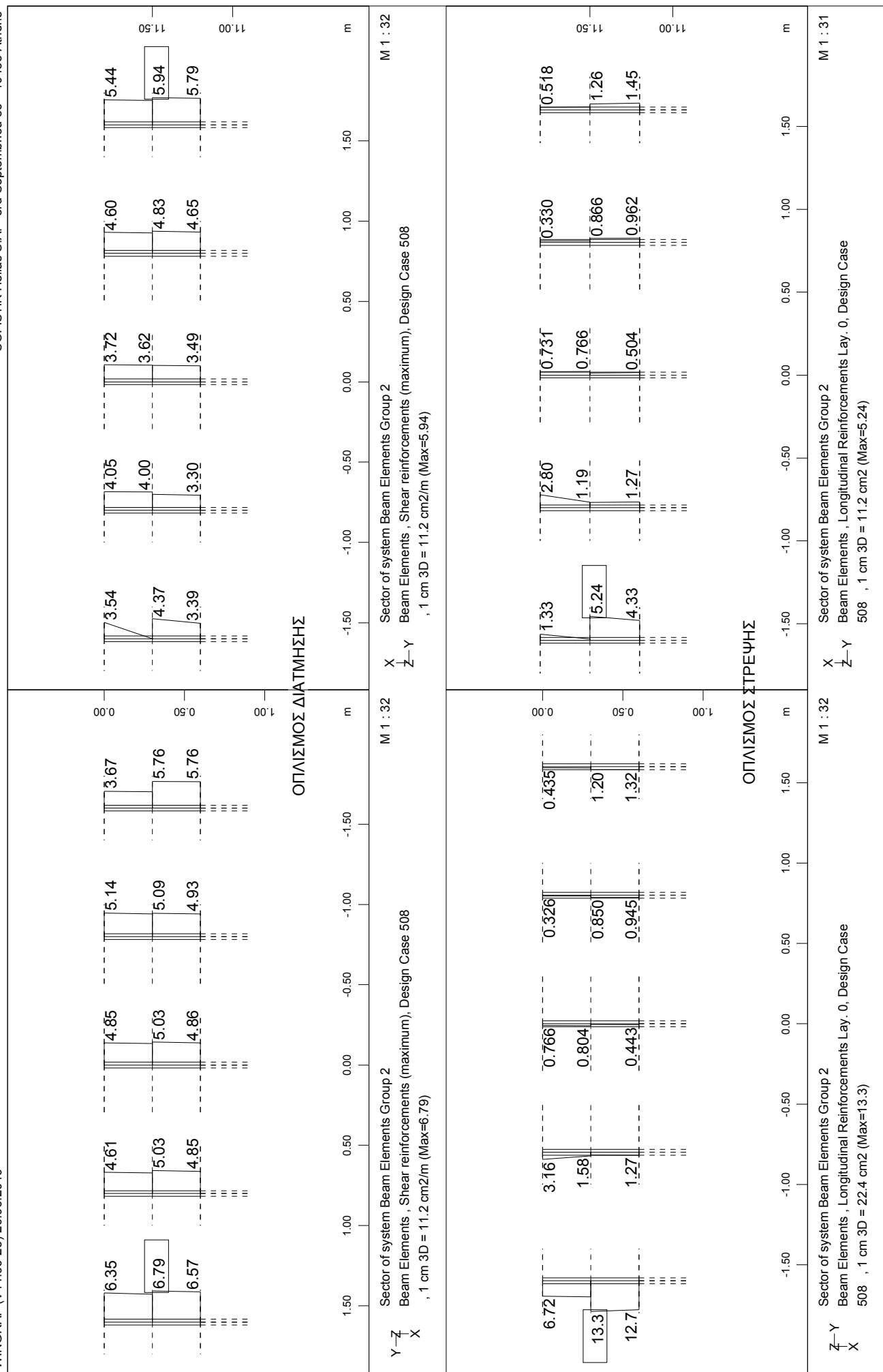
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00

9) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ SLS - ΡΗΓΜΑΤΩΣΗ

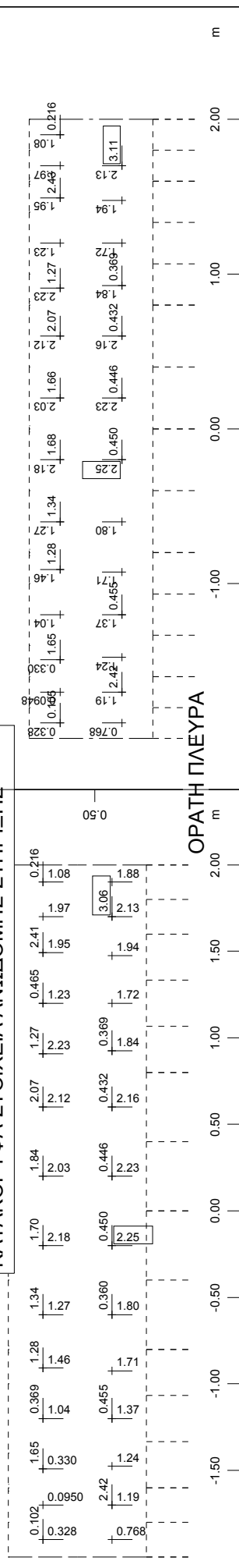




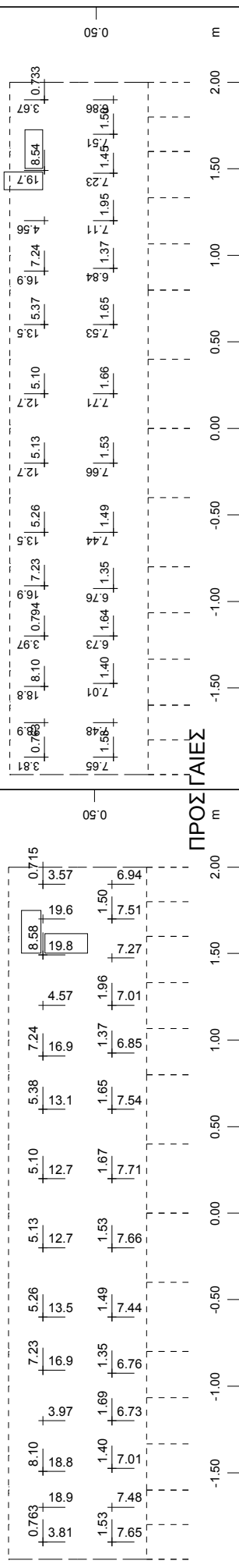




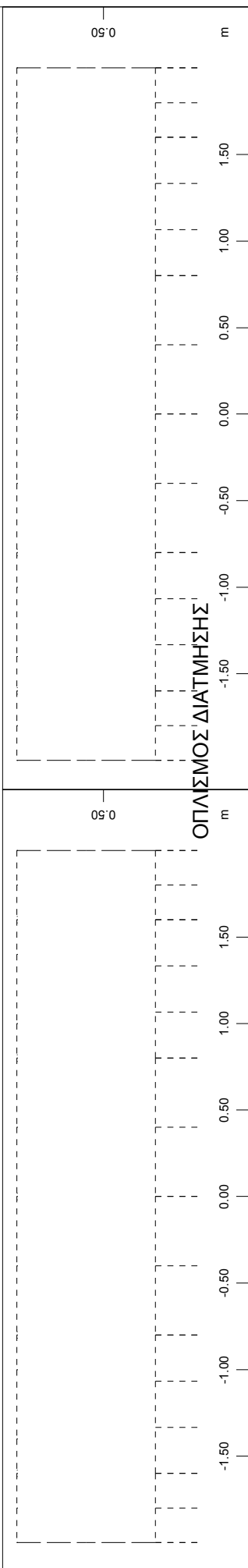
ΚΑΤΑΚΟΡΥΦΑ ΣΤΟΙΧΕΙΑ ΑΝΩΔΟΜΗΣ-ΣΤΗΡΙΞΗΣ



Sector of system Quadrilateral Elements Group 8
upper Reinforcements in Elements in cm2/m, Design Case 521 ULS
design (Max=3.11)



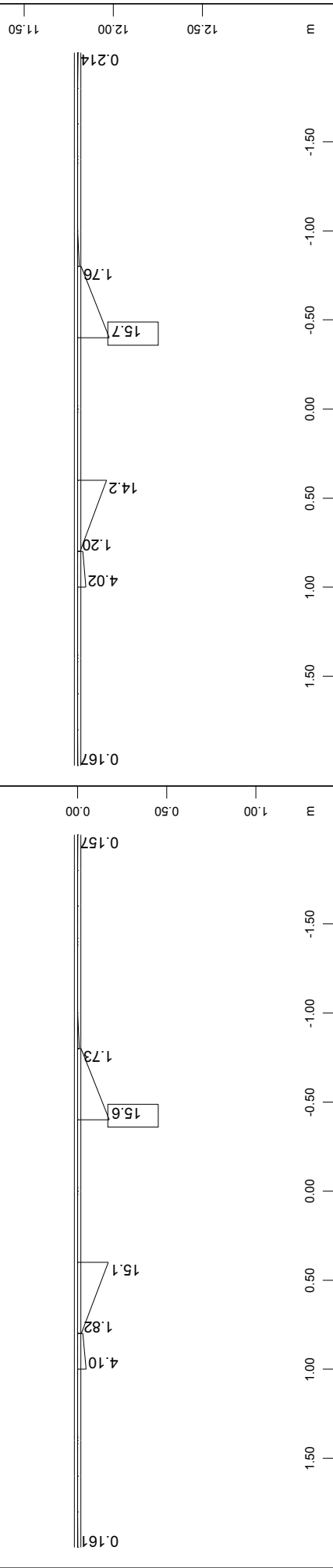
Sector of system Quadrilateral Elements Group 8
lower Reinforcements in Elements in cm2/m, Design Case 521 ULS
design (Max=19.8)



Sector of system Quadrilateral Elements Group 8
Shear reinforcement from middle of element in cm2/m2, Design
Case 521 ULS design (Max=0)

ΠΑΡΑΣΧΟΛΟΓΕΣΜΟΣ

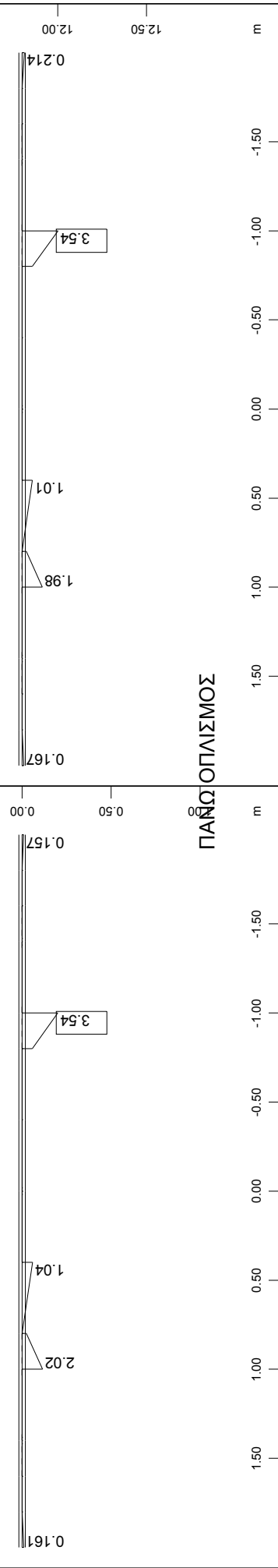
ΚΑΤΩ ΟΠΛΙΣΜΟΣ



Y-Z
X

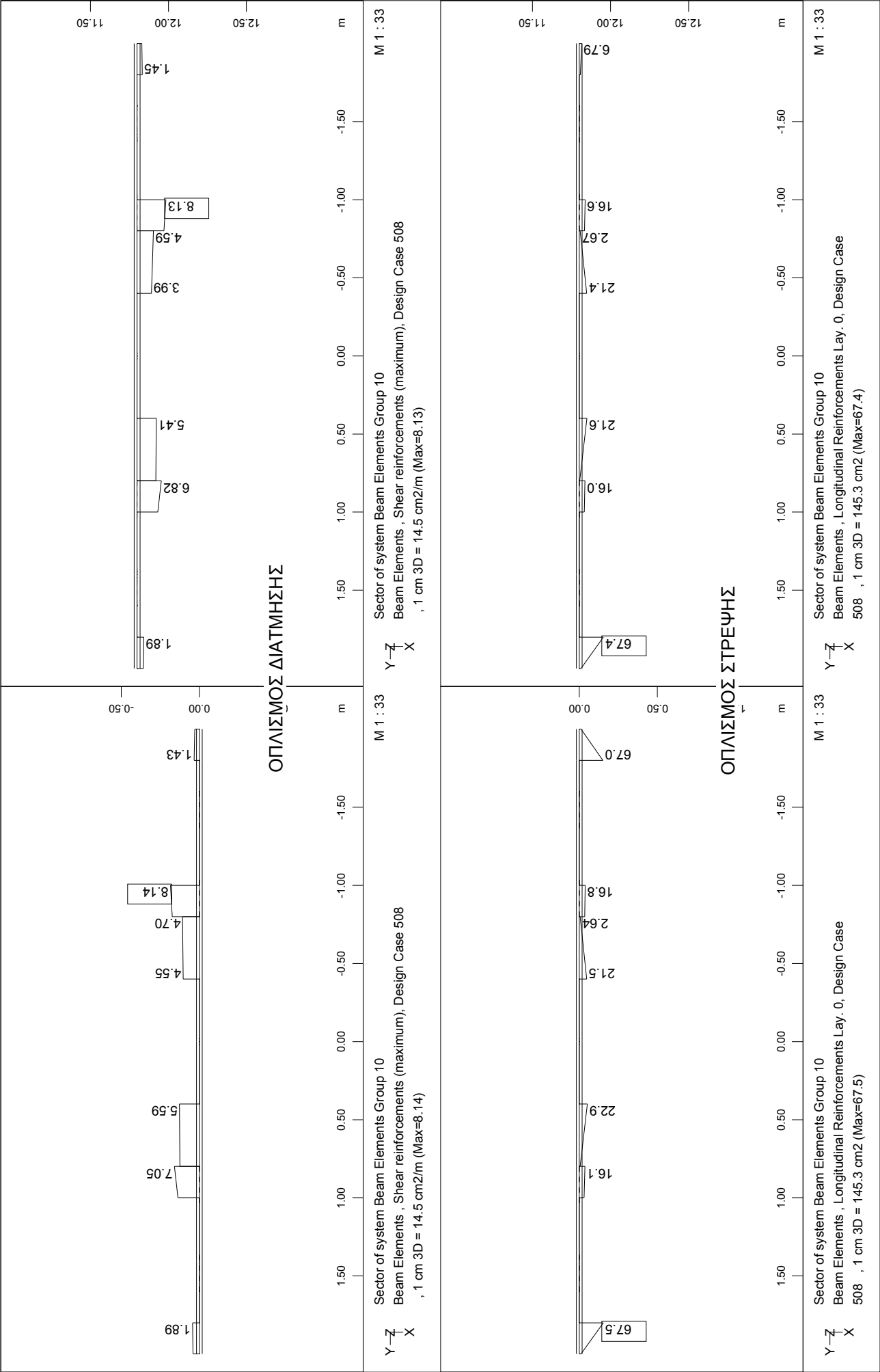
Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case
508 , 1 cm 3D = 29.1 cm2 (Max=15.7)

ΠΑΝΩ ΟΠΛΙΣΜΟΣ

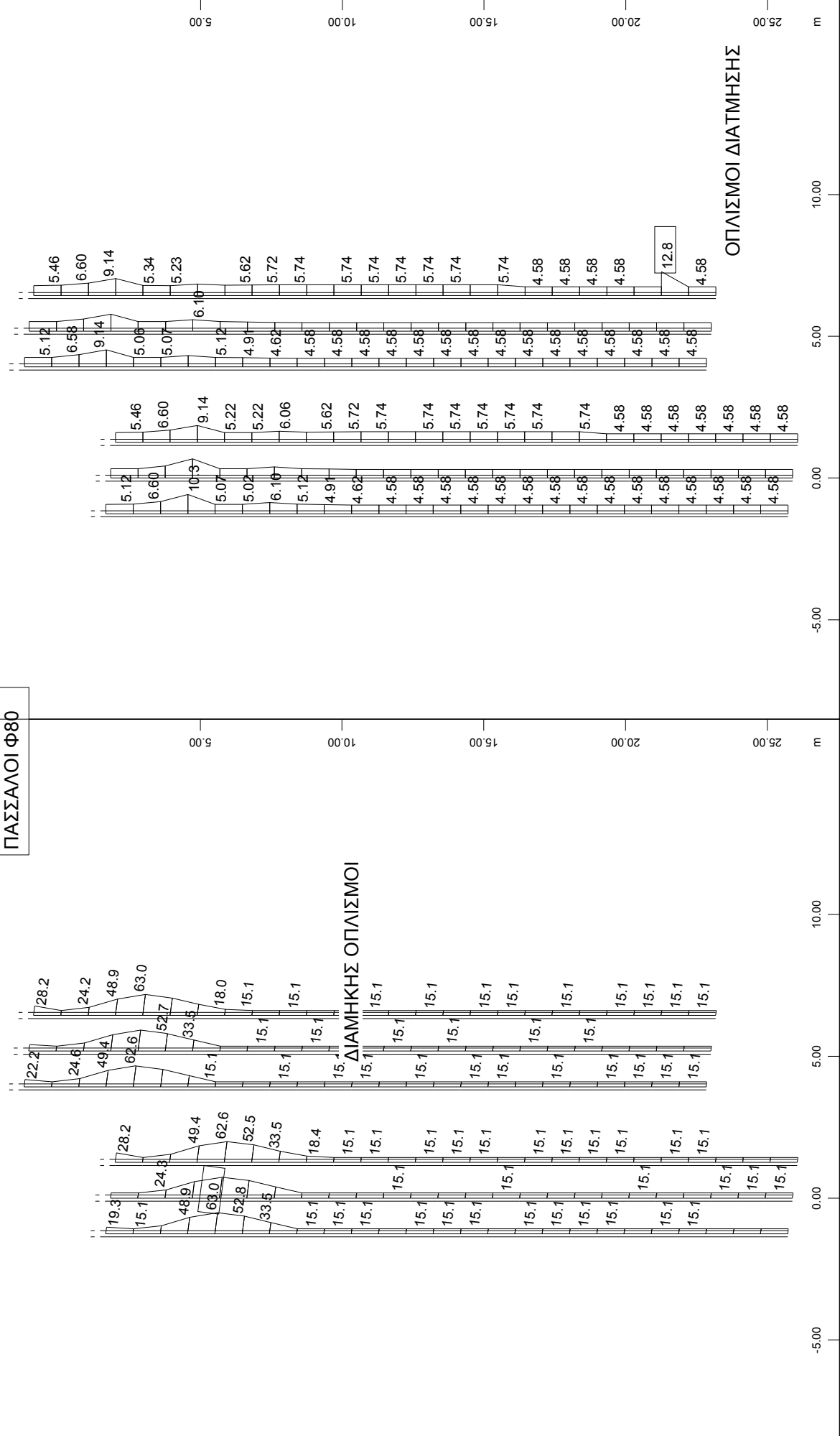


Y-Z
X

Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
508 , 1 cm 3D = 5.81 cm2 (Max=3.54)



ΠΑΣΣΑΛΟΙ Φ80

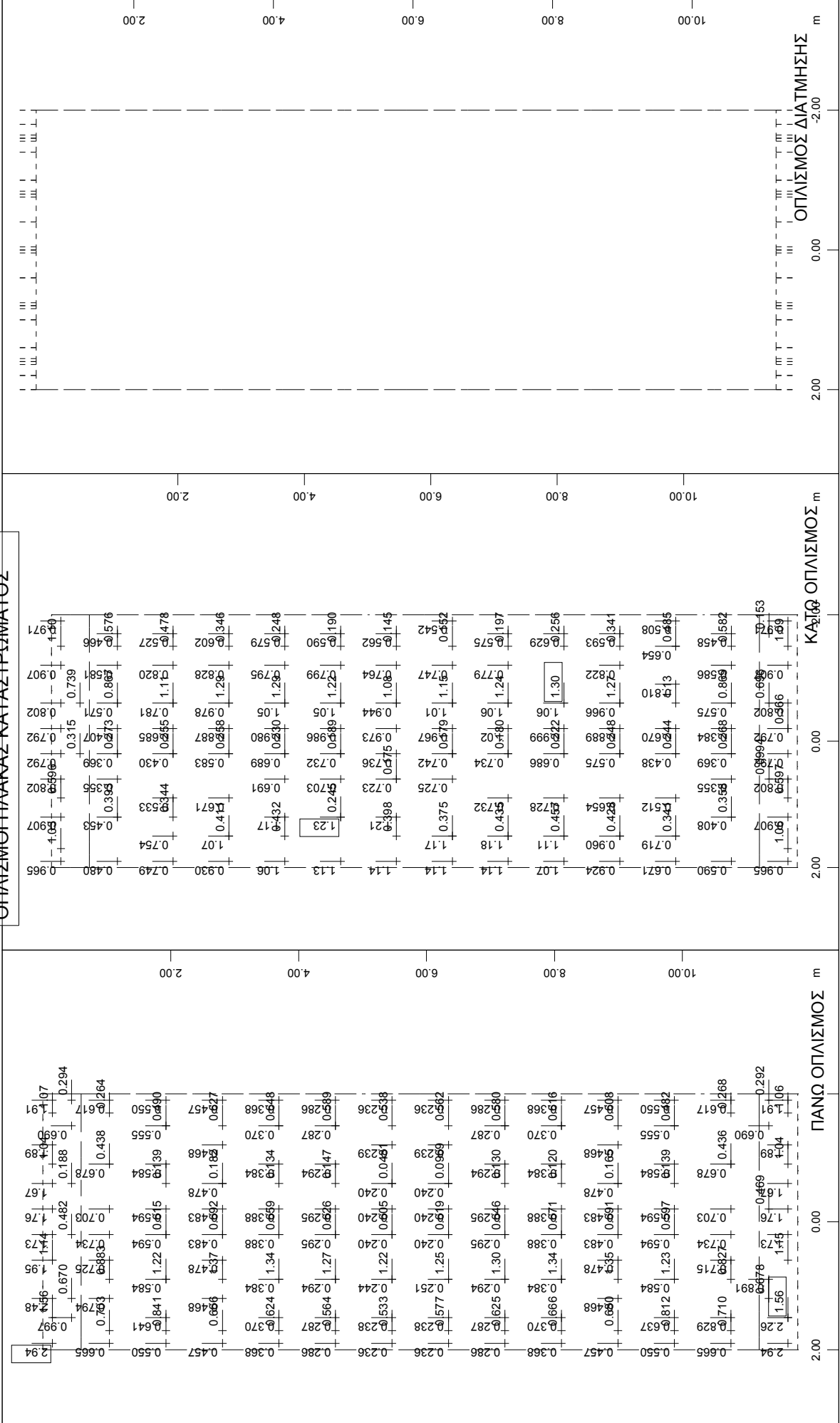


ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00
PRINT:ΟΠΛΙΣΜΟΙ_ΦΑΣΗ-2_SLS

Μ 1 : 191
X * 0.502
Y * 0.906
Z * 0.962

Sector of system Beam Elements Group 12
Beam Elements, Shear reinforcements (maximum), Design Case 508, 1 cm 3D = 29.1 cm²/m (Max=12.8)

ΟΠΛΙΣΜΟΙ ΠΛΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ



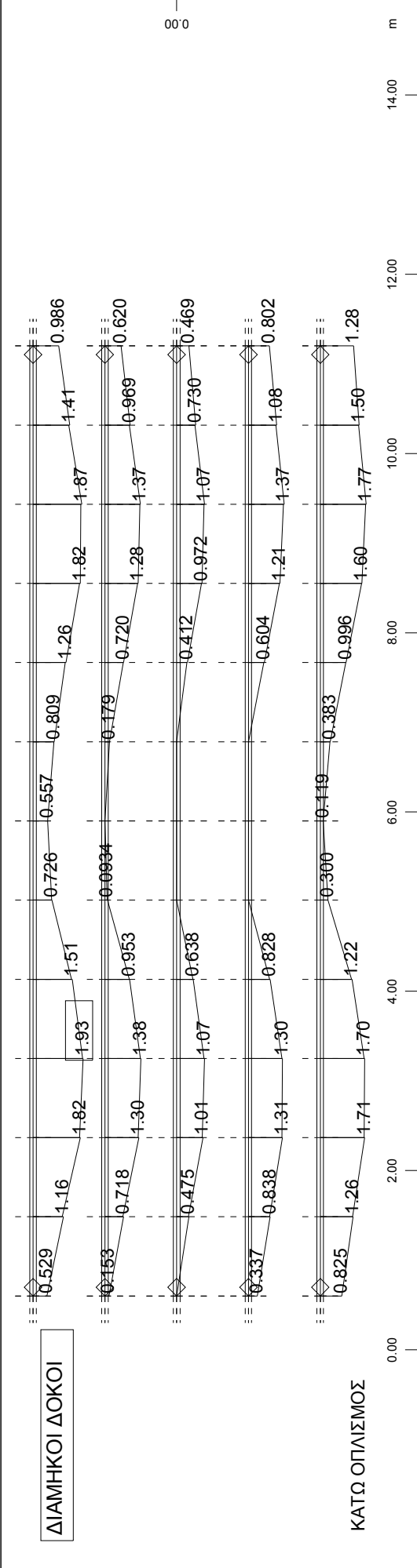
Sector of system Quadrilateral Elements Group 3.4
upper Reinforcements in Elements in cm2/m, Design Case
521 ULS design (Max=2.94)

Sector of system Quadrilateral Elements Group 3.4
lower Reinforcements in Elements in cm2/m, Design Case
521 ULS design (Max=1.30)

Sector of system Quadrilateral Elements Group 3
Shear reinforcement from middle of element in cm2/m2,
Design Case 521 ULS design (Max=0)

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/Λ=13.00

10) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ULS-ΣΕΙΣΜΙΚΑ (Q=1.50)



M 1 : 66

Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 510 , 1 cm 3D = 2.24 cm2 (Max=1.93)

Z-X
Y

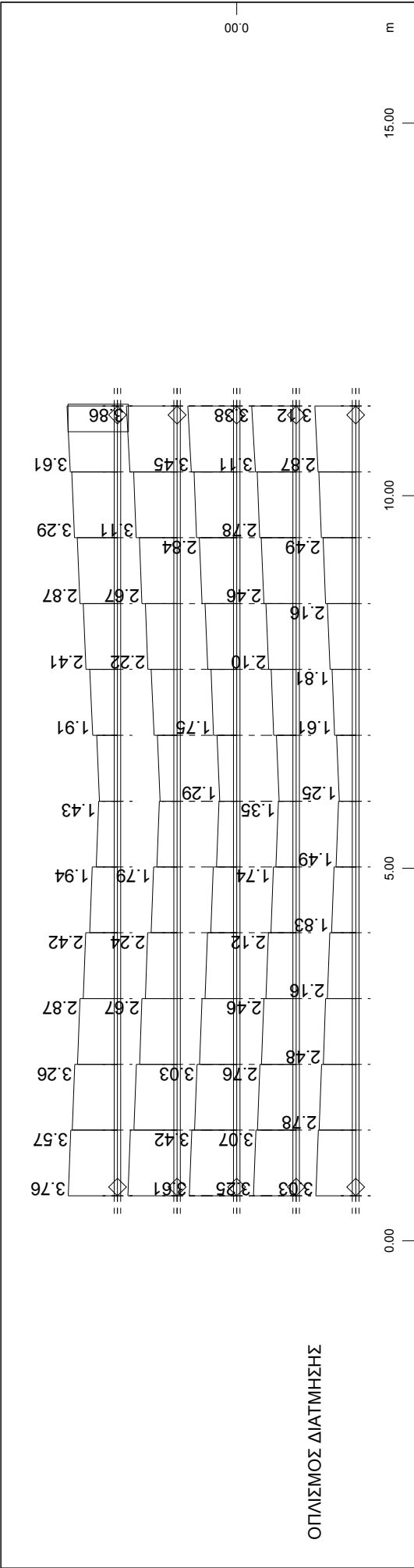
ΚΑΤΩ ΟΠΛΙΣΜΟΣ



M 1 : 65

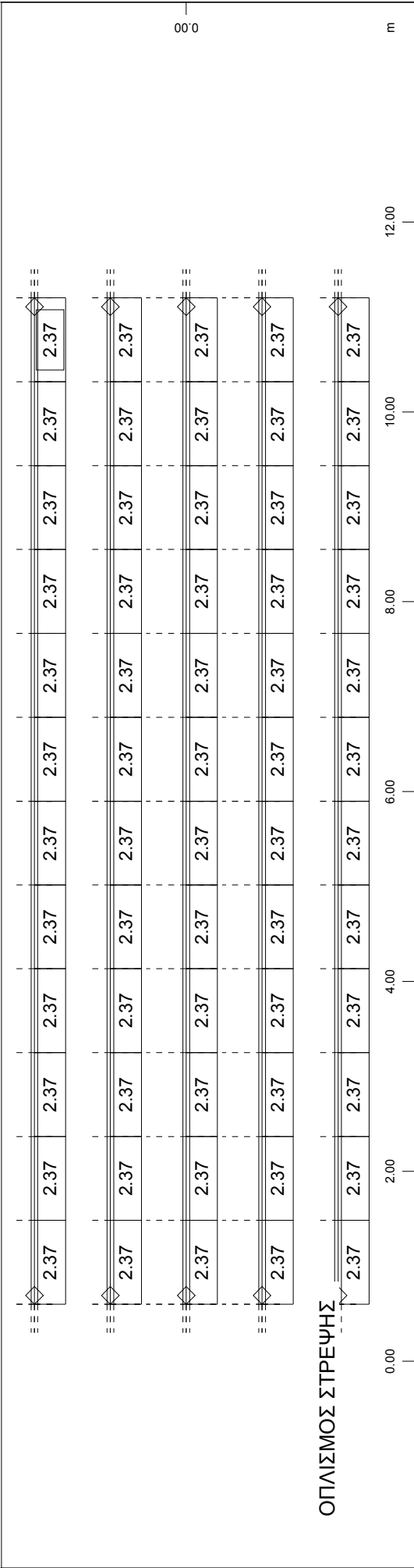
Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case 510 , 1 cm 3D = 22.4 cm2 (Max=18.0)

Z-X
Y



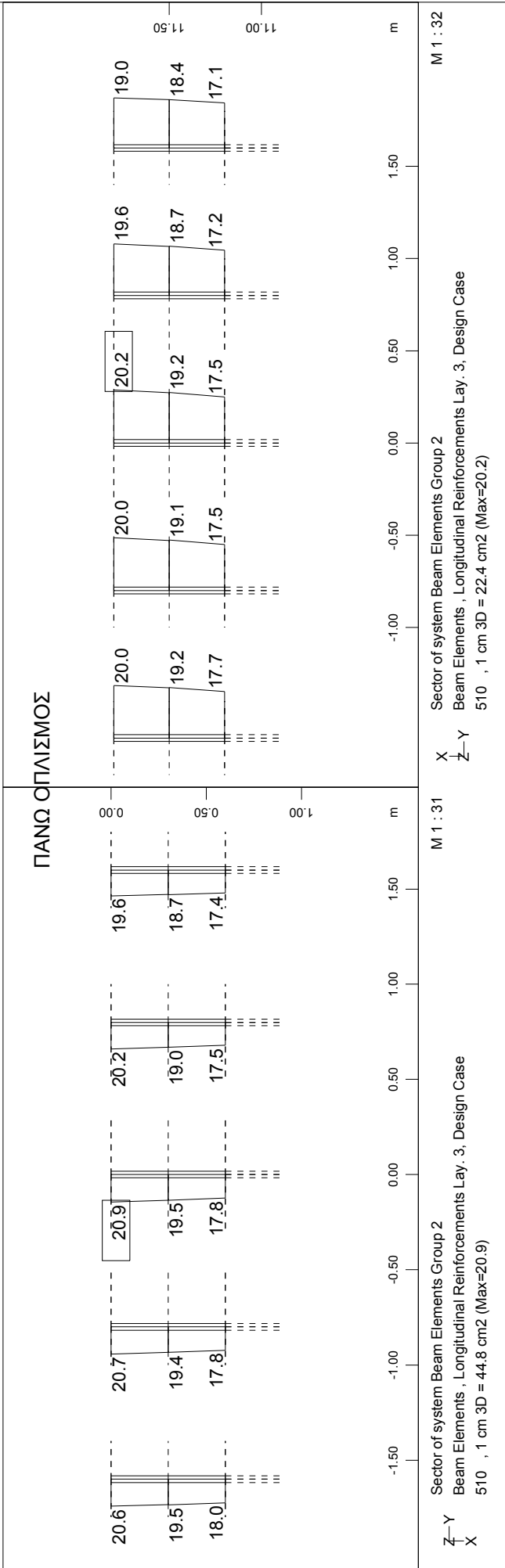
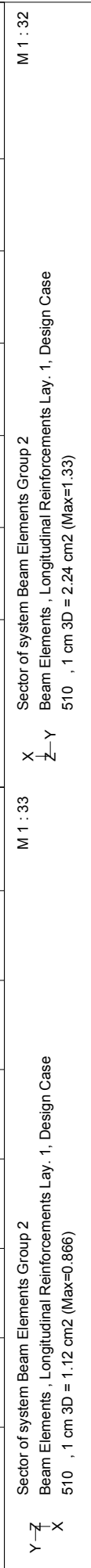
M 1 : 79

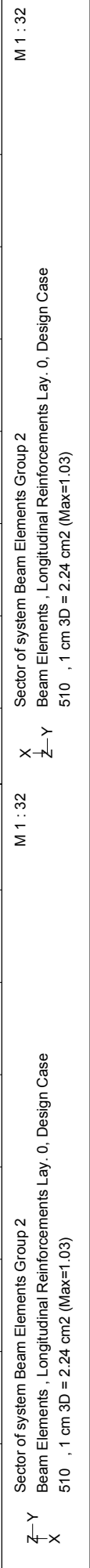
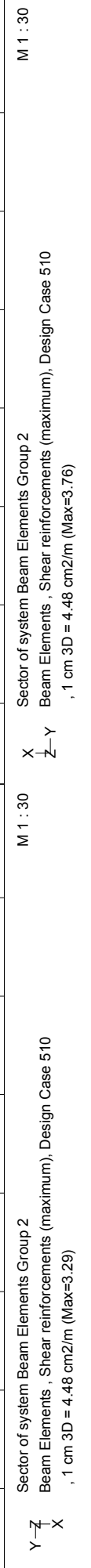
Z-X
Y

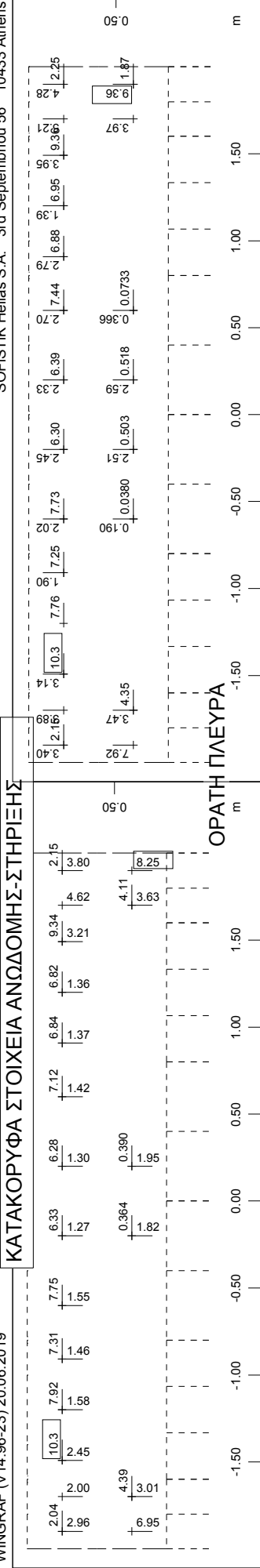


M 1 : 62

Z-X
Y





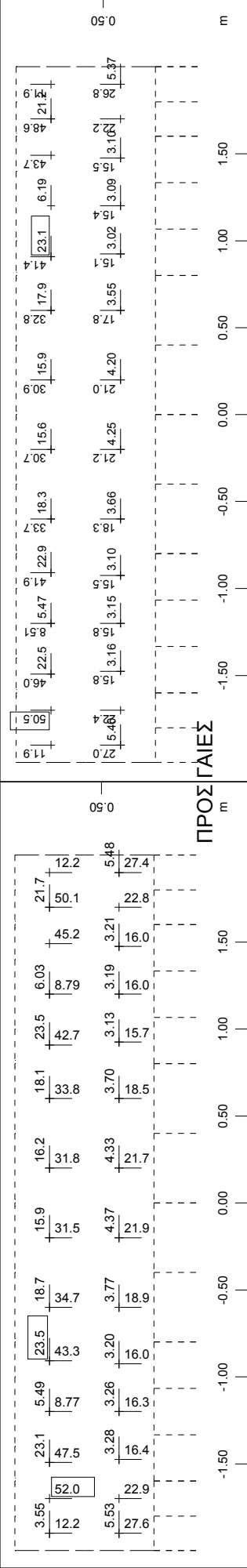


X-Y
Z

Sector of system Quadrilateral Elements Group 8
upper Reinforcements in Elements in cm2/m, Design Case 522 ULS
design (Max=10.3)

M 1 : 34

Sector of system Quadrilateral Elements Group 8
upper Reinforcements in Elements in cm2/m, Design Case 522 ULS
design (Max=10.3)

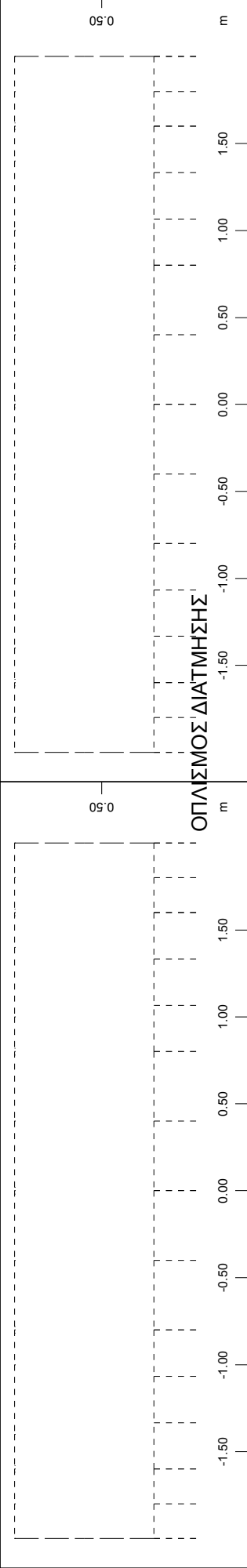


X-Y
Z

Sector of system Quadrilateral Elements Group 8
lower Reinforcements in Elements in cm2/m, Design Case 522 ULS
design (Max=52.0)

M 1 : 34

Sector of system Quadrilateral Elements Group 8
lower Reinforcements in Elements in cm2/m, Design Case 522 ULS
design (Max=50.5)



X-Y
Z

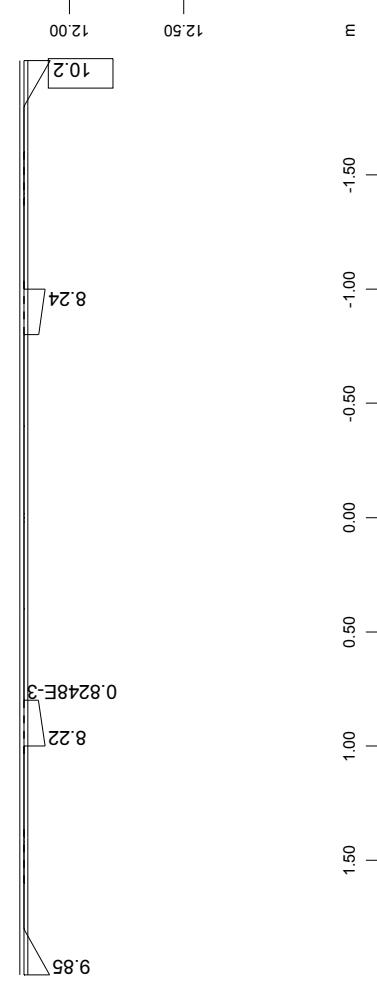
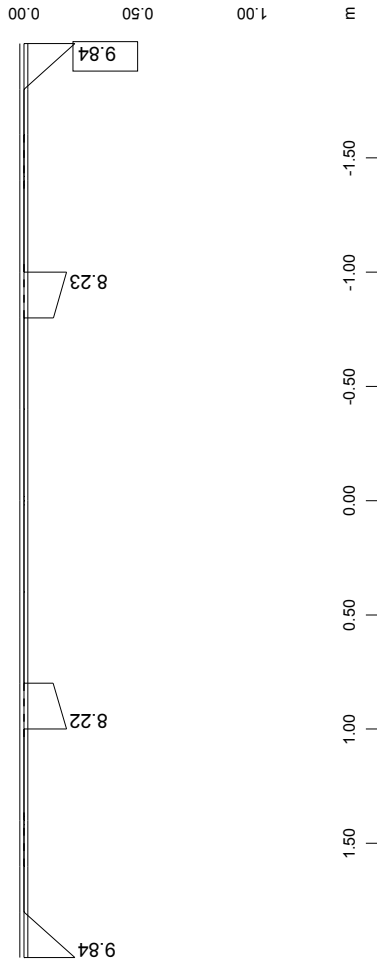
Sector of system Quadrilateral Elements Group 8
Shear reinforcement from middle of element in cm2/m2, Design Case 522 ULS design (Max=0)

M 1 : 34

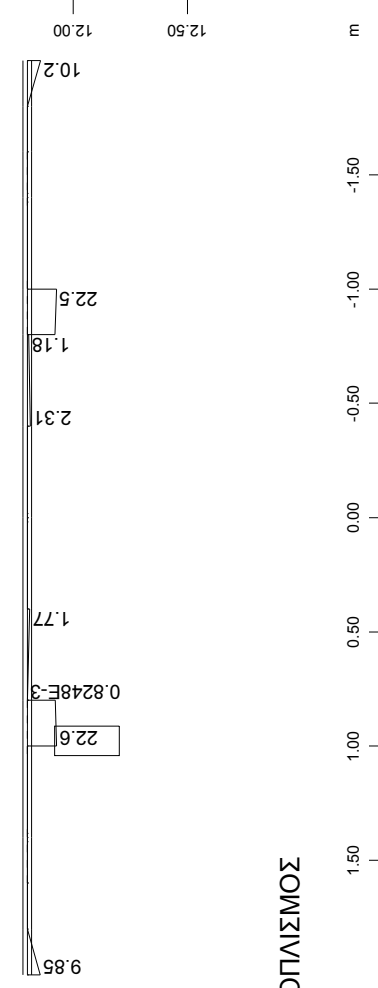
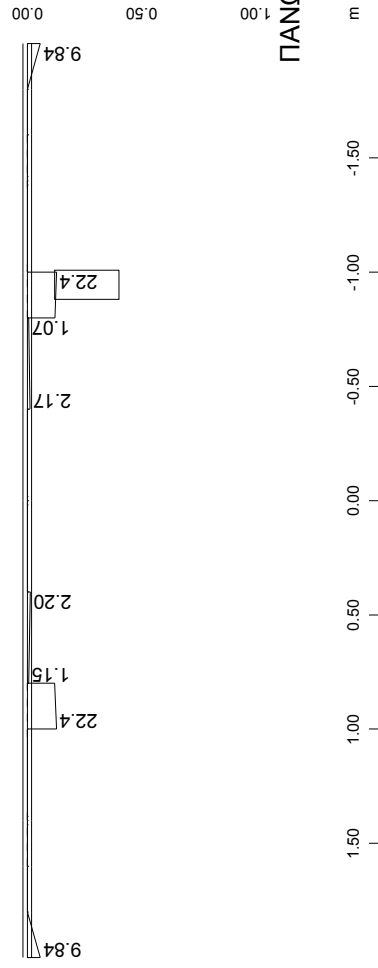
Sector of system Quadrilateral Elements Group 8
Shear reinforcement from middle of element in cm2/m2, Design Case 522 ULS design (Max=0)

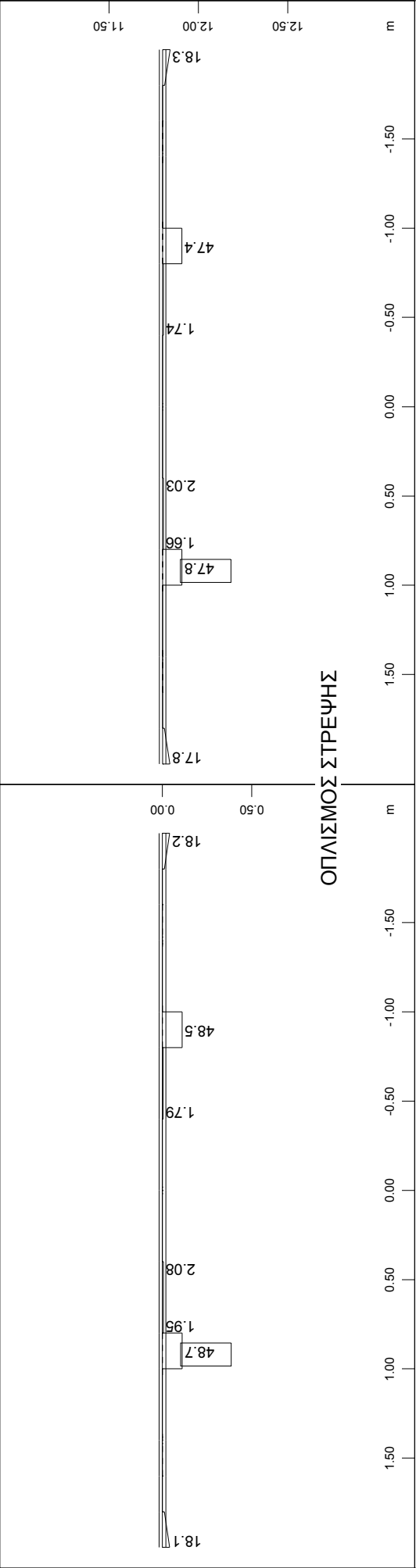
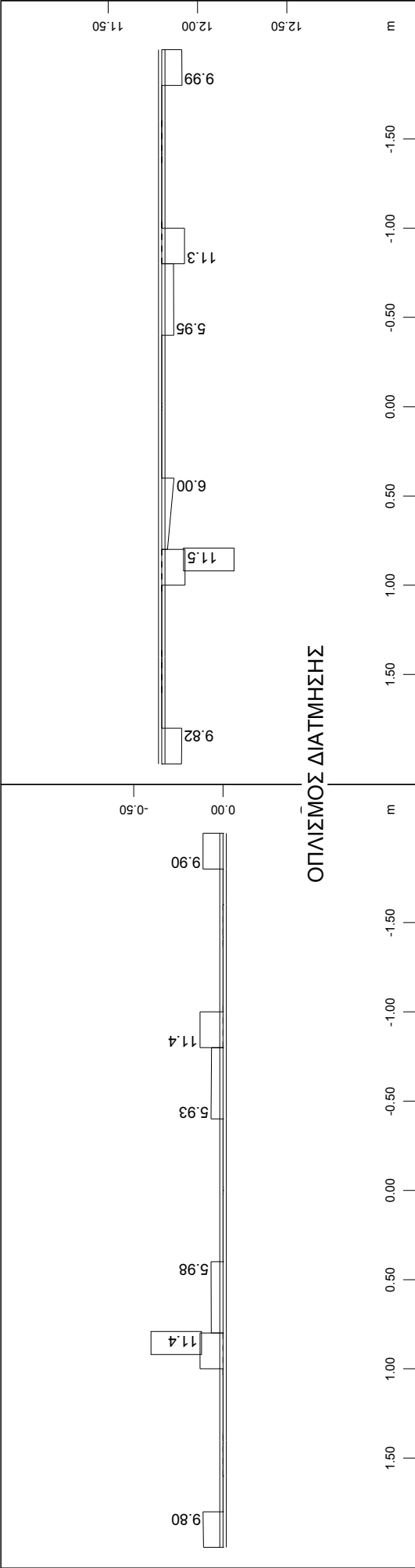
ΠΑΡΑΣΧΟΛΟΓΙΣΜΟΣ

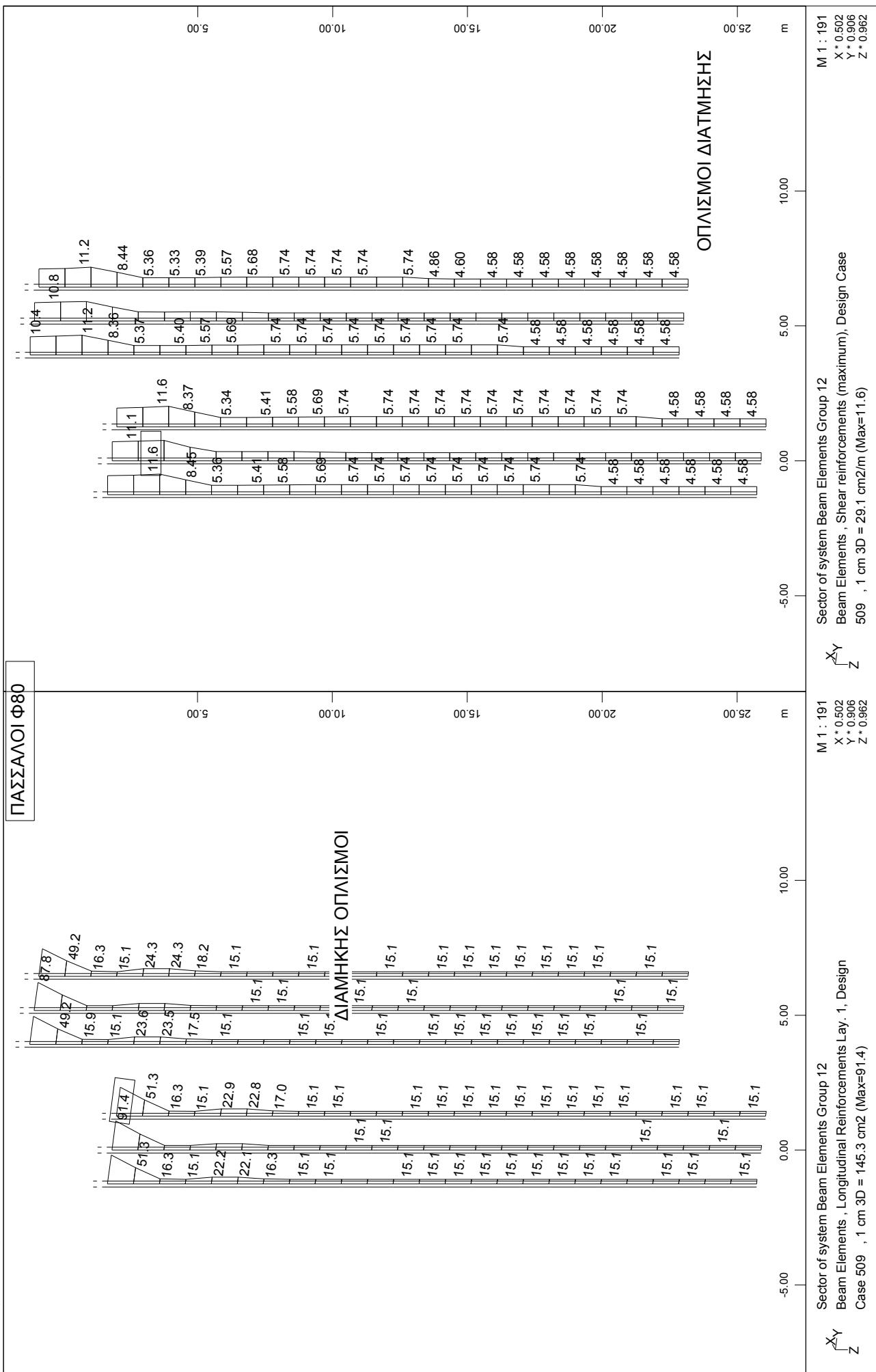
ΚΑΤΩ ΟΠΛΙΣΜΟΣ



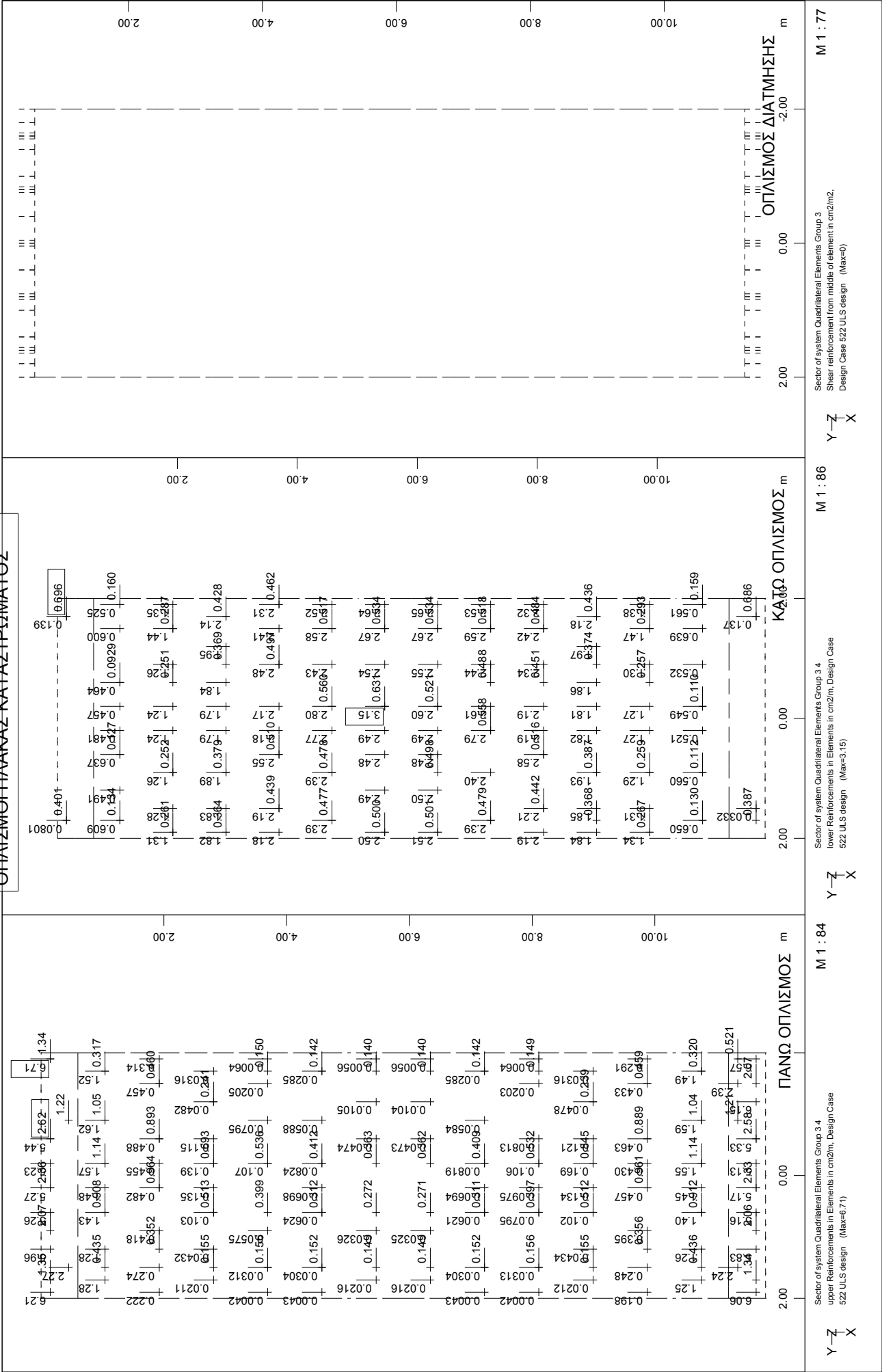
ΠΑΝΩ ΟΠΛΙΣΜΟΣ







ΟΠΛΙΣΜΟΙ ΠΛΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΑ/L=13.00

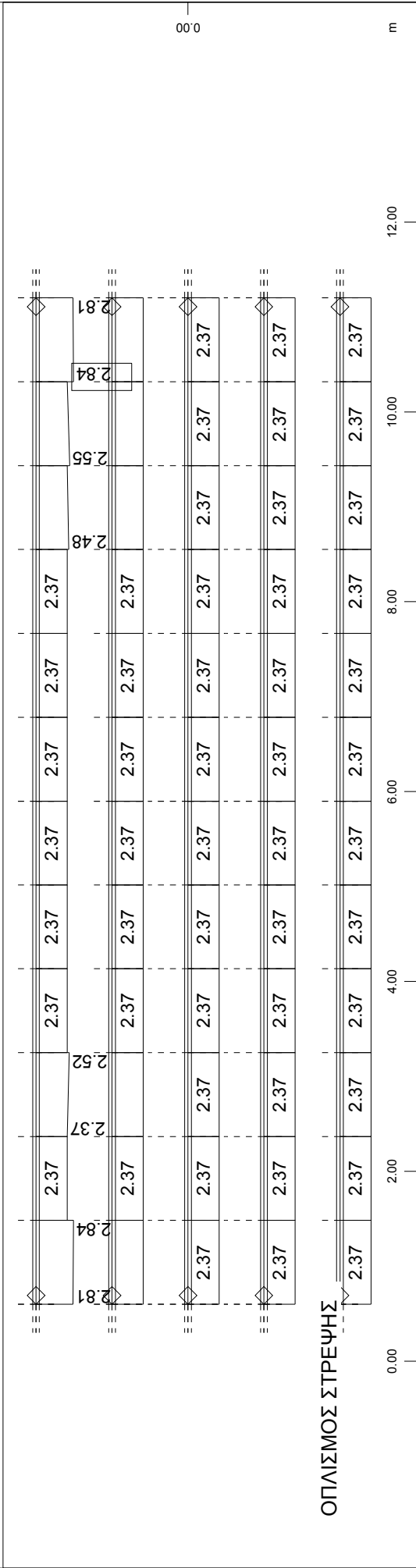
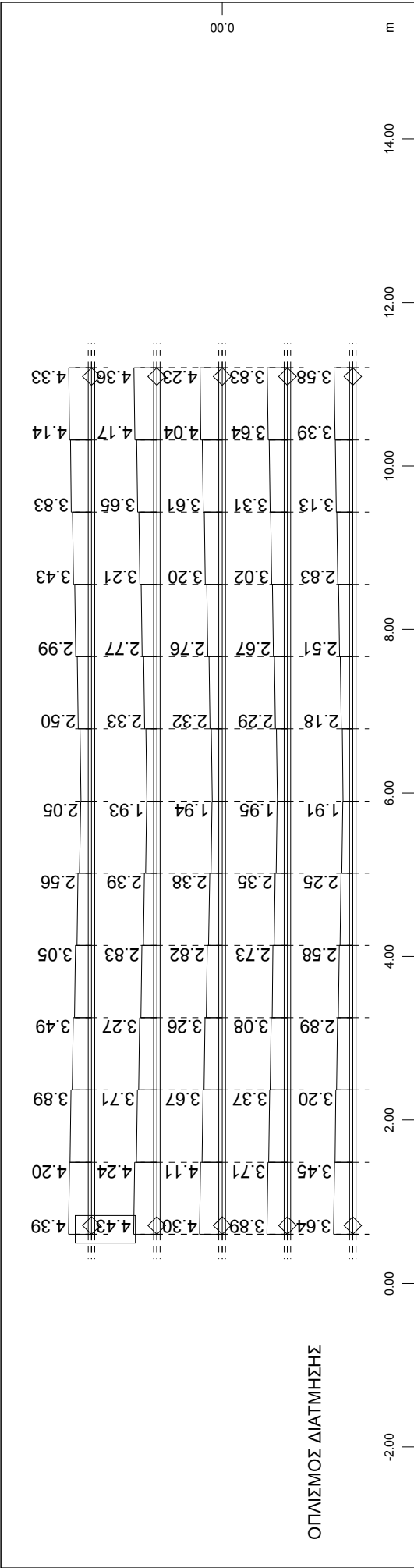
11) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ULS-ΣΕΙΣΜΙΚΑ (Q=1.00, γBd1=1.25)

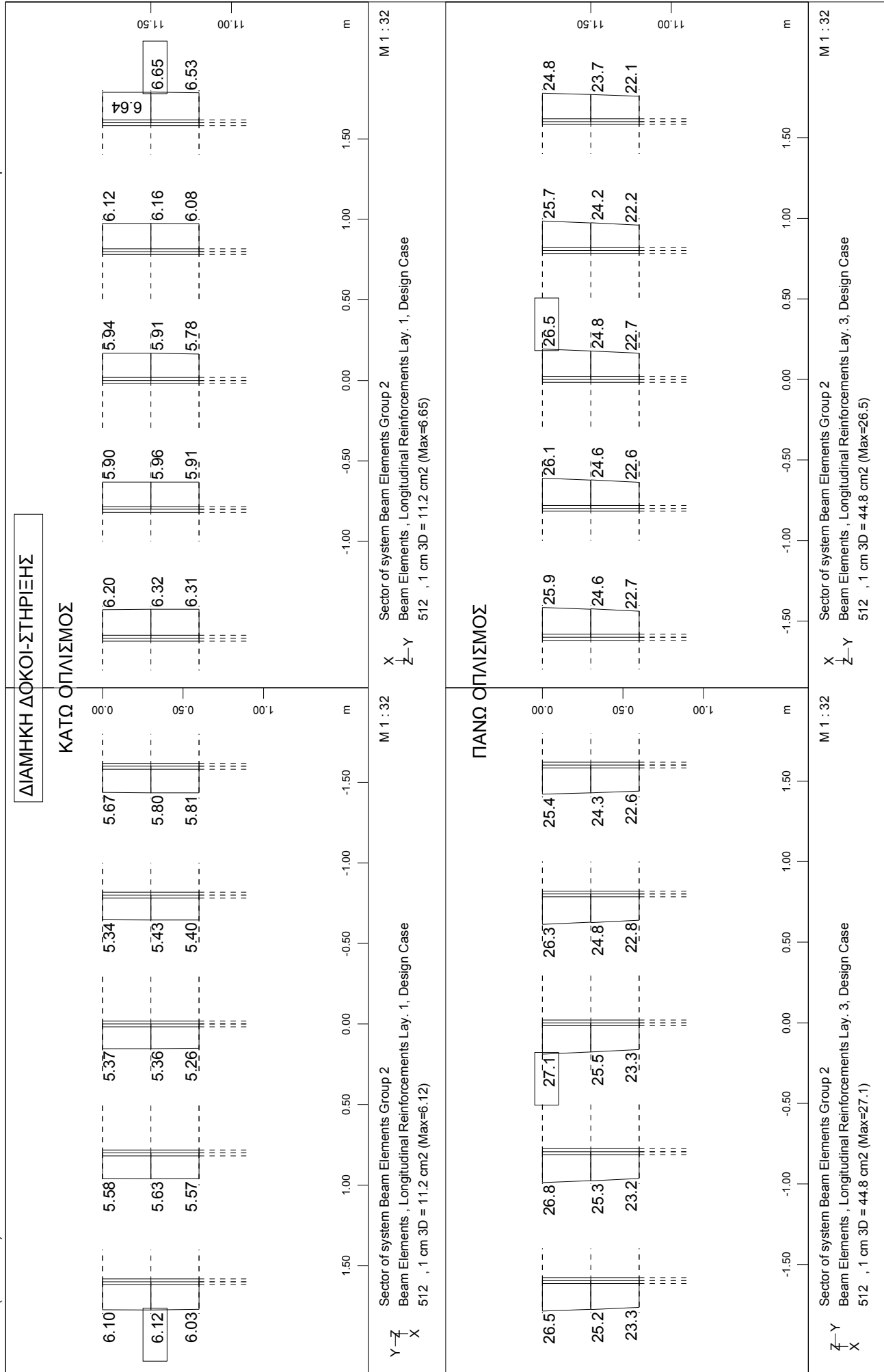


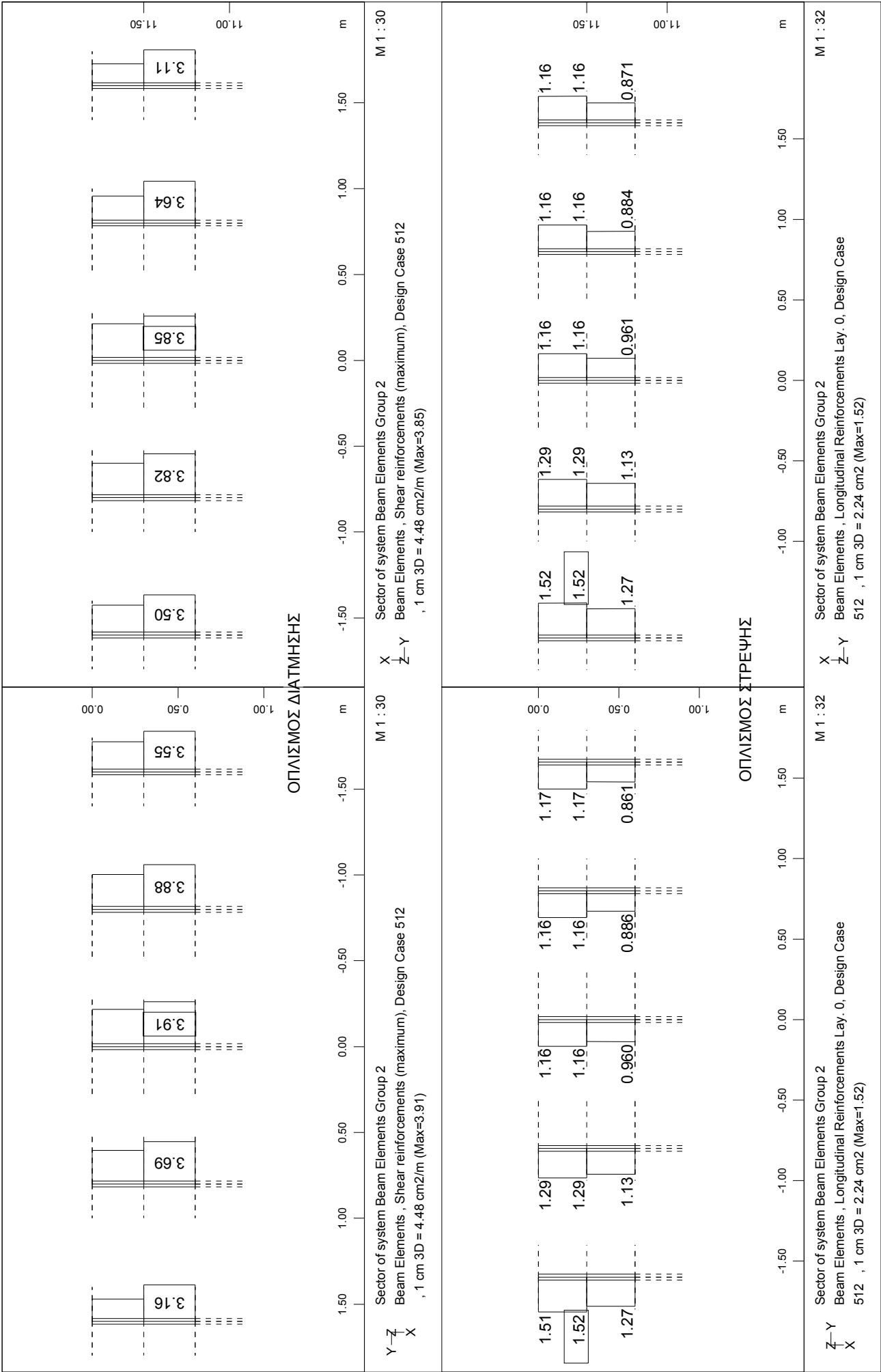
M 1 : 63



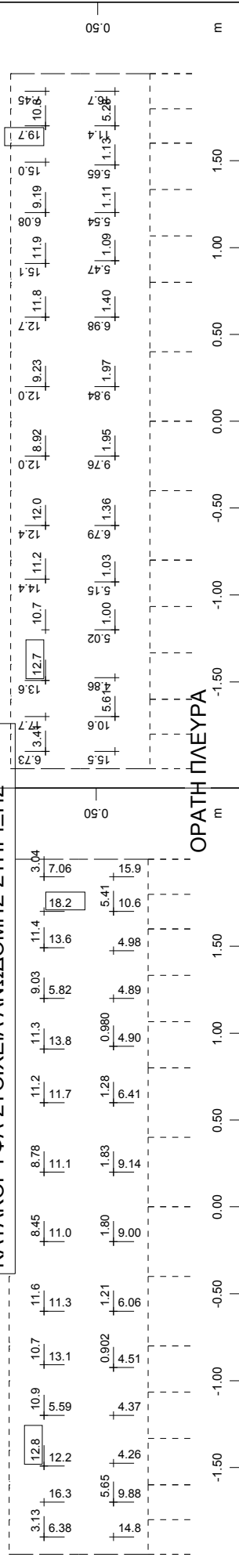
M 1 : 62





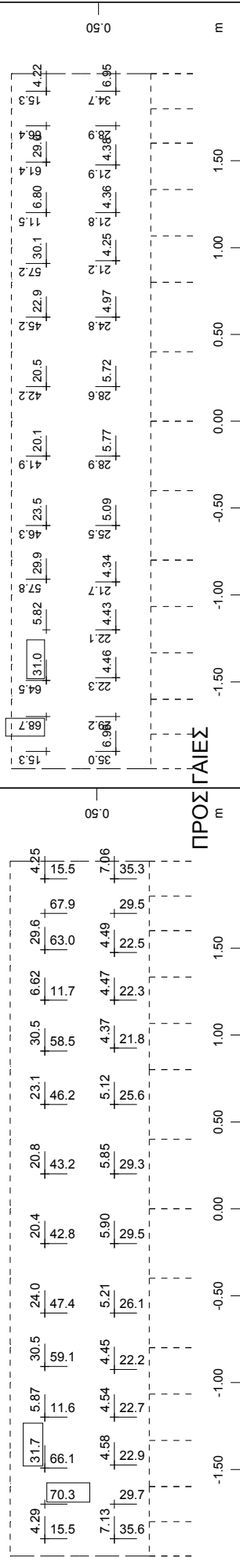


ΚΑΤΑΚΟΡΥΦΑ ΣΤΟΙΧΕΙΑ ΑΝΩΔΟΜΗΣ-ΣΤΗΡΙΞΗΣ



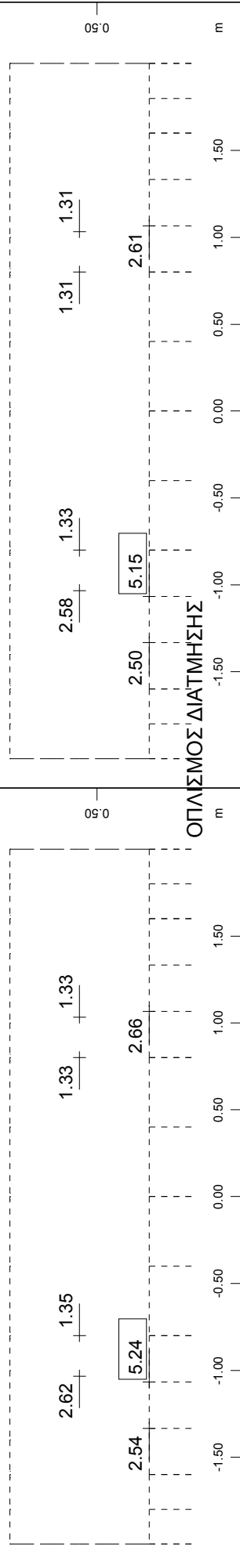
X-Y
Z

X-Y
Z



X-Y
Z

X-Y
Z

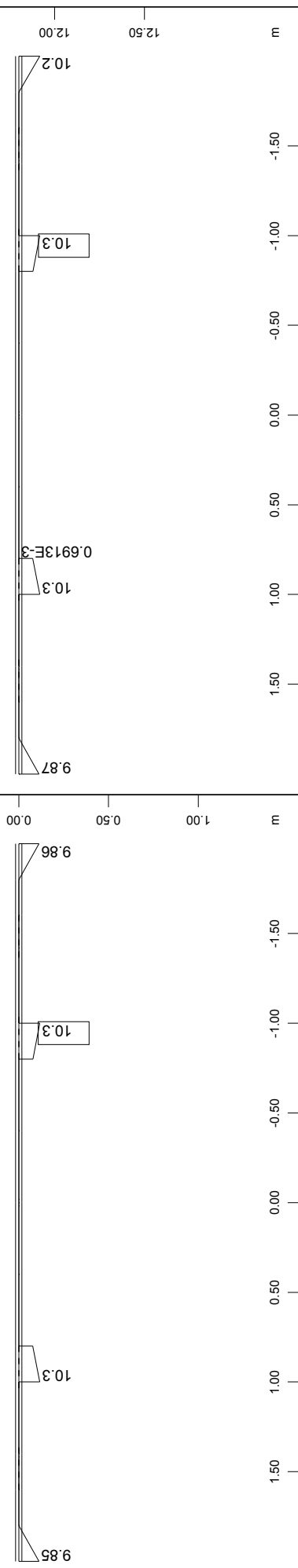


Sector of system Quadrilateral Elements Group 8
Shear reinforcement from middle of element in cm²/m². Design
Case 523 ULS design (Max=5.24)

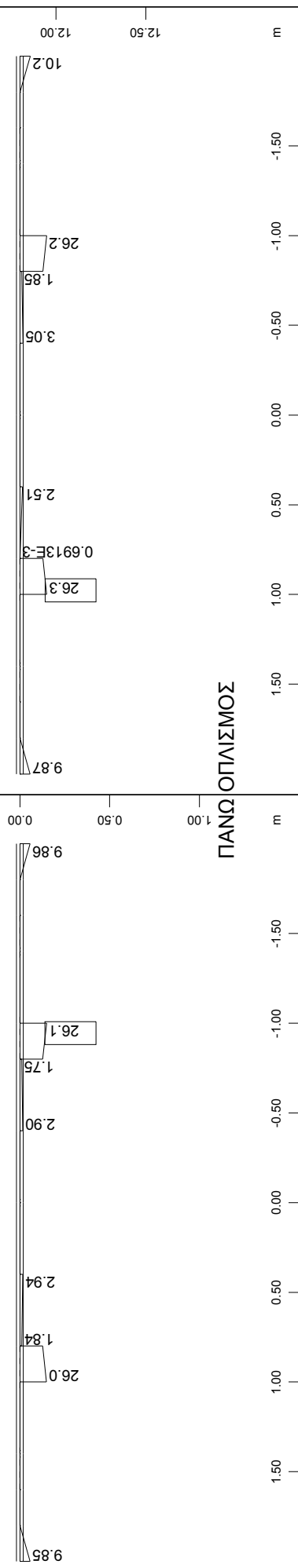
X-Y
Z

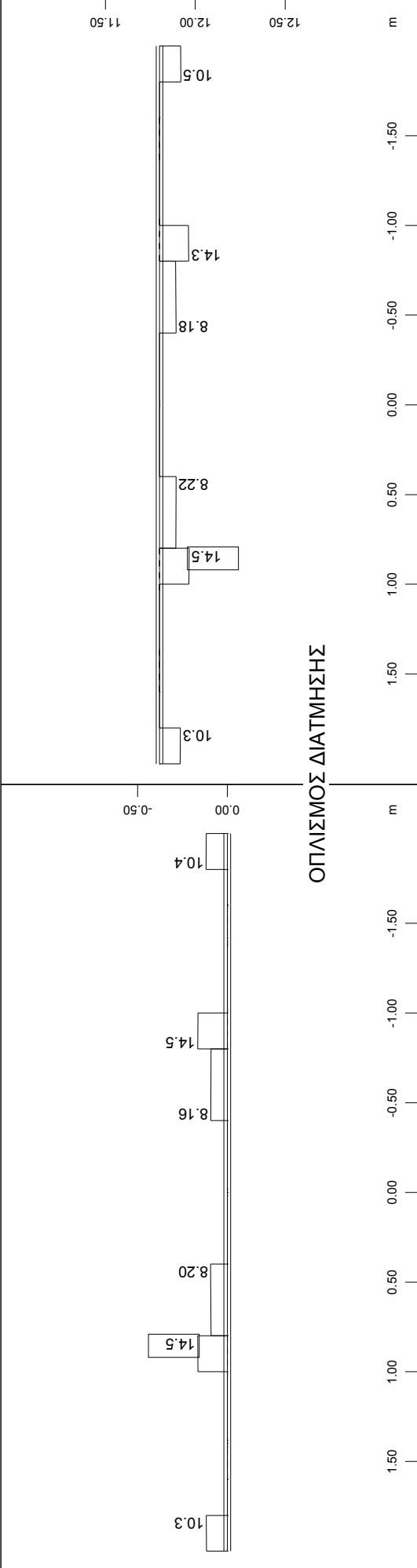
ΠΑΣΣΑΛΟΔΕΣΜΟΣ

ΚΑΤΩ ΟΠΛΙΣΜΟΣ

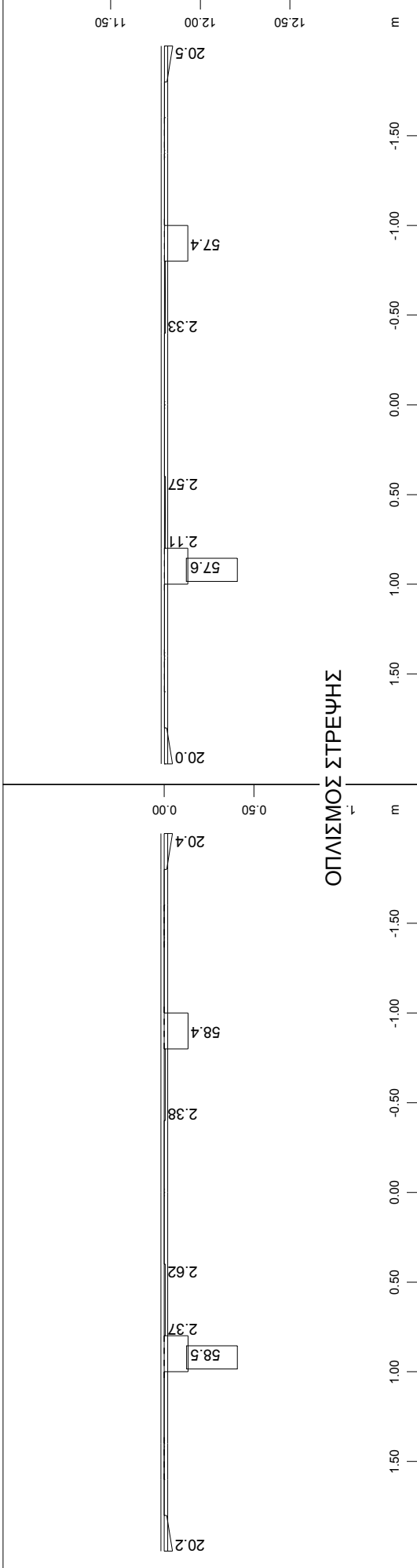


ΠΑΝΩ ΟΠΛΙΣΜΟΣ



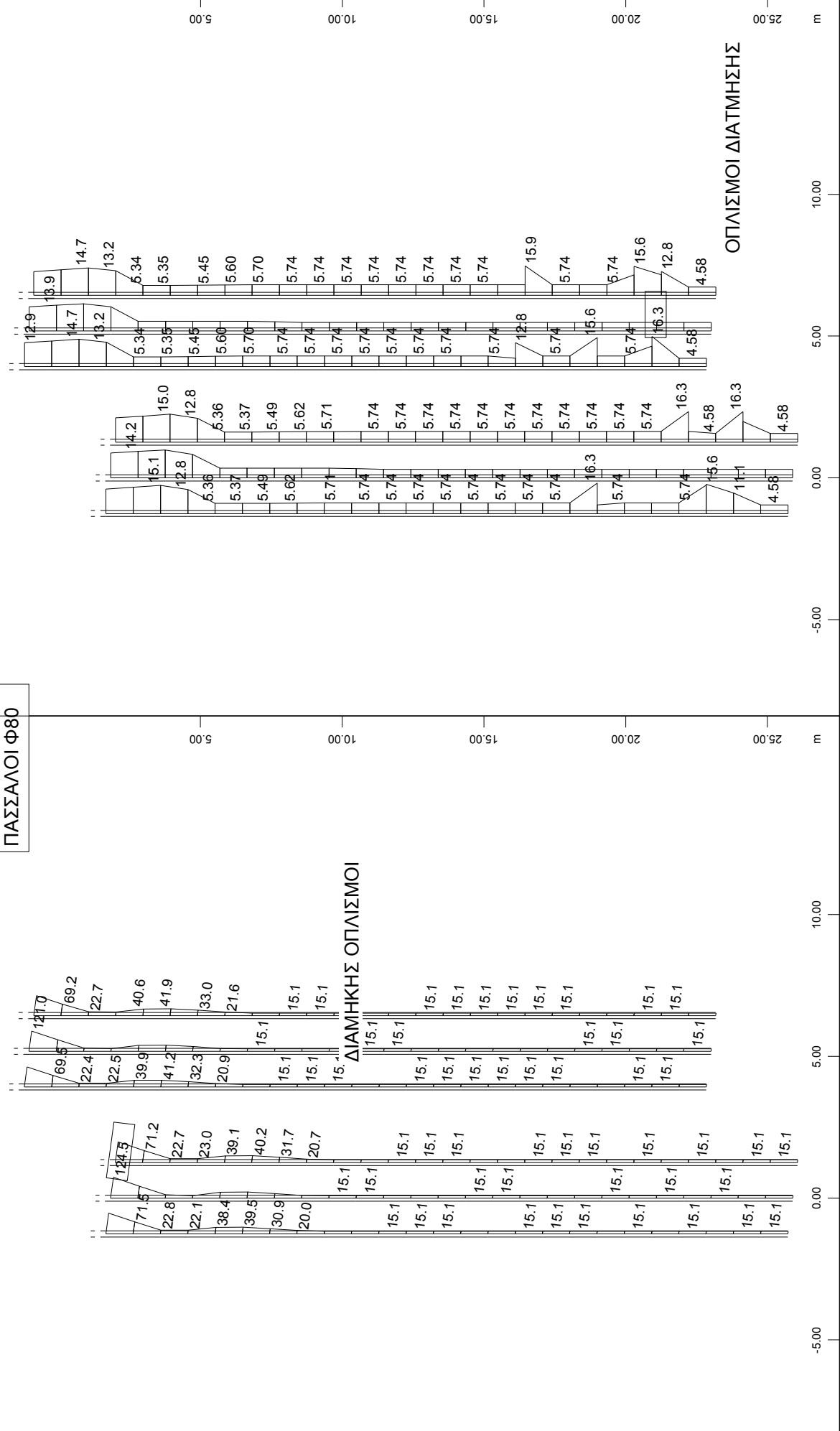


Sector of system Beam Elements Group 10
Beam Elements , Shear reinforcements (maximum), Design Case 511
, 1 cm 3D = 29.1 cm2/m (Max=14.5)



Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 0, Design Case 511 , 1 cm 3D = 145.3 cm2 (Max=58.5)

ΠΑΣΣΑΛΟΙ Φ80



Sector of system Beam Elements Group 12
Beam Elements , Longitudinal Reinforcements Lay. 1, Design
Case 511 , 1 cm 3D = 290.6 cm2 (Max=124.5)

Sector of system Beam Elements Group 12
Beam Elements , Shear reinforcements (maximum), Design Case
511 , 1 cm 3D = 29.1 cm2/m (Max=16.3)

M 1 : 191
X * 0.502
Y * 0.906
Z * 0.962

M 1 : 191
X * 0.502
Y * 0.906
Z * 0.962

M 1 : 191
X * 0.502
Y * 0.906
Z * 0.962

ΟΠΛΙΣΜΟΙ ΠΛΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ

