

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»

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

ΕΓΚΡΙΣΗ ΥΠΗΡΕΣΙΑΣ

ΕΛΕΓΧΘΗΚΕ ΑΠΟ ΓΕΝΙΚΗΣ ΑΠΟΨΗΣ ΚΑΙ ΕΓΚΡΙΝΕΤΑΙ ΜΕ ΤΙΣ ΑΚΟΛΟΥΘΕΣ ΠΑΡΑΤΗΡΗΣΕΙΣ :

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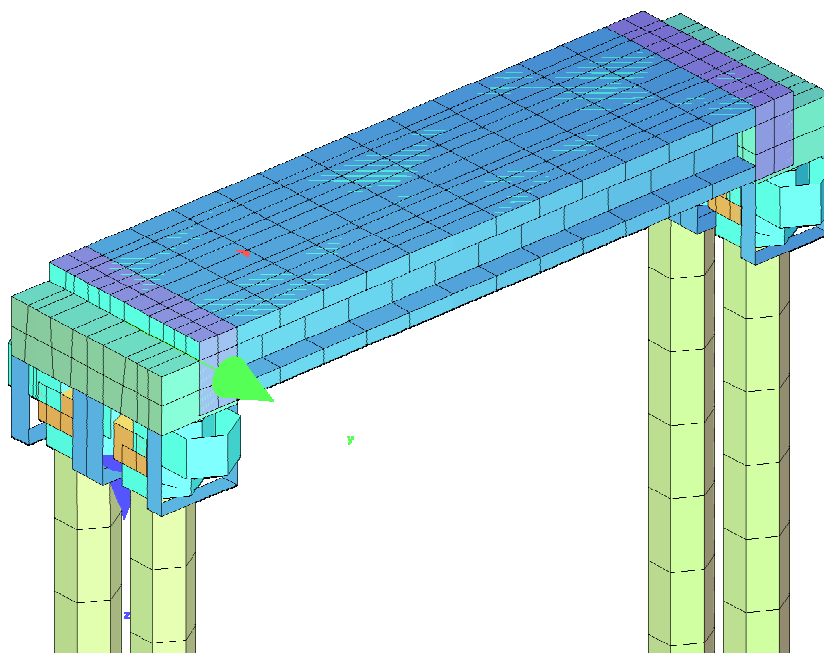
ΙΩΑΝΝΙΝΑ, __/__/2019
Ο ΕΠΙΒΛΕΠΩΝ

ΙΩΑΝΝΙΝΑ, __/__/2019
Ο ΠΡΟΪΣΤΑΜΕΝΟΣ

ΣΤΑΤΙΚΟΙ ΥΠΟΛΟΓΙΣΜΟΙ ΤΕΧΝΙΚΟΥ “ΤΒ”

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ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70

1) ΔΕΔΟΜΕΝΑ ΥΛΙΚΩΝ-ΔΙΑΤΟΜΩΝ

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΥΛΙΚΩΝ

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

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

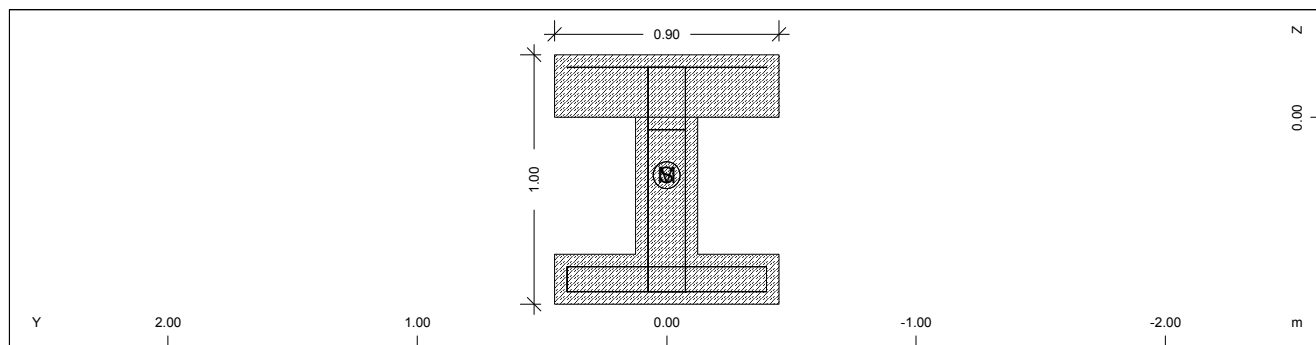
No. 9 C 25/30 (DIN 1045-1)

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/m ³]	5 % t.strength	fctk	1.80	[MPa]
weight buoyancy		2.5	[kN/m ³]	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/m ³]	Compr. strength	fc	550.00	[MPa]
weight buoyancy		78.5	[kN/m ³]	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]

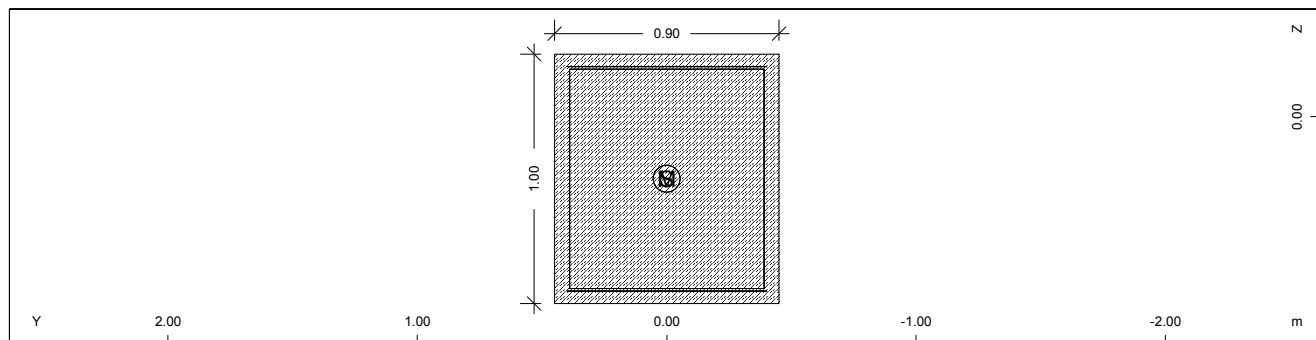
Cross section No. 1



Static properties of cross section

No.	Mat	A[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]
1	=	Composit with materials: 1 4						
	1	5.4404E-01		6.575E-02	0.000	0.000	26663	0.000
	12	1.077E-02		2.806E-02	0.234	0.234	11109	
1.1	=	CS 10						
	1	3.1750E-01		1.503E-02	0.000	0.000	26663	0.000
	12	5.290E-03		1.287E-02	0.488	0.488	11109	
1.2	=	CS 40						
	1	5.4404E-01		6.575E-02	0.000	0.000	26663	0.000
	12	1.077E-02		2.806E-02	0.234	0.234	11109	

Cross section No. 2 - DOKOS-2

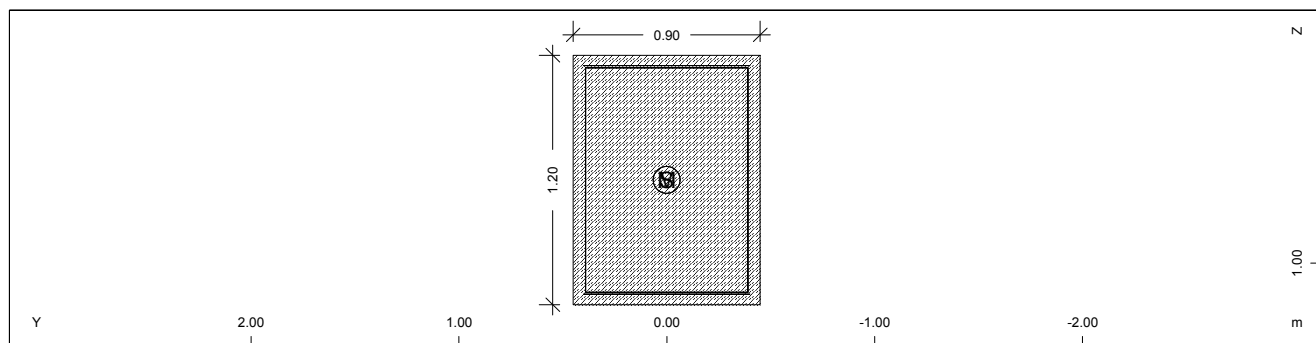


ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΥΛΙΚΩΝ

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	9.0000E-01		7.500E-02	0.000	0.000	26663	0.000
	12	1.133E-01		6.075E-02	0.250	0.250	11109	

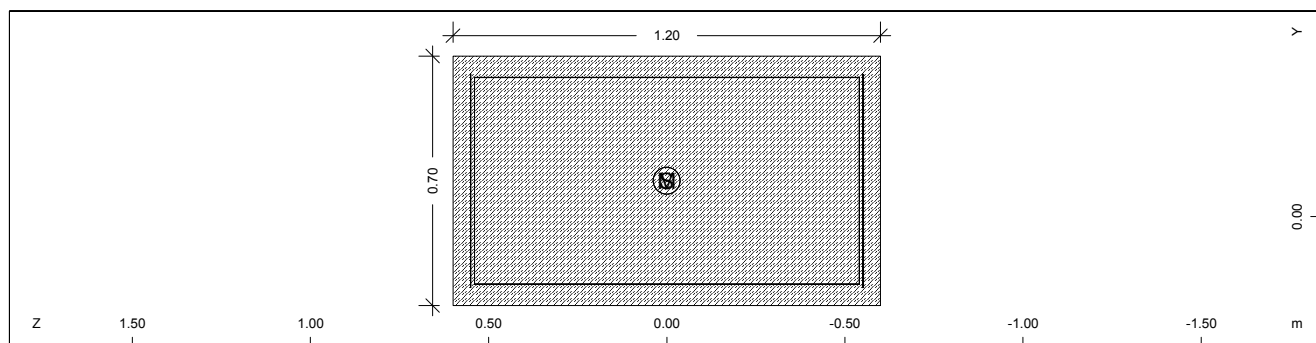
Cross section No. 3 - DOKOS-3



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	1.0800E+00		1.296E-01	0.000	0.000	26663	0.000
	12	1.579E-01		7.290E-02	0.600	0.600	11109	

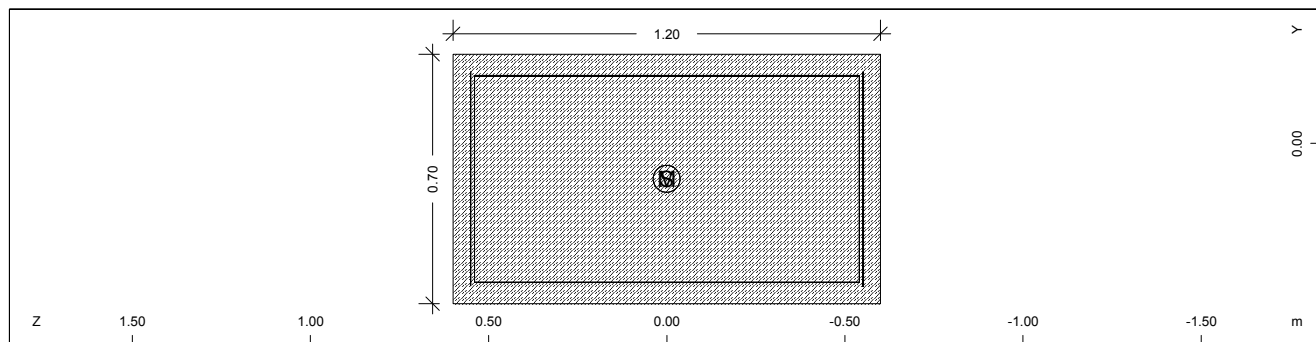
Cross section No. 4 - DOKOS-3a



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	8.4000E-01		1.008E-01	0.100	0.100	26663	0.000
	12	8.726E-02		3.430E-02	0.000	0.000	11109	

Cross section No. 5 - DOKOS-3b



Static properties of cross section

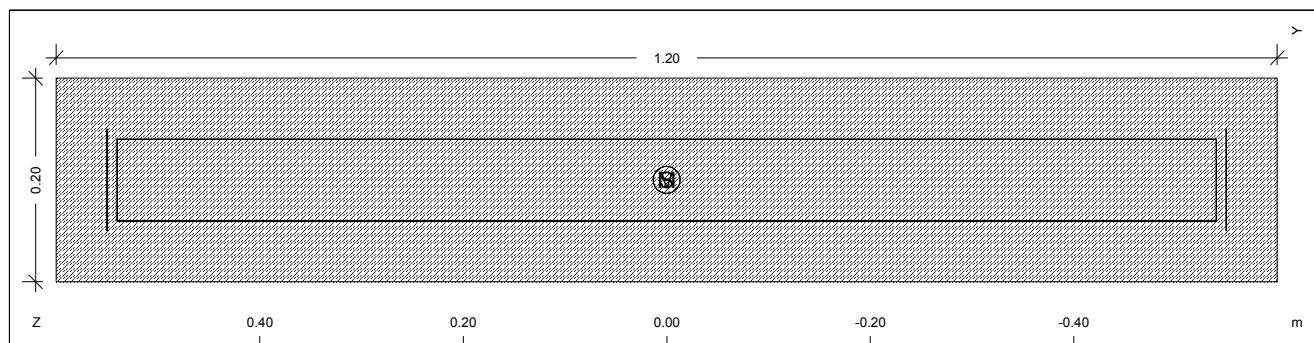
No.	Mat	A[m ²]	Ay/Az/Ayz	Iy/Iz/Iyz	ys/zs	y/z-sc	modules	gam
	NOR	It[m ⁴]	[m ²]	[m ⁴]	[m]	[m]	[MPa]	[MN/m]

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	8.4000E-01		1.008E-01	-0.100	-0.100	26663	0.000
	12	8.726E-02		3.430E-02	0.000	0.000	11109	

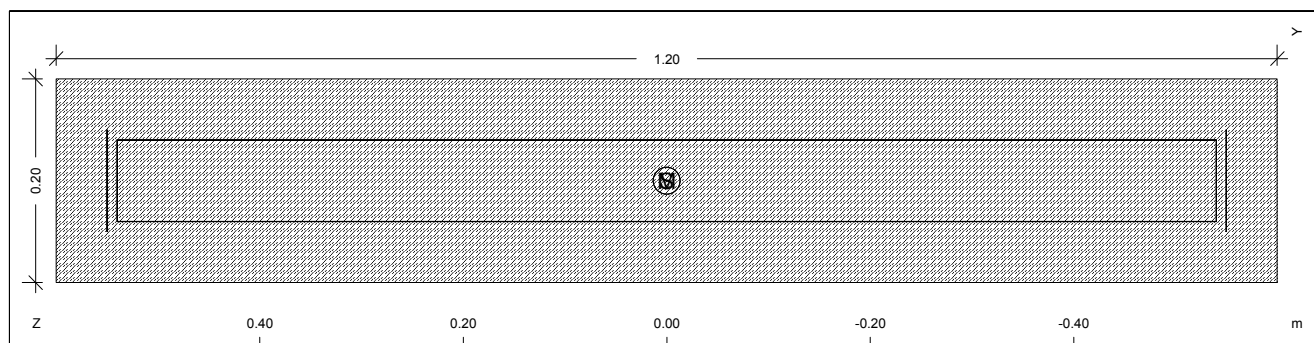
Cross section No. 6 - DOKOS-3c



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	

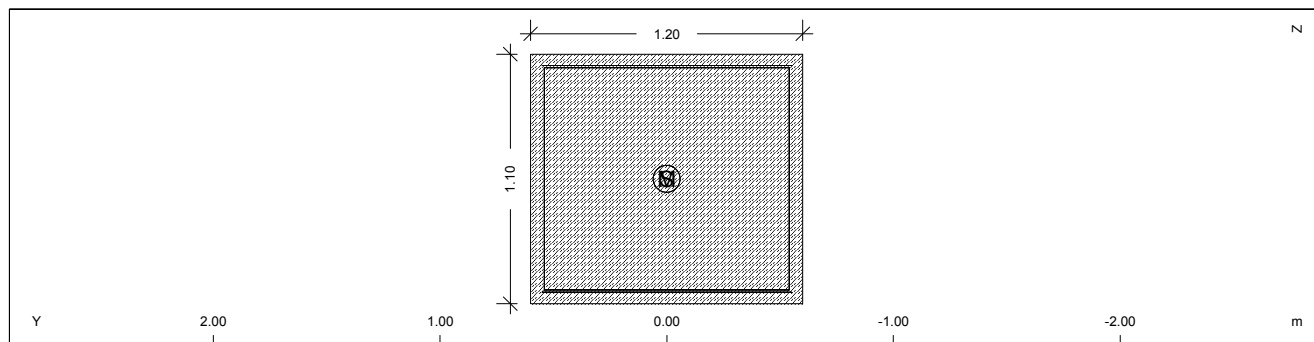
Cross section No. 7 - DOKOS-3d



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



Static properties of cross section

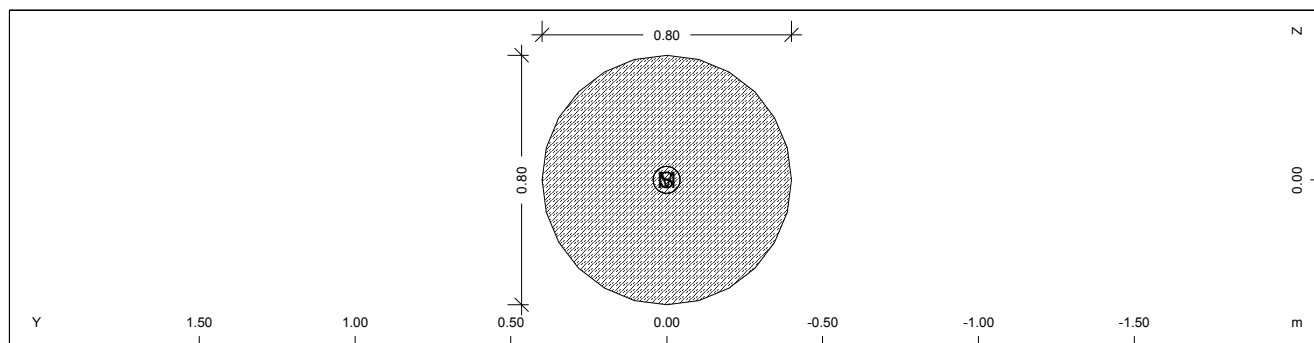
No.	Mat	A[m ²]	Ay/Az/Ayz	Iy/Iz/Iyz	ys/zs	y/z-sc	modules	gam
	NOR	It[m ⁴]	[m ²]	[m ⁴]	[m]	[m]	[MPa]	[MN/m]

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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

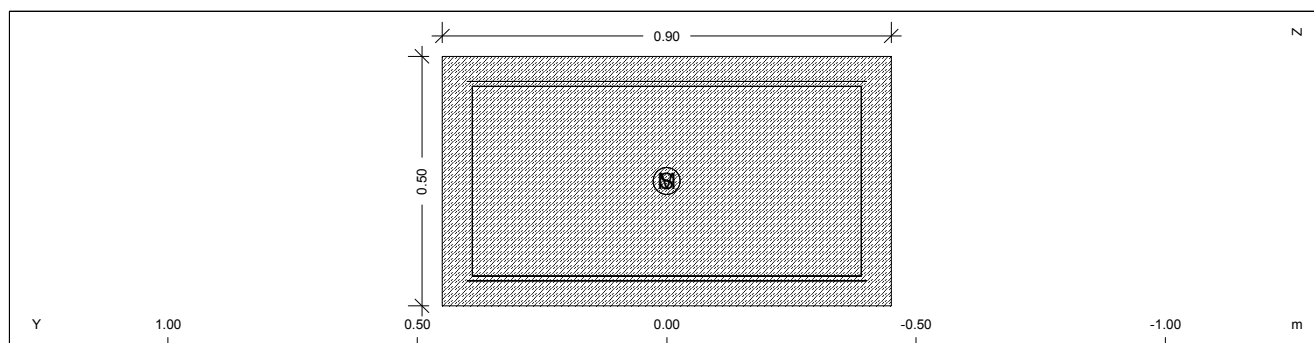
No.	Mat	A[m ²]	Ay/Az/Ayz	Iy/Iz/Iyz	ys/zs	y/z-sc	modules	gam
	NOR	It[m ⁴]	[m ²]	[m ⁴]	[m]	[m]	[MPa]	[MN/m]
9	=	section pile						
	7	5.0265E-01		2.011E-02	0.000	0.000	26663	0.013
	12	4.021E-02		2.011E-02	0.000	0.000	11109	

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	

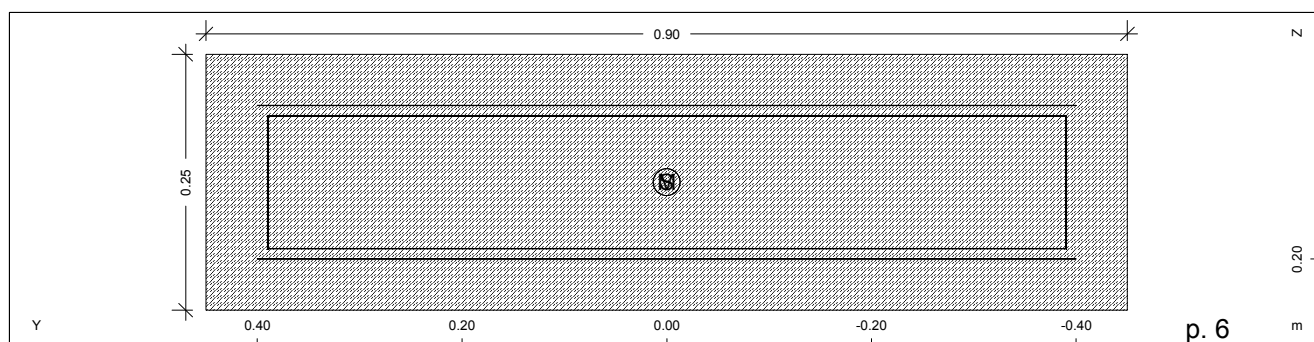
Cross section No. 11 - CANTIL-1



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	4.5000E-01		9.375E-03	0.000	0.000	26663	0.015
	12	2.447E-02		3.037E-02	0.250	0.250	11109	

Cross section No. 12 - CANTIL-2



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΥΛΙΚΩΝ

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	2.2500E-01		1.172E-03	0.000	0.000	26663	0.007
	12	3.875E-03		1.519E-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

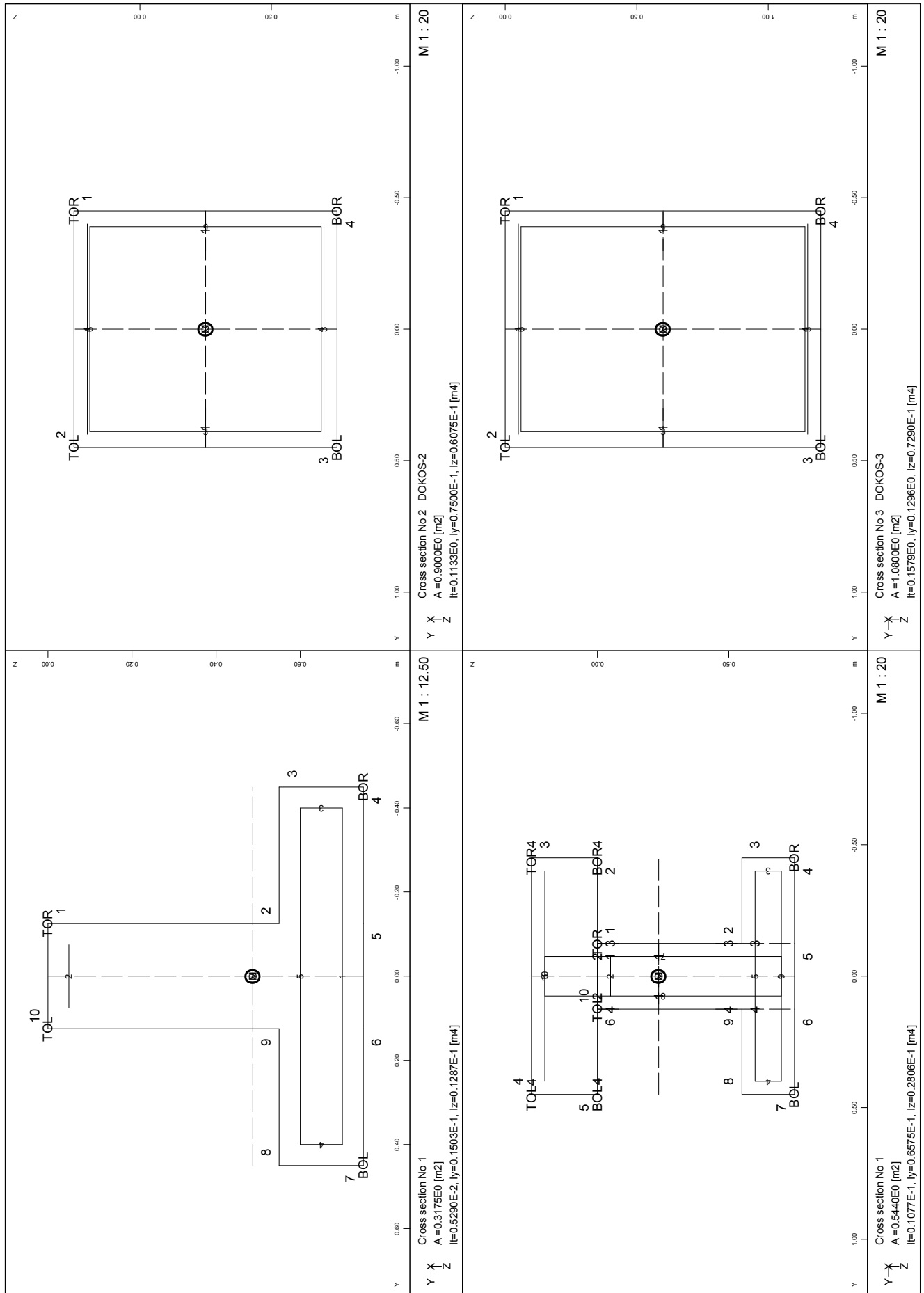
Cross sections

No.	TotLength	Max.Length	Totweight	Surface	Title
	[m]	[m]	[t]	[m2]	
1	24.900	0.692	0.000	57.270	
2	3.600	0.300	0.000	13.680	DOKOS-2
8	2.200	0.300	7.260	10.120	DOKOS-4
9	100.000	1.000	125.664	251.327	section pile
10	3.200	0.400	9.600		
13	7.700	0.550	0.000		
Sum	141.600		142.524	332.397	

Bore Profile No. 1 ΠΑΣΣΑΛΟΙ ΤΟΙΧΟΥ

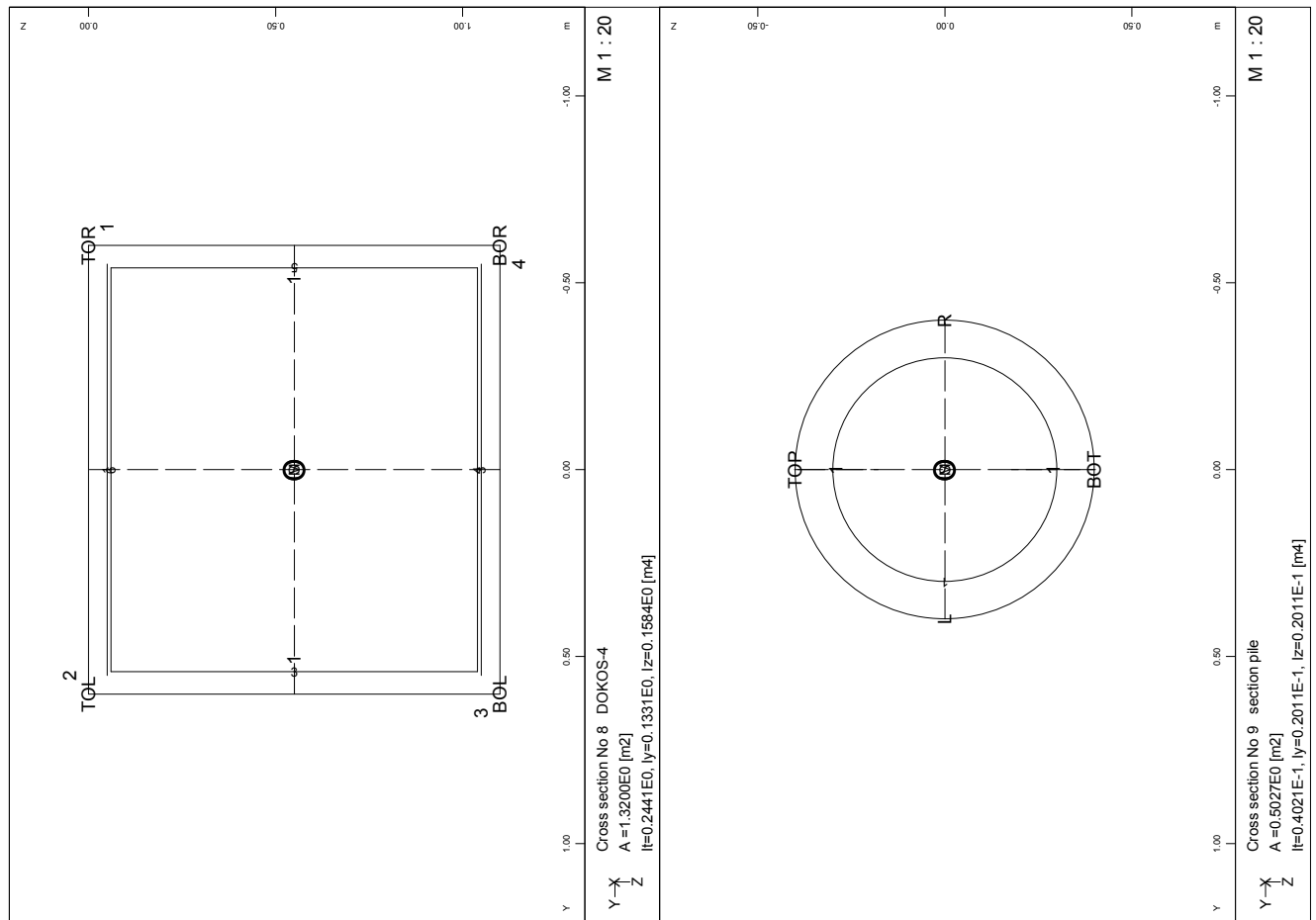
X[m]	Y[m]	Z[m]	dx[-]	dy[-]	dz[-]	a[°]	P0	P1	P2	P3	Pmax
0.000	0.000	0.000	0.000	0.000	1.000	0.0					
s[m]	K0-t	K1-t	K2-t	K3-t	P0	P1	P2	P3	Pmax		
	[MN/m2]	[MN/m2]	[MN/m2]	[MN/m2]	[-]	[-]	[-]	[-]	[-]		[MN/m]
4.900	8.480		11.520		1.00	1.00	1.00	1.00		0.468	
26.900										1.102	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70

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2) ΔΕΔΟΜΕΝΑ ΓΕΩΜΕΤΡΙΑΣ ΜΟΝΤΕΛΟΥ

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Groups

Grp	number	type	min-no	max-no	Title
1	36	BEAM	1001	1036	
2	12	BEAM	2001	2012	
3	120	QUAD	3001	3120	
4	40	QUAD	4001	4040	
8	40	QUAD	8001	8040	
9	10	BEAM	9001	9010	
10	20	BEAM	10001	10020	
11	4	BEAM	11001	11004	
12	100	BEAM	12001	12100	
13	4	SPRI	13001	13004	

Nodal Coordinates and Supports

Number	X[m]	Y[m]	Z[m]	Support Conditions
101	0.000	1.350	0.000	
102	0.000	1.100	0.000	
103	0.000	0.900	0.000	
104	0.000	0.700	0.000	
105	0.000	0.300	0.000	
106	0.000	0.000	0.000	
107	0.000	-0.250	0.000	
108	0.000	-0.650	0.000	
109	0.000	-0.900	0.000	
110	0.000	-1.050	0.000	
111	0.000	-1.350	0.000	
201	0.600	1.350	0.000	
202	0.600	1.100	0.000	
203	0.600	0.900	0.000	
204	0.600	0.700	0.000	
205	0.600	0.300	0.000	
206	0.600	0.000	0.000	
207	0.600	-0.250	0.000	
208	0.600	-0.650	0.000	
209	0.600	-0.900	0.000	
210	0.600	-1.050	0.000	
211	0.600	-1.350	0.000	
301	4.750	1.350	0.000	
302	4.750	1.100	0.000	
303	4.750	0.900	0.000	
304	4.750	0.700	0.000	
305	4.750	0.300	0.000	
306	4.750	0.000	0.000	
307	4.750	-0.250	0.000	
308	4.750	-0.650	0.000	
309	4.750	-0.900	0.000	
310	4.750	-1.050	0.000	
311	4.750	-1.350	0.000	
401	8.900	1.350	0.000	
402	8.900	1.100	0.000	
403	8.900	0.900	0.000	
404	8.900	0.700	0.000	
405	8.900	0.300	0.000	
406	8.900	0.000	0.000	
407	8.900	-0.250	0.000	
408	8.900	-0.650	0.000	
409	8.900	-0.900	0.000	
410	8.900	-1.050	0.000	
411	8.900	-1.350	0.000	
501	9.500	1.350	0.000	
502	9.500	1.100	0.000	
503	9.500	0.900	0.000	
504	9.500	0.700	0.000	
505	9.500	0.300	0.000	
506	9.500	0.000	0.000	
507	9.500	-0.250	0.000	
508	9.500	-0.650	0.000	
509	9.500	-0.900	0.000	
510	9.500	-1.050	0.000	
511	9.500	-1.350	0.000	
1101	0.000	1.350	0.800	
1102	0.000	1.100	0.800	
1103	0.000	0.900	0.800	
1104	0.000	0.700	0.800	
1105	0.000	0.300	0.800	
1106	0.000	0.000	0.800	
1107	0.000	-0.250	0.800	
1108	0.000	-0.650	0.800	
1109	0.000	-0.900	0.800	
1110	0.000	-1.050	0.800	
1111	0.000	-1.350	0.800	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

Number	X[m]	Y[m]	Z[m]	Support Conditions
1201	0.600	1.350	0.800	
1202	0.600	1.100	0.800	
1203	0.600	0.900	0.800	
1204	0.600	0.700	0.800	
1205	0.600	0.300	0.800	
1206	0.600	0.000	0.800	
1207	0.600	-0.250	0.800	
1208	0.600	-0.650	0.800	
1209	0.600	-0.900	0.800	
1210	0.600	-1.050	0.800	
1211	0.600	-1.350	0.800	
1301	4.750	1.350	0.800	
1302	4.750	1.100	0.800	
1303	4.750	0.900	0.800	
1304	4.750	0.700	0.800	
1305	4.750	0.300	0.800	
1306	4.750	0.000	0.800	
1307	4.750	-0.250	0.800	
1308	4.750	-0.650	0.800	
1309	4.750	-0.900	0.800	
1310	4.750	-1.050	0.800	
1311	4.750	-1.350	0.800	
1401	8.900	1.350	0.800	
1402	8.900	1.100	0.800	
1403	8.900	0.900	0.800	
1404	8.900	0.700	0.800	
1405	8.900	0.300	0.800	
1406	8.900	0.000	0.800	
1407	8.900	-0.250	0.800	
1408	8.900	-0.650	0.800	
1409	8.900	-0.900	0.800	
1410	8.900	-1.050	0.800	
1411	8.900	-1.350	0.800	
1501	9.500	1.350	0.800	
1502	9.500	1.100	0.800	
1503	9.500	0.900	0.800	
1504	9.500	0.700	0.800	
1505	9.500	0.300	0.800	
1506	9.500	0.000	0.800	
1507	9.500	-0.250	0.800	
1508	9.500	-0.650	0.800	
1509	9.500	-0.900	0.800	
1510	9.500	-1.050	0.800	
1511	9.500	-1.350	0.800	
2101	0.000	1.350	1.350	
2102	0.000	1.100	1.350	
2103	0.000	0.900	1.350	
2104	0.000	0.700	1.350	
2105	0.000	0.300	1.350	
2106	0.000	0.000	1.350	
2107	0.000	-0.250	1.350	
2108	0.000	-0.650	1.350	
2109	0.000	-0.900	1.350	
2110	0.000	-1.050	1.350	
2111	0.000	-1.350	1.350	
2201	0.600	1.350	1.350	
2202	0.600	1.100	1.350	
2203	0.600	0.900	1.350	
2204	0.600	0.700	1.350	
2205	0.600	0.300	1.350	
2206	0.600	0.000	1.350	
2207	0.600	-0.250	1.350	
2208	0.600	-0.650	1.350	
2209	0.600	-0.900	1.350	
2210	0.600	-1.050	1.350	
2211	0.600	-1.350	1.350	
2301	4.750	1.350	1.350	
2302	4.750	1.100	1.350	
2303	4.750	0.900	1.350	
2304	4.750	0.700	1.350	
2305	4.750	0.300	1.350	
2306	4.750	0.000	1.350	
2307	4.750	-0.250	1.350	
2308	4.750	-0.650	1.350	
2309	4.750	-0.900	1.350	
2310	4.750	-1.050	1.350	
2311	4.750	-1.350	1.350	
2401	8.900	1.350	1.350	
2402	8.900	1.100	1.350	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

Number	X[m]	Y[m]	Z[m]	Support Conditions
2403	8.900	0.900	1.350	
2404	8.900	0.700	1.350	
2405	8.900	0.300	1.350	
2406	8.900	0.000	1.350	
2407	8.900	-0.250	1.350	
2408	8.900	-0.650	1.350	
2409	8.900	-0.900	1.350	
2410	8.900	-1.050	1.350	
2411	8.900	-1.350	1.350	
2501	9.500	1.350	1.350	
2502	9.500	1.100	1.350	
2503	9.500	0.900	1.350	
2504	9.500	0.700	1.350	
2505	9.500	0.300	1.350	
2506	9.500	0.000	1.350	
2507	9.500	-0.250	1.350	
2508	9.500	-0.650	1.350	
2509	9.500	-0.900	1.350	
2510	9.500	-1.050	1.350	
2511	9.500	-1.350	1.350	
3101	0.000	1.350	1.900	
3102	0.000	1.100	1.900	
3103	0.000	0.900	1.900	
3104	0.000	0.700	1.900	
3105	0.000	0.300	1.900	
3106	0.000	0.000	1.900	
3107	0.000	-0.250	1.900	
3108	0.000	-0.650	1.900	
3109	0.000	-0.900	1.900	
3110	0.000	-1.050	1.900	
3111	0.000	-1.350	1.900	
3201	0.600	1.350	1.900	
3202	0.600	1.100	1.900	
3203	0.600	0.900	1.900	
3204	0.600	0.700	1.900	
3205	0.600	0.300	1.900	
3206	0.600	0.000	1.900	
3207	0.600	-0.250	1.900	
3208	0.600	-0.650	1.900	
3209	0.600	-0.900	1.900	
3210	0.600	-1.050	1.900	
3211	0.600	-1.350	1.900	
3301	4.750	1.350	1.900	
3302	4.750	1.100	1.900	
3303	4.750	0.900	1.900	
3304	4.750	0.700	1.900	
3305	4.750	0.300	1.900	
3306	4.750	0.000	1.900	
3307	4.750	-0.250	1.900	
3308	4.750	-0.650	1.900	
3309	4.750	-0.900	1.900	
3310	4.750	-1.050	1.900	
3311	4.750	-1.350	1.900	
3401	8.900	1.350	1.900	
3402	8.900	1.100	1.900	
3403	8.900	0.900	1.900	
3404	8.900	0.700	1.900	
3405	8.900	0.300	1.900	
3406	8.900	0.000	1.900	
3407	8.900	-0.250	1.900	
3408	8.900	-0.650	1.900	
3409	8.900	-0.900	1.900	
3410	8.900	-1.050	1.900	
3411	8.900	-1.350	1.900	
3501	9.500	1.350	1.900	
3502	9.500	1.100	1.900	
3503	9.500	0.900	1.900	
3504	9.500	0.700	1.900	
3505	9.500	0.300	1.900	
3506	9.500	0.000	1.900	
3507	9.500	-0.250	1.900	
3508	9.500	-0.650	1.900	
3509	9.500	-0.900	1.900	
3510	9.500	-1.050	1.900	
3511	9.500	-1.350	1.900	
4101	0.000	1.350	4.900	
4102	0.000	1.100	4.900	
4103	0.000	0.900	4.900	
4104	0.000	0.700	4.900	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

Number	X[m]	Y[m]	Z[m]	Support Conditions
4105	0.000	0.300	4.900	
4106	0.000	0.000	4.900	
4107	0.000	-0.250	4.900	
4108	0.000	-0.650	4.900	
4109	0.000	-0.900	4.900	
4110	0.000	-1.050	4.900	
4111	0.000	-1.350	4.900	
4201	0.600	1.350	4.900	
4202	0.600	1.100	4.900	
4203	0.600	0.900	4.900	
4204	0.600	0.700	4.900	
4205	0.600	0.300	4.900	
4206	0.600	0.000	4.900	
4207	0.600	-0.250	4.900	
4208	0.600	-0.650	4.900	
4209	0.600	-0.900	4.900	
4210	0.600	-1.050	4.900	
4211	0.600	-1.350	4.900	
4301	4.750	1.350	4.900	
4302	4.750	1.100	4.900	
4303	4.750	0.900	4.900	
4304	4.750	0.700	4.900	
4305	4.750	0.300	4.900	
4306	4.750	0.000	4.900	
4307	4.750	-0.250	4.900	
4308	4.750	-0.650	4.900	
4309	4.750	-0.900	4.900	
4310	4.750	-1.050	4.900	
4311	4.750	-1.350	4.900	
4401	8.900	1.350	4.900	
4402	8.900	1.100	4.900	
4403	8.900	0.900	4.900	
4404	8.900	0.700	4.900	
4405	8.900	0.300	4.900	
4406	8.900	0.000	4.900	
4407	8.900	-0.250	4.900	
4408	8.900	-0.650	4.900	
4409	8.900	-0.900	4.900	
4410	8.900	-1.050	4.900	
4411	8.900	-1.350	4.900	
4501	9.500	1.350	4.900	
4502	9.500	1.100	4.900	
4503	9.500	0.900	4.900	
4504	9.500	0.700	4.900	
4505	9.500	0.300	4.900	
4506	9.500	0.000	4.900	
4507	9.500	-0.250	4.900	
4508	9.500	-0.650	4.900	
4509	9.500	-0.900	4.900	
4510	9.500	-1.050	4.900	
4511	9.500	-1.350	4.900	
5101	0.000	1.350	26.900	
5102	0.000	1.100	26.900	
5103	0.000	0.900	26.900	
5104	0.000	0.700	26.900	
5105	0.000	0.300	26.900	
5106	0.000	0.000	26.900	
5107	0.000	-0.250	26.900	
5108	0.000	-0.650	26.900	
5109	0.000	-0.900	26.900	
5110	0.000	-1.050	26.900	
5111	0.000	-1.350	26.900	
5201	0.600	1.350	26.900	
5202	0.600	1.100	26.900	
5203	0.600	0.900	26.900	
5204	0.600	0.700	26.900	
5205	0.600	0.300	26.900	
5206	0.600	0.000	26.900	
5207	0.600	-0.250	26.900	
5208	0.600	-0.650	26.900	
5209	0.600	-0.900	26.900	
5210	0.600	-1.050	26.900	
5211	0.600	-1.350	26.900	
5301	4.750	1.350	26.900	
5302	4.750	1.100	26.900	
5303	4.750	0.900	26.900	
5304	4.750	0.700	26.900	
5305	4.750	0.300	26.900	
5306	4.750	0.000	26.900	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

Number	X[m]	Y[m]	Z[m]	Support Conditions
5307	4.750	-0.250	26.900	
5308	4.750	-0.650	26.900	
5309	4.750	-0.900	26.900	
5310	4.750	-1.050	26.900	
5311	4.750	-1.350	26.900	
5401	8.900	1.350	26.900	
5402	8.900	1.100	26.900	
5403	8.900	0.900	26.900	
5404	8.900	0.700	26.900	
5405	8.900	0.300	26.900	
5406	8.900	0.000	26.900	
5407	8.900	-0.250	26.900	
5408	8.900	-0.650	26.900	
5409	8.900	-0.900	26.900	
5410	8.900	-1.050	26.900	
5411	8.900	-1.350	26.900	
5501	9.500	1.350	26.900	
5502	9.500	1.100	26.900	
5503	9.500	0.900	26.900	
5504	9.500	0.700	26.900	
5505	9.500	0.300	26.900	
5506	9.500	0.000	26.900	
5507	9.500	-0.250	26.900	
5508	9.500	-0.650	26.900	
5509	9.500	-0.900	26.900	
5510	9.500	-1.050	26.900	
5511	9.500	-1.350	26.900	
10001	0.300	1.350	0.000	
10002	1.292	1.350	0.000	
10003	1.983	1.350	0.000	
10004	2.675	1.350	0.000	
10005	3.367	1.350	0.000	
10006	4.058	1.350	0.000	
10007	5.442	1.350	0.000	
10008	6.133	1.350	0.000	
10009	6.825	1.350	0.000	
10010	7.517	1.350	0.000	
10011	8.208	1.350	0.000	
10012	9.200	1.350	0.000	
10013	0.300	0.900	0.000	
10014	1.292	0.900	0.000	
10015	1.983	0.900	0.000	
10016	2.675	0.900	0.000	
10017	3.367	0.900	0.000	
10018	4.058	0.900	0.000	
10019	5.442	0.900	0.000	
10020	6.133	0.900	0.000	
10021	6.825	0.900	0.000	
10022	7.517	0.900	0.000	
10023	8.208	0.900	0.000	
10024	9.200	0.900	0.000	
10025	0.300	0.000	0.000	
10026	1.292	0.000	0.000	
10027	1.983	0.000	0.000	
10028	2.675	0.000	0.000	
10029	3.367	0.000	0.000	
10030	4.058	0.000	0.000	
10031	5.442	0.000	0.000	
10032	6.133	0.000	0.000	
10033	6.825	0.000	0.000	
10034	7.517	0.000	0.000	
10035	8.208	0.000	0.000	
10036	9.200	0.000	0.000	
10037	0.300	-0.900	0.000	
10038	1.292	-0.900	0.000	
10039	1.983	-0.900	0.000	
10040	2.675	-0.900	0.000	
10041	3.367	-0.900	0.000	
10042	4.058	-0.900	0.000	
10043	5.442	-0.900	0.000	
10044	6.133	-0.900	0.000	
10045	6.825	-0.900	0.000	
10046	7.517	-0.900	0.000	
10047	8.208	-0.900	0.000	
10048	9.200	-0.900	0.000	
10049	0.300	-1.350	0.000	
10050	1.292	-1.350	0.000	
10051	1.983	-1.350	0.000	
10052	2.675	-1.350	0.000	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

Number	X[m]	Y[m]	Z[m]	Support Conditions
10053	3.367	-1.350	0.000	
10054	4.058	-1.350	0.000	
10055	5.442	-1.350	0.000	
10056	6.133	-1.350	0.000	
10057	6.825	-1.350	0.000	
10058	7.517	-1.350	0.000	
10059	8.208	-1.350	0.000	
10060	9.200	-1.350	0.000	
10061	1.292	1.100	0.000	
10062	1.983	1.100	0.000	
10063	2.675	1.100	0.000	
10064	3.367	1.100	0.000	
10065	4.058	1.100	0.000	
10066	1.292	0.700	0.000	
10067	1.983	0.700	0.000	
10068	2.675	0.700	0.000	
10069	3.367	0.700	0.000	
10070	4.058	0.700	0.000	
10071	1.292	0.300	0.000	
10072	1.983	0.300	0.000	
10073	2.675	0.300	0.000	
10074	3.367	0.300	0.000	
10075	4.058	0.300	0.000	
10076	1.292	-0.250	0.000	
10077	1.983	-0.250	0.000	
10078	2.675	-0.250	0.000	
10079	3.367	-0.250	0.000	
10080	4.058	-0.250	0.000	
10081	1.292	-0.650	0.000	
10082	1.983	-0.650	0.000	
10083	2.675	-0.650	0.000	
10084	3.367	-0.650	0.000	
10085	4.058	-0.650	0.000	
10086	1.292	-1.050	0.000	
10087	1.983	-1.050	0.000	
10088	2.675	-1.050	0.000	
10089	3.367	-1.050	0.000	
10090	4.058	-1.050	0.000	
10091	5.442	1.100	0.000	
10092	6.133	1.100	0.000	
10093	6.825	1.100	0.000	
10094	7.517	1.100	0.000	
10095	8.208	1.100	0.000	
10096	5.442	0.700	0.000	
10097	6.133	0.700	0.000	
10098	6.825	0.700	0.000	
10099	7.517	0.700	0.000	
10100	8.208	0.700	0.000	
10101	5.442	0.300	0.000	
10102	6.133	0.300	0.000	
10103	6.825	0.300	0.000	
10104	7.517	0.300	0.000	
10105	8.208	0.300	0.000	
10106	5.442	-0.250	0.000	
10107	6.133	-0.250	0.000	
10108	6.825	-0.250	0.000	
10109	7.517	-0.250	0.000	
10110	8.208	-0.250	0.000	
10111	5.442	-0.650	0.000	
10112	6.133	-0.650	0.000	
10113	6.825	-0.650	0.000	
10114	7.517	-0.650	0.000	
10115	8.208	-0.650	0.000	
10116	5.442	-1.050	0.000	
10117	6.133	-1.050	0.000	
10118	6.825	-1.050	0.000	
10119	7.517	-1.050	0.000	
10120	8.208	-1.050	0.000	
10121	0.300	1.100	0.000	
10122	0.300	0.700	0.000	
10123	0.300	0.300	0.000	
10124	0.300	-0.250	0.000	
10125	0.300	-0.650	0.000	
10126	0.300	-1.050	0.000	
10127	9.200	1.100	0.000	
10128	9.200	0.700	0.000	
10129	9.200	0.300	0.000	
10130	9.200	-0.250	0.000	
10131	9.200	-0.650	0.000	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

Number	X[m]	Y[m]	Z[m]	Support Conditions
10132	9.200	-1.050	0.000	
10133	0.000	1.125	0.800	
10134	0.000	1.350	0.400	
10135	0.000	0.900	0.400	
10136	0.000	1.112	0.400	
10137	0.000	0.600	0.800	
10138	0.000	0.000	0.400	
10139	0.000	0.650	0.400	
10140	0.000	0.300	0.400	
10141	0.000	-0.300	0.800	
10142	0.000	-0.600	0.800	
10143	0.000	-0.900	0.400	
10144	0.000	-0.275	0.400	
10145	0.000	-0.625	0.400	
10146	0.000	-1.125	0.800	
10147	0.000	-1.350	0.400	
10148	0.000	-1.087	0.400	
10149	9.500	1.350	0.400	
10150	9.500	0.900	0.400	
10151	9.500	1.125	0.800	
10152	9.500	1.112	0.400	
10153	9.500	0.000	0.400	
10154	9.500	0.600	0.800	
10155	9.500	0.650	0.400	
10156	9.500	0.300	0.400	
10157	9.500	-0.900	0.400	
10158	9.500	-0.300	0.800	
10159	9.500	-0.600	0.800	
10160	9.500	-0.275	0.400	
10161	9.500	-0.625	0.400	
10162	9.500	-1.350	0.400	
10163	9.500	-1.125	0.800	
10164	9.500	-1.087	0.400	
10165	0.000	0.700	2.900	
10166	0.000	0.700	3.900	
10167	0.000	-0.650	2.900	
10168	0.000	-0.650	3.900	
10169	9.500	0.700	2.900	
10170	9.500	0.700	3.900	
10171	9.500	-0.650	2.900	
10172	9.500	-0.650	3.900	
10173	0.000	0.700	5.900	
10174	0.000	0.700	6.900	
10175	0.000	0.700	7.900	
10176	0.000	0.700	8.900	
10177	0.000	0.700	9.900	
10178	0.000	0.700	10.900	
10179	0.000	0.700	11.900	
10180	0.000	0.700	12.900	
10181	0.000	0.700	13.900	
10182	0.000	0.700	14.900	
10183	0.000	0.700	15.900	
10184	0.000	0.700	16.900	
10185	0.000	0.700	17.900	
10186	0.000	0.700	18.900	
10187	0.000	0.700	19.900	
10188	0.000	0.700	20.900	
10189	0.000	0.700	21.900	
10190	0.000	0.700	22.900	
10191	0.000	0.700	23.900	
10192	0.000	0.700	24.900	
10193	0.000	0.700	25.900	
10194	0.000	-0.650	5.900	
10195	0.000	-0.650	6.900	
10196	0.000	-0.650	7.900	
10197	0.000	-0.650	8.900	
10198	0.000	-0.650	9.900	
10199	0.000	-0.650	10.900	
10200	0.000	-0.650	11.900	
10201	0.000	-0.650	12.900	
10202	0.000	-0.650	13.900	
10203	0.000	-0.650	14.900	
10204	0.000	-0.650	15.900	
10205	0.000	-0.650	16.900	
10206	0.000	-0.650	17.900	
10207	0.000	-0.650	18.900	
10208	0.000	-0.650	19.900	
10209	0.000	-0.650	20.900	
10210	0.000	-0.650	21.900	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Nodal Coordinates and Supports

Number	X[m]	Y[m]	Z[m]	Support Conditions
10211	0.000	-0.650	22.900	
10212	0.000	-0.650	23.900	
10213	0.000	-0.650	24.900	
10214	0.000	-0.650	25.900	
10215	9.500	0.700	5.900	
10216	9.500	0.700	6.900	
10217	9.500	0.700	7.900	
10218	9.500	0.700	8.900	
10219	9.500	0.700	9.900	
10220	9.500	0.700	10.900	
10221	9.500	0.700	11.900	
10222	9.500	0.700	12.900	
10223	9.500	0.700	13.900	
10224	9.500	0.700	14.900	
10225	9.500	0.700	15.900	
10226	9.500	0.700	16.900	
10227	9.500	0.700	17.900	
10228	9.500	0.700	18.900	
10229	9.500	0.700	19.900	
10230	9.500	0.700	20.900	
10231	9.500	0.700	21.900	
10232	9.500	0.700	22.900	
10233	9.500	0.700	23.900	
10234	9.500	0.700	24.900	
10235	9.500	0.700	25.900	
10236	9.500	-0.650	5.900	
10237	9.500	-0.650	6.900	
10238	9.500	-0.650	7.900	
10239	9.500	-0.650	8.900	
10240	9.500	-0.650	9.900	
10241	9.500	-0.650	10.900	
10242	9.500	-0.650	11.900	
10243	9.500	-0.650	12.900	
10244	9.500	-0.650	13.900	
10245	9.500	-0.650	14.900	
10246	9.500	-0.650	15.900	
10247	9.500	-0.650	16.900	
10248	9.500	-0.650	17.900	
10249	9.500	-0.650	18.900	
10250	9.500	-0.650	19.900	
10251	9.500	-0.650	20.900	
10252	9.500	-0.650	21.900	
10253	9.500	-0.650	22.900	
10254	9.500	-0.650	23.900	
10255	9.500	-0.650	24.900	
10256	9.500	-0.650	25.900	

MIN	0.000	-1.350	0.000	
MAX	9.500	1.350	26.900	

Flat Elements

Grp	Number	Node	Node	Node	Node	MNo	t[m]	C[kNsec/m2]	direction	local	x
3	3001	201	10002	10061	202	5	0.250-		1.000	0.000	0.000
3	3002	10002	10003	10062	10061	5	0.250-		1.000	0.000	0.000
3	3003	10003	10004	10063	10062	5	0.250-		1.000	0.000	0.000
3	3004	10004	10005	10064	10063	5	0.250-		1.000	0.000	0.000
3	3005	10005	10006	10065	10064	5	0.250-		1.000	0.000	0.000
3	3006	10006	301	302	10065	5	0.250-		1.000	0.000	0.000
3	3007	202	10061	10014	203	5	0.250-		1.000	0.000	0.000
3	3008	10061	10062	10015	10014	5	0.250-		1.000	0.000	0.000
3	3009	10062	10063	10016	10015	5	0.250-		1.000	0.000	0.000
3	3010	10063	10064	10017	10016	5	0.250-		1.000	0.000	0.000
3	3011	10064	10065	10018	10017	5	0.250-		1.000	0.000	0.000
3	3012	10065	302	303	10018	5	0.250-		1.000	0.000	0.000
3	3013	203	10014	10066	204	5	0.250-		1.000	0.000	0.000
3	3014	10014	10015	10067	10066	5	0.250-		1.000	0.000	0.000
3	3015	10015	10016	10068	10067	5	0.250-		1.000	0.000	0.000
3	3016	10016	10017	10069	10068	5	0.250-		1.000	0.000	0.000
3	3017	10017	10018	10070	10069	5	0.250-		1.000	0.000	0.000
3	3018	10018	303	304	10070	5	0.250-		1.000	0.000	0.000
3	3019	204	10066	10071	205	5	0.250-		1.000	0.000	0.000
3	3020	10066	10067	10072	10071	5	0.250-		1.000	0.000	0.000
3	3021	10067	10068	10073	10072	5	0.250-		1.000	0.000	0.000
3	3022	10068	10069	10074	10073	5	0.250-		1.000	0.000	0.000
3	3023	10069	10070	10075	10074	5	0.250-		1.000	0.000	0.000
3	3024	10070	304	305	10075	5	0.250-		1.000	0.000	0.000
3	3025	205	10071	10026	206	5	0.250-		1.000	0.000	0.000
3	3026	10071	10072	10027	10026	5	0.250-		1.000	0.000	0.000
3	3027	10072	10073	10028	10027	5	0.250-		1.000	0.000	0.000

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Flat Elements

Grp	Number	Node	Node	Node	Node	MNO	t[m]	C[knsec/m2]	direction	local	x
3	3028	10073	10074	10029	10028	5	0.250-		1.000	0.000	0.000
3	3029	10074	10075	10030	10029	5	0.250-		1.000	0.000	0.000
3	3030	10075	305	306	10030	5	0.250-		1.000	0.000	0.000
3	3031	206	10026	10076	207	5	0.250-		1.000	0.000	0.000
3	3032	10026	10027	10077	10076	5	0.250-		1.000	0.000	0.000
3	3033	10027	10028	10078	10077	5	0.250-		1.000	0.000	0.000
3	3034	10028	10029	10079	10078	5	0.250-		1.000	0.000	0.000
3	3035	10029	10030	10080	10079	5	0.250-		1.000	0.000	0.000
3	3036	10030	306	307	10080	5	0.250-		1.000	0.000	0.000
3	3037	207	10076	10081	208	5	0.250-		1.000	0.000	0.000
3	3038	10076	10077	10082	10081	5	0.250-		1.000	0.000	0.000
3	3039	10077	10078	10083	10082	5	0.250-		1.000	0.000	0.000
3	3040	10078	10079	10084	10083	5	0.250-		1.000	0.000	0.000
3	3041	10079	10080	10085	10084	5	0.250-		1.000	0.000	0.000
3	3042	10080	307	308	10085	5	0.250-		1.000	0.000	0.000
3	3043	208	10081	10038	209	5	0.250-		1.000	0.000	0.000
3	3044	10081	10082	10039	10038	5	0.250-		1.000	0.000	0.000
3	3045	10082	10083	10040	10039	5	0.250-		1.000	0.000	0.000
3	3046	10083	10084	10041	10040	5	0.250-		1.000	0.000	0.000
3	3047	10084	10085	10042	10041	5	0.250-		1.000	0.000	0.000
3	3048	10085	308	309	10042	5	0.250-		1.000	0.000	0.000
3	3049	209	10038	10086	210	5	0.250-		1.000	0.000	0.000
3	3050	10038	10039	10087	10086	5	0.250-		1.000	0.000	0.000
3	3051	10039	10040	10088	10087	5	0.250-		1.000	0.000	0.000
3	3052	10040	10041	10089	10088	5	0.250-		1.000	0.000	0.000
3	3053	10041	10042	10090	10089	5	0.250-		1.000	0.000	0.000
3	3054	10042	309	310	10090	5	0.250-		1.000	0.000	0.000
3	3055	210	10086	10050	211	5	0.250-		1.000	0.000	0.000
3	3056	10086	10087	10051	10050	5	0.250-		1.000	0.000	0.000
3	3057	10087	10088	10052	10051	5	0.250-		1.000	0.000	0.000
3	3058	10088	10089	10053	10052	5	0.250-		1.000	0.000	0.000
3	3059	10089	10090	10054	10053	5	0.250-		1.000	0.000	0.000
3	3060	10090	310	311	10054	5	0.250-		1.000	0.000	0.000
3	3061	301	10007	10091	302	5	0.250-		1.000	0.000	0.000
3	3062	10007	10008	10092	10091	5	0.250-		1.000	0.000	0.000
3	3063	10008	10009	10093	10092	5	0.250-		1.000	0.000	0.000
3	3064	10009	10010	10094	10093	5	0.250-		1.000	0.000	0.000
3	3065	10010	10011	10095	10094	5	0.250-		1.000	0.000	0.000
3	3066	10011	401	402	10095	5	0.250-		1.000	0.000	0.000
3	3067	302	10091	10019	303	5	0.250-		1.000	0.000	0.000
3	3068	10091	10092	10020	10019	5	0.250-		1.000	0.000	0.000
3	3069	10092	10093	10021	10020	5	0.250-		1.000	0.000	0.000
3	3070	10093	10094	10022	10021	5	0.250-		1.000	0.000	0.000
3	3071	10094	10095	10023	10022	5	0.250-		1.000	0.000	0.000
3	3072	10095	402	403	10023	5	0.250-		1.000	0.000	0.000
3	3073	303	10019	10096	304	5	0.250-		1.000	0.000	0.000
3	3074	10019	10020	10097	10096	5	0.250-		1.000	0.000	0.000
3	3075	10020	10021	10098	10097	5	0.250-		1.000	0.000	0.000
3	3076	10021	10022	10099	10098	5	0.250-		1.000	0.000	0.000
3	3077	10022	10023	10100	10099	5	0.250-		1.000	0.000	0.000
3	3078	10023	403	404	10100	5	0.250-		1.000	0.000	0.000
3	3079	304	10096	10101	305	5	0.250-		1.000	0.000	0.000
3	3080	10096	10097	10102	10101	5	0.250-		1.000	0.000	0.000
3	3081	10097	10098	10103	10102	5	0.250-		1.000	0.000	0.000
3	3082	10098	10099	10104	10103	5	0.250-		1.000	0.000	0.000
3	3083	10099	10100	10105	10104	5	0.250-		1.000	0.000	0.000
3	3084	10100	404	405	10105	5	0.250-		1.000	0.000	0.000
3	3085	305	10101	10031	306	5	0.250-		1.000	0.000	0.000
3	3086	10101	10102	10032	10031	5	0.250-		1.000	0.000	0.000
3	3087	10102	10103	10033	10032	5	0.250-		1.000	0.000	0.000
3	3088	10103	10104	10034	10033	5	0.250-		1.000	0.000	0.000
3	3089	10104	10105	10035	10034	5	0.250-		1.000	0.000	0.000
3	3090	10105	405	406	10035	5	0.250-		1.000	0.000	0.000
3	3091	306	10031	10106	307	5	0.250-		1.000	0.000	0.000
3	3092	10031	10032	10107	10106	5	0.250-		1.000	0.000	0.000
3	3093	10032	10033	10108	10107	5	0.250-		1.000	0.000	0.000
3	3094	10033	10034	10109	10108	5	0.250-		1.000	0.000	0.000
3	3095	10034	10035	10110	10109	5	0.250-		1.000	0.000	0.000
3	3096	10035	406	407	10110	5	0.250-		1.000	0.000	0.000
3	3097	307	10106	10111	308	5	0.250-		1.000	0.000	0.000
3	3098	10106	10107	10112	10111	5	0.250-		1.000	0.000	0.000
3	3099	10107	10108	10113	10112	5	0.250-		1.000	0.000	0.000
3	3100	10108	10109	10114	10113	5	0.250-		1.000	0.000	0.000
3	3101	10109	10110	10115	10114	5	0.250-		1.000	0.000	0.000
3	3102	10110	407	408	10115	5	0.250-		1.000	0.000	0.000
3	3103	308	10111	10043	309	5	0.250-		1.000	0.000	0.000
3	3104	10111	10112	10044	10043	5	0.250-		1.000	0.000	0.000
3	3105	10112	10113	10045	10044	5	0.250-		1.000	0.000	0.000
3	3106	10113	10114	10046	10045	5	0.250-		1.000	0.000	0.000

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Flat Elements

Grp	Number	Node	Node	Node	Node	MNO	t[m]	C[knsec/m2]	direction	local	x
3	3107	10114	10115	10047	10046	5	0.250-		1.000	0.000	0.000
3	3108	10115	408	409	10047	5	0.250-		1.000	0.000	0.000
3	3109	309	10043	10116	310	5	0.250-		1.000	0.000	0.000
3	3110	10043	10044	10117	10116	5	0.250-		1.000	0.000	0.000
3	3111	10044	10045	10118	10117	5	0.250-		1.000	0.000	0.000
3	3112	10045	10046	10119	10118	5	0.250-		1.000	0.000	0.000
3	3113	10046	10047	10120	10119	5	0.250-		1.000	0.000	0.000
3	3114	10047	409	410	10120	5	0.250-		1.000	0.000	0.000
3	3115	310	10116	10055	311	5	0.250-		1.000	0.000	0.000
3	3116	10116	10117	10056	10055	5	0.250-		1.000	0.000	0.000
3	3117	10117	10118	10057	10056	5	0.250-		1.000	0.000	0.000
3	3118	10118	10119	10058	10057	5	0.250-		1.000	0.000	0.000
3	3119	10119	10120	10059	10058	5	0.250-		1.000	0.000	0.000
3	3120	10120	410	411	10059	5	0.250-		1.000	0.000	0.000
4	4001	101	10001	10121	102	5	0.250-		1.000	0.000	0.000
4	4002	10001	201	202	10121	5	0.250-		1.000	0.000	0.000
4	4003	102	10121	10013	103	5	0.250-		1.000	0.000	0.000
4	4004	10121	202	203	10013	5	0.250-		1.000	0.000	0.000
4	4005	103	10013	10122	104	5	0.250-		1.000	0.000	0.000
4	4006	10013	203	204	10122	5	0.250-		1.000	0.000	0.000
4	4007	104	10122	10123	105	5	0.250-		1.000	0.000	0.000
4	4008	10122	204	205	10123	5	0.250-		1.000	0.000	0.000
4	4009	105	10123	10025	106	5	0.250-		1.000	0.000	0.000
4	4010	10123	205	206	10025	5	0.250-		1.000	0.000	0.000
4	4011	106	10025	10124	107	5	0.250-		1.000	0.000	0.000
4	4012	10025	206	207	10124	5	0.250-		1.000	0.000	0.000
4	4013	107	10124	10125	108	5	0.250-		1.000	0.000	0.000
4	4014	10124	207	208	10125	5	0.250-		1.000	0.000	0.000
4	4015	108	10125	10037	109	5	0.250-		1.000	0.000	0.000
4	4016	10125	208	209	10037	5	0.250-		1.000	0.000	0.000
4	4017	109	10037	10126	110	5	0.250-		1.000	0.000	0.000
4	4018	10037	209	210	10126	5	0.250-		1.000	0.000	0.000
4	4019	110	10126	10049	111	5	0.250-		1.000	0.000	0.000
4	4020	10126	210	211	10049	5	0.250-		1.000	0.000	0.000
4	4021	401	10012	10127	402	5	0.250-		1.000	0.000	0.000
4	4022	10012	501	502	10127	5	0.250-		1.000	0.000	0.000
4	4023	402	10127	10024	403	5	0.250-		1.000	0.000	0.000
4	4024	10127	502	503	10024	5	0.250-		1.000	0.000	0.000
4	4025	403	10024	10128	404	5	0.250-		1.000	0.000	0.000
4	4026	10024	503	504	10128	5	0.250-		1.000	0.000	0.000
4	4027	404	10128	10129	405	5	0.250-		1.000	0.000	0.000
4	4028	10128	504	505	10129	5	0.250-		1.000	0.000	0.000
4	4029	405	10129	10036	406	5	0.250-		1.000	0.000	0.000
4	4030	10129	505	506	10036	5	0.250-		1.000	0.000	0.000
4	4031	406	10036	10130	407	5	0.250-		1.000	0.000	0.000
4	4032	10036	506	507	10130	5	0.250-		1.000	0.000	0.000
4	4033	407	10130	10131	408	5	0.250-		1.000	0.000	0.000
4	4034	10130	507	508	10131	5	0.250-		1.000	0.000	0.000
4	4035	408	10131	10048	409	5	0.250-		1.000	0.000	0.000
4	4036	10131	508	509	10048	5	0.250-		1.000	0.000	0.000
4	4037	409	10048	10132	410	5	0.250-		1.000	0.000	0.000
4	4038	10048	509	510	10132	5	0.250-		1.000	0.000	0.000
4	4039	410	10132	10060	411	5	0.250-		1.000	0.000	0.000
4	4040	10132	510	511	10060	5	0.250-		1.000	0.000	0.000
8	8001	101	10134	10136	102	6	1.200		0.000	1.000	0.000
8	8002	10134	1101	10133	10136	6	1.200		0.000	1.000	0.000
8	8003	102	10136	10135	103	6	1.200		0.000	1.000	0.000
8	8004	10136	10133	1103	10135	6	1.200		0.000	1.000	0.000
8	8005	103	10135	10139	104	6	1.200		0.000	1.000	0.000
8	8006	10135	1103	10137	10139	6	1.200		0.000	1.000	0.000
8	8007	104	10139	10140	105	6	1.200		0.000	1.000	0.000
8	8008	10139	10137	1105	10140	6	1.200		0.000	1.000	0.000
8	8009	105	10140	10138	106	6	1.200		0.000	1.000	0.000
8	8010	10140	1105	1106	10138	6	1.200		0.000	1.000	0.000
8	8011	106	10138	10144	107	6	1.200		0.000	1.000	0.000
8	8012	10138	1106	10141	10144	6	1.200		0.000	1.000	0.000
8	8013	107	10144	10145	108	6	1.200		0.000	1.000	0.000
8	8014	10144	10141	10142	10145	6	1.200		0.000	1.000	0.000
8	8015	108	10145	10143	109	6	1.200		0.000	1.000	0.000
8	8016	10145	10142	1109	10143	6	1.200		0.000	1.000	0.000
8	8017	109	10143	10148	110	6	1.200		0.000	1.000	0.000
8	8018	10143	1109	10146	10148	6	1.200		0.000	1.000	0.000
8	8019	110	10148	10147	111	6	1.200		0.000	1.000	0.000
8	8020	10148	10146	1111	10147	6	1.200		0.000	1.000	0.000
8	8021	501	502	10152	10149	6	1.200		0.000	1.000	0.000
8	8022	502	503	10150	10152	6	1.200		0.000	1.000	0.000
8	8023	10149	10152	10151	1501	6	1.200		0.000	1.000	0.000
8	8024	10152	10150	1503	10151	6	1.200		0.000	1.000	0.000
8	8025	503	504	10155	10150	6	1.200		0.000	1.000	0.000

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Flat Elements

Grp	Number	Node	Node	Node	Node	MNO	t[m]	C[knsec/m2]	direction	local	x
8	8026	504	505	10156	10155	6	1.200		0.000	1.000	0.000
8	8027	505	506	10153	10156	6	1.200		0.000	1.000	0.000
8	8028	10150	10155	10154	1503	6	1.200		0.000	1.000	0.000
8	8029	10155	10156	1505	10154	6	1.200		0.000	1.000	0.000
8	8030	10156	10153	1506	1505	6	1.200		0.000	1.000	0.000
8	8031	506	507	10160	10153	6	1.200		0.000	1.000	0.000
8	8032	507	508	10161	10160	6	1.200		0.000	1.000	0.000
8	8033	508	509	10157	10161	6	1.200		0.000	1.000	0.000
8	8034	10153	10160	10158	1506	6	1.200		0.000	1.000	0.000
8	8035	10160	10161	10159	10158	6	1.200		0.000	1.000	0.000
8	8036	10161	10157	1509	10159	6	1.200		0.000	1.000	0.000
8	8037	509	510	10164	10157	6	1.200		0.000	1.000	0.000
8	8038	510	511	10162	10164	6	1.200		0.000	1.000	0.000
8	8039	10157	10164	10163	1509	6	1.200		0.000	1.000	0.000
8	8040	10164	10162	1511	10163	6	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	0.692	1		0.692				
1	1002	10014	0.000	1	0-0	0.692		0.000	1.000	0.000
		10015	0.692	1		1.383				
1	1003	10015	0.000	1	0-0	1.383		0.000	1.000	0.000
		10016	0.692	1		2.075				
1	1004	10016	0.000	1	0-0	2.075		0.000	1.000	0.000
		10017	0.692	1		2.767				
1	1005	10017	0.000	1	0-0	2.767		0.000	1.000	0.000
		10018	0.692	1		3.458				
1	1006	10018	0.000	1	0-0	3.458		0.000	1.000	0.000
		303	0.692	1		4.150				
1	1007	303	0.000	1	0-0	4.150		0.000	1.000	0.000
		10019	0.692	1		4.842				
1	1008	10019	0.000	1	0-0	4.842		0.000	1.000	0.000
		10020	0.692	1		5.533				
1	1009	10020	0.000	1	0-0	5.533		0.000	1.000	0.000
		10021	0.692	1		6.225				
1	1010	10021	0.000	1	0-0	6.225		0.000	1.000	0.000
		10022	0.692	1		6.917				
1	1011	10022	0.000	1	0-0	6.917		0.000	1.000	0.000
		10023	0.692	1		7.608				
1	1012	10023	0.000	1	0-0	7.608		0.000	1.000	0.000
		403	0.692	1		8.300	N MtMyMz			
1	1013	206	0.000	1	0-0	0.000	MyMz	0.000	1.000	0.000
		10026	0.692	1		0.692				
1	1014	10026	0.000	1	0-0	0.692		0.000	1.000	0.000
		10027	0.692	1		1.383				
1	1015	10027	0.000	1	0-0	1.383		0.000	1.000	0.000
		10028	0.692	1		2.075				
1	1016	10028	0.000	1	0-0	2.075		0.000	1.000	0.000
		10029	0.692	1		2.767				
1	1017	10029	0.000	1	0-0	2.767		0.000	1.000	0.000
		10030	0.692	1		3.458				
1	1018	10030	0.000	1	0-0	3.458		0.000	1.000	0.000
		306	0.692	1		4.150				
1	1019	306	0.000	1	0-0	4.150		0.000	1.000	0.000
		10031	0.692	1		4.842				
1	1020	10031	0.000	1	0-0	4.842		0.000	1.000	0.000
		10032	0.692	1		5.533				
1	1021	10032	0.000	1	0-0	5.533		0.000	1.000	0.000
		10033	0.692	1		6.225				
1	1022	10033	0.000	1	0-0	6.225		0.000	1.000	0.000
		10034	0.692	1		6.917				
1	1023	10034	0.000	1	0-0	6.917		0.000	1.000	0.000
		10035	0.692	1		7.608				
1	1024	10035	0.000	1	0-0	7.608		0.000	1.000	0.000
		406	0.692	1		8.300	N MtMyMz			
1	1025	209	0.000	1	0-0	0.000	MyMz	0.000	1.000	0.000
		10038	0.692	1		0.692				
1	1026	10038	0.000	1	0-0	0.692		0.000	1.000	0.000
		10039	0.692	1		1.383				
1	1027	10039	0.000	1	0-0	1.383		0.000	1.000	0.000
		10040	0.692	1		2.075				
1	1028	10040	0.000	1	0-0	2.075		0.000	1.000	0.000
		10041	0.692	1		2.767				
1	1029	10041	0.000	1	0-0	2.767		0.000	1.000	0.000
		10042	0.692	1		3.458				
1	1030	10042	0.000	1	0-0	3.458		0.000	1.000	0.000
		309	0.692	1		4.150				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Beam Elements

Grp	Number	Node	x[m]	NoS	NoP	reference	Hinges	direction	local	y-axis
1	1031	309	0.000	1	0-0	4.150		0.000	1.000	0.000
		10043	0.692	1		4.842				
1	1032	10043	0.000	1	0-0	4.842		0.000	1.000	0.000
		10044	0.692	1		5.533				
1	1033	10044	0.000	1	0-0	5.533		0.000	1.000	0.000
		10045	0.692	1		6.225				
1	1034	10045	0.000	1	0-0	6.225		0.000	1.000	0.000
		10046	0.692	1		6.917				
1	1035	10046	0.000	1	0-0	6.917		0.000	1.000	0.000
		10047	0.692	1		7.608				
1	1036	10047	0.000	1	0-0	7.608		0.000	1.000	0.000
		409	0.692	1		8.300	N MtMyMz			
2	2001	103	0.000	2	0-0	0.000		0.000	1.000	0.000
		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				
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	109	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
		209	0.300	2		0.600				
2	2011	409	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
		509	0.300	2		0.600				
9	9001	1101	0.000	13		0.000		1.000	0.000	0.000
		2101	0.550	13		0.550				
9	9002	1103	0.000	13		0.000		1.000	0.000	0.000
		2103	0.550	13		0.550				
9	9003	1106	0.000	13		0.000		1.000	0.000	0.000
		2106	0.550	13		0.550				
9	9004	1109	0.000	13		0.000		1.000	0.000	0.000
		2109	0.550	13		0.550				
9	9005	1111	0.000	13		0.000		1.000	0.000	0.000
		2111	0.550	13		0.550				
9	9006	1501	0.000	13		0.000		1.000	0.000	0.000
		2501	0.550	13		0.550				
9	9007	1503	0.000	13		0.000		1.000	0.000	0.000
		2503	0.550	13		0.550				
9	9008	1506	0.000	13		0.000		1.000	0.000	0.000
		2506	0.550	13		0.550				
9	9009	1509	0.000	13		0.000		1.000	0.000	0.000
		2509	0.550	13		0.550				
9	9010	1511	0.000	13		0.000		1.000	0.000	0.000
		2511	0.550	13		0.550				
10	10001	2101	0.000	8		0.000		1.000	0.000	0.000
		2102	0.250	8		0.250				
10	10002	2102	0.000	10		0.250		1.000	0.000	0.000
		2103	0.200	10		0.450				
10	10003	2103	0.000	10		0.450		1.000	0.000	0.000
		2104	0.200	10		0.650				
10	10004	2104	0.000	10		0.650		1.000	0.000	0.000
		2105	0.400	10		1.050				
10	10005	2105	0.000	8		1.050		1.000	0.000	0.000
		2106	0.300	8		1.350				
10	10006	2106	0.000	8		1.350		1.000	0.000	0.000
		2107	0.250	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	0.250	10		2.250				
10	10009	2109	0.000	10		2.250		1.000	0.000	0.000
		2110	0.150	10		2.400				
10	10010	2110	0.000	8		2.400		1.000	0.000	0.000
		2111	0.300	8		2.700				
10	10011	2501	0.000	8		0.000		1.000	0.000	0.000
		2502	0.250	8		0.250				
10	10012	2502	0.000	10		0.250		1.000	0.000	0.000

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Beam Elements

Grp	Number	Node	x[m]	NoS	NoP	reference Hinges	direction	local	y-axis
10	10012	2503	0.200	10		0.450			
10	10013	2503	0.000	10		0.450	1.000	0.000	0.000
		2504	0.200	10		0.650			
10	10014	2504	0.000	10		0.650	1.000	0.000	0.000
		2505	0.400	10		1.050			
10	10015	2505	0.000	8		1.050	1.000	0.000	0.000
		2506	0.300	8		1.350			
10	10016	2506	0.000	8		1.350	1.000	0.000	0.000
		2507	0.250	8		1.600			
10	10017	2507	0.000	10		1.600	1.000	0.000	0.000
		2508	0.400	10		2.000			
10	10018	2508	0.000	10		2.000	1.000	0.000	0.000
		2509	0.250	10		2.250			
10	10019	2509	0.000	10		2.250	1.000	0.000	0.000
		2510	0.150	10		2.400			
10	10020	2510	0.000	8		2.400	1.000	0.000	0.000
		2511	0.300	8		2.700			
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	2504	0.000	13		0.000	1.000	0.000	0.000
		3504	0.550	13		0.550			
11	11004	2508	0.000	13		0.000	1.000	0.000	0.000
		3508	0.550	13		0.550			
12	12001	3104	0.000	9	1	0.000	1.000	0.000	0.000
		10165	1.000	9		1.000			
12	12002	10165	0.000	9	1	1.000	1.000	0.000	0.000
		10166	1.000	9		2.000			
12	12003	10166	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
		10167	1.000	9		1.000			
12	12005	10167	0.000	9	1	1.000	1.000	0.000	0.000
		10168	1.000	9		2.000			
12	12006	10168	0.000	9	1	2.000	1.000	0.000	0.000
		4108	1.000	9		3.000			
12	12007	3504	0.000	9	1	0.000	1.000	0.000	0.000
		10169	1.000	9		1.000			
12	12008	10169	0.000	9	1	1.000	1.000	0.000	0.000
		10170	1.000	9		2.000			
12	12009	10170	0.000	9	1	2.000	1.000	0.000	0.000
		4504	1.000	9		3.000			
12	12010	3508	0.000	9	1	0.000	1.000	0.000	0.000
		10171	1.000	9		1.000			
12	12011	10171	0.000	9	1	1.000	1.000	0.000	0.000
		10172	1.000	9		2.000			
12	12012	10172	0.000	9	1	2.000	1.000	0.000	0.000
		4508	1.000	9		3.000			
12	12013	4104	0.000	9	1	0.000	1.000	0.000	0.000
		10173	1.000	9		1.000			
12	12014	10173	0.000	9	1	1.000	1.000	0.000	0.000
		10174	1.000	9		2.000			
12	12015	10174	0.000	9	1	2.000	1.000	0.000	0.000
		10175	1.000	9		3.000			
12	12016	10175	0.000	9	1	3.000	1.000	0.000	0.000
		10176	1.000	9		4.000			
12	12017	10176	0.000	9	1	4.000	1.000	0.000	0.000
		10177	1.000	9		5.000			
12	12018	10177	0.000	9	1	5.000	1.000	0.000	0.000
		10178	1.000	9		6.000			
12	12019	10178	0.000	9	1	6.000	1.000	0.000	0.000
		10179	1.000	9		7.000			
12	12020	10179	0.000	9	1	7.000	1.000	0.000	0.000
		10180	1.000	9		8.000			
12	12021	10180	0.000	9	1	8.000	1.000	0.000	0.000
		10181	1.000	9		9.000			
12	12022	10181	0.000	9	1	9.000	1.000	0.000	0.000
		10182	1.000	9		10.000			
12	12023	10182	0.000	9	1	10.000	1.000	0.000	0.000
		10183	1.000	9		11.000			
12	12024	10183	0.000	9	1	11.000	1.000	0.000	0.000
		10184	1.000	9		12.000			
12	12025	10184	0.000	9	1	12.000	1.000	0.000	0.000
		10185	1.000	9		13.000			
12	12026	10185	0.000	9	1	13.000	1.000	0.000	0.000
		10186	1.000	9		14.000			
12	12027	10186	0.000	9	1	14.000	1.000	0.000	0.000
		10187	1.000	9		15.000			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Beam Elements

Grp	Number	Node	x[m]	NoS	NoP	reference	Hinges	direction	local	y-axis
12	12028	10187	0.000	9	1	15.000		1.000	0.000	0.000
		10188	1.000	9		16.000				
12	12029	10188	0.000	9	1	16.000		1.000	0.000	0.000
		10189	1.000	9		17.000				
12	12030	10189	0.000	9	1	17.000		1.000	0.000	0.000
		10190	1.000	9		18.000				
12	12031	10190	0.000	9	1	18.000		1.000	0.000	0.000
		10191	1.000	9		19.000				
12	12032	10191	0.000	9	1	19.000		1.000	0.000	0.000
		10192	1.000	9		20.000				
12	12033	10192	0.000	9	1	20.000		1.000	0.000	0.000
		10193	1.000	9		21.000				
12	12034	10193	0.000	9	1	21.000		1.000	0.000	0.000
		5104	1.000	9		22.000				
12	12035	4108	0.000	9	1	0.000		1.000	0.000	0.000
		10194	1.000	9		1.000				
12	12036	10194	0.000	9	1	1.000		1.000	0.000	0.000
		10195	1.000	9		2.000				
12	12037	10195	0.000	9	1	2.000		1.000	0.000	0.000
		10196	1.000	9		3.000				
12	12038	10196	0.000	9	1	3.000		1.000	0.000	0.000
		10197	1.000	9		4.000				
12	12039	10197	0.000	9	1	4.000		1.000	0.000	0.000
		10198	1.000	9		5.000				
12	12040	10198	0.000	9	1	5.000		1.000	0.000	0.000
		10199	1.000	9		6.000				
12	12041	10199	0.000	9	1	6.000		1.000	0.000	0.000
		10200	1.000	9		7.000				
12	12042	10200	0.000	9	1	7.000		1.000	0.000	0.000
		10201	1.000	9		8.000				
12	12043	10201	0.000	9	1	8.000		1.000	0.000	0.000
		10202	1.000	9		9.000				
12	12044	10202	0.000	9	1	9.000		1.000	0.000	0.000
		10203	1.000	9		10.000				
12	12045	10203	0.000	9	1	10.000		1.000	0.000	0.000
		10204	1.000	9		11.000				
12	12046	10204	0.000	9	1	11.000		1.000	0.000	0.000
		10205	1.000	9		12.000				
12	12047	10205	0.000	9	1	12.000		1.000	0.000	0.000
		10206	1.000	9		13.000				
12	12048	10206	0.000	9	1	13.000		1.000	0.000	0.000
		10207	1.000	9		14.000				
12	12049	10207	0.000	9	1	14.000		1.000	0.000	0.000
		10208	1.000	9		15.000				
12	12050	10208	0.000	9	1	15.000		1.000	0.000	0.000
		10209	1.000	9		16.000				
12	12051	10209	0.000	9	1	16.000		1.000	0.000	0.000
		10210	1.000	9		17.000				
12	12052	10210	0.000	9	1	17.000		1.000	0.000	0.000
		10211	1.000	9		18.000				
12	12053	10211	0.000	9	1	18.000		1.000	0.000	0.000
		10212	1.000	9		19.000				
12	12054	10212	0.000	9	1	19.000		1.000	0.000	0.000
		10213	1.000	9		20.000				
12	12055	10213	0.000	9	1	20.000		1.000	0.000	0.000
		10214	1.000	9		21.000				
12	12056	10214	0.000	9	1	21.000		1.000	0.000	0.000
		5108	1.000	9		22.000				
12	12057	4504	0.000	9	1	0.000		1.000	0.000	0.000
		10215	1.000	9		1.000				
12	12058	10215	0.000	9	1	1.000		1.000	0.000	0.000
		10216	1.000	9		2.000				
12	12059	10216	0.000	9	1	2.000		1.000	0.000	0.000
		10217	1.000	9		3.000				
12	12060	10217	0.000	9	1	3.000		1.000	0.000	0.000
		10218	1.000	9		4.000				
12	12061	10218	0.000	9	1	4.000		1.000	0.000	0.000
		10219	1.000	9		5.000				
12	12062	10219	0.000	9	1	5.000		1.000	0.000	0.000
		10220	1.000	9		6.000				
12	12063	10220	0.000	9	1	6.000		1.000	0.000	0.000
		10221	1.000	9		7.000				
12	12064	10221	0.000	9	1	7.000		1.000	0.000	0.000
		10222	1.000	9		8.000				
12	12065	10222	0.000	9	1	8.000		1.000	0.000	0.000
		10223	1.000	9		9.000				
12	12066	10223	0.000	9	1	9.000		1.000	0.000	0.000
		10224	1.000	9		10.000				
12	12067	10224	0.000	9	1	10.000		1.000	0.000	0.000

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Beam Elements

Grp	Number	Node	x[m]	NoS	NoP	reference	Hinges	direction	local	y-axis
12	12067	10225	1.000	9		11.000				
12	12068	10225	0.000	9	1	11.000		1.000	0.000	0.000
		10226	1.000	9		12.000				
12	12069	10226	0.000	9	1	12.000		1.000	0.000	0.000
		10227	1.000	9		13.000				
12	12070	10227	0.000	9	1	13.000		1.000	0.000	0.000
		10228	1.000	9		14.000				
12	12071	10228	0.000	9	1	14.000		1.000	0.000	0.000
		10229	1.000	9		15.000				
12	12072	10229	0.000	9	1	15.000		1.000	0.000	0.000
		10230	1.000	9		16.000				
12	12073	10230	0.000	9	1	16.000		1.000	0.000	0.000
		10231	1.000	9		17.000				
12	12074	10231	0.000	9	1	17.000		1.000	0.000	0.000
		10232	1.000	9		18.000				
12	12075	10232	0.000	9	1	18.000		1.000	0.000	0.000
		10233	1.000	9		19.000				
12	12076	10233	0.000	9	1	19.000		1.000	0.000	0.000
		10234	1.000	9		20.000				
12	12077	10234	0.000	9	1	20.000		1.000	0.000	0.000
		10235	1.000	9		21.000				
12	12078	10235	0.000	9	1	21.000		1.000	0.000	0.000
		5504	1.000	9		22.000				
12	12079	4508	0.000	9	1	0.000		1.000	0.000	0.000
		10236	1.000	9		1.000				
12	12080	10236	0.000	9	1	1.000		1.000	0.000	0.000
		10237	1.000	9		2.000				
12	12081	10237	0.000	9	1	2.000		1.000	0.000	0.000
		10238	1.000	9		3.000				
12	12082	10238	0.000	9	1	3.000		1.000	0.000	0.000
		10239	1.000	9		4.000				
12	12083	10239	0.000	9	1	4.000		1.000	0.000	0.000
		10240	1.000	9		5.000				
12	12084	10240	0.000	9	1	5.000		1.000	0.000	0.000
		10241	1.000	9		6.000				
12	12085	10241	0.000	9	1	6.000		1.000	0.000	0.000
		10242	1.000	9		7.000				
12	12086	10242	0.000	9	1	7.000		1.000	0.000	0.000
		10243	1.000	9		8.000				
12	12087	10243	0.000	9	1	8.000		1.000	0.000	0.000
		10244	1.000	9		9.000				
12	12088	10244	0.000	9	1	9.000		1.000	0.000	0.000
		10245	1.000	9		10.000				
12	12089	10245	0.000	9	1	10.000		1.000	0.000	0.000
		10246	1.000	9		11.000				
12	12090	10246	0.000	9	1	11.000		1.000	0.000	0.000
		10247	1.000	9		12.000				
12	12091	10247	0.000	9	1	12.000		1.000	0.000	0.000
		10248	1.000	9		13.000				
12	12092	10248	0.000	9	1	13.000		1.000	0.000	0.000
		10249	1.000	9		14.000				
12	12093	10249	0.000	9	1	14.000		1.000	0.000	0.000
		10250	1.000	9		15.000				
12	12094	10250	0.000	9	1	15.000		1.000	0.000	0.000
		10251	1.000	9		16.000				
12	12095	10251	0.000	9	1	16.000		1.000	0.000	0.000
		10252	1.000	9		17.000				
12	12096	10252	0.000	9	1	17.000		1.000	0.000	0.000
		10253	1.000	9		18.000				
12	12097	10253	0.000	9	1	18.000		1.000	0.000	0.000
		10254	1.000	9		19.000				
12	12098	10254	0.000	9	1	19.000		1.000	0.000	0.000
		10255	1.000	9		20.000				
12	12099	10255	0.000	9	1	20.000		1.000	0.000	0.000
		10256	1.000	9		21.000				
12	12100	10256	0.000	9	1	21.000		1.000	0.000	0.000
		5508	1.000	9		22.000				

Spring Elements

Grp	Number	Node	Node	dx[-]	dy[-]	dz[-]	CP[MN/m]	CT[MN/m]	CM[MNm]
				e-P[-]	e-T[-]	e-M[-]	DP[kNsec/m]	DT[kNsec/m]	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	5504		0.000	0.000	1.000	2.513E+02		
13	13004	5508		0.000	0.000	1.000	2.513E+02		

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΟΡΙΣΜΟΣ ΓΕΩΜΕΤΡΙΑΣ ΤΕΧΝΙΚΟΥ

Summary of all beam elements

Groups Grp	TotLength [m]	Max.Length [m]	TotWeight [t]	Surface [m2]
1	24.900	0.692	0.000	57.270
2	3.600	0.300	0.000	13.680
9	5.500	0.550	0.000	
10	5.400	0.400	16.860	10.120
11	2.200	0.550	0.000	
12	100.000	1.000	125.664	251.327

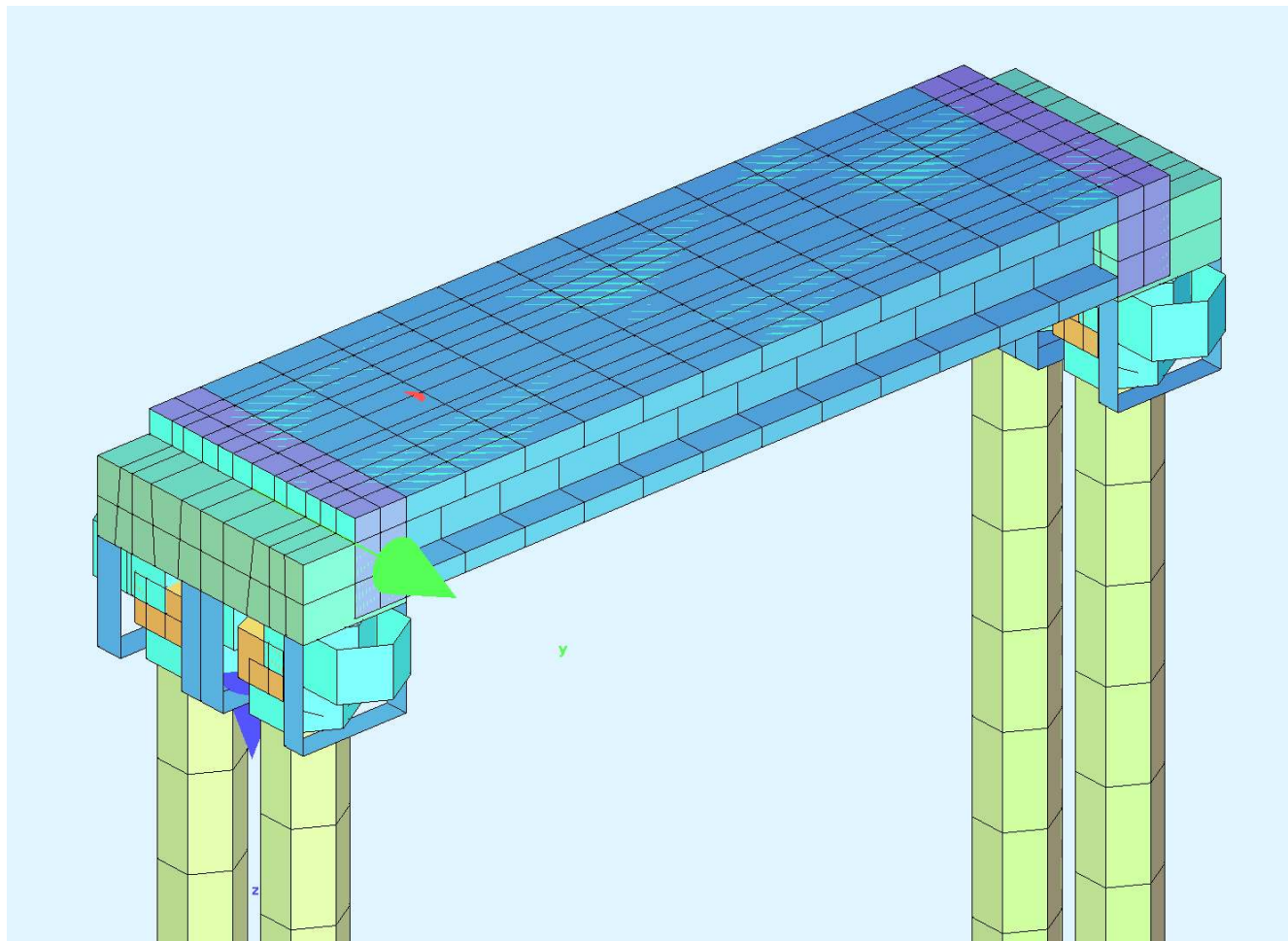
Sum	141.600		142.524	332.397

Summary of all planar elements

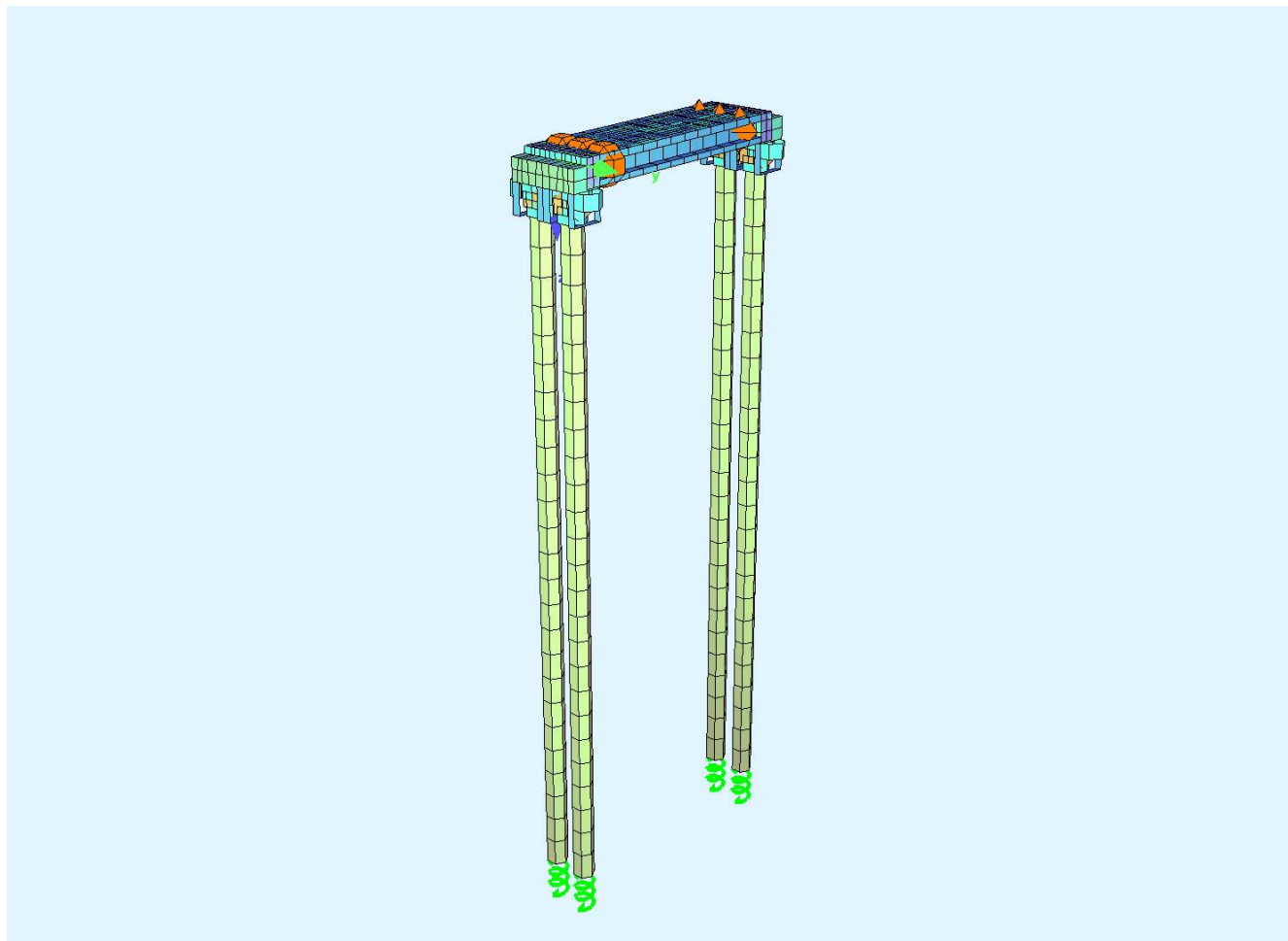
Groups Grp	TotArea [m2]	TotVolume [m3]	TotWeight [t]	Material No.
3	22.410	5.602	0.000	5
4	3.240	0.810	0.000	5
8	4.320	5.184	17.010	6

Sum	29.970	11.597	17.010	

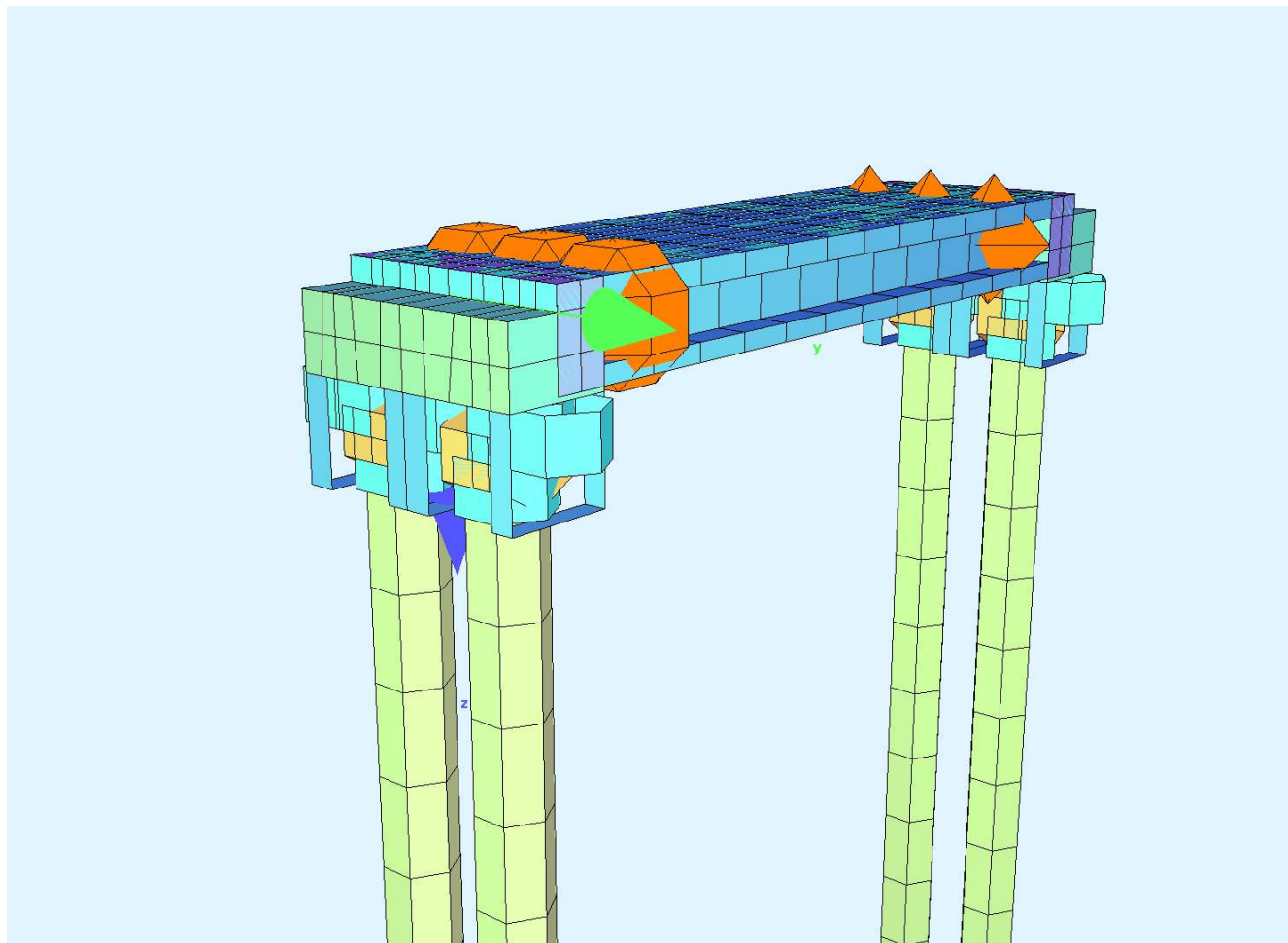
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70



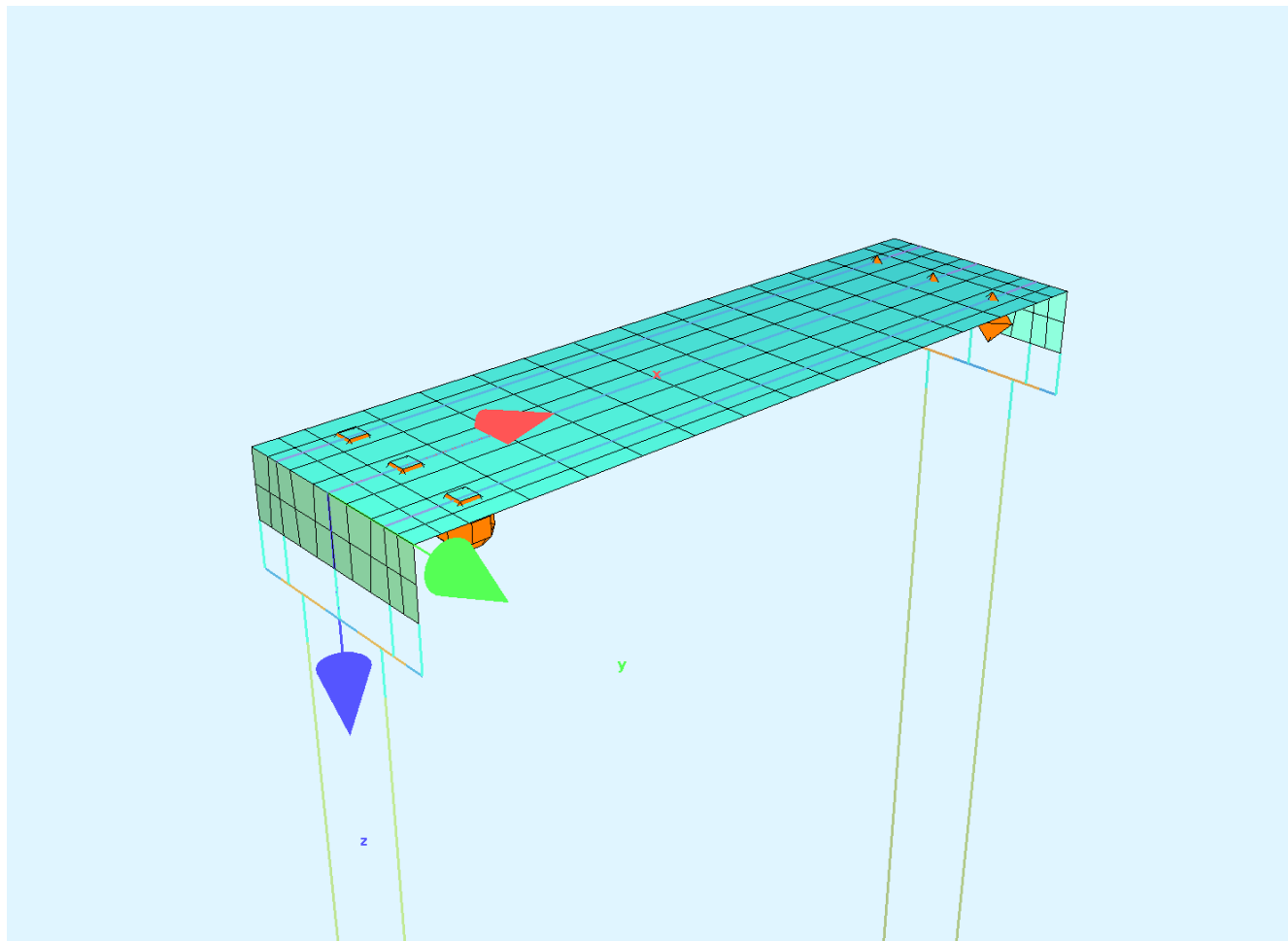
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70



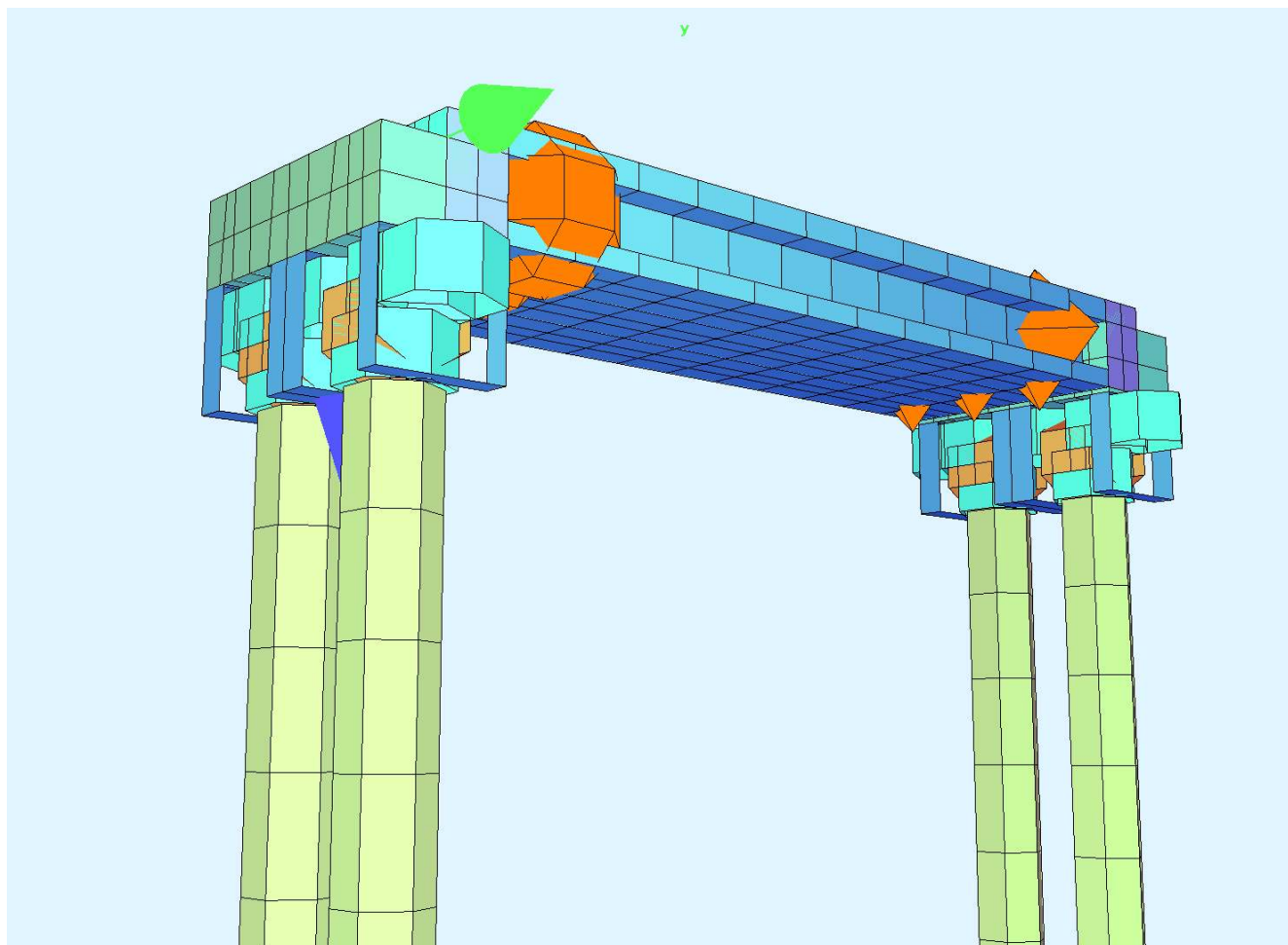
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70



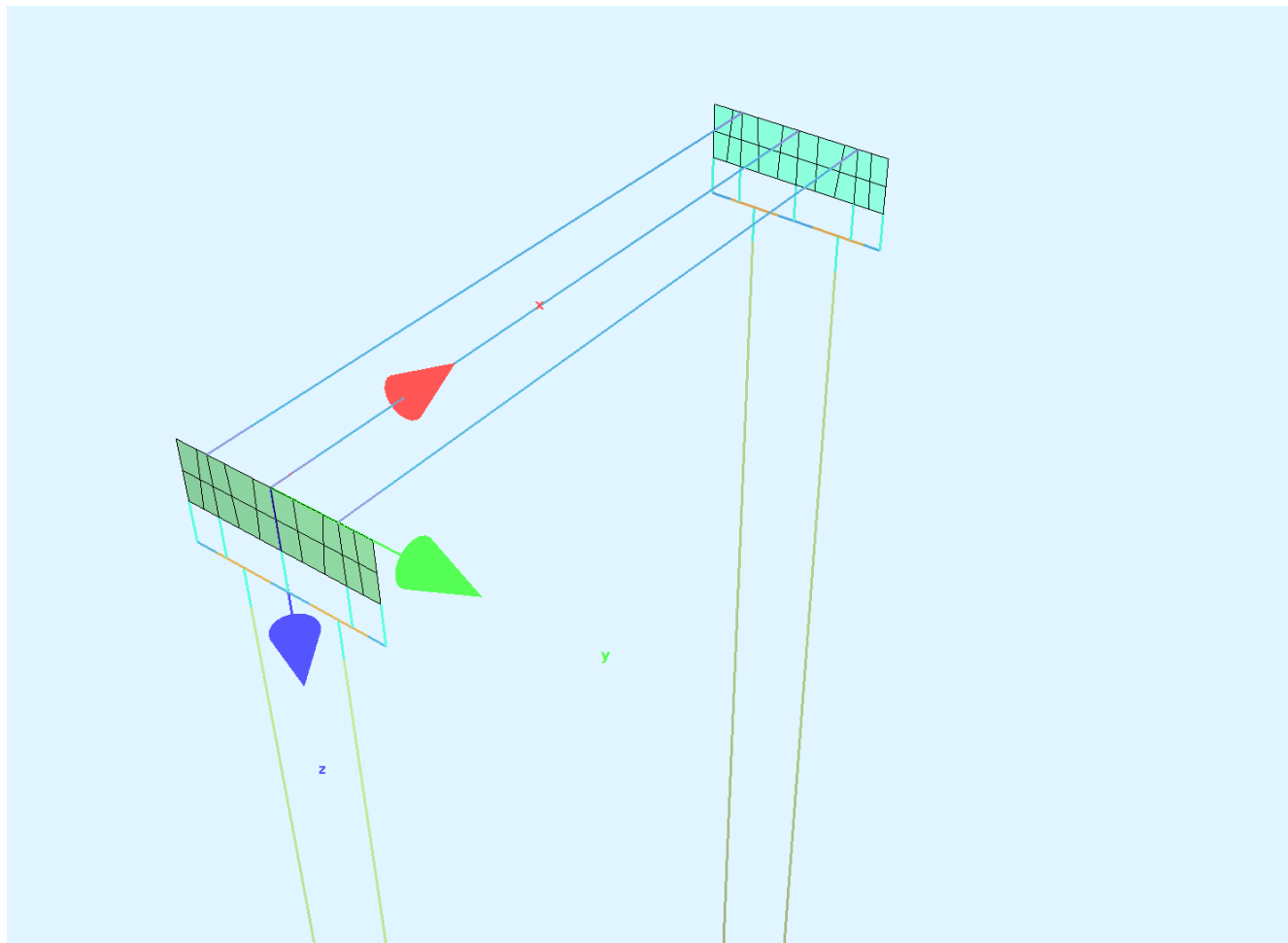
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70



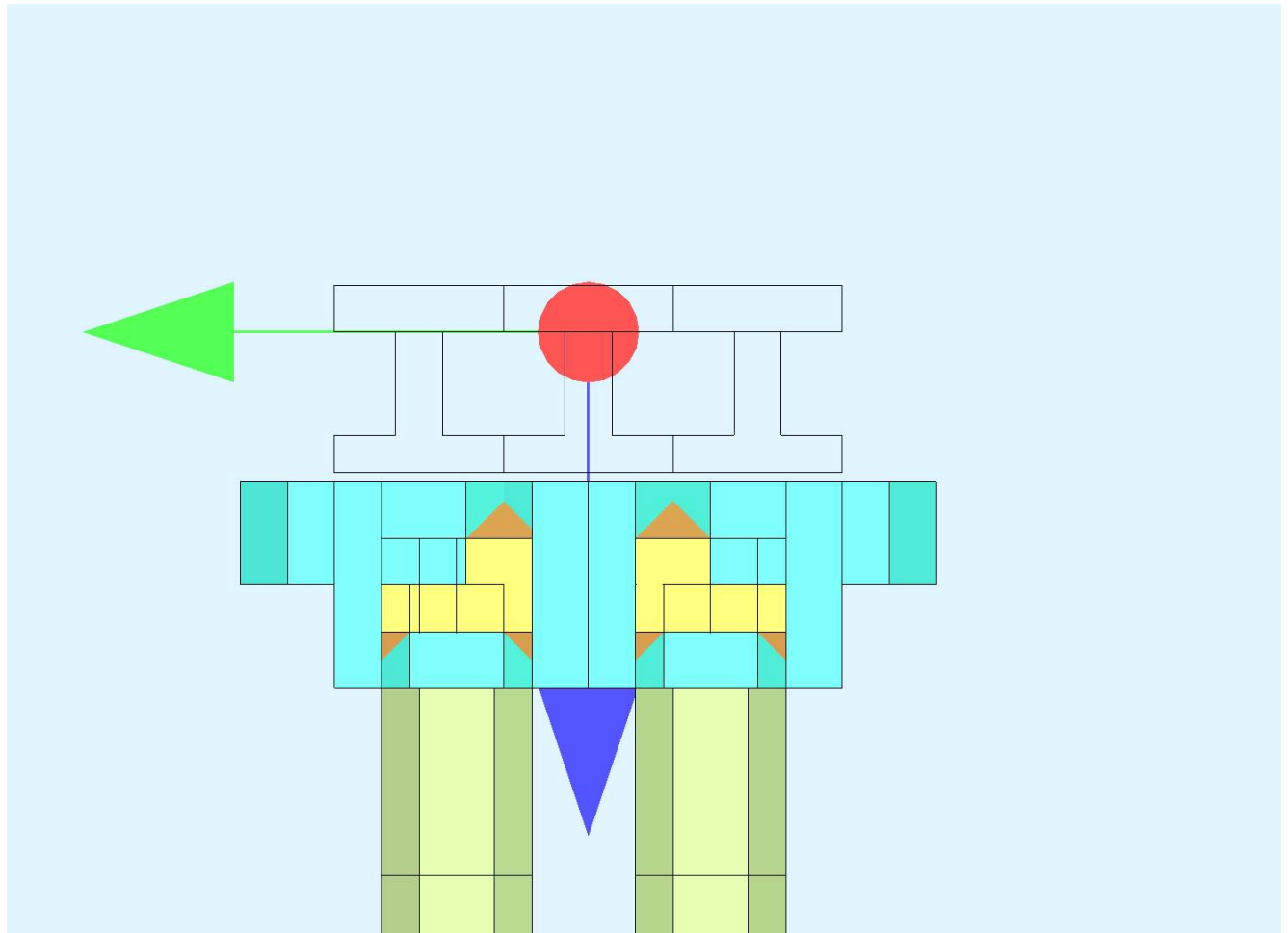
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70

3) ΟΡΙΣΜΟΣ & ΕΠΙΛΥΣΗ ΦΟΡΤΙΣΕΩΝ ΣΕ ΦΑΣΗ-1

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	0.692	0.008		[MN/m]				
1002	PG	0.000	0.692	0.008		[MN/m]				
1003	PG	0.000	0.692	0.008		[MN/m]				
1004	PG	0.000	0.692	0.008		[MN/m]				
1005	PG	0.000	0.692	0.008		[MN/m]				
1006	PG	0.000	0.692	0.008		[MN/m]				
1007	PG	0.000	0.692	0.008		[MN/m]				
1008	PG	0.000	0.692	0.008		[MN/m]				
1009	PG	0.000	0.692	0.008		[MN/m]				
1010	PG	0.000	0.692	0.008		[MN/m]				
1011	PG	0.000	0.692	0.008		[MN/m]				
1012	PG	0.000	0.692	0.008		[MN/m]				
1013	PG	0.000	0.692	0.008		[MN/m]				
1014	PG	0.000	0.692	0.008		[MN/m]				
1015	PG	0.000	0.692	0.008		[MN/m]				
1016	PG	0.000	0.692	0.008		[MN/m]				
1017	PG	0.000	0.692	0.008		[MN/m]				
1018	PG	0.000	0.692	0.008		[MN/m]				
1019	PG	0.000	0.692	0.008		[MN/m]				
1020	PG	0.000	0.692	0.008		[MN/m]				
1021	PG	0.000	0.692	0.008		[MN/m]				
1022	PG	0.000	0.692	0.008		[MN/m]				
1023	PG	0.000	0.692	0.008		[MN/m]				
1024	PG	0.000	0.692	0.008		[MN/m]				
1025	PG	0.000	0.692	0.008		[MN/m]				
1026	PG	0.000	0.692	0.008		[MN/m]				
1027	PG	0.000	0.692	0.008		[MN/m]				
1028	PG	0.000	0.692	0.008		[MN/m]				
1029	PG	0.000	0.692	0.008		[MN/m]				
1030	PG	0.000	0.692	0.008		[MN/m]				
1031	PG	0.000	0.692	0.008		[MN/m]				
1032	PG	0.000	0.692	0.008		[MN/m]				
1033	PG	0.000	0.692	0.008		[MN/m]				
1034	PG	0.000	0.692	0.008		[MN/m]				
1035	PG	0.000	0.692	0.008		[MN/m]				
1036	PG	0.000	0.692	0.008		[MN/m]				

Load Case 3 I.B. 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	0.692	0.006		[MN/m]				
1002	PG	0.000	0.692	0.006		[MN/m]				
1003	PG	0.000	0.692	0.006		[MN/m]				
1004	PG	0.000	0.692	0.006		[MN/m]				
1005	PG	0.000	0.692	0.006		[MN/m]				
1006	PG	0.000	0.692	0.006		[MN/m]				
1007	PG	0.000	0.692	0.006		[MN/m]				
1008	PG	0.000	0.692	0.006		[MN/m]				
1009	PG	0.000	0.692	0.006		[MN/m]				
1010	PG	0.000	0.692	0.006		[MN/m]				
1011	PG	0.000	0.692	0.006		[MN/m]				
1012	PG	0.000	0.692	0.006		[MN/m]				
1013	PG	0.000	0.692	0.006		[MN/m]				
1014	PG	0.000	0.692	0.006		[MN/m]				
1015	PG	0.000	0.692	0.006		[MN/m]				
1016	PG	0.000	0.692	0.006		[MN/m]				
1017	PG	0.000	0.692	0.006		[MN/m]				
1018	PG	0.000	0.692	0.006		[MN/m]				
1019	PG	0.000	0.692	0.006		[MN/m]				
1020	PG	0.000	0.692	0.006		[MN/m]				
1021	PG	0.000	0.692	0.006		[MN/m]				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
 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]
1022	PG	0.000	0.692	0.006		[MN/m]				
1023	PG	0.000	0.692	0.006		[MN/m]				
1024	PG	0.000	0.692	0.006		[MN/m]				
1025	PG	0.000	0.692	0.006		[MN/m]				
1026	PG	0.000	0.692	0.006		[MN/m]				
1027	PG	0.000	0.692	0.006		[MN/m]				
1028	PG	0.000	0.692	0.006		[MN/m]				
1029	PG	0.000	0.692	0.006		[MN/m]				
1030	PG	0.000	0.692	0.006		[MN/m]				
1031	PG	0.000	0.692	0.006		[MN/m]				
1032	PG	0.000	0.692	0.006		[MN/m]				
1033	PG	0.000	0.692	0.006		[MN/m]				
1034	PG	0.000	0.692	0.006		[MN/m]				
1035	PG	0.000	0.692	0.006		[MN/m]				
1036	PG	0.000	0.692	0.006		[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	0.692	0.001		[MN/m]				
1002	PG	0.000	0.692	0.001		[MN/m]				
1003	PG	0.000	0.692	0.001		[MN/m]				
1004	PG	0.000	0.692	0.001		[MN/m]				
1005	PG	0.000	0.692	0.001		[MN/m]				
1006	PG	0.000	0.692	0.001		[MN/m]				
1007	PG	0.000	0.692	0.001		[MN/m]				
1008	PG	0.000	0.692	0.001		[MN/m]				
1009	PG	0.000	0.692	0.001		[MN/m]				
1010	PG	0.000	0.692	0.001		[MN/m]				
1011	PG	0.000	0.692	0.001		[MN/m]				
1012	PG	0.000	0.692	0.001		[MN/m]				
1013	PG	0.000	0.692	0.001		[MN/m]				
1014	PG	0.000	0.692	0.001		[MN/m]				
1015	PG	0.000	0.692	0.001		[MN/m]				
1016	PG	0.000	0.692	0.001		[MN/m]				
1017	PG	0.000	0.692	0.001		[MN/m]				
1018	PG	0.000	0.692	0.001		[MN/m]				
1019	PG	0.000	0.692	0.001		[MN/m]				
1020	PG	0.000	0.692	0.001		[MN/m]				
1021	PG	0.000	0.692	0.001		[MN/m]				
1022	PG	0.000	0.692	0.001		[MN/m]				
1023	PG	0.000	0.692	0.001		[MN/m]				
1024	PG	0.000	0.692	0.001		[MN/m]				
1025	PG	0.000	0.692	0.001		[MN/m]				
1026	PG	0.000	0.692	0.001		[MN/m]				
1027	PG	0.000	0.692	0.001		[MN/m]				
1028	PG	0.000	0.692	0.001		[MN/m]				
1029	PG	0.000	0.692	0.001		[MN/m]				
1030	PG	0.000	0.692	0.001		[MN/m]				
1031	PG	0.000	0.692	0.001		[MN/m]				
1032	PG	0.000	0.692	0.001		[MN/m]				
1033	PG	0.000	0.692	0.001		[MN/m]				
1034	PG	0.000	0.692	0.001		[MN/m]				
1035	PG	0.000	0.692	0.001		[MN/m]				
1036	PG	0.000	0.692	0.001		[MN/m]				

Load Case 5 ΩΘΗΣΕΙΣ ΓΑΙΩΝ Α1-Κ0 (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

Loads acting on Beam-elements

Number	Type	a[m]	l[m]	Loadval	Loadval	Dimens.	ya[m]	za[m]	ye[m]	ze[m]
9001	PXX	0.000	0.550	0.000	0.001	[MN/m]				
9002	PXX	0.000	0.550	0.000	0.004	[MN/m]				
9003	PXX	0.000	0.550	0.000	0.005	[MN/m]				
9004	PXX	0.000	0.550	0.000	0.004	[MN/m]				
9005	PXX	0.000	0.550	0.000	0.001	[MN/m]				
11001	PXX	0.000	0.550	0.007	0.015	[MN/m]				
11002	PXX	0.000	0.550	0.007	0.015	[MN/m]				
12001	PXX	0.000	1.000	0.015	0.035	[MN/m]				
12002	PXX	0.000	1.000	0.035	0.055	[MN/m]				
12003	PXX	0.000	1.000	0.015	0.035	[MN/m]				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
 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]
12004	PXX	0.000	1.000	0.035	0.055	[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

Loads acting on Beam-elements

Number	Type	a[m]	l[m]	Loadval	Loadval	Dimens.	ya[m]	za[m]	ye[m]	ze[m]
9006	PXX	0.000	0.550	0.000	-0.001	[MN/m]				
9007	PXX	0.000	0.550	0.000	-0.004	[MN/m]				
9008	PXX	0.000	0.550	0.000	-0.005	[MN/m]				
9009	PXX	0.000	0.550	0.000	-0.004	[MN/m]				
9010	PXX	0.000	0.550	0.000	-0.001	[MN/m]				
11003	PXX	0.000	0.550	-0.007	-0.015	[MN/m]				
11004	PXX	0.000	0.550	-0.007	-0.015	[MN/m]				
12005	PXX	0.000	1.000	-0.015	-0.035	[MN/m]				
12006	PXX	0.000	1.000	-0.035	-0.055	[MN/m]				
12007	PXX	0.000	1.000	-0.015	-0.035	[MN/m]				
12008	PXX	0.000	1.000	-0.035	-0.055	[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

Loads acting on Beam-elements

Number	Type	a[m]	l[m]	Loadval	Loadval	Dimens.	ya[m]	za[m]	ye[m]	ze[m]
9001	PXX	0.000	0.550	0.010	0.007	[MN/m]				
9002	PXX	0.000	0.550	0.027	0.017	[MN/m]				
9003	PXX	0.000	0.550	0.037	0.024	[MN/m]				
9004	PXX	0.000	0.550	0.027	0.017	[MN/m]				
9005	PXX	0.000	0.550	0.010	0.007	[MN/m]				
11001	PXX	0.000	0.550	0.035	0.025	[MN/m]				
11002	PXX	0.000	0.550	0.035	0.025	[MN/m]				
12001	PXX	0.000	1.000	0.026	0.016	[MN/m]				
12002	PXX	0.000	1.000	0.016	0.007	[MN/m]				
12003	PXX	0.000	1.000	0.026	0.016	[MN/m]				
12004	PXX	0.000	1.000	0.016	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

Loads acting on Beam-elements

Number	Type	a[m]	l[m]	Loadval	Loadval	Dimens.	ya[m]	za[m]	ye[m]	ze[m]
9006	PXX	0.000	0.550	-0.010	-0.007	[MN/m]				
9007	PXX	0.000	0.550	-0.027	-0.017	[MN/m]				
9008	PXX	0.000	0.550	-0.037	-0.024	[MN/m]				
9009	PXX	0.000	0.550	-0.027	-0.017	[MN/m]				
9010	PXX	0.000	0.550	-0.010	-0.007	[MN/m]				
11003	PXX	0.000	0.550	-0.035	-0.025	[MN/m]				
11004	PXX	0.000	0.550	-0.035	-0.025	[MN/m]				
12005	PXX	0.000	1.000	-0.025	-0.016	[MN/m]				
12006	PXX	0.000	1.000	-0.016	-0.007	[MN/m]				
12007	PXX	0.000	1.000	-0.025	-0.016	[MN/m]				
12008	PXX	0.000	1.000	-0.016	-0.007	[MN/m]				

Load Case 11 ΘΩΣΕΙΣ ΓΑΙΩΝ:0.5*Α1+0.5*Α2(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

Loads acting on Beam-elements

Number	Type	a[m]	l[m]	Loadval	Loadval	Dimens.	ya[m]	za[m]	ye[m]	ze[m]
9001	PXX	0.000	0.550	0.000	0.001	[MN/m]				
9002	PXX	0.000	0.550	0.000	0.002	[MN/m]				
9003	PXX	0.000	0.550	0.000	0.002	[MN/m]				
9004	PXX	0.000	0.550	0.000	0.002	[MN/m]				
9005	PXX	0.000	0.550	0.000	0.001	[MN/m]				
9006	PXX	0.000	0.550	0.000	-0.001	[MN/m]				
9007	PXX	0.000	0.550	0.000	-0.002	[MN/m]				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
9008	PXX	0.000	0.550	0.000	-0.002	[MN/m]				
9009	PXX	0.000	0.550	0.000	-0.002	[MN/m]				
9010	PXX	0.000	0.550	0.000	-0.001	[MN/m]				
11001	PXX	0.000	0.550	0.004	0.007	[MN/m]				
11002	PXX	0.000	0.550	0.004	0.007	[MN/m]				
11003	PXX	0.000	0.550	-0.004	-0.007	[MN/m]				
11004	PXX	0.000	0.550	-0.004	-0.007	[MN/m]				
12001	PXX	0.000	1.000	0.007	0.018	[MN/m]				
12002	PXX	0.000	1.000	0.018	0.028	[MN/m]				
12003	PXX	0.000	1.000	0.007	0.018	[MN/m]				
12004	PXX	0.000	1.000	0.018	0.028	[MN/m]				
12005	PXX	0.000	1.000	-0.007	-0.018	[MN/m]				
12006	PXX	0.000	1.000	-0.018	-0.028	[MN/m]				
12007	PXX	0.000	1.000	-0.007	-0.018	[MN/m]				
12008	PXX	0.000	1.000	-0.018	-0.028	[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

Loads acting on Beam-elements

Number	Type	a[m]	l[m]	Loadval	Loadval	Dimens.	ya[m]	za[m]	ye[m]	ze[m]
9001	PXX	0.000	0.550	0.000	0.001	[MN/m]				
9002	PXX	0.000	0.550	0.000	0.004	[MN/m]				
9003	PXX	0.000	0.550	0.000	0.005	[MN/m]				
9004	PXX	0.000	0.550	0.000	0.004	[MN/m]				
9005	PXX	0.000	0.550	0.000	0.001	[MN/m]				
9006	PXX	0.000	0.550	0.000	-0.001	[MN/m]				
9007	PXX	0.000	0.550	0.000	-0.002	[MN/m]				
9008	PXX	0.000	0.550	0.000	-0.002	[MN/m]				
9009	PXX	0.000	0.550	0.000	-0.002	[MN/m]				
9010	PXX	0.000	0.550	0.000	-0.001	[MN/m]				
11001	PXX	0.000	0.550	0.007	0.015	[MN/m]				
11002	PXX	0.000	0.550	0.007	0.015	[MN/m]				
11003	PXX	0.000	0.550	-0.004	-0.007	[MN/m]				
11004	PXX	0.000	0.550	-0.004	-0.007	[MN/m]				
12001	PXX	0.000	1.000	0.015	0.035	[MN/m]				
12002	PXX	0.000	1.000	0.035	0.055	[MN/m]				
12003	PXX	0.000	1.000	0.015	0.035	[MN/m]				
12004	PXX	0.000	1.000	0.035	0.055	[MN/m]				
12005	PXX	0.000	1.000	-0.007	-0.018	[MN/m]				
12006	PXX	0.000	1.000	-0.018	-0.028	[MN/m]				
12007	PXX	0.000	1.000	-0.007	-0.018	[MN/m]				
12008	PXX	0.000	1.000	-0.018	-0.028	[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

Loads acting on Beam-elements

Number	Type	a[m]	l[m]	Loadval	Loadval	Dimens.	ya[m]	za[m]	ye[m]	ze[m]
9001	PXX	0.000	0.550	0.000	0.001	[MN/m]				
9002	PXX	0.000	0.550	0.000	0.002	[MN/m]				
9003	PXX	0.000	0.550	0.000	0.002	[MN/m]				
9004	PXX	0.000	0.550	0.000	0.002	[MN/m]				
9005	PXX	0.000	0.550	0.000	0.001	[MN/m]				
9006	PXX	0.000	0.550	0.000	-0.001	[MN/m]				
9007	PXX	0.000	0.550	0.000	-0.004	[MN/m]				
9008	PXX	0.000	0.550	0.000	-0.005	[MN/m]				
9009	PXX	0.000	0.550	0.000	-0.004	[MN/m]				
9010	PXX	0.000	0.550	0.000	-0.001	[MN/m]				
11001	PXX	0.000	0.550	0.004	0.007	[MN/m]				
11002	PXX	0.000	0.550	0.004	0.007	[MN/m]				
11003	PXX	0.000	0.550	-0.007	-0.015	[MN/m]				
11004	PXX	0.000	0.550	-0.007	-0.015	[MN/m]				
12001	PXX	0.000	1.000	0.007	0.018	[MN/m]				
12002	PXX	0.000	1.000	0.018	0.028	[MN/m]				
12003	PXX	0.000	1.000	0.007	0.018	[MN/m]				
12004	PXX	0.000	1.000	0.018	0.028	[MN/m]				
12005	PXX	0.000	1.000	-0.015	-0.035	[MN/m]				
12006	PXX	0.000	1.000	-0.035	-0.055	[MN/m]				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
 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]
12007	PXX	0.000	1.000	-0.015	-0.035	[MN/m]				
12008	PXX	0.000	1.000	-0.035	-0.055	[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

Loads acting on Beam-elements

Number	Type	a[m]	l[m]	Loadval	Loadval	Dimens.	ya[m]	za[m]	ye[m]	ze[m]
9001	PXX	0.000	0.550	0.000	0.001	[MN/m]				
9002	PXX	0.000	0.550	0.000	0.004	[MN/m]				
9003	PXX	0.000	0.550	0.000	0.005	[MN/m]				
9004	PXX	0.000	0.550	0.000	0.004	[MN/m]				
9005	PXX	0.000	0.550	0.000	0.001	[MN/m]				
9006	PXX	0.000	0.550	0.000	-0.001	[MN/m]				
9007	PXX	0.000	0.550	0.000	-0.004	[MN/m]				
9008	PXX	0.000	0.550	0.000	-0.005	[MN/m]				
9009	PXX	0.000	0.550	0.000	-0.004	[MN/m]				
9010	PXX	0.000	0.550	0.000	-0.001	[MN/m]				
11001	PXX	0.000	0.550	0.007	0.015	[MN/m]				
11002	PXX	0.000	0.550	0.007	0.015	[MN/m]				
11003	PXX	0.000	0.550	-0.007	-0.015	[MN/m]				
11004	PXX	0.000	0.550	-0.007	-0.015	[MN/m]				
12001	PXX	0.000	1.000	0.015	0.035	[MN/m]				
12002	PXX	0.000	1.000	0.035	0.055	[MN/m]				
12003	PXX	0.000	1.000	0.015	0.035	[MN/m]				
12004	PXX	0.000	1.000	0.035	0.055	[MN/m]				
12005	PXX	0.000	1.000	-0.015	-0.035	[MN/m]				
12006	PXX	0.000	1.000	-0.035	-0.055	[MN/m]				
12007	PXX	0.000	1.000	-0.015	-0.035	[MN/m]				
12008	PXX	0.000	1.000	-0.035	-0.055	[MN/m]				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
ΕΠΙΛΥΣΗ ΦΑΣΗ-1

Sum of Loads

LC Title	PXX[MN]	PYY[MN]	PZZ[MN]
1 I.B. ΚΑΤΑΚ.ΣΤΟΙΧΕΙΩΝ	0.000	0.000	1.595
2 I.B. ΔΟΚΩΝ	0.000	0.000	0.198
3 I.B. ΧΥΤΗΣ ΠΛΑΚΑΣ	0.000	0.000	0.146
4 ΚΙΝΗΤΟ ΦΑΣΗΣ-1	0.000	0.000	0.022
5 ΩΘΗΣΕΙΣ ΓΑΙΩΝ Α1-Κ0 (Φ-1	0.157	0.000	0.000
6 ΩΘΗΣΕΙΣ ΓΑΙΩΝ Α2-Κ0 (ΦΑΣ	-0.157	0.000	0.000
7 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝ Α1-Κ0 (Φ	0.147	0.000	0.000
8 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝ Α2-Κ0 (Φ	-0.146	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	0.078	0.000	0.000
13 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*Α1+1.0	-0.078	0.000	0.000
14 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:1.0*Α1+1.0	0.000	0.000	0.000

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70

4) ΟΡΙΣΜΟΣ & ΕΠΙΛΥΣΗ ΦΟΡΤΙΣΕΩΝ ΥΠΟΛΟΓΙΣΜΟΣ ΕΡΠΥΣΜΩΝ ΣΕ ΦΑΣΗ-2

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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 1.350 0.000	PG	0.008 [MN/m2]
			9.500 1.350 0.000		0.008 [MN/m2]
			9.500 -0.350 0.000		0.006 [MN/m2]
			0.000 -0.350 0.000		0.006 [MN/m2]
Area	QGRP 3	3.000	(--)	activated	87.37 percent
			0.000 1.350 0.000		0.008 [MN/m2]
			9.500 1.350 0.000		0.008 [MN/m2]
			9.500 -0.350 0.000		0.006 [MN/m2]
	QGRP 4	3.000	(--)	activated	12.63 percent
			0.000 -0.350 0.000		0.006 [MN/m2]

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			9.500 -1.350 0.000	PG	0.013 [MN/m2]
			0.000 -1.350 0.000		0.013 [MN/m2]
			0.000 -0.350 0.000		0.013 [MN/m2]
			9.500 -0.350 0.000		0.013 [MN/m2]
Area	QGRP 3	3.000	(--)	activated	87.37 percent
			9.500 -1.350 0.000		0.013 [MN/m2]
			0.000 -1.350 0.000		0.013 [MN/m2]
			0.000 -0.350 0.000		0.013 [MN/m2]
	QGRP 4	3.000	(--)	activated	12.63 percent
			9.500 -0.350 0.000		0.013 [MN/m2]

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 1.350 0.000	PG	0.001 [MN/m2]
			9.500 1.350 0.000		0.001 [MN/m2]
			9.500 -0.350 0.000		0.001 [MN/m2]
			0.000 -0.350 0.000		0.001 [MN/m2]
Area	QGRP 3	3.000	(--)	activated	87.37 percent
			0.000 1.350 0.000		0.001 [MN/m2]
			9.500 1.350 0.000		0.001 [MN/m2]
			9.500 -0.350 0.000		0.001 [MN/m2]
	QGRP 4	3.000	(--)	activated	12.63 percent
			0.000 -0.350 0.000		0.001 [MN/m2]

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 1.350 0.000	PXX	0.013 [MN/m2]
			0.000 1.350 0.800		0.013 [MN/m2]
			0.000 -1.350 0.800		0.013 [MN/m2]
			0.000 -1.350 0.000		0.013 [MN/m2]
QGRP 8	8	3.000		activated	100.00 percent

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			9.500 1.350 0.000	PXX	-0.013 [MN/m2]
			9.500 1.350 0.800		-0.013 [MN/m2]
			9.500 -1.350 0.800		-0.013 [MN/m2]
			9.500 -1.350 0.000		-0.013 [MN/m2]
QGRP 8	8	3.000		activated	100.00 percent

Load Case 36 ΟΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*Α1+0.5*Α2(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

OPISTIKH MEΛETH/TECHNIKO TB/L=10.70
FORTISEIS ΦΑΣΗ-2

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
		w[m]	X[m] Y[m] Z[m]		
Area			0.000 1.350 0.000	PXX	0.006 [MN/m2]
			0.000 1.350 0.800		0.006 [MN/m2]
			0.000 -1.350 0.800		0.006 [MN/m2]
			0.000 -1.350 0.000		0.006 [MN/m2]
Area	QGRP	8	3.000	activated	100.00 percent
Area			9.500 1.350 0.000	PXX	-0.006 [MN/m2]
			9.500 1.350 0.800		-0.006 [MN/m2]
			9.500 -1.350 0.800		-0.006 [MN/m2]
			9.500 -1.350 0.000		-0.006 [MN/m2]
Area	QGRP	8	3.000	activated	100.00 percent

Load Case 37 ΟΘΗΣΕΙΣ 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 1.350 0.000	PXX	0.013 [MN/m2]
			0.000 1.350 0.800		0.013 [MN/m2]
			0.000 -1.350 0.800		0.013 [MN/m2]
			0.000 -1.350 0.000		0.013 [MN/m2]
Area	QGRP	8	3.000	activated	100.00 percent
Area			9.500 1.350 0.000	PXX	-0.006 [MN/m2]
			9.500 1.350 0.800		-0.006 [MN/m2]
			9.500 -1.350 0.800		-0.006 [MN/m2]
			9.500 -1.350 0.000		-0.006 [MN/m2]
Area	QGRP	8	3.000	activated	100.00 percent

Load Case 38 ΟΘΗΣΕΙΣ 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 1.350 0.000	PXX	0.006 [MN/m2]
			0.000 1.350 0.800		0.006 [MN/m2]
			0.000 -1.350 0.800		0.006 [MN/m2]
			0.000 -1.350 0.000		0.006 [MN/m2]
Area	QGRP	8	3.000	activated	100.00 percent
Area			9.500 1.350 0.000	PXX	-0.013 [MN/m2]
			9.500 1.350 0.800		-0.013 [MN/m2]
			9.500 -1.350 0.800		-0.013 [MN/m2]
			9.500 -1.350 0.000		-0.013 [MN/m2]
Area	QGRP	8	3.000	activated	100.00 percent

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			0.000 1.350 0.000	PXX	0.013 [MN/m2]
			0.000 1.350 0.800		0.013 [MN/m2]
			0.000 -1.350 0.800		0.013 [MN/m2]
			0.000 -1.350 0.000		0.013 [MN/m2]
Area	QGRP	8	3.000	activated	100.00 percent
Area			9.500 1.350 0.000	PXX	-0.013 [MN/m2]
			9.500 1.350 0.800		-0.013 [MN/m2]
			9.500 -1.350 0.800		-0.013 [MN/m2]
			9.500 -1.350 0.000		-0.013 [MN/m2]
Area	QGRP	8	3.000	activated	100.00 percent

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			0.000 1.350 0.000	PG	0.003 [MN/m2]
			9.500 1.350 0.000		0.003 [MN/m2]
			9.500 -1.350 0.000		0.003 [MN/m2]
			0.000 -1.350 0.000		0.003 [MN/m2]

OPISTIKH MEΛETH/TECHNIKO TB/L=10.70
FORTISEIS ΦΑΣΗ-2

Meshfree Loading

Kind	Referenceto	Projection	Coordinates				Type	Loadvalue
			w[m]	x[m]	y[m]	z[m]		
Area	QGRP	3	3.000	(--)	activated			87.37 percent
				0.000	1.350	0.000	PG	0.003 [MN/m2]
				9.500	1.350	0.000		0.003 [MN/m2]
				9.500	-1.350	0.000		0.003 [MN/m2]
				0.000	-1.350	0.000		0.003 [MN/m2]
	QGRP	4	3.000	(--)	activated			12.63 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			3.000	9.500	-0.350	0.000	PG	0.006 [MN/m2]
				0.000	-0.350	0.000	0.006 [MN/m2]	
				0.000	2.650	0.000	0.006 [MN/m2]	
				9.500	2.650	0.000	0.006 [MN/m2]	
Area	QGRP	3	3.000	(--)	activated			49.51 percent
				9.500	-0.350	0.000	PG	0.006 [MN/m2]
				0.000	-0.350	0.000	0.006 [MN/m2]	
				0.000	2.650	0.000	0.006 [MN/m2]	
				9.500	2.650	0.000	0.006 [MN/m2]	
				(--)		activated	7.16 percent	

Load Case 50 TS_RIGHT_Posit.1

Factor forces and moments 1.000

Meshfree Loading

Kind	Reference	to	Projection	Coordinates	Type	Load	value			
				w[m]	x[m]	y[m]	z[m]			
Area				3.000	0.000	-0.250	0.000	PG	0.211	[MN/m2]
					0.800	-0.250	0.000	0.211	[MN/m2]	
					0.800	0.550	0.000	0.211	[MN/m2]	
					0.000	0.550	0.000	0.211	[MN/m2]	
Area	QGRP	3	ZZ	3.000	(--)	activated			25.00	percent
					0.000	-0.250	0.000	PG	0.211	[MN/m2]
					0.800	-0.250	0.000	0.211	[MN/m2]	
					0.800	0.550	0.000	0.211	[MN/m2]	
Area	QGRP	4	ZZ	3.000	0.000	0.550	0.000	0.211	[MN/m2]	
					(--)	activated			75.00	percent
					1.200	-0.250	0.000	PG	0.211	[MN/m2]
					2.000	-0.250	0.000	0.211	[MN/m2]	
Area	QGRP	3	ZZ	3.000	2.000	0.550	0.000	0.211	[MN/m2]	
					1.200	0.550	0.000	0.211	[MN/m2]	
					(--)	activated			100.00	percent
					1.200	-0.250	0.000	PG	0.211	[MN/m2]
Area	QGRP	4	ZZ	3.000	2.000	-0.250	0.000	0.211	[MN/m2]	
					2.000	0.550	0.000	0.211	[MN/m2]	
					1.200	0.550	0.000	0.211	[MN/m2]	
					(--)	activated			0.00	percent
Area	QGRP	3	ZZ	3.000	0.000	1.750	0.000	PG	0.211	[MN/m2]
					0.800	1.750	0.000	0.211	[MN/m2]	
					0.800	2.550	0.000	0.211	[MN/m2]	
					0.000	2.550	0.000	0.211	[MN/m2]	
Area	QGRP	4	ZZ	3.000	(--)	activated			0.00	percent
					0.000	1.750	0.000	PG	0.211	[MN/m2]
					0.800	1.750	0.000	0.211	[MN/m2]	
					0.800	2.550	0.000	0.211	[MN/m2]	
Area	QGRP	3	ZZ	3.000	0.000	2.550	0.000	0.211	[MN/m2]	
					(--)	activated			0.00	percent
					1.200	1.750	0.000	PG	0.211	[MN/m2]
					2.000	1.750	0.000	0.211	[MN/m2]	
Area	QGRP	4	ZZ	3.000	2.000	2.550	0.000	0.211	[MN/m2]	
					2.000	2.550	0.000	0.211	[MN/m2]	
					1.200	2.550	0.000	0.211	[MN/m2]	
					(--)	activated			0.00	percent
Area	QGRP	3	ZZ	3.000	1.200	1.750	0.000	PG	0.211	[MN/m2]
					2.000	1.750	0.000	0.211	[MN/m2]	
					2.000	2.550	0.000	0.211	[MN/m2]	
					1.200	2.550	0.000	0.211	[MN/m2]	
Area	QGRP	4	ZZ	3.000	(--)	activated			0.00	percent
					1.200	1.750	0.000	PG	0.211	[MN/m2]
					2.000	1.750	0.000	0.211	[MN/m2]	
					2.000	2.550	0.000	0.211	[MN/m2]	
Area	QGRP	3	ZZ	3.000	1.200	2.550	0.000	0.211	[MN/m2]	
					(--)	activated			0.00	percent
					1.200	1.750	0.000	PG	0.211	[MN/m2]
					2.000	1.750	0.000	0.211	[MN/m2]	
Area	QGRP	4	ZZ	3.000	2.000	2.550	0.000	0.211	[MN/m2]	
					2.000	2.550	0.000	0.211	[MN/m2]	
					1.200	2.550	0.000	0.211	[MN/m2]	
					(--)	activated			0.00	percent

Load Case 51 TS_RIGHT_Posit.2

Factor forces and moments 1.000

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
FORTISEIS ΦΑΣΗ-2

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
			w[m] X[m] Y[m] Z[m]		
Area			1.000 -0.250 0.000 PG	0.211 [MN/m2]	
			1.800 -0.250 0.000	0.211 [MN/m2]	
			1.800 0.550 0.000	0.211 [MN/m2]	
			1.000 0.550 0.000	0.211 [MN/m2]	
			activated	100.00 percent	
Area	QGRP	3 ZZ	3.000		
			1.000 -0.250 0.000 PG	0.211 [MN/m2]	
			1.800 -0.250 0.000	0.211 [MN/m2]	
			1.800 0.550 0.000	0.211 [MN/m2]	
			1.000 0.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	4 ZZ	3.000		
			(--)		
			2.200 -0.250 0.000 PG	0.211 [MN/m2]	
			3.000 -0.250 0.000	0.211 [MN/m2]	
			3.000 0.550 0.000	0.211 [MN/m2]	
			2.200 0.550 0.000	0.211 [MN/m2]	
			activated	100.00 percent	
Area	QGRP	3 ZZ	3.000		
			2.200 -0.250 0.000 PG	0.211 [MN/m2]	
			3.000 -0.250 0.000	0.211 [MN/m2]	
			3.000 0.550 0.000	0.211 [MN/m2]	
			2.200 0.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	4 ZZ	3.000		
			(--)		
			1.000 1.750 0.000 PG	0.211 [MN/m2]	
			1.800 1.750 0.000	0.211 [MN/m2]	
			1.800 2.550 0.000	0.211 [MN/m2]	
			1.000 2.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	3 ZZ	3.000		
			(--)		
			1.000 1.750 0.000 PG	0.211 [MN/m2]	
			1.800 1.750 0.000	0.211 [MN/m2]	
			1.800 2.550 0.000	0.211 [MN/m2]	
			1.000 2.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	4 ZZ	3.000		
			(--)		
			2.200 1.750 0.000 PG	0.211 [MN/m2]	
			3.000 1.750 0.000	0.211 [MN/m2]	
			3.000 2.550 0.000	0.211 [MN/m2]	
			2.200 2.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	3 ZZ	3.000		
			(--)		
			2.200 1.750 0.000 PG	0.211 [MN/m2]	
			3.000 1.750 0.000	0.211 [MN/m2]	
			3.000 2.550 0.000	0.211 [MN/m2]	
			2.200 2.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	4 ZZ	3.000		
			(--)		
			activated	0.00 percent	

Load Case 52 TS_RIGHT_Posit.3

Factor forces and moments 1.000

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
			w[m] X[m] Y[m] Z[m]		
Area			2.000 -0.250 0.000 PG	0.211 [MN/m2]	
			2.800 -0.250 0.000	0.211 [MN/m2]	
			2.800 0.550 0.000	0.211 [MN/m2]	
			2.000 0.550 0.000	0.211 [MN/m2]	
			activated	100.00 percent	
Area	QGRP	3 ZZ	3.000		
			2.000 -0.250 0.000 PG	0.211 [MN/m2]	
			2.800 -0.250 0.000	0.211 [MN/m2]	
			2.800 0.550 0.000	0.211 [MN/m2]	
			2.000 0.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	4 ZZ	3.000		
			(--)		
			3.200 -0.250 0.000 PG	0.211 [MN/m2]	
			4.000 -0.250 0.000	0.211 [MN/m2]	
			4.000 0.550 0.000	0.211 [MN/m2]	
			3.200 0.550 0.000	0.211 [MN/m2]	
			activated	100.00 percent	
Area	QGRP	3 ZZ	3.000		
			(--)		
			3.200 -0.250 0.000 PG	0.211 [MN/m2]	
			4.000 -0.250 0.000	0.211 [MN/m2]	
			4.000 0.550 0.000	0.211 [MN/m2]	
			3.200 0.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	4 ZZ	3.000		
			(--)		
			2.000 1.750 0.000 PG	0.211 [MN/m2]	
			2.800 1.750 0.000	0.211 [MN/m2]	
			2.800 2.550 0.000	0.211 [MN/m2]	
			2.000 2.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	3 ZZ	3.000		
			(--)		
			2.000 1.750 0.000 PG	0.211 [MN/m2]	
			2.800 1.750 0.000	0.211 [MN/m2]	
			2.800 2.550 0.000	0.211 [MN/m2]	
			2.000 2.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	4 ZZ	3.000		
			(--)		
			activated	0.00 percent	

OPISTIKH MELETH/TEKNIKO TB/L=10.70
FORTISEIS FASH-2

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
			w[m]		
			x[m]		
			y[m]		
			z[m]		
Area	QGRP	3	ZZ	3.000	4.000 1.750 0.000 0.211 [MN/m2]
					4.000 2.550 0.000 0.211 [MN/m2]
					3.200 2.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent
					3.200 1.750 0.000 PG 0.211 [MN/m2]
	QGRP	4	ZZ	3.000	4.000 1.750 0.000 0.211 [MN/m2]
					4.000 2.550 0.000 0.211 [MN/m2]
					3.200 2.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent

Load Case 53 TS_RIGHT_Posit.4

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	3.000 -0.250 0.000 PG 0.211 [MN/m2]
					3.800 -0.250 0.000 0.211 [MN/m2]
					3.800 0.550 0.000 0.211 [MN/m2]
					3.000 0.550 0.000 0.211 [MN/m2]
					activated 100.00 percent
	QGRP	4	ZZ	3.000	3.000 -0.250 0.000 PG 0.211 [MN/m2]
					3.800 -0.250 0.000 0.211 [MN/m2]
					3.800 0.550 0.000 0.211 [MN/m2]
					3.000 0.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent
Area	QGRP	3	ZZ	3.000	4.200 -0.250 0.000 PG 0.211 [MN/m2]
					5.000 -0.250 0.000 0.211 [MN/m2]
					5.000 0.550 0.000 0.211 [MN/m2]
					4.200 0.550 0.000 0.211 [MN/m2]
					activated 100.00 percent
	QGRP	4	ZZ	3.000	4.200 -0.250 0.000 PG 0.211 [MN/m2]
					5.000 -0.250 0.000 0.211 [MN/m2]
					5.000 0.550 0.000 0.211 [MN/m2]
					4.200 0.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent
Area	QGRP	3	ZZ	3.000	3.000 1.750 0.000 PG 0.211 [MN/m2]
					3.800 1.750 0.000 0.211 [MN/m2]
					3.800 2.550 0.000 0.211 [MN/m2]
					3.000 2.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent
	QGRP	4	ZZ	3.000	3.000 1.750 0.000 PG 0.211 [MN/m2]
					3.800 1.750 0.000 0.211 [MN/m2]
					3.800 2.550 0.000 0.211 [MN/m2]
					3.000 2.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent
Area	QGRP	3	ZZ	3.000	4.200 1.750 0.000 PG 0.211 [MN/m2]
					5.000 1.750 0.000 0.211 [MN/m2]
					5.000 2.550 0.000 0.211 [MN/m2]
					4.200 2.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent
	QGRP	4	ZZ	3.000	4.200 1.750 0.000 PG 0.211 [MN/m2]
					5.000 1.750 0.000 0.211 [MN/m2]
					5.000 2.550 0.000 0.211 [MN/m2]
					4.200 2.550 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 -0.250 0.000 PG 0.211 [MN/m2]
					4.800 -0.250 0.000 0.211 [MN/m2]
					4.800 0.550 0.000 0.211 [MN/m2]
					4.000 0.550 0.000 0.211 [MN/m2]
					activated 100.00 percent
	QGRP	4	ZZ	3.000	4.000 -0.250 0.000 PG 0.211 [MN/m2]
					4.800 -0.250 0.000 0.211 [MN/m2]
					4.800 0.550 0.000 0.211 [MN/m2]
					4.000 0.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent
Area	QGRP	3	ZZ	3.000	5.200 -0.250 0.000 PG 0.211 [MN/m2]
					6.000 -0.250 0.000 0.211 [MN/m2]
					6.000 0.550 0.000 0.211 [MN/m2]
					5.200 0.550 0.000 0.211 [MN/m2]
					activated 100.00 percent

OPISTIKH MEΛETH/TECHNIKO TB/L=10.70
FORTISEIS ΦΑΣΗ-2

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
		w[m]	x[m] y[m] z[m]		
Area			5.200 -0.250 0.000	PG	0.211 [MN/m2]
			6.000 -0.250 0.000		0.211 [MN/m2]
			6.000 0.550 0.000		0.211 [MN/m2]
			5.200 0.550 0.000		0.211 [MN/m2]
Area	QGRP	4 ZZ 3.000	(--)	activated	0.00 percent
			4.000 1.750 0.000	PG	0.211 [MN/m2]
			4.800 1.750 0.000		0.211 [MN/m2]
			4.800 2.550 0.000		0.211 [MN/m2]
			4.000 2.550 0.000		0.211 [MN/m2]
Area	QGRP	3 ZZ 3.000	(--)	activated	0.00 percent
			4.000 1.750 0.000	PG	0.211 [MN/m2]
			4.800 1.750 0.000		0.211 [MN/m2]
			4.800 2.550 0.000		0.211 [MN/m2]
			4.000 2.550 0.000		0.211 [MN/m2]
Area	QGRP	4 ZZ 3.000	(--)	activated	0.00 percent
			5.200 1.750 0.000	PG	0.211 [MN/m2]
			6.000 1.750 0.000		0.211 [MN/m2]
			6.000 2.550 0.000		0.211 [MN/m2]
			5.200 2.550 0.000		0.211 [MN/m2]
Area	QGRP	3 ZZ 3.000	(--)	activated	0.00 percent
			5.200 1.750 0.000	PG	0.211 [MN/m2]
			6.000 1.750 0.000		0.211 [MN/m2]
			6.000 2.550 0.000		0.211 [MN/m2]
			5.200 2.550 0.000		0.211 [MN/m2]
	QGRP	4 ZZ 3.000	(--)	activated	0.00 percent

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 -0.250 0.000	PG	0.211 [MN/m2]
			5.800 -0.250 0.000		0.211 [MN/m2]
			5.800 0.550 0.000		0.211 [MN/m2]
			5.000 0.550 0.000		0.211 [MN/m2]
Area	QGRP	3 ZZ 3.000	(--)	activated	100.00 percent
			5.000 -0.250 0.000	PG	0.211 [MN/m2]
			5.800 -0.250 0.000		0.211 [MN/m2]
			5.800 0.550 0.000		0.211 [MN/m2]
			5.000 0.550 0.000		0.211 [MN/m2]
Area	QGRP	4 ZZ 3.000	(--)	activated	0.00 percent
			6.200 -0.250 0.000	PG	0.211 [MN/m2]
			7.000 -0.250 0.000		0.211 [MN/m2]
			7.000 0.550 0.000		0.211 [MN/m2]
			6.200 0.550 0.000		0.211 [MN/m2]
Area	QGRP	3 ZZ 3.000	(--)	activated	100.00 percent
			6.200 -0.250 0.000	PG	0.211 [MN/m2]
			7.000 -0.250 0.000		0.211 [MN/m2]
			7.000 0.550 0.000		0.211 [MN/m2]
			6.200 0.550 0.000		0.211 [MN/m2]
Area	QGRP	4 ZZ 3.000	(--)	activated	0.00 percent
			5.000 1.750 0.000	PG	0.211 [MN/m2]
			5.800 1.750 0.000		0.211 [MN/m2]
			5.800 2.550 0.000		0.211 [MN/m2]
			5.000 2.550 0.000		0.211 [MN/m2]
Area	QGRP	3 ZZ 3.000	(--)	activated	0.00 percent
			5.000 1.750 0.000	PG	0.211 [MN/m2]
			5.800 1.750 0.000		0.211 [MN/m2]
			5.800 2.550 0.000		0.211 [MN/m2]
			5.000 2.550 0.000		0.211 [MN/m2]
Area	QGRP	4 ZZ 3.000	(--)	activated	0.00 percent
			6.200 1.750 0.000	PG	0.211 [MN/m2]
			7.000 1.750 0.000		0.211 [MN/m2]
			7.000 2.550 0.000		0.211 [MN/m2]
			6.200 2.550 0.000		0.211 [MN/m2]
Area	QGRP	3 ZZ 3.000	(--)	activated	0.00 percent
			6.200 1.750 0.000	PG	0.211 [MN/m2]
			7.000 1.750 0.000		0.211 [MN/m2]
			7.000 2.550 0.000		0.211 [MN/m2]
			6.200 2.550 0.000		0.211 [MN/m2]
	QGRP	4 ZZ 3.000	(--)	activated	0.00 percent

Load Case 56 TS_RIGHT_Posit.7

Factor forces and moments 1.000

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
FORTISEIS ΦΑΣΗ-2

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
			w[m] X[m] Y[m] Z[m]		
Area			6.000 -0.250 0.000 PG	0.211 [MN/m2]	
			6.800 -0.250 0.000	0.211 [MN/m2]	
			6.800 0.550 0.000	0.211 [MN/m2]	
			6.000 0.550 0.000	0.211 [MN/m2]	
			activated	100.00 percent	
Area	QGRP	3 ZZ 3.000	6.000 -0.250 0.000 PG	0.211 [MN/m2]	
			6.800 -0.250 0.000	0.211 [MN/m2]	
			6.800 0.550 0.000	0.211 [MN/m2]	
			6.000 0.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	4 ZZ 3.000	7.200 -0.250 0.000 PG	0.211 [MN/m2]	
			8.000 -0.250 0.000	0.211 [MN/m2]	
			8.000 0.550 0.000	0.211 [MN/m2]	
			7.200 0.550 0.000	0.211 [MN/m2]	
			activated	100.00 percent	
Area	QGRP	3 ZZ 3.000	7.200 -0.250 0.000 PG	0.211 [MN/m2]	
			8.000 -0.250 0.000	0.211 [MN/m2]	
			8.000 0.550 0.000	0.211 [MN/m2]	
			7.200 0.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	4 ZZ 3.000	6.000 1.750 0.000 PG	0.211 [MN/m2]	
			6.800 1.750 0.000	0.211 [MN/m2]	
			6.800 2.550 0.000	0.211 [MN/m2]	
			6.000 2.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	3 ZZ 3.000	6.000 1.750 0.000 PG	0.211 [MN/m2]	
			6.800 1.750 0.000	0.211 [MN/m2]	
			6.800 2.550 0.000	0.211 [MN/m2]	
			6.000 2.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	4 ZZ 3.000	7.200 1.750 0.000 PG	0.211 [MN/m2]	
			8.000 1.750 0.000	0.211 [MN/m2]	
			8.000 2.550 0.000	0.211 [MN/m2]	
			7.200 2.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	3 ZZ 3.000	7.200 1.750 0.000 PG	0.211 [MN/m2]	
			8.000 1.750 0.000	0.211 [MN/m2]	
			8.000 2.550 0.000	0.211 [MN/m2]	
			7.200 2.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	4 ZZ 3.000	7.200 1.750 0.000 PG	0.211 [MN/m2]	
			8.000 1.750 0.000	0.211 [MN/m2]	
			8.000 2.550 0.000	0.211 [MN/m2]	
			7.200 2.550 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 -0.250 0.000 PG	0.211 [MN/m2]	
			7.800 -0.250 0.000	0.211 [MN/m2]	
			7.800 0.550 0.000	0.211 [MN/m2]	
			7.000 0.550 0.000	0.211 [MN/m2]	
			activated	100.00 percent	
Area	QGRP	3 ZZ 3.000	7.000 -0.250 0.000 PG	0.211 [MN/m2]	
			7.800 -0.250 0.000	0.211 [MN/m2]	
			7.800 0.550 0.000	0.211 [MN/m2]	
			7.000 0.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	4 ZZ 3.000	8.200 -0.250 0.000 PG	0.211 [MN/m2]	
			9.000 -0.250 0.000	0.211 [MN/m2]	
			9.000 0.550 0.000	0.211 [MN/m2]	
			8.200 0.550 0.000	0.211 [MN/m2]	
			activated	87.50 percent	
Area	QGRP	3 ZZ 3.000	8.200 -0.250 0.000 PG	0.211 [MN/m2]	
			9.000 -0.250 0.000	0.211 [MN/m2]	
			9.000 0.550 0.000	0.211 [MN/m2]	
			8.200 0.550 0.000	0.211 [MN/m2]	
			activated	12.50 percent	
Area	QGRP	4 ZZ 3.000	7.000 1.750 0.000 PG	0.211 [MN/m2]	
			7.800 1.750 0.000	0.211 [MN/m2]	
			7.800 2.550 0.000	0.211 [MN/m2]	
			7.000 2.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	3 ZZ 3.000	7.000 1.750 0.000 PG	0.211 [MN/m2]	
			7.800 1.750 0.000	0.211 [MN/m2]	
			7.800 2.550 0.000	0.211 [MN/m2]	
			7.000 2.550 0.000	0.211 [MN/m2]	
			activated	0.00 percent	
Area	QGRP	4 ZZ 3.000	8.200 1.750 0.000 PG	0.211 [MN/m2]	
			activated	0.00 percent	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	9.000 1.750 0.000 0.211 [MN/m2]
					9.000 2.550 0.000 0.211 [MN/m2]
					8.200 2.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent
					8.200 1.750 0.000 PG 0.211 [MN/m2]
	QGRP	4	ZZ	3.000	9.000 1.750 0.000 0.211 [MN/m2]
					9.000 2.550 0.000 0.211 [MN/m2]
					8.200 2.550 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 -0.250 0.000 PG 0.211 [MN/m2]
					8.800 -0.250 0.000 0.211 [MN/m2]
					8.800 0.550 0.000 0.211 [MN/m2]
					8.000 0.550 0.000 0.211 [MN/m2]
Area	QGRP	3	ZZ	3.000	activated 100.00 percent
					8.000 -0.250 0.000 PG 0.211 [MN/m2]
					8.800 -0.250 0.000 0.211 [MN/m2]
					8.800 0.550 0.000 0.211 [MN/m2]
Area	QGRP	4	ZZ	3.000	8.000 0.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent
					9.200 -0.250 0.000 PG 0.211 [MN/m2]
					10.000 -0.250 0.000 0.211 [MN/m2]
Area	QGRP	3	ZZ	3.000	10.000 0.550 0.000 0.211 [MN/m2]
					9.200 0.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent
					9.200 -0.250 0.000 PG 0.211 [MN/m2]
Area	QGRP	4	ZZ	3.000	10.000 -0.250 0.000 0.211 [MN/m2]
					10.000 0.550 0.000 0.211 [MN/m2]
					9.200 0.550 0.000 0.211 [MN/m2]
					(--) activated 37.50 percent
Area	QGRP	3	ZZ	3.000	8.000 1.750 0.000 PG 0.211 [MN/m2]
					8.800 1.750 0.000 0.211 [MN/m2]
					8.800 2.550 0.000 0.211 [MN/m2]
					8.000 2.550 0.000 0.211 [MN/m2]
Area	QGRP	4	ZZ	3.000	(--) activated 0.00 percent
					8.000 1.750 0.000 PG 0.211 [MN/m2]
					8.800 1.750 0.000 0.211 [MN/m2]
					8.800 2.550 0.000 0.211 [MN/m2]
Area	QGRP	3	ZZ	3.000	8.000 2.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent
					9.200 1.750 0.000 PG 0.211 [MN/m2]
					10.000 1.750 0.000 0.211 [MN/m2]
Area	QGRP	4	ZZ	3.000	10.000 2.550 0.000 0.211 [MN/m2]
					9.200 2.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent
					9.200 1.750 0.000 PG 0.211 [MN/m2]
Area	QGRP	3	ZZ	3.000	10.000 1.750 0.000 0.211 [MN/m2]
					10.000 2.550 0.000 0.211 [MN/m2]
					9.200 2.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent
Area	QGRP	4	ZZ	3.000	9.200 1.750 0.000 PG 0.211 [MN/m2]
					10.000 1.750 0.000 0.211 [MN/m2]
					10.000 2.550 0.000 0.211 [MN/m2]
					9.200 2.550 0.000 0.211 [MN/m2]
Area	QGRP	3	ZZ	3.000	(--) activated 0.00 percent
					9.200 1.750 0.000 PG 0.211 [MN/m2]
					10.000 1.750 0.000 0.211 [MN/m2]
					10.000 2.550 0.000 0.211 [MN/m2]
Area	QGRP	4	ZZ	3.000	9.200 2.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent

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					9.000 -0.250 0.000 PG 0.211 [MN/m2]
					9.800 -0.250 0.000 0.211 [MN/m2]
					9.800 0.550 0.000 0.211 [MN/m2]
					9.000 0.550 0.000 0.211 [MN/m2]
Area	QGRP	3	ZZ	3.000	(--) activated 0.00 percent
					9.000 -0.250 0.000 PG 0.211 [MN/m2]
					9.800 -0.250 0.000 0.211 [MN/m2]
					9.800 0.550 0.000 0.211 [MN/m2]
Area	QGRP	4	ZZ	3.000	9.000 0.550 0.000 0.211 [MN/m2]
					(--) activated 62.50 percent
					10.200 -0.250 0.000 PG 0.211 [MN/m2]
					11.000 -0.250 0.000 0.211 [MN/m2]
Area	QGRP	3	ZZ	3.000	11.000 0.550 0.000 0.211 [MN/m2]
					10.200 0.550 0.000 0.211 [MN/m2]
					(--) activated 0.00 percent

OPISTIKH MEΛETH/TECHNIKO TB/L=10.70
FORTISEIS ΦΑΣΗ-2

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
		w[m]	X[m] Y[m] Z[m]		
Area			10.200 -0.250 0.000	PG	0.211 [MN/m2]
			11.000 -0.250 0.000		0.211 [MN/m2]
			11.000 0.550 0.000		0.211 [MN/m2]
			10.200 0.550 0.000		0.211 [MN/m2]
Area	QGRP	4 ZZ 3.000	(--)	activated	0.00 percent
			9.000 1.750 0.000	PG	0.211 [MN/m2]
			9.800 1.750 0.000		0.211 [MN/m2]
			9.800 2.550 0.000		0.211 [MN/m2]
			9.000 2.550 0.000		0.211 [MN/m2]
Area	QGRP	3 ZZ 3.000	(--)	activated	0.00 percent
			9.000 1.750 0.000	PG	0.211 [MN/m2]
			9.800 1.750 0.000		0.211 [MN/m2]
			9.800 2.550 0.000		0.211 [MN/m2]
			9.000 2.550 0.000		0.211 [MN/m2]
Area	QGRP	4 ZZ 3.000	(--)	activated	0.00 percent
			10.200 1.750 0.000	PG	0.211 [MN/m2]
			11.000 1.750 0.000		0.211 [MN/m2]
			11.000 2.550 0.000		0.211 [MN/m2]
			10.200 2.550 0.000		0.211 [MN/m2]
Area	QGRP	3 ZZ 3.000	(--)	activated	0.00 percent
			10.200 1.750 0.000	PG	0.211 [MN/m2]
			11.000 1.750 0.000		0.211 [MN/m2]
			11.000 2.550 0.000		0.211 [MN/m2]
			10.200 2.550 0.000		0.211 [MN/m2]
	QGRP	4 ZZ 3.000	(--)	activated	0.00 percent

Load Case 70 ΟΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 2.50-K0 (ΦΑΣΗ-
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 1.350 0.000	PXX	0.001 [MN/m2]
			0.000 1.350 0.800		0.001 [MN/m2]
			0.000 -1.350 0.800		0.001 [MN/m2]
			0.000 -1.350 0.000		0.001 [MN/m2]
	QGRP	8 3.000		activated	100.00 percent

Load Case 71 ΟΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 2.50-K0 (ΦΑΣΗ-
Factor forces and moments 1.000

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
		w[m]	X[m] Y[m] Z[m]		
Area			9.500 1.350 0.000	PXX	-0.001 [MN/m2]
			9.500 1.350 0.800		-0.001 [MN/m2]
			9.500 -1.350 0.800		-0.001 [MN/m2]
			9.500 -1.350 0.000		-0.001 [MN/m2]
	QGRP	8 3.000		activated	100.00 percent

Load Case 72 ΟΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 6.50-K0 (ΦΑΣΗ-
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 1.350 0.000	PXX	0.003 [MN/m2]
			0.000 1.350 0.800		0.003 [MN/m2]
			0.000 -1.350 0.800		0.003 [MN/m2]
			0.000 -1.350 0.000		0.003 [MN/m2]
	QGRP	8 3.000		activated	100.00 percent

Load Case 73 ΟΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 6.50-K0 (ΦΑΣΗ-
Factor forces and moments 1.000

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
		w[m]	X[m] Y[m] Z[m]		
Area			9.500 1.350 0.000	PXX	-0.003 [MN/m2]
			9.500 1.350 0.800		-0.003 [MN/m2]
			9.500 -1.350 0.800		-0.003 [MN/m2]
			9.500 -1.350 0.000		-0.003 [MN/m2]
	QGRP	8 3.000		activated	100.00 percent

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

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
 FORTISEIS ΦΑΣΗ-2

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
		W[m]	X[m]	Y[m]	Z[m]
Area			0.000	1.350	0.000
			0.000	1.350	0.800
			0.000	-1.350	0.800
			0.000	-1.350	0.000
QGRP	8	3.000			activated
					100.00 percent

Load Case 75 ΟΘΗΣΕΙΣ 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			9.500	1.350	0.000
			9.500	1.350	0.800
			9.500	-1.350	0.800
			9.500	-1.350	0.000
QGRP	8	3.000			activated
					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 ΔΤΝ = +33

Factor forces and moments 1.000

Load Case 86 ΔΤΝ = -20

Factor forces and moments 1.000

Load Case 87 ΔΤΜ = 13

Factor forces and moments 1.000

Load Case 88 ΔΤΜ = -7

Factor forces and moments 1.000

Load Case 90 (+ΔΤΝ)+0.75*(+ΔΤΜ)

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 (+ΔΤΝ)+0.75*(-ΔΤΜ)

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 (-ΔΤΝ)+0.75*(+ΔΤΜ)

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 (-ΔΤΝ)+0.75*(-ΔΤΜ)

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

Load Case 94 0.35*(+ΔΤΝ)+(+ΔΤΜ)

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*(+ΔΤΝ)+(-ΔΤΜ)

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*(-ΔΤΝ)+(+ΔΤΜ)

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*(-ΔΤΝ)+(-ΔΤΜ)

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

OPISTIKH MELETH/TEXNIKO TB/L=10.70
FORTISEIS FASH-2

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 -1.100 0.000	PYY	-0.480 [MN/m]
			0.500 -1.100 0.000		-0.480 [MN/m]
	QGRP 3	2.000	(--)	activated	0.00 percent
Line			0.000 -1.100 0.000	PYY	-0.480 [MN/m]
			0.500 -1.100 0.000		-0.480 [MN/m]
	QGRP 4	2.000	(--)	activated	100.00 percent
Line			0.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			0.500 -1.100 0.000		-0.480 [MNm/m]
	QGRP 3	2.000	(--)	activated	0.00 percent
Line			0.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			0.500 -1.100 0.000		-0.480 [MNm/m]
	QGRP 4	2.000	(--)	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 -1.100 0.000	PYY	-0.480 [MN/m]
			1.500 -1.100 0.000		-0.480 [MN/m]
	QGRP 3	2.000	(--)	activated	100.00 percent
Line			1.000 -1.100 0.000	PYY	-0.480 [MN/m]
			1.500 -1.100 0.000		-0.480 [MN/m]
	QGRP 4	2.000	(--)	activated	0.00 percent
Line			1.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			1.500 -1.100 0.000		-0.480 [MNm/m]
	QGRP 3	2.000	(--)	activated	100.00 percent
Line			1.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			1.500 -1.100 0.000		-0.480 [MNm/m]
	QGRP 4	2.000	(--)	activated	0.00 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 -1.100 0.000	PYY	-0.480 [MN/m]
			2.500 -1.100 0.000		-0.480 [MN/m]
	QGRP 3	2.000	(--)	activated	100.00 percent
Line			2.000 -1.100 0.000	PYY	-0.480 [MN/m]
			2.500 -1.100 0.000		-0.480 [MN/m]
	QGRP 4	2.000	(--)	activated	0.00 percent
Line			2.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			2.500 -1.100 0.000		-0.480 [MNm/m]
	QGRP 3	2.000	(--)	activated	100.00 percent
Line			2.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			2.500 -1.100 0.000		-0.480 [MNm/m]
	QGRP 4	2.000	(--)	activated	0.00 percent

Load Case 103 CRASH_-Y_Pos.4 _DECK
Factor forces and moments 1.000

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
		w[m]	x[m] y[m] z[m]		
Line			3.000 -1.100 0.000	PYY	-0.480 [MN/m]
			3.500 -1.100 0.000		-0.480 [MN/m]
	QGRP 3	2.000	(--)	activated	100.00 percent
Line			3.000 -1.100 0.000	PYY	-0.480 [MN/m]
			3.500 -1.100 0.000		-0.480 [MN/m]
	QGRP 4	2.000	(--)	activated	0.00 percent
Line			3.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			3.500 -1.100 0.000		-0.480 [MNm/m]
	QGRP 3	2.000	(--)	activated	100.00 percent
Line			3.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			3.500 -1.100 0.000		-0.480 [MNm/m]
	QGRP 4	2.000	(--)	activated	0.00 percent

Load Case 104 CRASH_-Y_Pos.5 _DECK
Factor forces and moments 1.000

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
 FORTISEIS ΦΑΣΗ-2

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
		w[m]	x[m] y[m] z[m]		
Line			4.000 -1.100 0.000	PYY	-0.480 [MN/m]
			4.500 -1.100 0.000		-0.480 [MN/m]
Line	QGRP 3	2.000	activated		100.00 percent
			4.000 -1.100 0.000	PYY	-0.480 [MN/m]
			4.500 -1.100 0.000		-0.480 [MN/m]
Line	QGRP 4	2.000	(--)	activated	0.00 percent
			4.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			4.500 -1.100 0.000		-0.480 [MNm/m]
Line	QGRP 3	2.000	activated		100.00 percent
			4.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			4.500 -1.100 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 -1.100 0.000	PYY	-0.480 [MN/m]
			5.500 -1.100 0.000		-0.480 [MN/m]
Line	QGRP 3	2.000	activated		100.00 percent
			5.000 -1.100 0.000	PYY	-0.480 [MN/m]
			5.500 -1.100 0.000		-0.480 [MN/m]
Line	QGRP 4	2.000	(--)	activated	0.00 percent
			5.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			5.500 -1.100 0.000		-0.480 [MNm/m]
Line	QGRP 3	2.000	activated		100.00 percent
			5.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			5.500 -1.100 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 -1.100 0.000	PYY	-0.480 [MN/m]
			6.500 -1.100 0.000		-0.480 [MN/m]
Line	QGRP 3	2.000	activated		100.00 percent
			6.000 -1.100 0.000	PYY	-0.480 [MN/m]
			6.500 -1.100 0.000		-0.480 [MN/m]
Line	QGRP 4	2.000	(--)	activated	0.00 percent
			6.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			6.500 -1.100 0.000		-0.480 [MNm/m]
Line	QGRP 3	2.000	activated		100.00 percent
			6.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			6.500 -1.100 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

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
		w[m]	x[m] y[m] z[m]		
Line			7.000 -1.100 0.000	PYY	-0.480 [MN/m]
			7.500 -1.100 0.000		-0.480 [MN/m]
Line	QGRP 3	2.000	activated		100.00 percent
			7.000 -1.100 0.000	PYY	-0.480 [MN/m]
			7.500 -1.100 0.000		-0.480 [MN/m]
Line	QGRP 4	2.000	(--)	activated	0.00 percent
			7.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			7.500 -1.100 0.000		-0.480 [MNm/m]
Line	QGRP 3	2.000	activated		100.00 percent
			7.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			7.500 -1.100 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

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
 FORTISEIS ΦΑΣΗ-2

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
		w[m]	X[m] Y[m] Z[m]		
Line			8.000 -1.100 0.000	PYY	-0.480 [MN/m]
			8.500 -1.100 0.000		-0.480 [MN/m]
Line	QGRP 3	2.000		activated	100.00 percent
			8.000 -1.100 0.000	PYY	-0.480 [MN/m]
			8.500 -1.100 0.000		-0.480 [MN/m]
Line	QGRP 4	2.000	(--)	activated	0.00 percent
			8.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			8.500 -1.100 0.000		-0.480 [MNm/m]
Line	QGRP 3	2.000		activated	100.00 percent
			8.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			8.500 -1.100 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 -1.100 0.000	PYY	-0.480 [MN/m]
			9.500 -1.100 0.000		-0.480 [MN/m]
Line	QGRP 3	2.000	(--)	activated	0.00 percent
			9.000 -1.100 0.000	PYY	-0.480 [MN/m]
			9.500 -1.100 0.000		-0.480 [MN/m]
Line	QGRP 4	2.000		activated	100.00 percent
			9.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			9.500 -1.100 0.000		-0.480 [MNm/m]
Line	QGRP 3	2.000	(--)	activated	0.00 percent
			9.000 -1.100 0.000	MXX	-0.480 [MNm/m]
			9.500 -1.100 0.000		-0.480 [MNm/m]
Line	QGRP 4	2.000		activated	100.00 percent

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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 ΠΥΣΕΙΣ-ΟΔΟΣΤΡΩΣΙΑ	0.000	0.000	0.116
32 PEZODROMIO	0.000	0.000	0.119
33 ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50	0.000	0.000	0.008
34 ΩΘΗΣΕΙΣ ΓΑΙΩΝ Α1-Κ0(Φ-2)	0.137	0.000	0.000
35 ΩΘΗΣΕΙΣ ΓΑΙΩΝ Α2-Κ0(Φ-2)	-0.137	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	0.068	0.000	0.000
38 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*Α1+1.0	-0.068	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	0.064
42 L.L.UDL_6.50KN/m2	0.000	0.000	0.105
50 TS_RIGHT_Posit.1	0.000	0.000	0.270
51 TS_RIGHT_Posit.2	0.000	0.000	0.270
52 TS_RIGHT_Posit.3	0.000	0.000	0.270
53 TS_RIGHT_Posit.4	0.000	0.000	0.270
54 TS_RIGHT_Posit.5	0.000	0.000	0.270
55 TS_RIGHT_Posit.6	0.000	0.000	0.270
56 TS_RIGHT_Posit.7	0.000	0.000	0.270
57 TS_RIGHT_Posit.8	0.000	0.000	0.270
58 TS_RIGHT_Posit.9	0.000	0.000	0.186
59 TS_RIGHT_Posit.10	0.000	0.000	0.084
70 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 2.50	0.013	0.000	0.000
71 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 2.50	-0.013	0.000	0.000
72 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 6.50	0.034	0.000	0.000
73 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 6.50	-0.034	0.000	0.000
74 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 TS1-	0.187	0.000	0.000
75 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 TS1-	-0.187	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 ΤΒ/Λ=10.70
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	-0.116
	0.000	0.000	0.116
32 ΡΕΖΟΔΡΟΜΙΟ	0.000	0.000	-0.119
	0.000	0.000	0.119
33 ΠΡΟΣΘΕΤΗ ΟΔΟΣΤΡΩΣΙΑ 0.50	0.000	0.000	-0.008
	0.000	0.000	0.008
34 ΩΘΗΣΕΙΣ ΓΑΙΩΝ Α1-Κ0(Φ-2)	-0.137	0.000	0.000
	0.137	0.000	0.000
35 ΩΘΗΣΕΙΣ ΓΑΙΩΝ Α2-Κ0(Φ-2)	0.137	0.000	0.000
	-0.137	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	-0.068	0.000	0.000
	0.068	0.000	0.000
38 ΩΘΗΣΕΙΣ ΓΑΙΩΝ:0.5*Α1+1.0	0.068	0.000	0.000
	-0.068	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	-0.064
	0.000	0.000	0.064
42 L.L.UDL_6.50KN/m2	0.000	0.000	-0.105
	0.000	0.000	0.105
50 TS_RIGHT_Posit.1	0.000	0.000	-0.270
	0.000	0.000	0.270
51 TS_RIGHT_Posit.2	0.000	0.000	-0.270
	0.000	0.000	0.270
52 TS_RIGHT_Posit.3	0.000	0.000	-0.270
	0.000	0.000	0.270
53 TS_RIGHT_Posit.4	0.000	0.000	-0.270
	0.000	0.000	0.270
54 TS_RIGHT_Posit.5	0.000	0.000	-0.270
	0.000	0.000	0.270
55 TS_RIGHT_Posit.6	0.000	0.000	-0.270
	0.000	0.000	0.270
56 TS_RIGHT_Posit.7	0.000	0.000	-0.270
	0.000	0.000	0.270
57 TS_RIGHT_Posit.8	0.000	0.000	-0.270
	0.000	0.000	0.270
58 TS_RIGHT_Posit.9	0.000	0.000	-0.186
	0.000	0.000	0.186
59 TS_RIGHT_Posit.10	0.000	0.000	-0.084
	0.000	0.000	0.084
70 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 2.50	-0.013	0.000	0.000
	0.013	0.000	0.000
71 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 2.50	0.013	0.000	0.000
	-0.013	0.000	0.000
72 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 6.50	-0.034	0.000	0.000
	0.034	0.000	0.000
73 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 6.50	0.034	0.000	0.000
	-0.034	0.000	0.000
74 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α1 TS1-	-0.186	0.000	0.000
	0.187	0.000	0.000
75 ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ Α2 TS1-	0.186	0.000	0.000
	-0.187	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 ΤΒ/Λ=10.70
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

Sum of Reactions and Loads

LC Title	PXX[MN]	PYY[MN]	PZZ[MN]
100 CRASH_-Y_Pos.1 _DECK	0.000	0.239	0.000
101 CRASH_-Y_Pos.2 _DECK	0.000	-0.240	0.000
102 CRASH_-Y_Pos.3 _DECK	0.000	0.239	0.000
103 CRASH_-Y_Pos.4 _DECK	0.000	-0.240	0.000
104 CRASH_-Y_Pos.5 _DECK	0.000	0.239	0.000
105 CRASH_-Y_Pos.6 _DECK	0.000	-0.240	0.000
106 CRASH_-Y_Pos.7 _DECK	0.000	0.239	0.000
107 CRASH_-Y_Pos.8 _DECK	0.000	-0.240	0.000
108 CRASH_-Y_Pos.9 _DECK	0.000	0.239	0.000
109 CRASH_-Y_Pos.10 _DECK	0.000	-0.240	0.000

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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

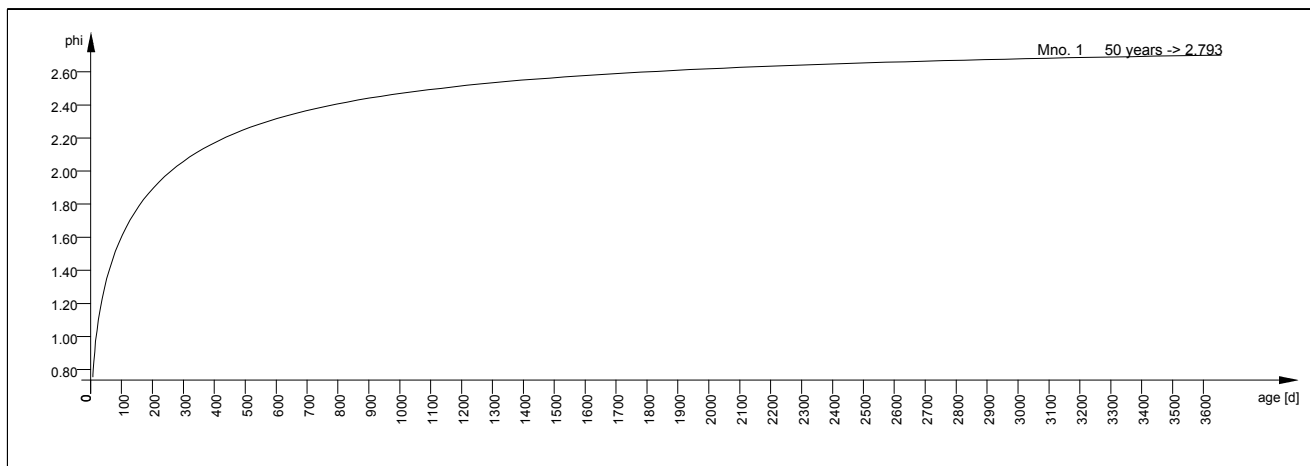
Grp	active from CS	active until CS	deadload from CS	Hfix from CS	Bedd from CS	Deck from CS	T0 d	FAC1	PHIF	QUEA	QEMX
1	10	999	10	40		20	7		1.000		
2	10	999	10			20	7				
3	40	999	40			20	7			0.000	
4	40	999	40			20	7			0.000	
8	10	999	10			20	7				
9	10	999	10			20	7				
10	10	999	10			20	7				
11	10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

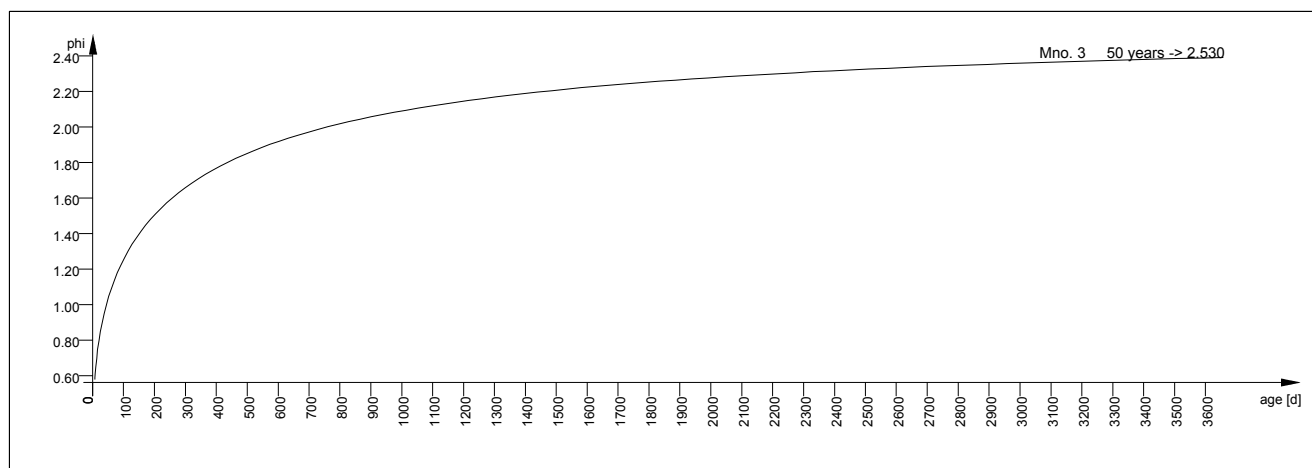
LC	Type	active from CS	active until CS	faktor
2	G_1	10	999	1.000000
3	G_2	20	999	1.000000
31	G_2	40	999	1.000000
32	G_2	40	999	1.000000
33	G_2	40	999	1.000000

Creep development material no. 1 deff= 0.194 m T0= 7 d Temp= 20 ° RH= 70

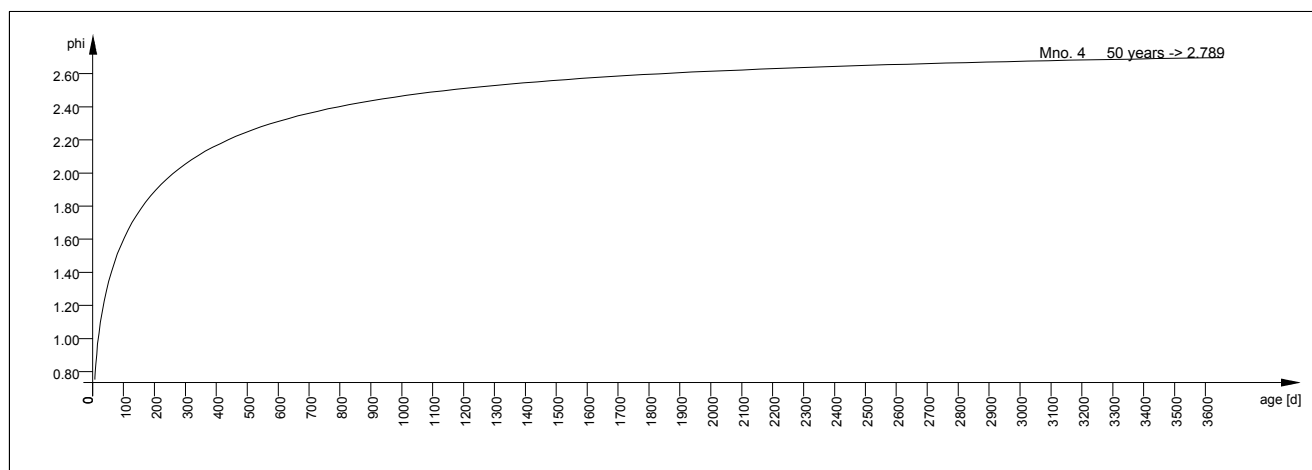


Creep development material no. 3 deff= 0.474 m T0= 7 d Temp= 20 ° RH= 70

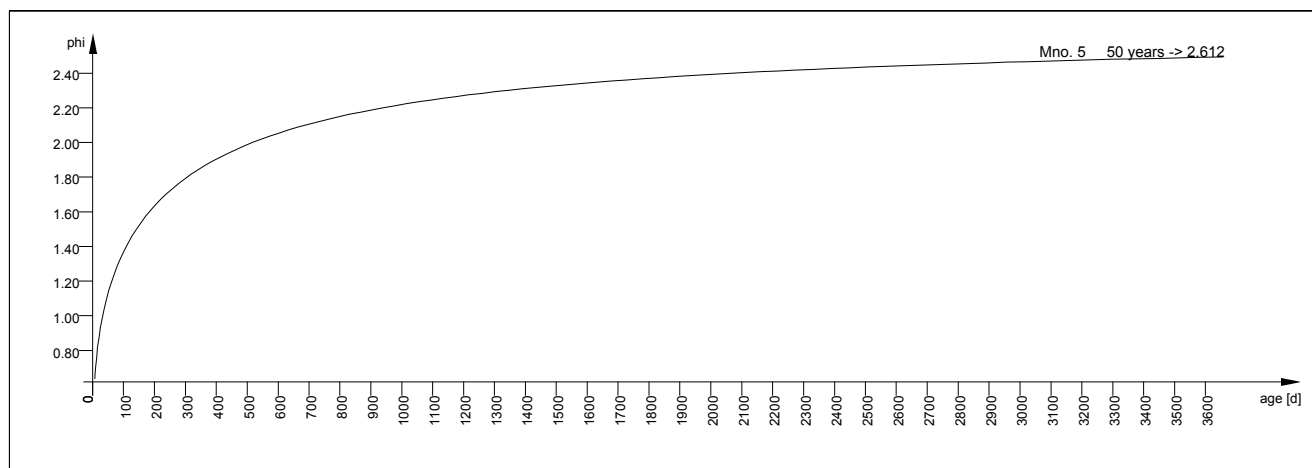
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
ΦΑΣΕΙΣ ΚΑΤΑΣΚΕΥΗΣ-ΥΠΟΛΟΓΙΣΜΟΣ ΕΡΠΥΣΜΟΥ&ΣΥΣΤ.ΞΗΡΑΝΣΗΣ



Creep development material no. 4 $deff = 0.196$ m $\tau_0 = 7$ d Temp= 20 ° RH= 70

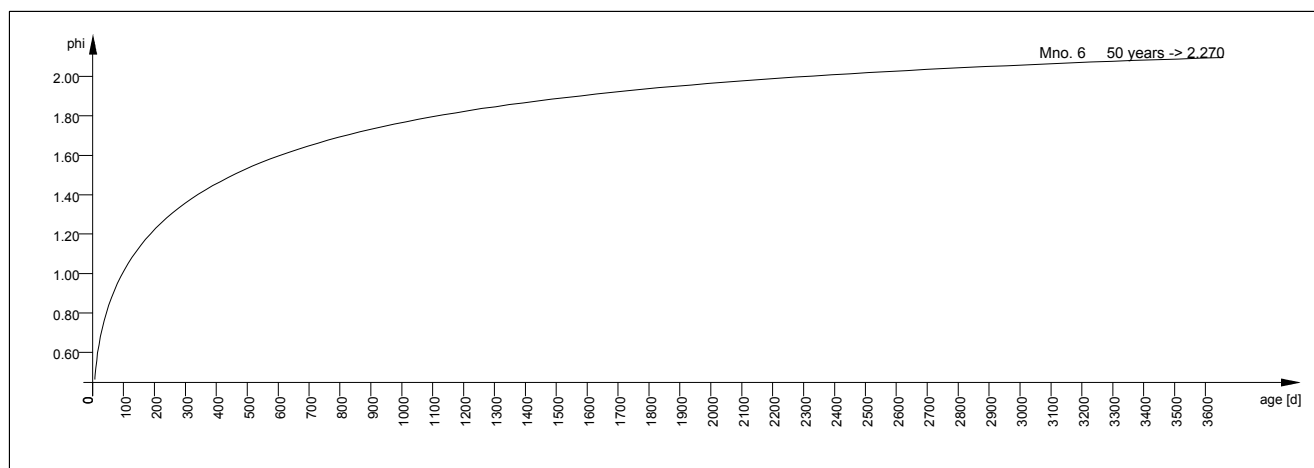


Creep development material no. 5 $deff = 0.350$ m $\tau_0 = 7$ d Temp= 20 ° RH= 70

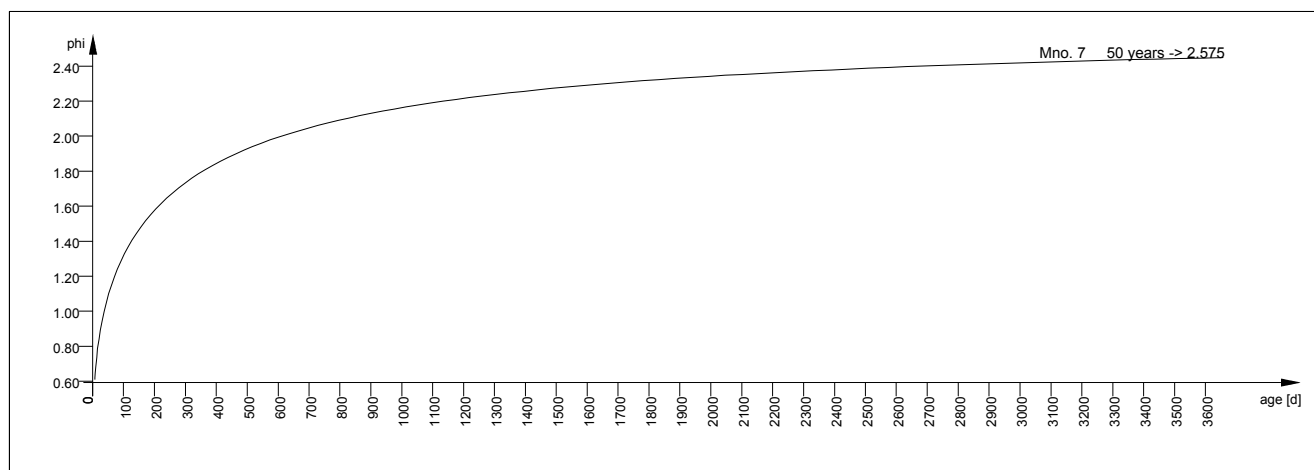


Creep development material no. 6 $deff = 1.680$ m $\tau_0 = 7$ d Temp= 20 ° RH= 70

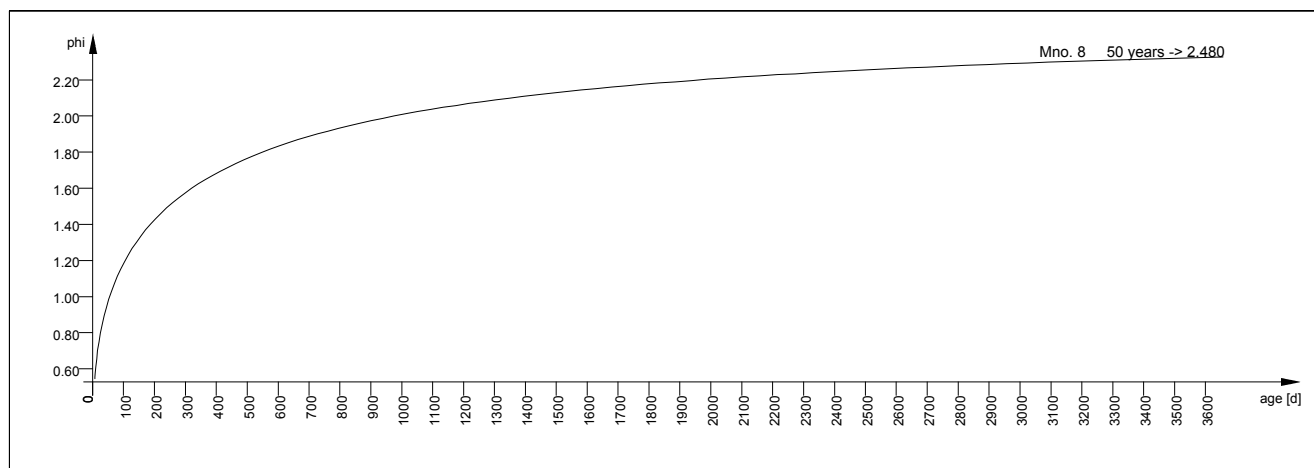
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
ΦΑΣΕΙΣ ΚΑΤΑΣΚΕΥΗΣ-ΥΠΟΛΟΓΙΣΜΟΣ ΕΡΠΥΣΜΟΥ&ΣΥΣΤ.ΞΗΡΑΝΣΗΣ



Creep development material no. 7 $deff = 0.400$ m $\tau_0 = 7$ d Temp= 20 ° RH= 70

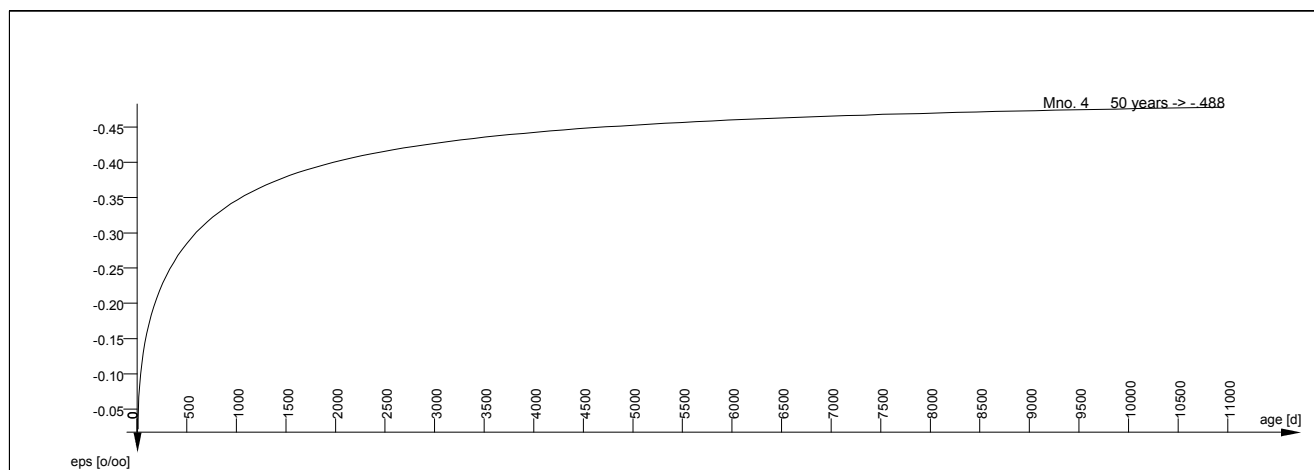
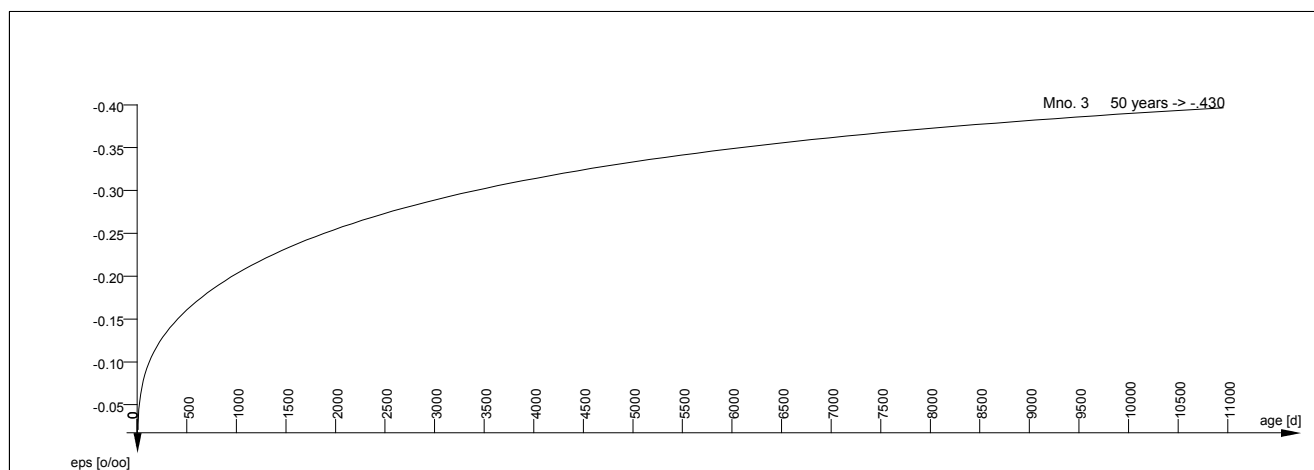
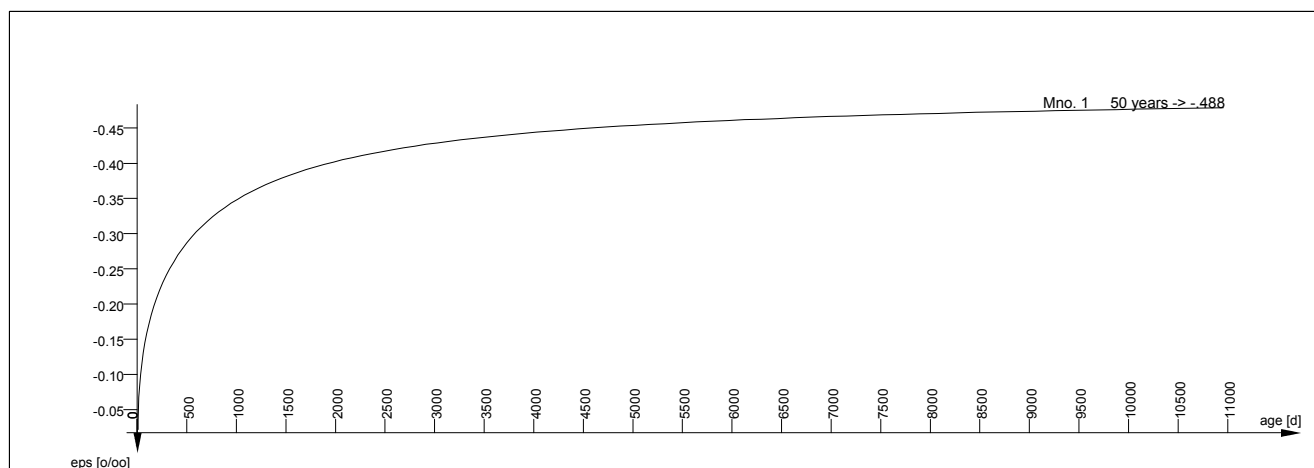


Creep development material no. 8 $deff = 0.574$ m $\tau_0 = 7$ d Temp= 20 ° RH= 70

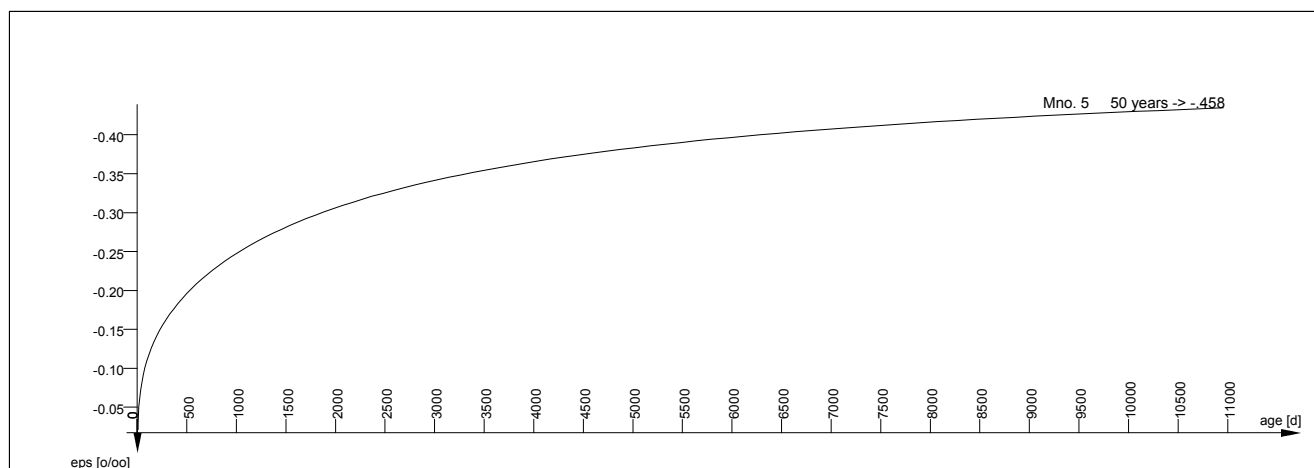


Shrinkage development material no. 1 $deff = 0.194$ m Temp= 20 ° RH= 70

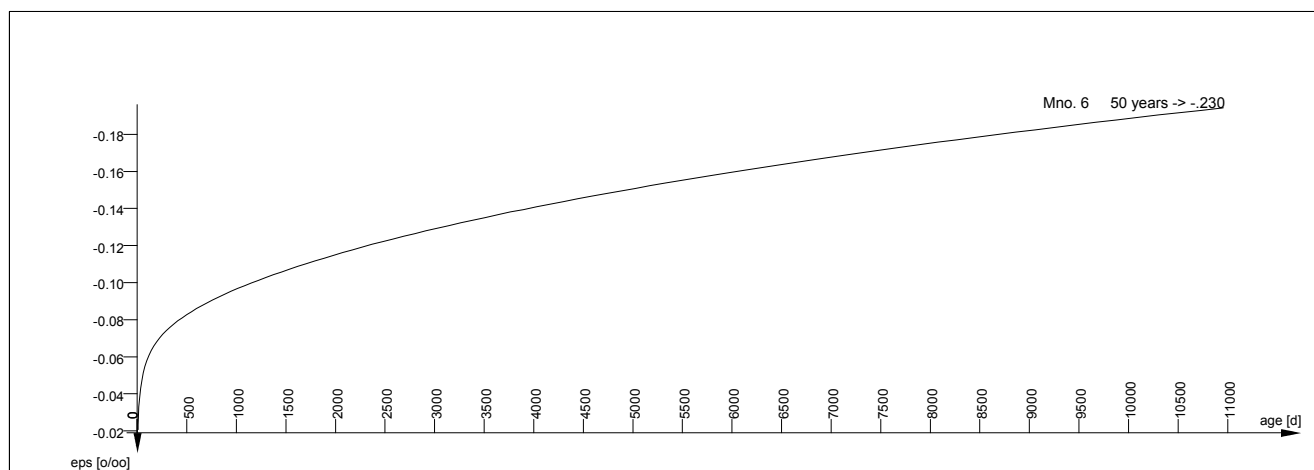
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
 ΦΑΣΕΙΣ ΚΑΤΑΣΚΕΥΗΣ-ΥΠΟΛΟΓΙΣΜΟΣ ΕΡΠΥΣΜΟΥ&ΣΥΣΤ.ΞΗΡΑΝΣΗΣ



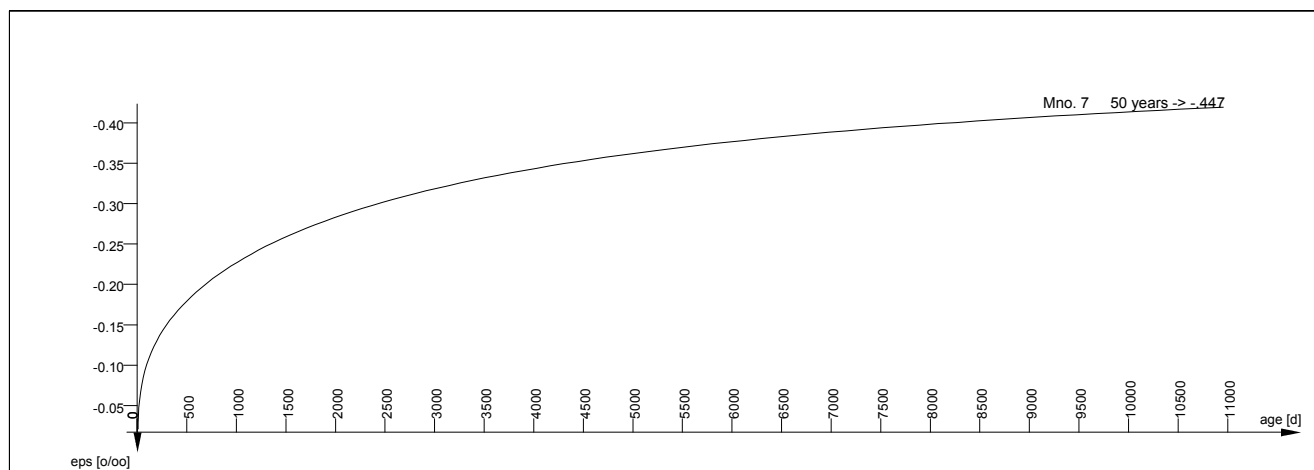
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
 ΦΑΣΕΙΣ ΚΑΤΑΣΚΕΥΗΣ-ΥΠΟΛΟΓΙΣΜΟΣ ΕΡΠΥΣΜΟΥ&ΣΥΣΤ.ΞΗΡΑΝΣΗΣ



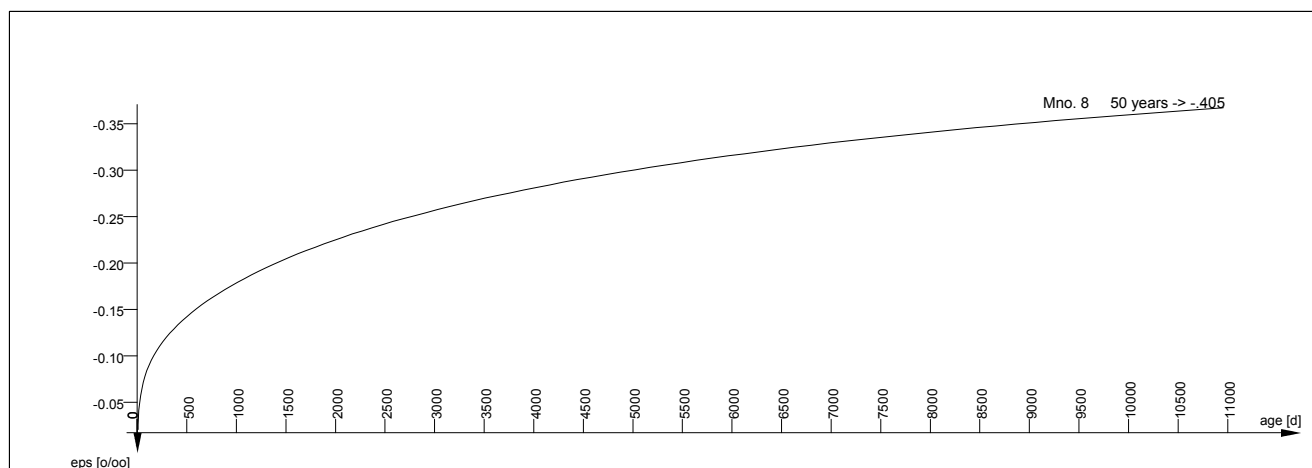
Shrinkage development material no. 6 deff= 1.680 m Temp= 20 ° RH= 70



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



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

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΦΑΣΕΙΣ ΚΑΤΑΣΚΕΥΗΣ-ΥΠΟΛΟΓΙΣΜΟΣ ΕΡΠΥΣΜΟΥ&ΣΥΣΤ.ΞΗΡΑΝΣΗΣ


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	0.194	7	0.76	0.47	0.36	0.49	0.39	0.21	0.09	0.03	2.80 / 1.14 **
1	4	beam	0.196	7	-	-	1.40	0.63	0.43	0.22	0.09	0.03	2.80 / 1.14 **
2	3	beam	0.474	7	0.58	0.37	0.30	0.43	0.41	0.28	0.13	0.05	2.55 / 1.14 **
3	5	-	0.350	7	-	-	1.19	0.57	0.44	0.26	0.11	0.04	2.63 / 1.14 **
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 **
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 *10Λ-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
			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	0.194	7	-21.8	-81.6	-55.1	-88.6	-101.	-82.8	-45.3	-18.4	-494.
1	4	beam	0.196	7	-	-	-128.	-107.	-108.	-86.0	-46.6	-18.8	-494.
2	3	beam	0.474	7	-21.0	-42.7	-28.5	-45.7	-64.7	-89.5	-95.3	-66.8	-454.
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.
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 ΤΒ/L=10.70

5) ΦΑΣΗ-1_ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ ULS-ΣΤΑΤΙΚΑ

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
 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

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Selected Beam Elements

FROM	TO	INC	X-VALUE	NC	MEMBER	CS0	CS1	CS2	CS3	CS4	CS5
10001											
10005											
10006											
10010											
10011											
10015											
10016											
10020											
12000	12100	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. 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*Α1+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*Α1+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*Α1+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*Α1+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/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/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	
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	
12	0	1.150	-456.52	-25.00	456.52	25.00	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
FASH-1_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

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

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		
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	1.04		0.93T	0.08		0.03	
10001	0.250	8	0.01	1.20		0.88T			0.32	
10005	0.000	8	0.07	9.41		9.02T			0.39	
10005	0.300	8	0.07	9.38		9.12T	0.25			
10006	0.000	8	0.10	13.28		13.03T	0.25			
10006	0.250	8	0.10	13.53		13.14T			0.38	
10010	0.000	8	0.02	1.99		1.66T			0.33	
10010	0.300	8	0.01	1.84		1.75T	0.09			
10011	0.000	8	0.01	0.97		0.87T	0.08		0.03	
10011	0.250	8	0.01	1.14		0.82T			0.32	
10015	0.000	8	0.05	7.14		6.74T			0.39	
10015	0.300	8	0.05	6.90		6.64T	0.25			
10016	0.000	8	0.08	10.92		10.67T	0.25			
10016	0.250	8	0.08	10.94		10.56T			0.38	
10020	0.000	8	0.01	1.88		1.55T			0.33	
10020	0.300	8	0.01	1.61		1.52T	0.09			
12001	0.000	9	0.30	15.08		15.08T				
12001	1.000	9	0.30	15.08		15.08T				
12002	0.000	9	0.30	15.08		15.08T				
12002	1.000	9	0.30	15.08		15.08T				
12003	0.000	9	0.30	15.08		15.08T				
12003	1.000	9	0.49	24.69		24.69T				
12004	0.000	9	0.30	15.08		15.08T				
12004	1.000	9	0.44	21.88		21.88T				
12005	0.000	9	0.44	21.88		21.88T				
12005	1.000	9	0.82	41.20		41.20T				
12006	0.000	9	0.82	41.20		41.20T				
12006	1.000	9	0.91	45.84		45.84T				
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	0.30	15.08		15.08T				
12009	0.000	9	0.30	15.08		15.08T				
12009	1.000	9	0.53	26.51		26.51T				
12010	0.000	9	0.30	15.08		15.08T				
12010	1.000	9	0.43	21.43		21.43T				
12011	0.000	9	0.43	21.43		21.43T				
12011	1.000	9	0.55	27.55		27.55T				
12012	0.000	9	0.55	27.55		27.55T				
12012	1.000	9	0.67	33.92		33.92T				
12013	0.000	9	0.49	24.69		24.69T				
12013	1.000	9	0.87	43.59		43.59T				
12014	0.000	9	0.87	43.54		43.54T				
12014	1.000	9	0.99	49.68		49.68T				
12015	0.000	9	0.99	49.64		49.64T				
12015	1.000	9	0.92	46.36		46.36T				
12016	0.000	9	0.92	46.34		46.34T				
12016	1.000	9	0.75	37.56		37.56T				
12017	0.000	9	0.75	37.54		37.54T				
12017	1.000	9	0.53	26.59		26.59T				
12018	0.000	9	0.53	26.59		26.59T				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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 [cm2]	shift by [m]	Lay-0&5 [cm2]	Lay-1&6 [cm2]	Lay-2&7 [cm2]	Lay-3&8 [cm2]	Lay-4&9 [cm2]
12018	1.000	9	0.31	15.81			15.81T			
12019	0.000	9	0.31	15.81			15.81T			
12019	1.000	9	0.30	15.08			15.08T			
12020	0.000	9	0.30	15.08			15.08T			
12020	1.000	9	0.30	15.08			15.08T			
12021	0.000	9	0.30	15.08			15.08T			
12021	1.000	9	0.30	15.08			15.08T			
12022	0.000	9	0.30	15.08			15.08T			
12022	1.000	9	0.30	15.08			15.08T			
12023	0.000	9	0.30	15.08			15.08T			
12023	1.000	9	0.30	15.08			15.08T			
12024	0.000	9	0.30	15.08			15.08T			
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			15.08'			
12034	1.000	9	0.30	15.08			15.08'			
12035	0.000	9	0.91	45.83			45.83T			
12035	1.000	9	0.85	42.68			42.68T			
12036	0.000	9	0.85	42.65			42.65T			
12036	1.000	9	0.69	34.75			34.75T			
12037	0.000	9	0.69	34.74			34.74T			
12037	1.000	9	0.50	24.90			24.90T			
12038	0.000	9	0.50	24.89			24.89T			
12038	1.000	9	0.30	15.13			15.13T			
12039	0.000	9	0.30	15.12			15.12T			
12039	1.000	9	0.30	15.08			15.08T			
12040	0.000	9	0.30	15.08			15.08T			
12040	1.000	9	0.30	15.08			15.08T			
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	0.30	15.08			15.08T			
12043	0.000	9	0.30	15.08			15.08T			
12043	1.000	9	0.30	15.08			15.08T			
12044	0.000	9	0.30	15.08			15.08T			
12044	1.000	9	0.30	15.08			15.08T			
12045	0.000	9	0.30	15.08			15.08T			
12045	1.000	9	0.30	15.08			15.08T			
12046	0.000	9	0.30	15.08			15.08T			
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			15.08'			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	shift by	Lay-0&5	Lay-1&6	Lay-2&7	Lay-3&8	Lay-4&9
			[--]	[cm2]	[m]	[cm2]	[cm2]	[cm2]	[cm2]	[cm2]
12056	1.000	9	0.30	15.08			15.08'			
12057	0.000	9	0.53	26.51			26.51T			
12057	1.000	9	0.80	40.24			40.24T			
12058	0.000	9	0.80	40.20			40.20T			
12058	1.000	9	0.86	43.23			43.23T			
12059	0.000	9	0.86	43.21			43.21T			
12059	1.000	9	0.77	38.77			38.77T			
12060	0.000	9	0.77	38.75			38.75T			
12060	1.000	9	0.60	30.24			30.24T			
12061	0.000	9	0.60	30.23			30.23T			
12061	1.000	9	0.41	20.36			20.36T			
12062	0.000	9	0.41	20.36			20.36T			
12062	1.000	9	0.30	15.08			15.08T			
12063	0.000	9	0.30	15.08			15.08T			
12063	1.000	9	0.30	15.08			15.08T			
12064	0.000	9	0.30	15.08			15.08T			
12064	1.000	9	0.30	15.08			15.08T			
12065	0.000	9	0.30	15.08			15.08T			
12065	1.000	9	0.30	15.08			15.08T			
12066	0.000	9	0.30	15.08			15.08T			
12066	1.000	9	0.30	15.08			15.08T			
12067	0.000	9	0.30	15.08			15.08T			
12067	1.000	9	0.30	15.08			15.08T			
12068	0.000	9	0.30	15.08			15.08T			
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			15.08'			
12078	1.000	9	0.30	15.08			15.08'			
12079	0.000	9	0.67	33.92			33.92T			
12079	1.000	9	0.72	36.36			36.36T			
12080	0.000	9	0.72	36.34			36.34T			
12080	1.000	9	0.65	32.56			32.56T			
12081	0.000	9	0.65	32.54			32.54T			
12081	1.000	9	0.50	25.31			25.31T			
12082	0.000	9	0.50	25.31			25.31T			
12082	1.000	9	0.34	16.89			16.89T			
12083	0.000	9	0.34	16.89			16.89T			
12083	1.000	9	0.30	15.08			15.08T			
12084	0.000	9	0.30	15.08			15.08T			
12084	1.000	9	0.30	15.08			15.08T			
12085	0.000	9	0.30	15.08			15.08T			
12085	1.000	9	0.30	15.08			15.08T			
12086	0.000	9	0.30	15.08			15.08T			
12086	1.000	9	0.30	15.08			15.08T			
12087	0.000	9	0.30	15.08			15.08T			
12087	1.000	9	0.30	15.08			15.08T			
12088	0.000	9	0.30	15.08			15.08T			
12088	1.000	9	0.30	15.08			15.08T			
12089	0.000	9	0.30	15.08			15.08T			
12089	1.000	9	0.30	15.08			15.08T			
12090	0.000	9	0.30	15.08			15.08T			
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			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	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]
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			15.08'			
12100	1.000	9	0.30	15.08			15.08'			

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	0.014	0.135	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
Cross sect.	9	0.000	0.000	0.238	0.001	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
<hr/>										
Total System		0.000	0.000	0.238	0.135	0.000	0.000	0.000	1.000	0.000
		0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000

OPISTIKH MELETH/TEKNIKO TB/L=10.70
FASH-1_ULS_DOKOI

Selected Beam Elements

FROM	TO	INC	X-VALUE	NC	MEMBER	CS0	CS1	CS2	CS3	CS4	CS5
1000	1036	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. 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	
8	0	1.500	-14.17	-2.00	0.00	0.00	

OPISTIKH MELETH/TEKNIKO TB/L=10.70
FASH-1_ULS_DOKOI

MNo.	temp lev.	Material- safety	max.compr stress [MPa]	at strain [o/oo]	max.tens stress [MPa]	at strain [o/oo]	tension- stiffening [MPa]
9	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]	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	
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	0.04	2.37		2.37				
1001	0.692	1	0.07	4.05		2.37	1.68			
1002	0.000	1	0.07	4.05		2.37	1.68			
1002	0.692	1	0.10	5.46		2.37	3.08			
1003	0.000	1	0.10	5.46		2.37	3.08			
1003	0.692	1	0.12	6.58		2.37	4.21			
1004	0.000	1	0.12	6.58		2.37	4.21			
1004	0.692	1	0.14	7.39		2.37	5.02			
1005	0.000	1	0.14	7.39		2.37	5.02			
1005	0.692	1	0.15	7.90		2.37	5.53			
1006	0.000	1	0.15	7.90		2.37	5.53			
1006	0.692	1	0.15	8.08		2.37	5.70			
1007	0.000	1	0.15	8.08		2.37'	5.70			
1007	0.692	1	0.15	7.90		2.37'	5.53			
1008	0.000	1	0.15	7.90		2.37'	5.53			
1008	0.692	1	0.14	7.39		2.37'	5.02			
1009	0.000	1	0.14	7.39		2.37	5.02			
1009	0.692	1	0.12	6.58		2.37	4.21			
1010	0.000	1	0.12	6.58		2.37	4.21			
1010	0.692	1	0.10	5.46		2.37	3.08			
1011	0.000	1	0.10	5.46		2.37'	3.08			
1011	0.692	1	0.07	4.05		2.37'	1.68			
1012	0.000	1	0.07	4.05		2.37'	1.68			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
1012	0.692	1	0.04	2.37		2.37				
1013	0.000	1	0.04	2.37		2.37				
1013	0.692	1	0.07	4.05		2.37	1.68			
1014	0.000	1	0.07	4.05		2.37	1.68			
1014	0.692	1	0.10	5.46		2.37	3.08			
1015	0.000	1	0.10	5.46		2.37	3.08			
1015	0.692	1	0.12	6.58		2.37	4.21			
1016	0.000	1	0.12	6.58		2.37	4.21			
1016	0.692	1	0.14	7.39		2.37	5.02			
1017	0.000	1	0.14	7.39		2.37	5.02			
1017	0.692	1	0.15	7.90		2.37	5.53			
1018	0.000	1	0.15	7.90		2.37	5.53			
1018	0.692	1	0.15	8.08		2.37	5.70			
1019	0.000	1	0.15	8.08		2.37	5.70			
1019	0.692	1	0.15	7.90		2.37	5.53			
1020	0.000	1	0.15	7.90		2.37	5.53			
1020	0.692	1	0.14	7.39		2.37	5.02			
1021	0.000	1	0.14	7.39		2.37	5.02			
1021	0.692	1	0.12	6.58		2.37	4.21			
1022	0.000	1	0.12	6.58		2.37'	4.21			
1022	0.692	1	0.10	5.46		2.37'	3.08			
1023	0.000	1	0.10	5.46		2.37'	3.08			
1023	0.692	1	0.07	4.05		2.37'	1.68			
1024	0.000	1	0.07	4.05		2.37'	1.68			
1024	0.692	1	0.04	2.37		2.37				
1025	0.000	1	0.04	2.37		2.37				
1025	0.692	1	0.07	4.05		2.37	1.68			
1026	0.000	1	0.07	4.05		2.37	1.68			
1026	0.692	1	0.10	5.46		2.37	3.08			
1027	0.000	1	0.10	5.46		2.37	3.08			
1027	0.692	1	0.12	6.58		2.37	4.21			
1028	0.000	1	0.12	6.58		2.37	4.21			
1028	0.692	1	0.14	7.39		2.37	5.02			
1029	0.000	1	0.14	7.39		2.37	5.02			
1029	0.692	1	0.15	7.90		2.37	5.53			
1030	0.000	1	0.15	7.90		2.37	5.53			
1030	0.692	1	0.15	8.08		2.37	5.70			
1031	0.000	1	0.15	8.08		2.37'	5.70			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
FASH-1_ULS_DOKOI

Longitudinal Reinforcements Accumulated minimum

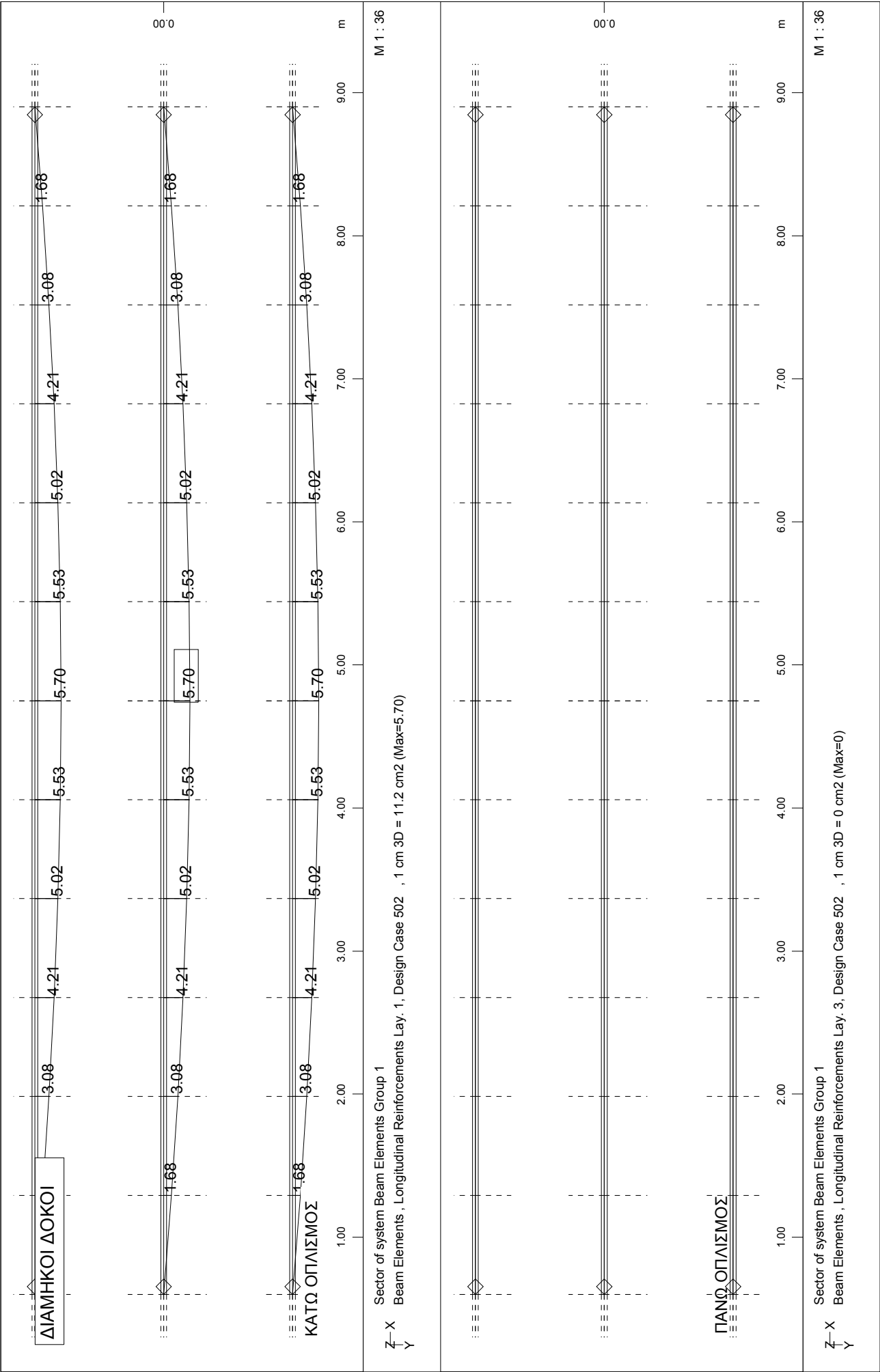
Note: Layer includes reinforcements for torsion if followed by T

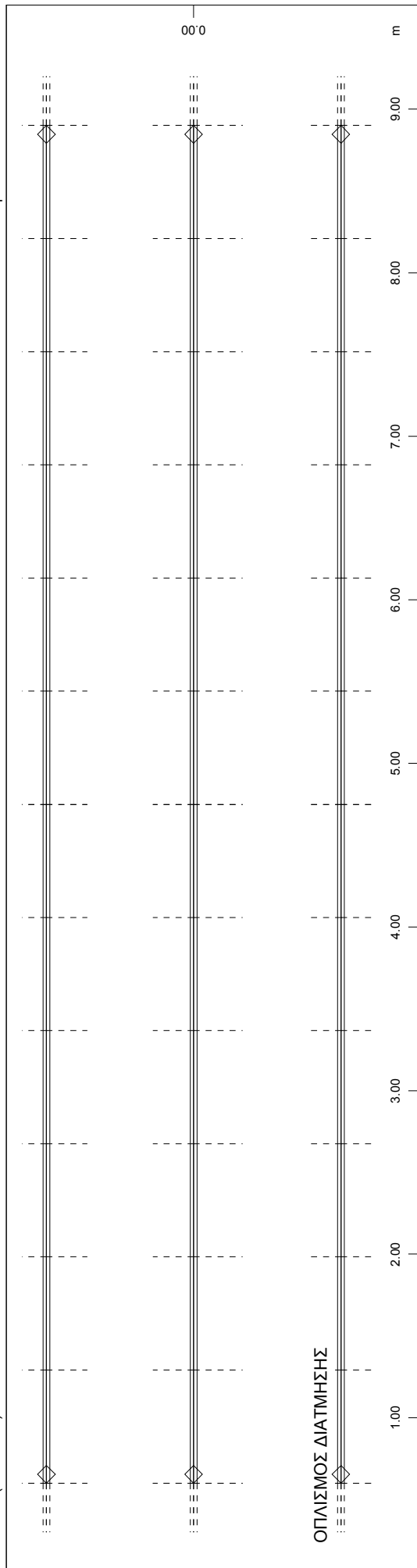
Note: Layer has only compression reinforcements if followed by a quote

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]
1031	0.692	1	0.15	7.90		2.37'	5.53			
1032	0.000	1	0.15	7.90		2.37'	5.53			
1032	0.692	1	0.14	7.39		2.37'	5.02			
1033	0.000	1	0.14	7.39		2.37	5.02			
1033	0.692	1	0.12	6.58		2.37	4.21			
1034	0.000	1	0.12	6.58		2.37	4.21			
1034	0.692	1	0.10	5.46		2.37	3.08			
1035	0.000	1	0.10	5.46		2.37'	3.08			
1035	0.692	1	0.07	4.05		2.37'	1.68			
1036	0.000	1	0.07	4.05		2.37'	1.68			
1036	0.692	1	0.04	2.37		2.37				

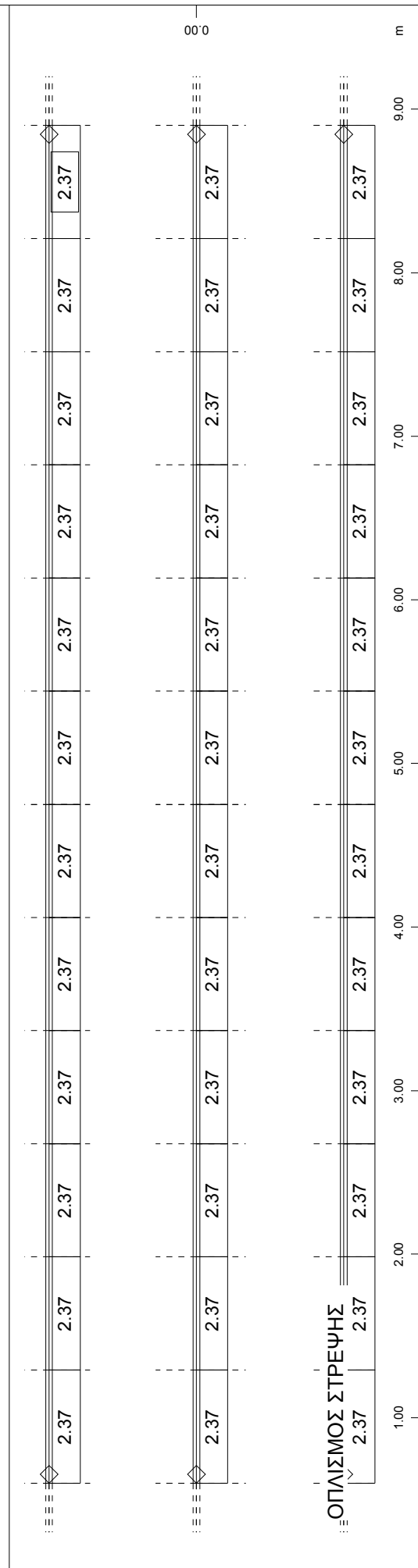
Maximum Degree of Utilization

Maximum Deg. of Freedom											
		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	1.000	0.000
		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	0.000	0.000	0.000	0.000	0.000	0.000	1.000	0.000
		0.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000



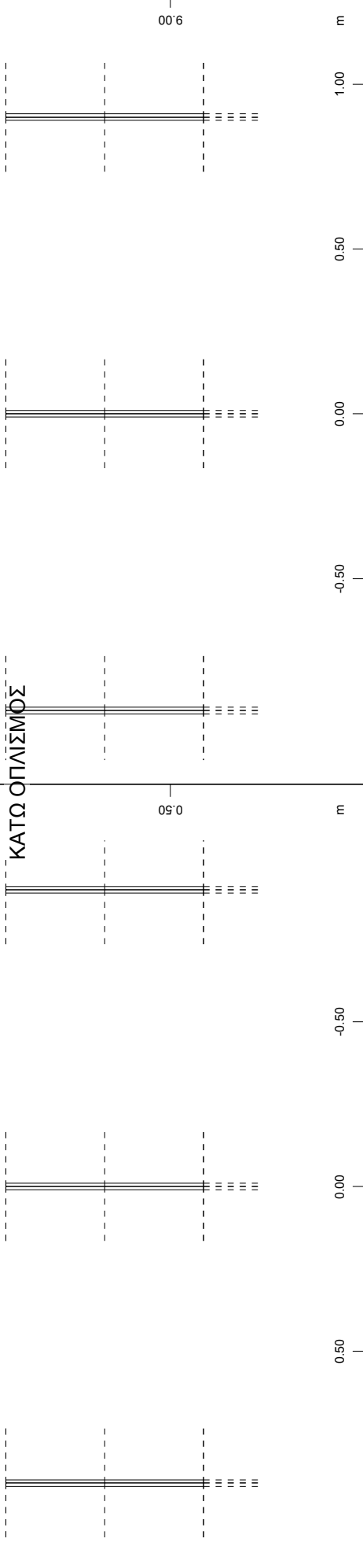


7- X
Sector of system Beam Elements Group 1
Beam Elements : Shear reinforcements (maximum), Design Case 502 , 1 cm 3D = 0 cm2/m (Max=0)

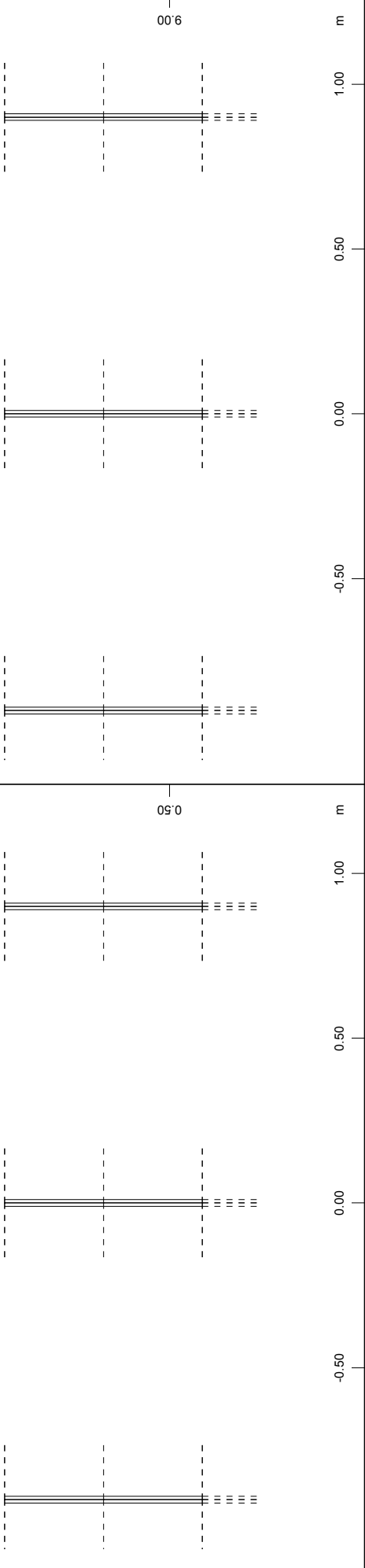


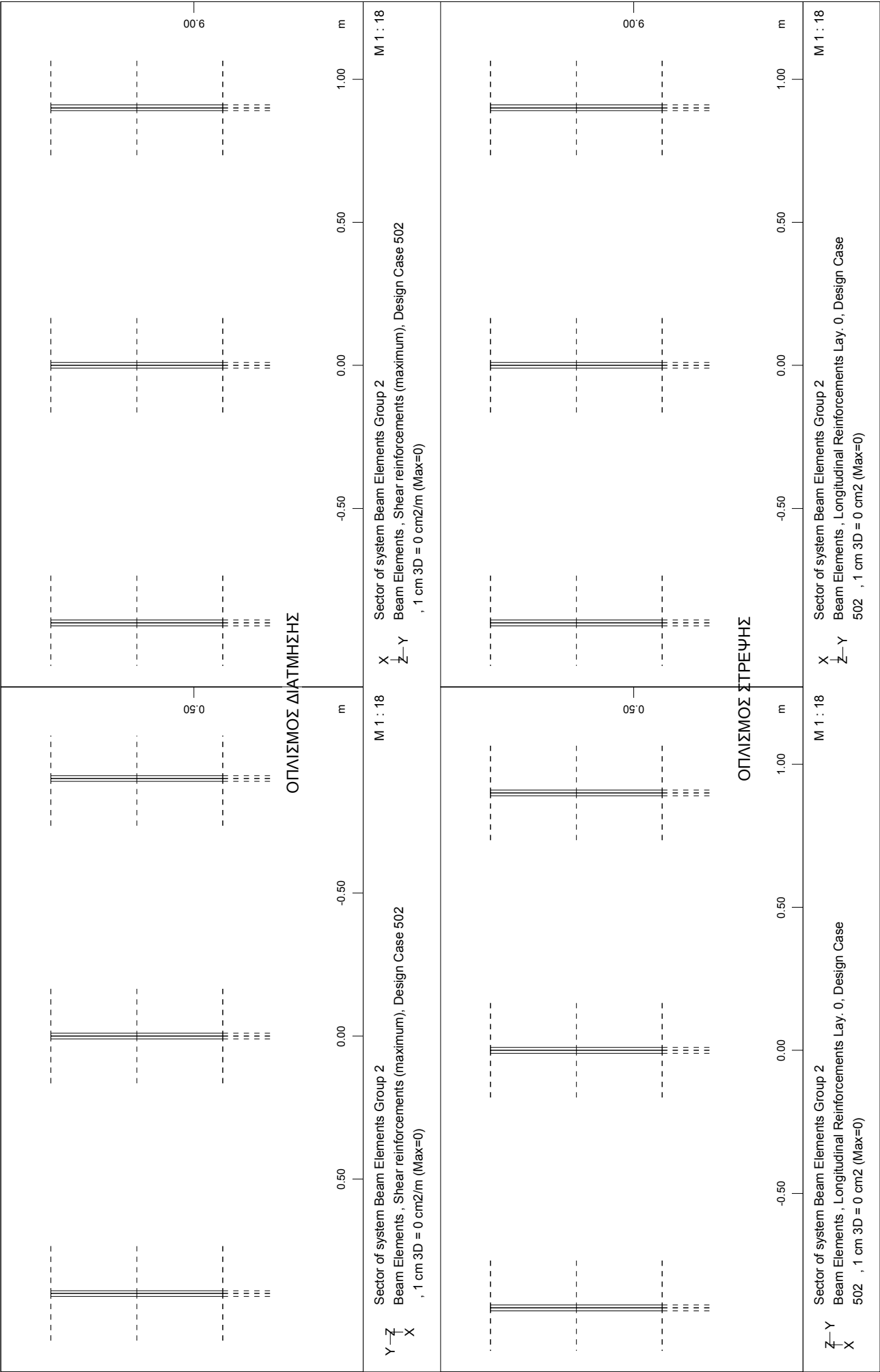
7-X
Sector of system Beam Elements Group 1
Beam Elements, Longitudinal Reinforcements Lay. 0, Design Case 502, 1 cm 3D = 4.48 cm2 (Max=2.37)

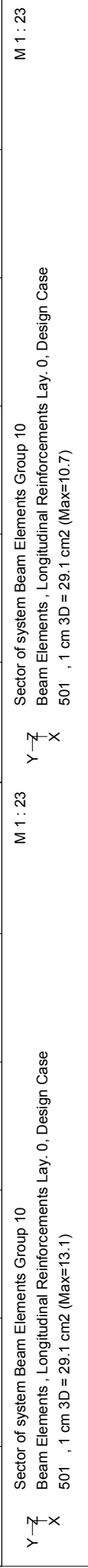
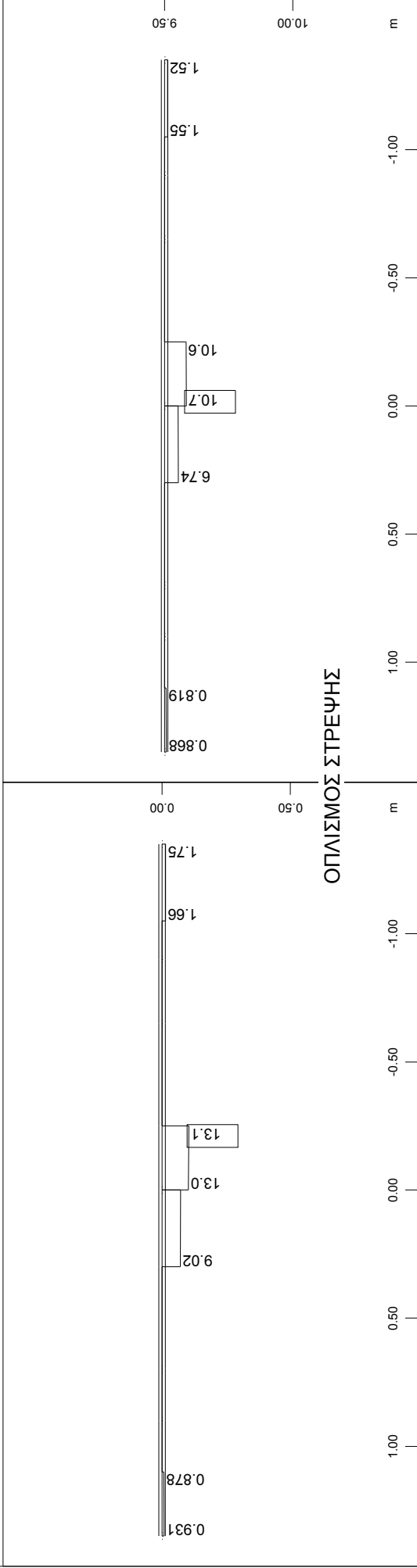
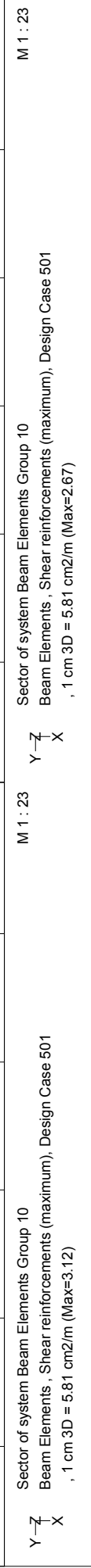
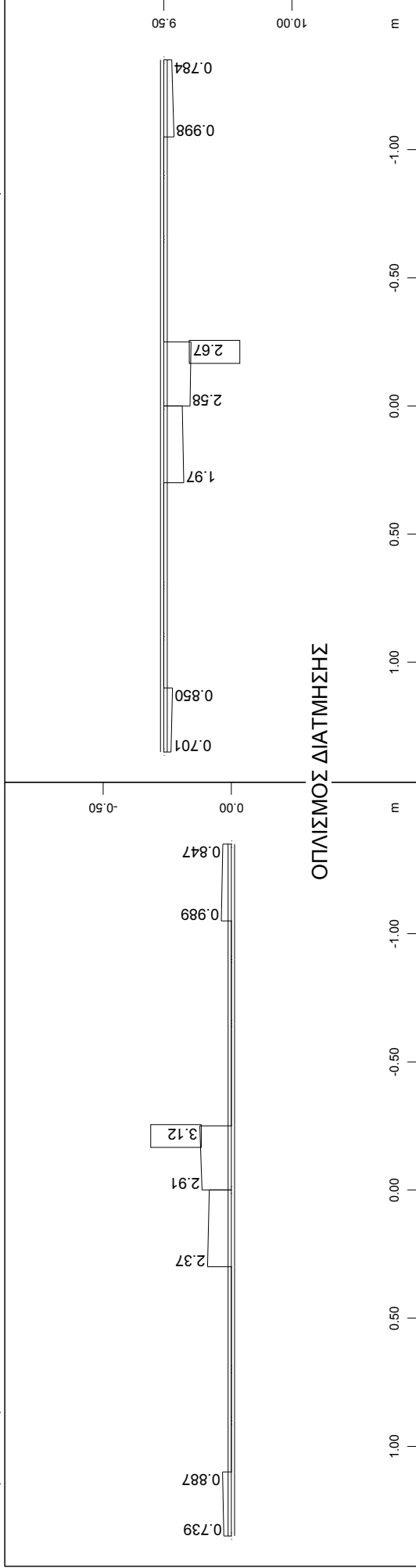
ΔΙΑΜΗΚΗ ΔΟΚΟΙ-ΣΤΗΡΙΞΗΣ



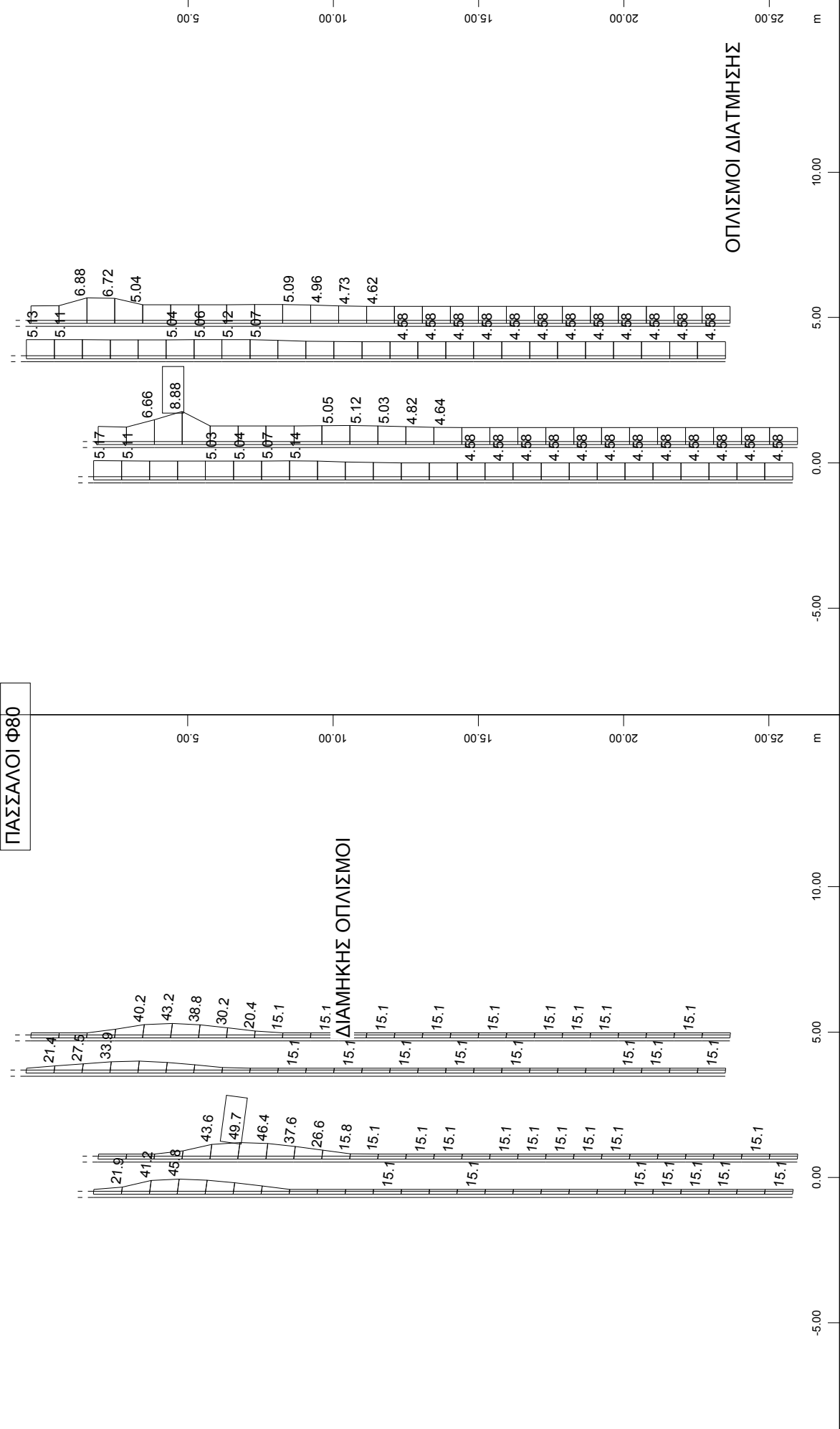
ΠΑΝΩ ΟΠΛΙΣΜΟΣ







ΠΑΣΣΑΛΟΙ Φ80



	Sector of system Beam Elements Group 12	M 1 : 186
	Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 501 , 1 cm 3D = 145.3 cm2 (Max=49.7)	X* 0.502 Y* 0.906 Z* 0.962
	Sector of system Beam Elements Group 12	M 1 : 186
	Beam Elements , Shear reinforcements (maximum), Design Case 501 , 1 cm 3D = 14.5 cm2/m (Max=8.88)	X* 0.502 Y* 0.906 Z* 0.962

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70

6) ΦΑΣΗ-1 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ SLS

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
FASH-1_SLS_DOKOI

Selected Beam Elements

FROM	TO	INC	X-VALUE	NC	MEMBER	CS0	CS1	CS2	CS3	CS4	CS5
1000	1036	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. 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	KINHTO 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 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

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	
12	0	1.000	-550.00	-25.00	550.00	25.00	

Interaction thin walled normal- and shearstress via Prandtl flow rule

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OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
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]
1004	0.692	1	1018	0.656	1.952	0.151-0.103		0.000	0.106	3563
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						20.0 0.30	214.14	302.06		7.58
						---- check for crack width passed with additional reinforcements				
1005	0.000	1	1017	1.007	2.788	0.127-0.127		0.000	0.106	2494
			1017	0.656	1.952	0.151-0.103		0.000	0.106	3563
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						20.0 0.30	214.14	302.06		7.58
						---- check for crack width passed with additional reinforcements				
			1018	1.007	2.788	0.127-0.127		0.000	0.106	2494
			1018	0.656	1.952	0.151-0.103		0.000	0.106	3563
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						20.0 0.30	214.14	302.06		7.58
						---- check for crack width passed with additional reinforcements				
	0.692	1	1017	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1017	0.651	1.975	0.158-0.096		0.000	0.115	3847
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						20.0 0.30	214.15	276.55		8.32
						---- check for crack width passed with additional reinforcements				
			1018	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1018	0.651	1.975	0.158-0.096		0.000	0.115	3847
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						20.0 0.30	214.15	276.55		8.32
						---- check for crack width passed with additional reinforcements				
1006	0.000	1	1017	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1017	0.651	1.975	0.158-0.096		0.000	0.115	3847
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						20.0 0.30	214.15	276.55		8.32
						---- check for crack width passed with additional reinforcements				
			1018	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1018	0.651	1.975	0.158-0.096		0.000	0.115	3847
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						20.0 0.30	214.15	276.55		8.32
						---- check for crack width passed with additional reinforcements				
	0.692	1	1017	0.993	2.811	0.134-0.120		0.000	0.119	2780
			1017	0.650	1.983	0.160-0.094		0.000	0.119	3940
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						20.0 0.30	214.16	268.99		8.56
						---- check for crack width passed with additional reinforcements				
			1018	0.993	2.811	0.134-0.120		0.000	0.119	2780
			1018	0.650	1.983	0.160-0.094		0.000	0.119	3940
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						20.0 0.30	214.16	268.99		8.56
						---- check for crack width passed with additional reinforcements				
1007	0.000	1	1017	0.993	2.811	0.134-0.120		0.000	0.119	2780
			1017	0.650	1.983	0.160-0.094		0.000	0.119	3940
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						20.0 0.30	214.16	269.72		8.56
						---- check for crack width passed with additional reinforcements				
			1018	0.993	2.811	0.134-0.120		0.000	0.119	2780
			1018	0.650	1.983	0.160-0.094		0.000	0.119	3940
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						20.0 0.30	214.16	269.72		8.56
						---- check for crack width passed with additional reinforcements				
	0.692	1	1017	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1017	0.651	1.975	0.158-0.096		0.000	0.115	3847
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						20.0 0.30	214.15	277.30		8.32
						---- check for crack width passed with additional reinforcements				
			1018	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1018	0.651	1.975	0.158-0.096		0.000	0.115	3847
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						20.0 0.30	214.15	277.30		8.32
						---- check for crack width passed with additional reinforcements				
1008	0.000	1	1017	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1017	0.651	1.975	0.158-0.096		0.000	0.115	3847
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						20.0 0.30	214.15	277.30		8.32
						---- check for crack width passed with additional reinforcements				
			1018	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1018	0.651	1.975	0.158-0.096		0.000	0.115	3847
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						20.0 0.30	214.15	277.30		8.32
						---- check for crack width passed with additional reinforcements				
	0.692	1	1017	1.007	2.788	0.127-0.127		0.000	0.106	2494
			1017	0.656	1.952	0.151-0.103		0.000	0.106	3563

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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 0.30 214.14 302.88 7.58						
				---- Check for crack width passed with additional reinforcements						
			1018	1.007	2.788	0.127-0.127	0.000	0.106	2494	
			1018	0.656	1.952	0.151-0.103	0.000	0.106	3563	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.14 302.88 7.58						
				---- Check for crack width passed with additional reinforcements						
1009	0.000	1	1017	1.007	2.788	0.127-0.127	0.000	0.106	2494	
			1017	0.656	1.952	0.151-0.103	0.000	0.106	3563	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.14 302.06 7.58						
				---- Check for crack width passed with additional reinforcements						
			1018	1.007	2.788	0.127-0.127	0.000	0.106	2494	
			1018	0.656	1.952	0.151-0.103	0.000	0.106	3563	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.14 302.06 7.58						
				---- Check for crack width passed with additional reinforcements						
	0.692	1	1017	1.019	2.746	0.116-0.138	0.000	0.089	2140	
			1017	0.665	1.911	0.140-0.114	0.000	0.089	3075	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.11 357.19 6.36						
				---- Check for crack width passed with additional reinforcements						
			1018	1.019	2.746	0.116-0.138	0.000	0.089	2140	
			1018	0.665	1.911	0.140-0.114	0.000	0.089	3075	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.11 357.19 6.36						
				---- Check for crack width passed with additional reinforcements						
1010	0.000	1	1017	1.019	2.746	0.116-0.138	0.000	0.089	2140	
			1017	0.665	1.911	0.140-0.114	0.000	0.089	3075	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.11 357.19 6.36						
				---- Check for crack width passed with additional reinforcements						
			1018	1.019	2.746	0.116-0.138	0.000	0.089	2140	
			1018	0.665	1.911	0.140-0.114	0.000	0.089	3075	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.11 357.19 6.36						
				---- Check for crack width passed with additional reinforcements						
	0.692	1	1017	1.036	2.679	0.101-0.153	0.000	0.066	1629	
			1017	0.677	1.850	0.121-0.133	0.000	0.066	2359	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.07 480.71 4.66						
				---- Check for crack width passed with additional reinforcements						
			1018	1.036	2.679	0.101-0.153	0.000	0.066	1629	
			1018	0.677	1.850	0.121-0.133	0.000	0.066	2359	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.07 480.71 4.66						
				---- Check for crack width passed with additional reinforcements						
1011	0.000	1	1017	1.036	2.679	0.101-0.153	0.000	0.066	1629	
			1017	0.677	1.850	0.121-0.133	0.000	0.066	2359	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.07 482.02 4.66						
				---- Check for crack width passed with additional reinforcements						
			1018	1.036	2.679	0.101-0.153	0.000	0.066	1629	
			1018	0.677	1.850	0.121-0.133	0.000	0.066	2359	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.07 482.02 4.66						
				---- Check for crack width passed with additional reinforcements						
	0.692	1	1017	1.058	2.566	0.075-0.179	0.000	0.036	938	
			1017	0.697	1.757	0.091-0.163	0.000	0.036	1369	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 213.97 872.69 2.52						
				---- Check for crack width passed with additional reinforcements						
			1018	1.058	2.566	0.075-0.179	0.000	0.036	938	
			1018	0.697	1.757	0.091-0.163	0.000	0.036	1369	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 213.97 872.69 2.52						
				---- Check for crack width passed with additional reinforcements						
1012	0.000	1	1017	1.058	2.566	0.075-0.179	0.000	0.036	938	
			1017	0.697	1.757	0.091-0.163	0.000	0.036	1369	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 213.97 872.68 2.52						
				---- Check for crack width passed with additional reinforcements						
			1018	1.058	2.566	0.075-0.179	0.000	0.036	938	
			1018	0.697	1.757	0.091-0.163	0.000	0.036	1369	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 213.97 872.68 2.52						
				---- Check for crack width passed with additional reinforcements						

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
FASH-1_SLS_DOKOI

Nonlinear Stresses

Beam	Linear stresses x[m]	NOS	LC	e-o [o/oo]	ky/kz [1/km]	x-zn/yn [m] [m]	Ni/Vi [MN]	Myi/Mzi [MNm]	Ey/Ez/G-EFF [MPa]		
1012	0.692	1	1017	0.000	0.000	0.262 -.-	0.000	0.000	26663		
				----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
			T-zone h= 0.488 20.0 0.00					0.00			
			---- check for crack width passed with given reinforcements								
			1018	0.000	0.000	0.262 -.-	0.000	0.000	26663		
				----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
1013	0.000	1	1017	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= 0.262 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]							
	0.692	1	1017	1.058	2.566	0.075-0.179	0.000	0.036	938		
				----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
			1017	0.697	1.757	0.091-0.163	0.000	0.036	1369		
			T-zone h= 0.125 20.0 0.30 213.97 870.30 2.52								
			---- check for crack width passed with additional reinforcements								
			1018	1.058	2.566	0.075-0.179	0.000	0.036	938		
	1018	0.697		1.757	0.091-0.163	0.000	0.036	1369			
	1014	0.000	1	1017	1.058	2.566	0.075-0.179	0.000	0.036	938	
					----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				1017	0.697	1.757	0.091-0.163	0.000	0.036	1369	
				T-zone h= 0.125 20.0 0.30 213.97 870.30 2.52							
				---- check for crack width passed with additional reinforcements							
1018				1.058	2.566	0.075-0.179	0.000	0.036	938		
		1018	0.697	1.757	0.091-0.163	0.000	0.036	1369			
0.692		1	1017	1.036	2.679	0.101-0.153	0.000	0.066	1629		
				----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
			1017	0.677	1.850	0.121-0.133	0.000	0.066	2359		
			T-zone h= 0.125 20.0 0.30 214.07 480.71 4.66								
			---- check for crack width passed with additional reinforcements								
			1018	1.036	2.679	0.101-0.153	0.000	0.066	1629		
1018		0.677		1.850	0.121-0.133	0.000	0.066	2359			
1015		0.000	1	1017	1.036	2.679	0.101-0.153	0.000	0.066	1629	
					----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				1017	0.677	1.850	0.121-0.133	0.000	0.066	2359	
				T-zone h= 0.125 20.0 0.30 214.07 480.71 4.66							
	---- check for crack width passed with additional reinforcements										
	1018			1.036	2.679	0.101-0.153	0.000	0.066	1629		
		1018	0.677	1.850	0.121-0.133	0.000	0.066	2359			
	0.692	1	1017	1.019	2.746	0.116-0.138	0.000	0.089	2140		
				----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
			1017	0.665	1.911	0.140-0.114	0.000	0.089	3075		
			T-zone h= 0.125 20.0 0.30 214.11 357.19 6.36								
			---- check for crack width passed with additional reinforcements								
			1018	1.019	2.746	0.116-0.138	0.000	0.089	2140		
	1018	0.665		1.911	0.140-0.114	0.000	0.089	3075			
	1016	0.000	1	1017	1.019	2.746	0.116-0.138	0.000	0.089	2140	
					----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				1017	0.665	1.911	0.140-0.114	0.000	0.089	3075	
				T-zone h= 0.125 20.0 0.30 214.11 357.19 6.36							
---- check for crack width passed with additional reinforcements											
1018				1.019	2.746	0.116-0.138	0.000	0.089	2140		
	1018	0.665	1.911	0.140-0.114	0.000	0.089	3075				

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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 0.30 214.11 357.19 6.36						
				---- Check for crack width passed with additional reinforcements						
0.692		1	1017	1.007	2.788	0.127-0.127	0.000	0.106	2494	
			1017	0.656	1.952	0.151-0.103	0.000	0.106	3563	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.14 302.06 7.58						
				---- Check for crack width passed with additional reinforcements						
			1018	1.007	2.788	0.127-0.127	0.000	0.106	2494	
			1018	0.656	1.952	0.151-0.103	0.000	0.106	3563	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.14 302.06 7.58						
				---- Check for crack width passed with additional reinforcements						
1017	0.000	1	1017	1.007	2.788	0.127-0.127	0.000	0.106	2494	
			1017	0.656	1.952	0.151-0.103	0.000	0.106	3563	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.14 302.06 7.58						
				---- Check for crack width passed with additional reinforcements						
			1018	1.007	2.788	0.127-0.127	0.000	0.106	2494	
			1018	0.656	1.952	0.151-0.103	0.000	0.106	3563	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.14 302.06 7.58						
				---- Check for crack width passed with additional reinforcements						
0.692		1	1017	0.998	2.808	0.132-0.122	0.000	0.115	2706	
			1017	0.651	1.975	0.158-0.096	0.000	0.115	3847	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.15 276.55 8.32						
				---- Check for crack width passed with additional reinforcements						
			1018	0.998	2.808	0.132-0.122	0.000	0.115	2706	
			1018	0.651	1.975	0.158-0.096	0.000	0.115	3847	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.15 276.55 8.32						
				---- Check for crack width passed with additional reinforcements						
1018	0.000	1	1017	0.998	2.808	0.132-0.122	0.000	0.115	2706	
			1017	0.651	1.975	0.158-0.096	0.000	0.115	3847	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.15 276.55 8.32						
				---- Check for crack width passed with additional reinforcements						
			1018	0.998	2.808	0.132-0.122	0.000	0.115	2706	
			1018	0.651	1.975	0.158-0.096	0.000	0.115	3847	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.15 276.55 8.32						
				---- Check for crack width passed with additional reinforcements						
0.692		1	1017	0.993	2.811	0.134-0.120	0.000	0.119	2780	
			1017	0.650	1.983	0.160-0.094	0.000	0.119	3940	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.16 268.99 8.56						
				---- Check for crack width passed with additional reinforcements						
			1018	0.993	2.811	0.134-0.120	0.000	0.119	2780	
			1018	0.650	1.983	0.160-0.094	0.000	0.119	3940	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.16 268.99 8.56						
				---- Check for crack width passed with additional reinforcements						
1019	0.000	1	1017	0.993	2.811	0.134-0.120	0.000	0.119	2780	
			1017	0.650	1.983	0.160-0.094	0.000	0.119	3940	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.16 268.99 8.56						
				---- Check for crack width passed with additional reinforcements						
			1018	0.993	2.811	0.134-0.120	0.000	0.119	2780	
			1018	0.650	1.983	0.160-0.094	0.000	0.119	3940	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.16 268.99 8.56						
				---- Check for crack width passed with additional reinforcements						
0.692		1	1017	0.998	2.808	0.132-0.122	0.000	0.115	2706	
			1017	0.651	1.975	0.158-0.096	0.000	0.115	3847	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.15 276.55 8.32						
				---- Check for crack width passed with additional reinforcements						
			1018	0.998	2.808	0.132-0.122	0.000	0.115	2706	
			1018	0.651	1.975	0.158-0.096	0.000	0.115	3847	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.15 276.55 8.32						
				---- Check for crack width passed with additional reinforcements						
1020	0.000	1	1017	0.998	2.808	0.132-0.122	0.000	0.115	2706	
			1017	0.651	1.975	0.158-0.096	0.000	0.115	3847	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm ²]						
				T-zone h= 0.125 20.0 0.30 214.15 276.55 8.32						
				---- Check for crack width passed with additional reinforcements						

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	0.000	1	1018	0.998	2.808	0.132	-0.122	0.000	0.115	2706
			1018	0.651	1.975	0.158	-0.096	0.000	0.115	3847
			----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
			T-zone h= 0.125 20.0 0.30 214.15 276.55 8.32							
			---- Check for crack width passed with additional reinforcements							
			1017	1.007	2.788	0.127	-0.127	0.000	0.106	2494
	0.692	1	1017	0.656	1.952	0.151	-0.103	0.000	0.106	3563
			----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
			T-zone h= 0.125 20.0 0.30 214.14 302.06 7.58							
			---- Check for crack width passed with additional reinforcements							
			1018	1.007	2.788	0.127	-0.127	0.000	0.106	2494
			1018	0.656	1.952	0.151	-0.103	0.000	0.106	3563
1021	0.000	1	1017	1.007	2.788	0.127	-0.127	0.000	0.106	2494
			1017	0.656	1.952	0.151	-0.103	0.000	0.106	3563
			----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
			T-zone h= 0.125 20.0 0.30 214.14 302.06 7.58							
			---- Check for crack width passed with additional reinforcements							
			1018	1.007	2.788	0.127	-0.127	0.000	0.106	2494
	0.692	1	1017	1.019	2.746	0.116	-0.138	0.000	0.089	2140
			1017	0.665	1.911	0.140	-0.114	0.000	0.089	3075
			----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
			T-zone h= 0.125 20.0 0.30 214.11 357.19 6.36							
			---- Check for crack width passed with additional reinforcements							
			1018	1.019	2.746	0.116	-0.138	0.000	0.089	2140
1022	0.000	1	1017	1.019	2.746	0.116	-0.138	0.000	0.089	2140
			1017	0.665	1.911	0.140	-0.114	0.000	0.089	3075
			----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
			T-zone h= 0.125 20.0 0.30 214.11 358.16 6.36							
			---- Check for crack width passed with additional reinforcements							
			1018	1.019	2.746	0.116	-0.138	0.000	0.089	2140
	0.692	1	1017	1.036	2.679	0.101	-0.153	0.000	0.066	1629
			1017	0.677	1.850	0.121	-0.133	0.000	0.066	2359
			----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
			T-zone h= 0.125 20.0 0.30 214.07 482.02 4.66							
			---- Check for crack width passed with additional reinforcements							
			1018	1.036	2.679	0.101	-0.153	0.000	0.066	1629
1023	0.000	1	1017	1.036	2.679	0.101	-0.153	0.000	0.066	1629
			1017	0.677	1.850	0.121	-0.133	0.000	0.066	2359
			----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
			T-zone h= 0.125 20.0 0.30 214.07 482.02 4.66							
			---- Check for crack width passed with additional reinforcements							
			1018	1.036	2.679	0.101	-0.153	0.000	0.066	1629
	0.692	1	1017	1.058	2.566	0.075	-0.179	0.000	0.036	938
			1017	0.697	1.757	0.091	-0.163	0.000	0.036	1369
			----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
			T-zone h= 0.125 20.0 0.30 213.97 872.69 2.52							
			---- Check for crack width passed with additional reinforcements							
			1018	1.058	2.566	0.075	-0.179	0.000	0.036	938
1024	0.000	1	1017	1.058	2.566	0.075	-0.179	0.000	0.036	938
			1017	0.697	1.757	0.091	-0.163	0.000	0.036	1369
			----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
			T-zone h= 0.125 20.0 0.30 213.97 872.69 2.52							

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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 0.30 213.97 872.68 2.52						
				---- check for crack width passed with additional reinforcements						
			1018	1.058	2.566	0.075-0.179	0.000	0.036	938	
			1018	0.697	1.757	0.091-0.163	0.000	0.036	1369	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.125 20.0 0.30 213.97 872.68 2.52						
				---- check for crack width passed with additional reinforcements						
	0.692	1	1017	0.000	0.000	0.262	--	0.000	0.000	26663
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.488 20.0 0.00 0.00 0.00 0.00						
				---- check for crack width passed with given reinforcements						
			1018	0.000	0.000	0.262	--	0.000	0.000	26663
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.488 20.0 0.00 0.00 0.00 0.00						
				---- check for crack width passed with given reinforcements						
1025	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
	0.692	1	1017	1.058	2.566	0.075-0.179	0.000	0.036	938	
			1017	0.697	1.757	0.091-0.163	0.000	0.036	1369	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.125 20.0 0.30 213.97 870.30 2.52						
				---- check for crack width passed with additional reinforcements						
			1018	1.058	2.566	0.075-0.179	0.000	0.036	938	
			1018	0.697	1.757	0.091-0.163	0.000	0.036	1369	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.125 20.0 0.30 213.97 870.30 2.52						
				---- check for crack width passed with additional reinforcements						
1026	0.000	1	1017	1.058	2.566	0.075-0.179	0.000	0.036	938	
			1017	0.697	1.757	0.091-0.163	0.000	0.036	1369	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.125 20.0 0.30 213.97 870.30 2.52						
				---- check for crack width passed with additional reinforcements						
			1018	1.058	2.566	0.075-0.179	0.000	0.036	938	
			1018	0.697	1.757	0.091-0.163	0.000	0.036	1369	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.125 20.0 0.30 213.97 870.30 2.52						
				---- check for crack width passed with additional reinforcements						
	0.692	1	1017	1.036	2.679	0.101-0.153	0.000	0.066	1629	
			1017	0.677	1.850	0.121-0.133	0.000	0.066	2359	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.125 20.0 0.30 214.07 480.71 4.66						
				---- check for crack width passed with additional reinforcements						
			1018	1.036	2.679	0.101-0.153	0.000	0.066	1629	
			1018	0.677	1.850	0.121-0.133	0.000	0.066	2359	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.125 20.0 0.30 214.07 480.71 4.66						
				---- check for crack width passed with additional reinforcements						
1027	0.000	1	1017	1.036	2.679	0.101-0.153	0.000	0.066	1629	
			1017	0.677	1.850	0.121-0.133	0.000	0.066	2359	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.125 20.0 0.30 214.07 480.71 4.66						
				---- check for crack width passed with additional reinforcements						
			1018	1.036	2.679	0.101-0.153	0.000	0.066	1629	
			1018	0.677	1.850	0.121-0.133	0.000	0.066	2359	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.125 20.0 0.30 214.07 480.71 4.66						
				---- check for crack width passed with additional reinforcements						
	0.692	1	1017	1.019	2.746	0.116-0.138	0.000	0.089	2140	
			1017	0.665	1.911	0.140-0.114	0.000	0.089	3075	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.125 20.0 0.30 214.11 357.19 6.36						
				---- check for crack width passed with additional reinforcements						
			1018	1.019	2.746	0.116-0.138	0.000	0.089	2140	
			1018	0.665	1.911	0.140-0.114	0.000	0.089	3075	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.125 20.0 0.30 214.11 357.19 6.36						
				---- check for crack width passed with additional reinforcements						
1028	0.000	1	1017	1.019	2.746	0.116-0.138	0.000	0.089	2140	
			1017	0.665	1.911	0.140-0.114	0.000	0.089	3075	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.125 20.0 0.30 214.11 357.19 6.36						
				---- check for crack width passed with additional reinforcements						
			1018	1.019	2.746	0.116-0.138	0.000	0.089	2140	
			1018	0.665	1.911	0.140-0.114	0.000	0.089	3075	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.125 20.0 0.30 214.11 357.19 6.36						
				---- check for crack width passed with additional reinforcements						

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
1028	0.692	1	1017	1.007	2.788	0.127-0.127		0.000	0.106	2494
			1017	0.656	1.952	0.151-0.103		0.000	0.106	3563
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125 20.0 0.30	214.14	302.06	7.58	
						---- check for crack width passed with additional reinforcements				
			1018	1.007	2.788	0.127-0.127		0.000	0.106	2494
			1018	0.656	1.952	0.151-0.103		0.000	0.106	3563
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125 20.0 0.30	214.14	302.06	7.58	
						---- check for crack width passed with additional reinforcements				
1029	0.000	1	1017	1.007	2.788	0.127-0.127		0.000	0.106	2494
			1017	0.656	1.952	0.151-0.103		0.000	0.106	3563
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125 20.0 0.30	214.14	302.06	7.58	
						---- check for crack width passed with additional reinforcements				
			1018	1.007	2.788	0.127-0.127		0.000	0.106	2494
			1018	0.656	1.952	0.151-0.103		0.000	0.106	3563
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125 20.0 0.30	214.14	302.06	7.58	
						---- check for crack width passed with additional reinforcements				
1029	0.692	1	1017	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1017	0.651	1.975	0.158-0.096		0.000	0.115	3847
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125 20.0 0.30	214.15	276.55	8.32	
						---- check for crack width passed with additional reinforcements				
			1018	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1018	0.651	1.975	0.158-0.096		0.000	0.115	3847
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125 20.0 0.30	214.15	276.55	8.32	
						---- check for crack width passed with additional reinforcements				
1030	0.000	1	1017	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1017	0.651	1.975	0.158-0.096		0.000	0.115	3847
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125 20.0 0.30	214.15	276.55	8.32	
						---- check for crack width passed with additional reinforcements				
			1018	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1018	0.651	1.975	0.158-0.096		0.000	0.115	3847
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125 20.0 0.30	214.15	276.55	8.32	
						---- check for crack width passed with additional reinforcements				
1030	0.692	1	1017	0.993	2.811	0.134-0.120		0.000	0.119	2780
			1017	0.650	1.983	0.160-0.094		0.000	0.119	3940
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125 20.0 0.30	214.16	268.99	8.56	
						---- check for crack width passed with additional reinforcements				
			1018	0.993	2.811	0.134-0.120		0.000	0.119	2780
			1018	0.650	1.983	0.160-0.094		0.000	0.119	3940
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125 20.0 0.30	214.16	268.99	8.56	
						---- check for crack width passed with additional reinforcements				
1031	0.000	1	1017	0.993	2.811	0.134-0.120		0.000	0.119	2780
			1017	0.650	1.983	0.160-0.094		0.000	0.119	3940
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125 20.0 0.30	214.16	269.72	8.56	
						---- check for crack width passed with additional reinforcements				
			1018	0.993	2.811	0.134-0.120		0.000	0.119	2780
			1018	0.650	1.983	0.160-0.094		0.000	0.119	3940
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125 20.0 0.30	214.16	269.72	8.56	
						---- check for crack width passed with additional reinforcements				
1031	0.692	1	1017	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1017	0.651	1.975	0.158-0.096		0.000	0.115	3847
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125 20.0 0.30	214.15	277.30	8.32	
						---- check for crack width passed with additional reinforcements				
			1018	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1018	0.651	1.975	0.158-0.096		0.000	0.115	3847
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125 20.0 0.30	214.15	277.30	8.32	
						---- check for crack width passed with additional reinforcements				
1032	0.000	1	1017	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1017	0.651	1.975	0.158-0.096		0.000	0.115	3847
						D[mm] w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125 20.0 0.30	214.15	277.30	8.32	
						---- check for crack width passed with additional reinforcements				
			1018	0.998	2.808	0.132-0.122		0.000	0.115	2706
			1018	0.651	1.975	0.158-0.096		0.000	0.115	3847

OPIΣTIKH MEΛETH/TEKNIKO TB/L=10.70
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 0.30 214.15 277.30 8.32						
				---- check for crack width passed with additional reinforcements						
0.692		1	1017	1.007	2.788	0.127-0.127	0.000	0.106	2494	
			1017	0.656	1.952	0.151-0.103	0.000	0.106	3563	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.125 20.0 0.30 214.14 302.88 7.58						
				---- check for crack width passed with additional reinforcements						
			1018	1.007	2.788	0.127-0.127	0.000	0.106	2494	
			1018	0.656	1.952	0.151-0.103	0.000	0.106	3563	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.125 20.0 0.30 214.14 302.88 7.58						
				---- check for crack width passed with additional reinforcements						
1033	0.000	1	1017	1.007	2.788	0.127-0.127	0.000	0.106	2494	
			1017	0.656	1.952	0.151-0.103	0.000	0.106	3563	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.125 20.0 0.30 214.14 302.06 7.58						
				---- check for crack width passed with additional reinforcements						
			1018	1.007	2.788	0.127-0.127	0.000	0.106	2494	
			1018	0.656	1.952	0.151-0.103	0.000	0.106	3563	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.125 20.0 0.30 214.14 302.06 7.58						
				---- check for crack width passed with additional reinforcements						
0.692		1	1017	1.019	2.746	0.116-0.138	0.000	0.089	2140	
			1017	0.665	1.911	0.140-0.114	0.000	0.089	3075	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.125 20.0 0.30 214.11 357.19 6.36						
				---- check for crack width passed with additional reinforcements						
			1018	1.019	2.746	0.116-0.138	0.000	0.089	2140	
			1018	0.665	1.911	0.140-0.114	0.000	0.089	3075	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.125 20.0 0.30 214.11 357.19 6.36						
				---- check for crack width passed with additional reinforcements						
1034	0.000	1	1017	1.019	2.746	0.116-0.138	0.000	0.089	2140	
			1017	0.665	1.911	0.140-0.114	0.000	0.089	3075	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.125 20.0 0.30 214.11 357.19 6.36						
				---- check for crack width passed with additional reinforcements						
			1018	1.019	2.746	0.116-0.138	0.000	0.089	2140	
			1018	0.665	1.911	0.140-0.114	0.000	0.089	3075	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.125 20.0 0.30 214.11 357.19 6.36						
				---- check for crack width passed with additional reinforcements						
0.692		1	1017	1.036	2.679	0.101-0.153	0.000	0.066	1629	
			1017	0.677	1.850	0.121-0.133	0.000	0.066	2359	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.125 20.0 0.30 214.07 480.71 4.66						
				---- check for crack width passed with additional reinforcements						
			1018	1.036	2.679	0.101-0.153	0.000	0.066	1629	
			1018	0.677	1.850	0.121-0.133	0.000	0.066	2359	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.125 20.0 0.30 214.07 480.71 4.66						
				---- check for crack width passed with additional reinforcements						
1035	0.000	1	1017	1.036	2.679	0.101-0.153	0.000	0.066	1629	
			1017	0.677	1.850	0.121-0.133	0.000	0.066	2359	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.125 20.0 0.30 214.07 482.02 4.66						
				---- check for crack width passed with additional reinforcements						
			1018	1.036	2.679	0.101-0.153	0.000	0.066	1629	
			1018	0.677	1.850	0.121-0.133	0.000	0.066	2359	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.125 20.0 0.30 214.07 482.02 4.66						
				---- check for crack width passed with additional reinforcements						
0.692		1	1017	1.058	2.566	0.075-0.179	0.000	0.036	938	
			1017	0.697	1.757	0.091-0.163	0.000	0.036	1369	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.125 20.0 0.30 213.97 872.69 2.52						
				---- check for crack width passed with additional reinforcements						
			1018	1.058	2.566	0.075-0.179	0.000	0.036	938	
			1018	0.697	1.757	0.091-0.163	0.000	0.036	1369	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.125 20.0 0.30 213.97 872.69 2.52						
				---- check for crack width passed with additional reinforcements						
1036	0.000	1	1017	1.058	2.566	0.075-0.179	0.000	0.036	938	
			1017	0.697	1.757	0.091-0.163	0.000	0.036	1369	
				D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.125 20.0 0.30 213.97 872.69 2.52						
				---- check for crack width passed with additional reinforcements						

OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
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]	
1036	0.000	1	1018	1.058	2.566	0.075	-0.179	0.000	0.036	938	
			1018	0.697	1.757	0.091	-0.163	0.000	0.036	1369	
0.692	1	1017	0.000	0.000	0.262	-.-	0.000	0.000	26663		

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

MNo	design width [mm]	width [mm]	bond [-]	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 [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	0.04	2.37		2.37				
1001	0.692	1	0.09	4.90		2.37	2.52			
1002	0.000	1	0.09	4.90		2.37	2.52			
1002	0.692	1	0.13	7.04		2.37	4.66			
1003	0.000	1	0.13	7.04		2.37	4.66			
1003	0.692	1	0.16	8.73		2.37	6.36			
1004	0.000	1	0.16	8.73		2.37	6.36			
1004	0.692	1	0.18	9.95		2.37	7.58			
1005	0.000	1	0.18	9.95		2.37	7.58			
1005	0.692	1	0.20	10.69		2.37	8.32			
1006	0.000	1	0.20	10.69		2.37	8.32			
1006	0.692	1	0.20	10.94		2.37	8.56			
1007	0.000	1	0.20	10.94		2.37	8.56			
1007	0.692	1	0.20	10.69		2.37	8.32			
1008	0.000	1	0.20	10.69		2.37	8.32			
1008	0.692	1	0.18	9.95		2.37	7.58			
1009	0.000	1	0.18	9.95		2.37	7.58			
1009	0.692	1	0.16	8.73		2.37	6.36			
1010	0.000	1	0.16	8.73		2.37	6.36			
1010	0.692	1	0.13	7.04		2.37	4.66			
1011	0.000	1	0.13	7.04		2.37	4.66			
1011	0.692	1	0.09	4.90		2.37	2.52			
1012	0.000	1	0.09	4.90		2.37	2.52			
1012	0.692	1	0.04	2.37		2.37				
1013	0.000	1	0.04	2.37		2.37				

OPISTIKH MEΛETH/TEXNIKO TB/L=10.70
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]
1013	0.692	1	0.09	4.90		2.37	2.52			
1014	0.000	1	0.09	4.90		2.37	2.52			
1014	0.692	1	0.13	7.04		2.37	4.66			
1015	0.000	1	0.13	7.04		2.37	4.66			
1015	0.692	1	0.16	8.73		2.37	6.36			
1016	0.000	1	0.16	8.73		2.37	6.36			
1016	0.692	1	0.18	9.95		2.37	7.58			
1017	0.000	1	0.18	9.95		2.37	7.58			
1017	0.692	1	0.20	10.69		2.37	8.32			
1018	0.000	1	0.20	10.69		2.37	8.32			
1018	0.692	1	0.20	10.94		2.37	8.56			
1019	0.000	1	0.20	10.94		2.37	8.56			
1019	0.692	1	0.20	10.69		2.37	8.32			
1020	0.000	1	0.20	10.69		2.37	8.32			
1020	0.692	1	0.18	9.95		2.37	7.58			
1021	0.000	1	0.18	9.95		2.37	7.58			
1021	0.692	1	0.16	8.73		2.37	6.36			
1022	0.000	1	0.16	8.73		2.37	6.36			
1022	0.692	1	0.13	7.04		2.37	4.66			
1023	0.000	1	0.13	7.04		2.37	4.66			
1023	0.692	1	0.09	4.90		2.37	2.52			
1024	0.000	1	0.09	4.90		2.37	2.52			
1024	0.692	1	0.04	2.37		2.37				
1025	0.000	1	0.04	2.37		2.37				
1025	0.692	1	0.09	4.90		2.37	2.52			
1026	0.000	1	0.09	4.90		2.37	2.52			
1026	0.692	1	0.13	7.04		2.37	4.66			
1027	0.000	1	0.13	7.04		2.37	4.66			
1027	0.692	1	0.16	8.73		2.37	6.36			
1028	0.000	1	0.16	8.73		2.37	6.36			
1028	0.692	1	0.18	9.95		2.37	7.58			
1029	0.000	1	0.18	9.95		2.37	7.58			
1029	0.692	1	0.20	10.69		2.37	8.32			
1030	0.000	1	0.20	10.69		2.37	8.32			
1030	0.692	1	0.20	10.94		2.37	8.56			
1031	0.000	1	0.20	10.94		2.37	8.56			
1031	0.692	1	0.20	10.69		2.37	8.32			
1032	0.000	1	0.20	10.69		2.37	8.32			

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
1032	0.692	1	0.18	9.95		2.37	7.58			
1033	0.000	1	0.18	9.95		2.37	7.58			
1033	0.692	1	0.16	8.73		2.37	6.36			
1034	0.000	1	0.16	8.73		2.37	6.36			
1034	0.692	1	0.13	7.04		2.37	4.66			
1035	0.000	1	0.13	7.04		2.37	4.66			
1035	0.692	1	0.09	4.90		2.37	2.52			
1036	0.000	1	0.09	4.90		2.37	2.52			
1036	0.692	1	0.04	2.37		2.37				

Reinforcements saved as design case LCR 503

Reinforcements are superposed with existing minimum reinforcements

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]
1001	0.000	1	0.04	2.37		2.37				
1001	0.692	1	0.09	4.90		2.37	2.52			
1002	0.000	1	0.09	4.90		2.37	2.52			
1002	0.692	1	0.13	7.04		2.37	4.66			
1003	0.000	1	0.13	7.04		2.37	4.66			
1003	0.692	1	0.16	8.73		2.37	6.36			
1004	0.000	1	0.16	8.73		2.37	6.36			
1004	0.692	1	0.18	9.95		2.37	7.58			
1005	0.000	1	0.18	9.95		2.37	7.58			
1005	0.692	1	0.20	10.69		2.37	8.32			
1006	0.000	1	0.20	10.69		2.37	8.32			
1006	0.692	1	0.20	10.94		2.37	8.56			
1007	0.000	1	0.20	10.94		2.37	8.56			
1007	0.692	1	0.20	10.69		2.37	8.32			
1008	0.000	1	0.20	10.69		2.37	8.32			
1008	0.692	1	0.18	9.95		2.37	7.58			
1009	0.000	1	0.18	9.95		2.37	7.58			
1009	0.692	1	0.16	8.73		2.37	6.36			
1010	0.000	1	0.16	8.73		2.37	6.36			
1010	0.692	1	0.13	7.04		2.37	4.66			
1011	0.000	1	0.13	7.04		2.37	4.66			
1011	0.692	1	0.09	4.90		2.37	2.52			
1012	0.000	1	0.09	4.90		2.37	2.52			
1012	0.692	1	0.04	2.37		2.37				
1013	0.000	1	0.04	2.37		2.37				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
FASH-1_SLS_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]
1013	0.692	1	0.09	4.90		2.37	2.52			
1014	0.000	1	0.09	4.90		2.37	2.52			
1014	0.692	1	0.13	7.04		2.37	4.66			
1015	0.000	1	0.13	7.04		2.37	4.66			
1015	0.692	1	0.16	8.73		2.37	6.36			
1016	0.000	1	0.16	8.73		2.37	6.36			
1016	0.692	1	0.18	9.95		2.37	7.58			
1017	0.000	1	0.18	9.95		2.37	7.58			
1017	0.692	1	0.20	10.69		2.37	8.32			
1018	0.000	1	0.20	10.69		2.37	8.32			
1018	0.692	1	0.20	10.94		2.37	8.56			
1019	0.000	1	0.20	10.94		2.37	8.56			
1019	0.692	1	0.20	10.69		2.37	8.32			
1020	0.000	1	0.20	10.69		2.37	8.32			
1020	0.692	1	0.18	9.95		2.37	7.58			
1021	0.000	1	0.18	9.95		2.37	7.58			
1021	0.692	1	0.16	8.73		2.37	6.36			
1022	0.000	1	0.16	8.73		2.37	6.36			
1022	0.692	1	0.13	7.04		2.37	4.66			
1023	0.000	1	0.13	7.04		2.37	4.66			
1023	0.692	1	0.09	4.90		2.37	2.52			
1024	0.000	1	0.09	4.90		2.37	2.52			
1024	0.692	1	0.04	2.37		2.37				
1025	0.000	1	0.04	2.37		2.37				
1025	0.692	1	0.09	4.90		2.37	2.52			
1026	0.000	1	0.09	4.90		2.37	2.52			
1026	0.692	1	0.13	7.04		2.37	4.66			
1027	0.000	1	0.13	7.04		2.37	4.66			
1027	0.692	1	0.16	8.73		2.37	6.36			
1028	0.000	1	0.16	8.73		2.37	6.36			
1028	0.692	1	0.18	9.95		2.37	7.58			
1029	0.000	1	0.18	9.95		2.37	7.58			
1029	0.692	1	0.20	10.69		2.37	8.32			
1030	0.000	1	0.20	10.69		2.37	8.32			
1030	0.692	1	0.20	10.94		2.37	8.56			
1031	0.000	1	0.20	10.94		2.37	8.56			
1031	0.692	1	0.20	10.69		2.37	8.32			
1032	0.000	1	0.20	10.69		2.37	8.32			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
FASH-1_SLS_DOKOI

Longitudinal Reinforcements Accumulated minimum

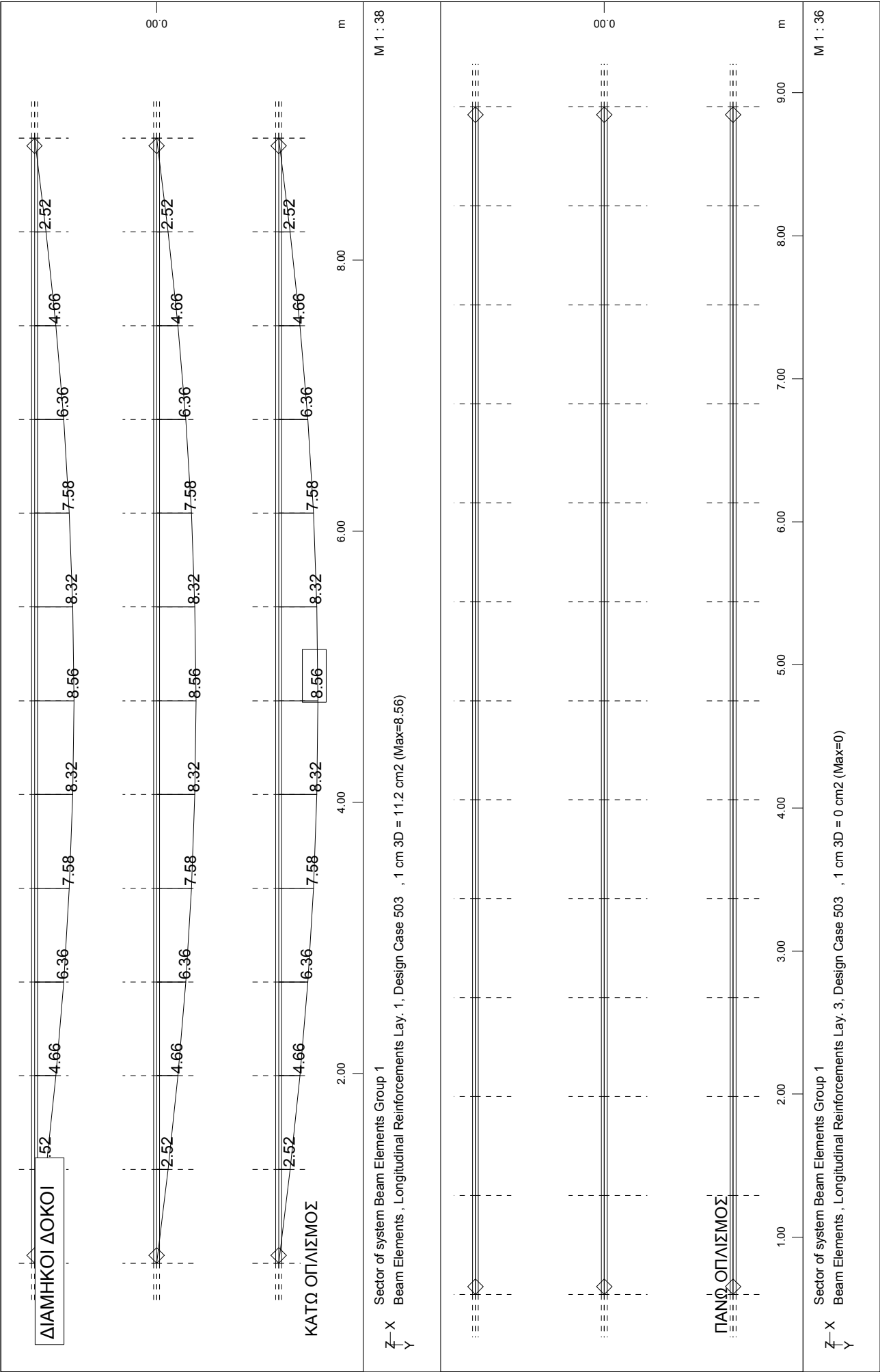
Note: Layer includes reinforcements for torsion if followed by T

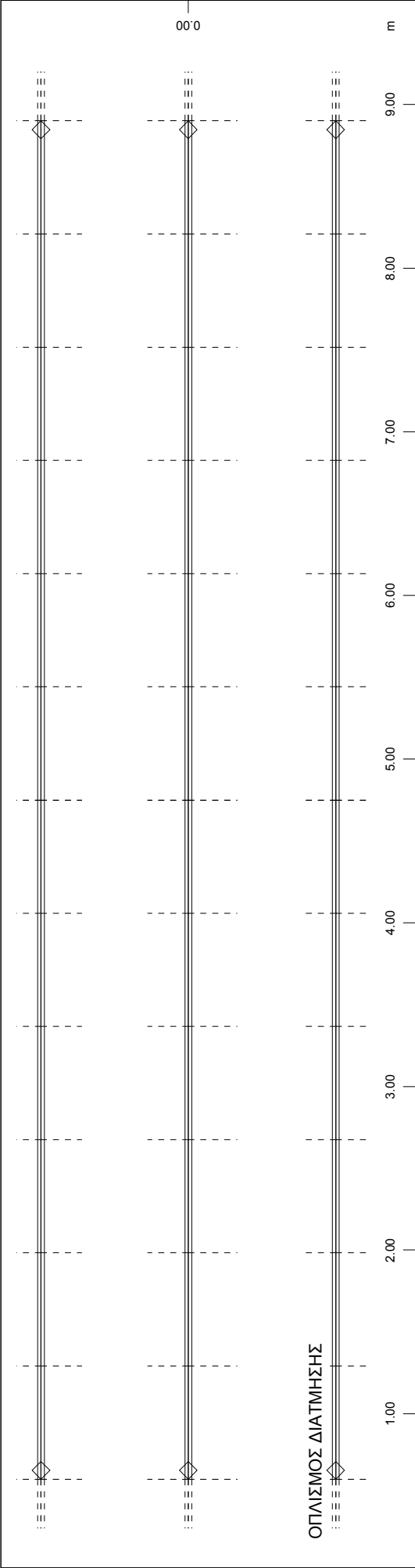
Note: Layer has only compression reinforcements if followed by a quote

Beam	x[m]	NoS	μ _e [-]	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]
1032	0.692	1	0.18	9.95		2.37	7.58			
1033	0.000	1	0.18	9.95		2.37	7.58			
1033	0.692	1	0.16	8.73		2.37	6.36			
1034	0.000	1	0.16	8.73		2.37	6.36			
1034	0.692	1	0.13	7.04		2.37	4.66			
1035	0.000	1	0.13	7.04		2.37	4.66			
1035	0.692	1	0.09	4.90		2.37	2.52			
1036	0.000	1	0.09	4.90		2.37	2.52			
1036	0.692	1	0.04	2.37		2.37				

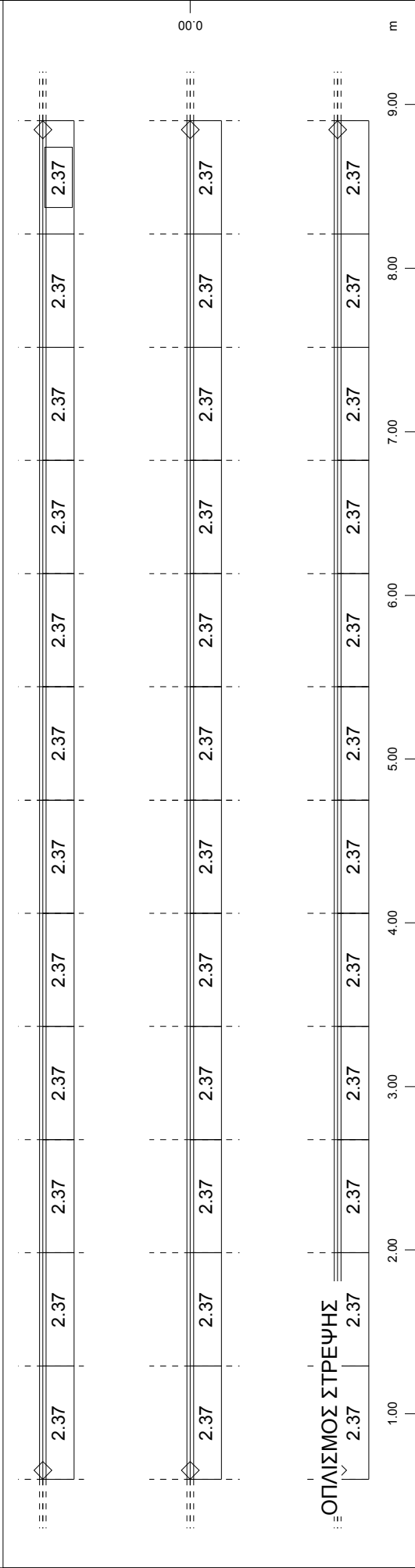
Maximum Degree of Utilization

		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	2.233	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	0.000	0.000	2.233	0.000	0.000



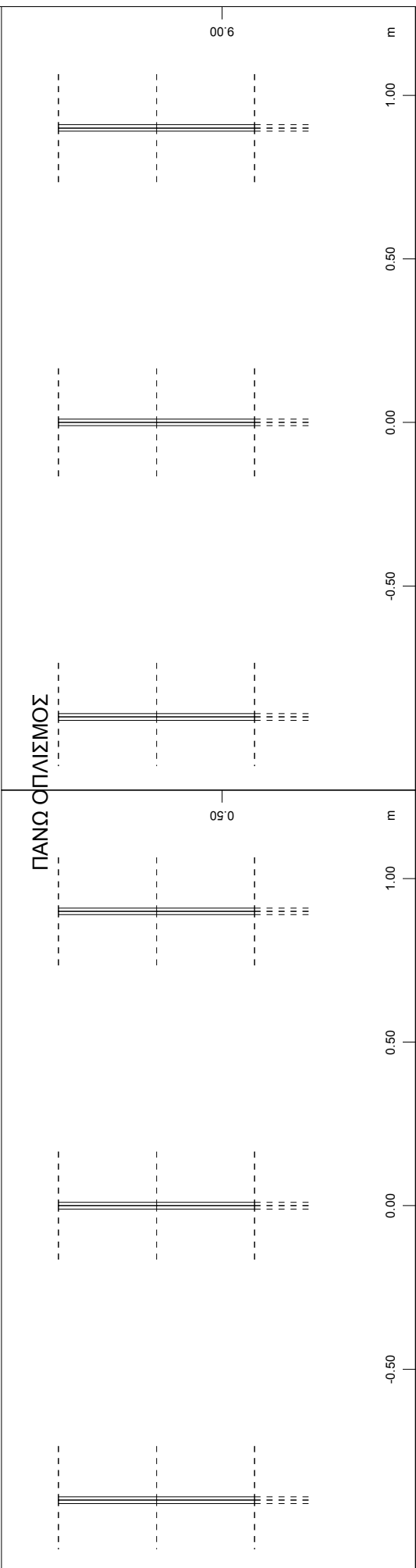
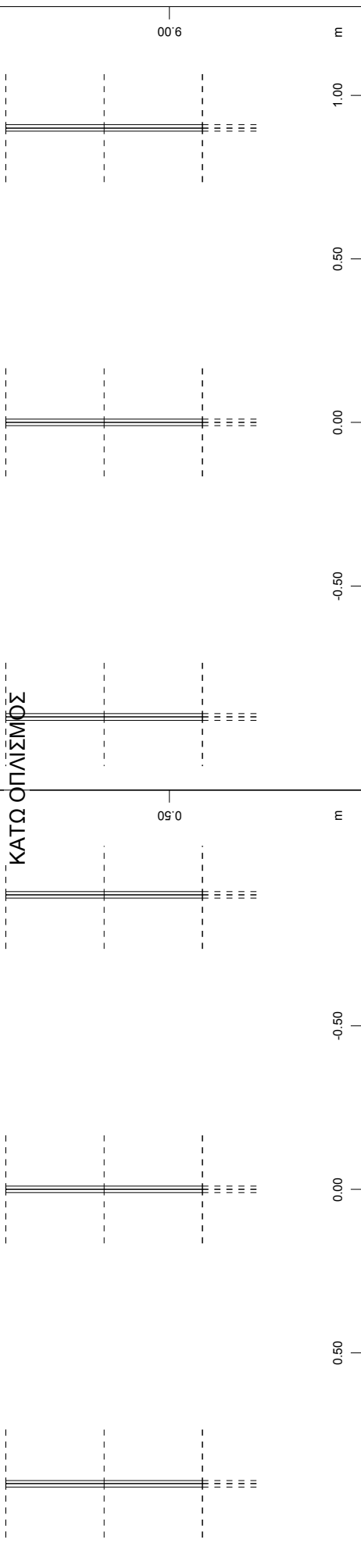


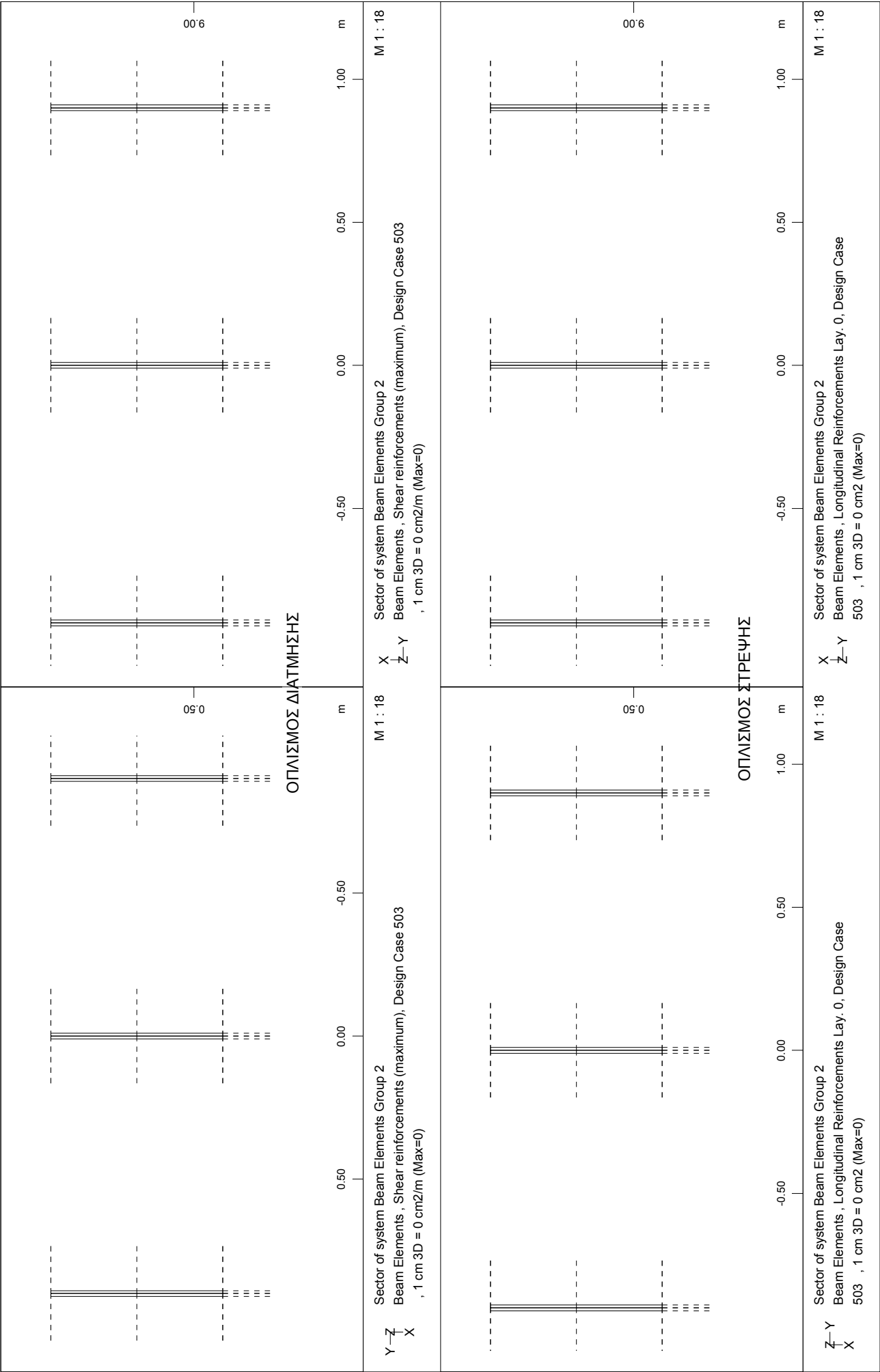
Σ-X
Y
Beam Elements , Shear reinforcements (maximum), Design Case 503 , 1 cm 3D = 0 cm2/m (Max=0)

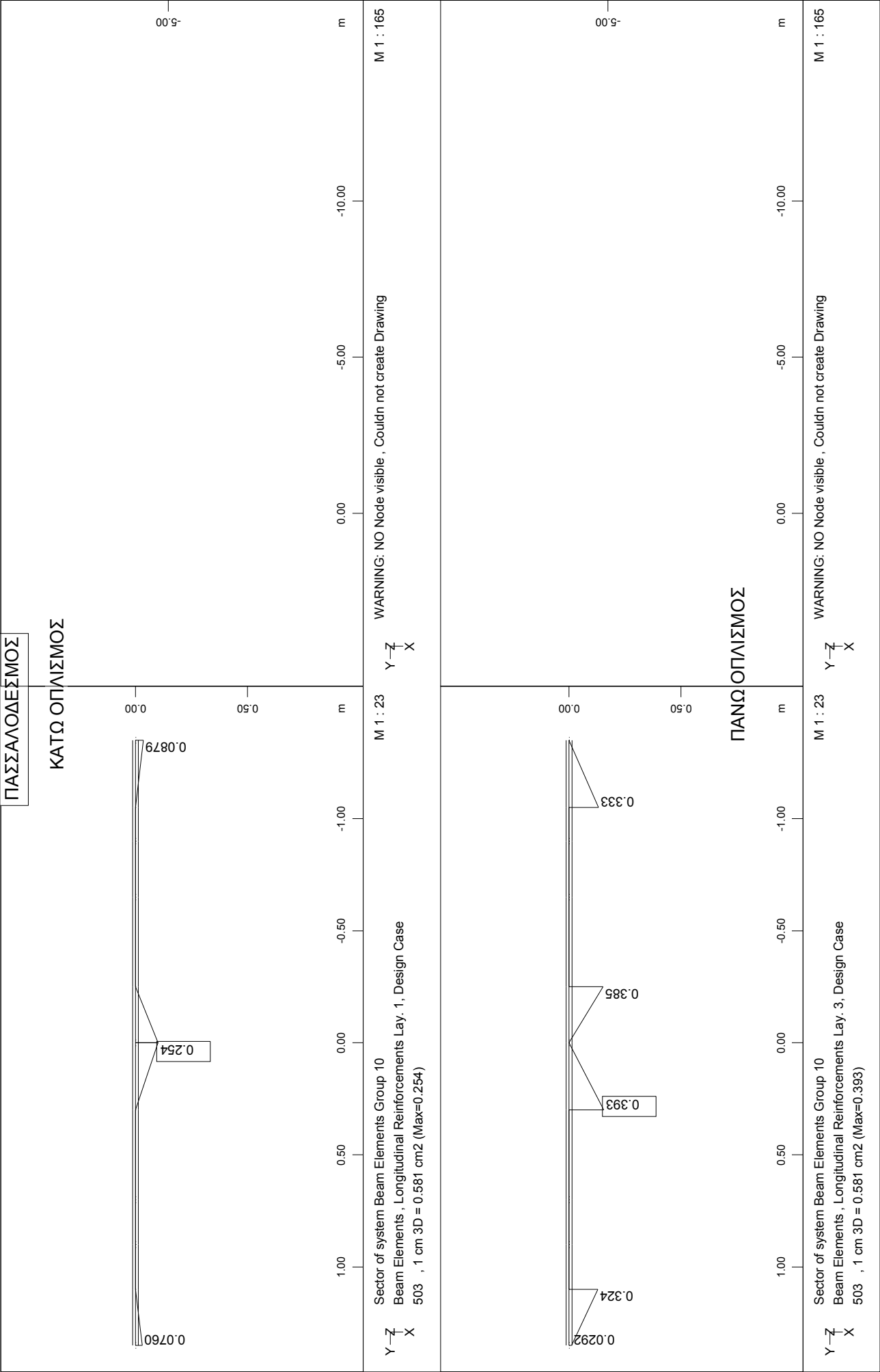


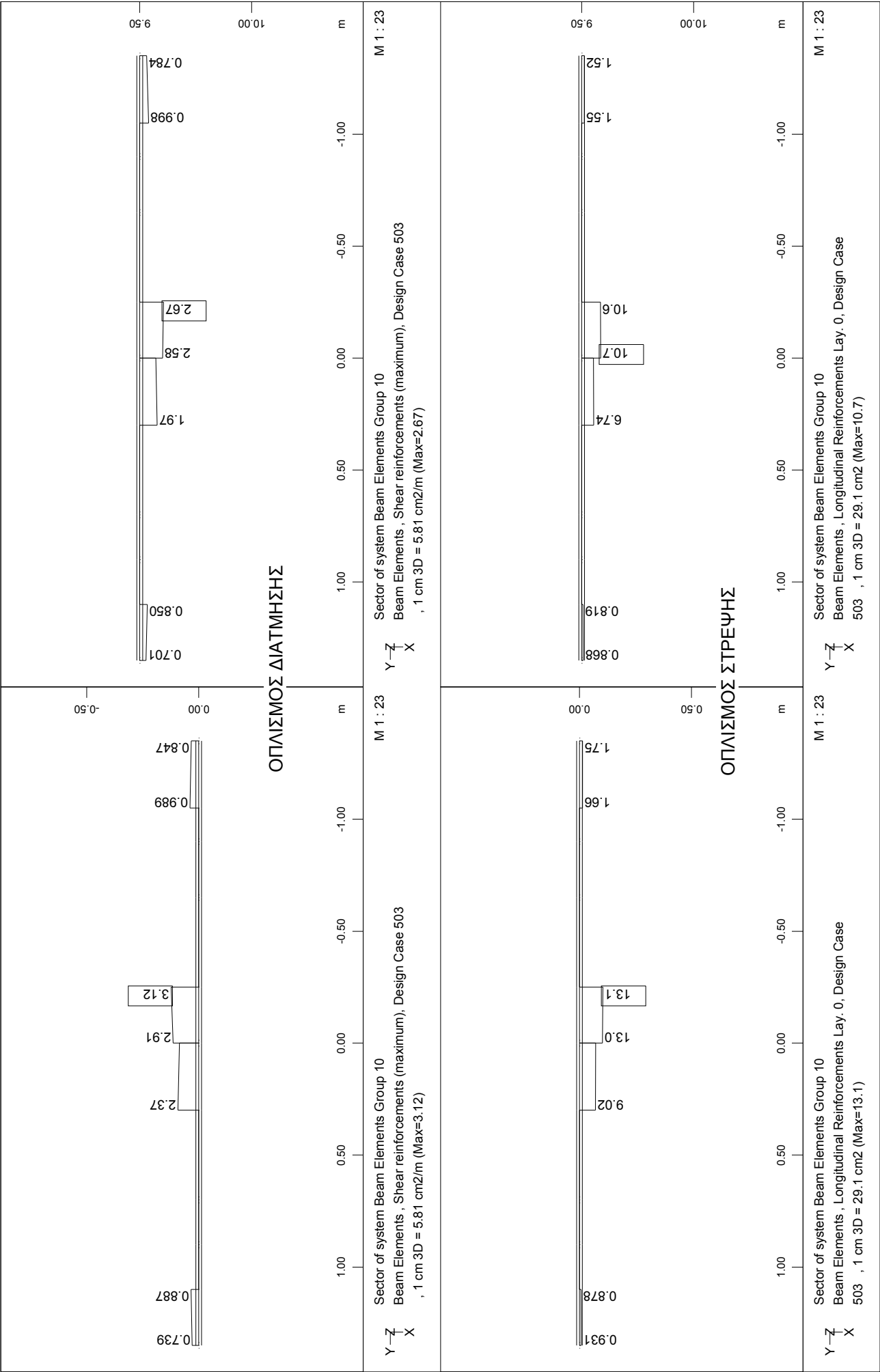
Σ-X
Y
Beam Elements , Longitudinal Reinforcements Lay. 0, Design Case 503 , 1 cm 3D = 4.48 cm2 (Max=2.37)

ΔΙΑΜΗΚΗ ΔΟΚΟΙ-ΣΤΗΡΙΞΗΣ

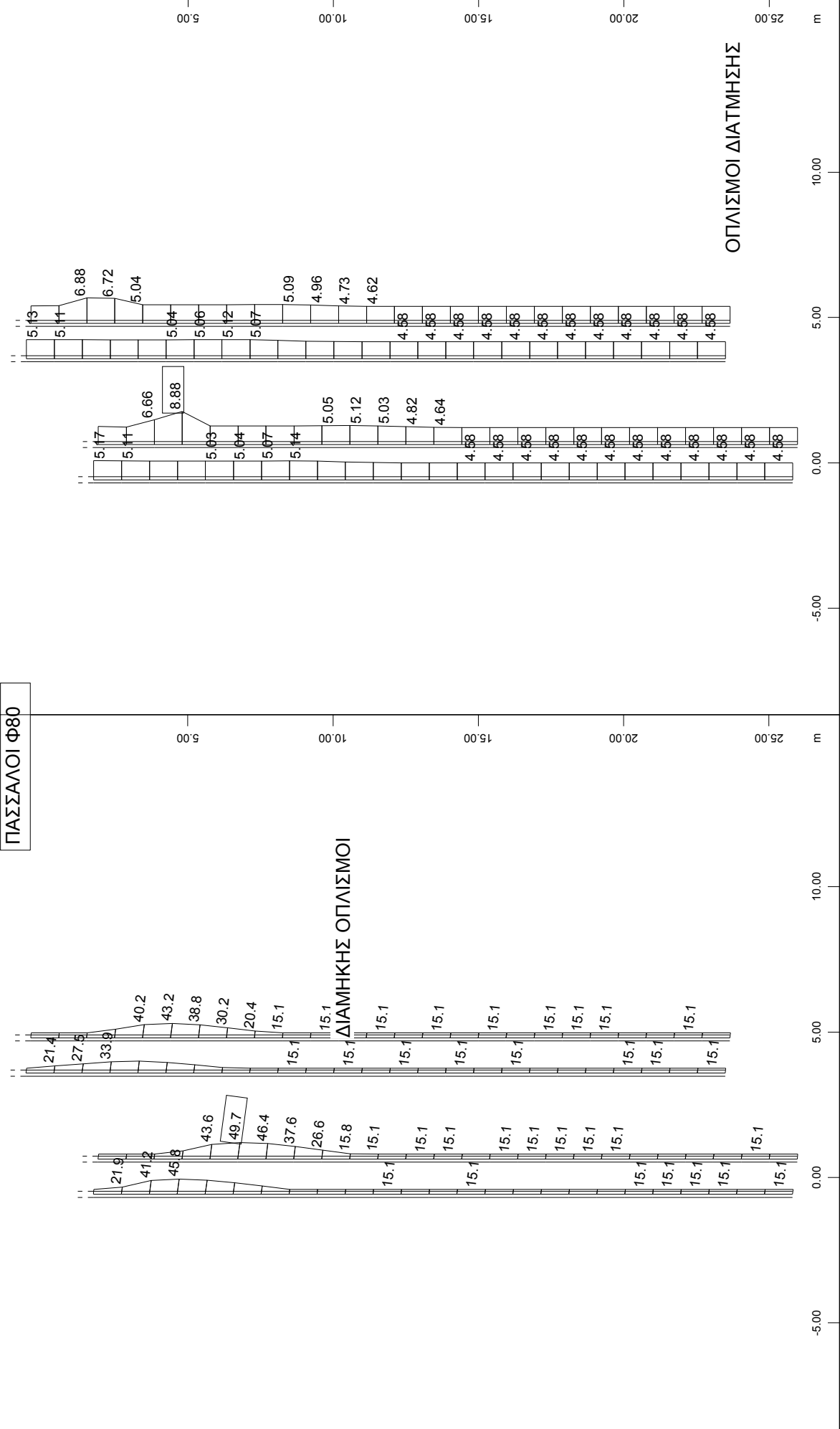








ΠΑΣΣΑΛΟΙ Φ80



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70

7) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ ULS-STATIKA

OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
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	
70	1.00	Conditional LC	ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A1	2.50
71	1.00	Conditional LC	ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A2	2.50
72	1.00	Conditional LC	ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A1	6.50
73	1.00	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	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 ΚΙΝΗΤΩΝΝ A1	2.50
71	1.00	Conditional LC	ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A2	2.50
72	1.00	Conditional LC	ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A1	6.50
73	1.00	Conditional LC	ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A2	6.50
74	1.00	Conditional LC	ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ A1	TS1-
75	1.00	Conditional LC	ΩΘΗΣΕΙΣ ΚΙΝΗΤΩΝΝ 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
1109	1	MAX-N BEAM
1110	1	MIN-N BEAM

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
COMBINATION-LL-characteristik

Generated Loadcases

Number	Comb	Title
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 ΤΒ/Λ=10.70
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 ΤΒ/Λ=10.70
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 ΤΒ/Λ=10.70
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 ΤΒ/Λ=10.70
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

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			
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]	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 ΤΒ/Λ=10.70
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΤΕΧΝΙΚΟΥ ΓΙΑ ΟΚΑ ΣΤΑΤΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

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	3001		maximum		0.25	0.60 0.12 0		1	0.020	
						0.41 0.12 0			0.496	
3	3002		maximum		0.25	0.50 0.10 0		1	0.021	
						0.45 0.11 0			0.496	
3	3003		maximum		0.25	0.40 0.08 0		1	0.019	
						0.48 0.10 0			0.496	
3	3004		maximum		0.25	0.31 0.06 0		1	0.021	
						0.53 0.11 0			0.496	
3	3005		maximum		0.25	0.22 0.05 0		1	0.020	
						0.54 0.11 0			0.496	
3	3006		maximum		0.25	0.19 0.04 0		1	0.021	
						0.57 0.11 0			0.496	
3	3007		maximum		0.25	0.64 0.21 0		1	0.032	
						0.43 0.14 0			0.496	
3	3008		maximum		0.25	0.51 0.21 0		1	0.029	
						0.41 0.15 0			0.496	
3	3009		maximum		0.25	0.41 0.16 0		1	0.026	
						0.47 0.15 0			0.496	
3	3010		maximum		0.25	0.30 0.15 0		1	0.026	
						0.48 0.15 0			0.496	
3	3011		maximum		0.25	0.23 0.14 0		1	0.025	
						0.53 0.12 0			0.496	
3	3012		maximum		0.25	0.20 0.14 0		1	0.024	
						0.55 0.14 0			0.496	
3	3013		maximum		0.25	0.63 0.29 0		1	0.222	
						0.46 0.42 0			0.496	
3	3014		maximum		0.25	0.52 0.27 0		1	0.244	
						0.52 0.37 0			0.496	
3	3015		maximum		0.25	0.41 0.18 0		1	0.253	
						0.55 0.42 0			0.496	
3	3016		maximum		0.25	0.31 0.13 0		1	0.279	
						0.63 0.41 0			0.496	
3	3017		maximum		0.25	0.23 0.05 0		1	0.268	
						0.57 0.38 0			0.496	
3	3018		maximum		0.25	0.21 0.09 0		1	0.261	
						0.64 0.42 0			0.496	
3	3019		maximum		0.25	0.58 0.14 0		1	0.117	
						0.59 0.86 0			0.496	
3	3020		maximum		0.25	0.52 0.10 0		1	0.144	
						0.65 1.07 0			0.496	
3	3021		maximum		0.25	0.41 0.08 0		1	0.159	
						0.76 1.16 0			0.496	
3	3022		maximum		0.25	0.31 0.06 0		1	0.175	
						0.82 1.28 0			0.496	
3	3023		maximum		0.25	0.24 0.05 0		1	0.171	
						0.84 1.33 0			0.496	
3	3024		maximum		0.25	0.21 0.07 0		1	0.167	
						0.86 1.33 0			0.496	
3	3025		maximum		0.25	0.59 0.12 0		1	0.239	
						0.49 0.71 0			0.496	
3	3026		maximum		0.25	0.52 0.11 0		1	0.201	
						0.63 1.00 0			0.496	
3	3027		maximum		0.25	0.41 0.08 0		1	0.189	
						0.80 1.29 0			0.496	
3	3028		maximum		0.25	0.31 0.06 0		1	0.196	
						0.86 1.42 0			0.496	
3	3029		maximum		0.25	0.24 0.05 0		1	0.179	
						0.89 1.49 0			0.496	
3	3030		maximum		0.25	0.21 0.07 0		1	0.172	
						0.88 1.49 0			0.496	
3	3031		maximum		0.25	0.60 0.13 0		1	0.093	
						0.45 0.56 0			0.496	
3	3032		maximum		0.25	0.50 0.10 0		1	0.062	
						0.67 0.93 0			0.496	
3	3033		maximum		0.25	0.40 0.08 0		1	0.062	
						0.82 1.19 0			0.496	
3	3034		maximum		0.25	0.31 0.06 0		1	0.067	
						0.83 1.29 0			0.496	
3	3035		maximum		0.25	0.24 0.08 0		1	0.070	
						0.88 1.39 0			0.496	
3	3036		maximum		0.25	0.21 0.08 0		1	0.074	
						0.84 1.36 0			0.496	
3	3037		maximum		0.25	0.54 0.12 0		1	0.056	
						0.57 0.54 0			0.496	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΤΕΧΝΙΚΟΥ ΓΙΑ ΟΚΑ ΣΤΑΤΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

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	3038		maximum		0.25	0.51 0.10	0	1	0.095		
						0.62 0.68	0		0.496		
3	3039		maximum		0.25	0.41 0.08	0	1	0.119		
						0.73 0.76	0		0.496		
3	3040		maximum		0.25	0.31 0.06	0	1	0.143		
						0.68 0.80	0		0.496		
3	3041		maximum		0.25	0.24 0.06	0	1	0.148		
						0.72 0.77	0		0.496		
3	3042		maximum		0.25	0.21 0.06	0	1	0.149		
						0.66 0.73	0		0.496		
3	3043		maximum		0.25	0.59 0.27	0	1	0.066		
						0.50 0.45	0		0.496		
3	3044		maximum		0.25	0.51 0.43	0	1	0.101		
						0.54 0.37	0		0.496		
3	3045		maximum		0.25	0.41 0.40	0	1	0.124		
						0.58 0.31	0		0.496		
3	3046		maximum		0.25	0.31 0.46	0	1	0.149		
						0.53 0.23	0		0.496		
3	3047		maximum		0.25	0.24 0.39	0	1	0.155		
						0.49 0.23	0		0.496		
3	3048		maximum		0.25	0.20 0.37	0	1	0.155		
						0.47 0.16	0		0.496		
3	3049		maximum		0.25	0.57 0.27	0	1	0.019		
						0.44 0.23	0		0.496		
3	3050		maximum		0.25	0.49 0.25	0	1	0.013		
						0.36 0.21	0		0.496		
3	3051		maximum		0.25	0.40 0.26	0	1	0.012		
						0.47 0.20	0		0.496		
3	3052		maximum		0.25	0.31 0.23	0	1	0.012		
						0.50 0.16	0		0.496		
3	3053		maximum		0.25	0.23 0.15	0	1	0.012		
						0.44 0.14	0		0.496		
3	3054		maximum		0.25	0.20 0.16	0	1	0.012		
						0.43 0.11	0		0.496		
3	3055		maximum		0.25	0.58 0.22	0	1	0.021		
						0.40 0.17	0		0.496		
3	3056		maximum		0.25	0.49 0.17	0	1	0.026		
						0.42 0.17	0		0.496		
3	3057		maximum		0.25	0.40 0.18	0	1	0.025		
						0.44 0.16	0		0.496		
3	3058		maximum		0.25	0.31 0.13	0	1	0.023		
						0.47 0.14	0		0.496		
3	3059		maximum		0.25	0.23 0.08	0	1	0.021		
						0.44 0.12	0		0.496		
3	3060		maximum		0.25	0.19 0.09	0	1	0.018		
						0.44 0.10	0		0.496		
3	3061		maximum		0.25	0.23 0.05	0	1	0.023		
						0.55 0.11	0		0.496		
3	3062		maximum		0.25	0.33 0.07	0	1	0.026		
						0.58 0.12	0		0.496		
3	3063		maximum		0.25	0.42 0.08	0	1	0.025		
						0.52 0.10	0		0.496		
3	3064		maximum		0.25	0.52 0.10	0	1	0.025		
						0.49 0.10	0		0.496		
3	3065		maximum		0.25	0.60 0.12	0	1	0.024		
						0.41 0.08	0		0.496		
3	3066		maximum		0.25	0.71 0.14	0	1	0.024		
						0.43 0.10	0		0.496		
3	3067		maximum		0.25	0.24 0.16	0	1	0.025		
						0.54 0.11	0		0.496		
3	3068		maximum		0.25	0.33 0.17	0	1	0.025		
						0.54 0.12	0		0.496		
3	3069		maximum		0.25	0.43 0.20	0	1	0.026		
						0.51 0.11	0		0.496		
3	3070		maximum		0.25	0.52 0.19	0	1	0.027		
						0.45 0.10	0		0.496		
3	3071		maximum		0.25	0.61 0.20	0	1	0.030		
						0.41 0.09	0		0.496		
3	3072		maximum		0.25	0.77 0.16	0	1	0.033		
						0.42 0.14	0		0.496		
3	3073		maximum		0.25	0.25 0.10	0	1	0.279		
						0.61 0.40	0		0.496		
3	3074		maximum		0.25	0.35 0.11	0	1	0.273		
						0.66 0.41	0		0.496		

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΤΕΧΝΙΚΟΥ ΓΙΑ ΟΚΑ ΣΤΑΤΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

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	3075		maximum		0.25	0.45 0.15	0	1	0.258	
						0.56 0.36	0		0.496	
3	3076		maximum		0.25	0.54 0.31	0	1	0.267	
						0.58 0.36	0		0.496	
3	3077		maximum		0.25	0.64 0.36	0	1	0.254	
						0.51 0.37	0		0.496	
3	3078		maximum		0.25	0.69 0.35	0	1	0.219	
						0.49 0.33	0		0.496	
3	3079		maximum		0.25	0.24 0.09	0	1	0.176	
						0.86 1.38	0		0.496	
3	3080		maximum		0.25	0.34 0.09	0	1	0.174	
						0.87 1.35	0		0.496	
3	3081		maximum		0.25	0.43 0.10	0	1	0.164	
						0.80 1.22	0		0.496	
3	3082		maximum		0.25	0.53 0.11	0	1	0.166	
						0.75 1.16	0		0.496	
3	3083		maximum		0.25	0.62 0.12	0	1	0.148	
						0.68 1.01	0		0.496	
3	3084		maximum		0.25	0.63 0.14	0	1	0.124	
						0.60 0.88	0		0.496	
3	3085		maximum		0.25	0.23 0.08	0	1	0.191	
						0.89 1.54	0		0.496	
3	3086		maximum		0.25	0.33 0.08	0	1	0.184	
						0.91 1.52	0		0.496	
3	3087		maximum		0.25	0.42 0.08	0	1	0.169	
						0.88 1.45	0		0.496	
3	3088		maximum		0.25	0.51 0.10	0	1	0.194	
						0.81 1.28	0		0.496	
3	3089		maximum		0.25	0.60 0.12	0	1	0.223	
						0.72 1.06	0		0.496	
3	3090		maximum		0.25	0.71 0.16	0	1	0.234	
						0.54 0.69	0		0.496	
3	3091		maximum		0.25	0.23 0.08	0	1	0.074	
						0.85 1.39	0		0.496	
3	3092		maximum		0.25	0.33 0.09	0	1	0.076	
						0.84 1.40	0		0.496	
3	3093		maximum		0.25	0.42 0.10	0	1	0.061	
						0.89 1.34	0		0.496	
3	3094		maximum		0.25	0.52 0.12	0	1	0.052	
						0.83 1.17	0		0.496	
3	3095		maximum		0.25	0.63 0.17	0	1	0.067	
						0.75 0.94	0		0.496	
3	3096		maximum		0.25	0.67 0.20	0	1	0.103	
						0.49 0.56	0		0.496	
3	3097		maximum		0.25	0.22 0.06	0	1	0.154	
						0.68 0.80	0		0.496	
3	3098		maximum		0.25	0.32 0.06	0	1	0.149	
						0.67 0.84	0		0.496	
3	3099		maximum		0.25	0.41 0.08	0	1	0.137	
						0.76 0.81	0		0.496	
3	3100		maximum		0.25	0.51 0.10	0	1	0.125	
						0.74 0.80	0		0.496	
3	3101		maximum		0.25	0.61 0.12	0	1	0.090	
						0.72 0.71	0		0.496	
3	3102		maximum		0.25	0.64 0.15	0	1	0.057	
						0.59 0.57	0		0.496	
3	3103		maximum		0.25	0.21 0.38	0	1	0.160	
						0.44 0.25	0		0.496	
3	3104		maximum		0.25	0.31 0.40	0	1	0.155	
						0.52 0.27	0		0.496	
3	3105		maximum		0.25	0.40 0.41	0	1	0.143	
						0.61 0.33	0		0.496	
3	3106		maximum		0.25	0.50 0.47	0	1	0.131	
						0.61 0.34	0		0.496	
3	3107		maximum		0.25	0.59 0.43	0	1	0.097	
						0.56 0.40	0		0.496	
3	3108		maximum		0.25	0.71 0.23	0	1	0.064	
						0.52 0.51	0		0.495	
3	3109		maximum		0.25	0.21 0.15	0	1	0.012	
						0.40 0.13	0		0.496	
3	3110		maximum		0.25	0.30 0.22	0	1	0.012	
						0.50 0.15	0		0.496	
3	3111		maximum		0.25	0.40 0.28	0	1	0.011	
						0.50 0.20	0		0.496	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΤΕΧΝΙΚΟΥ ΓΙΑ ΟΚΑ ΣΤΑΤΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

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 No	GEO No	h [m]	Reinforcement		dphi deg	Shr zon	Ass [cm ² /m ²]
					main	cross	dir	VEd/d [MPa]	VRd,ct/d
3	3112	maximum		0.25	0.49	0.28	0	1	0.011
					0.54	0.21	0		0.496
3	3113	maximum		0.25	0.58	0.28	0	1	0.012
					0.48	0.22	0		0.496
3	3114	maximum		0.25	0.61	0.25	0	1	0.021
					0.49	0.25	0		0.496
3	3115	maximum		0.25	0.20	0.09	0	1	0.021
					0.40	0.12	0		0.496
3	3116	maximum		0.25	0.29	0.12	0	1	0.024
					0.48	0.13	0		0.496
3	3117	maximum		0.25	0.39	0.19	0	1	0.026
					0.47	0.16	0		0.496
3	3118	maximum		0.25	0.48	0.20	0	1	0.027
					0.51	0.18	0		0.496
3	3119	maximum		0.25	0.57	0.20	0	1	0.028
					0.48	0.18	0		0.496
3	3120	maximum		0.25	0.61	0.17	0	1	0.022
					0.49	0.17	0		0.496
4	4001	maximum		0.25	2.33	0.47	0	1	
					1.36	0.27	0		0.496
4	4002	maximum		0.25	0.86	0.26	0	1	0.123
					0.54	0.13	0		0.496
4	4003	maximum		0.25	1.72	0.94	0	1	0.211
					0.99	0.27	0		0.495
4	4004	maximum		0.25	0.66	0.55	0	1	0.124
					0.42	0.24	0		0.495
4	4005	maximum		0.25	1.65	0.42	0	1	0.405
					1.00	0.95	0		0.495
4	4006	maximum		0.25	0.71	0.18	0	1	0.150
					0.46	0.73	0		0.495
4	4007	maximum		0.25	2.10	0.63	0	1	
					1.25	0.45	0		0.496
4	4008	maximum		0.25	0.77	0.26	0	1	0.096
					0.71	0.82	0		0.495
4	4009	maximum		0.25	1.60	0.56	0	1	0.301
					1.04	0.54	0		0.495
4	4010	maximum		0.25	0.71	0.14	0	1	0.223
					0.50	0.56	0		0.495
4	4011	maximum		0.25	1.54	0.53	0	1	0.177
					1.02	0.44	0		0.495
4	4012	maximum		0.25	0.68	0.21	0	1	0.120
					0.46	0.23	0		0.496
4	4013	maximum		0.25	1.92	0.58	0	1	
					1.27	0.40	0		0.496
4	4014	maximum		0.25	0.74	0.25	0	1	0.083
					0.53	0.37	0		0.495
4	4015	maximum		0.25	1.47	0.39	0	1	0.345
					0.95	0.89	0		0.495
4	4016	maximum		0.25	0.65	0.16	0	1	0.140
					0.47	0.69	0		0.495
4	4017	maximum		0.25	1.48	1.02	0	1	0.169
					1.10	0.49	0		0.495
4	4018	maximum		0.25	0.57	0.53	0	1	0.118
					0.43	0.24	0		0.495
4	4019	maximum		0.25	1.93	0.49	0	1	
					1.29	0.27	0		0.496
4	4020	maximum		0.25	0.78	0.33	0	1	0.094
					0.59	0.12	0		0.495
4	4021	maximum		0.25	0.98	0.24	0	1	0.145
					0.63	0.13	0		0.495
4	4022	maximum		0.25	2.63	0.53	0	1	
					1.42	0.28	0		0.496
4	4023	maximum		0.25	0.74	0.47	0	1	0.147
					0.47	0.32	0		0.495
4	4024	maximum		0.25	1.90	0.91	0	1	0.242
					1.09	0.43	0		0.495
4	4025	maximum		0.25	0.79	0.24	0	1	0.155
					0.50	0.55	0		0.495
4	4026	maximum		0.25	1.89	0.66	0	1	0.383
					1.04	0.89	0		0.495
4	4027	maximum		0.25	0.88	0.31	0	1	0.177
					0.66	0.77	0		0.495
4	4028	maximum		0.25	2.36	0.75	0	1	
					1.34	0.39	0		0.496

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΤΕΧΝΙΚΟΥ ΓΙΑ ΟΚΑ ΣΤΑΤΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

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			
4	4029	maximum		0.25	0.82	0.16	0	1	0.171
					0.53	0.62	0		0.495
4	4030	maximum		0.25	1.74	0.47	0	1	0.327
					1.06	0.65	0		0.495
4	4031	maximum		0.25	0.75	0.26	0	1	0.123
					0.50	0.22	0		0.495
4	4032	maximum		0.25	1.77	0.76	0	1	0.165
					1.13	0.36	0		0.495
4	4033	maximum		0.25	0.83	0.27	0	1	0.098
					0.58	0.43	0		0.495
4	4034	maximum		0.25	2.17	0.67	0	1	
					1.40	0.43	0		0.496
4	4035	maximum		0.25	0.71	0.14	0	1	0.167
					0.52	0.76	0		0.495
4	4036	maximum		0.25	1.59	0.32	0	1	0.381
					1.12	0.93	0		0.495
4	4037	maximum		0.25	0.69	0.58	0	1	0.122
					0.46	0.19	0		0.495
4	4038	maximum		0.25	1.68	1.20	0	1	0.187
					1.14	0.39	0		0.495
4	4039	maximum		0.25	0.95	0.33	0	1	0.092
					0.61	0.12	0		0.496
4	4040	maximum		0.25	2.11	0.56	0	1	
					1.50	0.30	0		0.496
8	8001	maximum		1.20	0.52	2.59	0	1	0.055
					0.77	3.85	0		0.307
8	8002	maximum		1.20	2.34	6.22	0	1	0.230
					5.23	10.65	0		0.315
8	8003	maximum		1.20	2.80	9.00	0	1	0.107
					8.68	19.72	0		0.345
8	8004	maximum		1.20	2.27	8.30	0	1	0.191
					3.36	13.03	0		0.319
8	8005	maximum		1.20	3.05	7.59	0	1	0.118
					6.47	15.37	0		0.356
8	8006	maximum		1.20	3.10	8.58	0	1	0.143
					7.04	14.43	0		0.313
8	8007	maximum		1.20	1.43	2.20	0	1	0.047
					1.85	1.92	0		0.302
8	8008	maximum		1.20	0.49	0.55	0	1	0.161
					1.47	0.29	0		0.342
8	8009	maximum		1.20	1.59	5.70	0	1	0.071
					5.68	13.30	0		0.359
8	8010	maximum		1.20	3.94	8.49	0	1	0.166
					4.94	12.53	0		0.324
8	8011	maximum		1.20	2.97	6.93	0	1	0.096
					5.33	13.50	0		0.375
8	8012	maximum		1.20	2.40	7.63	0	1	0.136
					5.96	13.74	0		0.333
8	8013	maximum		1.20	1.59	2.15	0	1	0.044
					1.54	1.57	0		0.306
8	8014	maximum		1.20	1.06	0.62	0	1	0.152
					0.64	0.13	0		0.336
8	8015	maximum		1.20	1.21	4.99	0	1	0.068
					5.82	13.95	0		0.347
8	8016	maximum		1.20	4.73	8.38	0	1	0.161
					5.18	12.33	0		0.325
8	8017	maximum		1.20	3.71	8.45	0	1	0.074
					7.96	18.73	0		0.337
8	8018	maximum		1.20	2.02	7.20	0	1	0.184
					3.50	12.88	0		0.317
8	8019	maximum		1.20	0.78	2.70	0	1	0.056
					1.16	4.51	0		0.308
8	8020	maximum		1.20	2.95	5.95	0	1	0.173
					3.91	9.07	0		0.306
8	8021	maximum		1.20	0.56	2.78	0	1	0.058
					0.80	4.01	0		0.307
8	8022	maximum		1.20	3.53	10.00	0	1	0.110
					9.25	21.76	0		0.346
8	8023	maximum		1.20	2.73	6.88	0	1	0.226
					5.02	10.94	0		0.316
8	8024	maximum		1.20	2.27	8.72	0	1	0.192
					3.55	13.70	0		0.317
8	8025	maximum		1.20	2.74	7.90	0	1	0.124
					8.01	17.89	0		0.359

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΤΕΧΝΙΚΟΥ ΓΙΑ ΟΚΑ ΣΤΑΤΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

REINFORCEMENT ACC. TO DIN1045-1 2008 in [cm²/m] upper/lower
General load safety factor - as defined in BEMESS: $\Gamma_{\text{f}} = 1.00$
Shear: stresses V_{Ed}/d and $V_{\text{Rd,ct}}/d$ with d =effective depth = $h-h_{\text{m}}$
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		$V_{\text{Rd,ct}}/d$	
8	8026	maximum		1.20	1.23	2.10	0	1	0.038	
					2.03	2.30	0		0.300	
8	8027	maximum		1.20	2.35	7.15	0	1	0.074	
					5.76	14.69	0		0.366	
8	8028	maximum		1.20	3.78	9.44	0	1	0.177	
					6.23	14.81	0		0.311	
8	8029	maximum		1.20	0.60	0.36	0	1	0.182	
					1.01	0.20	0		0.340	
8	8030	maximum		1.20	3.71	8.85	0	1	0.176	
					6.06	14.31	0		0.325	
8	8031	maximum		1.20	2.93	7.74	0	1	0.086	
					6.78	15.79	0		0.369	
8	8032	maximum		1.20	1.42	2.06	0	1	0.043	
					1.92	2.13	0		0.300	
8	8033	maximum		1.20	2.51	7.06	0	1	0.083	
					6.01	15.09	0		0.345	
8	8034	maximum		1.20	2.98	8.52	0	1	0.147	
					5.63	14.54	0		0.332	
8	8035	maximum		1.20	0.92	0.53	0	1	0.167	
					1.03	0.21	0		0.334	
8	8036	maximum		1.20	4.37	8.75	0	1	0.124	
					6.63	14.24	0		0.323	
8	8037	maximum		1.20	4.20	10.18	0	1	0.078	
					9.55	21.55	0		0.335	
8	8038	maximum		1.20	0.80	3.05	0	1	0.053	
					1.45	5.24	0		0.308	
8	8039	maximum		1.20	1.92	7.86	0	1	0.202	
					3.76	14.62	0		0.310	
8	8040	maximum		1.20	2.93	6.30	0	1	0.213	
					4.87	10.77	0		0.304	

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 $d-2 \cdot n_{\text{omc}}$.

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	0.60	0.12	0	0.41	0.12	0		
3	3002	0.50	0.10	0	0.45	0.11	0		
3	3003	0.40	0.08	0	0.48	0.10	0		
3	3004	0.31	0.06	0	0.53	0.11	0		
3	3005	0.22	0.05	0	0.54	0.11	0		
3	3006	0.19	0.04	0	0.57	0.11	0		
3	3007	0.64	0.21	0	0.43	0.14	0		
3	3008	0.51	0.21	0	0.41	0.15	0		
3	3009	0.41	0.16	0	0.47	0.15	0		
3	3010	0.30	0.15	0	0.48	0.15	0		
3	3011	0.23	0.14	0	0.53	0.12	0		
3	3012	0.20	0.14	0	0.55	0.14	0		
3	3013	0.63	0.29	0	0.46	0.42	0		
3	3014	0.52	0.27	0	0.52	0.37	0		
3	3015	0.41	0.18	0	0.55	0.42	0		
3	3016	0.31	0.13	0	0.63	0.41	0		
3	3017	0.23	0.05	0	0.57	0.38	0		
3	3018	0.21	0.09	0	0.64	0.42	0		
3	3019	0.58	0.14	0	0.59	0.86	0		
3	3020	0.52	0.10	0	0.65	1.07	0		
3	3021	0.41	0.08	0	0.76	1.16	0		
3	3022	0.31	0.06	0	0.82	1.28	0		
3	3023	0.24	0.05	0	0.84	1.33	0		
3	3024	0.21	0.07	0	0.86	1.33	0		
3	3025	0.59	0.12	0	0.49	0.71	0		
3	3026	0.52	0.11	0	0.63	1.00	0		
3	3027	0.41	0.08	0	0.80	1.29	0		
3	3028	0.31	0.06	0	0.86	1.42	0		
3	3029	0.24	0.05	0	0.89	1.49	0		
3	3030	0.21	0.07	0	0.88	1.49	0		
3	3031	0.60	0.13	0	0.45	0.56	0		
3	3032	0.50	0.10	0	0.67	0.93	0		
3	3033	0.40	0.08	0	0.82	1.19	0		
3	3034	0.31	0.06	0	0.83	1.29	0		

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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[cm2/m2]	Asse[cm2]
3	3035	0.24	0.08	0	0.88	1.39	0		
3	3036	0.21	0.08	0	0.84	1.36	0		
3	3037	0.54	0.12	0	0.57	0.54	0		
3	3038	0.51	0.10	0	0.62	0.68	0		
3	3039	0.41	0.08	0	0.73	0.76	0		
3	3040	0.31	0.06	0	0.68	0.80	0		
3	3041	0.24	0.06	0	0.72	0.77	0		
3	3042	0.21	0.06	0	0.66	0.73	0		
3	3043	0.59	0.27	0	0.50	0.45	0		
3	3044	0.51	0.43	0	0.54	0.37	0		
3	3045	0.41	0.40	0	0.58	0.31	0		
3	3046	0.31	0.46	0	0.53	0.23	0		
3	3047	0.24	0.39	0	0.49	0.23	0		
3	3048	0.20	0.37	0	0.47	0.16	0		
3	3049	0.57	0.27	0	0.44	0.23	0		
3	3050	0.49	0.25	0	0.36	0.21	0		
3	3051	0.40	0.26	0	0.47	0.20	0		
3	3052	0.31	0.23	0	0.50	0.16	0		
3	3053	0.23	0.15	0	0.44	0.14	0		
3	3054	0.20	0.16	0	0.43	0.11	0		
3	3055	0.58	0.22	0	0.40	0.17	0		
3	3056	0.49	0.17	0	0.42	0.17	0		
3	3057	0.40	0.18	0	0.44	0.16	0		
3	3058	0.31	0.13	0	0.47	0.14	0		
3	3059	0.23	0.08	0	0.44	0.12	0		
3	3060	0.19	0.09	0	0.44	0.10	0		
3	3061	0.23	0.05	0	0.55	0.11	0		
3	3062	0.33	0.07	0	0.58	0.12	0		
3	3063	0.42	0.08	0	0.52	0.10	0		
3	3064	0.52	0.10	0	0.49	0.10	0		
3	3065	0.60	0.12	0	0.41	0.08	0		
3	3066	0.71	0.14	0	0.43	0.10	0		
3	3067	0.24	0.16	0	0.54	0.11	0		
3	3068	0.33	0.17	0	0.54	0.12	0		
3	3069	0.43	0.20	0	0.51	0.11	0		
3	3070	0.52	0.19	0	0.45	0.10	0		
3	3071	0.61	0.20	0	0.41	0.09	0		
3	3072	0.77	0.16	0	0.42	0.14	0		
3	3073	0.25	0.10	0	0.61	0.40	0		
3	3074	0.35	0.11	0	0.66	0.41	0		
3	3075	0.45	0.15	0	0.56	0.36	0		
3	3076	0.54	0.31	0	0.58	0.36	0		
3	3077	0.64	0.36	0	0.51	0.37	0		
3	3078	0.69	0.35	0	0.49	0.33	0		
3	3079	0.24	0.09	0	0.86	1.38	0		
3	3080	0.34	0.09	0	0.87	1.35	0		
3	3081	0.43	0.10	0	0.80	1.22	0		
3	3082	0.53	0.11	0	0.75	1.16	0		
3	3083	0.62	0.12	0	0.68	1.01	0		
3	3084	0.63	0.14	0	0.60	0.88	0		
3	3085	0.23	0.08	0	0.89	1.54	0		
3	3086	0.33	0.08	0	0.91	1.52	0		
3	3087	0.42	0.08	0	0.88	1.45	0		
3	3088	0.51	0.10	0	0.81	1.28	0		
3	3089	0.60	0.12	0	0.72	1.06	0		
3	3090	0.71	0.16	0	0.54	0.69	0		
3	3091	0.23	0.08	0	0.85	1.39	0		
3	3092	0.33	0.09	0	0.84	1.40	0		
3	3093	0.42	0.10	0	0.89	1.34	0		
3	3094	0.52	0.12	0	0.83	1.17	0		
3	3095	0.63	0.17	0	0.75	0.94	0		
3	3096	0.67	0.20	0	0.49	0.56	0		
3	3097	0.22	0.06	0	0.68	0.80	0		
3	3098	0.32	0.06	0	0.67	0.84	0		
3	3099	0.41	0.08	0	0.76	0.81	0		
3	3100	0.51	0.10	0	0.74	0.80	0		
3	3101	0.61	0.12	0	0.72	0.71	0		
3	3102	0.64	0.15	0	0.59	0.57	0		
3	3103	0.21	0.38	0	0.44	0.25	0		
3	3104	0.31	0.40	0	0.52	0.27	0		
3	3105	0.40	0.41	0	0.61	0.33	0		
3	3106	0.50	0.47	0	0.61	0.34	0		
3	3107	0.59	0.43	0	0.56	0.40	0		
3	3108	0.71	0.23	0	0.52	0.51	0		
3	3109	0.21	0.15	0	0.40	0.13	0		
3	3110	0.30	0.22	0	0.50	0.15	0		
3	3111	0.40	0.28	0	0.50	0.20	0		
3	3112	0.49	0.28	0	0.54	0.21	0		

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	3113	0.58	0.28	0	0.48	0.22	0		
3	3114	0.61	0.25	0	0.49	0.25	0		
3	3115	0.20	0.09	0	0.40	0.12	0		
3	3116	0.29	0.12	0	0.48	0.13	0		
3	3117	0.39	0.19	0	0.47	0.16	0		
3	3118	0.48	0.20	0	0.51	0.18	0		
3	3119	0.57	0.20	0	0.48	0.18	0		
3	3120	0.61	0.17	0	0.49	0.17	0		
4	4001	2.33	0.47	0	1.36	0.27	0		
4	4002	0.86	0.26	0	0.54	0.13	0		
4	4003	1.72	0.94	0	0.99	0.27	0		
4	4004	0.66	0.55	0	0.42	0.24	0		
4	4005	1.65	0.42	0	1.00	0.95	0		
4	4006	0.71	0.18	0	0.46	0.73	0		
4	4007	2.10	0.63	0	1.25	0.45	0		
4	4008	0.77	0.26	0	0.71	0.82	0		
4	4009	1.60	0.56	0	1.04	0.54	0		
4	4010	0.71	0.14	0	0.50	0.56	0		
4	4011	1.54	0.53	0	1.02	0.44	0		
4	4012	0.68	0.21	0	0.46	0.23	0		
4	4013	1.92	0.58	0	1.27	0.40	0		
4	4014	0.74	0.25	0	0.53	0.37	0		
4	4015	1.47	0.39	0	0.95	0.89	0		
4	4016	0.65	0.16	0	0.47	0.69	0		
4	4017	1.48	1.02	0	1.10	0.49	0		
4	4018	0.57	0.53	0	0.43	0.24	0		
4	4019	1.93	0.49	0	1.29	0.27	0		
4	4020	0.78	0.33	0	0.59	0.12	0		
4	4021	0.98	0.24	0	0.63	0.13	0		
4	4022	2.63	0.53	0	1.42	0.28	0		
4	4023	0.74	0.47	0	0.47	0.32	0		
4	4024	1.90	0.91	0	1.09	0.43	0		
4	4025	0.79	0.24	0	0.50	0.55	0		
4	4026	1.89	0.66	0	1.04	0.89	0		
4	4027	0.88	0.31	0	0.66	0.77	0		
4	4028	2.36	0.75	0	1.34	0.39	0		
4	4029	0.82	0.16	0	0.53	0.62	0		
4	4030	1.74	0.47	0	1.06	0.65	0		
4	4031	0.75	0.26	0	0.50	0.22	0		
4	4032	1.77	0.76	0	1.13	0.36	0		
4	4033	0.83	0.27	0	0.58	0.43	0		
4	4034	2.17	0.67	0	1.40	0.43	0		
4	4035	0.71	0.14	0	0.52	0.76	0		
4	4036	1.59	0.32	0	1.12	0.93	0		
4	4037	0.69	0.58	0	0.46	0.19	0		
4	4038	1.68	1.20	0	1.14	0.39	0		
4	4039	0.95	0.33	0	0.61	0.12	0		
4	4040	2.11	0.56	0	1.50	0.30	0		
8	8001	0.52	2.59	0	0.77	3.85	0		
8	8002	2.34	6.22	0	5.23	10.65	0		
8	8003	2.80	9.00	0	8.68	19.72	0		
8	8004	2.27	8.30	0	3.36	13.03	0		
8	8005	3.05	7.59	0	6.47	15.37	0		
8	8006	3.10	8.58	0	7.04	14.43	0		
8	8007	1.43	2.20	0	1.85	1.92	0		
8	8008	0.49	0.55	0	1.47	0.29	0		
8	8009	1.59	5.70	0	5.68	13.30	0		
8	8010	3.94	8.49	0	4.94	12.53	0		
8	8011	2.97	6.93	0	5.33	13.50	0		
8	8012	2.40	7.63	0	5.96	13.74	0		
8	8013	1.59	2.15	0	1.54	1.57	0		
8	8014	1.06	0.62	0	0.64	0.13	0		
8	8015	1.21	4.99	0	5.82	13.95	0		
8	8016	4.73	8.38	0	5.18	12.33	0		
8	8017	3.71	8.45	0	7.96	18.73	0		
8	8018	2.02	7.20	0	3.50	12.88	0		
8	8019	0.78	2.70	0	1.16	4.51	0		
8	8020	2.95	5.95	0	3.91	9.07	0		
8	8021	0.56	2.78	0	0.80	4.01	0		
8	8022	3.53	10.00	0	9.25	21.76	0		
8	8023	2.73	6.88	0	5.02	10.94	0		
8	8024	2.27	8.72	0	3.55	13.70	0		
8	8025	2.74	7.90	0	8.01	17.89	0		
8	8026	1.23	2.10	0	2.03	2.30	0		
8	8027	2.35	7.15	0	5.76	14.69	0		
8	8028	3.78	9.44	0	6.23	14.81	0		
8	8029	0.60	0.36	0	1.01	0.20	0		
8	8030	3.71	8.85	0	6.06	14.31	0		

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	8031	2.93	7.74	0	6.78	15.79	0		
8	8032	1.42	2.06	0	1.92	2.13	0		
8	8033	2.51	7.06	0	6.01	15.09	0		
8	8034	2.98	8.52	0	5.63	14.54	0		
8	8035	0.92	0.53	0	1.03	0.21	0		
8	8036	4.37	8.75	0	6.63	14.24	0		
8	8037	4.20	10.18	0	9.55	21.55	0		
8	8038	0.80	3.05	0	1.45	5.24	0		
8	8039	1.92	7.86	0	3.76	14.62	0		
8	8040	2.93	6.30	0	4.87	10.77	0		

REINFORCEMENT INDEX [kg netto]: 0.041 (Upper)
0.074 (Lower)
0.000 (Shear)

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
FASH-2_ULS_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Selected Beam Elements

FROM	TO	INC	X-VALUE	NC	MEMBER	CS0	CS1	CS2	CS3	CS4	CS5
10001											
10005											
10006											
10010											
10011											
10015											
10016											
10020											
12000	12100	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. 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 ΤΒ/L=10.70
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/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	
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	
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	

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	3.68		3.40T	0.18		0.11	
10001	0.250	8	0.04	5.78		4.87T			0.91	
10005	0.000	8	0.08	10.08		9.02T			1.06	
10005	0.300	8	0.10	12.56		11.20T	1.35			
10006	0.000	8	0.11	14.40		13.03T	1.37			
10006	0.250	8	0.11	14.17		13.14T			1.03	
10010	0.000	8	0.04	5.11		4.36T			0.76	
10010	0.300	8	0.04	4.67		4.47T	0.19			
10011	0.000	8	0.03	4.26		3.99T	0.16		0.11	
10011	0.250	8	0.04	5.46		4.54T			0.92	
10015	0.000	8	0.08	10.07		8.99T			1.08	
10015	0.300	8	0.06	7.83		6.64T	1.19			
10016	0.000	8	0.12	15.69		14.45T	1.24			
10016	0.250	8	0.09	11.58		10.56T			1.02	
10020	0.000	8	0.04	5.71		4.95T			0.76	
10020	0.300	8	0.03	4.52		4.31T	0.19		0.02	
12001	0.000	9	0.30	15.08			15.08T			
12001	1.000	9	0.30	15.08			15.08T			
12002	0.000	9	0.30	15.08			15.08T			
12002	1.000	9	0.30	15.08			15.08T			
12003	0.000	9	0.30	15.08			15.08T			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
12003	1.000	9	0.49	24.69			24.69T			
12004	0.000	9	0.30	15.08			15.08T			
12004	1.000	9	0.44	21.88			21.88T			
12005	0.000	9	0.44	21.88			21.88T			
12005	1.000	9	0.82	41.20			41.20T			
12006	0.000	9	0.82	41.20			41.20T			
12006	1.000	9	0.91	45.84			45.84T			
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	0.30	15.08			15.08T			
12009	0.000	9	0.30	15.08			15.08T			
12009	1.000	9	0.53	26.51			26.51T			
12010	0.000	9	0.30	15.08			15.08T			
12010	1.000	9	0.43	21.43			21.43T			
12011	0.000	9	0.43	21.43			21.43T			
12011	1.000	9	0.55	27.55			27.55T			
12012	0.000	9	0.55	27.55			27.55T			
12012	1.000	9	0.67	33.92			33.92T			
12013	0.000	9	0.49	24.69			24.69T			
12013	1.000	9	0.87	43.59			43.59T			
12014	0.000	9	0.87	43.54			43.54T			
12014	1.000	9	0.99	49.68			49.68T			
12015	0.000	9	0.99	49.64			49.64T			
12015	1.000	9	0.92	46.36			46.36T			
12016	0.000	9	0.92	46.34			46.34T			
12016	1.000	9	0.75	37.56			37.56T			
12017	0.000	9	0.75	37.54			37.54T			
12017	1.000	9	0.53	26.59			26.59T			
12018	0.000	9	0.53	26.59			26.59T			
12018	1.000	9	0.31	15.81			15.81T			
12019	0.000	9	0.31	15.81			15.81T			
12019	1.000	9	0.30	15.08			15.08T			
12020	0.000	9	0.30	15.08			15.08T			
12020	1.000	9	0.30	15.08			15.08T			
12021	0.000	9	0.30	15.08			15.08T			
12021	1.000	9	0.30	15.08			15.08T			
12022	0.000	9	0.30	15.08			15.08T			
12022	1.000	9	0.30	15.08			15.08T			
12023	0.000	9	0.30	15.08			15.08T			
12023	1.000	9	0.30	15.08			15.08T			
12024	0.000	9	0.30	15.08			15.08T			
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			15.08'			
12034	1.000	9	0.30	15.08			15.08'			
12035	0.000	9	0.91	45.83			45.83T			
12035	1.000	9	0.85	42.68			42.68T			
12036	0.000	9	0.85	42.65			42.65T			
12036	1.000	9	0.69	34.75			34.75T			
12037	0.000	9	0.69	34.74			34.74T			
12037	1.000	9	0.50	24.90			24.90T			
12038	0.000	9	0.50	24.89			24.89T			
12038	1.000	9	0.30	15.13			15.13T			
12039	0.000	9	0.30	15.12			15.12T			
12039	1.000	9	0.30	15.08			15.08T			
12040	0.000	9	0.30	15.08			15.08T			
12040	1.000	9	0.30	15.08			15.08T			
12041	0.000	9	0.30	15.08			15.08T			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
12041	1.000	9	0.30	15.08			15.08T			
12042	0.000	9	0.30	15.08			15.08T			
12042	1.000	9	0.30	15.08			15.08T			
12043	0.000	9	0.30	15.08			15.08T			
12043	1.000	9	0.30	15.08			15.08T			
12044	0.000	9	0.30	15.08			15.08T			
12044	1.000	9	0.30	15.08			15.08T			
12045	0.000	9	0.30	15.08			15.08T			
12045	1.000	9	0.30	15.08			15.08T			
12046	0.000	9	0.30	15.08			15.08T			
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			15.08'			
12056	1.000	9	0.30	15.08			15.08'			
12057	0.000	9	0.53	26.51			26.51T			
12057	1.000	9	0.80	40.24			40.24T			
12058	0.000	9	0.80	40.20			40.20T			
12058	1.000	9	0.86	43.23			43.23T			
12059	0.000	9	0.86	43.21			43.21T			
12059	1.000	9	0.77	38.77			38.77T			
12060	0.000	9	0.77	38.75			38.75T			
12060	1.000	9	0.60	30.24			30.24T			
12061	0.000	9	0.60	30.23			30.23T			
12061	1.000	9	0.41	20.36			20.36T			
12062	0.000	9	0.41	20.36			20.36T			
12062	1.000	9	0.30	15.08			15.08T			
12063	0.000	9	0.30	15.08			15.08T			
12063	1.000	9	0.30	15.08			15.08T			
12064	0.000	9	0.30	15.08			15.08T			
12064	1.000	9	0.30	15.08			15.08T			
12065	0.000	9	0.30	15.08			15.08T			
12065	1.000	9	0.30	15.08			15.08T			
12066	0.000	9	0.30	15.08			15.08T			
12066	1.000	9	0.30	15.08			15.08T			
12067	0.000	9	0.30	15.08			15.08T			
12067	1.000	9	0.30	15.08			15.08T			
12068	0.000	9	0.30	15.08			15.08T			
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			15.08'			
12078	1.000	9	0.30	15.08			15.08'			
12079	0.000	9	0.67	33.92			33.92T			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
12079	1.000	9	0.72	36.36			36.36T			
12080	0.000	9	0.72	36.34			36.34T			
12080	1.000	9	0.65	32.56			32.56T			
12081	0.000	9	0.65	32.54			32.54T			
12081	1.000	9	0.50	25.31			25.31T			
12082	0.000	9	0.50	25.31			25.31T			
12082	1.000	9	0.34	16.89			16.89T			
12083	0.000	9	0.34	16.89			16.89T			
12083	1.000	9	0.30	15.08			15.08T			
12084	0.000	9	0.30	15.08			15.08T			
12084	1.000	9	0.30	15.08			15.08T			
12085	0.000	9	0.30	15.08			15.08T			
12085	1.000	9	0.30	15.08			15.08T			
12086	0.000	9	0.30	15.08			15.08T			
12086	1.000	9	0.30	15.08			15.08T			
12087	0.000	9	0.30	15.08			15.08T			
12087	1.000	9	0.30	15.08			15.08T			
12088	0.000	9	0.30	15.08			15.08T			
12088	1.000	9	0.30	15.08			15.08T			
12089	0.000	9	0.30	15.08			15.08T			
12089	1.000	9	0.30	15.08			15.08T			
12090	0.000	9	0.30	15.08			15.08T			
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			
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			15.08'			
12100	1.000	9	0.30	15.08			15.08'			

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]
10001	0.000	8	0.79	1.85				
10001	0.250	8	1.18	2.56				
10005	0.000	8	2.19	3.01				
10005	0.300	8	2.69	4.28				
10006	0.000	8	3.16	3.66				
10006	0.250	8	3.19	4.43				
10010	0.000	8	1.06	2.18				
10010	0.300	8	1.06	1.97				
10011	0.000	8	0.94	1.84				
10011	0.250	8	1.10	2.54				
10015	0.000	8	2.18	3.56				
10015	0.300	8	1.61	2.74				
10016	0.000	8	3.51	5.26				
10016	0.250	8	2.56	3.98				
10020	0.000	8	1.20	2.27				
10020	0.300	8	1.02	1.95				
12001	0.000	9	0.02	4.91				
12001	1.000	9	0.02	4.94				
12002	0.000	9	0.02	4.94				
12002	1.000	9	0.04	6.66				
12003	0.000	9	0.04	6.66				
12003	1.000	9	0.04	8.88				
12004	0.000	9	0.02	5.17				
12004	1.000	9	0.02	5.11				
12005	0.000	9	0.02	5.11				
12005	1.000	9	0.02	5.06				
12006	0.000	9	0.02	5.06				
12006	1.000	9	0.02	5.03				
12007	0.000	9	0.01	5.06				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
12007	1.000	9	0.01	4.78				
12008	0.000	9	0.01	4.78				
12008	1.000	9	0.02	6.88				
12009	0.000	9	0.02	6.88				
12009	1.000	9	0.02	6.72				
12010	0.000	9	0.01	5.13				
12010	1.000	9	0.01	5.11				
12011	0.000	9	0.01	5.11				
12011	1.000	9	0.01	5.07				
12012	0.000	9	0.01	5.07				
12012	1.000	9	0.01	5.08				
12013	0.000	9	0.04	8.88				
12013	1.000	9	0.02	5.03				
12014	0.000	9	0.02	5.03				
12014	1.000	9	0.02	5.03				
12015	0.000	9	0.02	5.03				
12015	1.000	9	0.02	5.03				
12016	0.000	9	0.02	5.03				
12016	1.000	9	0.02	5.04				
12017	0.000	9	0.02	5.04				
12017	1.000	9	0.02	5.05				
12018	0.000	9	0.02	5.05				
12018	1.000	9	0.02	5.12				
12019	0.000	9	0.02	5.12				
12019	1.000	9	0.02	5.03				
12020	0.000	9	0.01	5.03				
12020	1.000	9	0.01	4.82				
12021	0.000	9	0.01	4.82				
12021	1.000	9	0.01	4.64				
12022	0.000	9	0.01	4.64				
12022	1.000	9	0.01	4.58				
12023	0.000	9	0.01	4.58				
12023	1.000	9	0.01	4.58				
12024	0.000	9	0.01	4.58				
12024	1.000	9	0.01	4.58				
12025	0.000	9	0.01	4.58				
12025	1.000	9	0.01	4.58				
12026	0.000	9	0.01	4.58				
12026	1.000	9	0.01	4.58				
12027	0.000	9	0.01	4.58				
12027	1.000	9	0.01	4.58				
12028	0.000	9	0.01	4.58				
12028	1.000	9	0.01	4.58				
12029	0.000	9	0.01	4.58				
12029	1.000	9	0.01	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	0.02	5.03				
12035	1.000	9	0.02	5.03				
12036	0.000	9	0.02	5.03				
12036	1.000	9	0.02	5.04				
12037	0.000	9	0.02	5.04				
12037	1.000	9	0.02	5.07				
12038	0.000	9	0.02	5.07				
12038	1.000	9	0.02	5.14				
12039	0.000	9	0.02	5.14				
12039	1.000	9	0.02	5.04				
12040	0.000	9	0.02	5.04				
12040	1.000	9	0.02	4.85				
12041	0.000	9	0.02	4.85				
12041	1.000	9	0.02	4.66				
12042	0.000	9	0.01	4.66				
12042	1.000	9	0.01	4.58				
12043	0.000	9	0.01	4.58				
12043	1.000	9	0.01	4.58				
12044	0.000	9	0.01	4.58				
12044	1.000	9	0.01	4.58				
12045	0.000	9	0.01	4.58				
12045	1.000	9	0.01	4.58				
12046	0.000	9	0.01	4.58				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
12046	1.000	9	0.01	4.58				
12047	0.000	9	0.01	4.58				
12047	1.000	9	0.01	4.58				
12048	0.000	9	0.01	4.58				
12048	1.000	9	0.01	4.58				
12049	0.000	9	0.01	4.58				
12049	1.000	9	0.01	4.58				
12050	0.000	9	0.01	4.58				
12050	1.000	9	0.01	4.58				
12051	0.000	9	0.01	4.58				
12051	1.000	9	0.01	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	0.02	6.72				
12057	1.000	9	0.01	5.04				
12058	0.000	9	0.01	5.04				
12058	1.000	9	0.01	5.03				
12059	0.000	9	0.01	5.03				
12059	1.000	9	0.01	5.04				
12060	0.000	9	0.01	5.04				
12060	1.000	9	0.01	5.04				
12061	0.000	9	0.01	5.04				
12061	1.000	9	0.01	5.09				
12062	0.000	9	0.01	5.09				
12062	1.000	9	0.01	5.09				
12063	0.000	9	0.01	5.09				
12063	1.000	9	0.01	4.96				
12064	0.000	9	0.01	4.96				
12064	1.000	9	0.01	4.73				
12065	0.000	9	0.01	4.73				
12065	1.000	9	0.01	4.62				
12066	0.000	9	0.01	4.62				
12066	1.000	9	0.01	4.58				
12067	0.000	9	0.00	4.58				
12067	1.000	9	0.01	4.58				
12068	0.000	9	0.01	4.58				
12068	1.000	9	0.01	4.58				
12069	0.000	9	0.01	4.58				
12069	1.000	9	0.01	4.58				
12070	0.000	9	0.00	4.58				
12070	1.000	9	0.00	4.58				
12071	0.000	9	0.00	4.58				
12071	1.000	9	0.00	4.58				
12072	0.000	9	0.00	4.58				
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	0.01	5.08				
12079	1.000	9	0.01	5.04				
12080	0.000	9	0.01	5.04				
12080	1.000	9	0.01	5.04				
12081	0.000	9	0.01	5.04				
12081	1.000	9	0.01	5.06				
12082	0.000	9	0.01	5.06				
12082	1.000	9	0.01	5.12				
12083	0.000	9	0.01	5.12				
12083	1.000	9	0.01	5.07				
12084	0.000	9	0.01	5.07				
12084	1.000	9	0.01	4.93				
12085	0.000	9	0.01	4.93				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
12085	1.000	9	0.01	4.71				
12086	0.000	9	0.01	4.71				
12086	1.000	9	0.01	4.61				
12087	0.000	9	0.01	4.61				
12087	1.000	9	0.01	4.58				
12088	0.000	9	0.01	4.58				
12088	1.000	9	0.01	4.58				
12089	0.000	9	0.00	4.58				
12089	1.000	9	0.01	4.58				
12090	0.000	9	0.01	4.58				
12090	1.000	9	0.01	4.58				
12091	0.000	9	0.01	4.58				
12091	1.000	9	0.01	4.58				
12092	0.000	9	0.00	4.58				
12092	1.000	9	0.00	4.58				
12093	0.000	9	0.00	4.58				
12093	1.000	9	0.00	4.58				
12094	0.000	9	0.00	4.58				
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				

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	0.041	0.148	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	1.493	0.000	0.000	0.000
Cross sect.	9	0.000	0.000	0.135	0.001	0.000	0.000	0.000	0.000	1.000	0.000
section pile		0.000	0.000	0.000	0.000	0.000	0.797	0.723	0.000	0.000	0.000
<hr/>											
Total system		0.000	0.000	0.135	0.148	0.000	0.000	0.000	0.000	1.000	0.000
		0.000	0.000	0.000	0.000	0.000	1.000	1.493	0.000	0.000	0.000

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
FASH-2_ULS_DOKOI

Selected Beam Elements

FROM	TO	INC	X-VALUE	NC	MEMBER	CS0	CS1	CS2	CS3	CS4	CS5
1000	1036	1		1	bending	10	40				
2000	2012	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. 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 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
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
6025 part.	CS 0	25 K creep step						P perm

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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'
6055	part.	CS 1	C (creep + shrinkage) 55 K creep step						P perm
6060	part.	CS 1	C (creep + shrinkage) 60 K creep step						P perm
6061	part.	CS 1	C (creep + shrinkage) 61 K creep step						P perm
6062	part.	CS 1	C (creep + shrinkage) 62 K creep step						P perm
6063	part.	CS 1	C (creep + shrinkage) 63 K creep step						P perm
6064	part.	CS 1	C (creep + shrinkage) 64 K creep step						P perm
			C (creep + shrinkage)						

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. reinforcement		maximum-
Bending.	Compress.	e/d	N/Np]	requ. section		reinforc.
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	
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
Minimum fcd tau-rd sigIIQ sigIIT sigIIQ+ fyd

MNo	fcd [MPa]	tau-rd [MPa]	sigIIQ [MPa]	sigIIT [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

434.78

Tolerance for exceeding maximum shear or principal compression stress 0.0200

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
FASH-2_ULS_DOKOI

Shear Reinforcements per Cutted Part of Section LCR 507

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	0.72	4.26				
1001	0.692	1	0.72	4.05				
1002	0.000	1	0.68	3.78				
1002	0.692	1	0.68	3.59				
1003	0.000	1	0.63	3.19				
1003	0.692	1	0.63	3.00				
1004	0.000	1	0.66	2.60				
1004	0.692	1	0.66	2.40				
1005	0.000	1	0.76	2.18				
1005	0.692	1	0.76	1.98				
1006	0.000	1	0.79	1.69				
1006	0.692	1	0.79	1.50				
1007	0.000	1	0.81	0.73				
1007	0.692	1	0.81	1.46				
1008	0.000	1	0.95	1.57				
1008	0.692	1	0.95	1.77				
1009	0.000	1	0.90	1.87				
1009	0.692	1	0.90	2.07				
1010	0.000	1	0.81	2.33				
1010	0.692	1	0.81	2.53				
1011	0.000	1	0.86	2.95				
1011	0.692	1	0.86	3.14				
1012	0.000	1	0.85	2.98				
1012	0.692	1	0.85	3.78				
1013	0.000	1	0.51	5.05				
1013	0.692	1	0.51	4.79				
1014	0.000	1	0.64	4.29				
1014	0.692	1	0.64	4.10				
1015	0.000	1	0.80	3.57				
1015	0.692	1	0.80	3.39				
1016	0.000	1	0.73	3.19				
1016	0.692	1	0.73	2.96				
1017	0.000	1	0.68	2.73				
1017	0.692	1	0.68	2.53				
1018	0.000	1	0.63	2.03				
1018	0.692	1	0.63	1.85				
1019	0.000	1	0.61	2.12				
1019	0.692	1	0.61	2.33				
1020	0.000	1	0.63	2.37				
1020	0.692	1	0.63	2.55				
1021	0.000	1	0.68	3.00				
1021	0.692	1	0.68	3.19				
1022	0.000	1	0.68	3.56				
1022	0.692	1	0.68	3.77				
1023	0.000	1	0.63	3.72				
1023	0.692	1	0.63	3.89				
1024	0.000	1	0.58	4.45				
1024	0.692	1	0.58	4.68				
1025	0.000	1	1.18	3.72				
1025	0.692	1	1.18	3.42				
1026	0.000	1	1.16	3.25				
1026	0.692	1	1.16	3.06				
1027	0.000	1	1.06	2.78				
1027	0.692	1	1.06	2.59				
1028	0.000	1	1.06	2.37				
1028	0.692	1	1.06	2.18				
1029	0.000	1	1.00	1.81				
1029	0.692	1	1.00	1.61				
1030	0.000	1	0.90	1.33				
1030	0.692	1	0.90	1.13				
1031	0.000	1	0.85	0.79				
1031	0.692	1	0.85	1.24				
1032	0.000	1	0.79	1.43				
1032	0.692	1	0.79	1.62				
1033	0.000	1	0.73	1.81				
1033	0.692	1	0.73	2.01				
1034	0.000	1	0.69	2.21				
1034	0.692	1	0.69	2.40				
1035	0.000	1	0.81	2.93				
1035	0.692	1	0.81	3.13				
1036	0.000	1	0.90	3.26				
1036	0.692	1	0.90	3.56				
2001	0.000	2	0.04	4.09				
2001	0.300	2	0.04	3.95				
2002	0.000	2	0.14	4.36				
2002	0.300	2	0.08	4.19				
2003	0.000	2	0.08					
2003	0.300	2	0.11	3.65				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
FASH-2_ULS_DOKOI

Shear Reinforcements per Cutted Part of Section LCR 507

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]
2004	0.000	2	0.04					
2004	0.300	2	0.04					
2005	0.000	2	0.03	5.26				
2005	0.300	2	0.03	5.02				
2006	0.000	2	0.07	5.09				
2006	0.300	2	0.07	4.91				
2007	0.000	2	0.09	4.86				
2007	0.300	2	0.09	5.08				
2008	0.000	2	0.04	4.58				
2008	0.300	2	0.04	4.65				
2009	0.000	2	0.05					
2009	0.300	2	0.05					
2010	0.000	2	0.15	3.65				
2010	0.300	2	0.11					
2011	0.000	2	0.16	1.06				
2011	0.300	2	0.16	0.97				
2012	0.000	2	0.04					
2012	0.300	2	0.04					

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	0.22	11.73		2.37T	2.34		7.02	
1001	0.692	1	0.18	10.01		2.37T	3.51		4.13	
1002	0.000	1	0.18	10.01		2.37T	3.51		4.13	
1002	0.692	1	0.18	9.96		2.37T	5.87		1.72	
1003	0.000	1	0.18	9.97		2.37T	5.87		1.72	
1003	0.692	1	0.20	10.93		2.37T	8.56			
1004	0.000	1	0.20	10.93		2.37T	8.56			
1004	0.692	1	0.23	12.29		2.37T	9.92			
1005	0.000	1	0.23	12.29		2.37T	9.92			
1005	0.692	1	0.24	13.23		2.37T	10.86			
1006	0.000	1	0.24	13.23		2.37T	10.85			
1006	0.692	1	0.25	13.37		2.37T	11.00			
1007	0.000	1	0.25	13.37		2.37T	11.00			
1007	0.692	1	0.24	13.19		2.37T	10.82			
1008	0.000	1	0.24	13.19		2.37T	10.82			
1008	0.692	1	0.23	12.48		2.37T	10.11			
1009	0.000	1	0.23	12.48		2.37T	10.11			
1009	0.692	1	0.20	10.93		2.37T	8.15		0.41	
1010	0.000	1	0.20	10.93		2.37T	8.15		0.40	
1010	0.692	1	0.21	11.21		2.37T	6.31		2.53	
1011	0.000	1	0.21	11.21		2.37T	6.31		2.52	
1011	0.692	1	0.21	11.43		2.37T	4.07		4.99	
1012	0.000	1	0.21	11.44		2.37T	4.07		5.00	
1012	0.692	1	0.24	13.14		2.37T	2.84		7.93	
1013	0.000	1	0.21	11.58		2.37T	2.46		6.75	
1013	0.692	1	0.20	11.05		2.37T	4.37		4.31	
1014	0.000	1	0.20	11.03		2.37T	4.35		4.31	
1014	0.692	1	0.21	11.18		2.37T	6.80		2.01	
1015	0.000	1	0.21	11.17		2.37T	6.79		2.01	
1015	0.692	1	0.21	11.59		2.37T	9.21			
1016	0.000	1	0.21	11.58		2.37T	9.21			
1016	0.692	1	0.23	12.71		2.37T	10.34			
1017	0.000	1	0.23	12.70		2.37T	10.33			
1017	0.692	1	0.25	13.59		2.37T	11.22			
1018	0.000	1	0.25	13.59		2.37T	11.22			
1018	0.692	1	0.25	13.74		2.37T	11.36			
1019	0.000	1	0.25	13.73		2.37T	11.36			
1019	0.692	1	0.25	13.63		2.37T	11.26			
1020	0.000	1	0.25	13.63		2.37T	11.26			
1020	0.692	1	0.24	13.00		2.37T	10.62			
1021	0.000	1	0.24	13.00		2.37T	10.62			
1021	0.692	1	0.22	11.94		2.37T	9.00		0.57	
1022	0.000	1	0.22	11.95		2.37T	9.00		0.57	
1022	0.692	1	0.23	12.36		2.37T	7.36		2.63	
1023	0.000	1	0.23	12.37		2.37T	7.37		2.63	
1023	0.692	1	0.22	12.09		2.37T	4.76		4.96	
1024	0.000	1	0.22	12.11		2.37T	4.78		4.97	
1024	0.692	1	0.24	13.01		2.37T	3.22		7.42	
1025	0.000	1	0.23	12.60		2.37T	2.69		7.54	
1025	0.692	1	0.20	11.09		2.37T	3.97		4.74	
1026	0.000	1	0.20	11.08		2.37T	3.97		4.74	
1026	0.692	1	0.19	10.27		2.37T	5.61		2.28	
1027	0.000	1	0.19	10.28		2.37T	5.62		2.28	
1027	0.692	1	0.19	10.09		2.37T	7.52		0.19	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	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]
1028	0.000	1	0.19	10.09		2.37T	7.53			
1028	0.692	1	0.20	11.10		2.37T	8.73			
1029	0.000	1	0.20	11.11		2.37T	8.73			
1029	0.692	1	0.22	11.83		2.37T	9.46			
1030	0.000	1	0.22	11.83		2.37T	9.46			
1030	0.692	1	0.22	11.93		2.37T	9.56			
1031	0.000	1	0.22	11.94		2.37T	9.56			
1031	0.692	1	0.22	11.92		2.37T	9.55			
1032	0.000	1	0.22	11.92		2.37T	9.54			
1032	0.692	1	0.21	11.31		2.37T	8.94			
1033	0.000	1	0.21	11.31		2.37T	8.94			
1033	0.692	1	0.20	10.77		2.37T	7.76		0.65	
1034	0.000	1	0.20	10.77		2.37T	7.75		0.64	
1034	0.692	1	0.21	11.27		2.37T	6.15		2.75	
1035	0.000	1	0.21	11.26		2.37T	6.14		2.75	
1035	0.692	1	0.23	12.57		2.37T	4.98		5.22	
1036	0.000	1	0.23	12.57		2.37T	4.98		5.22	
1036	0.692	1	0.26	14.07		2.37T	3.70		8.00	
2001	0.000	2	0.13	11.63		0.09T	1.60		9.94	
2001	0.300	2	0.12	10.79		0.09T	2.06		8.64	
2002	0.000	2	0.12	11.07		0.34T	2.07		8.67	
2002	0.300	2	0.11	9.76		0.21T	2.42		7.14	
2003	0.000	2	0.12	11.18		0.19T	2.92		8.07	
2003	0.300	2	0.14	12.39		0.25T	2.52		9.62	
2004	0.000	2	0.14	12.19		0.09T	2.51		9.60	
2004	0.300	2	0.14	12.98		0.09T	2.00		10.89	
2005	0.000	2	0.13	11.28		0.07T	1.87		9.34	
2005	0.300	2	0.12	10.52		0.07T	2.25		8.20	
2006	0.000	2	0.12	10.66		0.18T	2.25		8.23	
2006	0.300	2	0.11	9.57		0.18T	2.53		6.86	
2007	0.000	2	0.12	11.08		0.23T	3.30		7.55	
2007	0.300	2	0.14	12.16		0.23T	3.01		8.93	
2008	0.000	2	0.13	12.01		0.11T	3.00		8.90	
2008	0.300	2	0.14	12.72		0.11T	2.60		10.02	
2009	0.000	2	0.13	11.94		0.12T	1.61		10.21	
2009	0.300	2	0.13	11.37		0.12T	2.22		9.04	
2010	0.000	2	0.13	11.65		0.36T	2.23		9.06	
2010	0.300	2	0.12	10.69		0.28T	2.76		7.65	
2011	0.000	2	0.14	12.30		0.39T	3.79		8.12	
2011	0.300	2	0.15	13.17		0.39T	3.26		9.51	
2012	0.000	2	0.14	12.85		0.11T	3.25		9.49	
2012	0.300	2	0.15	13.36		0.11T	2.62		10.63	

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	0.72	4.26				
1001	0.692	1	0.72	4.05				
1002	0.000	1	0.68	3.78				
1002	0.692	1	0.68	3.59				
1003	0.000	1	0.63	3.19				
1003	0.692	1	0.63	3.00				
1004	0.000	1	0.66	2.60				
1004	0.692	1	0.66	2.40				
1005	0.000	1	0.76	2.18				
1005	0.692	1	0.76	1.98				
1006	0.000	1	0.79	1.69				
1006	0.692	1	0.79	1.50				
1007	0.000	1	0.81	0.73				
1007	0.692	1	0.81	1.46				
1008	0.000	1	0.95	1.57				
1008	0.692	1	0.95	1.77				
1009	0.000	1	0.90	1.87				
1009	0.692	1	0.90	2.07				
1010	0.000	1	0.81	2.33				
1010	0.692	1	0.81	2.53				
1011	0.000	1	0.86	2.95				
1011	0.692	1	0.86	3.14				
1012	0.000	1	0.85	2.98				
1012	0.692	1	0.85	3.78				
1013	0.000	1	0.51	5.05				
1013	0.692	1	0.51	4.79				
1014	0.000	1	0.64	4.29				
1014	0.692	1	0.64	4.10				
1015	0.000	1	0.80	3.57				
1015	0.692	1	0.80	3.39				

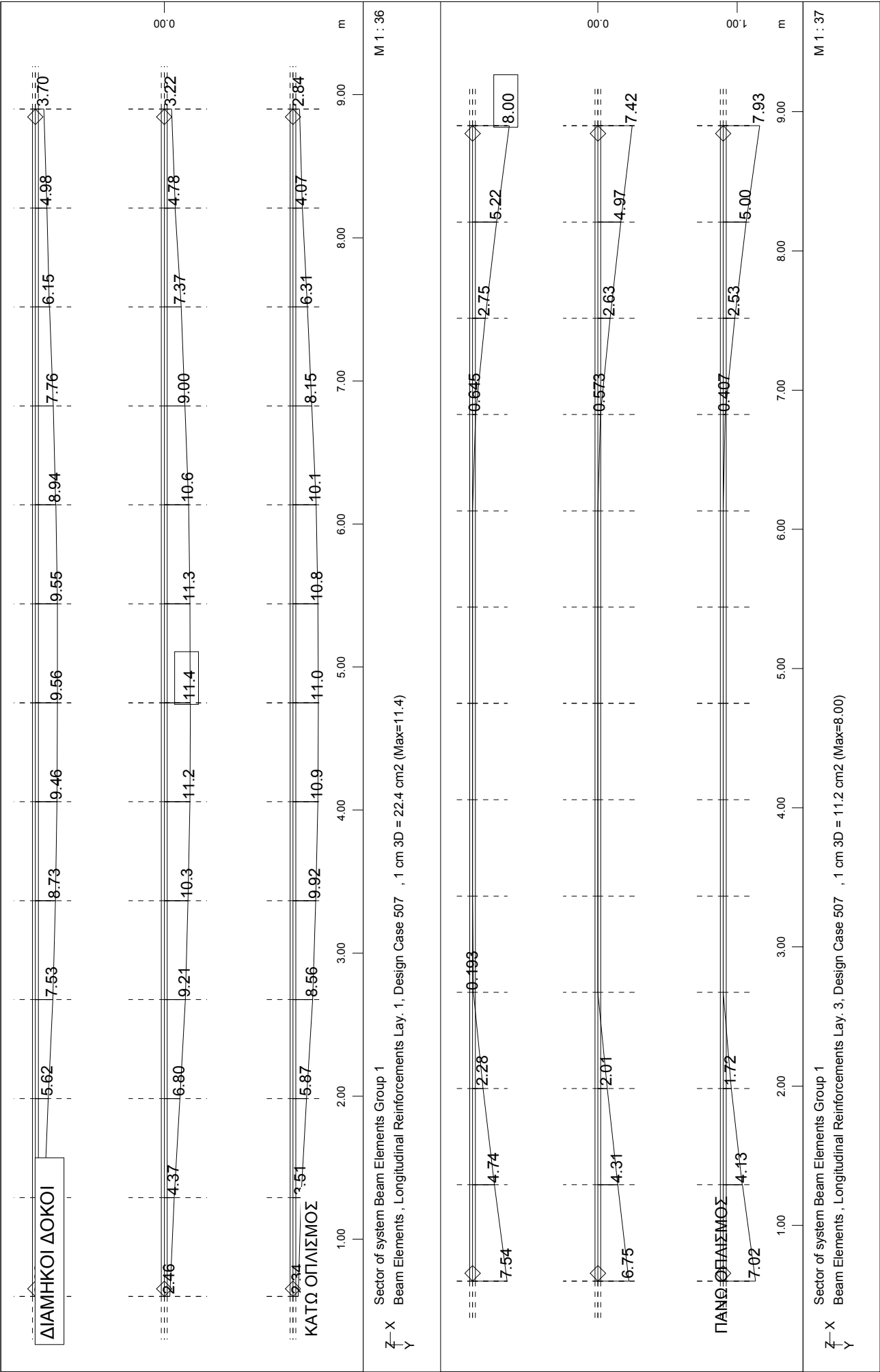
OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
FASH-2_ULS_DOKOI

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]
1016	0.000	1	0.73	3.19				
1016	0.692	1	0.73	2.96				
1017	0.000	1	0.68	2.73				
1017	0.692	1	0.68	2.53				
1018	0.000	1	0.63	2.03				
1018	0.692	1	0.63	1.85				
1019	0.000	1	0.61	2.12				
1019	0.692	1	0.61	2.33				
1020	0.000	1	0.63	2.37				
1020	0.692	1	0.63	2.55				
1021	0.000	1	0.68	3.00				
1021	0.692	1	0.68	3.19				
1022	0.000	1	0.68	3.56				
1022	0.692	1	0.68	3.77				
1023	0.000	1	0.63	3.72				
1023	0.692	1	0.63	3.89				
1024	0.000	1	0.58	4.45				
1024	0.692	1	0.58	4.68				
1025	0.000	1	1.18	3.72				
1025	0.692	1	1.18	3.42				
1026	0.000	1	1.16	3.25				
1026	0.692	1	1.16	3.06				
1027	0.000	1	1.06	2.78				
1027	0.692	1	1.06	2.59				
1028	0.000	1	1.06	2.37				
1028	0.692	1	1.06	2.18				
1029	0.000	1	1.00	1.81				
1029	0.692	1	1.00	1.61				
1030	0.000	1	0.90	1.33				
1030	0.692	1	0.90	1.13				
1031	0.000	1	0.85	0.79				
1031	0.692	1	0.85	1.24				
1032	0.000	1	0.79	1.43				
1032	0.692	1	0.79	1.62				
1033	0.000	1	0.73	1.81				
1033	0.692	1	0.73	2.01				
1034	0.000	1	0.69	2.21				
1034	0.692	1	0.69	2.40				
1035	0.000	1	0.81	2.93				
1035	0.692	1	0.81	3.13				
1036	0.000	1	0.90	3.26				
1036	0.692	1	0.90	3.56				
2001	0.000	2	0.04	4.09				
2001	0.300	2	0.04	3.95				
2002	0.000	2	0.14	4.36				
2002	0.300	2	0.08	4.19				
2003	0.000	2	0.08					
2003	0.300	2	0.11	3.65				
2004	0.000	2	0.04					
2004	0.300	2	0.04					
2005	0.000	2	0.03	5.26				
2005	0.300	2	0.03	5.02				
2006	0.000	2	0.07	5.09				
2006	0.300	2	0.07	4.91				
2007	0.000	2	0.09	4.86				
2007	0.300	2	0.09	5.08				
2008	0.000	2	0.04	4.58				
2008	0.300	2	0.04	4.65				
2009	0.000	2	0.05					
2009	0.300	2	0.05					
2010	0.000	2	0.15	3.65				
2010	0.300	2	0.11					
2011	0.000	2	0.16	1.06				
2011	0.300	2	0.16	0.97				
2012	0.000	2	0.04					
2012	0.300	2	0.04					

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	0.319	0.091	0.000	0.000	0.000	0.000	1.002	0.000
		0.000	0.000	0.000	0.000	0.000	1.001	0.000	0.000	0.000	0.000
Cross sect.	2	0.000	0.000	0.097	0.008	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	0.319	0.091	0.000	0.000	0.000	0.000	1.002	0.000
		0.000	0.000	0.000	0.000	0.000	1.001	0.000	0.000	0.000	0.000



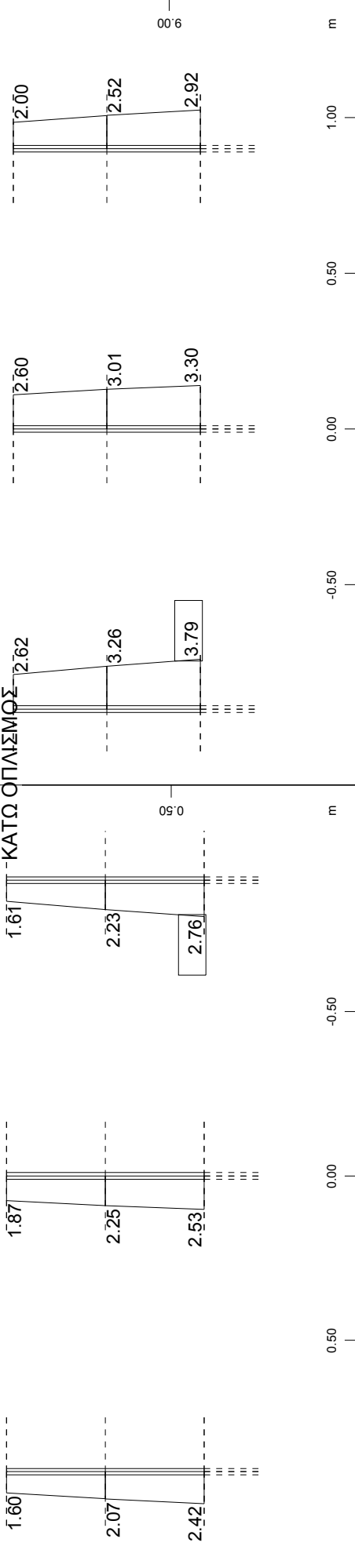


7- X
Sector of system Beam Elements Group 1
Beam Elements, Shear reinforcements (maximum), Design Case 507, 1 cm 3D = 11.2 cm2/m (Max=5.05)

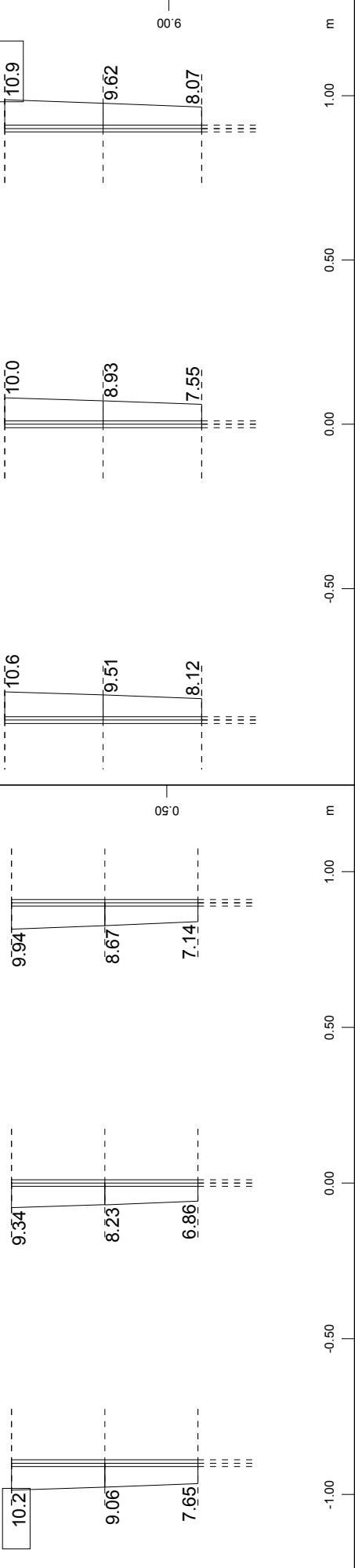


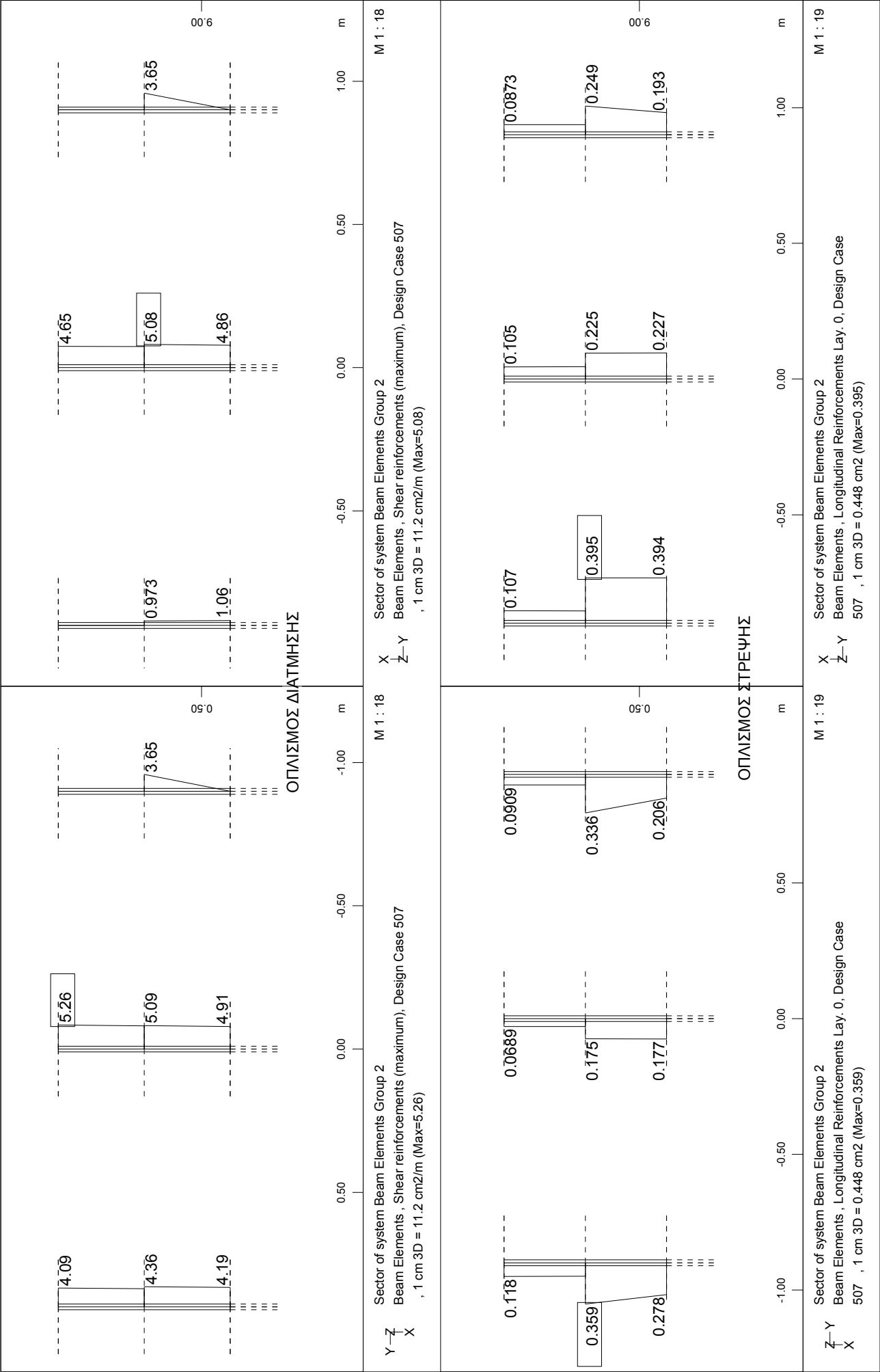
7- X
Sector of system Beam Elements Group 1
Beam Elements, Longitudinal Reinforcements Lay. 0, Design Case 507 , 1 cm 3D = 4.48 cm2 (Max=2.37)

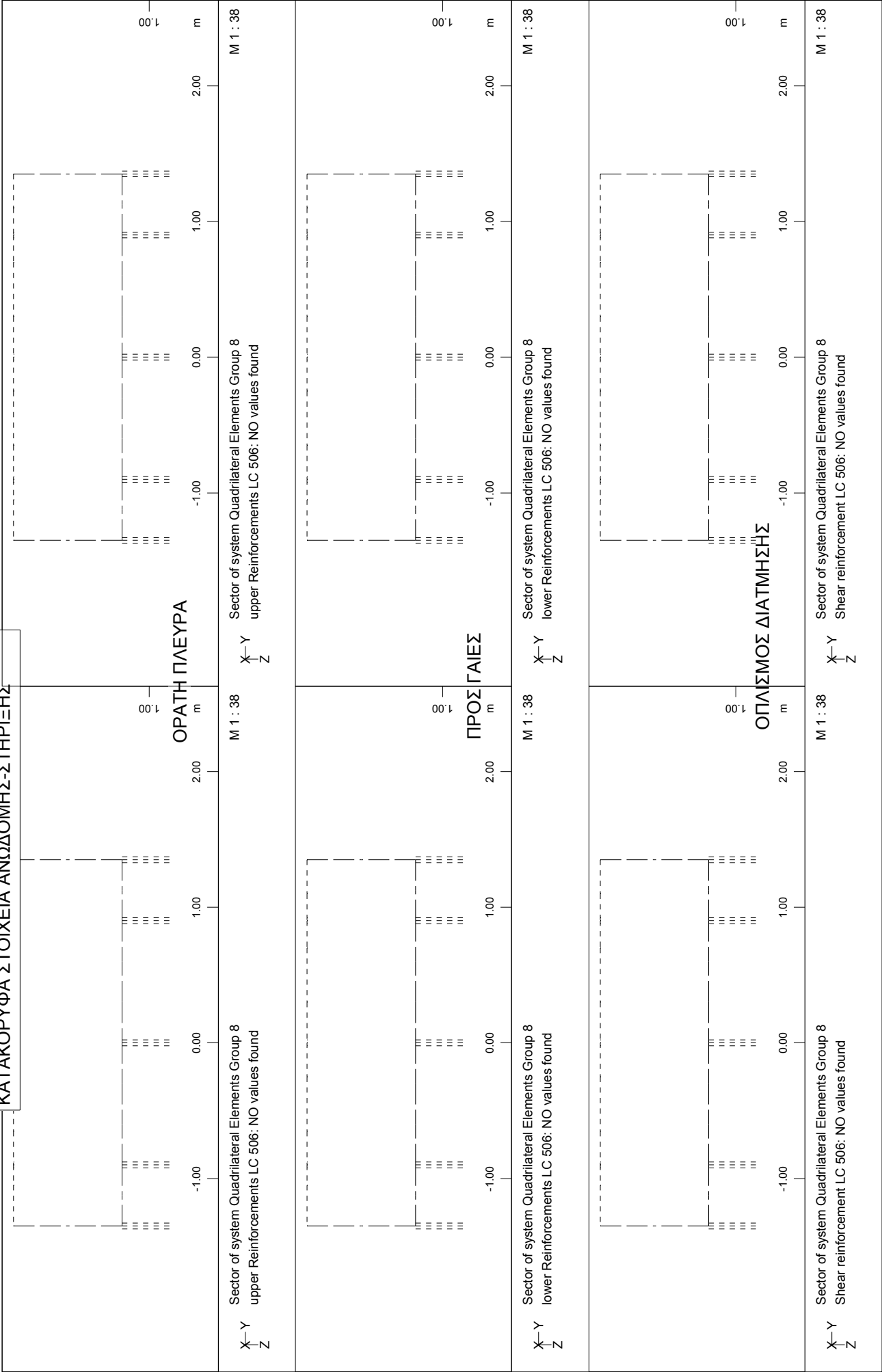
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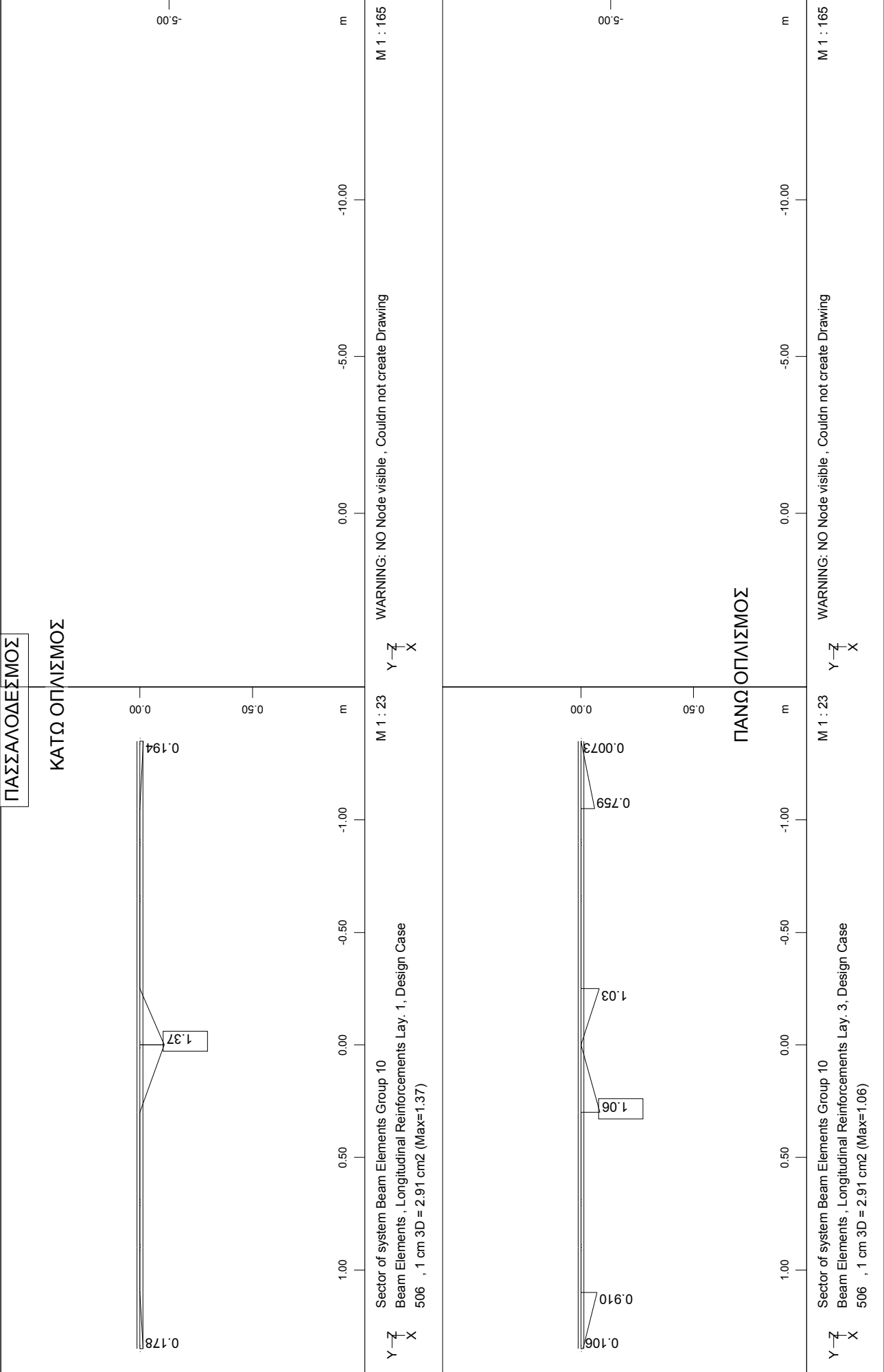


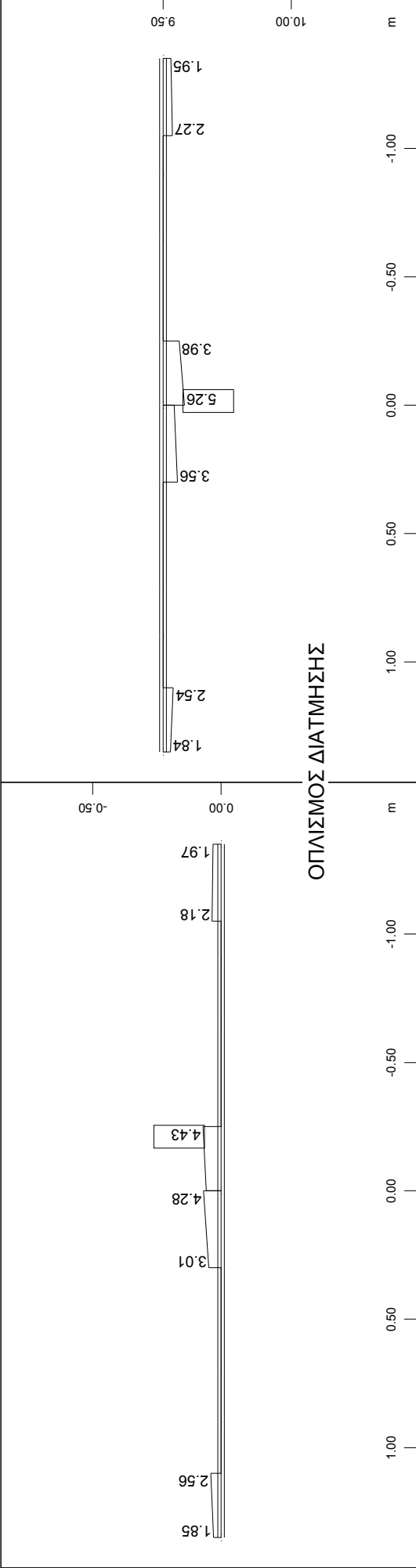
ΠΑΝΩ ΟΠΛΙΣΜΟΣ







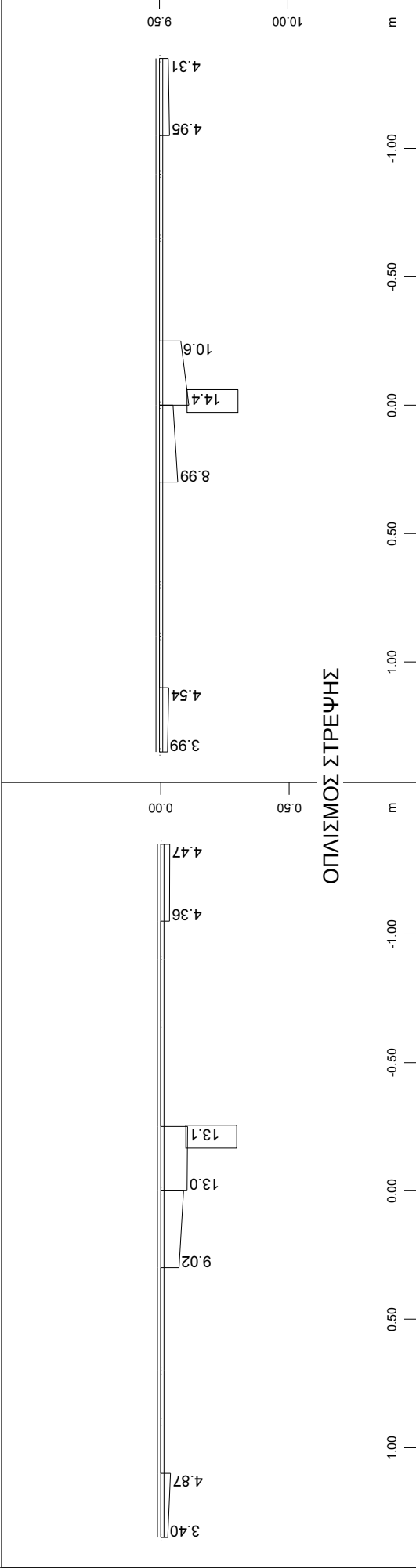




Sector of system Beam Elements Group 10
Beam Elements , Shear reinforcements (maximum), Design Case 506
, 1 cm 3D = 14.5 cm2/m (Max=4.43)

M 1 : 23

Y-Z X

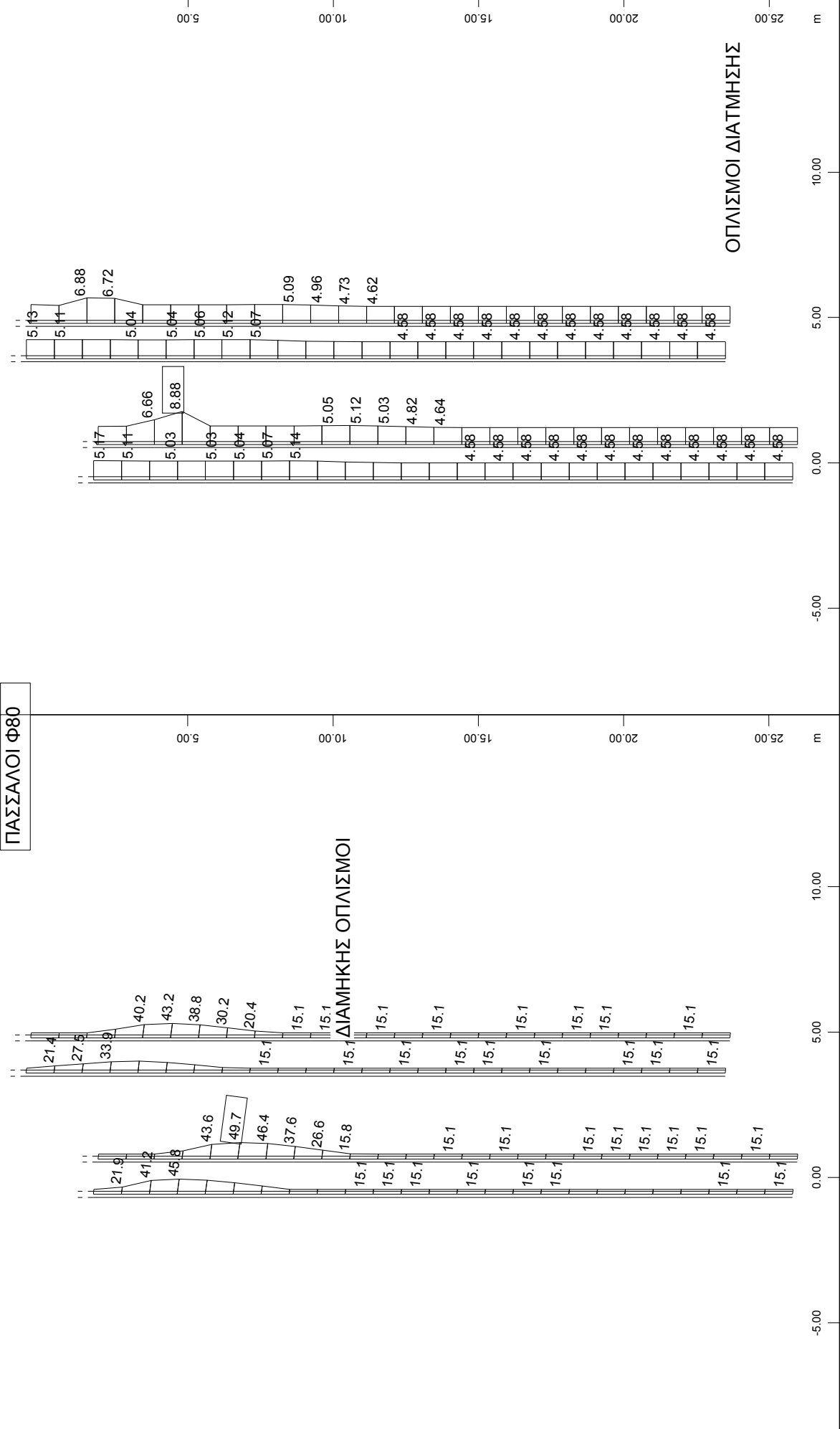


Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 0, Design Case 506 , 1 cm 3D = 29.1 cm2 (Max=13.1)

M 1 : 23

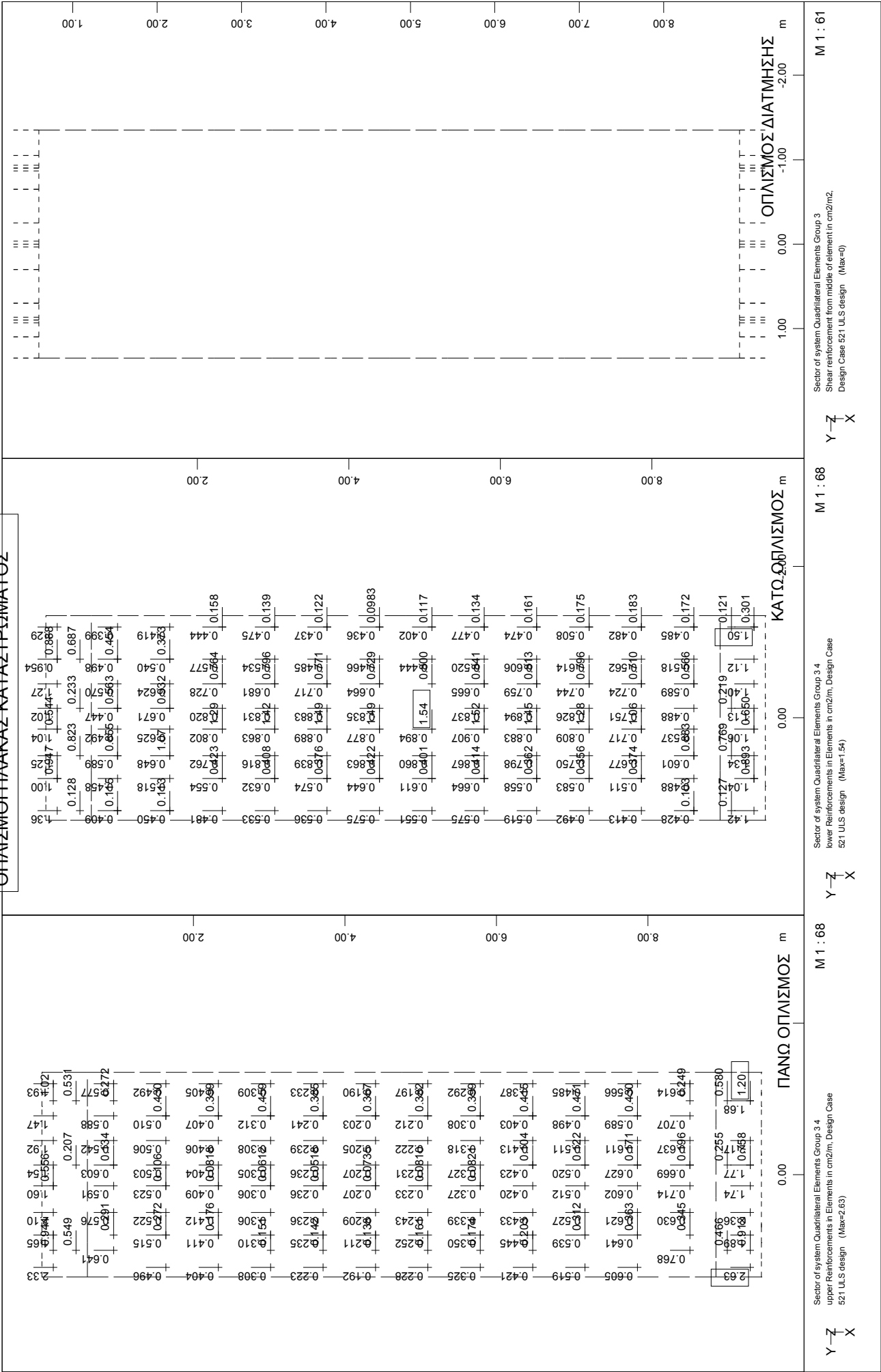
Y-Z X

ΠΑΣΣΑΛΟΙ Φ80



	Sector of system Beam Elements Group 12	M 1 : 186
	Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 506 , 1 cm 3D = 145.3 cm2 (Max=49.7)	X* 0.502 Y* 0.906 Z* 0.962
	Sector of system Beam Elements Group 12	M 1 : 186
	Beam Elements , Shear reinforcements (maximum), Design Case 506 , 1 cm 3D = 14.5 cm2/m (Max=8.88)	X* 0.502 Y* 0.906 Z* 0.962

ΟΠΛΙΣΜΟΙ ΠΛΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70

8) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ ULS-ΠΡΟΣΚΡΟΥΣΗΣ

OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
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	
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
1409	1 MAX-N	BEAM
1410	1 MIN-N	BEAM

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
COMBINATION-LL-frequent

Generated Loadcases

Number	Comb	Title
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

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	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
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

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		ΠΥΣΕΙΣ-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
2211	1.00	Exclusive LC	A 3	MAX-NXX QUAK LL-ON
2212	1.00	Exclusive LC	A 3	MIN-NXX QUAK LL-ON

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
COMBINATION ULD-CRASH

Combination rule Number 2

COMB.ULS-1-QUAD

Resulting loadcases type Design Combination

Loadcase selection

Number	factor	type	Title	
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
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
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

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
COMBINATION ULD-CRASH**Generated Loadcases**

Number	Comb	Title
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 TB/L=10.70
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	f-cr	f-yk	f-tk	f-ctm	N minQ	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		1.30	1.30		1.00	1.00

Acc. the german DIN Fachberichten a minimum concrete shear capacity $V_{Rd,ct}$ 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	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: 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 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	3001	maximum		0.25	2.04	0.77	0		1	0.091	
					1.15	0.74	0			0.547	
3	3002	maximum		0.25	2.15	0.78	0		1	0.131	
					1.17	0.61	0			0.549	
3	3003	maximum		0.25	1.95	0.86	0		1	0.151	
					1.30	0.83	0			0.537	
3	3004	maximum		0.25	1.67	0.90	0		1	0.161	
					1.38	0.92	0			0.534	
3	3005	maximum		0.25	1.34	0.88	0		1	0.169	
					1.34	0.99	0			0.540	
3	3006	maximum		0.25	0.79	0.78	0		1	0.172	
					0.98	0.78	0			0.546	

OPIΣTIKH MEΛETH/TEKNIKO TB/L=10.70
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		dphi deg	Shr zon	V_{Ed}/d [MPa]	Ass [cm ² /m ²]
						main	cross	dir		$V_{Rd,ct}/d$	
3	3007		maximum		0.25	2.33	1.17	0	1	0.020	
						1.60	1.13	0		0.540	
3	3008		maximum		0.25	2.12	1.05	0	1	0.042	
						1.19	1.11	0		0.525	
3	3009		maximum		0.25	1.96	1.19	0	1	0.036	
						1.53	1.08	0		0.528	
3	3010		maximum		0.25	1.74	1.16	0	1	0.036	
						1.60	1.22	0		0.519	
3	3011		maximum		0.25	1.28	1.06	0	1	0.036	
						1.31	1.11	0		0.516	
3	3012		maximum		0.25	0.95	1.02	0	1	0.037	
						1.25	1.12	0		0.526	
3	3013		maximum		0.25	2.80	2.32	0	1	0.172	
						0.62	1.67	0		0.504	
3	3014		maximum		0.25	2.70	2.48	0	1	0.167	
						0.58	0.87	0		0.508	
3	3015		maximum		0.25	2.44	2.16	0	1	0.160	
						0.85	1.17	0		0.528	
3	3016		maximum		0.25	2.09	1.99	0	1	0.169	
						0.99	1.13	0		0.503	
3	3017		maximum		0.25	1.79	1.78	0	1	0.154	
						1.01	1.10	0		0.506	
3	3018		maximum		0.25	1.47	1.63	0	1	0.140	
						1.03	1.07	0		0.501	
3	3019		maximum		0.25	2.30	2.07	0	1	0.138	
						0.89	1.35	0		0.517	
3	3020		maximum		0.25	2.43	2.06	0	1	0.116	
						0.84	1.62	0		0.529	
3	3021		maximum		0.25	2.13	1.76	0	1	0.113	
						0.89	1.35	0		0.513	
3	3022		maximum		0.25	1.77	1.66	0	1	0.115	
						1.07	1.49	0		0.520	
3	3023		maximum		0.25	1.51	1.62	0	1	0.103	
						1.12	1.53	0		0.510	
3	3024		maximum		0.25	1.39	1.59	0	1	0.093	
						1.14	1.46	0		0.506	
3	3025		maximum		0.25	2.09	1.95	0	1	0.237	
						1.14	1.83	0		0.511	
3	3026		maximum		0.25	2.04	1.95	0	1	0.167	
						1.35	1.57	0		0.500	
3	3027		maximum		0.25	1.79	1.94	0	1	0.150	
						1.33	1.23	0		0.505	
3	3028		maximum		0.25	1.51	1.78	0	1	0.174	
						1.11	1.36	0		0.502	
3	3029		maximum		0.25	1.29	2.21	0	1	0.170	
						1.12	1.51	0		0.501	
3	3030		maximum		0.25	1.06	2.08	0	1	0.173	
						1.09	1.44	0		0.504	
3	3031		maximum		0.25	1.81	2.54	0	1	0.297	
						1.47	3.09	0		0.496	
3	3032		maximum		0.25	1.66	2.44	0	1	0.276	
						1.37	2.03	0		0.504	
3	3033		maximum		0.25	1.62	2.92	0	1	0.296	
						1.34	1.81	0		0.527	
3	3034		maximum		0.25	1.78	3.15	0	1	0.290	
						1.13	1.39	0		0.504	
3	3035		maximum		0.25	1.69	3.49	0	1	0.266	
						1.08	1.34	0		0.515	
3	3036		maximum		0.25	1.75	3.51	0	1	0.291	
						1.11	1.30	0		0.506	
3	3037		maximum		0.25	2.30	4.98	0	1	0.309	
						1.03	0.80	0		0.496	
3	3038		maximum		0.25	2.29	5.32	0	1	0.309	
						1.24	0.30	0		0.498	
3	3039		maximum		0.25	2.03	5.38	0	1	0.333	
						0.91	0.74	0		0.515	
3	3040		maximum		0.25	1.97	5.85	0	1	0.337	
						1.00	0.87	0		0.507	
3	3041		maximum		0.25	1.89	6.01	0	1	0.314	
						1.08	1.06	0		0.499	
3	3042		maximum		0.25	2.03	5.97	0	1	0.337	
						1.08	1.16	0		0.509	
3	3043		maximum		0.25	2.89	8.49	0	1	0.334	
						0.63	0.19	0		0.514	

OPISTIKH MELETH/TEXNIKO TB/L=10.70
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]	Ass [cm2/m2]
										VRd,ct/d	
3	3044	maximum			0.25	2.61	8.88	0	1	0.343	
						0.52	0.18	0		0.504	
3	3045	maximum			0.25	2.32	8.76	0	1	0.379	
						0.80	0.25	0		0.522	
3	3046	maximum			0.25	2.29	9.36	0	1	0.380	
						0.89	0.56	0		0.504	
3	3047	maximum			0.25	2.79	9.32	0	1	0.349	
						0.97	0.85	0		0.498	
3	3048	maximum			0.25	2.63	9.37	0	1	0.381	
						0.98	0.86	0		0.501	
3	3049	maximum			0.25	5.61	23.60	0	1	0.391	
						1.25	1.11	0		0.628	
3	3050	maximum			0.25	5.98	22.62	0	1	0.302	
						1.39	1.55	0		0.586	
3	3051	maximum			0.25	4.64	23.19	0	1	0.316	
						1.52	1.28	0		0.617	
3	3052	maximum			0.25	5.90	23.83	0	1	0.334	
						1.20	1.21	0		0.549	
3	3053	maximum			0.25	6.47	20.80	0	1	0.270	
						1.43	1.46	0		0.601	
3	3054	maximum			0.25	5.61	23.85	0	1	0.325	
						1.54	1.42	0		0.596	
3	3055	maximum			0.25	2.58	6.34	0	2	0.657	10.97
						2.99	0.84	0		0.535	
3	3056	maximum			0.25	3.56	6.66	0	2	0.829	13.84
						3.66	1.33	0		0.563	
3	3057	maximum			0.25	2.41	4.44	0	1	0.404	
						3.45	0.92	0		0.544	
3	3058	maximum			0.25	3.52	6.22	0	2	0.628	10.50
						4.82	1.06	0		0.525	
3	3059	maximum			0.25	4.79	6.94	0	2	0.807	13.49
						4.46	1.32	0		0.510	
3	3060	maximum			0.25	3.20	5.49	0	2	0.534	8.92
						4.84	0.97	0		0.499	
3	3061	maximum			0.25	0.79	0.80	0	1	0.172	
						0.95	0.79	0		0.546	
3	3062	maximum			0.25	1.42	0.91	0	1	0.170	
						1.30	1.01	0		0.540	
3	3063	maximum			0.25	1.74	0.91	0	1	0.162	
						1.31	0.94	0		0.535	
3	3064	maximum			0.25	2.02	0.84	0	1	0.153	
						1.25	0.84	0		0.537	
3	3065	maximum			0.25	2.23	0.77	0	1	0.133	
						1.13	0.62	0		0.549	
3	3066	maximum			0.25	2.12	0.76	0	1	0.091	
						1.15	0.78	0		0.547	
3	3067	maximum			0.25	1.02	1.03	0	1	0.037	
						1.20	1.09	0		0.528	
3	3068	maximum			0.25	1.35	1.09	0	1	0.037	
						1.31	1.10	0		0.516	
3	3069	maximum			0.25	1.82	1.20	0	1	0.037	
						1.53	1.25	0		0.518	
3	3070	maximum			0.25	2.05	1.19	0	1	0.037	
						1.56	1.11	0		0.528	
3	3071	maximum			0.25	2.20	1.07	0	1	0.043	
						1.19	1.08	0		0.523	
3	3072	maximum			0.25	2.41	1.19	0	1	0.021	
						1.66	1.09	0		0.537	
3	3073	maximum			0.25	1.47	1.70	0	1	0.150	
						1.02	0.98	0		0.499	
3	3074	maximum			0.25	1.87	1.83	0	1	0.157	
						1.01	1.12	0		0.506	
3	3075	maximum			0.25	2.16	1.99	0	1	0.157	
						0.92	1.10	0		0.519	
3	3076	maximum			0.25	2.51	2.22	0	1	0.169	
						0.89	1.17	0		0.505	
3	3077	maximum			0.25	2.78	2.52	0	1	0.172	
						0.58	0.87	0		0.533	
3	3078	maximum			0.25	2.87	2.33	0	1	0.171	
						0.67	1.58	0		0.503	
3	3079	maximum			0.25	1.39	1.59	0	1	0.098	
						1.15	1.44	0		0.503	
3	3080	maximum			0.25	1.60	1.64	0	1	0.106	
						1.14	1.51	0		0.513	

OPIΣTIKH MEΛETH/TEKNIKO TB/L=10.70
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]	$V_{Rd,ct}/d$	Ass [cm ² /m ²]
3	3081	maximum			0.25	1.89 1.69 0		1	0.109		
						1.05 1.46 0			0.515		
3	3082	maximum			0.25	2.21 1.79 0		1	0.118		
						0.95 1.33 0			0.521		
3	3083	maximum			0.25	2.51 2.07 0		1	0.118		
						0.84 1.58 0			0.517		
3	3084	maximum			0.25	2.37 2.08 0		1	0.142		
						0.95 1.36 0			0.498		
3	3085	maximum			0.25	1.15 2.12 0		1	0.184		
						1.15 1.52 0			0.499		
3	3086	maximum			0.25	1.36 2.21 0		1	0.173		
						1.13 1.50 0			0.500		
3	3087	maximum			0.25	1.58 1.81 0		1	0.158		
						1.12 1.37 0			0.506		
3	3088	maximum			0.25	1.86 1.95 0		1	0.154		
						1.39 1.33 0			0.504		
3	3089	maximum			0.25	2.11 1.95 0		1	0.179		
						1.21 1.39 0			0.503		
3	3090	maximum			0.25	2.10 1.96 0		1	0.234		
						1.03 1.81 0			0.512		
3	3091	maximum			0.25	1.81 3.48 0		1	0.292		
						1.15 1.34 0			0.506		
3	3092	maximum			0.25	1.80 3.49 0		1	0.269		
						1.05 1.21 0			0.506		
3	3093	maximum			0.25	1.79 3.15 0		1	0.286		
						1.19 1.50 0			0.504		
3	3094	maximum			0.25	1.62 2.90 0		1	0.290		
						1.34 1.71 0			0.530		
3	3095	maximum			0.25	1.76 2.44 0		1	0.285		
						1.45 2.14 0			0.506		
3	3096	maximum			0.25	1.92 2.54 0		1	0.291		
						1.47 3.14 0			0.495		
3	3097	maximum			0.25	2.03 6.00 0		1	0.340		
						1.07 1.13 0			0.508		
3	3098	maximum			0.25	1.87 6.01 0		1	0.315		
						1.05 0.99 0			0.499		
3	3099	maximum			0.25	1.98 5.83 0		1	0.334		
						1.05 0.92 0			0.506		
3	3100	maximum			0.25	2.03 5.42 0		1	0.337		
						0.89 0.64 0			0.516		
3	3101	maximum			0.25	2.30 5.32 0		1	0.306		
						1.27 0.34 0			0.498		
3	3102	maximum			0.25	2.40 4.94 0		1	0.310		
						1.11 0.90 0			0.496		
3	3103	maximum			0.25	2.57 9.42 0		1	0.384		
						1.00 0.92 0			0.501		
3	3104	maximum			0.25	2.87 9.29 0		1	0.349		
						0.98 0.84 0			0.498		
3	3105	maximum			0.25	2.37 9.39 0		1	0.377		
						0.96 0.54 0			0.503		
3	3106	maximum			0.25	2.33 8.77 0		1	0.382		
						0.81 0.24 0			0.523		
3	3107	maximum			0.25	2.60 8.88 0		1	0.341		
						0.59 0.19 0			0.503		
3	3108	maximum			0.25	2.90 8.44 0		1	0.332		
						0.67 0.24 0			0.514		
3	3109	maximum			0.25	5.66 23.88 0		1	0.325		
						1.54 1.43 0			0.596		
3	3110	maximum			0.25	6.55 20.82 0		1	0.270		
						1.40 1.49 0			0.601		
3	3111	maximum			0.25	5.91 23.82 0		1	0.334		
						1.20 1.20 0			0.548		
3	3112	maximum			0.25	4.65 23.23 0		1	0.316		
						1.35 1.30 0			0.617		
3	3113	maximum			0.25	6.04 22.65 0		1	0.301		
						1.39 1.55 0			0.587		
3	3114	maximum			0.25	5.62 23.58 0		1	0.392		
						1.21 1.14 0			0.628		
3	3115	maximum			0.25	3.20 5.51 0		2	0.536	8.95	
						4.82 0.96 0			0.499		
3	3116	maximum			0.25	4.79 6.94 0		2	0.809	13.51	
						4.47 1.33 0			0.510		
3	3117	maximum			0.25	3.46 6.20 0		2	0.626	10.46	
						4.84 1.07 0			0.525		

OPISTIKH MELETH/TEKNIKO TB/L=10.70
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	3118	maximum			0.25	2.23	4.45	0	1	0.405	
						3.48	0.92	0		0.544	
3	3119	maximum			0.25	3.53	6.66	0	2	0.830	13.86
						3.67	1.33	0		0.563	
3	3120	maximum			0.25	2.59	6.33	0	2	0.655	10.93
						3.00	0.81	0		0.535	
4	4001	maximum			0.25	4.68	0.94	0	1		
						2.12	0.56	0		0.548	
4	4002	maximum			0.25	2.21	0.65	0	1	0.256	
						2.01	1.53	0		0.555	
4	4003	maximum			0.25	2.84	3.50	0	2	0.959	16.01
						0.48	0.60	0		0.543	
4	4004	maximum			0.25	1.66	1.02	0	1	0.272	
						2.47	2.70	0		0.501	
4	4005	maximum			0.25	3.50	4.09	0	2	0.811	13.54
						1.41	1.00	0		0.551	
4	4006	maximum			0.25	2.41	2.07	0	1	0.221	
						1.11	2.21	0		0.509	
4	4007	maximum			0.25	2.40	1.61	0	1		
						1.03	0.67	0		0.515	
4	4008	maximum			0.25	1.74	1.49	0	1	0.199	
						1.48	1.54	0		0.498	
4	4009	maximum			0.25	1.40	2.95	0	2	0.657	10.98
						1.04	1.27	0		0.529	
4	4010	maximum			0.25	0.88	1.48	0	1	0.353	
						1.39	2.71	0		0.507	
4	4011	maximum			0.25	1.10	5.21	0	2	0.727	12.14
						2.31	2.35	0		0.540	
4	4012	maximum			0.25	1.39	3.04	0	1	0.294	
						1.66	2.75	0		0.521	
4	4013	maximum			0.25	2.59	4.20	0	1		
						3.42	3.61	0		0.500	
4	4014	maximum			0.25	1.86	5.18	0	1	0.232	
						1.18	2.05	0		0.496	
4	4015	maximum			0.25	3.53	7.70	0	2	1.174	19.61
						2.02	2.45	0		0.496	
4	4016	maximum			0.25	2.70	8.20	0	2	0.469	7.84
						0.87	0.32	0		0.507	
4	4017	maximum			0.25	6.85	34.24	0	2	2.749	74.51
						0.58	0.64	0		0.701	
4	4018	maximum			0.25	4.42	22.11	0	2	1.657	29.61
						2.28	2.89	0		0.522	
4	4019	maximum			0.25	4.67	2.32	0	1		
						2.91	6.71	0		0.567	
4	4020	maximum			0.25	1.94	3.01	0	2	1.254	20.94
						4.55	3.77	0		0.554	
4	4021	maximum			0.25	2.22	0.61	0	1	0.269	
						1.87	1.56	0		0.555	
4	4022	maximum			0.25	4.84	0.97	0	1		
						2.15	0.60	0		0.549	
4	4023	maximum			0.25	1.71	0.98	0	1	0.286	
						2.50	2.79	0		0.501	
4	4024	maximum			0.25	2.92	3.45	0	2	0.939	15.69
						0.52	0.60	0		0.543	
4	4025	maximum			0.25	2.50	2.12	0	1	0.222	
						1.18	2.11	0		0.514	
4	4026	maximum			0.25	3.65	4.18	0	2	0.793	13.25
						1.48	1.02	0		0.551	
4	4027	maximum			0.25	1.84	1.55	0	1	0.212	
						1.50	1.35	0		0.501	
4	4028	maximum			0.25	2.53	1.68	0	1		
						1.08	0.67	0		0.519	
4	4029	maximum			0.25	0.90	1.40	0	1	0.319	
						1.35	2.75	0		0.511	
4	4030	maximum			0.25	1.49	2.89	0	2	0.644	10.76
						1.11	1.32	0		0.528	
4	4031	maximum			0.25	1.44	3.12	0	1	0.294	
						1.66	2.78	0		0.521	
4	4032	maximum			0.25	1.28	5.39	0	2	0.711	11.88
						2.35	2.29	0		0.539	
4	4033	maximum			0.25	1.90	5.23	0	1	0.229	
						1.32	2.07	0		0.496	
4	4034	maximum			0.25	2.68	4.40	0	1		
						3.54	3.66	0		0.501	

OPIΣTIKH MEΛETH/TEKNIKO TB/L=10.70
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]
									$V_{Rd,ct}/d$	
4	4035		maximum		0.25	2.71 8.13	0	2	0.469	7.83
						0.92 0.34	0		0.507	
4	4036		maximum		0.25	3.60 7.59	0	2	1.161	19.40
						2.14 2.41	0		0.496	
4	4037		maximum		0.25	4.43 22.15	0	2	1.658	29.64
						2.04 2.82	0		0.522	
4	4038		maximum		0.25	6.87 34.33	0	2	2.725	73.67
						1.21 0.66	0		0.697	
4	4039		maximum		0.25	1.94 3.01	0	2	1.254	20.94
						4.60 3.79	0		0.554	
4	4040		maximum		0.25	4.72 2.33	0	1		
						3.03 6.69	0		0.567	
8	8001		maximum		1.20	1.38 5.00	0	1	0.064	
						1.10 3.19	0		0.313	
8	8002		maximum		1.20	1.95 8.21	0	1	0.188	
						3.53 8.21	0		0.311	
8	8003		maximum		1.20	3.61 16.06	0	1	0.170	
						9.36 19.59	0		0.344	
8	8004		maximum		1.20	2.81 10.95	0	1	0.194	
						2.24 10.82	0		0.321	
8	8005		maximum		1.20	11.45 17.43	0	1	0.218	
						9.91 17.73	0		0.359	
8	8006		maximum		1.20	4.06 8.62	0	1	0.183	
						4.87 11.69	0		0.322	
8	8007		maximum		1.20	3.00 3.25	0	1	0.070	
						3.14 2.41	0		0.301	
8	8008		maximum		1.20	2.78 2.94	0	1	0.230	
						2.32 1.13	0		0.324	
8	8009		maximum		1.20	8.77 9.51	0	1	0.048	
						5.59 9.44	0		0.334	
8	8010		maximum		1.20	4.67 4.99	0	1	0.244	
						3.67 8.22	0		0.313	
8	8011		maximum		1.20	4.71 4.24	0	1	0.076	
						4.81 8.41	0		0.346	
8	8012		maximum		1.20	4.83 6.73	0	1	0.237	
						5.49 8.98	0		0.302	
8	8013		maximum		1.20	5.02 6.41	0	1	0.055	
						2.96 2.95	0		0.312	
8	8014		maximum		1.20	2.30 4.02	0	1	0.223	
						2.06 0.94	0		0.316	
8	8015		maximum		1.20	10.46 18.68	0	1	0.177	
						9.68 17.86	0		0.352	
8	8016		maximum		1.20	2.79 8.08	0	1	0.203	
						2.59 9.45	0		0.327	
8	8017		maximum		1.20	6.90 17.92	0	1	0.168	
						8.97 19.90	0		0.354	
8	8018		maximum		1.20	1.93 3.60	0	1	0.200	
						2.77 11.22	0		0.334	
8	8019		maximum		1.20	2.64 0.53	0	1	0.055	
						2.13 2.67	0		0.382	
8	8020		maximum		1.20	2.59 1.87	0	1	0.166	
						2.91 6.51	0		0.352	
8	8021		maximum		1.20	1.54 5.03	0	1	0.067	
						1.11 3.11	0		0.314	
8	8022		maximum		1.20	3.98 16.52	0	1	0.172	
						9.63 20.60	0		0.345	
8	8023		maximum		1.20	2.16 8.53	0	1	0.185	
						3.41 8.34	0		0.311	
8	8024		maximum		1.20	2.80 11.13	0	1	0.193	
						2.34 11.37	0		0.322	
8	8025		maximum		1.20	11.25 17.52	0	1	0.221	
						10.71 19.03	0		0.359	
8	8026		maximum		1.20	3.12 3.35	0	1	0.065	
						3.54 2.92	0		0.301	
8	8027		maximum		1.20	9.26 10.28	0	1	0.049	
						5.61 10.10	0		0.336	
8	8028		maximum		1.20	4.16 9.01	0	1	0.199	
						4.42 11.86	0		0.321	
8	8029		maximum		1.20	2.73 2.82	0	1	0.234	
						1.95 0.79	0		0.323	
8	8030		maximum		1.20	4.53 5.16	0	1	0.250	
						4.24 9.10	0		0.314	
8	8031		maximum		1.20	4.66 4.57	0	1	0.066	
						5.55 9.56	0		0.349	

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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		dphi deg	Shr zon	V_{Ed}/d [MPa]	Ass [cm ² /m ²]
						main	cross	dir		$V_{Rd,ct}/d$	
8	8032		maximum		1.20	5.26	6.72	0	1	0.053	
						2.83	2.81	0		0.311	
8	8033		maximum		1.20	11.11	19.70	0	1	0.186	
						9.75	18.56	0		0.352	
8	8034		maximum		1.20	5.13	7.17	0	1	0.243	
						5.30	9.36	0		0.302	
8	8035		maximum		1.20	2.37	4.15	0	1	0.227	
						1.96	0.62	0		0.317	
8	8036		maximum		1.20	2.61	8.22	0	1	0.181	
						3.08	10.34	0		0.327	
8	8037		maximum		1.20	7.11	18.74	0	1	0.165	
						9.77	21.28	0		0.353	
8	8038		maximum		1.20	2.69	0.54	0	1	0.054	
						2.35	3.04	0		0.382	
8	8039		maximum		1.20	1.82	3.91	0	1	0.180	
						2.85	11.85	0		0.334	
8	8040		maximum		1.20	2.55	2.01	0	1	0.190	
						3.40	7.36	0		0.313	

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 $d-2 \cdot n_{omc}$.

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
3055	10.97	0.66	0.179	1.75	0.123
3056	13.84	0.83	0.229	1.75	0.126
3058	10.50	0.63	0.174	1.75	0.145
3059	13.49	0.81	0.223	1.75	0.145
3060	8.92	0.53	0.148	1.75	0.145
3115	8.95	0.54	0.148	1.75	0.145
3116	13.51	0.81	0.224	1.75	0.145
3117	10.46	0.63	0.173	1.75	0.145
3119	13.86	0.83	0.229	1.75	0.126
3120	10.93	0.65	0.179	1.75	0.123
4003	16.01	0.96	0.265	1.75	0.140
4005	13.54	0.81	0.218	1.75	0.123
4009	10.98	0.66	0.182	1.75	0.123
4011	12.14	0.73	0.197	1.75	0.123
4015	19.61	1.17	0.325	1.75	0.123
4016	7.84	0.47	0.130	1.75	0.139
4017	74.51	2.75	0.657	1.08	0.145
4018	29.61	1.66	0.444	1.64	0.138
4020	20.94	1.25	0.347	1.75	0.123
4024	15.69	0.94	0.260	1.75	0.140
4026	13.25	0.79	0.213	1.75	0.125
4030	10.76	0.64	0.178	1.75	0.123
4032	11.88	0.71	0.192	1.75	0.123
4035	7.83	0.47	0.130	1.75	0.138
4036	19.40	1.16	0.321	1.75	0.123
4037	29.64	1.66	0.444	1.64	0.138
4038	73.67	2.73	0.652	1.08	0.145
4039	20.94	1.25	0.347	1.75	0.123

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
FASH-2_CRASH_ΠΑΣΣΑΛΟΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Selected Beam Elements

FROM	TO	INC	X-VALUE	NC	MEMBER	CS0	CS1	CS2	CS3	CS4	CS5
10001											
10005											
10006											
10010											
10011											
10015											
10016											
10020											
12000	12100	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. 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
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

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
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'
1509 part.	CS 1	MAX-N BEAM L (live loading)	1.50	0.00	0.75	0.75	0.20	0.80 Q exc1
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

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 [MPa]	at strain [o/o]	max.tens stress [MPa]	at strain [o/o]	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	
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+ 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

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
			[m]	[cm ²]	[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[cm ²]
10001	0.000	8	0.03	4.25		3.90T	0.25		0.11	
10001	0.250	8	0.05	5.97		4.87T	0.19		0.91	
10005	0.000	8	0.09	12.38		9.02T	2.30		1.06	
10005	0.300	8	0.12	15.41		11.20T	1.35		2.85	
10006	0.000	8	0.11	14.40		13.03T	1.37			
10006	0.250	8	0.11	14.19		13.14T	0.03		1.03	
10010	0.000	8	0.05	6.54		5.59T			0.95	
10010	0.300	8	0.04	4.86		4.47T	0.39			
10011	0.000	8	0.03	4.58		4.24T	0.24		0.11	
10011	0.250	8	0.04	5.64		4.54T	0.18		0.92	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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
			[-]	[cm ²]	[m]	[cm ²]	[cm ²]	[cm ²]	[cm ²]	[cm ²]
10015	0.000	8	0.09	12.40		8.99T	2.33		1.08	
10015	0.300	8	0.08	10.69		6.64T	1.19		2.86	
10016	0.000	8	0.12	15.69		14.45T	1.24			
10016	0.250	8	0.09	11.58		10.56T			1.02	
10020	0.000	8	0.05	6.88		5.92T			0.95	
10020	0.300	8	0.04	4.72		4.31T	0.39		0.02	
12001	0.000	9	0.54	27.17			27.17T			
12001	1.000	9	0.30	15.08			15.08T			
12002	0.000	9	0.30	15.08			15.08T			
12002	1.000	9	0.69	34.73			34.73T			
12003	0.000	9	0.69	34.73			34.73T			
12003	1.000	9	0.92	46.40			46.40T			
12004	0.000	9	0.30	15.08			15.08T			
12004	1.000	9	0.44	21.88			21.88T			
12005	0.000	9	0.44	21.88			21.88T			
12005	1.000	9	0.82	41.20			41.20T			
12006	0.000	9	0.82	41.20			41.20T			
12006	1.000	9	0.91	45.84			45.84T			
12007	0.000	9	0.49	24.55			24.55T			
12007	1.000	9	0.30	15.08			15.08T			
12008	0.000	9	0.30	15.08			15.08T			
12008	1.000	9	0.68	34.24			34.24T			
12009	0.000	9	0.68	34.24			34.24T			
12009	1.000	9	0.96	48.19			48.19T			
12010	0.000	9	0.30	15.08			15.08T			
12010	1.000	9	0.43	21.43			21.43T			
12011	0.000	9	0.43	21.43			21.43T			
12011	1.000	9	0.55	27.55			27.55T			
12012	0.000	9	0.55	27.55			27.55T			
12012	1.000	9	0.67	33.92			33.92T			
12013	0.000	9	0.92	46.40			46.40T			
12013	1.000	9	1.13	57.00			57.00T			
12014	0.000	9	1.13	56.96			56.96T			
12014	1.000	9	1.17	58.85			58.85T			
12015	0.000	9	1.17	58.83			58.83T			
12015	1.000	9	1.08	54.30			54.30T			
12016	0.000	9	1.08	54.28			54.28T			
12016	1.000	9	0.92	46.25			46.25T			
12017	0.000	9	0.92	46.24			46.24T			
12017	1.000	9	0.75	37.47			37.47T			
12018	0.000	9	0.75	37.47			37.47T			
12018	1.000	9	0.57	28.84			28.84T			
12019	0.000	9	0.57	28.84			28.84T			
12019	1.000	9	0.43	21.59			21.59T			
12020	0.000	9	0.43	21.59			21.59T			
12020	1.000	9	0.32	16.14			16.14T			
12021	0.000	9	0.32	16.14			16.14T			
12021	1.000	9	0.30	15.08			15.08T			
12022	0.000	9	0.30	15.08			15.08T			
12022	1.000	9	0.30	15.08			15.08T			
12023	0.000	9	0.30	15.08			15.08T			
12023	1.000	9	0.30	15.08			15.08T			
12024	0.000	9	0.30	15.08			15.08T			
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			15.08			
12034	1.000	9	0.30	15.08			15.08			
12035	0.000	9	0.91	45.83			45.83T			
12035	1.000	9	0.85	42.68			42.68T			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
12036	0.000	9	0.85	42.65			42.65T			
12036	1.000	9	0.69	34.75			34.75T			
12037	0.000	9	0.69	34.74			34.74T			
12037	1.000	9	0.50	24.90			24.90T			
12038	0.000	9	0.50	24.89			24.89T			
12038	1.000	9	0.30	15.13			15.13T			
12039	0.000	9	0.30	15.12			15.12T			
12039	1.000	9	0.30	15.08			15.08T			
12040	0.000	9	0.30	15.08			15.08T			
12040	1.000	9	0.30	15.08			15.08T			
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	0.30	15.08			15.08T			
12043	0.000	9	0.30	15.08			15.08T			
12043	1.000	9	0.30	15.08			15.08T			
12044	0.000	9	0.30	15.08			15.08T			
12044	1.000	9	0.30	15.08			15.08T			
12045	0.000	9	0.30	15.08			15.08T			
12045	1.000	9	0.30	15.08			15.08T			
12046	0.000	9	0.30	15.08			15.08T			
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			15.08'			
12056	1.000	9	0.30	15.08			15.08'			
12057	0.000	9	0.96	48.19			48.19T			
12057	1.000	9	1.18	59.08			59.08T			
12058	0.000	9	1.17	59.05			59.05T			
12058	1.000	9	1.20	60.50			60.50T			
12059	0.000	9	1.20	60.48			60.48T			
12059	1.000	9	1.10	55.35			55.35T			
12060	0.000	9	1.10	55.34			55.34T			
12060	1.000	9	0.93	46.77			46.77T			
12061	0.000	9	0.93	46.76			46.76T			
12061	1.000	9	0.76	38.22			38.22T			
12062	0.000	9	0.76	38.22			38.22T			
12062	1.000	9	0.58	29.18			29.18T			
12063	0.000	9	0.58	29.18			29.18T			
12063	1.000	9	0.43	21.65			21.65T			
12064	0.000	9	0.43	21.65			21.65T			
12064	1.000	9	0.32	16.01			16.01T			
12065	0.000	9	0.32	16.01			16.01T			
12065	1.000	9	0.30	15.08			15.08T			
12066	0.000	9	0.30	15.08			15.08T			
12066	1.000	9	0.30	15.08			15.08T			
12067	0.000	9	0.30	15.08			15.08T			
12067	1.000	9	0.30	15.08			15.08T			
12068	0.000	9	0.30	15.08			15.08T			
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			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
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			15.08			
12078	1.000	9	0.30	15.08			15.08			
12079	0.000	9	0.67	33.92			33.92T			
12079	1.000	9	0.72	36.36			36.36T			
12080	0.000	9	0.72	36.34			36.34T			
12080	1.000	9	0.65	32.56			32.56T			
12081	0.000	9	0.65	32.54			32.54T			
12081	1.000	9	0.50	25.31			25.31T			
12082	0.000	9	0.50	25.31			25.31T			
12082	1.000	9	0.34	16.89			16.89T			
12083	0.000	9	0.34	16.89			16.89T			
12083	1.000	9	0.30	15.08			15.08T			
12084	0.000	9	0.30	15.08			15.08T			
12084	1.000	9	0.30	15.08			15.08T			
12085	0.000	9	0.30	15.08			15.08T			
12085	1.000	9	0.30	15.08			15.08T			
12086	0.000	9	0.30	15.08			15.08T			
12086	1.000	9	0.30	15.08			15.08T			
12087	0.000	9	0.30	15.08			15.08T			
12087	1.000	9	0.30	15.08			15.08T			
12088	0.000	9	0.30	15.08			15.08T			
12088	1.000	9	0.30	15.08			15.08T			
12089	0.000	9	0.30	15.08			15.08T			
12089	1.000	9	0.30	15.08			15.08T			
12090	0.000	9	0.30	15.08			15.08T			
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			
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			15.08'			
12100	1.000	9	0.30	15.08			15.08'			

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]
10001	0.000	8	0.95	1.85				
10001	0.250	8	1.18	2.56				
10005	0.000	8	2.19	8.51				
10005	0.300	8	2.69	10.47				
10006	0.000	8	3.16	9.25				
10006	0.250	8	3.19	10.05				
10010	0.000	8	1.36	2.98				
10010	0.300	8	1.06	1.97				
10011	0.000	8	1.03	1.84				
10011	0.250	8	1.10	2.54				
10015	0.000	8	2.18	8.58				
10015	0.300	8	1.61	10.29				
10016	0.000	8	3.51	9.89				
10016	0.250	8	2.56	9.75				
10020	0.000	8	1.44	3.03				
10020	0.300	8	1.02	1.95				
12001	0.000	9	0.02	7.26				
12001	1.000	9	0.02	5.49				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
12002	0.000	9	0.02	5.49				
12002	1.000	9	0.04	7.22				
12003	0.000	9	0.04	7.22				
12003	1.000	9	0.04	8.88				
12004	0.000	9	0.02	5.17				
12004	1.000	9	0.02	5.11				
12005	0.000	9	0.02	5.11				
12005	1.000	9	0.02	5.06				
12006	0.000	9	0.02	5.06				
12006	1.000	9	0.02	5.03				
12007	0.000	9	0.01	7.73				
12007	1.000	9	0.01	5.49				
12008	0.000	9	0.01	5.49				
12008	1.000	9	0.02	6.88				
12009	0.000	9	0.02	6.88				
12009	1.000	9	0.02	6.72				
12010	0.000	9	0.01	5.13				
12010	1.000	9	0.01	5.11				
12011	0.000	9	0.01	5.11				
12011	1.000	9	0.01	5.07				
12012	0.000	9	0.01	5.07				
12012	1.000	9	0.01	5.08				
12013	0.000	9	0.04	8.88				
12013	1.000	9	0.02	5.06				
12014	0.000	9	0.02	5.06				
12014	1.000	9	0.02	5.05				
12015	0.000	9	0.02	5.05				
12015	1.000	9	0.02	5.06				
12016	0.000	9	0.02	5.07				
12016	1.000	9	0.02	5.11				
12017	0.000	9	0.02	5.11				
12017	1.000	9	0.02	5.18				
12018	0.000	9	0.02	5.18				
12018	1.000	9	0.02	5.27				
12019	0.000	9	0.02	5.27				
12019	1.000	9	0.02	5.42				
12020	0.000	9	0.01	5.42				
12020	1.000	9	0.01	5.59				
12021	0.000	9	0.01	5.59				
12021	1.000	9	0.01	5.69				
12022	0.000	9	0.01	5.69				
12022	1.000	9	0.01	5.74				
12023	0.000	9	0.01	5.74				
12023	1.000	9	0.01	5.74				
12024	0.000	9	0.01	5.74				
12024	1.000	9	0.01	5.74				
12025	0.000	9	0.01	5.74				
12025	1.000	9	0.01	5.73				
12026	0.000	9	0.01	5.73				
12026	1.000	9	0.01	5.73				
12027	0.000	9	0.01	5.73				
12027	1.000	9	0.01	5.74				
12028	0.000	9	0.01	5.74				
12028	1.000	9	0.01	5.74				
12029	0.000	9	0.01	5.74				
12029	1.000	9	0.01	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	4.58				
12034	0.000	9	0.00	4.58				
12034	1.000	9	0.00	4.58				
12035	0.000	9	0.02	5.03				
12035	1.000	9	0.02	5.03				
12036	0.000	9	0.02	5.03				
12036	1.000	9	0.02	5.04				
12037	0.000	9	0.02	5.04				
12037	1.000	9	0.02	5.07				
12038	0.000	9	0.02	5.07				
12038	1.000	9	0.02	5.14				
12039	0.000	9	0.02	5.14				
12039	1.000	9	0.02	5.04				
12040	0.000	9	0.02	5.04				
12040	1.000	9	0.02	4.85				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
12041	0.000	9	0.02	4.85				
12041	1.000	9	0.02	4.66				
12042	0.000	9	0.01	4.66				
12042	1.000	9	0.01	4.59				
12043	0.000	9	0.01	4.59				
12043	1.000	9	0.01	4.58				
12044	0.000	9	0.01	4.58				
12044	1.000	9	0.01	4.58				
12045	0.000	9	0.01	4.58				
12045	1.000	9	0.01	4.58				
12046	0.000	9	0.01	4.58				
12046	1.000	9	0.01	4.58				
12047	0.000	9	0.01	4.58				
12047	1.000	9	0.01	4.58				
12048	0.000	9	0.01	4.58				
12048	1.000	9	0.01	4.58				
12049	0.000	9	0.01	4.58				
12049	1.000	9	0.01	4.58				
12050	0.000	9	0.01	4.58				
12050	1.000	9	0.01	4.58				
12051	0.000	9	0.01	4.58				
12051	1.000	9	0.01	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	0.02	6.72				
12057	1.000	9	0.01	5.05				
12058	0.000	9	0.01	5.05				
12058	1.000	9	0.01	5.04				
12059	0.000	9	0.01	5.04				
12059	1.000	9	0.01	5.06				
12060	0.000	9	0.01	5.06				
12060	1.000	9	0.01	5.10				
12061	0.000	9	0.01	5.10				
12061	1.000	9	0.01	5.17				
12062	0.000	9	0.01	5.17				
12062	1.000	9	0.01	5.26				
12063	0.000	9	0.01	5.26				
12063	1.000	9	0.01	5.41				
12064	0.000	9	0.01	5.41				
12064	1.000	9	0.01	5.59				
12065	0.000	9	0.01	5.59				
12065	1.000	9	0.01	5.70				
12066	0.000	9	0.01	5.70				
12066	1.000	9	0.01	5.74				
12067	0.000	9	0.00	5.74				
12067	1.000	9	0.01	5.74				
12068	0.000	9	0.01	5.74				
12068	1.000	9	0.01	5.74				
12069	0.000	9	0.01	5.74				
12069	1.000	9	0.01	5.73				
12070	0.000	9	0.00	5.73				
12070	1.000	9	0.00	5.73				
12071	0.000	9	0.00	5.73				
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	4.58				
12078	0.000	9	0.00	4.58				
12078	1.000	9	0.00	4.58				
12079	0.000	9	0.01	5.08				
12079	1.000	9	0.01	5.04				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
12080	0.000	9	0.01	5.04				
12080	1.000	9	0.01	5.04				
12081	0.000	9	0.01	5.04				
12081	1.000	9	0.01	5.06				
12082	0.000	9	0.01	5.06				
12082	1.000	9	0.01	5.12				
12083	0.000	9	0.01	5.12				
12083	1.000	9	0.01	5.07				
12084	0.000	9	0.01	5.07				
12084	1.000	9	0.01	4.93				
12085	0.000	9	0.01	4.93				
12085	1.000	9	0.01	4.71				
12086	0.000	9	0.01	4.71				
12086	1.000	9	0.01	4.61				
12087	0.000	9	0.01	4.61				
12087	1.000	9	0.01	4.58				
12088	0.000	9	0.01	4.58				
12088	1.000	9	0.01	4.58				
12089	0.000	9	0.00	4.58				
12089	1.000	9	0.01	4.58				
12090	0.000	9	0.01	4.58				
12090	1.000	9	0.01	4.58				
12091	0.000	9	0.01	4.58				
12091	1.000	9	0.01	4.58				
12092	0.000	9	0.00	4.58				
12092	1.000	9	0.00	4.58				
12093	0.000	9	0.00	4.58				
12093	1.000	9	0.00	4.58				
12094	0.000	9	0.00	4.58				
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				

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	0.161	0.074	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	1.877	0.000	0.000	0.000
Cross sect.	9	0.000	0.000	0.226	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	1.528	0.000	0.000	0.000
Total system		0.000	0.000	0.226	0.074	0.000	0.000	0.000	0.000	1.000	0.000
		0.000	0.000	0.000	0.000	0.000	1.000	1.877	0.000	0.000	0.000

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
FASH-2_CRASH_DOKOI

Selected Beam Elements

FROM	TO	INC	X-VALUE	NC	MEMBER	CS0	CS1	CS2	CS3	CS4	CS5
1000	1036	1		1	bending	10	40				
2000	2012	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. 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
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
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	1.50	0.00	0.75	0.75	0.20	0.80 Q exc1

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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'
			L (live loading)						
5015	part.	CS 0	K creep step	1.00	1.00	1.00	1.00	1.00	1.00 P perm
			C (creep + shrinkage)						
5025	part.	CS 0	K creep step	1.00	1.00	1.00	1.00	1.00	1.00 P perm
			C (creep + shrinkage)						
5055	part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	1.00 P perm
			C (creep + shrinkage)						
5060	part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	1.00 P perm
			C (creep + shrinkage)						
5061	part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	1.00 P perm
			C (creep + shrinkage)						
5062	part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	1.00 P perm
			C (creep + shrinkage)						
5063	part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	1.00 P perm
			C (creep + shrinkage)						
5064	part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	1.00 P perm
			C (creep + shrinkage)						
6015	part.	CS 0	15 K creep step						P perm
			C (creep + shrinkage)						
6025	part.	CS 0	25 K creep step						P perm
			C (creep + shrinkage)						
6055	part.	CS 1	55 K creep step						P perm
			C (creep + shrinkage)						
6060	part.	CS 1	60 K creep step						P perm
			C (creep + shrinkage)						
6061	part.	CS 1	61 K creep step						P perm
			C (creep + shrinkage)						
6062	part.	CS 1	62 K creep step						P perm
			C (creep + shrinkage)						
6063	part.	CS 1	63 K creep step						P perm
			C (creep + shrinkage)						
6064	part.	CS 1	64 K creep step						P perm
			C (creep + shrinkage)						

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 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	
12	0	1.000	-525.00	-25.00	525.00	25.00	

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

OPIΣTIKH MEΛETH/TEKNIKO TB/L=10.70
FASH-2_CRASH_DOKOI

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

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

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	0.53	28.67		10.52T	11.13		7.02	
1001	0.692	1	0.45	24.30		10.54T	9.62		4.13	
1002	0.000	1	0.52	27.94		14.38T	9.44		4.13	
1002	0.692	1	0.46	25.03		14.55T	8.76		1.72	
1003	0.000	1	0.51	27.46		16.64T	8.61		2.21	
1003	0.692	1	0.52	28.36		19.80T	8.56			
1004	0.000	1	0.50	27.17		17.91T	8.56		0.70	
1004	0.692	1	0.57	30.99		21.07T	9.92			
1005	0.000	1	0.59	31.76		21.84T	9.92			
1005	0.692	1	0.54	29.25		18.40T	10.86			
1006	0.000	1	0.54	29.38		18.52T	10.85			
1006	0.692	1	0.54	29.52		18.52T	11.00			
1007	0.000	1	0.55	29.78		18.78T	11.00			
1007	0.692	1	0.54	29.56		18.74T	10.82			
1008	0.000	1	0.54	29.50		18.68T	10.82			
1008	0.692	1	0.59	32.27		22.17T	10.11			
1009	0.000	1	0.58	31.50		21.39T	10.11			
1009	0.692	1	0.50	27.37		18.15T	8.15		1.07	
1010	0.000	1	0.46	24.87		16.32T	8.15		0.40	
1010	0.692	1	0.52	28.27		16.86T	8.81		2.60	
1011	0.000	1	0.48	26.23		14.76T	8.95		2.52	
1011	0.692	1	0.54	29.26		14.58T	9.69		4.99	
1012	0.000	1	0.47	25.58		10.71T	9.88		5.00	
1012	0.692	1	0.55	29.96		10.68T	11.34		7.93	
1013	0.000	1	0.21	11.58		2.37T	2.46		6.75	
1013	0.692	1	0.28	15.20		6.52T	4.37		4.31	
1014	0.000	1	0.35	19.06		10.40T	4.35		4.31	
1014	0.692	1	0.28	15.27		6.46T	6.80		2.01	
1015	0.000	1	0.39	20.93		12.13T	6.79		2.01	
1015	0.692	1	0.37	19.89		10.56T	9.21		0.12	
1016	0.000	1	0.37	20.00		10.79T	9.21			
1016	0.692	1	0.39	21.39		11.05T	10.34			
1017	0.000	1	0.40	21.59		11.26T	10.33			
1017	0.692	1	0.49	26.75		15.53T	11.22			
1018	0.000	1	0.49	26.78		15.56T	11.22			
1018	0.692	1	0.49	26.34		14.98T	11.36			
1019	0.000	1	0.48	26.18		14.82T	11.36			
1019	0.692	1	0.49	26.69		15.44T	11.26			
1020	0.000	1	0.49	26.59		15.33T	11.26			
1020	0.692	1	0.40	21.96		11.34T	10.62			
1021	0.000	1	0.40	21.84		11.22T	10.62			
1021	0.692	1	0.35	19.11		9.54T	9.00		0.57	
1022	0.000	1	0.37	20.28		10.70T	9.00		0.57	
1022	0.692	1	0.41	22.36		12.37T	7.36		2.63	
1023	0.000	1	0.30	16.38		6.39T	7.37		2.63	
1023	0.692	1	0.38	20.35		10.62T	4.76		4.96	
1024	0.000	1	0.30	16.44		6.70T	4.78		4.97	
1024	0.692	1	0.24	13.04		2.40T	3.22		7.42	
1025	0.000	1	0.67	36.12		17.36T	11.22		7.54	
1025	0.692	1	0.61	33.32		17.35T	11.23		4.74	
1026	0.000	1	0.62	33.44		17.73T	10.91		4.80	
1026	0.692	1	0.57	30.72		16.96T	11.48		2.28	
1027	0.000	1	0.59	31.98		19.23T	9.88		2.87	
1027	0.692	1	0.53	28.74		16.87T	11.68		0.19	
1028	0.000	1	0.58	31.42		19.76T	10.42		1.25	
1028	0.692	1	0.63	34.27		22.72T	11.55			
1029	0.000	1	0.64	34.67		23.63T	11.03			
1029	0.692	1	0.53	28.60		16.53T	12.07			
1030	0.000	1	0.55	29.96		18.34T	11.62			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
1030	0.692	1	0.44	23.95		11.88T	12.06			
1031	0.000	1	0.44	23.95		11.88T	12.06			
1031	0.692	1	0.64	34.91		23.27T	11.65			
1032	0.000	1	0.53	28.85		16.76T	12.10			
1032	0.692	1	0.64	34.47		23.30T	11.08		0.08	
1033	0.000	1	0.63	33.99		22.39T	11.60			
1033	0.692	1	0.59	31.95		20.01T	10.47		1.46	
1034	0.000	1	0.55	30.11		17.73T	11.74		0.64	
1034	0.692	1	0.60	32.40		19.19T	10.12		3.09	
1035	0.000	1	0.58	31.46		16.99T	11.72		2.75	
1035	0.692	1	0.64	34.52		17.92T	11.38		5.22	
1036	0.000	1	0.63	34.41		17.50T	11.70		5.22	
1036	0.692	1	0.69	37.20		17.51T	11.69		8.00	
2001	0.000	2	0.26	23.76		1.20T	12.62		9.94	
2001	0.300	2	0.24	21.95		1.20T	12.10		8.64	
2002	0.000	2	0.27	24.55		3.82T	12.06		8.67	
2002	0.300	2	0.25	22.32		3.83T	11.35		7.14	
2003	0.000	2	0.26	23.44		3.80T	11.57		8.07	
2003	0.300	2	0.29	25.67		3.79T	12.26		9.62	
2004	0.000	2	0.26	23.09		1.20T	12.30		9.60	
2004	0.300	2	0.28	24.88		1.20T	12.79		10.89	
2005	0.000	2	0.15	13.63		1.01T	3.28		9.34	
2005	0.300	2	0.13	11.56		0.51T	2.85		8.20	
2006	0.000	2	0.13	11.65		0.60T	2.83		8.23	
2006	0.300	2	0.11	9.68		0.29T	2.53		6.86	
2007	0.000	2	0.12	11.12		0.27T	3.30		7.55	
2007	0.300	2	0.14	12.72		0.62T	3.18		8.93	
2008	0.000	2	0.14	12.60		0.51T	3.20		8.90	
2008	0.300	2	0.16	14.65		1.02T	3.61		10.02	
2009	0.000	2	0.28	25.29		3.16T	11.92		10.21	
2009	0.300	2	0.26	23.05		3.17T	10.84		9.04	
2010	0.000	2	0.36	32.43		12.33T	11.04		9.06	
2010	0.300	2	0.31	28.13		8.96T	11.52		7.65	
2011	0.000	2	0.32	29.10		8.97T	12.00		8.12	
2011	0.300	2	0.33	30.02		8.99T	11.52		9.51	
2012	0.000	2	0.27	23.98		3.17T	11.32		9.49	
2012	0.300	2	0.29	26.18		3.16T	12.40		10.63	

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	6.12	8.09				
1001	0.692	1	6.05	7.62				
1002	0.000	1	8.25	9.28				
1002	0.692	1	8.25	9.12				
1003	0.000	1	9.43	10.00				
1003	0.692	1	9.43	9.83				
1004	0.000	1	10.03	10.24				
1004	0.692	1	10.03	10.07				
1005	0.000	1	10.40	10.30				
1005	0.692	1	10.31	8.95				
1006	0.000	1	10.42	9.36				
1006	0.692	1	10.41	9.74				
1007	0.000	1	10.55	9.71				
1007	0.692	1	10.55	9.36				
1008	0.000	1	10.47	8.96				
1008	0.692	1	10.56	10.47				
1009	0.000	1	10.19	10.23				
1009	0.692	1	10.19	10.40				
1010	0.000	1	9.57	9.99				
1010	0.692	1	9.57	10.16				
1011	0.000	1	8.38	9.27				
1011	0.692	1	8.38	9.43				
1012	0.000	1	6.16	7.76				
1012	0.692	1	6.23	8.22				
1013	0.000	1	1.23	5.05				
1013	0.692	1	3.64	4.79				
1014	0.000	1	5.81	4.83				
1014	0.692	1	3.60	4.10				
1015	0.000	1	6.74	6.09				
1015	0.692	1	5.90	4.91				
1016	0.000	1	5.14	4.75				
1016	0.692	1	6.19	4.90				
1017	0.000	1	6.31	4.27				
1017	0.692	1	8.72	6.29				
1018	0.000	1	8.74	6.38				

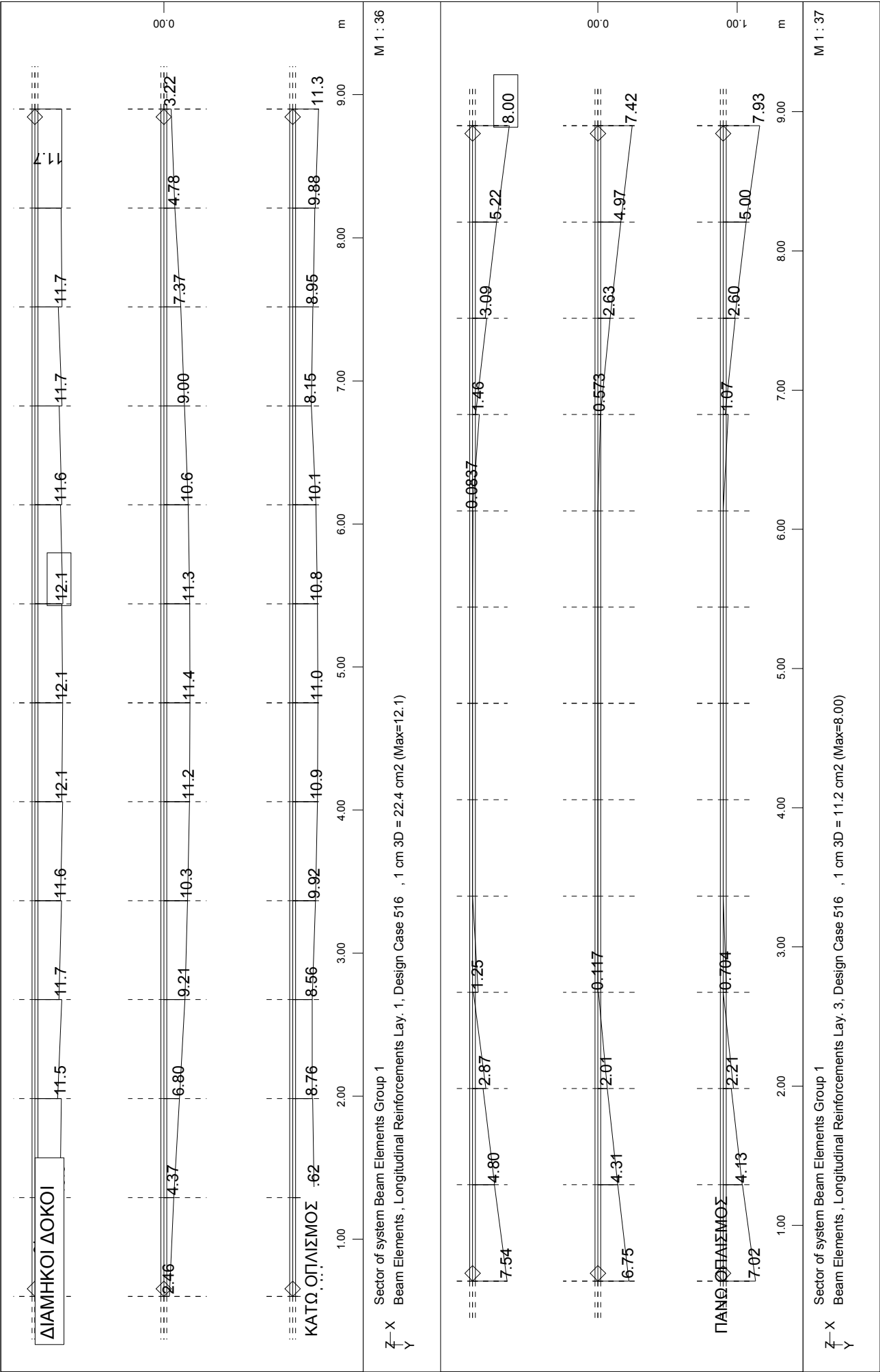
OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
FASH-2_CRASH_DOKOI

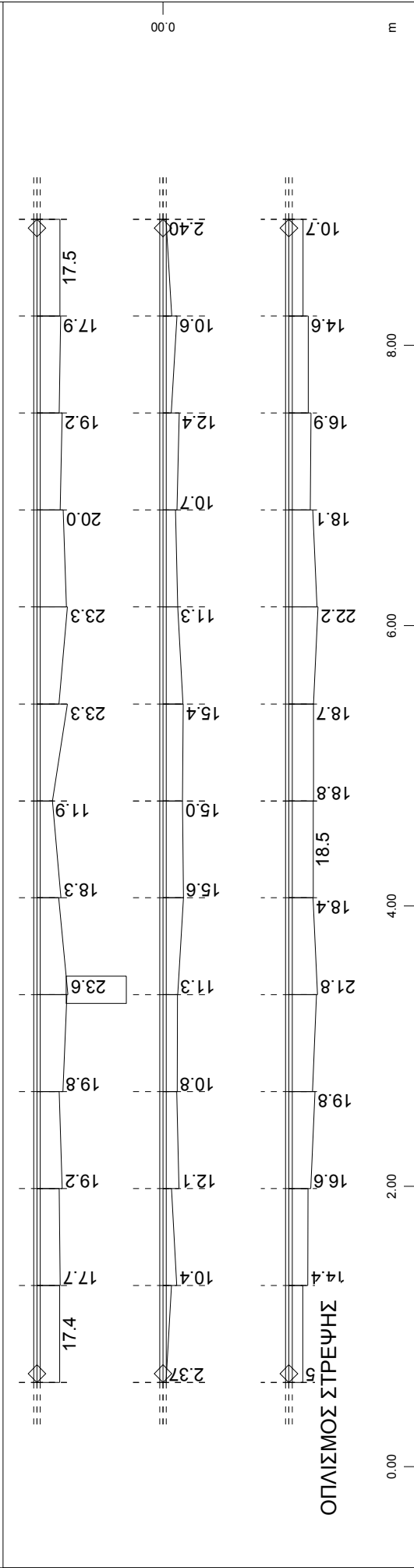
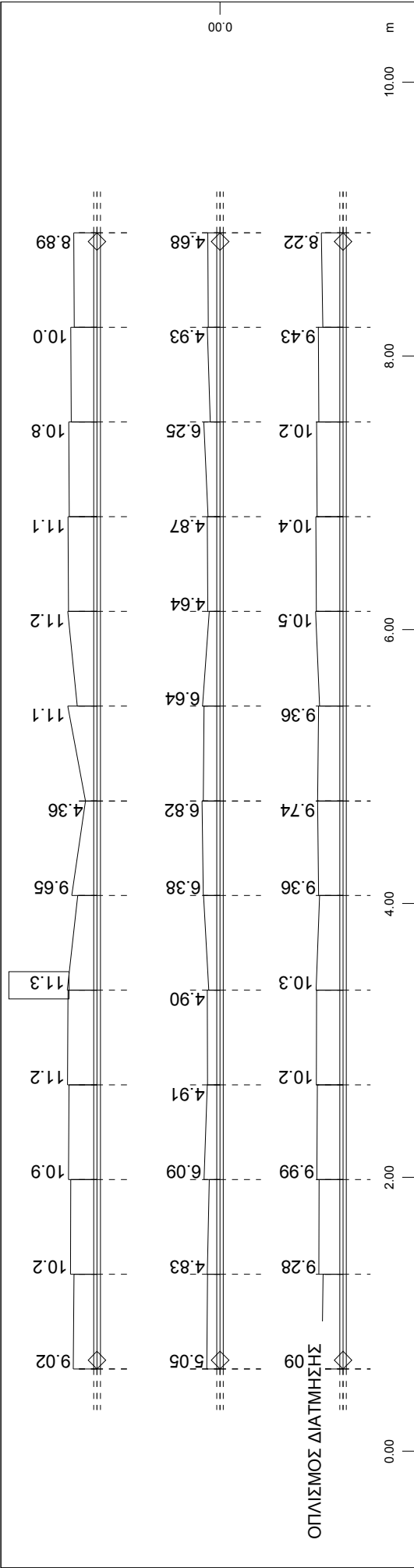
Shear Reinforcements per Cutted Part of Section Accumulated minimum

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]
1018	0.692	1	8.42	6.82				
1019	0.000	1	8.32	6.37				
1019	0.692	1	8.67	6.11				
1020	0.000	1	8.61	6.64				
1020	0.692	1	6.36	4.16				
1021	0.000	1	6.29	4.64				
1021	0.692	1	5.30	4.87				
1022	0.000	1	5.99	4.57				
1022	0.692	1	6.89	6.25				
1023	0.000	1	3.56	3.72				
1023	0.692	1	5.95	4.93				
1024	0.000	1	3.75	4.45				
1024	0.692	1	1.32	4.68				
1025	0.000	1	9.65	9.02				
1025	0.692	1	9.64	8.76				
1026	0.000	1	9.91	10.16				
1026	0.692	1	9.45	10.00				
1027	0.000	1	10.76	10.91				
1027	0.692	1	10.06	10.73				
1028	0.000	1	11.03	11.23				
1028	0.692	1	10.82	11.06				
1029	0.000	1	11.25	11.33				
1029	0.692	1	9.18	7.41				
1030	0.000	1	10.19	9.65				
1030	0.692	1	5.66	4.36				
1031	0.000	1	5.66	4.36				
1031	0.692	1	11.08	11.11				
1032	0.000	1	9.31	7.59				
1032	0.692	1	11.10	11.17				
1033	0.000	1	10.66	10.90				
1033	0.692	1	11.18	11.07				
1034	0.000	1	9.91	10.58				
1034	0.692	1	10.75	10.75				
1035	0.000	1	9.47	9.86				
1035	0.692	1	10.02	10.02				
1036	0.000	1	9.73	8.63				
1036	0.692	1	9.74	8.89				
2001	0.000	2	0.50	4.09				
2001	0.300	2	0.50	3.95				
2002	0.000	2	1.59	4.64				
2002	0.300	2	1.59	4.54				
2003	0.000	2	1.58	4.57				
2003	0.300	2	1.58	4.69				
2004	0.000	2	0.50	3.23				
2004	0.300	2	0.50	3.32				
2005	0.000	2	0.42	5.26				
2005	0.300	2	0.21	5.02				
2006	0.000	2	0.25	5.09				
2006	0.300	2	0.12	4.91				
2007	0.000	2	0.11	4.86				
2007	0.300	2	0.26	5.08				
2008	0.000	2	0.21	4.58				
2008	0.300	2	0.42	4.65				
2009	0.000	2	1.32	3.93				
2009	0.300	2	1.32	3.84				
2010	0.000	2	3.71	5.26				
2010	0.300	2	3.71	5.15				
2011	0.000	2	3.73	5.13				
2011	0.300	2	3.73	5.23				
2012	0.000	2	1.32	3.82				
2012	0.300	2	1.32	3.91				

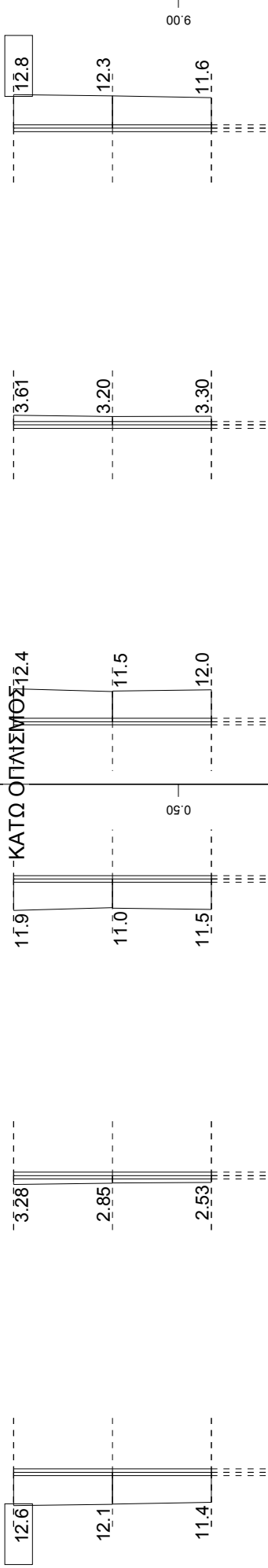
Maximum Degree of Utilization

		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	0.297	0.999	0.000	0.000	0.000	0.000	1.001	0.000
Cross sect.	2	0.000	0.000	0.087	0.221	0.000	0.000	0.000	0.000	1.000	0.000
DOKOS-2		0.000	0.000	0.000	0.000	0.000	1.000	2.689	0.000	0.000	0.000
Total System		0.000	0.000	0.297	0.999	0.000	0.000	0.000	0.000	1.001	0.000
		0.000	0.000	0.000	0.000	0.000	1.000	6.694	0.000	0.000	0.000





ΔΙΑΜΗΚΗ ΔΟΚΟΙ-ΣΤΗΡΙΞΗΣ



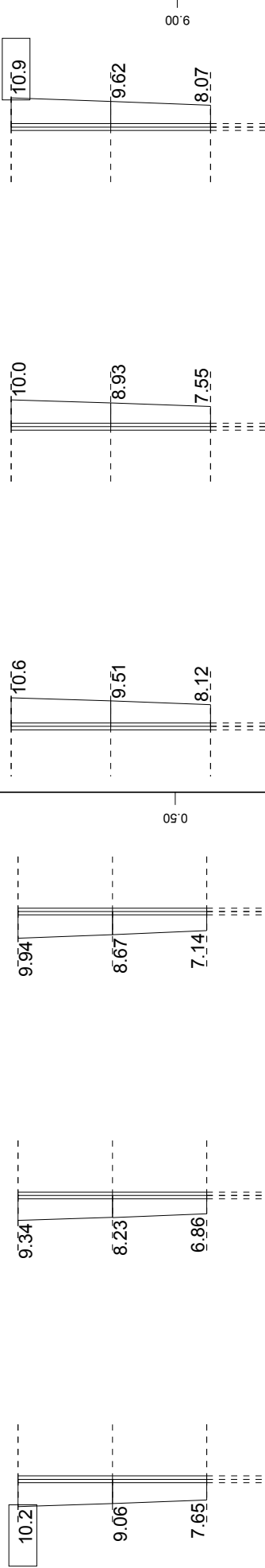
Y-Z
X
Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case
516 , 1 cm 3D = 22.4 cm2 (Max=12.6)

M 1 : 18

X
Z-Y
Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case
516 , 1 cm 3D = 22.4 cm2 (Max=12.8)

M 1 : 18

ΠΑΝΩ ΟΠΛΙΣΜΟΣ

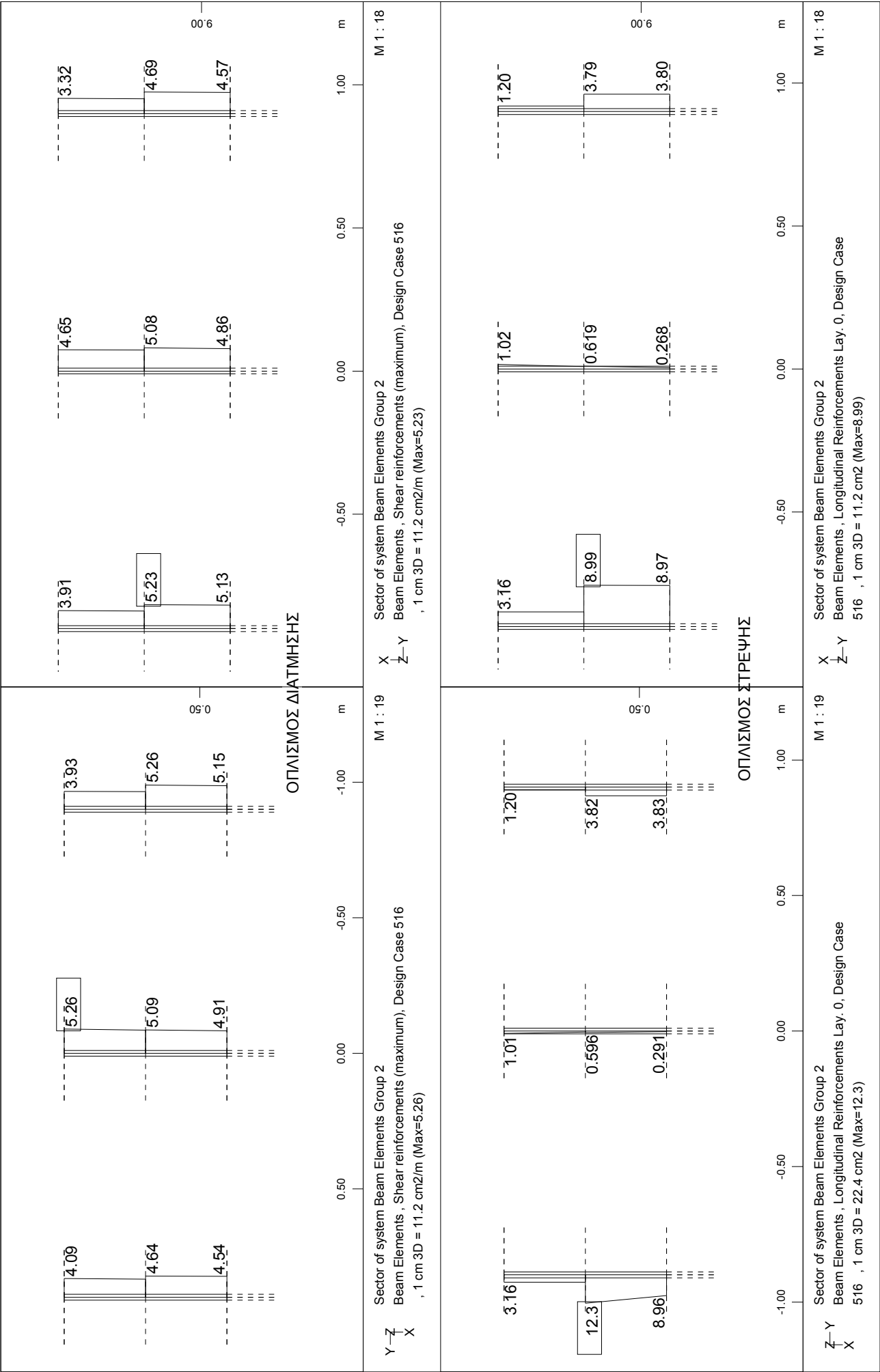


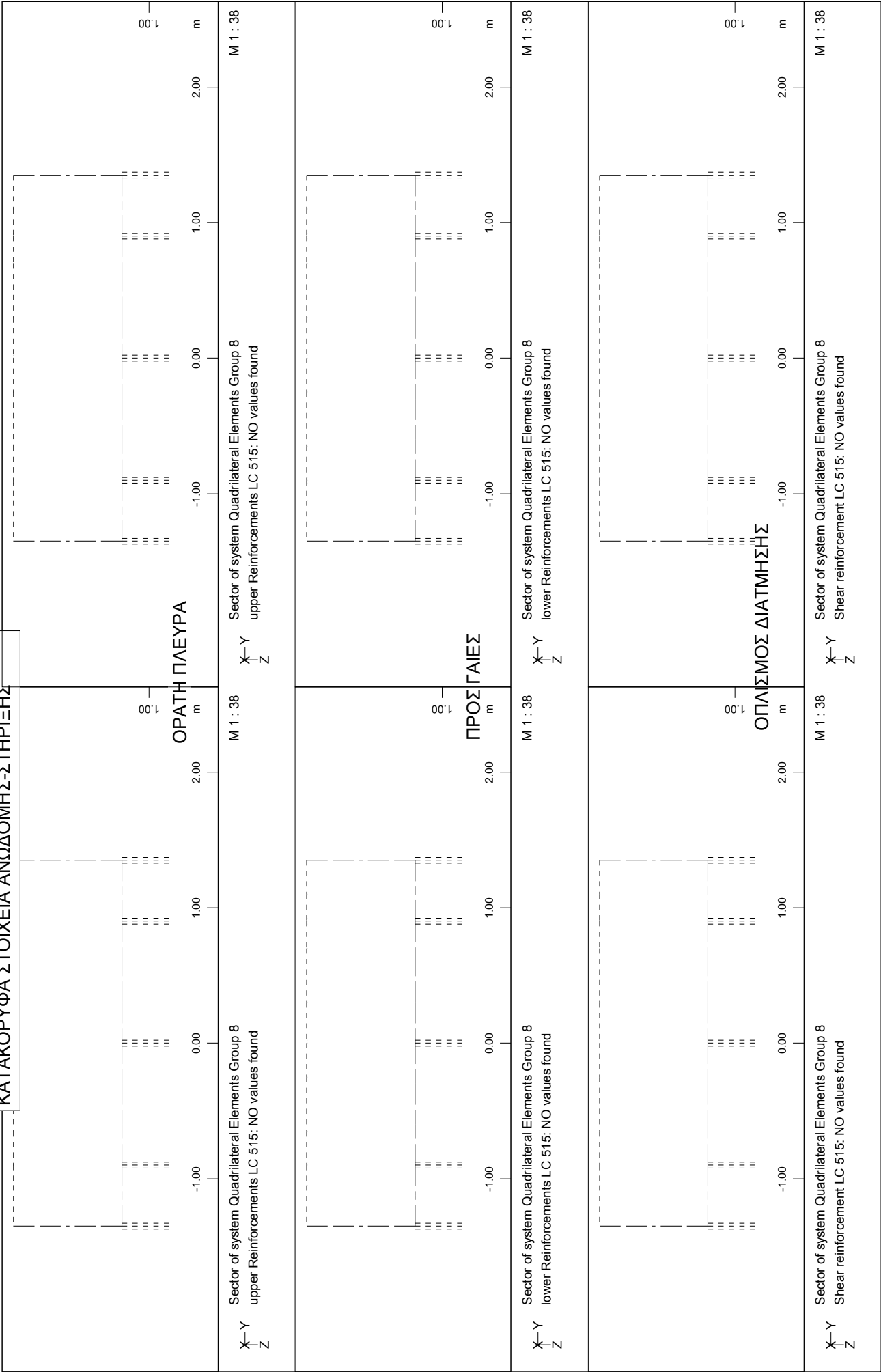
Z-Y
X
Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
516 , 1 cm 3D = 22.4 cm2 (Max=10.2)

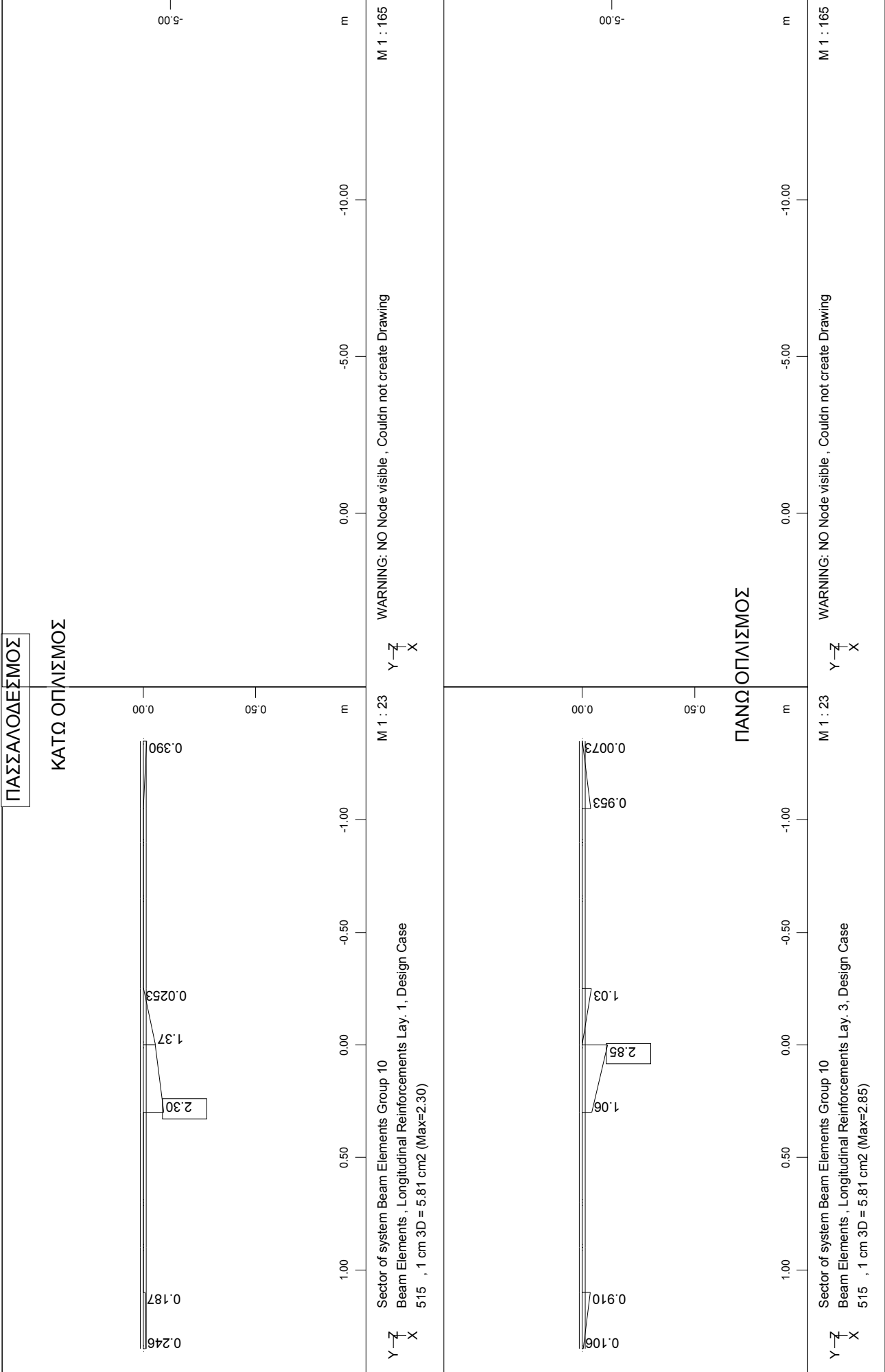
M 1 : 19

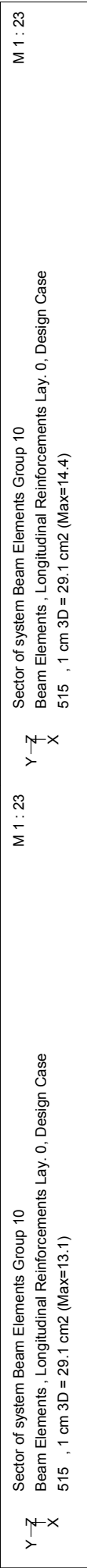
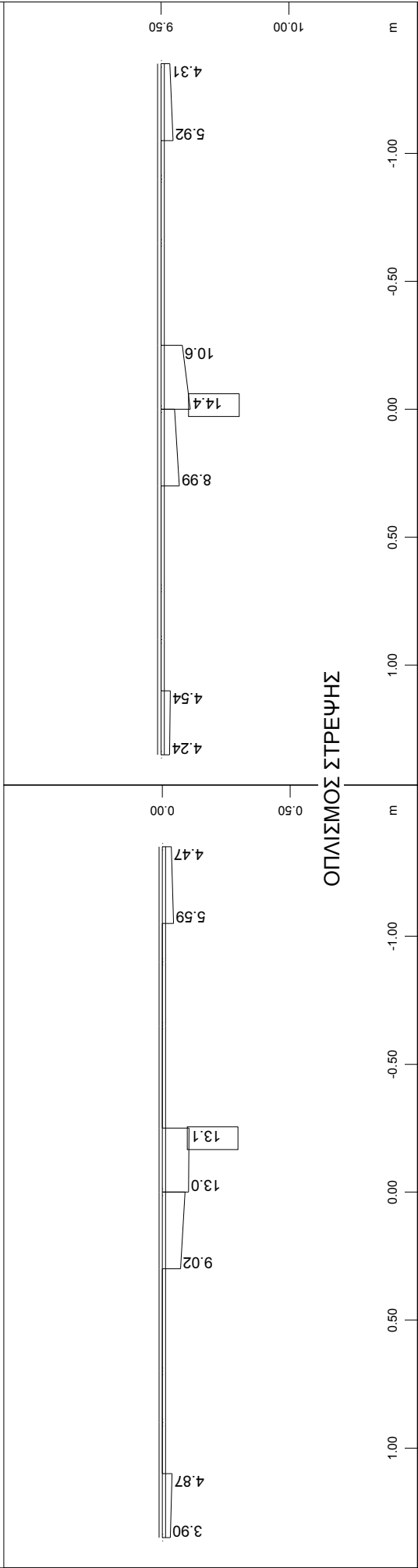
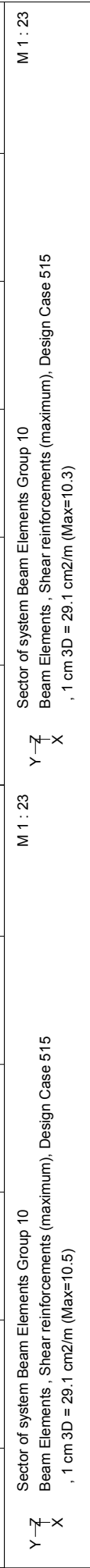
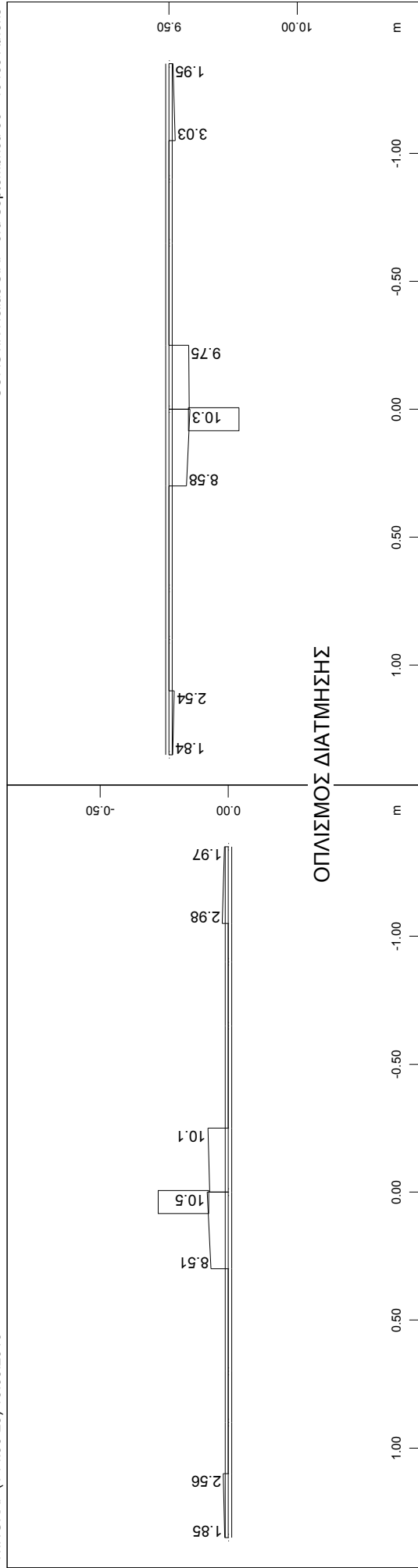
X
Z-Y
Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
516 , 1 cm 3D = 22.4 cm2 (Max=10.9)

M 1 : 18

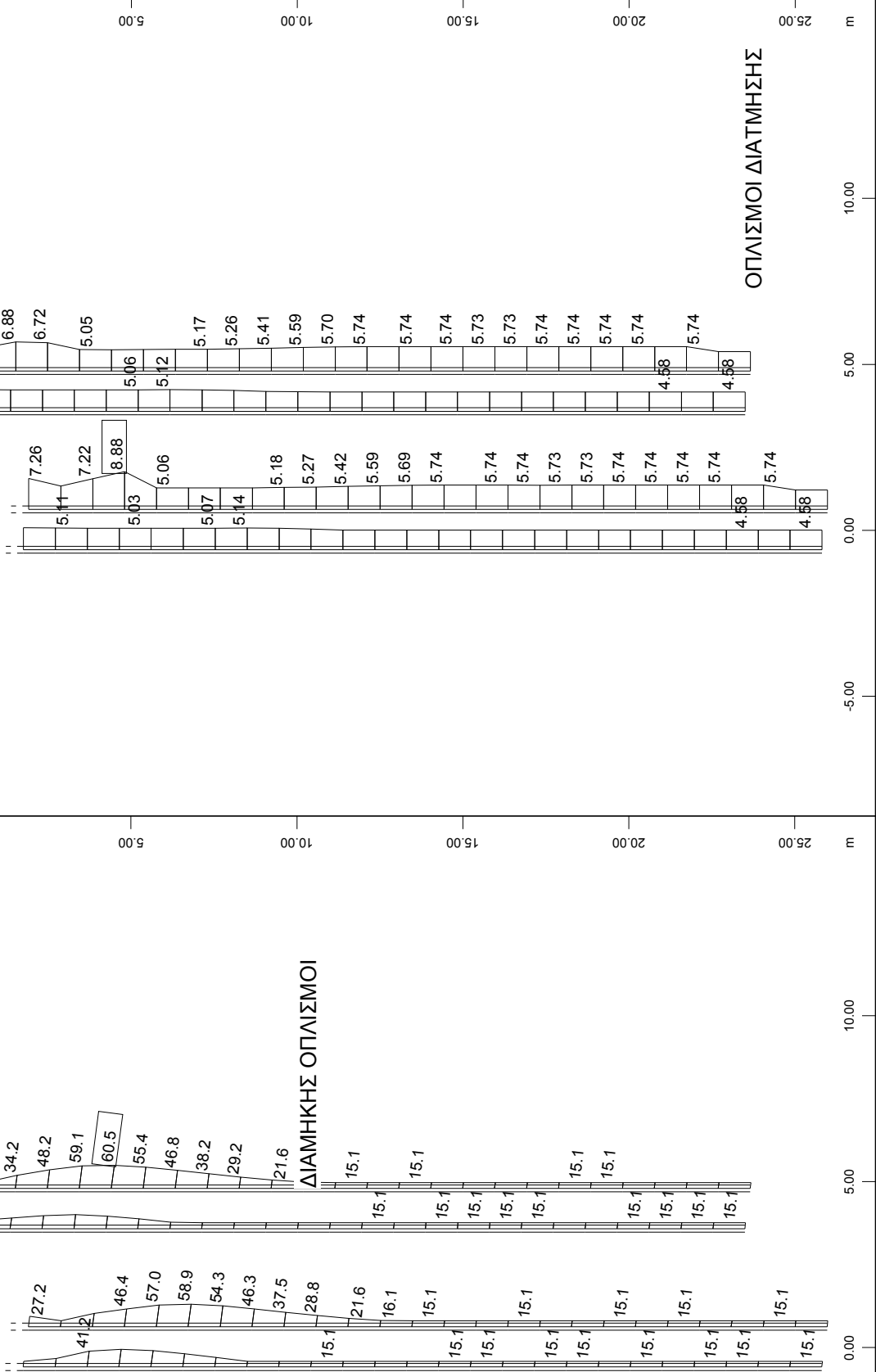






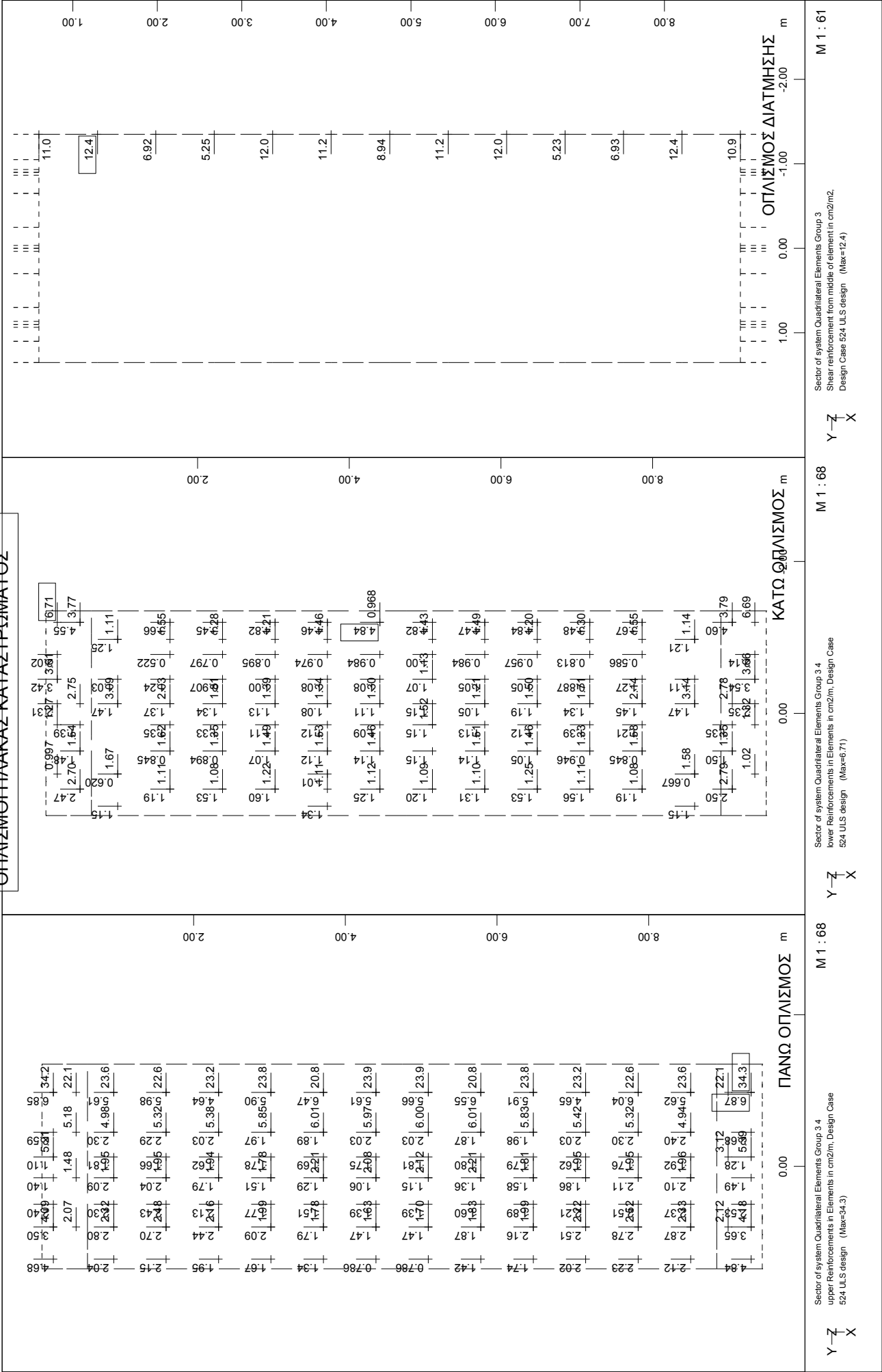


ΠΑΣΣΑΛΟΙ Φ80



	Sector of system Beam Elements Group 12	M 1 : 186
	Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 515 , 1 cm 3D = 145.3 cm2 (Max=60.5)	X * 0.502 Y * 0.906 Z * 0.962
	Sector of system Beam Elements Group 12	M 1 : 186
	Beam Elements , Shear reinforcements (maximum), Design Case 515 , 1 cm 3D = 14.5 cm2/m (Max=8.88)	X * 0.502 Y * 0.906 Z * 0.962

ΟΠΛΙΣΜΟΙ ΠΛΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70

9) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ SLS - ΡΗΓΜΑΤΩΣΗ

OPISTIKH MELETH/TEKNIKO TB/L=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

Selected Beam Elements

FROM	TO	INC	X-VALUE	NC	MEMBER	CS0	CS1	CS2	CS3	CS4	CS5
1000	1036	1		1		10	40				
2000	2012	1									
10001											
10005											
10006											
10010											
10011											
10015											
10016											
10020											

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. 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 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
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	ΡΕΖΟΔΡΟΜΙΟ 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 excl
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 excl
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 excl
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 excl
80	gross	CS 1	ΠΙΘΑΝΕΣ ΚΑΘΙΣΗΣΕΙΣ A1 Q (variable load)	1.50	0.00	0.70	0.50	0.30	1.00 Q cond
81	gross	CS 1	ΠΙΘΑΝΕΣ ΚΑΘΙΣΗΣΕΙΣ 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 excl
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 excl
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 excl
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 excl
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 excl
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 excl
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 excl
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 excl
5015	part.	CS 0	K creep step	1.00	1.00	1.00	1.00	1.00	1.00 P perm

OPIΣTIKH MEΛETH/TEKNIKO TB/L=10.70
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'
		C (creep + shrinkage)						
5025 part.	CS 0	K creep step	1.00	1.00	1.00	1.00	1.00	P perm
		C (creep + shrinkage)						
5055 part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	P perm
		C (creep + shrinkage)						
5060 part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	P perm
		C (creep + shrinkage)						
5061 part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	P perm
		C (creep + shrinkage)						
5062 part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	P perm
		C (creep + shrinkage)						
5063 part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	P perm
		C (creep + shrinkage)						
5064 part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	P perm
		C (creep + shrinkage)						
6015 part.	CS 0	15 K creep step						P perm
		C (creep + shrinkage)						
6025 part.	CS 0	25 K creep step						P perm
		C (creep + shrinkage)						
6055 part.	CS 1	55 K creep step						P perm
		C (creep + shrinkage)						
6060 part.	CS 1	60 K creep step						P perm
		C (creep + shrinkage)						
6061 part.	CS 1	61 K creep step						P perm
		C (creep + shrinkage)						
6062 part.	CS 1	62 K creep step						P perm
		C (creep + shrinkage)						
6063 part.	CS 1	63 K creep step						P perm
		C (creep + shrinkage)						
6064 part.	CS 1	64 K creep step						P perm
		C (creep + shrinkage)						

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 [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	
12	0	1.000	-550.00	-25.00	550.00	25.00	

Interaction thin walled normal- and shearstress via Prandtl flow rule

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	1217	0.034	0.118	0.195	-0.055	-0.036	0.038	4691
					1.000	fact	Mt-i		0.002	4665
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
					T-zone h= 0.222	17.1	0.00	17.82	205.29	15.25
					---- check for crack width	passed with	given	reinforcements		
			1218	0.462	-1.192	0.129	0.621	-0.052	-0.213	2607
					1.000	fact	Mt-i		0.002	2985
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
					T-zone h= 0.290	12.0	0.15	195.74	356.09	10.17
					---- check for crack width	passed with	given	reinforcements		
	0.692	1	1217	0.119	0.360	0.154	-0.096	-0.036	0.084	3415
					1.000	fact	Mt-i		0.002	3688
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
					T-zone h= 0.248	16.8	0.02	57.36	257.41	14.18
					---- check for crack width	passed with	given	reinforcements		
			1218	0.397	-0.997	0.119	0.631	-0.052	-0.142	2093

OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

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	0.692	1	1218	1.000	fact	Mt-i			0.002	2485
				-----	D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.355	12.0	0.11	165.81	463.97	13.25	
				----	Check for crack width passed with given reinforcements					
1002	0.000	1	1217	0.109	0.337	0.160-0.090	-0.036	0.084	3642	
				1.000	fact	Mt-i		0.001	3878	
				-----	D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.280	16.2	0.01	53.23	239.38	16.39	
				----	Check for crack width passed with given reinforcements					
		1218		0.337	-0.868	0.128	0.622	-0.052	-0.142	2396
				1.000	fact	Mt-i		0.002	2785	
				-----	D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.386	12.0	0.08	142.61	400.74	16.26	
				----	Check for crack width passed with given reinforcements					
	0.692	1	1217	0.173	0.520	0.151-0.099	-0.037	0.118	3348	
				1.000	fact	Mt-i		0.001	3634	
				-----	D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.292	16.0	0.04	83.05	255.01	16.09	
				----	Check for crack width passed with given reinforcements					
		1218		0.222	-0.569	0.127	0.623	-0.052	-0.082	2120
				1.000	fact	Mt-i		0.002	2513	
				-----	D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.470	12.0	0.03	93.74	490.29	14.30	
				----	Check for crack width passed with given reinforcements					
1003	0.000	1	1217	0.166	0.502	0.154-0.096	-0.037	0.118	3456	
				1.000	fact	Mt-i		0.001	3726	
				-----	D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.308	15.7	0.03	79.98	246.16	17.40	
				----	Check for crack width passed with given reinforcements					
		1218		0.188	-0.494	0.136	0.614	-0.052	-0.082	2439
				1.000	fact	Mt-i		0.002	2826	
				-----	D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.456	12.0	0.03	80.43	421.21	16.37	
				----	Check for crack width passed with given reinforcements					
	0.692	1	1217	0.220	0.648	0.145-0.105	-0.002	0.145	3295	
				1.000	fact	Mt-i		0.002	3593	
				-----	D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.332	15.3	0.05	104.44	243.22	19.78	
				----	Check for crack width passed with given reinforcements					
		1218		0.036	-0.114	0.201	0.549	-0.052	-0.033	4281
				1.000	fact	Mt-i		0.002	4371	
				-----	D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.484	12.0	0.00	17.02	305.49	15.99	
				----	Check for crack width passed with given reinforcements					
1004	0.000	1	1217	0.231	0.675	0.141-0.109	-0.001	0.145	3166	
				1.000	fact	Mt-i		0.001	3483	
				-----	D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.322	15.5	0.06	109.19	254.27	18.43	
				----	Check for crack width passed with given reinforcements					
		1218		0.036	-0.113	0.202	0.548	-0.052	-0.033	4315
				1.000	fact	Mt-i		0.001	4394	
				-----	D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.481	12.0	0.00	16.91	302.81	15.55	
				----	Check for crack width passed with given reinforcements					
	0.692	1	1217	0.221	0.665	0.151-0.099	-0.001	0.164	3605	
				1.000	fact	Mt-i		0.001	3853	
				-----	D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.320	15.5	0.06	106.32	220.46	21.44	
				----	Check for crack width passed with given reinforcements					
		1218		-0.003	0.003	1.000	1.416	-0.052	0.005	28822
1005	0.000	1	1217	0.217	0.655	0.153-0.097	-0.002	0.164	3659	
				1.000	fact	Mt-i		0.001	3897	
				-----	D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.323	15.4	0.05	104.48	216.78	21.98	
				----	Check for crack width passed with given reinforcements					
		1218		-0.003	0.003	1.000	1.424	-0.052	0.005	28807
	0.692	1	1217	0.232	0.696	0.150-0.100	-0.001	0.172	3618	
				1.000	fact	Mt-i		0.001	3861	
				-----	D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.295	16.0	0.06	111.34	219.87	20.20	
				----	Check for crack width passed with given reinforcements					
		1218		0.003	0.036	0.398	0.148	-0.064	0.029	11838
				-----	D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.205	16.0	0.00	3.96	96.24	17.56	
				----	Check for crack width passed with given reinforcements					
1006	0.000	1	1217	0.231	0.695	0.150-0.100	-0.001	0.172	3625	
				1.000	fact	Mt-i		0.000	3867	

OΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

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= 0.295 16.0 0.06 111.09 219.40 20.28				
						---- Check for crack width passed with given reinforcements				
			1218	0.003	0.036	0.398	0.148	-0.064	0.029	11852
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.205 16.0 0.00 3.95 96.10 17.62				
						---- Check for crack width passed with given reinforcements				
	0.692	1	1217	0.226	0.679	0.151-0.099		-0.002	0.170	3661
						1.000	fact	Mt-i	0.000	3896
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.294 16.0 0.06 108.47 217.04 20.37				
						---- Check for crack width passed with given reinforcements				
			1218	0.017	0.081	0.274	0.024	-0.064	0.041	7381
						1.000	fact	Mt-i	0.000	6277
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.247 16.0 0.00 10.97 143.43 18.99				
						---- Check for crack width passed with given reinforcements				
1007	0.000	1	1217	0.224	0.676	0.152-0.098		-0.002	0.170	3676
						1.000	fact	Mt-i	0.000	3908
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.295 16.0 0.06 107.95 216.04 20.54				
						---- Check for crack width passed with given reinforcements				
			1218	0.017	0.081	0.275	0.025	-0.064	0.041	7401
						1.000	fact	Mt-i	-0.001	6288
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.248 16.0 0.00 10.94 142.92 19.13				
						---- Check for crack width passed with given reinforcements				
	0.692	1	1217	0.231	0.693	0.151-0.099		-0.001	0.172	3632
						1.000	fact	Mt-i	0.000	3873
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.297 15.9 0.06 110.84 218.94 20.40				
						---- Check for crack width passed with given reinforcements				
			1218	0.003	0.032	0.381	0.131	-0.053	0.025	11224
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.212 15.9 0.00 3.69 101.52 17.86				
						---- Check for crack width passed with given reinforcements				
1008	0.000	1	1217	0.231	0.694	0.151-0.099		-0.001	0.172	3628
						1.000	fact	Mt-i	-0.001	3869
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.297 15.9 0.06 110.98 219.19 20.36				
						---- Check for crack width passed with given reinforcements				
			1218	0.003	0.033	0.380	0.130	-0.053	0.025	11180
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.212 15.9 0.00 3.72 101.93 17.84				
						---- Check for crack width passed with given reinforcements				
	0.692	1	1217	0.213	0.645	0.154-0.096		-0.002	0.164	3712
						1.000	fact	Mt-i	-0.001	3940
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.322 15.5 0.05 102.78 213.40 22.32				
						---- Check for crack width passed with given reinforcements				
1009	0.000	1	1217	-0.003	-0.002	1.000	-1.76	-0.053	-0.003	32759
				0.216	0.654	0.153-0.097		-0.002	0.164	3668
						1.000	fact	Mt-i	-0.001	3904
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.319 15.5 0.05 104.25 216.30 21.77				
						---- Check for crack width passed with given reinforcements				
			1218	-0.003	-0.002	1.000	-1.80	-0.053	-0.003	32804
	0.692	1	1217	0.212	0.639	0.152-0.098		-0.036	0.147	3377
						1.000	fact	Mt-i	-0.001	3661
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.325 15.4 0.05 101.98 248.38 18.22				
						---- Check for crack width passed with given reinforcements				
			1218	0.062	-0.182	0.174	0.576	-0.053	-0.042	3427
						1.000	fact	Mt-i	-0.002	3702
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.483 12.0 0.00 28.29 350.79 16.41				
						---- Check for crack width passed with given reinforcements				
1010	0.000	1	1217	0.222	0.664	0.149-0.101		-0.036	0.147	3260
						1.000	fact	Mt-i	-0.002	3559
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.314 15.6 0.06 106.36 258.29 16.93				
						---- Check for crack width passed with given reinforcements				
			1218	0.075	-0.212	0.161	0.589	-0.053	-0.042	2947
						1.000	fact	Mt-i	-0.002	3289
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.484 12.0 0.00 33.47 414.96 13.84				
						---- Check for crack width passed with given reinforcements				
	0.692	1	1217	0.170	0.515	0.154-0.096		-0.035	0.122	3481

OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

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]
1010	0.692	1	1217	1.000	fact	Mt-i			-0.002	3747
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.307	15.7	0.03	81.96	243.13	17.69	
				---- Check for crack width passed with given reinforcements						
			1218	0.207	-0.543	0.136	0.614	-0.053	-0.092	2487
				1.000	fact	Mt-i			-0.002	2872
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.443	12.0	0.03	88.44	406.32	16.86	
				---- Check for crack width passed with given reinforcements						
1011	0.000	1	1217	0.177	0.532	0.151-0.099	-0.035	-0.122	3372	
				1.000	fact	Mt-i			-0.002	3655
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.291	16.0	0.04	85.08	251.95	16.37	
				---- Check for crack width passed with given reinforcements						
			1218	0.228	-0.591	0.130	0.620	-0.053	-0.092	2286
				1.000	fact	Mt-i			-0.003	2678
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.437	12.0	0.04	96.97	445.37	15.03	
				---- Check for crack width passed with given reinforcements						
	0.692	1	1217	0.112	0.346	0.159-0.091	-0.035	0.087	3663	
				1.000	fact	Mt-i			-0.002	3896
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.278	16.2	0.02	54.71	236.41	16.71	
				---- Check for crack width passed with given reinforcements						
			1218	0.332	-0.864	0.133	0.617	-0.053	-0.153	2587
				1.000	fact	Mt-i			-0.003	2967
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.364	12.0	0.08	141.25	367.43	17.32	
				---- Check for crack width passed with given reinforcements						
1012	0.000	1	1217	0.122	0.370	0.153-0.097	-0.035	0.087	3436	
				1.000	fact	Mt-i			-0.003	3707
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.247	16.8	0.02	58.93	254.02	14.50	
				---- Check for crack width passed with given reinforcements						
			1218	0.385	-0.980	0.124	0.626	-0.053	-0.153	2290
				1.000	fact	Mt-i			-0.003	2681
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.333	12.0	0.10	161.94	419.56	14.41	
				---- Check for crack width passed with given reinforcements						
	0.692	1	1217	0.037	0.126	0.190-0.060	-0.034	0.040	4585	
				1.000	fact	Mt-i			-0.003	4592
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.223	17.1	0.00	19.13	206.73	15.54	
				---- Check for crack width passed with given reinforcements						
			1218	0.447	-1.167	0.133	0.617	-0.053	-0.225	2805
				1.000	fact	Mt-i			-0.003	3167
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.276	12.0	0.14	190.59	328.61	10.99	
				---- Check for crack width passed with given reinforcements						
1013	0.000	1	1217	0.203	0.519	0.092-0.158	-0.030	0.040	1164	
				1.000	fact	Mt-i			-0.002	1477
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.254	17.1	0.04	89.07	886.79	3.51	
				---- Check for crack width passed with given reinforcements						
			1218	0.633	-1.555	0.109	0.641	-0.047	-0.204	1955
				1.000	fact	Mt-i			-0.002	2332
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.168	12.0	0.27	261.49	484.28	7.19	
				---- Check for crack width passed with given reinforcements						
	0.692	1	1217	0.244	0.655	0.110-0.140	-0.030	0.080	1817	
				1.000	fact	Mt-i			-0.002	2195
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.296	16.2	0.06	109.96	502.91	7.69	
				---- Check for crack width passed with given reinforcements						
			1218	0.476	-1.168	0.109	0.641	-0.047	-0.141	1795
				1.000	fact	Mt-i			-0.002	2172
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.298	12.0	0.15	196.54	542.59	6.32	
				---- Check for crack width passed with given reinforcements						
1014	0.000	1	1217	0.203	0.559	0.121-0.129	-0.030	0.080	2128	
				1.000	fact	Mt-i			-0.002	2515
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
				T-zone h= 0.347	15.3	0.04	92.64	423.75	10.48	
				---- Check for crack width passed with given reinforcements						
			1218	0.392	-0.989	0.120	0.630	-0.047	-0.141	2110
				1.000	fact	Mt-i			-0.002	2496

OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

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= 0.348 12.0 0.11 164.17 455.72 13.34						
				---- Check for crack width passed with given reinforcements						
0.692	1	1217		0.264	0.729	0.122-0.128		-0.030	0.112	2295
				1.000	fact	Mt-i			-0.002	2675
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
				T-zone h= 0.243 17.1 0.08 120.72 382.38 9.56						
				---- Check for crack width passed with given reinforcements						
		1218		0.388	-0.929	0.099 0.651		-0.047	-0.085	1358
				1.000	fact	Mt-i			-0.002	1700
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
				T-zone h= 0.392 12.0 0.10 158.12 773.31 7.63						
				---- Check for crack width passed with given reinforcements						
1015	0.000	1	1217	0.215	0.616	0.135-0.115		-0.030	0.113	2708
				1.000	fact	Mt-i			-0.002	3070
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
				T-zone h= 0.307 15.9 0.05 100.46 318.93 13.18						
				---- Check for crack width passed with given reinforcements						
		1218		0.263	-0.660	0.118 0.632		-0.047	-0.085	1896
				1.000	fact	Mt-i			-0.002	2282
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
				T-zone h= 0.447 12.0 0.05 109.84 540.93 12.43						
				---- Check for crack width passed with given reinforcements						
0.692	1	1217		0.254	0.723	0.132-0.118		-0.005	0.140	2863
				1.000	fact	Mt-i			-0.002	3209
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
				T-zone h= 0.259 16.7 0.08 118.29 286.24 13.98						
				---- Check for crack width passed with given reinforcements						
		1218		0.103	-0.269	0.133 0.617		-0.047	-0.037	2043
				1.000	fact	Mt-i			-0.002	2431
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
				T-zone h= 0.484 12.0 0.01 43.94 623.00 8.72						
				---- Check for crack width passed with given reinforcements						
1016	0.000	1	1217	0.253	0.720	0.132-0.118		-0.005	0.140	2877
				1.000	fact	Mt-i			-0.002	3221
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
				T-zone h= 0.261 16.7 0.08 117.79 284.68 14.11						
				---- Check for crack width passed with given reinforcements						
		1218		0.103	-0.269	0.133 0.617		-0.047	-0.037	2035
				1.000	fact	Mt-i			-0.002	2424
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
				T-zone h= 0.484 12.0 0.01 43.92 626.49 8.71						
				---- Check for crack width passed with given reinforcements						
0.692	1	1217		0.262	0.757	0.137-0.113		-0.005	0.159	3107
				1.000	fact	Mt-i			-0.002	3425
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
				T-zone h= 0.250 16.9 0.08 123.00 261.74 15.17						
				---- Check for crack width passed with given reinforcements						
		1218		-0.003	0.001	1.000 4.305		-0.047	0.001	26663
1017	0.000	1	1217	0.261	0.755	0.138-0.112		-0.005	0.159	3118
				1.000	fact	Mt-i			-0.001	3435
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
				T-zone h= 0.252 16.8 0.08 122.56 260.65 15.28						
				---- Check for crack width passed with given reinforcements						
		1218		-0.003	0.001	1.000 4.037		-0.047	0.001	26663
0.692	1	1217		0.234	0.697	0.148-0.102		-0.005	0.168	3544
				1.000	fact	Mt-i			-0.001	3798
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
				T-zone h= 0.274 16.4 0.07 111.80 226.27 18.58						
				---- Check for crack width passed with given reinforcements						
		1218		0.003	0.031	0.401 0.151		-0.057	0.025	11949
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
				T-zone h= 0.191 16.4 0.00 3.44 95.92 16.53						
				---- Check for crack width passed with given reinforcements						
1018	0.000	1	1217	0.234	0.697	0.148-0.102		-0.005	0.168	3545
				1.000	fact	Mt-i			0.000	3799
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
				T-zone h= 0.274 16.4 0.07 111.79 226.18 18.60						
				---- Check for crack width passed with given reinforcements						
		1218		0.003	0.031	0.401 0.151		-0.057	0.026	11913
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
				T-zone h= 0.191 16.4 0.00 3.46 96.19 16.55						
				---- Check for crack width passed with given reinforcements						
0.692	1	1217		0.232	0.692	0.148-0.102		-0.005	0.166	3537
				1.000	fact	Mt-i			0.000	3792
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
				T-zone h= 0.269 16.5 0.07 110.93 226.79 18.34						
				---- Check for crack width passed with given reinforcements						

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

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]	
1018	0.692	1	1218	0.018	0.080	0.262	0.012	-0.057	0.038	6923	
					1.000	fact	Mt-i		-0.001	6033	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
					T-zone h=	0.230	16.5	0.00	11.03	152.83	17.42
						---- Check for crack width passed with given reinforcements					
1019	0.000	1	1217	0.233	0.694	0.148	-0.102	-0.005	0.166	3527	
					1.000	fact	Mt-i		0.000	3784	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
					T-zone h=	0.267	16.5	0.07	111.30	227.52	18.24
						---- Check for crack width passed with given reinforcements					
			1218	0.018	0.080	0.262	0.012	-0.057	0.038	6908	
					1.000	fact	Mt-i		0.000	6024	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
					T-zone h=	0.229	16.5	0.00	11.06	153.24	17.33
						---- Check for crack width passed with given reinforcements					
	0.692	1	1217	0.234	0.697	0.148	-0.102	-0.005	0.168	3544	
					1.000	fact	Mt-i		0.000	3798	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
					T-zone h=	0.273	16.4	0.07	111.81	226.22	18.55
						---- Check for crack width passed with given reinforcements					
			1218	0.001	0.024	0.443	0.193	-0.051	0.022	13481	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
					T-zone h=	0.178	16.4	0.00	2.39	84.60	16.24
						---- Check for crack width passed with given reinforcements					
1020	0.000	1	1217	0.234	0.698	0.148	-0.102	-0.005	0.168	3539	
					1.000	fact	Mt-i		0.001	3794	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
					T-zone h=	0.272	16.4	0.07	111.97	226.61	18.49
						---- Check for crack width passed with given reinforcements					
			1218	0.001	0.023	0.444	0.194	-0.051	0.022	13525	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
					T-zone h=	0.178	16.4	0.00	2.37	84.31	16.19
						---- Check for crack width passed with given reinforcements					
	0.692	1	1217	0.255	0.740	0.139	-0.111	-0.005	0.159	3179	
					1.000	fact	Mt-i		0.001	3488	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
					T-zone h=	0.250	16.9	0.08	119.94	255.25	15.57
						---- Check for crack width passed with given reinforcements					
			1218	-0.003	-0.003	1.000	-0.704	-0.051	-0.007	31494	
1021	0.000	1	1217	0.255	0.741	0.139	-0.111	-0.005	0.159	3172	
					1.000	fact	Mt-i		0.002	3481	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
					T-zone h=	0.249	16.9	0.08	120.17	255.89	15.50
						---- Check for crack width passed with given reinforcements					
			1218	-0.003	-0.003	1.000	-0.690	-0.051	-0.007	31477	
	0.692	1	1217	0.252	0.725	0.136	-0.114	-0.026	0.142	2906	
					1.000	fact	Mt-i		0.001	3246	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
					T-zone h=	0.250	16.9	0.08	117.92	290.60	13.16
						---- Check for crack width passed with given reinforcements					
			1218	0.144	-0.367	0.124	0.626	-0.051	-0.046	1840	
					1.000	fact	Mt-i		0.001	2223	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
					T-zone h=	0.484	12.0	0.01	60.60	663.59	8.66
						---- Check for crack width passed with given reinforcements					
1022	0.000	1	1217	0.243	0.704	0.139	-0.111	-0.026	0.142	2985	
					1.000	fact	Mt-i		0.002	3317	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
					T-zone h=	0.261	16.7	0.07	114.21	282.09	13.86
						---- Check for crack width passed with given reinforcements					
			1218	0.132	-0.340	0.129	0.621	-0.051	-0.046	1992	
					1.000	fact	Mt-i		0.001	2380	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
					T-zone h=	0.484	12.0	0.01	55.76	608.38	9.59
						---- Check for crack width passed with given reinforcements					
	0.692	1	1217	0.217	0.623	0.135	-0.115	-0.026	0.118	2793	
					1.000	fact	Mt-i		0.002	3148	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
					T-zone h=	0.300	16.0	0.05	101.52	305.44	13.74
						---- Check for crack width passed with given reinforcements					
			1218	0.263	-0.668	0.123	0.627	-0.051	-0.094	2070	
					1.000	fact	Mt-i		0.001	2461	
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
					T-zone h=	0.420	12.0	0.05	110.54	491.21	13.13
						---- Check for crack width passed with given reinforcements					
1023	0.000	1	1217	0.266	0.737	0.122	-0.128	-0.026	0.118	2369	
					1.000	fact	Mt-i		0.002	2747	

OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

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]
1027	0.000	1	1217	0.160	0.486	0.154	-0.096	-0.016	0.121	3639
					1.000	fact	Mt-i		-0.005	3881
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.309	15.7	0.03	77.39	224.05	20.07	
				---- Check for crack width passed with given reinforcements						
		1218	0.177	-0.458	0.131	0.619	-0.025	-0.076	2439	
				1.000	fact	Mt-i		-0.005	2831	
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
	T-zone h= 0.449		12.0	0.02	75.05	388.91	19.25			
			---- Check for crack width passed with given reinforcements							
	0.692	1	1217	0.199	0.599	0.151	-0.099	-0.002	0.151	3689
					1.000	fact	Mt-i		-0.005	3917
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.277	16.3	0.05	95.79	215.49	19.77	
				---- Check for crack width passed with given reinforcements						
		1218	0.059	-0.156	0.141	0.609	-0.025	-0.025	2396	
			1.000	fact	Mt-i		-0.005	2787		
				D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]		
T-zone h= 0.484	12.0		0.00	25.20	478.50	13.93				
		---- Check for crack width passed with given reinforcements								
1028	0.000	1	1217	0.203	0.610	0.150	-0.100	-0.001	0.151	3614
					1.000	fact	Mt-i		-0.003	3860
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.307	15.7	0.05	97.61	220.14	20.84	
				---- Check for crack width passed with given reinforcements						
		1218	0.044	-0.123	0.158	0.592	-0.025	-0.026	3044	
				1.000	fact	Mt-i		-0.004	3382	
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
	T-zone h= 0.484		12.0	0.00	19.46	367.39	18.02			
			---- Check for crack width passed with given reinforcements							
	0.692	1	1217	0.202	0.623	0.159	-0.091	-0.002	0.171	3998
					1.000	fact	Mt-i		-0.003	4166
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.308	15.7	0.05	98.60	196.75	23.55	
				---- Check for crack width passed with given reinforcements						
		1218	0.003	0.021	0.330	0.080	-0.026	0.014	9507	
			1.000	fact	Mt-i		-0.004	7258		
				D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]		
T-zone h= 0.239	15.7		0.00	2.62	114.41	21.08				
		---- Check for crack width passed with given reinforcements								
1029	0.000	1	1217	0.204	0.630	0.159	-0.091	-0.002	0.171	3959
					1.000	fact	Mt-i		-0.002	4136
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.317	15.5	0.05	99.63	198.82	23.87	
				---- Check for crack width passed with given reinforcements						
		1218	0.003	0.021	0.331	0.081	-0.026	0.014	9513	
				1.000	fact	Mt-i		-0.003	7261	
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
	T-zone h= 0.246		15.5	0.00	2.60	114.74	21.20			
			---- Check for crack width passed with given reinforcements							
	0.692	1	1217	0.234	0.706	0.152	-0.098	-0.001	0.180	3728
					1.000	fact	Mt-i		-0.002	3948
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.271	16.4	0.07	112.74	213.01	19.85	
				---- Check for crack width passed with given reinforcements						
		1218	0.030	0.108	0.206	-0.044	-0.032	0.038	5180	
			1.000	fact	Mt-i		-0.003	4998		
				D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]		
T-zone h= 0.252	16.4		0.00	16.07	178.11	19.34				
		---- Check for crack width passed with given reinforcements								
1030	0.000	1	1217	0.231	0.699	0.153	-0.097	-0.002	0.180	3761
					1.000	fact	Mt-i		-0.001	3976
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.286	16.1	0.06	111.44	210.71	20.67	
				---- Check for crack width passed with given reinforcements						
		1218	0.030	0.107	0.207	-0.043	-0.032	0.038	5209	
				1.000	fact	Mt-i		-0.001	5019	
					D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
	T-zone h= 0.266		16.1	0.00	15.93	176.90	20.08			
			---- Check for crack width passed with given reinforcements							
	0.692	1	1217	0.257	0.757	0.144	-0.106	-0.001	0.178	3452
					1.000	fact	Mt-i		-0.001	3719
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h= 0.240	17.0	0.08	122.03	232.14	17.07	
				---- Check for crack width passed with given reinforcements						
		1218	0.051	0.168	0.183	-0.067	-0.033	0.050	4415	
			1.000	fact	Mt-i		-0.001	4463		

OPISTIKH MELETH/TEKNIKO TB/L=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

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]
1031	0.000	1	1217	T-zone h= 0.229 17.0 0.00 25.82 203.23 16.85						
				---- Check for crack width passed with given reinforcements						
				0.257	0.757	0.144	-0.106	-0.001	0.178	3452
				1.000	fact	Mt-i		0.001	3719	
				T-zone h= 0.240 17.0 0.08 122.02 232.13 17.07						
				---- Check for crack width passed with given reinforcements						
	0.692	1	1218	0.051	0.168	0.183	-0.067	-0.033	0.050	4415
				1.000	fact	Mt-i		0.000	4464	
				T-zone h= 0.229 17.0 0.00 25.81 203.20 16.85						
				---- Check for crack width passed with given reinforcements						
				0.209	0.648	0.160	-0.090	-0.002	0.180	4044
				1.000	fact	Mt-i		0.001	4202	
1032	0.000	1	1217	T-zone h= 0.309 15.6 0.05 102.31 194.24 23.98						
				---- Check for crack width passed with given reinforcements						
				0.023	0.087	0.221	-0.029	-0.032	0.034	5755
				1.000	fact	Mt-i		0.000	5373	
				T-zone h= 0.284 15.6 0.00 12.65 160.73 23.04						
				---- Check for crack width passed with given reinforcements						
	0.692	1	1217	0.233	0.703	0.152	-0.098	-0.001	0.180	3745
				1.000	fact	Mt-i		0.002	3962	
				T-zone h= 0.272 16.4 0.07 112.13 211.90 20.00						
				---- Check for crack width passed with given reinforcements						
				0.025	0.093	0.213	-0.037	-0.032	0.034	5395
				1.000	fact	Mt-i		0.002	5139	
1033	0.000	1	1217	T-zone h= 0.251 16.4 0.00 13.72 173.50 19.43						
				---- Check for crack width passed with given reinforcements						
				0.205	0.631	0.158	-0.092	-0.002	0.171	3948
				1.000	fact	Mt-i		0.002	4128	
				T-zone h= 0.315 15.5 0.05 99.94 199.44 23.67						
				---- Check for crack width passed with given reinforcements						
	0.692	1	1218	-0.002	0.003	1.000	0.879	-0.032	0.006	29397
				0.203	0.625	0.159	-0.091	-0.002	0.171	3989
				1.000	fact	Mt-i		0.003	4159	
				T-zone h= 0.306 15.7 0.05 98.89 197.30 23.35						
				---- Check for crack width passed with given reinforcements						
				1218	-0.002	0.003	1.000	0.871	-0.032	0.006
1034	0.000	1	1217	0.200	0.606	0.154	-0.096	-0.010	0.154	3712
				1.000	fact	Mt-i		0.003	3939	
				T-zone h= 0.307 15.7 0.05 96.53 215.98 21.01						
				---- Check for crack width passed with given reinforcements						
				0.058	-0.162	0.157	0.593	-0.032	-0.034	3038
				1.000	fact	Mt-i		0.003	3378	
	0.692	1	1217	T-zone h= 0.482 12.0 0.00 25.68 362.53 18.55						
				---- Check for crack width passed with given reinforcements						
				0.195	0.593	0.155	-0.095	-0.009	0.154	3801
				1.000	fact	Mt-i		0.004	4008	
				T-zone h= 0.281 16.2 0.05 94.28 210.65 20.33						
				---- Check for crack width passed with given reinforcements						
1035	0.000	1	1218	0.072	-0.193	0.144	0.606	-0.032	-0.034	2550
				1.000	fact	Mt-i		0.004	2935	
				T-zone h= 0.484 12.0 0.00 31.04 439.90 15.38						
				---- Check for crack width passed with given reinforcements						
				0.172	0.517	0.151	-0.099	-0.009	0.127	3599
				1.000	fact	Mt-i		0.004	3849	
	0.692	1	1217	T-zone h= 0.307 15.7 0.03 82.62 224.27 20.23						
				---- Check for crack width passed with given reinforcements						
				0.187	-0.488	0.134	0.616	-0.032	-0.085	2535
				1.000	fact	Mt-i		0.004	2923	
				T-zone h= 0.440 12.0 0.02 79.65 377.11 19.33						
				---- Check for crack width passed with given reinforcements						
1035	0.000	1	1217	0.163	0.493	0.154	-0.096	-0.010	0.128	3774
				1.000	fact	Mt-i		0.005	3988	

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

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= 0.276 16.3 0.03 78.52 213.11 19.85				
						---- Check for crack width passed with given reinforcements				
			1218	0.211	-0.541	0.126	0.624	-0.032	-0.085	2282
						1.000	fact	Mt-i	0.005	2680
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.444 12.0 0.03 89.06 422.95 17.24				
						---- Check for crack width passed with given reinforcements				
	0.692	1	1217	0.112	0.339	0.154	-0.096	-0.009	0.088	3794
						1.000	fact	Mt-i	0.005	4007
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.285 16.1 0.02 53.89 213.33 20.21				
						---- Check for crack width passed with given reinforcements				
			1218	0.303	-0.792	0.134	0.616	-0.033	-0.148	2719
						1.000	fact	Mt-i	0.005	3095
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.382 12.0 0.07 129.24 336.45 20.26				
						---- Check for crack width passed with given reinforcements				
1036	0.000	1	1217	0.110	0.336	0.155	-0.095	-0.009	0.089	3828
						1.000	fact	Mt-i	0.006	4034
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.279 16.2 0.02 53.40 211.29 20.15				
						---- Check for crack width passed with given reinforcements				
			1218	0.307	-0.801	0.133	0.617	-0.033	-0.148	2689
						1.000	fact	Mt-i	0.005	3068
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.379 12.0 0.07 130.90 340.57 19.93				
						---- Check for crack width passed with given reinforcements				
	0.692	1	1217	0.042	0.129	0.162	-0.088	-0.009	0.036	4026
						1.000	fact	Mt-i	0.006	4190
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.277 16.2 0.00 20.34 206.47 20.08				
						---- Check for crack width passed with given reinforcements				
			1218	0.385	-1.029	0.142	0.608	-0.033	-0.225	3161
						1.000	fact	Mt-i	0.005	3489
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.327 12.0 0.11 166.28 281.33 23.11				
						---- Check for crack width passed with given reinforcements				
2001	0.000	2	1217	-0.001	-0.002	1.000	-0.406	-0.036	-0.005	31923
			1218	0.592	-1.555	0.119	0.631	-0.052	-0.268	2301
						1.000	fact	Mt-i	0.001	1936
			1218	0.401	-1.118	0.141	0.609	-0.052	-0.268	3201
						1.000	fact	Mt-i	0.001	2596
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.125 28.0 0.30 180.84 267.75 14.77				
						---- Check for crack width passed with additional reinforcements				
	0.300	2	1217	0.004	0.024	0.341	0.091	-0.036	0.017	9448
						1.000	fact	Mt-i	0.001	6120
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.125 28.0 0.00 2.90 102.15 12.43				
						---- Check for crack width passed with given reinforcements				
			1218	0.605	-1.566	0.113	0.637	-0.052	-0.242	2057
						1.000	fact	Mt-i	0.001	1749
			1218	0.405	-1.109	0.135	0.615	-0.052	-0.242	2903
						1.000	fact	Mt-i	0.001	2383
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.125 28.0 0.30 180.79 298.64 13.09				
						---- Check for crack width passed with additional reinforcements				
2002	0.000	2	1217	0.004	0.024	0.343	0.093	-0.036	0.017	9579
						1.000	fact	Mt-i	0.002	6178
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.125 28.0 0.00 2.88 99.99 13.11				
						---- Check for crack width passed with given reinforcements				
			1218	0.539	-1.420	0.120	0.630	-0.052	-0.242	2272
						1.000	fact	Mt-i	0.002	1914
			1218	0.404	-1.109	0.136	0.614	-0.052	-0.242	2909
						1.000	fact	Mt-i	0.002	2387
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.145 28.0 0.30 180.62 297.73 12.84				
						---- Check for crack width passed with additional reinforcements				
	0.300	2	1217	0.043	0.133	0.181	-0.069	-0.036	0.039	3908
						1.000	fact	Mt-i	0.002	3081
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm ²]
						T-zone h= 0.136 28.0 0.00 20.51 237.98 12.43				
						---- Check for crack width passed with given reinforcements				
			1218	0.551	-1.424	0.113	0.637	-0.052	-0.212	1985
						1.000	fact	Mt-i	0.002	1693
			1218	0.408	-1.099	0.129	0.621	-0.052	-0.212	2571

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OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

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]															
2006	0.000	2	1218	0.405	-1.109	0.135	0.615	-0.047	-0.227	2734															
				1.000	fact	Mt-i		-0.001	2259																
				----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]																					
				T-zone h= 0.125 28.0 0.30 180.85 316.81 12.46																					
				---- Check for crack width passed with additional reinforcements																					
	0.300	2	1217	0.271	0.645	0.081	-0.169	-0.030	0.041	857															
				1.000	fact	Mt-i		-0.001	767																
				----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]																					
				T-zone h= 0.125 28.0 0.11 112.16 1183.18 2.61																					
				---- Check for crack width passed with given reinforcements																					
1218	0.661	-1.669	0.104	0.646	-0.047	-0.202	-0.001	1614																	
									1.000	fact	Mt-i		-0.001	1399											
									1218	0.409	-1.100	0.128	0.622	-0.047	-0.202	-0.001	2449								
																		1.000	fact	Mt-i		-0.001	2048		
																		----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
																		T-zone h= 0.125 28.0 0.30 180.79 358.18 10.92							
---- Check for crack width passed with additional reinforcements																									
2007	0.000	2	1217	0.256	0.615	0.084	-0.166	-0.026	0.046	987															
				1.000	fact	Mt-i		0.001	879																
				----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]																					
				T-zone h= 0.125 28.0 0.10 106.60 993.29 3.38																					
				---- Check for crack width passed with given reinforcements																					
	1218	0.627	-1.602	0.109	0.641	-0.051	-0.212	0.001	1765																
										1.000	fact	Mt-i		0.001	1519										
										1218	0.407	-1.104	0.131	0.619	-0.051	-0.212	0.001	2561							
																			1.000	fact	Mt-i		0.001	2131	
																			----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
																			T-zone h= 0.125 28.0 0.30 180.88 341.86 11.44						
---- Check for crack width passed with additional reinforcements																									
0.300	2	1217	0.115	0.288	0.101	-0.149	-0.026	0.027	1262																
			1.000	fact	Mt-i		0.001	1110																	
			----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]																						
			T-zone h= 0.127 28.0 0.02 48.94 818.43 3.35																						
			---- Check for crack width passed with given reinforcements																						
1218	0.589	-1.539	0.117	0.633	-0.051	-0.238	0.001	2059																	
									1.000	fact	Mt-i		0.001	1750											
									1218	0.403	-1.114	0.138	0.612	-0.051	-0.238	0.001	2845								
																		1.000	fact	Mt-i		0.001	2340		
																		----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
																		T-zone h= 0.125 28.0 0.30 180.93 303.80 12.98							
---- Check for crack width passed with additional reinforcements																									
2008	0.000	2	1217	0.116	0.289	0.101	-0.149	-0.026	0.027	1256															
				1.000	fact	Mt-i		0.000	1105																
				----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]																					
				T-zone h= 0.125 28.0 0.02 49.13 823.28 3.34																					
				---- Check for crack width passed with given reinforcements																					
	1218	0.592	-1.545	0.117	0.633	-0.051	-0.237	0.000	2045																
										1.000	fact	Mt-i		0.000	1740										
										1218	0.404	-1.114	0.138	0.612	-0.051	-0.237	0.000	2838							
																			1.000	fact	Mt-i		0.000	2335	
																			----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
																			T-zone h= 0.125 28.0 0.30 180.94 304.64 12.96						
---- Check for crack width passed with additional reinforcements																									
0.300	2	1217	0.000	0.009	0.463	0.213	-0.026	0.009	14300																
			----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]																						
			T-zone h= 0.125 28.0 0.00 0.84 65.07 3.89																						
			---- Check for crack width passed with given reinforcements																						
			1218	0.568	-1.508	0.123	0.627	-0.051	-0.259	0.000	2294														
1.000	fact	Mt-i											0.000	1931											
1218	0.400	-1.121										0.143	0.607	-0.051	-0.259	0.000	3085								
																		1.000	fact	Mt-i		0.000	2513		
																		----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
																		T-zone h= 0.125 28.0 0.30 180.94 277.46 14.28							
			---- Check for crack width passed with additional reinforcements																						
2009	0.000	2	1217	0.031	-0.089	0.156	0.594	-0.015	-0.021	3209															
				1.000	fact	Mt-i		-0.002	2601																
				----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]																					
				T-zone h= 0.136 28.0 0.00 14.18 288.86 11.09																					
				---- Check for crack width passed with given reinforcements																					
	1218	0.588	-1.550	0.120	0.630	-0.025	-0.280	-0.002	2404																
										1.000	fact	Mt-i		-0.002	2014										
										1218	0.400	-1.118	0.142	0.608	-0.025	-0.280	-0.002	3334							
																			1.000	fact	Mt-i		-0.002	2689	
																			----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
																			T-zone h= 0.134 28.0 0.30 180.60 252.40 15.91						
---- Check for crack width passed with additional reinforcements																									
0.300	2	1217	-0.001	0.002	0.773	0.523	-0.015	0.004	27575																

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

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[cm2]	
						T-zone h= 0.125	28.0	0.00	0.07	20.06	11.71
						---- Check for crack width					passed with given reinforcements
			1218	0.584	-1.518	0.115	0.635	-0.025	-0.249		2189
						1.000	fact	Mt-i	-0.002		1851
			1218	0.404	-1.108	0.135	0.615	-0.025	-0.249		2999
						1.000	fact	Mt-i	-0.002		2452
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.138	28.0	0.30	180.57	283.53	14.04
						---- Check for crack width					passed with additional reinforcements
2010	0.000	2	1217	0.000	0.002	0.743	0.493	-0.015	0.004		26912
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.125	28.0	0.00	0.08	21.41	14.42
						---- Check for crack width					passed with given reinforcements
			1218	0.424	-1.159	0.134	0.616	-0.025	-0.250		2873
						1.000	fact	Mt-i	-0.005		2361
			1218	0.408	-1.122	0.136	0.614	-0.025	-0.250		2967
						1.000	fact	Mt-i	-0.005		2429
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.211	28.0	0.30	182.56	286.14	13.68
						---- Check for crack width					passed with additional reinforcements
	0.300	2	1217	0.037	0.109	0.163	-0.087	-0.015	0.030		3657
						1.000	fact	Mt-i	-0.005		2912
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.174	28.0	0.00	17.21	241.49	14.24
						---- Check for crack width					passed with given reinforcements
			1218	0.459	-1.214	0.122	0.628	-0.025	-0.216		2376
						1.000	fact	Mt-i	-0.005		1993
			1218	0.412	-1.105	0.128	0.622	-0.025	-0.216		2608
						1.000	fact	Mt-i	-0.005		2167
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.202	28.0	0.30	181.82	329.93	11.71
						---- Check for crack width					passed with additional reinforcements
2011	0.000	2	1217	0.051	0.145	0.149	-0.101	-0.009	0.037		3362
						1.000	fact	Mt-i	0.005		2708
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.174	28.0	0.00	23.22	255.29	14.72
						---- Check for crack width					passed with given reinforcements
			1218	0.450	-1.201	0.125	0.625	-0.032	-0.224		2492
						1.000	fact	Mt-i	0.005		2080
			1218	0.410	-1.109	0.130	0.620	-0.032	-0.224		2697
						1.000	fact	Mt-i	0.005		2232
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.199	28.0	0.30	181.91	319.46	12.03
						---- Check for crack width					passed with additional reinforcements
	0.300	2	1217	0.010	0.033	0.187	-0.063	-0.009	0.011		4301
						1.000	fact	Mt-i	0.005		3340
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.170	28.0	0.00	5.02	211.93	14.23
						---- Check for crack width					passed with given reinforcements
			1218	0.463	-1.254	0.131	0.619	-0.032	-0.258		2739
						1.000	fact	Mt-i	0.005		2263
			1218	0.403	-1.115	0.139	0.611	-0.032	-0.258		3081
						1.000	fact	Mt-i	0.005		2510
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.187	28.0	0.30	180.87	275.80	14.03
						---- Check for crack width					passed with additional reinforcements
2012	0.000	2	1217	0.012	0.037	0.174	-0.076	-0.009	0.010		3749
						1.000	fact	Mt-i	0.002		2975
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.131	28.0	0.00	5.73	248.26	12.20
						---- Check for crack width					passed with given reinforcements
			1218	0.569	-1.492	0.119	0.631	-0.032	-0.257		2297
						1.000	fact	Mt-i	0.002		1933
			1218	0.403	-1.112	0.138	0.612	-0.032	-0.257		3083
						1.000	fact	Mt-i	0.002		2512
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.137	28.0	0.30	180.63	275.96	14.36
						---- Check for crack width					passed with additional reinforcements
	0.300	2	1217	0.022	-0.064	0.150	0.600	-0.009	-0.015		3122
						1.000	fact	Mt-i	0.002		2540
						D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]	
						T-zone h= 0.135	28.0	0.00	10.24	292.50	11.51
						---- Check for crack width					passed with given reinforcements
			1218	0.576	-1.528	0.123	0.627	-0.032	-0.287		2504
						1.000	fact	Mt-i	0.002		2089
			1218	0.399	-1.121	0.144	0.606	-0.032	-0.287		3413
						1.000	fact	Mt-i	0.002		2744

OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

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]
10001	0.000	8	1217	----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]						
				T-zone h= 0.133 28.0 0.30 180.65 246.75 16.21						
				---- Check for crack width passed with additional reinforcements						
				0.539	1.206	0.103	0.103	-0.183	0.137	856
		1217	1.000	fact	Mt-i		-0.059	639		
			0.420	0.965	0.115	0.115	-0.184	0.137	1069	
			1.000	fact	Mt-i		-0.059	793		
			----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]							
	T-zone h= 0.316 28.0 0.30 180.49 1080.33 2.29									
	---- Check for crack width passed with additional reinforcements									
	0.250	8	1217	0.522	1.173	0.105	0.105	-0.186	0.137	878
				1.000	fact	Mt-i		-0.007	655	
				0.419	0.964	0.116	0.116	-0.186	0.137	1068
				1.000	fact	Mt-i		-0.007	792	
		----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]								
		T-zone h= 0.320 28.0 0.30 180.25 1085.75 2.23								
---- Check for crack width passed with additional reinforcements										
10005		0.000	8	1217	0.609	1.358	0.101	0.101	-0.186	0.153
	1.000				fact	Mt-i		-0.021	633	
	0.417				0.969	0.119	0.119	-0.186	0.153	1188
	1.000				fact	Mt-i		-0.021	878	
	----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]									
	T-zone h= 0.316 28.0 0.30 180.27 939.65 3.08									
	---- Check for crack width passed with additional reinforcements									
	0.300		8	1217	0.588	1.312	0.102	0.102	-0.183	0.150
1.000		fact			Mt-i		-0.043	640		
0.419		0.971			0.118	0.118	-0.183	0.150	1159	
1.000		fact			Mt-i		-0.043	858		
----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]										
T-zone h= 0.318 28.0 0.30 180.93 966.67 2.96										
---- Check for crack width passed with additional reinforcements										
10006		0.000	8	1217	0.836	2.188	0.168	0.168	-0.831	0.637
	1.000				fact	Mt-i		0.039	1569	
	0.349				1.110	0.235	0.235	-0.831	0.637	4313
	1.000				fact	Mt-i		0.039	2911	
	----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]									
	T-zone h= 0.205 28.0 0.30 180.81 231.52 13.10									
	---- Check for crack width passed with additional reinforcements									
	0.250		8	1217	0.830	2.173	0.168	0.168	-0.828	0.634
		1.000			fact	Mt-i		0.069	1571	
		0.350			1.109	0.235	0.235	-0.828	0.634	4293
		1.000			fact	Mt-i		0.069	2899	
		----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]								
		T-zone h= 0.205 28.0 0.30 180.81 232.85 13.00								
		---- Check for crack width passed with additional reinforcements								
		0.300	8	1217	0.813	2.132	0.169	0.169	-0.827	0.626
	1.000				fact	Mt-i		0.102	1582	
0.350	1.106				0.233	0.233	-0.827	0.626	4252	
1.000	fact				Mt-i		0.102	2875		
----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]										
T-zone h= 0.217 28.0 0.30 180.73 236.32 12.58										
---- Check for crack width passed with additional reinforcements										
0.350	8		1217	0.797	2.097	0.170	0.170	-0.831	0.624	2236
		1.000		fact	Mt-i		-0.009	1602		
		0.350		1.107	0.233	0.233	-0.831	0.624	4236	
		1.000		fact	Mt-i		-0.009	2866		
	----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]									
	T-zone h= 0.217 28.0 0.30 180.77 237.88 12.35									
	---- Check for crack width passed with additional reinforcements									
	0.400	8	1217	0.930	2.502	0.178	0.178	-1.051	0.799	2400
1.000				fact	Mt-i		-0.041	1711		
0.331				1.147	0.262	0.262	-1.051	0.799	5235	
1.000				fact	Mt-i		-0.041	3446		
----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]										
T-zone h= 0.212 28.0 0.30 180.80 185.08 16.86										
---- Check for crack width passed with additional reinforcements										
0.450		8	1217	0.913	2.466	0.180	0.180	-1.057	0.797	2427
	1.000			fact	Mt-i		-0.055	1729		
	0.331			1.147	0.262	0.262	-1.057	0.797	5219	
	1.000			fact	Mt-i		-0.055	3436		
	----- D[mm] w[mm] sig[MPa] ssr[MPa] As-eff[cm2]									
	T-zone h= 0.212 28.0 0.30 180.84 186.14 16.60									
	---- Check for crack width passed with additional reinforcements									
	0.500	8	1217	1.423	3.571	0.151	0.151	-1.056	0.815	1714
1.000				fact	Mt-i		0.027	1247		
0.330				1.148	0.263	0.263	-1.056	0.815	5335	
1.000				fact	Mt-i		0.027	3502		

OPIΣTIKH MEΛETH/TEKHNIKO TB/L=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

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=	0.219	28.0	0.30	180.66	180.45	17.63
				---- check for crack width				passed with	additional	reinforcements
			1218	1.386	3.489	0.153	0.153	-1.052	0.811	1746
					1.000	fact	Mt-i		-0.124	1269
			1218	0.330	1.147	0.262	0.262	-1.052	0.811	5313
					1.000	fact	Mt-i		-0.124	3490
				-----		D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h=	0.219	28.0	0.30	180.66	181.44	17.48
				---- check for crack width				passed with	additional	reinforcements
10010	0.000	8	1217	0.154	-0.212	0.000	1.278	0.022	-0.006	< 226
					1.000	fact	Mt-i		0.031	172
				-----		D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				C-zone h=	0.573	28.0	0.02	52.10	6190.35	2.86
				---- check for crack width				passed with	given	reinforcements
				T-zone h=	0.527	28.0	0.02	52.10	3095.71	3.68
				---- check for crack width				passed with	given	reinforcements
			1218	0.186	-0.342	0.007	1.093	0.027	-0.010	< 216
					1.000	fact	Mt-i		0.046	165
				-----		D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h=	0.398	28.0	0.05	71.29	3114.37	3.34
				---- check for crack width				passed with	given	reinforcements
	0.300	8	1217	0.314	0.601	0.028	0.028	0.024	0.016	< 198
					1.000	fact	Mt-i		0.067	151
				-----		D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h=	0.418	28.0	0.14	122.81	3750.33	2.34
				---- check for crack width				passed with	given	reinforcements
			1218	0.301	0.578	0.028	0.028	0.023	0.015	< 200
					1.000	fact	Mt-i		0.017	152
				-----		D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h=	0.417	28.0	0.13	118.00	3734.54	2.33
				---- Check for crack width				passed with	given	reinforcements
10011	0.000	8	1217	0.506	1.140	0.106	0.106	-0.183	0.137	905
					1.000	fact	Mt-i		0.064	675
			1217	0.419	0.965	0.115	0.115	-0.183	0.137	1070
					1.000	fact	Mt-i		0.064	794
				-----		D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h=	0.330	28.0	0.30	180.29	1078.25	2.33
				---- check for crack width				passed with	additional	reinforcements
			1218	0.493	1.114	0.108	0.108	-0.185	0.137	924
					1.000	fact	Mt-i		0.011	689
			1218	0.419	0.964	0.116	0.116	-0.185	0.137	1068
					1.000	fact	Mt-i		0.011	793
				-----		D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h=	0.335	28.0	0.30	180.24	1084.25	2.27
				---- check for crack width				passed with	additional	reinforcements
	0.250	8	1217	0.649	1.437	0.098	0.098	-0.186	0.153	800
					1.000	fact	Mt-i		0.025	598
			1217	0.419	0.972	0.119	0.119	-0.186	0.153	1183
					1.000	fact	Mt-i		0.025	875
				-----		D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h=	0.304	28.0	0.30	180.88	944.14	3.04
				---- check for crack width				passed with	additional	reinforcements
			1218	0.626	1.388	0.099	0.099	-0.183	0.150	810
					1.000	fact	Mt-i		0.041	605
			1218	0.419	0.970	0.118	0.118	-0.183	0.150	1159
					1.000	fact	Mt-i		0.041	857
				-----		D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h=	0.305	28.0	0.30	180.87	967.42	2.93
				---- Check for crack width				passed with	additional	reinforcements
10015	0.000	8	1217	0.837	2.192	0.168	0.168	-0.831	0.638	2187
					1.000	fact	Mt-i		0.023	1569
			1217	0.349	1.110	0.235	0.235	-0.831	0.638	4319
					1.000	fact	Mt-i		0.023	2915
				-----		D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h=	0.204	28.0	0.30	180.80	231.05	13.17
				---- check for crack width				passed with	additional	reinforcements
			1218	0.831	2.177	0.168	0.168	-0.827	0.635	2190
					1.000	fact	Mt-i		-0.107	1571
			1218	0.349	1.109	0.235	0.235	-0.827	0.635	4299
					1.000	fact	Mt-i		-0.107	2903
				-----		D[mm]	w[mm]	sig[MPa]	ssr[MPa]	As-eff[cm2]
				T-zone h=	0.204	28.0	0.30	180.80	232.35	13.07
				---- check for crack width				passed with	additional	reinforcements
	0.300	8	1217	1.502	3.582	0.131	0.131	-0.826	0.626	1312
					1.000	fact	Mt-i		-0.034	966
			1217	0.351	1.107	0.233	0.233	-0.826	0.626	4248
					1.000	fact	Mt-i		-0.034	2873

OPISTIKH MELETH/TEKNIKO TB/L=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

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= 0.209 28.0 0.30 180.79 236.56 12.57						
				---- Check for crack width passed with additional reinforcements						
			1218	1.366	3.300	0.136	0.136	-0.832	0.624	1420
					1.000	fact	Mt-i		-0.050	1042
			1218	0.351	1.107	0.233	0.233	-0.832	0.624	4232
					1.000	fact	Mt-i		-0.050	2863
				T-zone h= 0.210 28.0 0.30 180.81 238.23 12.31						
				---- Check for crack width passed with additional reinforcements						
10016	0.000	8	1217	0.873	2.379	0.183	0.183	-1.052	0.800	2525
					1.000	fact	Mt-i		0.117	1794
			1217	0.331	1.147	0.262	0.262	-1.052	0.800	5238
					1.000	fact	Mt-i		0.117	3447
				T-zone h= 0.214 28.0 0.30 180.79 184.96 16.87						
				---- Check for crack width passed with additional reinforcements						
			1218	0.858	2.345	0.184	0.184	-1.057	0.797	2554
					1.000	fact	Mt-i		0.010	1812
			1218	0.331	1.147	0.262	0.262	-1.057	0.797	5221
					1.000	fact	Mt-i		0.010	3438
				T-zone h= 0.214 28.0 0.30 180.83 186.05 16.60						
				---- Check for crack width passed with additional reinforcements						
	0.250	8	1217	4.268	9.416	0.097	0.097	-1.056	0.814	650
					1.000	fact	Mt-i		0.038	488
			1217	0.330	1.148	0.263	0.263	-1.056	0.814	5326
					1.000	fact	Mt-i		0.038	3497
				T-zone h= 0.212 28.0 0.30 180.78 180.88 17.56						
				---- Check for crack width passed with additional reinforcements						
			1218	4.001	8.874	0.099	0.099	-1.053	0.810	686
					1.000	fact	Mt-i		0.090	515
			1218	0.330	1.148	0.262	0.262	-1.053	0.810	5304
					1.000	fact	Mt-i		0.090	3484
				T-zone h= 0.212 28.0 0.30 180.78 181.85 17.42						
				---- Check for crack width passed with additional reinforcements						
10020	0.000	8	1217	0.147	-0.203	0.000	1.274	0.022	-0.006	< 234
					1.000	fact	Mt-i		-0.027	178
				C-zone h= 0.570 28.0 0.02 49.64 5828.50 3.02						
				---- Check for crack width passed with given reinforcements						
				T-zone h= 0.530 28.0 0.02 49.64 2955.65 3.86						
				---- Check for crack width passed with given reinforcements						
			1218	0.165	-0.308	0.015	1.085	0.024	-0.010	< 237
					1.000	fact	Mt-i		-0.051	180
				T-zone h= 0.395 28.0 0.04 63.85 2802.02 3.47						
				---- Check for crack width passed with given reinforcements						
	0.300	8	1217	0.323	0.618	0.027	0.027	0.024	0.016	< 192
					1.000	fact	Mt-i		-0.065	146
				T-zone h= 0.417 28.0 0.15 126.28 3867.28 2.27						
				---- Check for crack width passed with given reinforcements						
			1218	0.310	0.595	0.028	0.028	0.023	0.015	< 193
					1.000	fact	Mt-i		-0.014	147
				T-zone h= 0.416 28.0 0.13 121.56 3874.17 2.26						
				---- Check for crack width passed with given reinforcements						

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 0.800

Check for crack width passed with additional reinforcements

Stiffness is not saved in database

Longitudinal Reinforcements LCR 508

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]
1001	0.000	1	0.53	28.67	10.52T	11.13		7.02	
1001	0.692	1	0.45	24.30	10.54T	9.62		4.13	
1002	0.000	1	0.52	27.94	14.38T	9.44		4.13	

OPISTIKH MELETH/TEXNIKO TB/L=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

Longitudinal Reinforcements LCR 508

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]
1002	0.692	1	0.46	25.03		14.55T	8.76		1.72	
1003	0.000	1	0.51	27.46		16.64T	8.61		2.21	
1003	0.692	1	0.52	28.36		19.80T	8.56			
1004	0.000	1	0.50	27.17		17.91T	8.56		0.70	
1004	0.692	1	0.57	30.99		21.07T	9.92			
1005	0.000	1	0.59	31.76		21.84T	9.92			
1005	0.692	1	0.54	29.25		18.40T	10.86			
1006	0.000	1	0.54	29.38		18.52T	10.85			
1006	0.692	1	0.54	29.52		18.52T	11.00			
1007	0.000	1	0.55	29.78		18.78T	11.00			
1007	0.692	1	0.54	29.56		18.74T	10.82			
1008	0.000	1	0.54	29.50		18.68T	10.82			
1008	0.692	1	0.59	32.27		22.17T	10.11			
1009	0.000	1	0.58	31.50		21.39T	10.11			
1009	0.692	1	0.50	27.37		18.15T	8.15		1.07	
1010	0.000	1	0.46	24.87		16.32T	8.15		0.40	
1010	0.692	1	0.52	28.27		16.86T	8.81		2.60	
1011	0.000	1	0.48	26.23		14.76T	8.95		2.52	
1011	0.692	1	0.54	29.26		14.58T	9.69		4.99	
1012	0.000	1	0.47	25.58		10.71T	9.88		5.00	
1012	0.692	1	0.55	29.96		10.68T	11.34		7.93	
1013	0.000	1	0.21	11.58		2.37T	2.46		6.75	
1013	0.692	1	0.28	15.20		6.52T	4.37		4.31	
1014	0.000	1	0.35	19.06		10.40T	4.35		4.31	
1014	0.692	1	0.28	15.27		6.46T	6.80		2.01	
1015	0.000	1	0.39	20.93		12.13T	6.79		2.01	
1015	0.692	1	0.37	19.89		10.56T	9.21		0.12	
1016	0.000	1	0.37	20.00		10.79T	9.21			
1016	0.692	1	0.39	21.39		11.05T	10.34			
1017	0.000	1	0.40	21.59		11.26T	10.33			
1017	0.692	1	0.49	26.75		15.53T	11.22			
1018	0.000	1	0.49	26.78		15.56T	11.22			
1018	0.692	1	0.49	26.34		14.98T	11.36			
1019	0.000	1	0.48	26.18		14.82T	11.36			
1019	0.692	1	0.49	26.69		15.44T	11.26			
1020	0.000	1	0.49	26.59		15.33T	11.26			
1020	0.692	1	0.40	21.96		11.34T	10.62			
1021	0.000	1	0.40	21.84		11.22T	10.62			
1021	0.692	1	0.35	19.11		9.54T	9.00		0.57	
1022	0.000	1	0.37	20.28		10.70T	9.00		0.57	
1022	0.692	1	0.41	22.36		12.37T	7.36		2.63	
1023	0.000	1	0.30	16.38		6.39T	7.37		2.63	
1023	0.692	1	0.38	20.35		10.62T	4.76		4.96	
1024	0.000	1	0.30	16.44		6.70T	4.78		4.97	
1024	0.692	1	0.24	13.04		2.40T	3.22		7.42	
1025	0.000	1	0.67	36.12		17.36T	11.22		7.54	
1025	0.692	1	0.61	33.32		17.35T	11.23		4.74	
1026	0.000	1	0.62	33.44		17.73T	10.91		4.80	
1026	0.692	1	0.57	30.72		16.96T	11.48		2.28	
1027	0.000	1	0.59	31.98		19.23T	9.88		2.87	
1027	0.692	1	0.53	28.74		16.87T	11.68		0.19	
1028	0.000	1	0.58	31.42		19.76T	10.42		1.25	
1028	0.692	1	0.63	34.27		22.72T	11.55			
1029	0.000	1	0.64	34.67		23.63T	11.03			
1029	0.692	1	0.53	28.60		16.53T	12.07			
1030	0.000	1	0.55	29.96		18.34T	11.62			
1030	0.692	1	0.44	23.95		11.88T	12.06			
1031	0.000	1	0.44	23.95		11.88T	12.06			
1031	0.692	1	0.64	34.91		23.27T	11.65			
1032	0.000	1	0.53	28.85		16.76T	12.10			
1032	0.692	1	0.64	34.47		23.30T	11.08		0.08	
1033	0.000	1	0.63	33.99		22.39T	11.60			
1033	0.692	1	0.59	31.95		20.01T	10.47		1.46	
1034	0.000	1	0.55	30.11		17.73T	11.74		0.64	
1034	0.692	1	0.60	32.40		19.19T	10.12		3.09	
1035	0.000	1	0.58	31.46		16.99T	11.72		2.75	
1035	0.692	1	0.64	34.52		17.92T	11.38		5.22	
1036	0.000	1	0.63	34.41		17.50T	11.70		5.22	
1036	0.692	1	0.69	37.20		17.51T	11.69		8.00	
2001	0.000	2	0.32	28.61		1.67T	12.62		14.32	
2001	0.300	2	0.29	26.42		1.69T	12.10		12.63	
2002	0.000	2	0.31	28.13		4.52T	12.06		11.55	
2002	0.300	2	0.28	25.53		4.49T	11.35		9.69	
2003	0.000	2	0.29	26.36		4.33T	11.57		10.46	
2003	0.300	2	0.32	28.97		4.37T	12.26		12.35	
2004	0.000	2	0.30	27.31		1.62T	12.30		13.39	

OΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
SLS(QUASI-PERMANENT)-CRACK w=0.30

Longitudinal Reinforcements LCR 508

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]
2004	0.300	2	0.33	29.49		1.61T	12.79		15.09	
2005	0.000	2	0.20	18.07		1.41T	3.28		13.37	
2005	0.300	2	0.18	15.82		0.74T	2.85		12.23	
2006	0.000	2	0.18	15.92		0.87T	2.83		12.22	
2006	0.300	2	0.15	13.78		0.45T	2.53		10.80	
2007	0.000	2	0.17	15.03		0.40T	3.30		11.33	
2007	0.300	2	0.19	16.79		0.87T	3.18		12.74	
2008	0.000	2	0.19	16.68		0.72T	3.20		12.76	
2008	0.300	2	0.21	18.89		1.37T	3.61		13.90	
2009	0.000	2	0.34	30.86		4.20T	11.92		14.74	
2009	0.300	2	0.31	27.83		4.11T	10.84		12.88	
2010	0.000	2	0.37	33.12		12.46T	11.04		9.62	
2010	0.300	2	0.33	29.77		9.62T	11.52		8.63	
2011	0.000	2	0.34	30.54		9.55T	12.00		8.99	
2011	0.300	2	0.36	32.39		9.95T	11.52		10.93	
2012	0.000	2	0.32	28.58		4.03T	11.32		13.23	
2012	0.300	2	0.35	31.59		4.13T	12.40		15.06	
10001	0.000	8	0.04	4.81		3.93T	0.77		0.11	
10001	0.250	8	0.05	7.25		5.31T	1.02		0.91	
10005	0.000	8	0.18	23.32		13.70T	8.55		1.06	
10005	0.300	8	0.19	25.23		14.82T	7.56		2.85	
10006	0.000	8	0.23	30.32		20.27T	10.05			
10006	0.250	8	0.25	33.57		22.58T	9.96		1.03	
10010	0.000	8	0.05	6.54		5.59T			0.95	
10010	0.300	8	0.04	4.86		4.47T	0.39			
10011	0.000	8	0.04	5.01		4.24T	0.66		0.11	
10011	0.250	8	0.05	7.04		4.97T	1.15		0.92	
10015	0.000	8	0.18	23.41		13.71T	8.62		1.08	
10015	0.300	8	0.19	24.54		13.68T	8.00		2.86	
10016	0.000	8	0.23	30.57		20.67T	9.91			
10016	0.250	8	0.25	32.54		21.01T	10.51		1.02	
10020	0.000	8	0.05	6.88		5.92T			0.95	
10020	0.300	8	0.04	4.72		4.31T	0.39		0.02	

Reinforcements saved as design case LCR 508

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	0.53	28.67		10.52T	11.13		7.02	
1001	0.692	1	0.45	24.30		10.54T	9.62		4.13	
1002	0.000	1	0.52	27.94		14.38T	9.44		4.13	
1002	0.692	1	0.46	25.03		14.55T	8.76		1.72	
1003	0.000	1	0.51	27.46		16.64T	8.61		2.21	
1003	0.692	1	0.52	28.36		19.80T	8.56			
1004	0.000	1	0.50	27.17		17.91T	8.56		0.70	
1004	0.692	1	0.57	30.99		21.07T	9.92			
1005	0.000	1	0.59	31.76		21.84T	9.92			
1005	0.692	1	0.54	29.25		18.40T	10.86			
1006	0.000	1	0.54	29.38		18.52T	10.85			
1006	0.692	1	0.54	29.52		18.52T	11.00			
1007	0.000	1	0.55	29.78		18.78T	11.00			
1007	0.692	1	0.54	29.56		18.74T	10.82			
1008	0.000	1	0.54	29.50		18.68T	10.82			
1008	0.692	1	0.59	32.27		22.17T	10.11			
1009	0.000	1	0.58	31.50		21.39T	10.11			
1009	0.692	1	0.50	27.37		18.15T	8.15		1.07	
1010	0.000	1	0.46	24.87		16.32T	8.15		0.40	
1010	0.692	1	0.52	28.27		16.86T	8.81		2.60	
1011	0.000	1	0.48	26.23		14.76T	8.95		2.52	
1011	0.692	1	0.54	29.26		14.58T	9.69		4.99	
1012	0.000	1	0.47	25.58		10.71T	9.88		5.00	
1012	0.692	1	0.55	29.96		10.68T	11.34		7.93	
1013	0.000	1	0.21	11.58		2.37T	2.46		6.75	
1013	0.692	1	0.28	15.20		6.52T	4.37		4.31	
1014	0.000	1	0.35	19.06		10.40T	4.35		4.31	
1014	0.692	1	0.28	15.27		6.46T	6.80		2.01	
1015	0.000	1	0.39	20.93		12.13T	6.79		2.01	
1015	0.692	1	0.37	19.89		10.56T	9.21		0.12	
1016	0.000	1	0.37	20.00		10.79T	9.21			
1016	0.692	1	0.39	21.39		11.05T	10.34			
1017	0.000	1	0.40	21.59		11.26T	10.33			
1017	0.692	1	0.49	26.75		15.53T	11.22			
1018	0.000	1	0.49	26.78		15.56T	11.22			

OPIΣTIKH MEΛETH/TEKHNIKO TB/L=10.70
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]
1018	0.692	1	0.49	26.34		14.98T	11.36			
1019	0.000	1	0.48	26.18		14.82T	11.36			
1019	0.692	1	0.49	26.69		15.44T	11.26			
1020	0.000	1	0.49	26.59		15.33T	11.26			
1020	0.692	1	0.40	21.96		11.34T	10.62			
1021	0.000	1	0.40	21.84		11.22T	10.62			
1021	0.692	1	0.35	19.11		9.54T	9.00			
1022	0.000	1	0.37	20.28		10.70T	9.00		0.57	
1022	0.692	1	0.41	22.36		12.37T	7.36		0.57	
1023	0.000	1	0.30	16.38		6.39T	7.37		2.63	
1023	0.692	1	0.38	20.35		10.62T	4.76		2.63	
1024	0.000	1	0.30	16.44		6.70T	4.78		4.96	
1024	0.692	1	0.24	13.04		2.40T	3.22		4.97	
1025	0.000	1	0.67	36.12		17.36T	11.22		7.42	
1025	0.692	1	0.61	33.32		17.35T	11.23		7.54	
1026	0.000	1	0.62	33.44		17.73T	10.91		4.74	
1026	0.692	1	0.57	30.72		16.96T	11.48		4.80	
1027	0.000	1	0.59	31.98		19.23T	9.88		2.28	
1027	0.692	1	0.53	28.74		16.87T	11.68		2.87	
1028	0.000	1	0.58	31.42		19.76T	10.42		0.19	
1028	0.692	1	0.63	34.27		22.72T	11.55		1.25	
1029	0.000	1	0.64	34.67		23.63T	11.03			
1029	0.692	1	0.53	28.60		16.53T	12.07			
1030	0.000	1	0.55	29.96		18.34T	11.62			
1030	0.692	1	0.44	23.95		11.88T	12.06			
1031	0.000	1	0.44	23.95		11.88T	12.06			
1031	0.692	1	0.64	34.91		23.27T	11.65			
1032	0.000	1	0.53	28.85		16.76T	12.10			
1032	0.692	1	0.64	34.47		23.30T	11.08			
1033	0.000	1	0.63	33.99		22.39T	11.60		0.08	
1033	0.692	1	0.59	31.95		20.01T	10.47			
1034	0.000	1	0.55	30.11		17.73T	11.74		1.46	
1034	0.692	1	0.60	32.40		19.19T	10.12		0.64	
1035	0.000	1	0.58	31.46		16.99T	11.72		3.09	
1035	0.692	1	0.64	34.52		17.92T	11.38		2.75	
1036	0.000	1	0.63	34.41		17.50T	11.70		5.22	
1036	0.692	1	0.69	37.20		17.51T	11.69		5.22	
2001	0.000	2	0.32	28.61		1.67T	12.62		8.00	
2001	0.300	2	0.29	26.42		1.69T	12.10		14.32	
2002	0.000	2	0.31	28.13		4.52T	12.06		12.63	
2002	0.300	2	0.28	25.53		4.49T	11.35		11.55	
2003	0.000	2	0.29	26.36		4.33T	11.57		9.69	
2003	0.300	2	0.32	28.97		4.37T	12.26		10.46	
2004	0.000	2	0.30	27.31		1.62T	12.30		12.35	
2004	0.300	2	0.33	29.49		1.61T	12.79		13.39	
2005	0.000	2	0.20	18.07		1.41T	3.28		15.09	
2005	0.300	2	0.18	15.82		0.74T	2.85		13.37	
2006	0.000	2	0.18	15.92		0.87T	2.83		12.23	
2006	0.300	2	0.15	13.78		0.45T	2.53		12.22	
2007	0.000	2	0.17	15.03		0.40T	3.30		10.80	
2007	0.300	2	0.19	16.79		0.87T	3.18		11.33	
2008	0.000	2	0.19	16.68		0.72T	3.20		12.74	
2008	0.300	2	0.21	18.89		1.37T	3.61		12.76	
2009	0.000	2	0.34	30.86		4.20T	11.92		13.90	
2009	0.300	2	0.31	27.83		4.11T	10.84		14.74	
2010	0.000	2	0.37	33.12		12.46T	11.04		12.88	
2010	0.300	2	0.33	29.77		9.62T	11.52		9.62	
2011	0.000	2	0.34	30.54		9.55T	12.00		8.63	
2011	0.300	2	0.36	32.39		9.95T	11.52		8.99	
2012	0.000	2	0.32	28.58		4.03T	11.32		10.93	
2012	0.300	2	0.35	31.59		4.13T	12.40		13.23	
10001	0.000	8	0.04	4.81		3.93T	0.77		15.06	
10001	0.250	8	0.05	7.25		5.31T	1.02		0.11	
10005	0.000	8	0.18	23.32		13.70T	8.55		0.91	
10005	0.300	8	0.19	25.23		14.82T	7.56		1.06	
10006	0.000	8	0.23	30.32		20.27T	10.05		2.85	
10006	0.250	8	0.25	33.57		22.58T	9.96			
10010	0.000	8	0.05	6.54		5.59T			1.03	
10010	0.300	8	0.04	4.86		4.47T	0.39		0.95	
10011	0.000	8	0.04	5.01		4.24T	0.66			
10011	0.250	8	0.05	7.04		4.97T	1.15		0.11	
10015	0.000	8	0.18	23.41		13.71T	8.62		0.92	
10015	0.300	8	0.19	24.54		13.68T	8.00		1.08	
10016	0.000	8	0.23	30.57		20.67T	9.91		2.86	
10016	0.250	8	0.25	32.54		21.01T	10.51			
10020	0.000	8	0.05	6.88		5.92T			1.02	
									0.95	

OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
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]
10020	0.300	8	0.04	4.72		4.31T	0.39		0.02	

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	6.12	8.09				
1001	0.692	1	6.05	7.62				
1002	0.000	1	8.25	9.28				
1002	0.692	1	8.25	9.12				
1003	0.000	1	9.43	10.00				
1003	0.692	1	9.43	9.83				
1004	0.000	1	10.03	10.24				
1004	0.692	1	10.03	10.07				
1005	0.000	1	10.40	10.30				
1005	0.692	1	10.31	8.95				
1006	0.000	1	10.42	9.36				
1006	0.692	1	10.41	9.74				
1007	0.000	1	10.55	9.71				
1007	0.692	1	10.55	9.36				
1008	0.000	1	10.47	8.96				
1008	0.692	1	10.56	10.47				
1009	0.000	1	10.19	10.23				
1009	0.692	1	10.19	10.40				
1010	0.000	1	9.57	9.99				
1010	0.692	1	9.57	10.16				
1011	0.000	1	8.38	9.27				
1011	0.692	1	8.38	9.43				
1012	0.000	1	6.16	7.76				
1012	0.692	1	6.23	8.22				
1013	0.000	1	1.23	5.05				
1013	0.692	1	3.64	4.79				
1014	0.000	1	5.81	4.83				
1014	0.692	1	3.60	4.10				
1015	0.000	1	6.74	6.09				
1015	0.692	1	5.90	4.91				
1016	0.000	1	5.14	4.75				
1016	0.692	1	6.19	4.90				
1017	0.000	1	6.31	4.27				
1017	0.692	1	8.72	6.29				
1018	0.000	1	8.74	6.38				
1018	0.692	1	8.42	6.82				
1019	0.000	1	8.32	6.37				
1019	0.692	1	8.67	6.11				
1020	0.000	1	8.61	6.64				
1020	0.692	1	6.36	4.16				
1021	0.000	1	6.29	4.64				
1021	0.692	1	5.30	4.87				
1022	0.000	1	5.99	4.57				
1022	0.692	1	6.89	6.25				
1023	0.000	1	3.56	3.72				
1023	0.692	1	5.95	4.93				
1024	0.000	1	3.75	4.45				
1024	0.692	1	1.32	4.68				
1025	0.000	1	9.65	9.02				
1025	0.692	1	9.64	8.76				
1026	0.000	1	9.91	10.16				
1026	0.692	1	9.45	10.00				
1027	0.000	1	10.76	10.91				
1027	0.692	1	10.06	10.73				
1028	0.000	1	11.03	11.23				
1028	0.692	1	10.82	11.06				
1029	0.000	1	11.25	11.33				
1029	0.692	1	9.18	7.41				
1030	0.000	1	10.19	9.65				
1030	0.692	1	5.66	4.36				
1031	0.000	1	5.66	4.36				
1031	0.692	1	11.08	11.11				
1032	0.000	1	9.31	7.59				
1032	0.692	1	11.10	11.17				
1033	0.000	1	10.66	10.90				
1033	0.692	1	11.18	11.07				
1034	0.000	1	9.91	10.58				
1034	0.692	1	10.75	10.75				
1035	0.000	1	9.47	9.86				
1035	0.692	1	10.02	10.02				
1036	0.000	1	9.73	8.63				

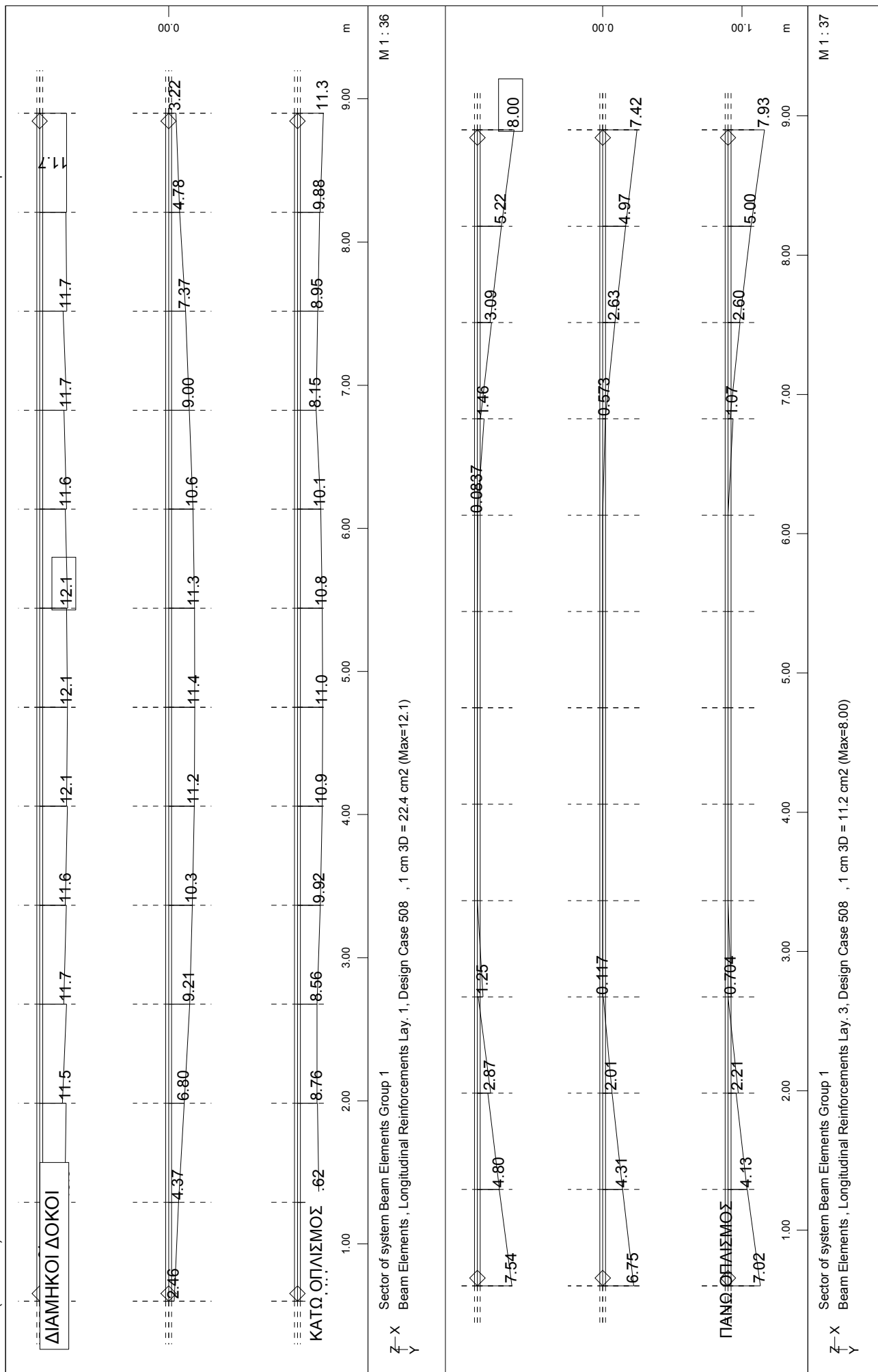
OPISTIKH MELETH/TEKNIKO TB/L=10.70
SLS (QUASI-PERMANENT) - CRACK w=0.30

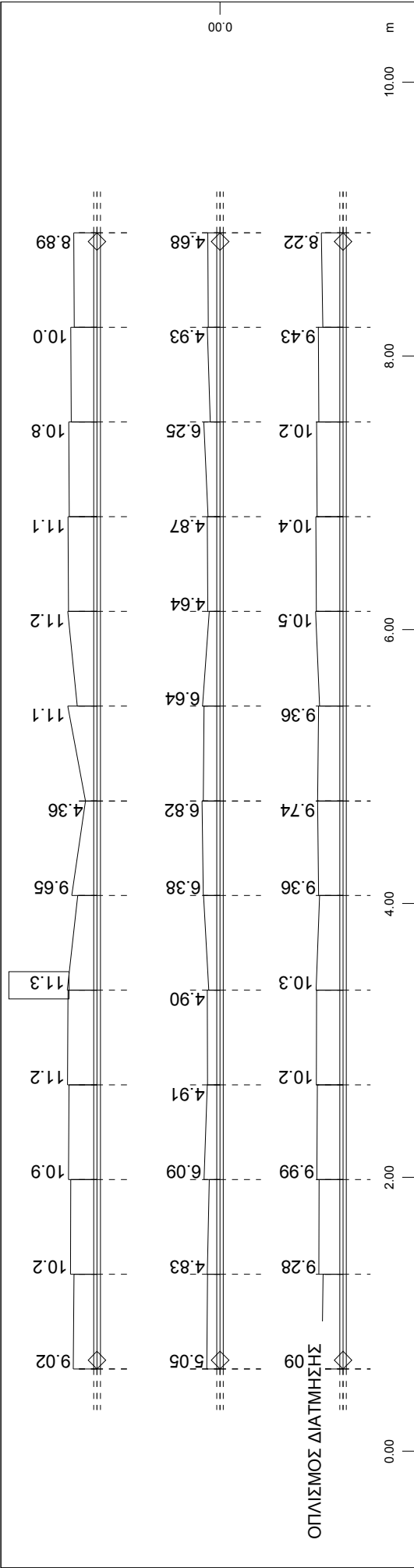
Shear Reinforcements per Cutted Part of Section Accumulated minimum

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]
1036	0.692	1	9.74	8.89				
2001	0.000	2	0.50	4.09				
2001	0.300	2	0.50	3.95				
2002	0.000	2	1.59	4.64				
2002	0.300	2	1.59	4.54				
2003	0.000	2	1.58	4.57				
2003	0.300	2	1.58	4.69				
2004	0.000	2	0.50	3.23				
2004	0.300	2	0.50	3.32				
2005	0.000	2	0.42	5.26				
2005	0.300	2	0.21	5.02				
2006	0.000	2	0.25	5.09				
2006	0.300	2	0.12	4.91				
2007	0.000	2	0.11	4.86				
2007	0.300	2	0.26	5.08				
2008	0.000	2	0.21	4.58				
2008	0.300	2	0.42	4.65				
2009	0.000	2	1.32	3.93				
2009	0.300	2	1.32	3.84				
2010	0.000	2	3.71	5.26				
2010	0.300	2	3.71	5.15				
2011	0.000	2	3.73	5.13				
2011	0.300	2	3.73	5.23				
2012	0.000	2	1.32	3.82				
2012	0.300	2	1.32	3.91				
10001	0.000	8	0.95	1.85				
10001	0.250	8	1.18	2.56				
10005	0.000	8	2.19	8.51				
10005	0.300	8	2.69	10.47				
10006	0.000	8	3.16	9.25				
10006	0.250	8	3.19	10.05				
10010	0.000	8	1.36	2.98				
10010	0.300	8	1.06	1.97				
10011	0.000	8	1.03	1.84				
10011	0.250	8	1.10	2.54				
10015	0.000	8	2.18	8.58				
10015	0.300	8	1.61	10.29				
10016	0.000	8	3.51	9.89				
10016	0.250	8	2.56	9.75				
10020	0.000	8	1.44	3.03				
10020	0.300	8	1.02	1.95				

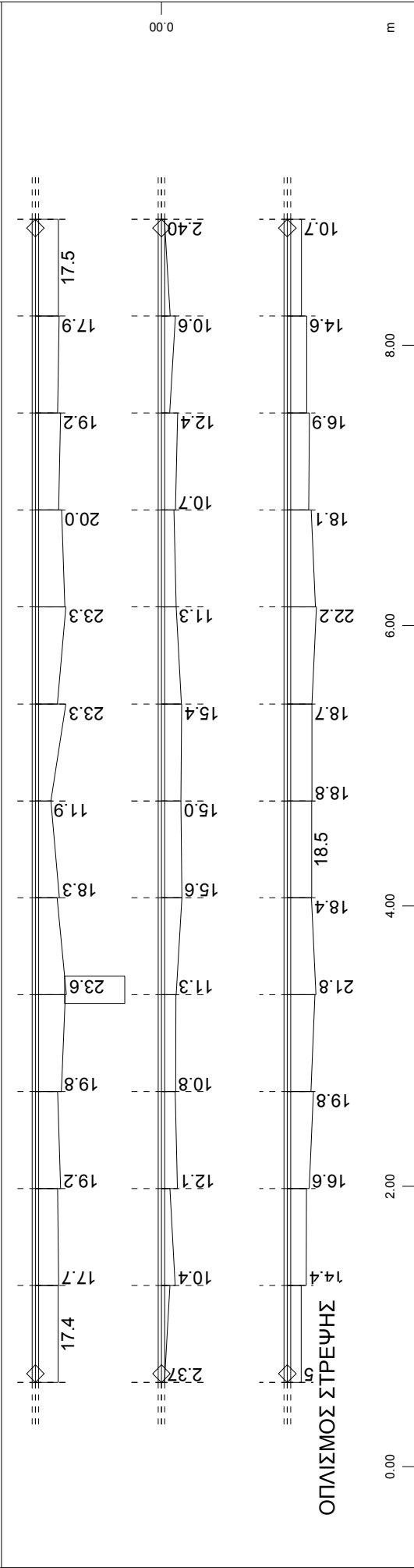
Maximum Degree of Utilization

		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
Cross sect.	2	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.889	0.000	0.000
DOKOS-2		0.000	0.000	0.000	0.000	0.000	0.000	0.000	2.418	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	8.023	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	0.000	0.000	8.023	0.000	0.000



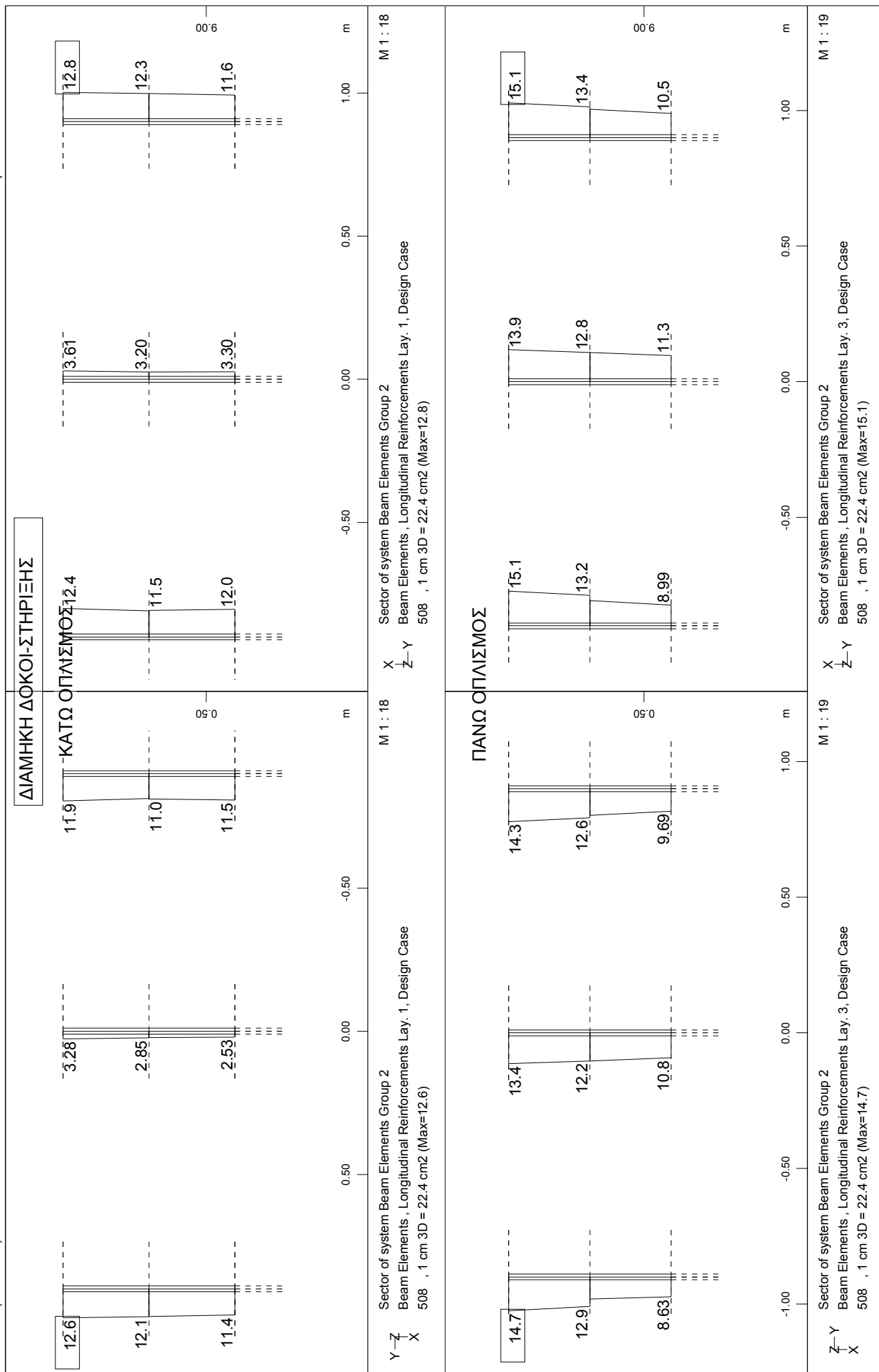


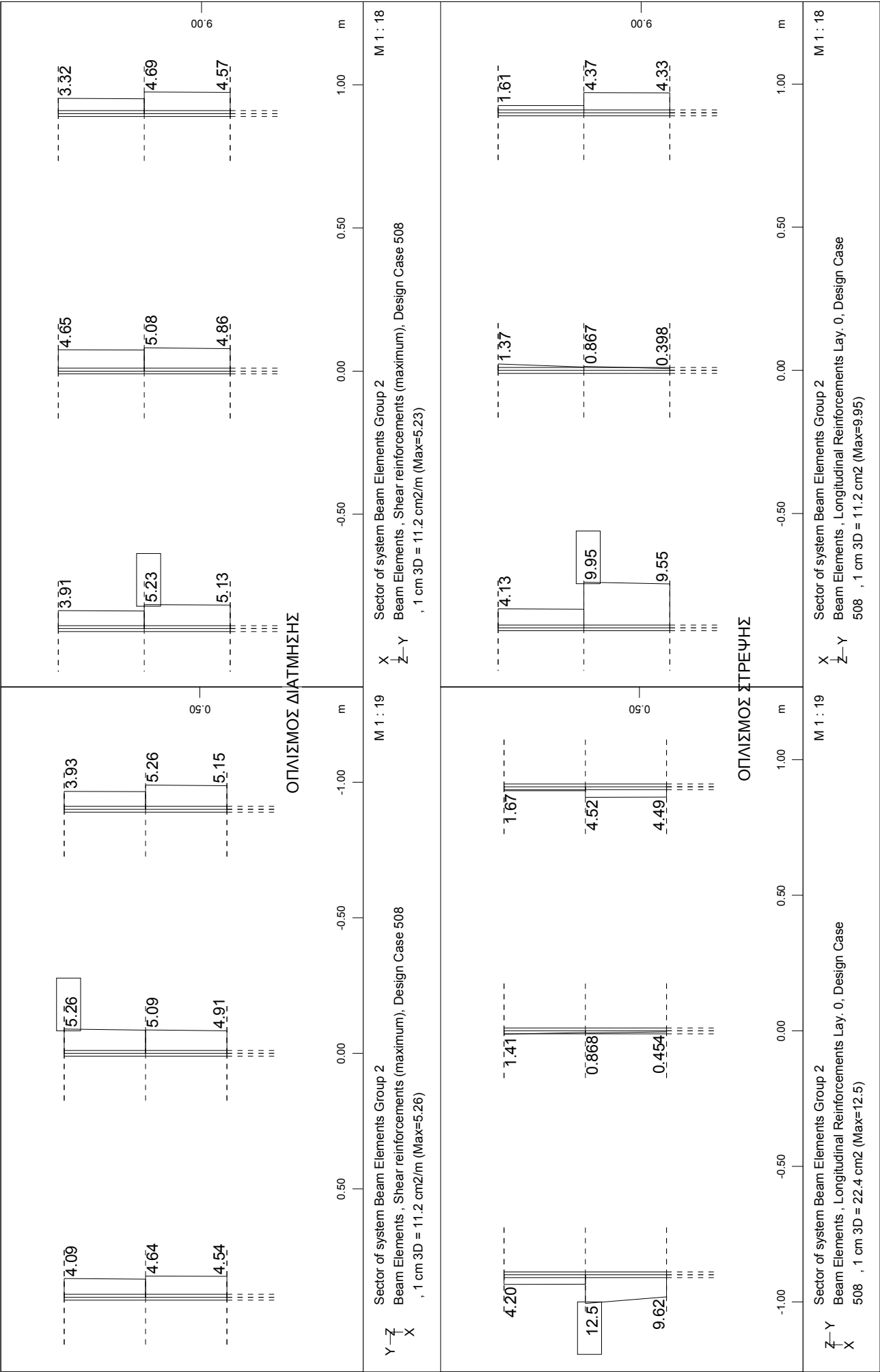
Sector of system Beam Elements Group 1
Beam Elements , Shear reinforcements (maximum), Design Case 508 , 1 cm 3D = 22.4 cm²/m (Max=11.3)

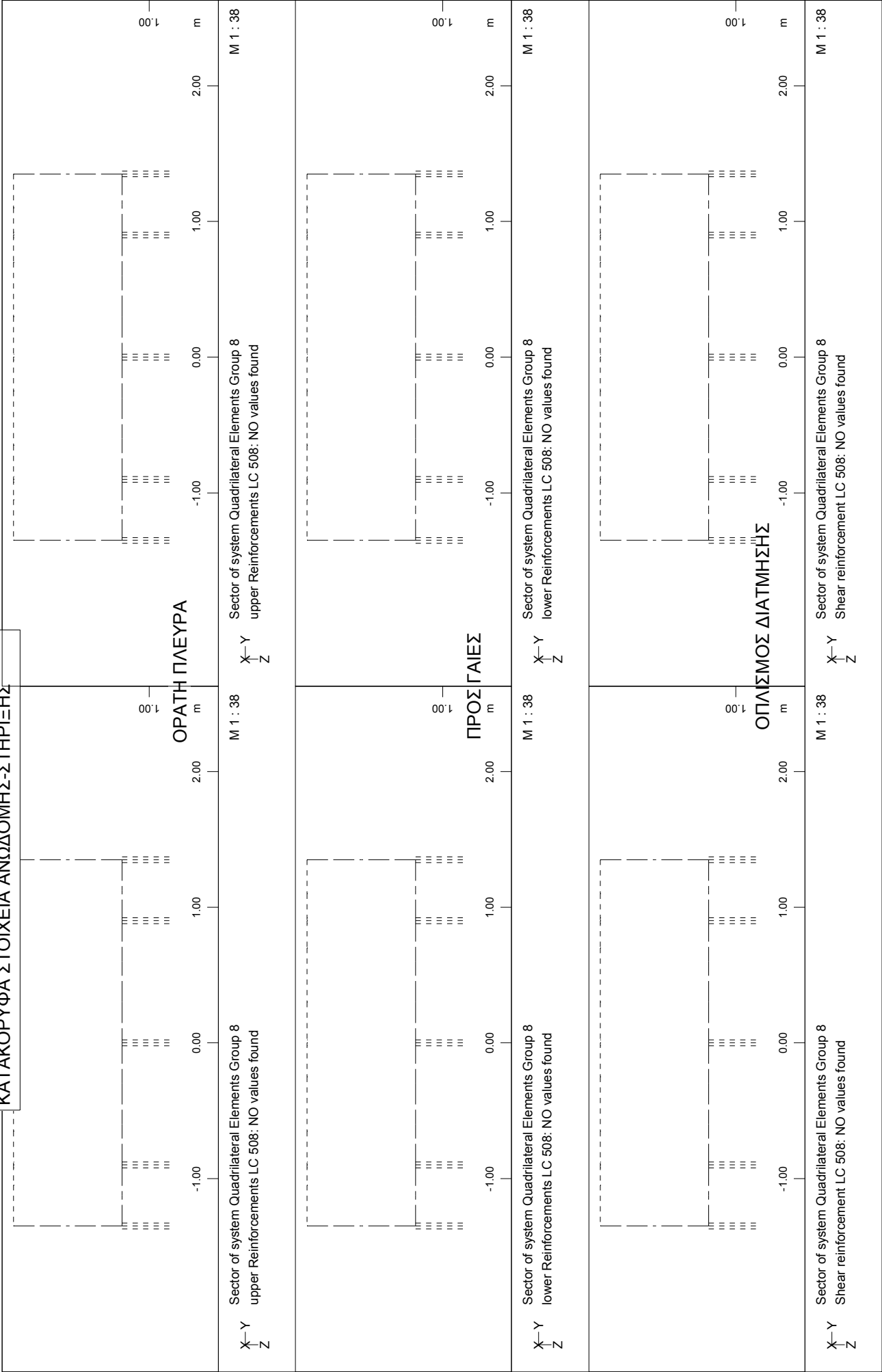


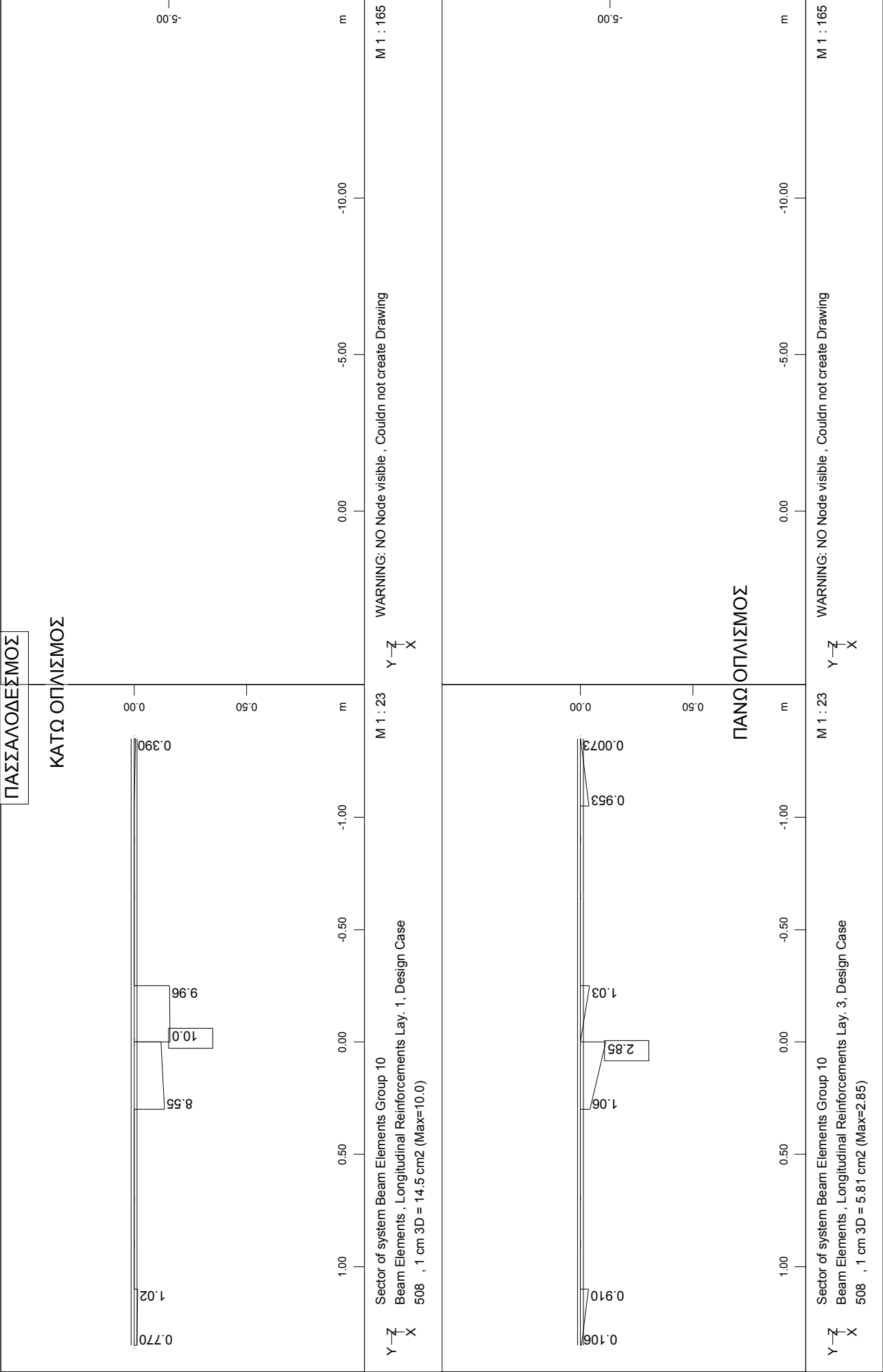
Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 0, Design Case 508 , 1 cm 3D = 44.8 cm² (Max=23.6)

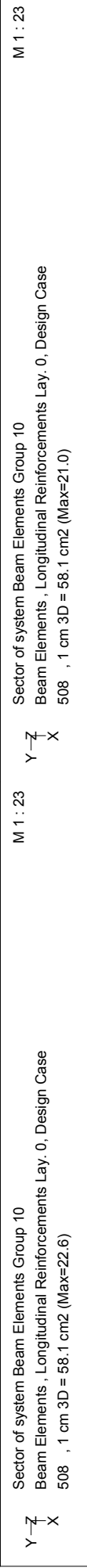
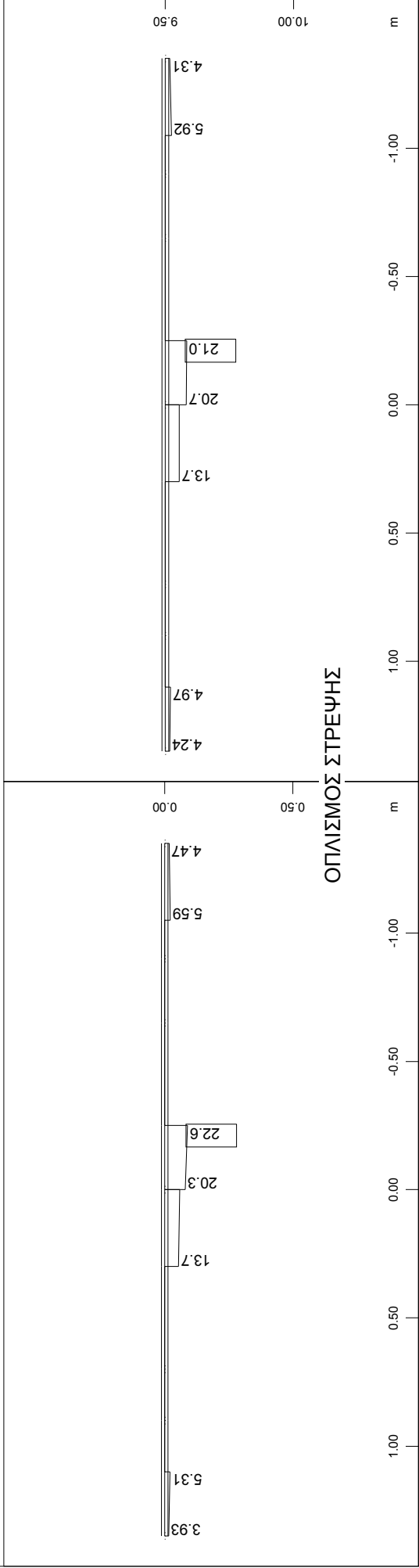
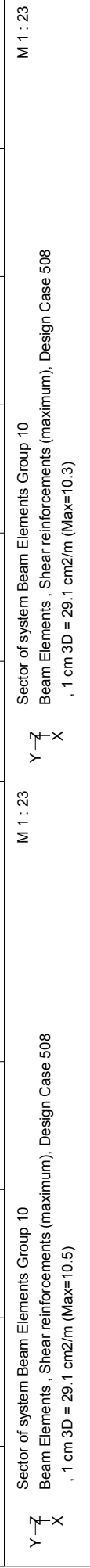
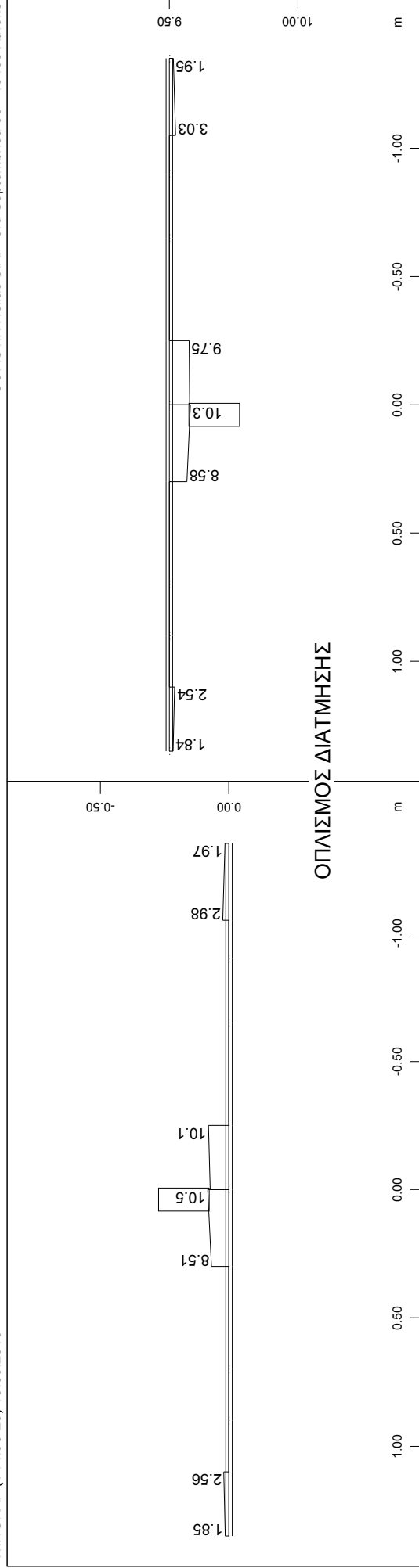
ΟΠΛΙΣΜΟΣ ΣΤΡΕΨΗΣ



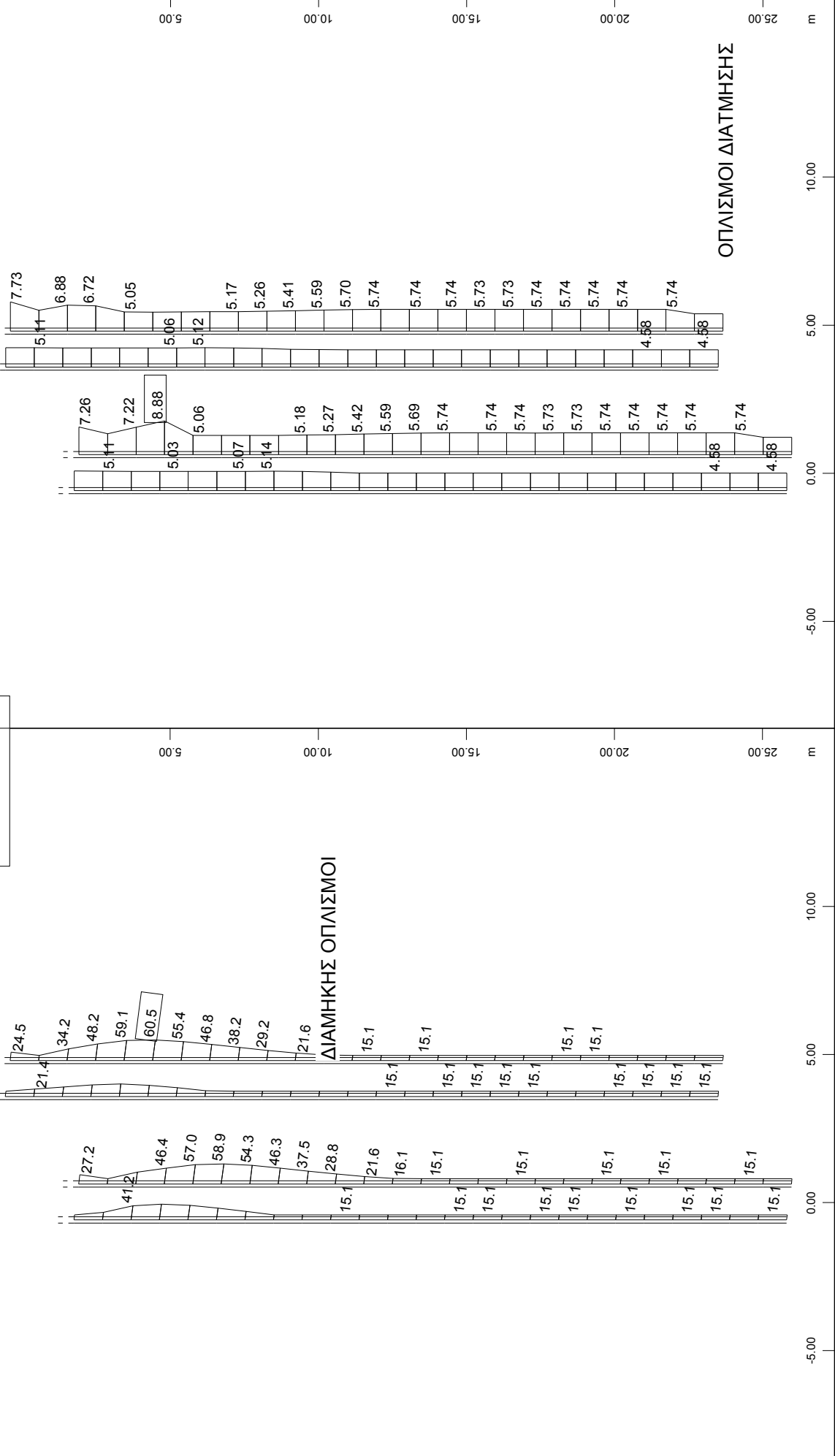








ΠΑΣΣΑΛΟΙ Φ80



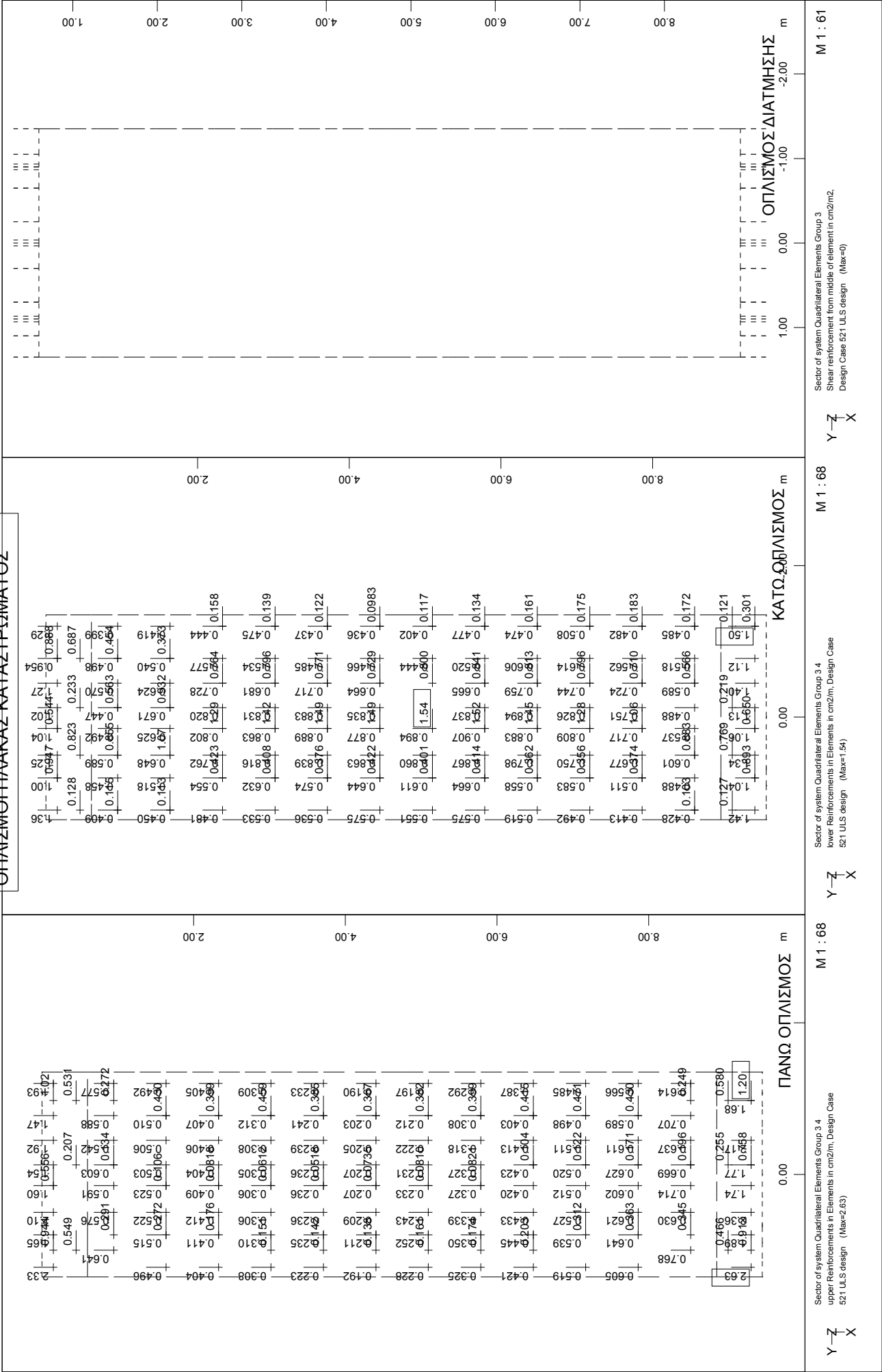
Sector of system Beam Elements Group 12
Beam Elements , Longitudinal Reinforcements Lay. 1, Design
Case 508 , 1 cm 3D = 145.3 cm2 (Max=60.5)

Sector of system Beam Elements Group 12
Beam Elements , Shear reinforcements (maximum), Design Case
508 , 1 cm 3D = 14.5 cm2/m (Max=8.88)

M 1 : 186
X * 0.502
Y * 0.906
Z * 0.962

M 1 : 186
X * 0.502
Y * 0.906
Z * 0.962

ΟΠΛΙΣΜΟΙ ΠΛΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ



ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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 ΤΒ/Λ=10.70
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	1036	1		1		10	40				
2000	2012	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. 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
5025 part.	CS 0	K creep step	1.00	1.00	1.00	1.00	1.00	1.00 P perm

OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
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'
		C (creep + shrinkage)						
5055 part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	P perm
		C (creep + shrinkage)						
5060 part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	P perm
		C (creep + shrinkage)						
5061 part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	P perm
		C (creep + shrinkage)						
5062 part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	P perm
		C (creep + shrinkage)						
5063 part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	P perm
		C (creep + shrinkage)						
5064 part.	CS 1	K creep step	1.00	1.00	1.00	1.00	1.00	P perm
		C (creep + shrinkage)						
6015 part.	CS 0	15 K creep step						P perm
		C (creep + shrinkage)						
6025 part.	CS 0	25 K creep step						P perm
		C (creep + shrinkage)						
6055 part.	CS 1	55 K creep step						P perm
		C (creep + shrinkage)						
6060 part.	CS 1	60 K creep step						P perm
		C (creep + shrinkage)						
6061 part.	CS 1	61 K creep step						P perm
		C (creep + shrinkage)						
6062 part.	CS 1	62 K creep step						P perm
		C (creep + shrinkage)						
6063 part.	CS 1	63 K creep step						P perm
		C (creep + shrinkage)						
6064 part.	CS 1	64 K creep step						P perm
		C (creep + shrinkage)						

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		-1.23	1.20	0.26	0.72	-1.28	6.38	
				4		-1.11	-0.36	0.00		-1.11	-7.95	
		1	1220	1		0.48	-2.67	1.04	1.11	-2.71	-19.88	
				4		2.46	1.35	0.00			-19.88	
		0.692	1	1219	1	-1.70	1.60	0.43	0.95	-1.79	-11.97	
				4		-1.30	-0.46	0.00		-1.30	-20.53	
	0.692	1	1220	1		-0.19	-1.78	0.76	0.62	-1.81	-12.65	
				4		1.83	1.04	0.00			-12.65	
		1	1219	1		-1.70	1.60	0.34	0.95	-1.76	-11.97	
				4		-1.30	-0.46	0.00		-1.30	-20.53	
		1	1220	1		-0.20	-1.78	0.72	0.58	-1.80	-12.63	
				4		1.83	1.04	0.00			-12.63	
1002	0.000	1	1219	1		-2.14	2.22	0.70	1.37	-2.32	-18.78	
				4		-1.63	-0.60	0.00		-1.63	-31.96	
		1	1220	1		-0.75	-1.06	0.67	0.37	-1.22	-10.70	
				4		1.31	0.79	0.00			-12.20	
		0.692	1	1219	1	-2.51	2.87	0.50	1.80	-2.60	-24.24	
				4		-2.00	-0.75	0.00		-2.00	-41.52	
	0.692	1	1220	1		-1.20	-0.45	0.57	0.26	-1.40	-16.71	
				4		0.86	0.57	0.00			-22.41	
		1	1219	1		-2.51	2.87	0.36	1.80	-2.56	-24.23	
				4		-1.99	-0.75	0.00		-1.99	-41.51	
		1	1220	1		-1.20	-0.45	0.52	0.23	-1.37	-16.70	
				4		0.86	0.57	0.00			-22.41	
1003	0.000	1	1219	1		-2.81	3.25	0.43	2.04	-2.87	-28.37	
				4		-2.26	-0.88	0.00		-2.26	-48.42	
		1	1220	1		-1.56	0.06	0.47	0.18	-1.67	-21.19	
				4		0.47	0.38	0.00			-30.15	
		0.692	1	1219	1	-2.81	3.25	0.20	2.04	-2.82	-28.37	
				4		-2.26	-0.88	0.00		-2.26	-48.42	
	0.692	1	1220	1		-1.56	0.06	0.43	0.15	-1.65	-21.19	
				4		0.47	0.38	0.00			-30.14	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	0.692	1	1219	1		-2.97	3.48	0.19	2.19	-2.98	-30.72	
				4		-2.40	-0.94	0.00		-2.40	-52.42	
			1220	1		-1.64	0.52	0.09	0.10	-1.64	-22.89	
				4		0.36	0.39	0.00			-33.85	
1006	0.000	1	1219	1		-2.97	3.48	0.05	2.19	-2.97	-30.72	
				4		-2.40	-0.94	0.00		-2.40	-52.42	
			1220	1		-1.64	0.52	0.06	0.09	-1.64	-22.89	
				4		0.36	0.39	0.00			-33.85	
	0.692	1	1219	1		-3.01	3.52	0.22	2.22	-3.03	-31.45	
				4		-2.42	-0.95	0.00		-2.42	-53.57	
			1220	1		-1.68	0.55	0.01	0.11	-1.68	-23.61	
				4		0.35	0.38	0.00			-34.98	
1007	0.000	1	1219	1		-3.01	3.52	0.13	2.22	-3.02	-31.45	
				4		-2.42	-0.95	0.00		-2.42	-53.57	
			1220	1		-1.68	0.55	0.01	0.11	-1.68	-23.61	
				4		0.35	0.38	0.00			-34.98	
	0.692	1	1219	1		-2.99	3.49	0.03	2.19	-2.99	-30.87	
				4		-2.43	-0.96	0.00		-2.43	-52.63	
			1220	1		-1.74	0.28	0.40	0.14	-1.82	-23.72	
				4		0.31	0.29	0.00			-34.35	
1008	0.000	1	1219	1		-2.99	3.49	0.26	2.19	-3.01	-30.87	
				4		-2.43	-0.96	0.00		-2.43	-52.63	
			1220	1		-1.74	0.28	0.44	0.16	-1.84	-23.73	
				4		0.31	0.29	0.00			-34.35	
	0.692	1	1219	1		-2.83	3.29	0.19	2.07	-2.84	-28.46	
				4		-2.30	-0.89	0.00		-2.30	-48.67	
			1220	1		-1.48	-0.14	0.49	0.19	-1.61	-20.74	
				4		0.64	0.45	0.00			-29.02	
1009	0.000	1	1219	1		-2.83	3.29	0.33	2.07	-2.86	-28.47	
				4		-2.30	-0.90	0.00		-2.30	-48.67	
			1220	1		-1.48	-0.13	0.53	0.22	-1.63	-20.75	
				4		0.64	0.45	0.00			-29.02	
	0.692	1	1219	1		-2.59	2.84	0.35	1.76	-2.63	-24.76	
				4		-2.08	-0.82	0.00		-2.08	-42.14	
			1220	1		-1.12	-0.65	0.59	0.27	-1.34	-16.24	
				4		1.04	0.65	0.00			-21.22	
1010	0.000	1	1219	1		-2.59	2.84	0.54	1.76	-2.68	-24.76	
				4		-2.08	-0.82	0.00		-2.08	-42.14	
			1220	1		-1.12	-0.65	0.63	0.31	-1.37	-16.24	
				4		1.04	0.65	0.00			-21.23	
	0.692	1	1219	1		-2.17	2.32	0.49	1.43	-2.27	-18.99	
				4		-1.72	-0.64	0.00		-1.72	-32.51	
			1220	1		-0.66	-1.28	0.68	0.39	-1.32	-10.20	
				4		1.50	0.87	0.00			-10.95	
1011	0.000	1	1219	1		-2.17	2.32	0.64	1.44	-2.33	-18.99	
				4		-1.72	-0.64	0.00		-1.72	-32.52	
			1220	1		-0.66	-1.27	0.73	0.43	-1.32	-10.21	
				4		1.50	0.87	0.00			-10.96	
	0.692	1	1219	1		-1.74	1.73	0.39	1.05	-1.82	-12.22	
				4		-1.40	-0.50	0.00		-1.40	-21.21	
			1220	1		-0.10	-2.01	0.78	0.67	-2.04	-14.19	
				4		2.03	1.13	0.00			-14.19	
1012	0.000	1	1219	1		-1.74	1.73	0.48	1.05	-1.85	-12.22	
				4		-1.40	-0.50	0.00		-1.40	-21.21	
			1220	1		-0.10	-2.01	0.81	0.71	-2.04	-14.20	
				4		2.03	1.14	0.00			-14.20	
	0.692	1	1219	1		-1.27	1.31	0.31	0.80	-1.33	7.13	
				4		-1.19	-0.39	0.00		-1.19	-8.52	
			1220	1		0.57	-2.91	1.09	1.18	-2.96	-21.50	
				4		2.67	1.45	0.00			-21.50	
1013	0.000	1	1219	1		-1.20	1.21	0.25	0.74	-1.25	6.44	
				4		-1.07	-0.33	0.00		-1.07	-7.70	
			1220	1		0.43	-2.48	0.82	0.98	-2.49	-18.55	
				4		2.33	1.31	0.00			-18.55	
	0.692	1	1219	1		-1.67	1.74	1.00	1.09	-2.08	-11.69	
				4		-1.31	-0.43	0.00		-1.31	-20.53	
			1220	1		-0.18	-1.72	0.68	0.54	-1.73	-12.18	
				4		1.82	1.06	0.00			-12.18	
1014	0.000	1	1219	1		-1.67	1.74	0.62	1.07	-1.85	-11.68	
				4		-1.31	-0.43	0.00		-1.31	-20.50	
			1220	1		-0.18	-1.71	0.68	0.55	-1.72	-12.17	
				4		1.82	1.05	0.00			-12.17	
	0.692	1	1219	1		-2.20	2.42	0.57	1.51	-2.32	-19.13	
				4		-1.79	-0.66	0.00		-1.79	-32.96	
			1220	1		-0.72	-1.03	0.64	0.35	-1.16	-10.48	
				4		1.34	0.82	0.00			-11.98	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
CHARACTERISTIC COMBINATION (0.60*f_{ck}), (0.80*f_{yk})

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		-2.20	2.42	0.39	1.50	-2.26	-19.12	
				4		-1.78	-0.66	0.00		-1.78	-32.95	
				1220	1	-0.72	-1.03	0.62	0.33	-1.15	-10.48	
		4		1.34	0.82	0.00			-11.99			
		1219	1	-2.59	3.02	0.61	1.91	-2.71	-24.68			
		4		-2.14	-0.82	0.00		-2.14	-42.52			
	0.692	1	1220	1		-1.17	-0.43	0.57	0.27	-1.37	-16.45	
				4		0.90	0.60	0.00			-22.10	
				1219	1	-2.59	3.02	0.29	1.90	-2.62	-24.67	
		4		-2.14	-0.82	0.00		-2.14	-42.51			
		1220	1	-1.17	-0.43	0.53	0.24	-1.35	-16.45			
		4		0.90	0.60	0.00			-22.10			
1016	0.000	1	1219	1		-2.86	3.34	0.58	2.11	-2.96	-28.67	
				4		-2.35	-0.93	0.00		-2.35	-49.08	
				1220	1	-1.52	0.07	0.48	0.19	-1.65	-20.92	
		4		0.52	0.41	0.00			-29.81			
		1219	1	-2.86	3.34	0.21	2.10	-2.88	-28.66			
		4		-2.35	-0.93	0.00		-2.35	-49.07			
	0.692	1	1220	1		-1.52	0.07	0.43	0.16	-1.62	-20.92	
				4		0.52	0.41	0.00			-29.81	
				1219	1	-3.02	3.57	0.18	2.25	-3.03	-31.02	
		4		-2.49	-0.99	0.00		-2.49	-53.05			
		1220	1	-1.63	0.44	0.07	0.04	-1.63	-22.81			
		4		0.41	0.41	0.00			-33.54			
1017	0.000	1	1219	1		-3.02	3.57	0.06	2.25	-3.03	-31.02	
				4		-2.49	-0.99	0.00		-2.49	-53.05	
				1220	1	-1.63	0.44	0.06	0.03	-1.63	-22.81	
		4		0.41	0.41	0.00			-33.54			
		1219	1	-3.07	3.60	0.30	2.27	-3.09	-31.75			
		4		-2.51	-1.00	0.00		-2.51	-54.21			
	0.692	1	1220	1		-1.67	0.48	0.01	0.05	-1.67	-23.53	
				4		0.40	0.40	0.00			-34.67	
				1219	1	-3.07	3.60	0.12	2.27	-3.07	-31.75	
		4		-2.51	-1.00	0.00		-2.51	-54.20			
		1220	1	-1.67	0.48	0.01	0.05	-1.67	-23.53			
		4		0.40	0.40	0.00			-34.67			
1018	0.000	1	1219	1		-3.04	3.58	0.03	2.26	-3.04	-31.14	
				4		-2.52	-1.01	0.00		-2.52	-53.25	
				1220	1	-1.73	0.28	0.36	0.11	-1.79	-23.57	
		4		0.34	0.31	0.00			-34.13			
		1219	1	-3.04	3.58	0.39	2.26	-3.09	-31.14			
		4		-2.52	-1.01	0.00		-2.52	-53.26			
	0.692	1	1220	1		-1.73	0.28	0.36	0.11	-1.79	-23.57	
				4		0.34	0.31	0.00			-34.13	
				1219	1	-2.88	3.40	0.13	2.15	-2.89	-28.78	
		4		-2.40	-0.95	0.00		-2.40	-49.39			
		1220	1	-1.46	-0.13	0.41	0.14	-1.56	-20.60			
		4		0.67	0.47	0.00			-28.82			
1019	0.000	1	1219	1		-2.88	3.40	0.37	2.15	-2.93	-28.78	
				4		-2.40	-0.95	0.00		-2.40	-49.40	
				1220	1	-1.46	-0.13	0.43	0.15	-1.57	-20.60	
		4		0.67	0.47	0.00			-28.82			
		1219	1	-2.63	3.00	0.16	1.88	-2.64	-24.95			
		4		-2.19	-0.86	0.00		-2.19	-42.84			
	0.692	1	1220	1		-1.11	-0.64	0.48	0.20	-1.26	-16.12	
				4		1.06	0.66	0.00			-21.08	
				1219	1	-2.63	3.00	0.38	1.88	-2.67	-24.95	
		4		-2.19	-0.86	0.00		-2.19	-42.84			
		1220	1	-1.11	-0.64	0.52	0.23	-1.29	-16.12			
		4		1.06	0.66	0.00			-21.07			
1020	0.000	1	1219	1		-2.24	2.54	0.44	1.59	-2.31	-19.34	
				4		-1.88	-0.70	0.00		-1.88	-33.57	
				1220	1	-0.66	-1.25	0.57	0.29	-1.26	-10.13	
		4		1.50	0.88	0.00			-10.93			
		1219	1	-2.24	2.54	0.81	1.60	-2.47	-19.34			
		4		-1.88	-0.70	0.00		-1.88	-33.58			
	0.692	1	1220	1		-0.66	-1.25	0.59	0.31	-1.26	-10.13	
				4		1.50	0.88	0.00			-10.93	
				1219	1	-1.68	1.82	0.55	1.13	-1.82	11.82	
		4		-1.35	-0.44	0.00		-1.35	-20.82			
		1220	1	-0.12	-1.94	0.64	0.54	-1.95	-13.70			
		4		1.99	1.12	0.00			-13.70			
1021	0.000	1	1219	1		-1.68	1.82	0.86	1.15	-2.00	11.84	
				4		-1.36	-0.44	0.00		-1.36	-20.84	
				1220	1	-0.11	-1.94	0.64	0.54	-1.95	-13.72	
	4		1.99	1.12	0.00			-13.72				
	0.692	1	1219	1		-1.68	1.82	0.86	1.15	-2.00	11.84	
				4		-1.36	-0.44	0.00		-1.36	-20.84	
1220				1	-0.11	-1.94	0.64	0.54	-1.95	-13.72		
4		1.99	1.12	0.00			-13.72					

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	0.692	1	1219	1		-1.24	1.37	0.22	0.85	-1.28	7.54	
				4		-1.18	-0.37	0.00		-1.18	-8.40	
			1220	1		0.50	-2.71	0.83	1.04	-2.72	-20.11	
				4		2.50	1.38	0.00			-20.11	
1025	0.000	1	1219	1		-1.14	1.20	0.49	0.78	-1.31	6.45	
				4		-1.01	-0.28	0.00		-1.01	-7.20	
			1220	1		0.55	-2.52	1.05	1.08	-2.54	-18.72	
				4		2.48	1.41	0.00			-18.72	
	0.692	1	1219	1		-1.63	1.65	0.50	1.03	-1.76	-11.49	
				4		-1.23	-0.39	0.00		-1.23	-20.00	
			1220	1		-0.12	-1.65	0.94	0.82	-1.68	-11.71	
				4		1.88	1.11	0.00			-11.71	
1026	0.000	1	1219	1		-1.63	1.65	0.43	1.03	-1.73	-11.49	
				4		-1.23	-0.39	0.00		-1.23	-20.00	
			1220	1		-0.12	-1.65	0.89	0.77	-1.68	-11.70	
				4		1.88	1.11	0.00			-11.70	
	0.692	1	1219	1		-2.02	2.11	0.50	1.29	-2.12	-18.00	
				4		-1.43	-0.48	0.00		-1.43	-30.60	
			1220	1		-0.69	-0.91	0.84	0.54	-1.30	-10.21	
				4		1.34	0.85	0.00			-11.94	
1027	0.000	1	1219	1		-2.02	2.11	0.42	1.29	-2.09	-18.00	
				4		-1.44	-0.48	0.00		-1.44	-30.60	
			1220	1		-0.69	-0.91	0.76	0.47	-1.23	-10.20	
				4		1.34	0.85	0.00			-11.93	
	0.692	1	1219	1		-2.39	2.61	0.39	1.61	-2.44	-23.44	
				4		-1.73	-0.61	0.00		-1.73	-39.72	
			1220	1		-1.16	-0.28	0.71	0.39	-1.46	-16.25	
				4		0.88	0.62	0.00			-22.22	
1028	0.000	1	1219	1		-2.39	2.61	0.32	1.61	-2.43	-23.44	
				4		-1.73	-0.61	0.00		-1.73	-39.73	
			1220	1		-1.16	-0.28	0.63	0.33	-1.41	-16.24	
				4		0.88	0.62	0.00			-22.21	
	0.692	1	1219	1		-2.67	2.95	0.31	1.83	-2.70	-27.47	
				4		-1.95	-0.73	0.00		-1.95	-46.39	
			1220	1		-1.52	0.23	0.58	0.27	-1.69	-20.74	
				4		0.49	0.43	0.00			-29.99	
1029	0.000	1	1219	1		-2.67	2.95	0.16	1.82	-2.68	-27.47	
				4		-1.95	-0.73	0.00		-1.95	-46.39	
			1220	1		-1.52	0.23	0.50	0.21	-1.65	-20.74	
				4		0.49	0.43	0.00			-29.98	
	0.692	1	1219	1		-2.82	3.14	0.13	1.95	-2.83	-29.76	
				4		-2.06	-0.78	0.00		-2.06	-50.19	
			1220	1		-1.64	0.50	0.11	0.10	-1.65	-22.79	
				4		0.40	0.41	0.00			-33.65	
1030	0.000	1	1219	1		-2.82	3.14	0.06	1.95	-2.82	-29.76	
				4		-2.06	-0.78	0.00		-2.06	-50.19	
			1220	1		-1.64	0.50	0.07	0.07	-1.64	-22.79	
				4		0.40	0.41	0.00			-33.65	
	0.692	1	1219	1		-2.86	3.17	0.18	1.96	-2.87	-30.47	
				4		-2.07	-0.78	0.00		-2.07	-51.28	
			1220	1		-1.68	0.53	0.02	0.09	-1.68	-23.51	
				4		0.38	0.40	0.00			-34.77	
1031	0.000	1	1219	1		-2.86	3.17	0.10	1.96	-2.87	-30.47	
				4		-2.07	-0.78	0.00		-2.07	-51.28	
			1220	1		-1.68	0.53	0.02	0.09	-1.68	-23.51	
				4		0.38	0.40	0.00			-34.77	
	0.692	1	1219	1		-2.83	3.16	0.01	1.96	-2.83	-29.83	
				4		-2.08	-0.79	0.00		-2.08	-50.34	
			1220	1		-1.64	0.50	0.07	0.07	-1.64	-22.79	
				4		0.40	0.41	0.00			-33.65	
1032	0.000	1	1219	1		-2.83	3.16	0.18	1.96	-2.84	-29.83	
				4		-2.08	-0.79	0.00		-2.08	-50.33	
			1220	1		-1.64	0.50	0.11	0.10	-1.65	-22.79	
				4		0.40	0.41	0.00			-33.65	
	0.692	1	1219	1		-2.68	2.99	0.17	1.86	-2.69	-27.50	
				4		-1.98	-0.73	0.00		-1.98	-46.54	
			1220	1		-1.47	0.02	0.44	0.17	-1.58	-20.52	
				4		0.63	0.47	0.00			-29.10	
1033	0.000	1	1219	1		-2.68	2.99	0.25	1.86	-2.70	-27.50	
				4		-1.98	-0.73	0.00		-1.98	-46.54	
			1220	1		-1.47	0.02	0.53	0.23	-1.62	-20.52	
				4		0.63	0.47	0.00			-29.11	
	0.692	1	1219	1		-2.43	2.67	0.26	1.66	-2.45	-23.68	
				4		-1.80	-0.65	0.00		-1.80	-40.22	
			1220	1		-1.11	-0.50	0.58	0.28	-1.33	-16.01	
				4		1.02	0.67	0.00			-21.32	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
CHARACTERISTIC COMBINATION (0.60*f_{ck}), (0.80*f_{yk})

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		-2.43	2.67	0.41	1.66	-2.49	-23.68	
			4			-1.80	-0.65	0.00		-1.80	-40.22	
			1220	1		-1.11	-0.50	0.66	0.35	-1.39	-16.02	
			4			1.02	0.67	0.00			-21.32	
	0.692	1	1219	1		-2.04	2.21	0.40	1.37	-2.10	-18.06	
			4			-1.49	-0.50	0.00		-1.49	-30.96	
			1220	1		-0.64	-1.13	0.71	0.42	-1.21	-9.97	
			4			1.48	0.90	0.00			-11.03	
1035	0.000	1	1219	1		-2.04	2.21	0.48	1.37	-2.13	-18.06	
			4			-1.49	-0.50	0.00		-1.49	-30.95	
			1220	1		-0.64	-1.13	0.79	0.49	-1.28	-9.97	
			4			1.48	0.90	0.00			-11.04	
	0.692	1	1219	1		-1.67	1.85	0.39	1.17	-1.75	12.07	
			4			-1.36	-0.44	0.00		-1.36	-20.82	
			1220	1		-0.07	-1.87	0.84	0.75	-1.89	-13.22	
			4			2.02	1.16	0.00			-13.22	
1036	0.000	1	1219	1		-1.67	1.85	0.47	1.18	-1.78	12.08	
			4			-1.36	-0.44	0.00		-1.36	-20.83	
			1220	1		-0.07	-1.87	0.89	0.80	-1.89	-13.23	
			4			2.02	1.16	0.00			-13.23	
	0.692	1	1219	1		-1.18	1.41	0.46	0.92	-1.33	7.89	
			4			-1.14	-0.32	0.00		-1.14	-8.03	
			1220	1		0.60	-2.73	1.01	1.11	-2.74	-20.19	
			4			2.62	1.46	0.00			-20.19	
2001	0.000	2	1219	3		-0.78	0.71	0.07	0.06	-0.78	0.78	
			1220	3		2.85	-2.96	0.27	0.25	-2.96	2.96	
	0.300	2	1219	3		-0.89	0.82	0.08	0.06	-0.89	0.89	
			1220	3		2.59	-2.69	0.26	0.23	-2.69	2.69	
2002	0.000	2	1219	3		-0.90	0.83	0.07	0.06	-0.90	0.90	
			1220	3		2.59	-2.70	0.31	0.28	-2.70	2.70	
	0.300	2	1219	3		-0.99	0.92	0.08	0.07	-0.99	0.99	
			1220	3		2.28	-2.39	0.29	0.26	-2.39	2.39	
2003	0.000	2	1219	3		-1.07	1.01	0.09	0.08	-1.07	1.07	
			1220	3		2.47	-2.59	0.30	0.27	-2.59	2.59	
	0.300	2	1219	3		-0.97	0.91	0.08	0.07	-0.97	0.97	
			1220	3		2.79	-2.90	0.32	0.29	-2.90	2.90	
2004	0.000	2	1219	3		-0.97	0.91	0.09	0.07	-0.97	0.97	
			1220	3		2.78	-2.90	0.26	0.23	-2.90	2.90	
	0.300	2	1219	3		-0.85	0.79	0.08	0.07	-0.85	0.85	
			1220	3		3.05	-3.16	0.28	0.25	-3.16	3.16	
2005	0.000	2	1219	3		-0.81	0.76	0.05	0.04	-0.81	0.81	
			1220	3		2.64	-2.71	0.23	0.21	-2.71	2.71	
	0.300	2	1219	3		-0.89	0.85	0.06	0.05	-0.89	0.89	
			1220	3		2.41	-2.49	0.21	0.20	-2.49	2.49	
2006	0.000	2	1219	3		-0.90	0.85	0.05	0.04	-0.90	0.90	
			1220	3		2.42	-2.49	0.25	0.24	-2.49	2.49	
	0.300	2	1219	3		-0.96	0.92	0.06	0.05	-0.96	0.96	
			1220	3		2.15	-2.23	0.24	0.22	-2.23	2.23	
2007	0.000	2	1219	3		-1.07	1.05	0.06	0.06	-1.07	1.07	
			1220	3		2.31	-2.41	0.24	0.21	-2.41	2.41	
	0.300	2	1219	3		-1.00	0.98	0.05	0.05	-1.00	1.00	
			1220	3		2.58	-2.68	0.26	0.24	-2.68	2.68	
2008	0.000	2	1219	3		-0.99	0.98	0.06	0.05	-0.99	0.99	
			1220	3		2.58	-2.68	0.22	0.19	-2.68	2.68	
	0.300	2	1219	3		-0.90	0.89	0.05	0.05	-0.90	0.90	
			1220	3		2.79	-2.89	0.23	0.21	-2.89	2.89	
2009	0.000	2	1219	3		-0.62	0.62	0.11	0.11	-0.62	0.62	
			1220	3		2.80	-2.80	0.25	0.25	-2.80	2.80	
	0.300	2	1219	3		-0.77	0.77	0.12	0.12	-0.77	0.77	
			1220	3		2.56	-2.55	0.24	0.24	-2.55	2.56	
2010	0.000	2	1219	3		-0.77	0.77	0.12	0.12	-0.77	0.77	
			1220	3		2.56	-2.56	0.29	0.29	-2.56	2.56	
	0.300	2	1219	3		-0.91	0.91	0.13	0.13	-0.91	0.91	
			1220	3		2.28	-2.27	0.27	0.27	-2.27	2.28	
2011	0.000	2	1219	3		-1.03	1.07	0.13	0.13	-1.03	1.07	
			1220	3		2.41	-2.45	0.27	0.26	-2.45	2.45	
	0.300	2	1219	3		-0.90	0.94	0.12	0.12	-0.90	0.94	
			1220	3		2.69	-2.73	0.29	0.28	-2.73	2.73	
2012	0.000	2	1219	3		-0.90	0.94	0.12	0.12	-0.90	0.94	
			1220	3		2.69	-2.72	0.23	0.22	-2.72	2.72	
	0.300	2	1219	3		-0.75	0.79	0.11	0.11	-0.75	0.79	
			1220	3		2.92	-2.96	0.25	0.24	-2.96	2.96	

Stresses [MPa]		NOS	LC	M	A	sig-	sig+	tau	sig-I	sig-II	sig-s	N/Npl*
Beam	x[m]											
Total System			MIN	1		-3.07	-2.91	0.01	0.03	-1.15	-3.41	
Total System			MAX	1		0.60	3.60	1.09	2.27	-3.09	-31.75	
Total System			MIN	3		-1.07	-3.16	0.05	0.04	-0.62	0.00	
Total System			MAX	3		3.05	1.07	0.32	0.29	-3.16	0.00	n 218

OPISTIKH MEΛETH/TECHNIKO TB/L=10.70
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*
Total System			MIN 4	-2.52	-1.01	0.00			-7.20	
Total System			MAX 4	2.67	1.46	0.00		-2.52	-54.21	
Total System			MIN12	-7.20	-8.26					
Total System			MAX12	-54.21	26.62					

Reviewed Maximum Values Material 1

Biaxial compression 15.00 MPa utilisation 0.205 LC C01

Reviewed Maximum Values Material 3

Biaxial compression 15.00 MPa utilisation 0.211 LC C02

Reviewed Maximum Values Material 4

Biaxial compression 15.00 MPa utilisation 0.168 LC C01

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
		0.205	0.000	0.000	0.000	0.136	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		0.211	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
		0.211	0.000	0.000	0.000	0.136	0.000	0.000	0.000	0.000	0.000

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70

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

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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 1.350 0.000	PXX	0.003 [MN/m2]
			9.500 1.350 0.000		0.003 [MN/m2]
			9.500 -0.350 0.000		0.002 [MN/m2]
			0.000 -0.350 0.000		0.002 [MN/m2]
Area	QGRP 3	3.000	(--)	activated	87.37 percent
			0.000 1.350 0.000	PXX	0.003 [MN/m2]
			9.500 1.350 0.000		0.003 [MN/m2]
			9.500 -0.350 0.000		0.002 [MN/m2]
			0.000 -0.350 0.000		0.002 [MN/m2]
Area	QGRP 4	3.000	(--)	activated	12.63 percent
			9.500 -1.350 0.000	PXX	0.004 [MN/m2]
			0.000 -1.350 0.000		0.004 [MN/m2]
			0.000 -0.350 0.000		0.004 [MN/m2]
			9.500 -0.350 0.000		0.004 [MN/m2]
Area	QGRP 3	3.000	(--)	activated	87.37 percent
			9.500 -1.350 0.000	PXX	0.004 [MN/m2]
			0.000 -1.350 0.000		0.004 [MN/m2]
			0.000 -0.350 0.000		0.004 [MN/m2]
			9.500 -0.350 0.000		0.004 [MN/m2]
Area	QGRP 4	3.000	(--)	activated	12.63 percent
			0.000 1.350 0.000	PXX	0.000 [MN/m2]
			9.500 1.350 0.000		0.000 [MN/m2]
			9.500 -0.350 0.000		0.000 [MN/m2]
			0.000 -0.350 0.000		0.000 [MN/m2]
Area	QGRP 3	3.000	(--)	activated	87.37 percent
			0.000 1.350 0.000	PXX	0.000 [MN/m2]
			9.500 1.350 0.000		0.000 [MN/m2]
			9.500 -0.350 0.000		0.000 [MN/m2]
			0.000 -0.350 0.000		0.000 [MN/m2]
Area	QGRP 4	3.000	(--)	activated	12.63 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	0.692	0.003		[MN/m]				
1001	PXX	0.000	0.692	0.002		[MN/m]				
1002	PXX	0.000	0.692	0.002		[MN/m]				
1002	PXX	0.000	0.692	0.003		[MN/m]				
1003	PXX	0.000	0.692	0.003		[MN/m]				
1003	PXX	0.000	0.692	0.002		[MN/m]				
1004	PXX	0.000	0.692	0.002		[MN/m]				
1004	PXX	0.000	0.692	0.003		[MN/m]				
1005	PXX	0.000	0.692	0.003		[MN/m]				
1005	PXX	0.000	0.692	0.002		[MN/m]				
1006	PXX	0.000	0.692	0.002		[MN/m]				
1006	PXX	0.000	0.692	0.003		[MN/m]				
1007	PXX	0.000	0.692	0.003		[MN/m]				
1007	PXX	0.000	0.692	0.002		[MN/m]				
1008	PXX	0.000	0.692	0.002		[MN/m]				
1008	PXX	0.000	0.692	0.003		[MN/m]				
1009	PXX	0.000	0.692	0.003		[MN/m]				
1009	PXX	0.000	0.692	0.002		[MN/m]				
1010	PXX	0.000	0.692	0.003		[MN/m]				
1010	PXX	0.000	0.692	0.002		[MN/m]				
1011	PXX	0.000	0.692	0.002		[MN/m]				
1011	PXX	0.000	0.692	0.003		[MN/m]				
1012	PXX	0.000	0.692	0.003		[MN/m]				
1012	PXX	0.000	0.692	0.002		[MN/m]				
1013	PXX	0.000	0.692	0.002		[MN/m]				
1013	PXX	0.000	0.692	0.003		[MN/m]				
1014	PXX	0.000	0.692	0.003		[MN/m]				
1014	PXX	0.000	0.692	0.002		[MN/m]				
1015	PXX	0.000	0.692	0.002		[MN/m]				
1015	PXX	0.000	0.692	0.003		[MN/m]				
1016	PXX	0.000	0.692	0.003		[MN/m]				
1016	PXX	0.000	0.692	0.002		[MN/m]				
1017	PXX	0.000	0.692	0.002		[MN/m]				
1017	PXX	0.000	0.692	0.003		[MN/m]				
1018	PXX	0.000	0.692	0.003		[MN/m]				
1018	PXX	0.000	0.692	0.002		[MN/m]				
1019	PXX	0.000	0.692	0.003		[MN/m]				
1019	PXX	0.000	0.692	0.002		[MN/m]				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	0.692	0.002		[MN/m]				
1020	PXX	0.000	0.692	0.003		[MN/m]				
1021	PXX	0.000	0.692	0.003		[MN/m]				
1021	PXX	0.000	0.692	0.002		[MN/m]				
1022	PXX	0.000	0.692	0.002		[MN/m]				
1022	PXX	0.000	0.692	0.003		[MN/m]				
1023	PXX	0.000	0.692	0.003		[MN/m]				
1023	PXX	0.000	0.692	0.002		[MN/m]				
1024	PXX	0.000	0.692	0.002		[MN/m]				
1024	PXX	0.000	0.692	0.003		[MN/m]				
1025	PXX	0.000	0.692	0.003		[MN/m]				
1025	PXX	0.000	0.692	0.002		[MN/m]				
1026	PXX	0.000	0.692	0.002		[MN/m]				
1026	PXX	0.000	0.692	0.003		[MN/m]				
1027	PXX	0.000	0.692	0.003		[MN/m]				
1027	PXX	0.000	0.692	0.002		[MN/m]				
1028	PXX	0.000	0.692	0.003		[MN/m]				
1028	PXX	0.000	0.692	0.002		[MN/m]				
1029	PXX	0.000	0.692	0.002		[MN/m]				
1029	PXX	0.000	0.692	0.003		[MN/m]				
1030	PXX	0.000	0.692	0.003		[MN/m]				
1030	PXX	0.000	0.692	0.002		[MN/m]				
1031	PXX	0.000	0.692	0.002		[MN/m]				
1031	PXX	0.000	0.692	0.003		[MN/m]				
1032	PXX	0.000	0.692	0.003		[MN/m]				
1032	PXX	0.000	0.692	0.002		[MN/m]				
1033	PXX	0.000	0.692	0.002		[MN/m]				
1033	PXX	0.000	0.692	0.003		[MN/m]				
1034	PXX	0.000	0.692	0.003		[MN/m]				
1034	PXX	0.000	0.692	0.002		[MN/m]				
1035	PXX	0.000	0.692	0.002		[MN/m]				
1035	PXX	0.000	0.692	0.003		[MN/m]				
1036	PXX	0.000	0.692	0.003		[MN/m]				
1036	PXX	0.000	0.692	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	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	1.350	0.000	PYY	0.003 [MN/m2]
			9.500	1.350	0.000		0.003 [MN/m2]
			9.500	-0.350	0.000		0.002 [MN/m2]
			0.000	-0.350	0.000		0.002 [MN/m2]
Area	QGRP	3	3.000	(--)	activated		87.37 percent
			0.000	1.350	0.000	PYY	0.003 [MN/m2]
			9.500	1.350	0.000		0.003 [MN/m2]
			9.500	-0.350	0.000		0.002 [MN/m2]
			0.000	-0.350	0.000		0.002 [MN/m2]
Area	QGRP	4	3.000	(--)	activated		12.63 percent
			9.500	-1.350	0.000	PYY	0.004 [MN/m2]
			0.000	-1.350	0.000		0.004 [MN/m2]
			0.000	-0.350	0.000		0.004 [MN/m2]
			9.500	-0.350	0.000		0.004 [MN/m2]
Area	QGRP	3	3.000	(--)	activated		87.37 percent
			9.500	-1.350	0.000	PYY	0.004 [MN/m2]
			0.000	-1.350	0.000		0.004 [MN/m2]
			0.000	-0.350	0.000		0.004 [MN/m2]
			9.500	-0.350	0.000		0.004 [MN/m2]
Area	QGRP	4	3.000	(--)	activated		12.63 percent
			0.000	1.350	0.000	PYY	0.000 [MN/m2]
			9.500	1.350	0.000		0.000 [MN/m2]
			9.500	-0.350	0.000		0.000 [MN/m2]
			0.000	-0.350	0.000		0.000 [MN/m2]
Area	QGRP	3	3.000	(--)	activated		87.37 percent
			0.000	1.350	0.000	PYY	0.000 [MN/m2]
			9.500	1.350	0.000		0.000 [MN/m2]
			9.500	-0.350	0.000		0.000 [MN/m2]

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
		w[m]	x[m]	y[m]	z[m]
QGRP	4	3.000	0.000 (--)	-0.350 activated	0.000 12.63 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	0.692	0.003		[MN/m]				
1001	PYY	0.000	0.692	0.002		[MN/m]				
1002	PYY	0.000	0.692	0.002		[MN/m]				
1002	PYY	0.000	0.692	0.003		[MN/m]				
1003	PYY	0.000	0.692	0.003		[MN/m]				
1003	PYY	0.000	0.692	0.002		[MN/m]				
1004	PYY	0.000	0.692	0.002		[MN/m]				
1004	PYY	0.000	0.692	0.003		[MN/m]				
1005	PYY	0.000	0.692	0.003		[MN/m]				
1005	PYY	0.000	0.692	0.002		[MN/m]				
1006	PYY	0.000	0.692	0.002		[MN/m]				
1006	PYY	0.000	0.692	0.003		[MN/m]				
1007	PYY	0.000	0.692	0.003		[MN/m]				
1007	PYY	0.000	0.692	0.002		[MN/m]				
1008	PYY	0.000	0.692	0.002		[MN/m]				
1008	PYY	0.000	0.692	0.003		[MN/m]				
1009	PYY	0.000	0.692	0.003		[MN/m]				
1009	PYY	0.000	0.692	0.002		[MN/m]				
1010	PYY	0.000	0.692	0.003		[MN/m]				
1010	PYY	0.000	0.692	0.002		[MN/m]				
1011	PYY	0.000	0.692	0.002		[MN/m]				
1011	PYY	0.000	0.692	0.003		[MN/m]				
1012	PYY	0.000	0.692	0.003		[MN/m]				
1012	PYY	0.000	0.692	0.002		[MN/m]				
1013	PYY	0.000	0.692	0.002		[MN/m]				
1013	PYY	0.000	0.692	0.003		[MN/m]				
1014	PYY	0.000	0.692	0.003		[MN/m]				
1014	PYY	0.000	0.692	0.002		[MN/m]				
1015	PYY	0.000	0.692	0.002		[MN/m]				
1015	PYY	0.000	0.692	0.003		[MN/m]				
1016	PYY	0.000	0.692	0.003		[MN/m]				
1016	PYY	0.000	0.692	0.002		[MN/m]				
1017	PYY	0.000	0.692	0.002		[MN/m]				
1017	PYY	0.000	0.692	0.003		[MN/m]				
1018	PYY	0.000	0.692	0.003		[MN/m]				
1018	PYY	0.000	0.692	0.002		[MN/m]				
1019	PYY	0.000	0.692	0.003		[MN/m]				
1019	PYY	0.000	0.692	0.002		[MN/m]				
1020	PYY	0.000	0.692	0.002		[MN/m]				
1020	PYY	0.000	0.692	0.003		[MN/m]				
1021	PYY	0.000	0.692	0.003		[MN/m]				
1021	PYY	0.000	0.692	0.002		[MN/m]				
1022	PYY	0.000	0.692	0.002		[MN/m]				
1022	PYY	0.000	0.692	0.003		[MN/m]				
1023	PYY	0.000	0.692	0.003		[MN/m]				
1023	PYY	0.000	0.692	0.002		[MN/m]				
1024	PYY	0.000	0.692	0.002		[MN/m]				
1024	PYY	0.000	0.692	0.003		[MN/m]				
1025	PYY	0.000	0.692	0.003		[MN/m]				
1025	PYY	0.000	0.692	0.002		[MN/m]				
1026	PYY	0.000	0.692	0.002		[MN/m]				
1026	PYY	0.000	0.692	0.003		[MN/m]				
1027	PYY	0.000	0.692	0.003		[MN/m]				
1027	PYY	0.000	0.692	0.002		[MN/m]				
1028	PYY	0.000	0.692	0.003		[MN/m]				
1028	PYY	0.000	0.692	0.002		[MN/m]				
1029	PYY	0.000	0.692	0.002		[MN/m]				
1029	PYY	0.000	0.692	0.003		[MN/m]				
1030	PYY	0.000	0.692	0.003		[MN/m]				
1030	PYY	0.000	0.692	0.002		[MN/m]				
1031	PYY	0.000	0.692	0.002		[MN/m]				
1031	PYY	0.000	0.692	0.003		[MN/m]				
1032	PYY	0.000	0.692	0.003		[MN/m]				
1032	PYY	0.000	0.692	0.002		[MN/m]				
1033	PYY	0.000	0.692	0.002		[MN/m]				
1033	PYY	0.000	0.692	0.003		[MN/m]				
1034	PYY	0.000	0.692	0.003		[MN/m]				
1034	PYY	0.000	0.692	0.002		[MN/m]				
1035	PYY	0.000	0.692	0.002		[MN/m]				
1035	PYY	0.000	0.692	0.003		[MN/m]				
1036	PYY	0.000	0.692	0.003		[MN/m]				
1036	PYY	0.000	0.692	0.002		[MN/m]				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

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	Referenceto	Projection w[m]	Coordinates X[m]	Y[m]	Z[m]	Type	Loadvalue
Area			0.000	1.350	0.000	PG	0.004 [MN/m2]
			9.500	1.350	0.000		0.004 [MN/m2]
			9.500	-0.350	0.000		0.002 [MN/m2]
			0.000	-0.350	0.000		0.002 [MN/m2]
Area	QGRP 3	3.000	(--)	activated			87.37 percent
			0.000	1.350	0.000	PG	0.004 [MN/m2]
			9.500	1.350	0.000		0.004 [MN/m2]
			9.500	-0.350	0.000		0.002 [MN/m2]
			0.000	-0.350	0.000		0.002 [MN/m2]
Area	QGRP 4	3.000	(--)	activated			12.63 percent
			9.500	-1.350	0.000	PG	0.005 [MN/m2]
			0.000	-1.350	0.000		0.005 [MN/m2]
			0.000	-0.350	0.000		0.005 [MN/m2]
			9.500	-0.350	0.000		0.005 [MN/m2]
Area	QGRP 3	3.000	(--)	activated			87.37 percent
			9.500	-1.350	0.000	PG	0.005 [MN/m2]
			0.000	-1.350	0.000		0.005 [MN/m2]
			0.000	-0.350	0.000		0.005 [MN/m2]
			9.500	-0.350	0.000		0.005 [MN/m2]
Area	QGRP 4	3.000	(--)	activated			12.63 percent
			0.000	1.350	0.000	PG	0.000 [MN/m2]
			9.500	1.350	0.000		0.000 [MN/m2]
			9.500	-0.350	0.000		0.000 [MN/m2]
			0.000	-0.350	0.000		0.000 [MN/m2]
Area	QGRP 3	3.000	(--)	activated			87.37 percent
			0.000	1.350	0.000	PG	0.000 [MN/m2]
			9.500	1.350	0.000		0.000 [MN/m2]
			9.500	-0.350	0.000		0.000 [MN/m2]
			0.000	-0.350	0.000		0.000 [MN/m2]
QGRP 4	3.000	(--)	activated				12.63 percent

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	0.692	0.003	[MN/m]				
1001	PG	0.000	0.692	0.002	[MN/m]				
1002	PG	0.000	0.692	0.002	[MN/m]				
1002	PG	0.000	0.692	0.003	[MN/m]				
1003	PG	0.000	0.692	0.003	[MN/m]				
1003	PG	0.000	0.692	0.002	[MN/m]				
1004	PG	0.000	0.692	0.002	[MN/m]				
1004	PG	0.000	0.692	0.003	[MN/m]				
1005	PG	0.000	0.692	0.003	[MN/m]				
1005	PG	0.000	0.692	0.002	[MN/m]				
1006	PG	0.000	0.692	0.002	[MN/m]				
1006	PG	0.000	0.692	0.003	[MN/m]				
1007	PG	0.000	0.692	0.003	[MN/m]				
1007	PG	0.000	0.692	0.002	[MN/m]				
1008	PG	0.000	0.692	0.002	[MN/m]				
1008	PG	0.000	0.692	0.003	[MN/m]				
1009	PG	0.000	0.692	0.003	[MN/m]				
1009	PG	0.000	0.692	0.002	[MN/m]				
1010	PG	0.000	0.692	0.003	[MN/m]				
1010	PG	0.000	0.692	0.002	[MN/m]				
1011	PG	0.000	0.692	0.002	[MN/m]				
1011	PG	0.000	0.692	0.003	[MN/m]				
1012	PG	0.000	0.692	0.003	[MN/m]				
1012	PG	0.000	0.692	0.002	[MN/m]				
1013	PG	0.000	0.692	0.002	[MN/m]				
1013	PG	0.000	0.692	0.003	[MN/m]				
1014	PG	0.000	0.692	0.003	[MN/m]				
1014	PG	0.000	0.692	0.002	[MN/m]				
1015	PG	0.000	0.692	0.002	[MN/m]				
1015	PG	0.000	0.692	0.003	[MN/m]				
1016	PG	0.000	0.692	0.003	[MN/m]				
1016	PG	0.000	0.692	0.002	[MN/m]				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
1017	PG	0.000	0.692	0.002		[MN/m]				
1017	PG	0.000	0.692	0.003		[MN/m]				
1018	PG	0.000	0.692	0.003		[MN/m]				
1018	PG	0.000	0.692	0.002		[MN/m]				
1019	PG	0.000	0.692	0.003		[MN/m]				
1019	PG	0.000	0.692	0.002		[MN/m]				
1020	PG	0.000	0.692	0.002		[MN/m]				
1020	PG	0.000	0.692	0.003		[MN/m]				
1021	PG	0.000	0.692	0.003		[MN/m]				
1021	PG	0.000	0.692	0.002		[MN/m]				
1022	PG	0.000	0.692	0.002		[MN/m]				
1022	PG	0.000	0.692	0.003		[MN/m]				
1023	PG	0.000	0.692	0.003		[MN/m]				
1023	PG	0.000	0.692	0.002		[MN/m]				
1024	PG	0.000	0.692	0.002		[MN/m]				
1024	PG	0.000	0.692	0.003		[MN/m]				
1025	PG	0.000	0.692	0.003		[MN/m]				
1025	PG	0.000	0.692	0.002		[MN/m]				
1026	PG	0.000	0.692	0.002		[MN/m]				
1026	PG	0.000	0.692	0.003		[MN/m]				
1027	PG	0.000	0.692	0.003		[MN/m]				
1027	PG	0.000	0.692	0.002		[MN/m]				
1028	PG	0.000	0.692	0.003		[MN/m]				
1028	PG	0.000	0.692	0.002		[MN/m]				
1029	PG	0.000	0.692	0.002		[MN/m]				
1029	PG	0.000	0.692	0.003		[MN/m]				
1030	PG	0.000	0.692	0.003		[MN/m]				
1030	PG	0.000	0.692	0.002		[MN/m]				
1031	PG	0.000	0.692	0.002		[MN/m]				
1031	PG	0.000	0.692	0.003		[MN/m]				
1032	PG	0.000	0.692	0.003		[MN/m]				
1032	PG	0.000	0.692	0.002		[MN/m]				
1033	PG	0.000	0.692	0.002		[MN/m]				
1033	PG	0.000	0.692	0.003		[MN/m]				
1034	PG	0.000	0.692	0.003		[MN/m]				
1034	PG	0.000	0.692	0.002		[MN/m]				
1035	PG	0.000	0.692	0.002		[MN/m]				
1035	PG	0.000	0.692	0.003		[MN/m]				
1036	PG	0.000	0.692	0.003		[MN/m]				
1036	PG	0.000	0.692	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	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	from	to	inc	Load Prim Type LC/CC	Load val.	Dimension	Variation dP/dx	dP/dY	dP/dz
	3000	3999	1	PG	0.018	[MN/m2]			
	4000	4999	1	PG	0.018	[MN/m2]			

Load Case 205 ΟΜΟΦΟΡΕΣ ΣΕΙΣΜΙΚΕΣ ΩΘΗΣΕΙΣ 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	1.350	0.000 PXX 0.023 [MN/m2]
			0.000	1.350	0.800 0.023 [MN/m2]
			0.000	-1.350	0.800 0.023 [MN/m2]
			0.000	-1.350	0.000 0.023 [MN/m2]
					activated 100.00 percent
Area	QGRP	8	3.000		
			9.500	1.350	0.000 PXX 0.023 [MN/m2]
			9.500	1.350	0.800 0.023 [MN/m2]
			9.500	-1.350	0.800 0.023 [MN/m2]
			9.500	-1.350	0.000 0.023 [MN/m2]
					activated 100.00 percent
	QGRP	8	3.000		

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
9001	PXX	0.000	0.550	0.006	[MN/m]				
9002	PXX	0.000	0.550	0.015	[MN/m]				
9003	PXX	0.000	0.550	0.020	[MN/m]				
9004	PXX	0.000	0.550	0.015	[MN/m]				
9005	PXX	0.000	0.550	0.006	[MN/m]				
9006	PXX	0.000	0.550	0.006	[MN/m]				
9007	PXX	0.000	0.550	0.015	[MN/m]				
9008	PXX	0.000	0.550	0.020	[MN/m]				
9009	PXX	0.000	0.550	0.015	[MN/m]				
9010	PXX	0.000	0.550	0.006	[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	0.031	[MN/m]				
11004	PXX	0.000	0.550	0.032	[MN/m]				
12001	PXX	0.000	1.000	0.031	[MN/m]	0.031			
12002	PXX	0.000	1.000	0.031	[MN/m]				
12003	PXX	0.000	1.000	0.031	[MN/m]				
12004	PXX	0.000	1.000	0.031	[MN/m]				
12005	PXX	0.000	1.000	0.031	[MN/m]				
12006	PXX	0.000	1.000	0.031	[MN/m]				
12007	PXX	0.000	1.000	0.031	[MN/m]				
12008	PXX	0.000	1.000	0.031	[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 1.350 0.000	PXX	0.003 [MN/m2]
			9.500 1.350 0.000		0.003 [MN/m2]
			9.500 -0.350 0.000		0.002 [MN/m2]
			0.000 -0.350 0.000		0.002 [MN/m2]
Area	QGRP	3	(--)	activated	87.37 percent
			0.000 1.350 0.000	PXX	0.003 [MN/m2]
			9.500 1.350 0.000		0.003 [MN/m2]
			9.500 -0.350 0.000		0.002 [MN/m2]
			0.000 -0.350 0.000		0.002 [MN/m2]
Area	QGRP	4	(--)	activated	12.63 percent
			9.500 -1.350 0.000	PXX	0.004 [MN/m2]
			0.000 -1.350 0.000		0.004 [MN/m2]
			0.000 -0.350 0.000		0.004 [MN/m2]
			9.500 -0.350 0.000		0.004 [MN/m2]
Area	QGRP	3	(--)	activated	87.37 percent
			9.500 -1.350 0.000	PXX	0.004 [MN/m2]
			0.000 -1.350 0.000		0.004 [MN/m2]
			0.000 -0.350 0.000		0.004 [MN/m2]
			9.500 -0.350 0.000		0.004 [MN/m2]
Area	QGRP	4	(--)	activated	12.63 percent
			0.000 1.350 0.000	PXX	0.000 [MN/m2]
			9.500 1.350 0.000		0.000 [MN/m2]
			9.500 -0.350 0.000		0.000 [MN/m2]
			0.000 -0.350 0.000		0.000 [MN/m2]
Area	QGRP	3	(--)	activated	87.37 percent
			0.000 1.350 0.000	PXX	0.000 [MN/m2]
			9.500 1.350 0.000		0.000 [MN/m2]
			9.500 -0.350 0.000		0.000 [MN/m2]
			0.000 -0.350 0.000		0.000 [MN/m2]
Area	QGRP	4	(--)	activated	12.63 percent
			0.000 1.350 0.000	PXX	0.023 [MN/m2]
			0.000 1.350 0.800		0.023 [MN/m2]
			0.000 -1.350 0.800		0.023 [MN/m2]
			0.000 -1.350 0.000		0.023 [MN/m2]
Area	QGRP	8	(--)	activated	100.00 percent
			9.500 1.350 0.000	PXX	0.023 [MN/m2]
			9.500 1.350 0.800		0.023 [MN/m2]
			9.500 -1.350 0.800		0.023 [MN/m2]
			9.500 -1.350 0.000		0.023 [MN/m2]
	QGRP	8	(--)	activated	100.00 percent

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
1001	PXX	0.000	0.692	0.002		[MN/m]				
1001	PXX	0.000	0.692	0.003		[MN/m]				
1002	PXX	0.000	0.692	0.003		[MN/m]				
1002	PXX	0.000	0.692	0.002		[MN/m]				
1003	PXX	0.000	0.692	0.002		[MN/m]				
1003	PXX	0.000	0.692	0.003		[MN/m]				
1004	PXX	0.000	0.692	0.003		[MN/m]				
1004	PXX	0.000	0.692	0.002		[MN/m]				
1005	PXX	0.000	0.692	0.002		[MN/m]				
1005	PXX	0.000	0.692	0.003		[MN/m]				
1006	PXX	0.000	0.692	0.003		[MN/m]				
1006	PXX	0.000	0.692	0.002		[MN/m]				
1007	PXX	0.000	0.692	0.002		[MN/m]				
1007	PXX	0.000	0.692	0.003		[MN/m]				
1008	PXX	0.000	0.692	0.003		[MN/m]				
1008	PXX	0.000	0.692	0.002		[MN/m]				
1009	PXX	0.000	0.692	0.002		[MN/m]				
1009	PXX	0.000	0.692	0.003		[MN/m]				
1010	PXX	0.000	0.692	0.002		[MN/m]				
1010	PXX	0.000	0.692	0.003		[MN/m]				
1011	PXX	0.000	0.692	0.003		[MN/m]				
1011	PXX	0.000	0.692	0.002		[MN/m]				
1012	PXX	0.000	0.692	0.002		[MN/m]				
1012	PXX	0.000	0.692	0.003		[MN/m]				
1013	PXX	0.000	0.692	0.003		[MN/m]				
1013	PXX	0.000	0.692	0.002		[MN/m]				
1014	PXX	0.000	0.692	0.002		[MN/m]				
1014	PXX	0.000	0.692	0.003		[MN/m]				
1015	PXX	0.000	0.692	0.003		[MN/m]				
1015	PXX	0.000	0.692	0.002		[MN/m]				
1016	PXX	0.000	0.692	0.002		[MN/m]				
1016	PXX	0.000	0.692	0.003		[MN/m]				
1017	PXX	0.000	0.692	0.003		[MN/m]				
1017	PXX	0.000	0.692	0.002		[MN/m]				
1018	PXX	0.000	0.692	0.002		[MN/m]				
1018	PXX	0.000	0.692	0.003		[MN/m]				
1019	PXX	0.000	0.692	0.002		[MN/m]				
1019	PXX	0.000	0.692	0.003		[MN/m]				
1020	PXX	0.000	0.692	0.003		[MN/m]				
1020	PXX	0.000	0.692	0.002		[MN/m]				
1021	PXX	0.000	0.692	0.002		[MN/m]				
1021	PXX	0.000	0.692	0.003		[MN/m]				
1022	PXX	0.000	0.692	0.003		[MN/m]				
1022	PXX	0.000	0.692	0.002		[MN/m]				
1023	PXX	0.000	0.692	0.002		[MN/m]				
1023	PXX	0.000	0.692	0.003		[MN/m]				
1024	PXX	0.000	0.692	0.003		[MN/m]				
1024	PXX	0.000	0.692	0.002		[MN/m]				
1025	PXX	0.000	0.692	0.002		[MN/m]				
1025	PXX	0.000	0.692	0.003		[MN/m]				
1026	PXX	0.000	0.692	0.003		[MN/m]				
1026	PXX	0.000	0.692	0.002		[MN/m]				
1027	PXX	0.000	0.692	0.002		[MN/m]				
1027	PXX	0.000	0.692	0.003		[MN/m]				
1028	PXX	0.000	0.692	0.002		[MN/m]				
1028	PXX	0.000	0.692	0.003		[MN/m]				
1029	PXX	0.000	0.692	0.003		[MN/m]				
1029	PXX	0.000	0.692	0.002		[MN/m]				
1030	PXX	0.000	0.692	0.002		[MN/m]				
1030	PXX	0.000	0.692	0.003		[MN/m]				
1031	PXX	0.000	0.692	0.003		[MN/m]				
1031	PXX	0.000	0.692	0.002		[MN/m]				
1032	PXX	0.000	0.692	0.002		[MN/m]				
1032	PXX	0.000	0.692	0.003		[MN/m]				
1033	PXX	0.000	0.692	0.003		[MN/m]				
1033	PXX	0.000	0.692	0.002		[MN/m]				
1034	PXX	0.000	0.692	0.002		[MN/m]				
1034	PXX	0.000	0.692	0.003		[MN/m]				
1035	PXX	0.000	0.692	0.003		[MN/m]				
1035	PXX	0.000	0.692	0.002		[MN/m]				
1036	PXX	0.000	0.692	0.002		[MN/m]				
1036	PXX	0.000	0.692	0.003		[MN/m]				
9001	PXX	0.000	0.550	0.006		[MN/m]				
9002	PXX	0.000	0.550	0.015		[MN/m]				
9003	PXX	0.000	0.550	0.020		[MN/m]				
9004	PXX	0.000	0.550	0.015		[MN/m]				
9005	PXX	0.000	0.550	0.006		[MN/m]				
9006	PXX	0.000	0.550	0.006		[MN/m]				
9007	PXX	0.000	0.550	0.015		[MN/m]				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
9008	PXX	0.000	0.550	0.020		[MN/m]				
9009	PXX	0.000	0.550	0.015		[MN/m]				
9010	PXX	0.000	0.550	0.006		[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	0.031		[MN/m]				
11004	PXX	0.000	0.550	0.032	0.031	[MN/m]				
12001	PXX	0.000	1.000	0.031		[MN/m]				
12002	PXX	0.000	1.000	0.031		[MN/m]				
12003	PXX	0.000	1.000	0.031		[MN/m]				
12004	PXX	0.000	1.000	0.031		[MN/m]				
12005	PXX	0.000	1.000	0.031		[MN/m]				
12006	PXX	0.000	1.000	0.031		[MN/m]				
12007	PXX	0.000	1.000	0.031		[MN/m]				
12008	PXX	0.000	1.000	0.031		[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	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	1.350	0.000
			9.500	1.350	0.000
			9.500	-0.350	0.000
			0.000	-0.350	0.000
Area	QGRP	3	3.000	(--)	activated
			0.000	1.350	0.000
			9.500	1.350	0.000
			9.500	-0.350	0.000
			0.000	-0.350	0.000
Area	QGRP	4	3.000	(--)	activated
			9.500	-1.350	0.000
			0.000	-1.350	0.000
			0.000	-0.350	0.000
			9.500	-0.350	0.000
Area	QGRP	3	3.000	(--)	activated
			9.500	-1.350	0.000
			0.000	-1.350	0.000
			0.000	-0.350	0.000
			9.500	-0.350	0.000
Area	QGRP	4	3.000	(--)	activated
			0.000	1.350	0.000
			9.500	1.350	0.000
			9.500	-0.350	0.000
			0.000	-0.350	0.000
Area	QGRP	3	3.000	(--)	activated
			0.000	1.350	0.000
			9.500	1.350	0.000
			9.500	-0.350	0.000
			0.000	-0.350	0.000
Area	QGRP	4	3.000	(--)	activated
			0.000	1.350	0.000
			0.000	1.350	0.800
			0.000	-1.350	0.800
			0.000	-1.350	0.000
Area	QGRP	8	3.000	(--)	activated
			9.500	1.350	0.000
			9.500	1.350	0.800
			9.500	-1.350	0.800
			9.500	-1.350	0.000
Area	QGRP	8	3.000	(--)	activated

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	0.692	-0.002		[MN/m]				
1001	PXX	0.000	0.692	-0.003		[MN/m]				
1002	PXX	0.000	0.692	-0.003		[MN/m]				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
1002	PXX	0.000	0.692	-0.002		[MN/m]				
1003	PXX	0.000	0.692	-0.002		[MN/m]				
1003	PXX	0.000	0.692	-0.003		[MN/m]				
1004	PXX	0.000	0.692	-0.003		[MN/m]				
1004	PXX	0.000	0.692	-0.002		[MN/m]				
1005	PXX	0.000	0.692	-0.002		[MN/m]				
1005	PXX	0.000	0.692	-0.003		[MN/m]				
1006	PXX	0.000	0.692	-0.003		[MN/m]				
1006	PXX	0.000	0.692	-0.002		[MN/m]				
1007	PXX	0.000	0.692	-0.002		[MN/m]				
1007	PXX	0.000	0.692	-0.003		[MN/m]				
1008	PXX	0.000	0.692	-0.003		[MN/m]				
1008	PXX	0.000	0.692	-0.002		[MN/m]				
1009	PXX	0.000	0.692	-0.002		[MN/m]				
1009	PXX	0.000	0.692	-0.003		[MN/m]				
1010	PXX	0.000	0.692	-0.002		[MN/m]				
1010	PXX	0.000	0.692	-0.003		[MN/m]				
1011	PXX	0.000	0.692	-0.003		[MN/m]				
1011	PXX	0.000	0.692	-0.002		[MN/m]				
1012	PXX	0.000	0.692	-0.002		[MN/m]				
1012	PXX	0.000	0.692	-0.003		[MN/m]				
1013	PXX	0.000	0.692	-0.003		[MN/m]				
1013	PXX	0.000	0.692	-0.002		[MN/m]				
1014	PXX	0.000	0.692	-0.002		[MN/m]				
1014	PXX	0.000	0.692	-0.003		[MN/m]				
1015	PXX	0.000	0.692	-0.003		[MN/m]				
1015	PXX	0.000	0.692	-0.002		[MN/m]				
1016	PXX	0.000	0.692	-0.002		[MN/m]				
1016	PXX	0.000	0.692	-0.003		[MN/m]				
1017	PXX	0.000	0.692	-0.003		[MN/m]				
1017	PXX	0.000	0.692	-0.002		[MN/m]				
1018	PXX	0.000	0.692	-0.002		[MN/m]				
1018	PXX	0.000	0.692	-0.003		[MN/m]				
1019	PXX	0.000	0.692	-0.002		[MN/m]				
1019	PXX	0.000	0.692	-0.003		[MN/m]				
1020	PXX	0.000	0.692	-0.003		[MN/m]				
1020	PXX	0.000	0.692	-0.002		[MN/m]				
1021	PXX	0.000	0.692	-0.002		[MN/m]				
1021	PXX	0.000	0.692	-0.003		[MN/m]				
1022	PXX	0.000	0.692	-0.003		[MN/m]				
1022	PXX	0.000	0.692	-0.002		[MN/m]				
1023	PXX	0.000	0.692	-0.002		[MN/m]				
1023	PXX	0.000	0.692	-0.003		[MN/m]				
1024	PXX	0.000	0.692	-0.003		[MN/m]				
1024	PXX	0.000	0.692	-0.002		[MN/m]				
1025	PXX	0.000	0.692	-0.002		[MN/m]				
1025	PXX	0.000	0.692	-0.003		[MN/m]				
1026	PXX	0.000	0.692	-0.003		[MN/m]				
1026	PXX	0.000	0.692	-0.002		[MN/m]				
1027	PXX	0.000	0.692	-0.002		[MN/m]				
1027	PXX	0.000	0.692	-0.003		[MN/m]				
1028	PXX	0.000	0.692	-0.002		[MN/m]				
1028	PXX	0.000	0.692	-0.003		[MN/m]				
1029	PXX	0.000	0.692	-0.003		[MN/m]				
1029	PXX	0.000	0.692	-0.002		[MN/m]				
1030	PXX	0.000	0.692	-0.002		[MN/m]				
1030	PXX	0.000	0.692	-0.003		[MN/m]				
1031	PXX	0.000	0.692	-0.003		[MN/m]				
1031	PXX	0.000	0.692	-0.002		[MN/m]				
1032	PXX	0.000	0.692	-0.002		[MN/m]				
1032	PXX	0.000	0.692	-0.003		[MN/m]				
1033	PXX	0.000	0.692	-0.003		[MN/m]				
1033	PXX	0.000	0.692	-0.002		[MN/m]				
1034	PXX	0.000	0.692	-0.002		[MN/m]				
1034	PXX	0.000	0.692	-0.003		[MN/m]				
1035	PXX	0.000	0.692	-0.003		[MN/m]				
1035	PXX	0.000	0.692	-0.002		[MN/m]				
1036	PXX	0.000	0.692	-0.002		[MN/m]				
1036	PXX	0.000	0.692	-0.003		[MN/m]				
9001	PXX	0.000	0.550	-0.006		[MN/m]				
9002	PXX	0.000	0.550	-0.015		[MN/m]				
9003	PXX	0.000	0.550	-0.020		[MN/m]				
9004	PXX	0.000	0.550	-0.015		[MN/m]				
9005	PXX	0.000	0.550	-0.006		[MN/m]				
9006	PXX	0.000	0.550	-0.006		[MN/m]				
9007	PXX	0.000	0.550	-0.015		[MN/m]				
9008	PXX	0.000	0.550	-0.020		[MN/m]				
9009	PXX	0.000	0.550	-0.015		[MN/m]				
9010	PXX	0.000	0.550	-0.006		[MN/m]				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	-0.031		[MN/m]				
11004	PXX	0.000	0.550	-0.032	-0.031	[MN/m]				
12001	PXX	0.000	1.000	-0.031		[MN/m]				
12002	PXX	0.000	1.000	-0.031		[MN/m]				
12003	PXX	0.000	1.000	-0.031		[MN/m]				
12004	PXX	0.000	1.000	-0.031		[MN/m]				
12005	PXX	0.000	1.000	-0.031		[MN/m]				
12006	PXX	0.000	1.000	-0.031		[MN/m]				
12007	PXX	0.000	1.000	-0.031		[MN/m]				
12008	PXX	0.000	1.000	-0.031		[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 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	Referenceto	Projection w[m]	Coordinates X[m]	Y[m]	Z[m]	Type	Loadvalue
Area			0.000	1.350	0.000	PYY	0.003 [MN/m2]
			9.500	1.350	0.000		0.003 [MN/m2]
			9.500	-0.350	0.000		0.002 [MN/m2]
			0.000	-0.350	0.000		0.002 [MN/m2]
Area	QGRP	3	3.000	(--)	activated		87.37 percent
			0.000	1.350	0.000	PYY	0.003 [MN/m2]
			9.500	1.350	0.000		0.003 [MN/m2]
			9.500	-0.350	0.000		0.002 [MN/m2]
			0.000	-0.350	0.000		0.002 [MN/m2]
Area	QGRP	4	3.000	(--)	activated		12.63 percent
			9.500	-1.350	0.000	PYY	0.004 [MN/m2]
			0.000	-1.350	0.000		0.004 [MN/m2]
			0.000	-0.350	0.000		0.004 [MN/m2]
			9.500	-0.350	0.000		0.004 [MN/m2]
Area	QGRP	3	3.000	(--)	activated		87.37 percent
			9.500	-1.350	0.000	PYY	0.004 [MN/m2]
			0.000	-1.350	0.000		0.004 [MN/m2]
			0.000	-0.350	0.000		0.004 [MN/m2]
			9.500	-0.350	0.000		0.004 [MN/m2]
Area	QGRP	4	3.000	(--)	activated		12.63 percent
			0.000	1.350	0.000	PYY	0.000 [MN/m2]
			9.500	1.350	0.000		0.000 [MN/m2]
			9.500	-0.350	0.000		0.000 [MN/m2]
			0.000	-0.350	0.000		0.000 [MN/m2]
Area	QGRP	3	3.000	(--)	activated		87.37 percent
			0.000	1.350	0.000	PYY	0.000 [MN/m2]
			9.500	1.350	0.000		0.000 [MN/m2]
			9.500	-0.350	0.000		0.000 [MN/m2]
			0.000	-0.350	0.000		0.000 [MN/m2]
Area	QGRP	4	3.000	(--)	activated		12.63 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	0.692	0.002		[MN/m]				
1001	PYY	0.000	0.692	0.003		[MN/m]				
1002	PYY	0.000	0.692	0.003		[MN/m]				
1002	PYY	0.000	0.692	0.002		[MN/m]				
1003	PYY	0.000	0.692	0.002		[MN/m]				
1003	PYY	0.000	0.692	0.003		[MN/m]				
1004	PYY	0.000	0.692	0.003		[MN/m]				
1004	PYY	0.000	0.692	0.002		[MN/m]				
1005	PYY	0.000	0.692	0.002		[MN/m]				
1005	PYY	0.000	0.692	0.003		[MN/m]				
1006	PYY	0.000	0.692	0.003		[MN/m]				
1006	PYY	0.000	0.692	0.002		[MN/m]				
1007	PYY	0.000	0.692	0.002		[MN/m]				
1007	PYY	0.000	0.692	0.003		[MN/m]				
1008	PYY	0.000	0.692	0.003		[MN/m]				
1008	PYY	0.000	0.692	0.002		[MN/m]				
1009	PYY	0.000	0.692	0.002		[MN/m]				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
1009	PYY	0.000	0.692	0.003		[MN/m]				
1010	PYY	0.000	0.692	0.002		[MN/m]				
1010	PYY	0.000	0.692	0.003		[MN/m]				
1011	PYY	0.000	0.692	0.003		[MN/m]				
1011	PYY	0.000	0.692	0.002		[MN/m]				
1012	PYY	0.000	0.692	0.002		[MN/m]				
1012	PYY	0.000	0.692	0.003		[MN/m]				
1013	PYY	0.000	0.692	0.003		[MN/m]				
1013	PYY	0.000	0.692	0.002		[MN/m]				
1014	PYY	0.000	0.692	0.002		[MN/m]				
1014	PYY	0.000	0.692	0.003		[MN/m]				
1015	PYY	0.000	0.692	0.003		[MN/m]				
1015	PYY	0.000	0.692	0.002		[MN/m]				
1016	PYY	0.000	0.692	0.002		[MN/m]				
1016	PYY	0.000	0.692	0.003		[MN/m]				
1017	PYY	0.000	0.692	0.003		[MN/m]				
1017	PYY	0.000	0.692	0.002		[MN/m]				
1018	PYY	0.000	0.692	0.002		[MN/m]				
1018	PYY	0.000	0.692	0.003		[MN/m]				
1019	PYY	0.000	0.692	0.002		[MN/m]				
1019	PYY	0.000	0.692	0.003		[MN/m]				
1020	PYY	0.000	0.692	0.003		[MN/m]				
1020	PYY	0.000	0.692	0.002		[MN/m]				
1021	PYY	0.000	0.692	0.002		[MN/m]				
1021	PYY	0.000	0.692	0.003		[MN/m]				
1022	PYY	0.000	0.692	0.003		[MN/m]				
1022	PYY	0.000	0.692	0.002		[MN/m]				
1023	PYY	0.000	0.692	0.002		[MN/m]				
1023	PYY	0.000	0.692	0.003		[MN/m]				
1024	PYY	0.000	0.692	0.003		[MN/m]				
1024	PYY	0.000	0.692	0.002		[MN/m]				
1025	PYY	0.000	0.692	0.002		[MN/m]				
1025	PYY	0.000	0.692	0.003		[MN/m]				
1026	PYY	0.000	0.692	0.003		[MN/m]				
1026	PYY	0.000	0.692	0.002		[MN/m]				
1027	PYY	0.000	0.692	0.002		[MN/m]				
1027	PYY	0.000	0.692	0.003		[MN/m]				
1028	PYY	0.000	0.692	0.002		[MN/m]				
1028	PYY	0.000	0.692	0.003		[MN/m]				
1029	PYY	0.000	0.692	0.003		[MN/m]				
1029	PYY	0.000	0.692	0.002		[MN/m]				
1030	PYY	0.000	0.692	0.002		[MN/m]				
1030	PYY	0.000	0.692	0.003		[MN/m]				
1031	PYY	0.000	0.692	0.003		[MN/m]				
1031	PYY	0.000	0.692	0.002		[MN/m]				
1032	PYY	0.000	0.692	0.002		[MN/m]				
1032	PYY	0.000	0.692	0.003		[MN/m]				
1033	PYY	0.000	0.692	0.003		[MN/m]				
1033	PYY	0.000	0.692	0.002		[MN/m]				
1034	PYY	0.000	0.692	0.002		[MN/m]				
1034	PYY	0.000	0.692	0.003		[MN/m]				
1035	PYY	0.000	0.692	0.003		[MN/m]				
1035	PYY	0.000	0.692	0.002		[MN/m]				
1036	PYY	0.000	0.692	0.002		[MN/m]				
1036	PYY	0.000	0.692	0.003		[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 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	1.350	0.000
			9.500	1.350	0.000
			9.500	-0.350	0.000
			0.000	-0.350	0.000
			(--)	activated	87.37 percent
Area	QGRP	3	3.000	0.000	1.350
				0.000	0.000
				9.500	1.350
				9.500	0.000

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
			w[m] x[m] y[m] z[m]		
Area	QGRP	4	3.000	PYY	9.500 -0.350 0.000 -0.002 [MN/m2]
					0.000 -0.350 0.000 -0.002 [MN/m2]
					(--) activated 12.63 percent
					9.500 -1.350 0.000 -0.004 [MN/m2]
					0.000 -1.350 0.000 -0.004 [MN/m2]
Area	QGRP	3	3.000	PYY	0.000 -0.350 0.000 -0.004 [MN/m2]
					9.500 -0.350 0.000 -0.004 [MN/m2]
					(--) activated 87.37 percent
					9.500 -1.350 0.000 -0.004 [MN/m2]
					0.000 -1.350 0.000 -0.004 [MN/m2]
Area	QGRP	4	3.000	PYY	0.000 -0.350 0.000 -0.004 [MN/m2]
					(--) activated 12.63 percent
					0.000 1.350 0.000 0.000 [MN/m2]
					9.500 1.350 0.000 0.000 [MN/m2]
					9.500 -0.350 0.000 0.000 [MN/m2]
Area	QGRP	3	3.000	PYY	0.000 -0.350 0.000 0.000 [MN/m2]
					(--) activated 87.37 percent
					0.000 1.350 0.000 0.000 [MN/m2]
					9.500 1.350 0.000 0.000 [MN/m2]
					9.500 -0.350 0.000 0.000 [MN/m2]
Area	QGRP	4	3.000		0.000 -0.350 0.000 0.000 [MN/m2]
					(--) activated 12.63 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	0.692	-0.002		[MN/m]				
1001	PYY	0.000	0.692	-0.003		[MN/m]				
1002	PYY	0.000	0.692	-0.003		[MN/m]				
1002	PYY	0.000	0.692	-0.002		[MN/m]				
1003	PYY	0.000	0.692	-0.002		[MN/m]				
1003	PYY	0.000	0.692	-0.003		[MN/m]				
1004	PYY	0.000	0.692	-0.003		[MN/m]				
1004	PYY	0.000	0.692	-0.002		[MN/m]				
1005	PYY	0.000	0.692	-0.002		[MN/m]				
1005	PYY	0.000	0.692	-0.003		[MN/m]				
1006	PYY	0.000	0.692	-0.003		[MN/m]				
1006	PYY	0.000	0.692	-0.002		[MN/m]				
1007	PYY	0.000	0.692	-0.002		[MN/m]				
1007	PYY	0.000	0.692	-0.003		[MN/m]				
1008	PYY	0.000	0.692	-0.003		[MN/m]				
1008	PYY	0.000	0.692	-0.002		[MN/m]				
1009	PYY	0.000	0.692	-0.002		[MN/m]				
1009	PYY	0.000	0.692	-0.003		[MN/m]				
1010	PYY	0.000	0.692	-0.002		[MN/m]				
1010	PYY	0.000	0.692	-0.003		[MN/m]				
1011	PYY	0.000	0.692	-0.003		[MN/m]				
1011	PYY	0.000	0.692	-0.002		[MN/m]				
1012	PYY	0.000	0.692	-0.002		[MN/m]				
1012	PYY	0.000	0.692	-0.003		[MN/m]				
1013	PYY	0.000	0.692	-0.003		[MN/m]				
1013	PYY	0.000	0.692	-0.002		[MN/m]				
1014	PYY	0.000	0.692	-0.002		[MN/m]				
1014	PYY	0.000	0.692	-0.003		[MN/m]				
1015	PYY	0.000	0.692	-0.003		[MN/m]				
1015	PYY	0.000	0.692	-0.002		[MN/m]				
1016	PYY	0.000	0.692	-0.002		[MN/m]				
1016	PYY	0.000	0.692	-0.003		[MN/m]				
1017	PYY	0.000	0.692	-0.003		[MN/m]				
1017	PYY	0.000	0.692	-0.002		[MN/m]				
1018	PYY	0.000	0.692	-0.002		[MN/m]				
1018	PYY	0.000	0.692	-0.003		[MN/m]				
1019	PYY	0.000	0.692	-0.002		[MN/m]				
1019	PYY	0.000	0.692	-0.003		[MN/m]				
1020	PYY	0.000	0.692	-0.003		[MN/m]				
1020	PYY	0.000	0.692	-0.002		[MN/m]				
1021	PYY	0.000	0.692	-0.002		[MN/m]				
1021	PYY	0.000	0.692	-0.003		[MN/m]				
1022	PYY	0.000	0.692	-0.003		[MN/m]				
1022	PYY	0.000	0.692	-0.002		[MN/m]				
1023	PYY	0.000	0.692	-0.002		[MN/m]				
1023	PYY	0.000	0.692	-0.003		[MN/m]				
1024	PYY	0.000	0.692	-0.003		[MN/m]				
1024	PYY	0.000	0.692	-0.002		[MN/m]				
1025	PYY	0.000	0.692	-0.002		[MN/m]				
1025	PYY	0.000	0.692	-0.003		[MN/m]				
1026	PYY	0.000	0.692	-0.003		[MN/m]				
1026	PYY	0.000	0.692	-0.002		[MN/m]				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
1027	PYY	0.000	0.692	-0.002		[MN/m]				
1027	PYY	0.000	0.692	-0.003		[MN/m]				
1028	PYY	0.000	0.692	-0.002		[MN/m]				
1028	PYY	0.000	0.692	-0.003		[MN/m]				
1029	PYY	0.000	0.692	-0.003		[MN/m]				
1029	PYY	0.000	0.692	-0.002		[MN/m]				
1030	PYY	0.000	0.692	-0.002		[MN/m]				
1030	PYY	0.000	0.692	-0.003		[MN/m]				
1031	PYY	0.000	0.692	-0.003		[MN/m]				
1031	PYY	0.000	0.692	-0.002		[MN/m]				
1032	PYY	0.000	0.692	-0.002		[MN/m]				
1032	PYY	0.000	0.692	-0.003		[MN/m]				
1033	PYY	0.000	0.692	-0.003		[MN/m]				
1033	PYY	0.000	0.692	-0.002		[MN/m]				
1034	PYY	0.000	0.692	-0.002		[MN/m]				
1034	PYY	0.000	0.692	-0.003		[MN/m]				
1035	PYY	0.000	0.692	-0.003		[MN/m]				
1035	PYY	0.000	0.692	-0.002		[MN/m]				
1036	PYY	0.000	0.692	-0.002		[MN/m]				
1036	PYY	0.000	0.692	-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	Coordinates	Type	Loadvalue
		w[m]	x[m]	Y[m]	Z[m]
Area			0.000	1.350	0.000
			9.500	1.350	0.000
			9.500	-0.350	0.000
			0.000	-0.350	0.000
Area	QGRP 3	3.000	(--)	activated	87.37 percent
			0.000	1.350	0.000
			9.500	1.350	0.000
			9.500	-0.350	0.000
			0.000	-0.350	0.000
Area	QGRP 4	3.000	(--)	activated	12.63 percent
			9.500	-1.350	0.000
			0.000	-1.350	0.000
			0.000	-0.350	0.000
			9.500	-0.350	0.000
Area	QGRP 3	3.000	(--)	activated	87.37 percent
			9.500	-1.350	0.000
			0.000	-1.350	0.000
			0.000	-0.350	0.000
			9.500	-0.350	0.000
Area	QGRP 4	3.000	(--)	activated	12.63 percent
			0.000	1.350	0.000
			9.500	1.350	0.000
			9.500	-0.350	0.000
			0.000	-0.350	0.000
Area	QGRP 3	3.000	(--)	activated	87.37 percent
			0.000	1.350	0.000
			9.500	1.350	0.000
			9.500	-0.350	0.000
			0.000	-0.350	0.000
Area	QGRP 4	3.000	(--)	activated	12.63 percent

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	0.692	0.002		[MN/m]				
1001	PG	0.000	0.692	0.003		[MN/m]				
1002	PG	0.000	0.692	0.003		[MN/m]				
1002	PG	0.000	0.692	0.002		[MN/m]				
1003	PG	0.000	0.692	0.002		[MN/m]				
1003	PG	0.000	0.692	0.003		[MN/m]				
1004	PG	0.000	0.692	0.003		[MN/m]				
1004	PG	0.000	0.692	0.002		[MN/m]				
1005	PG	0.000	0.692	0.002		[MN/m]				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
1005	PG	0.000	0.692	0.003		[MN/m]				
1006	PG	0.000	0.692	0.003		[MN/m]				
1006	PG	0.000	0.692	0.002		[MN/m]				
1007	PG	0.000	0.692	0.002		[MN/m]				
1007	PG	0.000	0.692	0.003		[MN/m]				
1008	PG	0.000	0.692	0.003		[MN/m]				
1008	PG	0.000	0.692	0.002		[MN/m]				
1009	PG	0.000	0.692	0.002		[MN/m]				
1009	PG	0.000	0.692	0.003		[MN/m]				
1010	PG	0.000	0.692	0.002		[MN/m]				
1010	PG	0.000	0.692	0.003		[MN/m]				
1011	PG	0.000	0.692	0.003		[MN/m]				
1011	PG	0.000	0.692	0.002		[MN/m]				
1012	PG	0.000	0.692	0.002		[MN/m]				
1012	PG	0.000	0.692	0.003		[MN/m]				
1013	PG	0.000	0.692	0.003		[MN/m]				
1013	PG	0.000	0.692	0.002		[MN/m]				
1014	PG	0.000	0.692	0.002		[MN/m]				
1014	PG	0.000	0.692	0.003		[MN/m]				
1015	PG	0.000	0.692	0.003		[MN/m]				
1015	PG	0.000	0.692	0.002		[MN/m]				
1016	PG	0.000	0.692	0.002		[MN/m]				
1016	PG	0.000	0.692	0.003		[MN/m]				
1017	PG	0.000	0.692	0.003		[MN/m]				
1017	PG	0.000	0.692	0.002		[MN/m]				
1018	PG	0.000	0.692	0.002		[MN/m]				
1018	PG	0.000	0.692	0.003		[MN/m]				
1019	PG	0.000	0.692	0.002		[MN/m]				
1019	PG	0.000	0.692	0.003		[MN/m]				
1020	PG	0.000	0.692	0.003		[MN/m]				
1020	PG	0.000	0.692	0.002		[MN/m]				
1021	PG	0.000	0.692	0.002		[MN/m]				
1021	PG	0.000	0.692	0.003		[MN/m]				
1022	PG	0.000	0.692	0.003		[MN/m]				
1022	PG	0.000	0.692	0.002		[MN/m]				
1023	PG	0.000	0.692	0.002		[MN/m]				
1023	PG	0.000	0.692	0.003		[MN/m]				
1024	PG	0.000	0.692	0.003		[MN/m]				
1024	PG	0.000	0.692	0.002		[MN/m]				
1025	PG	0.000	0.692	0.002		[MN/m]				
1025	PG	0.000	0.692	0.003		[MN/m]				
1026	PG	0.000	0.692	0.003		[MN/m]				
1026	PG	0.000	0.692	0.002		[MN/m]				
1027	PG	0.000	0.692	0.002		[MN/m]				
1027	PG	0.000	0.692	0.003		[MN/m]				
1028	PG	0.000	0.692	0.002		[MN/m]				
1028	PG	0.000	0.692	0.003		[MN/m]				
1029	PG	0.000	0.692	0.003		[MN/m]				
1029	PG	0.000	0.692	0.002		[MN/m]				
1030	PG	0.000	0.692	0.002		[MN/m]				
1030	PG	0.000	0.692	0.003		[MN/m]				
1031	PG	0.000	0.692	0.003		[MN/m]				
1031	PG	0.000	0.692	0.002		[MN/m]				
1032	PG	0.000	0.692	0.002		[MN/m]				
1032	PG	0.000	0.692	0.003		[MN/m]				
1033	PG	0.000	0.692	0.003		[MN/m]				
1033	PG	0.000	0.692	0.002		[MN/m]				
1034	PG	0.000	0.692	0.002		[MN/m]				
1034	PG	0.000	0.692	0.003		[MN/m]				
1035	PG	0.000	0.692	0.003		[MN/m]				
1035	PG	0.000	0.692	0.002		[MN/m]				
1036	PG	0.000	0.692	0.002		[MN/m]				
1036	PG	0.000	0.692	0.003		[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	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

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΣΕΙΣΜΙΚΕΣ ΜΕΜΟΝΩΜΕΝΕΣ ΦΟΡΤΙΣΕΙΣ

Meshfree Loading

Kind	Referenceto	Projection	Coordinates	Type	Loadvalue
		w[m]	x[m]	y[m]	z[m]
Area			0.000	1.350	0.000
			9.500	1.350	0.000
			9.500	-0.350	0.000
			0.000	-0.350	0.000
			(--)	activated	87.37 percent
Area	QGRP	3	3.000	0.000	1.350
			9.500	1.350	0.000
			9.500	-0.350	0.000
			0.000	-0.350	0.000
			(--)	activated	12.63 percent
Area	QGRP	4	3.000	9.500	-1.350
			0.000	-1.350	0.000
			0.000	-0.350	0.000
			9.500	-0.350	0.000
			(--)	activated	87.37 percent
Area	QGRP	3	3.000	9.500	-1.350
			0.000	-1.350	0.000
			0.000	-0.350	0.000
			9.500	-0.350	0.000
			(--)	activated	12.63 percent
Area	QGRP	4	3.000	0.000	1.350
			9.500	1.350	0.000
			9.500	-0.350	0.000
			0.000	-0.350	0.000
			(--)	activated	87.37 percent
Area	QGRP	3	3.000	0.000	1.350
			9.500	1.350	0.000
			9.500	-0.350	0.000
			0.000	-0.350	0.000
			(--)	activated	87.37 percent
Area	QGRP	4	3.000	0.000	1.350
			9.500	1.350	0.000
			9.500	-0.350	0.000
			0.000	-0.350	0.000
			(--)	activated	12.63 percent

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	0.692	-0.002	[MN/m]				
1001	PG	0.000	0.692	-0.003	[MN/m]				
1002	PG	0.000	0.692	-0.003	[MN/m]				
1002	PG	0.000	0.692	-0.002	[MN/m]				
1003	PG	0.000	0.692	-0.002	[MN/m]				
1003	PG	0.000	0.692	-0.003	[MN/m]				
1004	PG	0.000	0.692	-0.003	[MN/m]				
1004	PG	0.000	0.692	-0.002	[MN/m]				
1005	PG	0.000	0.692	-0.002	[MN/m]				
1005	PG	0.000	0.692	-0.003	[MN/m]				
1006	PG	0.000	0.692	-0.003	[MN/m]				
1006	PG	0.000	0.692	-0.002	[MN/m]				
1007	PG	0.000	0.692	-0.002	[MN/m]				
1007	PG	0.000	0.692	-0.003	[MN/m]				
1008	PG	0.000	0.692	-0.003	[MN/m]				
1008	PG	0.000	0.692	-0.002	[MN/m]				
1009	PG	0.000	0.692	-0.002	[MN/m]				
1009	PG	0.000	0.692	-0.003	[MN/m]				
1010	PG	0.000	0.692	-0.002	[MN/m]				
1010	PG	0.000	0.692	-0.003	[MN/m]				
1011	PG	0.000	0.692	-0.003	[MN/m]				
1011	PG	0.000	0.692	-0.002	[MN/m]				
1012	PG	0.000	0.692	-0.002	[MN/m]				
1012	PG	0.000	0.692	-0.003	[MN/m]				
1013	PG	0.000	0.692	-0.003	[MN/m]				
1013	PG	0.000	0.692	-0.002	[MN/m]				
1014	PG	0.000	0.692	-0.002	[MN/m]				
1014	PG	0.000	0.692	-0.003	[MN/m]				
1015	PG	0.000	0.692	-0.003	[MN/m]				
1015	PG	0.000	0.692	-0.002	[MN/m]				
1016	PG	0.000	0.692	-0.002	[MN/m]				
1016	PG	0.000	0.692	-0.003	[MN/m]				
1017	PG	0.000	0.692	-0.003	[MN/m]				
1017	PG	0.000	0.692	-0.002	[MN/m]				
1018	PG	0.000	0.692	-0.002	[MN/m]				
1018	PG	0.000	0.692	-0.003	[MN/m]				
1019	PG	0.000	0.692	-0.002	[MN/m]				
1019	PG	0.000	0.692	-0.003	[MN/m]				
1020	PG	0.000	0.692	-0.003	[MN/m]				
1020	PG	0.000	0.692	-0.002	[MN/m]				
1021	PG	0.000	0.692	-0.002	[MN/m]				
1021	PG	0.000	0.692	-0.003	[MN/m]				
1022	PG	0.000	0.692	-0.003	[MN/m]				
1022	PG	0.000	0.692	-0.002	[MN/m]				
1023	PG	0.000	0.692	-0.002	[MN/m]				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
1023	PG	0.000	0.692	-0.003		[MN/m]				
1024	PG	0.000	0.692	-0.003		[MN/m]				
1024	PG	0.000	0.692	-0.002		[MN/m]				
1025	PG	0.000	0.692	-0.002		[MN/m]				
1025	PG	0.000	0.692	-0.003		[MN/m]				
1026	PG	0.000	0.692	-0.003		[MN/m]				
1026	PG	0.000	0.692	-0.002		[MN/m]				
1027	PG	0.000	0.692	-0.002		[MN/m]				
1027	PG	0.000	0.692	-0.003		[MN/m]				
1028	PG	0.000	0.692	-0.002		[MN/m]				
1028	PG	0.000	0.692	-0.003		[MN/m]				
1029	PG	0.000	0.692	-0.003		[MN/m]				
1029	PG	0.000	0.692	-0.002		[MN/m]				
1030	PG	0.000	0.692	-0.002		[MN/m]				
1030	PG	0.000	0.692	-0.003		[MN/m]				
1031	PG	0.000	0.692	-0.003		[MN/m]				
1031	PG	0.000	0.692	-0.002		[MN/m]				
1032	PG	0.000	0.692	-0.002		[MN/m]				
1032	PG	0.000	0.692	-0.003		[MN/m]				
1033	PG	0.000	0.692	-0.003		[MN/m]				
1033	PG	0.000	0.692	-0.002		[MN/m]				
1034	PG	0.000	0.692	-0.002		[MN/m]				
1034	PG	0.000	0.692	-0.003		[MN/m]				
1035	PG	0.000	0.692	-0.003		[MN/m]				
1035	PG	0.000	0.692	-0.002		[MN/m]				
1036	PG	0.000	0.692	-0.002		[MN/m]				
1036	PG	0.000	0.692	-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 ΤΒ/Λ=10.70
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	1.267	0.244	2.567

Iteration sequence

Iteration 1 Residual	0.002	energy 197.0506 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 197.1036 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	1.267	0.244	1.980

Iteration sequence

Iteration 1 Residual	0.002	energy	192.8251 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy	192.8690 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	1.267	-0.244	2.567

Iteration sequence

Iteration 1 Residual	0.002	energy	197.3001 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy	197.3536 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	1.267	-0.244	1.980

Iteration sequence

Iteration 1 Residual	0.002	energy	193.0259 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy	193.0700 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-1.317	0.244	2.567

Iteration sequence

Iteration 1 Residual	0.002	energy	198.6852 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy	198.7442 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-1.317	0.244	1.980

Iteration sequence

Iteration 1 Residual	0.002	energy	194.3811 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy	194.4301 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-1.317	-0.244	2.567

Iteration sequence

Iteration 1 Residual	0.002	energy	198.9396 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy	198.9994 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-1.317	-0.244	1.980

Iteration sequence

Iteration 1 Residual	0.002	energy	194.5867 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy	194.6363 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	0.363	0.813	2.567

Iteration sequence

Iteration 1 Residual	0.002	energy 183.9440 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 183.9788 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	0.363	0.813	1.980

Iteration sequence

Iteration 1 Residual	0.002	energy 179.7475 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 179.7763 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	0.363	-0.813	2.567

Iteration sequence

Iteration 1 Residual	0.002	energy 184.7814 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 184.8181 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	0.363	-0.813	1.980

Iteration sequence

Iteration 1 Residual	0.002	energy 180.4224 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 180.4524 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-0.412	0.813	2.567

Iteration sequence

Iteration 1 Residual	0.002	energy 184.4110 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 184.4472 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-0.412	0.813	1.980

Iteration sequence

Iteration 1 Residual	0.002	energy 180.1911 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 180.2210 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-0.412	-0.813	2.567

Iteration sequence

Iteration 1 Residual	0.002	energy 185.2533 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 185.2918 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-0.412	-0.813	1.980

Iteration sequence

Iteration 1 Residual	0.002	energy 180.8709 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 180.9024 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	0.363	0.244	3.252

Iteration sequence

Iteration 1 Residual	0.001	energy 177.2738 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 177.2820 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	0.363	0.244	1.295

Iteration sequence

Iteration 1 Residual	0.000	energy 163.0960 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 163.1003 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	0.363	-0.244	3.252

Iteration sequence

Iteration 1 Residual	0.001	energy 177.5819 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 177.5910 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	0.363	-0.244	1.295

Iteration sequence

Iteration 1 Residual	0.000	energy 163.2416 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 163.2461 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-0.412	0.244	3.252

Iteration sequence

Iteration 1 Residual	0.001	energy 177.7699 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 177.7800 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-0.412	0.244	1.295

Iteration sequence

Iteration 1 Residual	0.000	energy 163.5141 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 163.5192 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-0.412	-0.244	3.252

Iteration sequence

Iteration 1 Residual	0.001	energy 178.0795 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 178.0905 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-0.412	-0.244	1.295

Iteration sequence

Iteration 1 Residual	0.000	energy 163.6611 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 163.6666 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ

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

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			
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	hi-upper	he-lower	hi-lower	Elem.	height
	[mm]	[mm]	[mm]	[mm]		[mm]
1	50	70	35	55	As saved	

Selection of elements

Group	from	to	inc	GEOMETRY
	all		1	

Reinforcement is saved in the data base file
Number of stored reinforcement-distribution: 522

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ

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	3001		maximum		0.25	0.80	0.16	0	1	0.068	
						0.95	0.19	0		0.495	
3	3002		maximum		0.25	0.02	0.03	0	1	0.041	
						1.40	0.28	0		0.495	
3	3003		maximum		0.25	0.01	0.03	0	1	0.040	
						1.66	0.33	0		0.496	
3	3004		maximum		0.25	0.01	0.03	0	1	0.033	
						1.82	0.36	0		0.496	
3	3005		maximum		0.25	0.01	0.03	0	1	0.027	
						1.88	0.38	0		0.496	
3	3006		maximum		0.25	0.01	0.03	0	1	0.020	
						1.90	0.38	0		0.496	
3	3007		maximum		0.25	0.74	0.29	0	1	0.051	
						1.07	0.21	0		0.495	
3	3008		maximum		0.25	0.07	0.16	0	1	0.044	
						1.44	0.29	0		0.496	
3	3009		maximum		0.25	0.03	0.14	0	1	0.040	
						1.71	0.34	0		0.496	
3	3010		maximum		0.25	0.03	0.13	0	1	0.035	
						1.87	0.37	0		0.496	
3	3011		maximum		0.25	0.03	0.13	0	1	0.032	
						1.92	0.38	0		0.496	
3	3012		maximum		0.25	0.03	0.13	0	1	0.030	
						1.87	0.37	0		0.496	
3	3013		maximum		0.25	0.87	0.56	0	1	0.053	
						0.91	0.18	0		0.495	
3	3014		maximum		0.25	0.09	0.34	0	1	0.043	
						1.41	0.28	0		0.496	
3	3015		maximum		0.25	0.05	0.24	0	1	0.036	
						1.68	0.34	0		0.496	
3	3016		maximum		0.25	0.04	0.21	0	1	0.036	
						1.85	0.37	0		0.496	
3	3017		maximum		0.25	0.04	0.21	0	1	0.035	
						1.90	0.38	0		0.496	
3	3018		maximum		0.25	0.04	0.20	0	1	0.035	
						1.86	0.37	0		0.496	
3	3019		maximum		0.25	0.81	0.62	0	1	0.059	
						0.87	0.17	0		0.495	
3	3020		maximum		0.25	0.12	0.34	0	1	0.040	
						1.41	0.28	0		0.495	
3	3021		maximum		0.25	0.04	0.19	0	1	0.035	
						1.69	0.34	0		0.495	
3	3022		maximum		0.25	0.02	0.12	0	1	0.027	
						1.86	0.37	0		0.496	
3	3023		maximum		0.25	0.02	0.08	0	1	0.022	
						1.91	0.38	0		0.496	
3	3024		maximum		0.25	0.01	0.06	0	1	0.016	
						1.91	0.38	0		0.496	
3	3025		maximum		0.25	0.79	0.64	0	1	0.056	
						0.95	0.19	0		0.495	
3	3026		maximum		0.25	0.17	0.52	0	1	0.049	
						1.39	0.28	0		0.496	
3	3027		maximum		0.25	0.05	0.27	0	1	0.037	
						1.71	0.34	0		0.496	
3	3028		maximum		0.25	0.03	0.17	0	1	0.029	
						1.89	0.38	0		0.496	
3	3029		maximum		0.25	0.02	0.11	0	1	0.023	
						1.94	0.39	0		0.496	
3	3030		maximum		0.25	0.02	0.09	0	1	0.019	
						1.92	0.38	0		0.496	
3	3031		maximum		0.25	0.85	0.66	0	1	0.050	
						0.89	0.18	0		0.495	
3	3032		maximum		0.25	0.10	0.47	0	1	0.054	
						1.39	0.28	0		0.496	
3	3033		maximum		0.25	0.06	0.29	0	1	0.047	
						1.65	0.33	0		0.496	
3	3034		maximum		0.25	0.04	0.22	0	1	0.046	
						1.83	0.37	0		0.496	
3	3035		maximum		0.25	0.04	0.18	0	1	0.045	
						1.88	0.38	0		0.496	
3	3036		maximum		0.25	0.03	0.16	0	1	0.044	
						1.89	0.38	0		0.496	
3	3037		maximum		0.25	0.77	0.57	0	1	0.055	
						0.89	0.18	0		0.495	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
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		
		MBW							
3	3038	maximum		0.25	0.11	0.32	0	1	0.042
					1.44	0.29	0		0.495
3	3039	maximum		0.25	0.03	0.16	0	1	0.038
					1.71	0.34	0		0.495
3	3040	maximum		0.25	0.01	0.07	0	1	0.030
					1.88	0.38	0		0.495
3	3041	maximum		0.25		0.02	0	1	0.024
					1.92	0.38	0		0.496
3	3042	maximum		0.25			0	1	0.020
					1.96	0.39	0		0.496
3	3043	maximum		0.25	0.77	0.60	0	1	0.063
					0.97	0.19	0		0.495
3	3044	maximum		0.25	0.16	0.40	0	1	0.047
					1.45	0.29	0		0.496
3	3045	maximum		0.25	0.04	0.18	0	1	0.037
					1.76	0.35	0		0.496
3	3046	maximum		0.25	0.02	0.12	0	1	0.031
					1.93	0.39	0		0.496
3	3047	maximum		0.25	0.01	0.07	0	1	0.026
					1.98	0.40	0		0.496
3	3048	maximum		0.25	0.01	0.05	0	1	0.023
					1.98	0.40	0		0.497
3	3049	maximum		0.25	0.80	0.32	0	1	0.062
					0.88	0.18	0		0.495
3	3050	maximum		0.25	0.09	0.28	0	1	0.056
					1.40	0.28	0		0.496
3	3051	maximum		0.25	0.04	0.19	0	1	0.050
					1.85	0.37	0		0.496
3	3052	maximum		0.25	0.03	0.17	0	1	0.045
					1.84	0.37	0		0.496
3	3053	maximum		0.25	0.03	0.16	0	1	0.042
					1.89	0.38	0		0.496
3	3054	maximum		0.25	0.03	0.16	0	1	0.040
					1.92	0.38	0		0.496
3	3055	maximum		0.25	0.86	0.17	0	1	0.078
					0.84	0.17	0		0.495
3	3056	maximum		0.25	0.07	0.14	0	1	0.057
					1.43	0.29	0		0.495
3	3057	maximum		0.25	0.01	0.06	0	1	0.051
					1.70	0.34	0		0.495
3	3058	maximum		0.25	0.01	0.05	0	1	0.042
					1.86	0.37	0		0.495
3	3059	maximum		0.25	0.01	0.05	0	1	0.031
					1.91	0.38	0		0.495
3	3060	maximum		0.25	0.01	0.05	0	1	0.021
					1.95	0.39	0		0.496
3	3061	maximum		0.25	0.01	0.03	0	1	0.026
					1.91	0.38	0		0.496
3	3062	maximum		0.25	0.01	0.03	0	1	0.033
					1.96	0.39	0		0.496
3	3063	maximum		0.25	0.01	0.03	0	1	0.039
					1.90	0.38	0		0.496
3	3064	maximum		0.25	0.01	0.04	0	1	0.046
					1.75	0.35	0		0.495
3	3065	maximum		0.25	0.15	0.06	0	1	0.046
					1.49	0.30	0		0.495
3	3066	maximum		0.25	0.92	0.18	0	1	0.072
					1.04	0.21	0		0.495
3	3067	maximum		0.25	0.03	0.13	0	1	0.030
					1.91	0.38	0		0.496
3	3068	maximum		0.25	0.03	0.13	0	1	0.032
					1.97	0.39	0		0.496
3	3069	maximum		0.25	0.03	0.14	0	1	0.035
					1.92	0.38	0		0.496
3	3070	maximum		0.25	0.03	0.14	0	1	0.040
					1.76	0.35	0		0.496
3	3071	maximum		0.25	0.15	0.14	0	1	0.045
					1.51	0.30	0		0.496
3	3072	maximum		0.25	0.84	0.30	0	1	0.054
					1.13	0.23	0		0.495
3	3073	maximum		0.25	0.04	0.20	0	1	0.035
					1.89	0.38	0		0.496
3	3074	maximum		0.25	0.04	0.21	0	1	0.036
					1.94	0.39	0		0.496

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ

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	3075		maximum		0.25	0.04 0.22	0	1	0.036	
						1.89 0.38	0		0.496	
3	3076		maximum		0.25	0.05 0.26	0	1	0.037	
						1.73 0.35	0		0.496	
3	3077		maximum		0.25	0.22 0.38	0	1	0.044	
						1.47 0.29	0		0.496	
3	3078		maximum		0.25	0.95 0.57	0	1	0.052	
						1.02 0.20	0		0.495	
3	3079		maximum		0.25	0.01 0.06	0	1	0.016	
						1.91 0.38	0		0.496	
3	3080		maximum		0.25	0.02 0.08	0	1	0.022	
						1.97 0.39	0		0.496	
3	3081		maximum		0.25	0.03 0.13	0	1	0.027	
						1.92 0.38	0		0.496	
3	3082		maximum		0.25	0.04 0.20	0	1	0.035	
						1.76 0.35	0		0.495	
3	3083		maximum		0.25	0.18 0.31	0	1	0.040	
						1.48 0.30	0		0.495	
3	3084		maximum		0.25	0.88 0.61	0	1	0.056	
						0.96 0.19	0		0.495	
3	3085		maximum		0.25	0.02 0.09	0	1	0.019	
						1.94 0.39	0		0.497	
3	3086		maximum		0.25	0.02 0.11	0	1	0.023	
						2.01 0.40	0		0.496	
3	3087		maximum		0.25	0.03 0.17	0	1	0.029	
						1.96 0.39	0		0.496	
3	3088		maximum		0.25	0.05 0.26	0	1	0.037	
						1.77 0.35	0		0.496	
3	3089		maximum		0.25	0.23 0.48	0	1	0.048	
						1.48 0.30	0		0.496	
3	3090		maximum		0.25	0.87 0.58	0	1	0.053	
						1.05 0.21	0		0.495	
3	3091		maximum		0.25	0.03 0.16	0	1	0.044	
						1.91 0.38	0		0.496	
3	3092		maximum		0.25	0.04 0.18	0	1	0.045	
						1.96 0.39	0		0.496	
3	3093		maximum		0.25	0.04 0.22	0	1	0.047	
						1.90 0.38	0		0.496	
3	3094		maximum		0.25	0.06 0.30	0	1	0.048	
						1.73 0.35	0		0.496	
3	3095		maximum		0.25	0.21 0.48	0	1	0.057	
						1.48 0.30	0		0.496	
3	3096		maximum		0.25	0.92 0.65	0	1	0.054	
						1.01 0.20	0		0.495	
3	3097		maximum		0.25		0	1	0.020	
						1.96 0.39	0		0.496	
3	3098		maximum		0.25		0	1	0.024	
						1.99 0.40	0		0.495	
3	3099		maximum		0.25	0.01 0.07	0	1	0.030	
						1.95 0.39	0		0.495	
3	3100		maximum		0.25	0.03 0.15	0	1	0.038	
						1.79 0.36	0		0.495	
3	3101		maximum		0.25	0.16 0.28	0	1	0.043	
						1.53 0.31	0		0.495	
3	3102		maximum		0.25	0.83 0.53	0	1	0.056	
						0.99 0.20	0		0.495	
3	3103		maximum		0.25	0.01 0.05	0	1	0.023	
						1.97 0.39	0		0.497	
3	3104		maximum		0.25	0.01 0.07	0	1	0.026	
						2.05 0.41	0		0.496	
3	3105		maximum		0.25	0.02 0.10	0	1	0.030	
						2.01 0.40	0		0.496	
3	3106		maximum		0.25	0.03 0.15	0	1	0.036	
						1.85 0.37	0		0.496	
3	3107		maximum		0.25	0.22 0.33	0	1	0.045	
						1.56 0.31	0		0.496	
3	3108		maximum		0.25	0.91 0.54	0	1	0.064	
						1.09 0.22	0		0.495	
3	3109		maximum		0.25	0.03 0.16	0	1	0.040	
						1.96 0.39	0		0.496	
3	3110		maximum		0.25	0.03 0.16	0	1	0.042	
						1.99 0.40	0		0.496	
3	3111		maximum		0.25	0.03 0.17	0	1	0.044	
						1.93 0.39	0		0.496	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
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		
		MBW							
3	3112	maximum		0.25	0.04	0.18	0	1	0.049
					1.76	0.35	0		0.496
3	3113	maximum		0.25	0.14	0.19	0	1	0.054
					1.50	0.30	0		0.496
3	3114	maximum		0.25	0.85	0.35	0	1	0.065
					1.02	0.20	0		0.495
3	3115	maximum		0.25	0.01	0.05	0	1	0.016
					1.97	0.39	0		0.496
3	3116	maximum		0.25	0.01	0.05	0	1	0.026
					1.99	0.40	0		0.496
3	3117	maximum		0.25	0.01	0.05	0	1	0.036
					1.95	0.39	0		0.495
3	3118	maximum		0.25	0.01	0.06	0	1	0.046
					1.80	0.36	0		0.495
3	3119	maximum		0.25	0.18	0.11	0	1	0.051
					1.53	0.31	0		0.495
3	3120	maximum		0.25	0.94	0.19	0	1	0.074
					0.96	0.19	0		0.495
4	4001	maximum		0.25	5.13	1.32	0	1	
					1.37	0.27	0		0.497
4	4002	maximum		0.25	2.12	0.42	0	1	0.239
					0.63	0.13	0		0.495
4	4003	maximum		0.25	4.05	2.01	0	1	0.330
					0.59	0.12	0		0.495
4	4004	maximum		0.25	1.77	0.86	0	1	0.217
					0.37	0.12	0		0.495
4	4005	maximum		0.25	3.74	1.04	0	2	0.621
					0.83	0.17	0		0.495
4	4006	maximum		0.25	1.66	0.68	0	1	0.346
					0.37	0.07	0		0.496
4	4007	maximum		0.25	4.88	1.86	0	1	
					1.03	0.21	0		0.497
4	4008	maximum		0.25	1.78	1.04	0	1	0.242
					0.52	0.10	0		0.496
4	4009	maximum		0.25	3.93	1.80	0	1	0.397
					0.58	0.12	0		0.495
4	4010	maximum		0.25	1.65	0.90	0	1	0.264
					0.45	0.09	0		0.495
4	4011	maximum		0.25	3.75	1.39	0	1	0.465
					0.80	0.20	0		0.495
4	4012	maximum		0.25	1.69	0.76	0	1	0.294
					0.45	0.09	0		0.496
4	4013	maximum		0.25	4.86	1.88	0	1	
					1.01	0.20	0		0.497
4	4014	maximum		0.25	1.74	0.97	0	1	0.235
					0.51	0.10	0		0.495
4	4015	maximum		0.25	3.89	1.50	0	1	0.485
					0.51	0.10	0		0.495
4	4016	maximum		0.25	1.66	0.99	0	1	0.297
					0.31	0.06	0		0.496
4	4017	maximum		0.25	3.90	1.65	0	1	0.322
					0.70	0.18	0		0.495
4	4018	maximum		0.25	1.59	0.60	0	1	0.235
					0.29	0.26	0		0.496
4	4019	maximum		0.25	5.06	1.12	0	1	
					1.04	0.21	0		0.497
4	4020	maximum		0.25	1.93	0.39	0	1	0.246
					0.50	0.10	0		0.495
4	4021	maximum		0.25	2.19	0.44	0	1	0.256
					0.74	0.15	0		0.495
4	4022	maximum		0.25	5.41	1.31	0	1	
					1.61	0.32	0		0.497
4	4023	maximum		0.25	1.82	0.79	0	1	0.234
					0.49	0.18	0		0.495
4	4024	maximum		0.25	4.23	1.93	0	1	0.359
					0.85	0.17	0		0.495
4	4025	maximum		0.25	1.75	0.74	0	1	0.351
					0.46	0.09	0		0.496
4	4026	maximum		0.25	3.97	1.27	0	2	0.599
					1.29	0.26	0		0.495
4	4027	maximum		0.25	1.86	1.04	0	1	0.247
					0.64	0.13	0		0.495
4	4028	maximum		0.25	5.12	1.95	0	1	
					1.36	0.27	0		0.497

11.92

11.51

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
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			
		MBW							
4	4029	maximum		0.25	1.77	0.83	0	1	0.281
					0.49	0.10	0		0.495
4	4030	maximum		0.25	4.08	1.73	0	1	0.429
					0.91	0.18	0		0.495
4	4031	maximum		0.25	1.77	0.80	0	1	0.298
					0.48	0.10	0		0.496
4	4032	maximum		0.25	3.99	1.61	0	1	0.451
					1.07	0.22	0		0.495
4	4033	maximum		0.25	1.82	0.97	0	1	0.243
					0.65	0.13	0		0.495
4	4034	maximum		0.25	5.12	1.95	0	1	
					1.40	0.28	0		0.497
4	4035	maximum		0.25	1.77	0.90	0	1	0.321
					0.45	0.09	0		0.496
4	4036	maximum		0.25	4.04	1.39	0	2	0.530
					0.84	0.17	0		0.495
4	4037	maximum		0.25	1.77	0.70	0	1	0.240
					0.41	0.22	0		0.496
4	4038	maximum		0.25	4.14	1.92	0	1	0.298
					1.28	0.26	0		0.495
4	4039	maximum		0.25	2.11	0.42	0	1	0.246
					0.66	0.13	0		0.495
4	4040	maximum		0.25	5.27	1.23	0	1	
					1.49	0.30	0		0.497
8	8001	maximum		1.20	0.26	1.28	0	1	0.104
					0.97	4.86	0		0.358
8	8002	maximum		1.20	0.12	0.60	0	1	0.380
					2.21	11.04	0		0.581
8	8003	maximum		1.20	2.25	11.24	0	1	0.129
					7.88	39.39	0		0.385
8	8004	maximum		1.20	1.78	8.91	0	1	0.345
					4.41	22.04	0		0.584
8	8005	maximum		1.20	3.06	15.28	0	1	0.186
					7.27	36.36	0		0.404
8	8006	maximum		1.20	2.82	14.09	0	1	0.130
					5.93	29.64	0		0.516
8	8007	maximum		1.20	0.57	2.87	0	1	0.100
					0.84	4.21	0		0.395
8	8008	maximum		1.20	0.39	1.93	0	1	0.272
					0.33	1.65	0		0.417
8	8009	maximum		1.20	1.66	8.29	0	1	0.095
					5.87	29.37	0		0.385
8	8010	maximum		1.20	1.27	6.35	0	1	0.257
					3.72	18.60	0		0.476
8	8011	maximum		1.20	2.07	10.33	0	1	0.118
					6.09	30.46	0		0.389
8	8012	maximum		1.20	1.48	7.39	0	1	0.221
					4.55	22.77	0		0.492
8	8013	maximum		1.20	0.62	3.09	0	1	0.076
					0.85	4.25	0		0.396
8	8014	maximum		1.20	0.48	2.39	0	1	0.274
					0.32	1.58	0		0.429
8	8015	maximum		1.20	2.53	12.64	0	1	0.141
					6.90	34.48	0		0.391
8	8016	maximum		1.20	2.82	14.11	0	1	0.176
					4.94	24.69	0		0.493
8	8017	maximum		1.20	2.29	11.43	0	1	0.126
					7.83	39.13	0		0.369
8	8018	maximum		1.20	1.66	8.32	0	1	0.294
					4.23	21.17	0		0.603
8	8019	maximum		1.20	0.28	1.39	0	1	0.100
					1.12	5.62	0		0.360
8	8020	maximum		1.20	0.19	0.96	0	1	0.312
					1.74	8.69	0		0.610
8	8021	maximum		1.20	0.35	1.77	0	1	0.107
					0.99	4.96	0		0.353
8	8022	maximum		1.20	2.92	14.60	0	1	0.139
					8.25	41.23	0		0.388
8	8023	maximum		1.20	0.40	2.02	0	1	0.372
					2.21	11.03	0		0.583
8	8024	maximum		1.20	2.14	10.69	0	1	0.324
					4.51	22.57	0		0.584
8	8025	maximum		1.20	3.66	18.31	0	1	0.194
					7.78	38.90	0		0.407

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
ΔΙΑΣΤΑΣΙΟΛΟΓΗΣΗ ΦΟΡΕΑ ΣΕΙΣΜΙΚΕΣ ΦΟΡΤΙΣΕΙΣ

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 [MPa]	Ass [cm ² /m ²]
						main	cross	dir				
8	8026		maximum		1.20	0.67	3.33	0	1	0.091		
						0.87	4.33	0		0.395		
8	8027		maximum		1.20	2.30	11.52	0	1	0.110		
						6.16	30.78	0		0.377		
8	8028		maximum		1.20	3.18	15.90	0	1	0.160		
						5.86	29.28	0		0.519		
8	8029		maximum		1.20	0.46	2.31	0	1	0.294		
						0.35	1.73	0		0.438		
8	8030		maximum		1.20	1.65	8.23	0	1	0.284		
						4.03	20.15	0		0.496		
8	8031		maximum		1.20	2.73	13.67	0	1	0.125		
						6.58	32.90	0		0.385		
8	8032		maximum		1.20	0.71	3.56	0	1	0.074		
						0.88	4.38	0		0.396		
8	8033		maximum		1.20	3.48	17.38	0	1	0.160		
						7.23	36.16	0		0.399		
8	8034		maximum		1.20	1.87	9.33	0	1	0.259		
						4.64	23.18	0		0.479		
8	8035		maximum		1.20	0.56	2.79	0	1	0.292		
						0.37	1.87	0		0.457		
8	8036		maximum		1.20	3.19	15.93	0	1	0.186		
						5.33	26.67	0		0.499		
8	8037		maximum		1.20	3.34	16.71	0	1	0.142		
						9.34	42.45	0		0.378		
8	8038		maximum		1.20	0.44	2.20	0	1	0.095		
						1.23	6.14	0		0.361		
8	8039		maximum		1.20	2.05	10.26	0	1	0.309		
						4.48	22.38	0		0.604		
8	8040		maximum		1.20	0.47	2.35	0	1	0.360		
						2.02	10.09	0		0.608		

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	11.92	0.62	0.198	1.75	0.184
4026	11.51	0.60	0.191	1.75	0.145
4036	10.18	0.53	0.169	1.75	0.183

OPIΣTIKH MEΛETH/TEΧNIKO TB/L=10.70
DESIGN_ΣΕΙΣΜΙΚΑ_ΠΑΣ/ΔΕΣΜΟΣ-ΠΑΣΣΑΛΟΙ

Selected Beam Elements

FROM	TO	INC	X-VALUE	NC	MEMBER	CS0	CS1	CS2	CS3	CS4	CS5
10001											
10005											
10006											
10010											
10011											
10015											
10016											
10020											
12000	12100	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. 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
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 [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	
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	
12	0	1.150	-456.52	-25.00	456.52	25.00	

Shear Design

Design for shear DIN 1045-1 (2003)

Design for shear DIN 1045-1 (2005)						
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	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	

12 434.78
Tolerance for exceeding maximum shear or principal compression stress 0.0200

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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 [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	0.33	43.97		8.17T			35.80	
10001	0.250	8	0.37	48.40		8.09T			40.31	
10005	0.000	8	0.49	64.47		26.07T			38.40	
10005	0.300	8	0.48	63.38		26.07T			37.30	
10006	0.000	8	0.35	46.72		11.00T			35.73	
10006	0.250	8	0.36	47.56		10.97T			36.58	
10010	0.000	8	0.38	49.90		7.88T			42.02	
10010	0.300	8	0.34	44.72		7.97T			36.75	
10011	0.000	8	0.33	44.05		8.25T			35.80	
10011	0.250	8	0.37	48.47		8.17T			40.30	
10015	0.000	8	0.40	53.12		14.77T			38.36	
10015	0.300	8	0.39	52.13		14.79T			37.34	
10016	0.000	8	0.38	50.50		14.80T			35.69	
10016	0.250	8	0.39	51.38		14.78T			36.60	
10020	0.000	8	0.38	49.97		7.97T			42.00	
10020	0.300	8	0.34	44.82		8.06T			36.75	
12001	0.000	9	1.56	78.43			78.43T			
12001	1.000	9	0.98	49.33			49.33T			
12002	0.000	9	0.98	49.36			49.36T			
12002	1.000	9	0.46	23.14			23.14T			
12003	0.000	9	0.46	23.19			23.19T			
12003	1.000	9	0.33	16.42			16.42T			
12004	0.000	9	1.23	61.67			61.67T			
12004	1.000	9	0.90	45.16			45.16T			
12005	0.000	9	0.90	45.19			45.19T			
12005	1.000	9	0.54	27.33			27.33T			
12006	0.000	9	0.54	27.38			27.38T			
12006	1.000	9	0.35	17.51			17.51T			
12007	0.000	9	1.40	70.58			70.58T			
12007	1.000	9	0.87	43.67			43.67T			
12008	0.000	9	0.87	43.69			43.69T			
12008	1.000	9	0.39	19.81			19.81T			
12009	0.000	9	0.40	19.86			19.86T			
12009	1.000	9	0.32	16.28			16.28T			
12010	0.000	9	1.35	67.78			67.78T			
12010	1.000	9	0.84	42.42			42.42T			
12011	0.000	9	0.84	42.45			42.45T			
12011	1.000	9	0.38	19.25			19.25T			
12012	0.000	9	0.38	19.30			19.30T			
12012	1.000	9	0.33	16.42			16.42T			
12013	0.000	9	0.33	16.46			16.46T			
12013	1.000	9	0.45	22.69			22.69T			
12014	0.000	9	0.45	22.69			22.69T			
12014	1.000	9	0.48	24.36			24.36T			
12015	0.000	9	0.48	24.36			24.36T			
12015	1.000	9	0.45	22.79			22.79T			
12016	0.000	9	0.45	22.79			22.79T			
12016	1.000	9	0.39	19.37			19.37T			
12017	0.000	9	0.39	19.37			19.37T			
12017	1.000	9	0.31	15.55			15.55T			
12018	0.000	9	0.31	15.55			15.55T			
12018	1.000	9	0.30	15.08			15.08T			
12019	0.000	9	0.30	15.08			15.08T			
12019	1.000	9	0.30	15.08			15.08T			
12020	0.000	9	0.30	15.08			15.08T			
12020	1.000	9	0.30	15.08			15.08T			
12021	0.000	9	0.30	15.08			15.08T			
12021	1.000	9	0.30	15.08			15.08T			
12022	0.000	9	0.30	15.08			15.08T			
12022	1.000	9	0.30	15.08			15.08T			
12023	0.000	9	0.30	15.08			15.08T			
12023	1.000	9	0.30	15.08			15.08T			
12024	0.000	9	0.30	15.08			15.08T			
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			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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 [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]
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			15.08'			
12034	1.000	9	0.30	15.08			15.08'			
12035	0.000	9	0.35	17.55			17.55T			
12035	1.000	9	0.46	23.15			23.15T			
12036	0.000	9	0.46	23.15			23.15T			
12036	1.000	9	0.49	24.42			24.42T			
12037	0.000	9	0.49	24.42			24.42T			
12037	1.000	9	0.45	22.59			22.59T			
12038	0.000	9	0.45	22.59			22.59T			
12038	1.000	9	0.38	19.02			19.02T			
12039	0.000	9	0.38	19.02			19.02T			
12039	1.000	9	0.30	15.08			15.08T			
12040	0.000	9	0.30	15.08			15.08T			
12040	1.000	9	0.30	15.08			15.08T			
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	0.30	15.08			15.08T			
12043	0.000	9	0.30	15.08			15.08T			
12043	1.000	9	0.30	15.08			15.08T			
12044	0.000	9	0.30	15.08			15.08T			
12044	1.000	9	0.30	15.08			15.08T			
12045	0.000	9	0.30	15.08			15.08T			
12045	1.000	9	0.30	15.08			15.08T			
12046	0.000	9	0.30	15.08			15.08T			
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			15.08'			
12056	1.000	9	0.30	15.08			15.08'			
12057	0.000	9	0.32	16.31			16.31T			
12057	1.000	9	0.45	22.50			22.50T			
12058	0.000	9	0.45	22.50			22.50T			
12058	1.000	9	0.48	23.95			23.95T			
12059	0.000	9	0.48	23.95			23.95T			
12059	1.000	9	0.44	22.08			22.08T			
12060	0.000	9	0.44	22.08			22.08T			
12060	1.000	9	0.39	19.59			19.59T			
12061	0.000	9	0.39	19.59			19.59T			
12061	1.000	9	0.31	15.82			15.82T			
12062	0.000	9	0.31	15.82			15.82T			
12062	1.000	9	0.30	15.08			15.08T			
12063	0.000	9	0.30	15.08			15.08T			
12063	1.000	9	0.30	15.08			15.08T			
12064	0.000	9	0.30	15.08			15.08T			
12064	1.000	9	0.30	15.08			15.08T			
12065	0.000	9	0.30	15.08			15.08T			
12065	1.000	9	0.30	15.08			15.08T			
12066	0.000	9	0.30	15.08			15.08T			
12066	1.000	9	0.30	15.08			15.08T			
12067	0.000	9	0.30	15.08			15.08T			
12067	1.000	9	0.30	15.08			15.08T			
12068	0.000	9	0.30	15.08			15.08T			
12068	1.000	9	0.30	15.08			15.08T			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
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			15.08'			
12078	1.000	9	0.30	15.08			15.08'			
12079	0.000	9	0.33	16.46			16.46T			
12079	1.000	9	0.45	22.46			22.46T			
12080	0.000	9	0.45	22.46			22.46T			
12080	1.000	9	0.48	23.99			23.99T			
12081	0.000	9	0.48	23.99			23.99T			
12081	1.000	9	0.44	22.34			22.34T			
12082	0.000	9	0.44	22.34			22.34T			
12082	1.000	9	0.38	18.89			18.89T			
12083	0.000	9	0.38	18.89			18.89T			
12083	1.000	9	0.30	15.08			15.08T			
12084	0.000	9	0.30	15.08			15.08T			
12084	1.000	9	0.30	15.08			15.08T			
12085	0.000	9	0.30	15.08			15.08T			
12085	1.000	9	0.30	15.08			15.08T			
12086	0.000	9	0.30	15.08			15.08T			
12086	1.000	9	0.30	15.08			15.08T			
12087	0.000	9	0.30	15.08			15.08T			
12087	1.000	9	0.30	15.08			15.08T			
12088	0.000	9	0.30	15.08			15.08T			
12088	1.000	9	0.30	15.08			15.08T			
12089	0.000	9	0.30	15.08			15.08T			
12089	1.000	9	0.30	15.08			15.08T			
12090	0.000	9	0.30	15.08			15.08T			
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			
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			15.08'			
12100	1.000	9	0.30	15.08			15.08'			

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]
10001	0.000	8	2.80	13.08				
10001	0.250	8	2.80	13.20				
10005	0.000	8	6.33	9.89				
10005	0.300	8	6.33	9.74				
10006	0.000	8	3.80	7.51				
10006	0.250	8	3.80	7.63				
10010	0.000	8	2.73	12.87				
10010	0.300	8	2.73	12.72				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
10011	0.000	8	2.83	13.09				
10011	0.250	8	2.83	13.22				
10015	0.000	8	5.10	9.12				
10015	0.300	8	5.10	8.97				
10016	0.000	8	5.11	8.19				
10016	0.250	8	5.11	8.31				
10020	0.000	8	2.76	12.86				
10020	0.300	8	2.76	12.71				
12001	0.000	9	0.00	7.95				
12001	1.000	9	0.00	8.21				
12002	0.000	9	0.00	8.21				
12002	1.000	9	0.00	8.20				
12003	0.000	9	0.00	8.20				
12003	1.000	9	0.00	9.01				
12004	0.000	9	0.00	5.65				
12004	1.000	9	0.00	6.30				
12005	0.000	9	0.00	6.30				
12005	1.000	9	0.00	7.65				
12006	0.000	9	0.00	7.65				
12006	1.000	9	0.00	8.94				
12007	0.000	9	0.00	7.53				
12007	1.000	9	0.00	7.73				
12008	0.000	9	0.00	7.73				
12008	1.000	9	0.00	7.76				
12009	0.000	9	0.00	7.76				
12009	1.000	9	0.00	8.14				
12010	0.000	9	0.00	7.10				
12010	1.000	9	0.00	7.30				
12011	0.000	9	0.00	7.30				
12011	1.000	9	0.00	7.71				
12012	0.000	9	0.00	7.71				
12012	1.000	9	0.00	7.63				
12013	0.000	9	0.00	9.01				
12013	1.000	9	0.00	5.36				
12014	0.000	9	0.00	5.36				
12014	1.000	9	0.00	5.27				
12015	0.000	9	0.00	5.27				
12015	1.000	9	0.00	5.26				
12016	0.000	9	0.00	5.26				
12016	1.000	9	0.00	5.28				
12017	0.000	9	0.00	5.28				
12017	1.000	9	0.00	5.35				
12018	0.000	9	0.00	5.35				
12018	1.000	9	0.00	5.48				
12019	0.000	9	0.00	5.48				
12019	1.000	9	0.00	5.62				
12020	0.000	9	0.00	5.62				
12020	1.000	9	0.00	5.70				
12021	0.000	9	0.00	5.70				
12021	1.000	9	0.00	5.74				
12022	0.000	9	0.00	5.74				
12022	1.000	9	0.00	5.74				
12023	0.000	9	0.00	5.74				
12023	1.000	9	0.00	5.74				
12024	0.000	9	0.00	5.74				
12024	1.000	9	0.00	5.74				
12025	0.000	9	0.00	5.74				
12025	1.000	9	0.00	5.74				
12026	0.000	9	0.00	5.74				
12026	1.000	9	0.00	5.74				
12027	0.000	9	0.00	5.74				
12027	1.000	9	0.00	5.74				
12028	0.000	9	0.00	5.74				
12028	1.000	9	0.00	4.97				
12029	0.000	9	0.00	4.97				
12029	1.000	9	0.00	4.67				
12030	0.000	9	0.00	4.67				
12030	1.000	9	0.00	4.59				
12031	0.000	9	0.00	4.59				
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	8.94				
12035	1.000	9	0.00	5.30				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
12036	0.000	9	0.00	5.30				
12036	1.000	9	0.00	5.27				
12037	0.000	9	0.00	5.27				
12037	1.000	9	0.00	5.26				
12038	0.000	9	0.00	5.26				
12038	1.000	9	0.00	5.28				
12039	0.000	9	0.00	5.28				
12039	1.000	9	0.00	5.36				
12040	0.000	9	0.00	5.36				
12040	1.000	9	0.00	5.49				
12041	0.000	9	0.00	5.49				
12041	1.000	9	0.00	5.62				
12042	0.000	9	0.00	5.62				
12042	1.000	9	0.00	5.70				
12043	0.000	9	0.00	5.70				
12043	1.000	9	0.00	5.74				
12044	0.000	9	0.00	5.74				
12044	1.000	9	0.00	5.74				
12045	0.000	9	0.00	5.74				
12045	1.000	9	0.00	5.74				
12046	0.000	9	0.00	5.74				
12046	1.000	9	0.00	5.74				
12047	0.000	9	0.00	5.74				
12047	1.000	9	0.00	5.74				
12048	0.000	9	0.00	5.74				
12048	1.000	9	0.00	5.74				
12049	0.000	9	0.00	5.74				
12049	1.000	9	0.00	5.06				
12050	0.000	9	0.00	5.06				
12050	1.000	9	0.00	4.77				
12051	0.000	9	0.00	4.77				
12051	1.000	9	0.00	4.63				
12052	0.000	9	0.00	4.63				
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	8.14				
12057	1.000	9	0.00	5.53				
12058	0.000	9	0.00	5.53				
12058	1.000	9	0.00	5.28				
12059	0.000	9	0.00	5.28				
12059	1.000	9	0.00	5.28				
12060	0.000	9	0.00	5.28				
12060	1.000	9	0.00	5.27				
12061	0.000	9	0.00	5.27				
12061	1.000	9	0.00	5.33				
12062	0.000	9	0.00	5.33				
12062	1.000	9	0.00	5.46				
12063	0.000	9	0.00	5.46				
12063	1.000	9	0.00	5.61				
12064	0.000	9	0.00	5.61				
12064	1.000	9	0.00	5.26				
12065	0.000	9	0.00	5.26				
12065	1.000	9	0.00	5.19				
12066	0.000	9	0.00	5.19				
12066	1.000	9	0.00	4.95				
12067	0.000	9	0.00	4.95				
12067	1.000	9	0.00	4.65				
12068	0.000	9	0.00	4.65				
12068	1.000	9	0.00	4.65				
12069	0.000	9	0.00	4.65				
12069	1.000	9	0.00	4.65				
12070	0.000	9	0.00	4.65				
12070	1.000	9	0.00	4.63				
12071	0.000	9	0.00	4.63				
12071	1.000	9	0.00	4.61				
12072	0.000	9	0.00	4.61				
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				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
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	7.63				
12079	1.000	9	0.00	5.29				
12080	0.000	9	0.00	5.29				
12080	1.000	9	0.00	5.27				
12081	0.000	9	0.00	5.27				
12081	1.000	9	0.00	5.26				
12082	0.000	9	0.00	5.26				
12082	1.000	9	0.00	5.28				
12083	0.000	9	0.00	5.28				
12083	1.000	9	0.00	5.36				
12084	0.000	9	0.00	5.36				
12084	1.000	9	0.00	5.49				
12085	0.000	9	0.00	5.49				
12085	1.000	9	0.00	5.62				
12086	0.000	9	0.00	5.62				
12086	1.000	9	0.00	5.70				
12087	0.000	9	0.00	5.70				
12087	1.000	9	0.00	5.74				
12088	0.000	9	0.00	5.74				
12088	1.000	9	0.00	5.74				
12089	0.000	9	0.00	5.74				
12089	1.000	9	0.00	5.74				
12090	0.000	9	0.00	5.74				
12090	1.000	9	0.00	5.74				
12091	0.000	9	0.00	5.74				
12091	1.000	9	0.00	5.74				
12092	0.000	9	0.00	5.74				
12092	1.000	9	0.00	5.21				
12093	0.000	9	0.00	5.21				
12093	1.000	9	0.00	5.03				
12094	0.000	9	0.00	5.03				
12094	1.000	9	0.00	4.75				
12095	0.000	9	0.00	4.75				
12095	1.000	9	0.00	4.63				
12096	0.000	9	0.00	4.63				
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				

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	0.158	0.268	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	0.242	0.000	0.000	0.000	0.000	0.000	1.001	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	0.242	0.268	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

OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
DESIGN_ΣΕΙΣΜΙΚΑ_ΔΟΚΟΙ

Selected Beam Elements

FROM	TO	INC	X-VALUE	NC	MEMBER	CS0	CS1	CS2	CS3	CS4	CS5
1000	1036	1		1	bending	10	40				
2000	2012	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. 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. reinforcement		maximum-
Bending.	Compress.	e/d	N/Np1	requ.	section	reinforc.
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	
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	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	

434.78

Tolerance for exceeding maximum shear or principal compression stress 0.0200

OPIΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
1001	0.000	1	0.40	21.69		2.37T	5.49		13.83	
1001	0.692	1	0.34	18.39		2.37T	5.36		10.66	
1002	0.000	1	0.34	18.42		2.37T	5.34		10.70	
1002	0.692	1	0.28	15.03		2.37T	4.88		7.78	
1003	0.000	1	0.28	15.08		2.37T	4.87		7.84	
1003	0.692	1	0.21	11.65		2.37T	4.11		5.16	
1004	0.000	1	0.22	11.70		2.37T	4.10		5.22	
1004	0.692	1	0.15	8.21		2.37T	3.04		2.80	
1005	0.000	1	0.15	8.26		2.37T	3.03		2.86	
1005	0.692	1	0.10	5.38		2.37T	1.73		1.28	
1006	0.000	1	0.10	5.40		2.37T	1.73		1.29	
1006	0.692	1	0.09	5.12		2.37T	1.76		0.99	
1007	0.000	1	0.09	5.11		2.37T	1.77		0.97	
1007	0.692	1	0.12	6.51		2.37T	2.57		1.56	
1008	0.000	1	0.12	6.50		2.37T	2.58		1.54	
1008	0.692	1	0.18	9.96		2.37T	4.01		3.57	
1009	0.000	1	0.18	9.91		2.37T	4.02		3.51	
1009	0.692	1	0.25	13.50		2.37T	5.15		5.98	
1010	0.000	1	0.25	13.45		2.37T	5.16		5.92	
1010	0.692	1	0.31	17.03		2.37T	6.00		8.66	
1011	0.000	1	0.31	16.98		2.37T	6.01		8.60	
1011	0.692	1	0.38	20.54		2.37T	6.56		11.61	
1012	0.000	1	0.38	20.52		2.37T	6.58		11.56	
1012	0.692	1	0.44	23.96		2.37T	6.97		14.61	
1013	0.000	1	0.39	21.00		2.37T	5.02		13.61	
1013	0.692	1	0.33	17.78		2.37T	5.02		10.39	
1014	0.000	1	0.33	17.82		2.37T	5.00		10.45	
1014	0.692	1	0.27	14.56		2.37T	4.65		7.54	
1015	0.000	1	0.27	14.62		2.37T	4.63		7.61	
1015	0.692	1	0.21	11.31		2.37T	3.96		4.98	
1016	0.000	1	0.21	11.36		2.37T	3.94		5.05	
1016	0.692	1	0.15	7.98		2.37T	2.93		2.68	
1017	0.000	1	0.15	8.03		2.37T	2.92		2.74	
1017	0.692	1	0.10	5.29		2.37T	1.75		1.17	
1018	0.000	1	0.10	5.31		2.37T	1.74		1.19	
1018	0.692	1	0.09	5.06		2.37T	1.86		0.83	
1019	0.000	1	0.09	5.05		2.37T	1.86		0.82	
1019	0.692	1	0.12	6.47		2.37T	2.72		1.38	
1020	0.000	1	0.12	6.46		2.37T	2.73		1.36	
1020	0.692	1	0.18	9.73		2.37T	4.13		3.22	
1021	0.000	1	0.18	9.68		2.37T	4.14		3.16	
1021	0.692	1	0.24	13.18		2.37T	5.24		5.57	
1022	0.000	1	0.24	13.13		2.37T	5.25		5.50	
1022	0.692	1	0.31	16.60		2.37T	6.03		8.19	
1023	0.000	1	0.30	16.54		2.37T	6.05		8.12	
1023	0.692	1	0.37	20.01		2.37T	6.52		11.12	
1024	0.000	1	0.37	19.97		2.37T	6.54		11.06	
1024	0.692	1	0.43	23.35		2.37T	6.83		14.14	
1025	0.000	1	0.42	22.64		2.37T	5.68		14.59	
1025	0.692	1	0.37	19.83		2.37T	5.70	0.43	11.32	
1026	0.000	1	0.37	19.86		2.37T	5.67	0.42	11.39	
1026	0.692	1	0.32	17.27		2.37T	5.35	0.34	8.45	0.36
						0.40				
1027	0.000	1	0.32	17.32		2.37T	5.33	0.34	8.53	0.36
						0.40				
1027	0.692	1	0.25	13.58		2.37T	4.66	0.19	5.87	0.24
						0.25				
1028	0.000	1	0.25	13.63		2.37T	4.64	0.19	5.95	0.24
						0.24				
1028	0.692	1	0.19	10.51		2.37T	3.63	0.41	3.54	0.27
						0.28				
1029	0.000	1	0.19	10.58		2.37T	3.61	0.42	3.62	0.27
						0.28				
1029	0.692	1	0.14	7.55		2.37T	2.55	0.19	2.00	0.22
						0.22				
1030	0.000	1	0.14	7.56		2.37T	2.54	0.18	2.03	0.22
						0.22				
1030	0.692	1	0.13	7.16		2.37T	2.72	0.33	1.61	0.08
						0.05				
1031	0.000	1	0.13	7.14		2.37T	2.72	0.32	1.59	0.08
						0.05				
1031	0.692	1	0.16	8.75		2.37T	3.60	0.04	2.16	0.28
						0.30				
1032	0.000	1	0.16	8.73		2.37T	3.61	0.02	2.14	0.28
						0.31				
1032	0.692	1	0.21	11.31		2.37T	5.03		3.91	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	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	0.21	11.26		2.37T	5.05		3.84	
1033	0.692	1	0.27	14.80		2.37T	6.16		6.27	
1034	0.000	1	0.27	14.74		2.37T	6.18		6.19	
1034	0.692	1	0.34	18.26		2.37T	6.98		8.91	
1035	0.000	1	0.34	18.20		2.37T	7.00		8.83	
1035	0.692	1	0.42	22.53		2.37T	7.48	0.22	11.84	0.31
						0.32				
1036	0.000	1	0.41	22.51		2.37T	7.51	0.22	11.77	0.31
						0.32				
1036	0.692	1	0.46	25.06		2.37T	7.80		14.88	
2001	0.000	2	0.25	22.77		0.65T	5.71		16.40	
2001	0.300	2	0.24	21.42		0.50T	5.70		15.22	
2002	0.000	2	0.24	21.47		0.48T	5.71		15.28	
2002	0.300	2	0.22	19.81		0.39T	5.63		13.79	
2003	0.000	2	0.25	22.29		0.46T	7.03		14.80	
2003	0.300	2	0.26	23.82		0.34T	7.18		16.30	
2004	0.000	2	0.27	24.05		0.66T	7.17		16.23	
2004	0.300	2	0.28	24.96		0.65T	7.16		17.14	
2005	0.000	2	0.25	22.08		0.63T	5.16		16.29	
2005	0.300	2	0.23	20.86		0.63T	5.17		15.06	
2006	0.000	2	0.23	20.86		0.57T	5.18		15.11	
2006	0.300	2	0.21	19.30		0.57T	5.15		13.58	
2007	0.000	2	0.24	21.75		0.53T	6.88		14.34	
2007	0.300	2	0.26	23.42		0.53T	7.00		15.89	
2008	0.000	2	0.26	23.45		0.63T	6.99		15.83	
2008	0.300	2	0.27	24.38		0.63T	6.98		16.77	
2009	0.000	2	0.26	23.69		0.69T	5.72		17.28	
2009	0.300	2	0.25	22.50		0.69T	5.79		16.02	
2010	0.000	2	0.25	22.46		0.58T	5.79		16.09	
2010	0.300	2	0.23	20.93		0.58T	5.80		14.54	
2011	0.000	2	0.26	23.65		0.73T	7.86		15.06	
2011	0.300	2	0.28	25.09		0.54T	7.96		16.59	
2012	0.000	2	0.28	25.16		0.70T	7.95		16.52	
2012	0.300	2	0.29	26.05		0.69T	7.87		17.48	

Shear Reinforcements per Cutted Part of Section LCR 510

Beam	x[m]	Nos	As1-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	0.84	3.57				
1001	0.692	1	0.84	3.41				
1002	0.000	1	0.57	3.15				
1002	0.692	1	0.57	2.99				
1003	0.000	1	0.48	2.80				
1003	0.692	1	0.48	2.64				
1004	0.000	1	0.47	2.52				
1004	0.692	1	0.47	2.36				
1005	0.000	1	0.45	2.28				
1005	0.692	1	0.45	2.12				
1006	0.000	1	0.42	2.02				
1006	0.692	1	0.42	1.91				
1007	0.000	1	0.39	1.99				
1007	0.692	1	0.39	2.17				
1008	0.000	1	0.35	2.50				
1008	0.692	1	0.35	2.44				
1009	0.000	1	0.29	2.53				
1009	0.692	1	0.29	2.70				
1010	0.000	1	0.27	2.77				
1010	0.692	1	0.27	2.94				
1011	0.000	1	0.35	2.99				
1011	0.692	1	0.35	3.16				
1012	0.000	1	0.65	3.35				
1012	0.692	1	0.65	3.59				
1013	0.000	1	0.77	3.59				
1013	0.692	1	0.77	3.43				
1014	0.000	1	0.60	3.25				
1014	0.692	1	0.60	3.09				
1015	0.000	1	0.53	2.92				
1015	0.692	1	0.53	2.76				
1016	0.000	1	0.49	2.59				
1016	0.692	1	0.49	2.43				
1017	0.000	1	0.41	2.25				
1017	0.692	1	0.41	2.09				
1018	0.000	1	0.32	1.91				
1018	0.692	1	0.32	2.07				
1019	0.000	1	0.23	2.00				
1019	0.692	1	0.23	2.02				

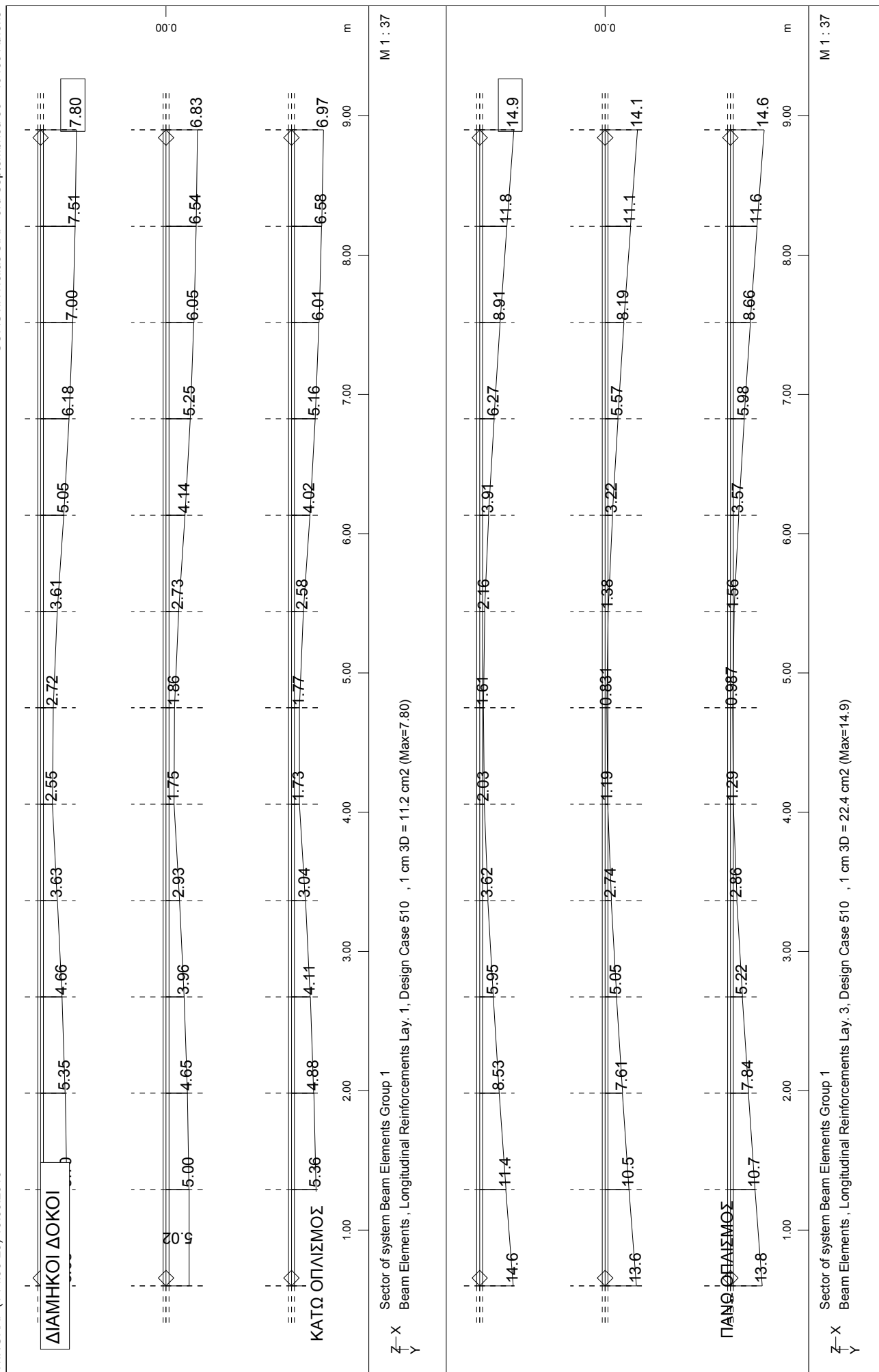
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
DESIGN_ΣΕΙΣΜΙΚΑ_ΔΟΚΟΙ

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]
1020	0.000	1	0.18	2.08				
1020	0.692	1	0.18	2.26				
1021	0.000	1	0.27	2.32				
1021	0.692	1	0.27	2.50				
1022	0.000	1	0.33	2.62				
1022	0.692	1	0.33	2.80				
1023	0.000	1	0.40	2.98				
1023	0.692	1	0.40	3.15				
1024	0.000	1	0.62	3.36				
1024	0.692	1	0.62	3.64				
1025	0.000	1	0.84	3.58				
1025	0.692	1	0.84	3.42				
1026	0.000	1	0.75	3.40				
1026	0.692	1	0.75	3.24				
1027	0.000	1	0.67	3.10				
1027	0.692	1	0.67	2.94				
1028	0.000	1	0.54	2.78				
1028	0.692	1	0.54	2.62				
1029	0.000	1	0.39	2.42				
1029	0.692	1	0.39	2.26				
1030	0.000	1	0.21	2.05				
1030	0.692	1	0.21	1.89				
1031	0.000	1	0.09	1.75				
1031	0.692	1	0.09	1.93				
1032	0.000	1	0.15	2.07				
1032	0.692	1	0.15	2.25				
1033	0.000	1	0.31	2.44				
1033	0.692	1	0.31	2.62				
1034	0.000	1	0.45	2.79				
1034	0.692	1	0.45	2.96				
1035	0.000	1	0.56	3.10				
1035	0.692	1	0.56	3.27				
1036	0.000	1	0.69	3.30				
1036	0.692	1	0.69	3.54				
2001	0.000	2	0.27	1.20				
2001	0.300	2	0.27	1.20				
2002	0.000	2	0.26	1.24				
2002	0.300	2	0.26	1.24				
2003	0.000	2	0.23	1.22				
2003	0.300	2	0.23	3.59				
2004	0.000	2	0.28	1.44				
2004	0.300	2	0.28	1.44				
2005	0.000	2	0.26	1.27				
2005	0.300	2	0.26	1.27				
2006	0.000	2	0.23	1.34				
2006	0.300	2	0.23	1.34				
2007	0.000	2	0.22	1.28				
2007	0.300	2	0.22	1.28				
2008	0.000	2	0.26	1.51				
2008	0.300	2	0.26	1.51				
2009	0.000	2	0.28	1.61				
2009	0.300	2	0.28	1.61				
2010	0.000	2	0.24	1.43				
2010	0.300	2	0.24	1.43				
2011	0.000	2	0.22	1.34				
2011	0.300	2	0.22	3.64				
2012	0.000	2	0.28	1.55				
2012	0.300	2	0.28	1.55				

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	0.232	0.065	0.000	0.000	0.000	0.000	1.009	0.000
Cross sect.	2	0.000	0.000	0.067	0.015	0.000	1.001	0.000	0.000	0.000	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	0.232	0.065	0.000	0.000	0.000	0.000	1.009	0.000
		0.000	0.000	0.000	0.000	0.000	1.001	0.000	0.000	0.000	0.000

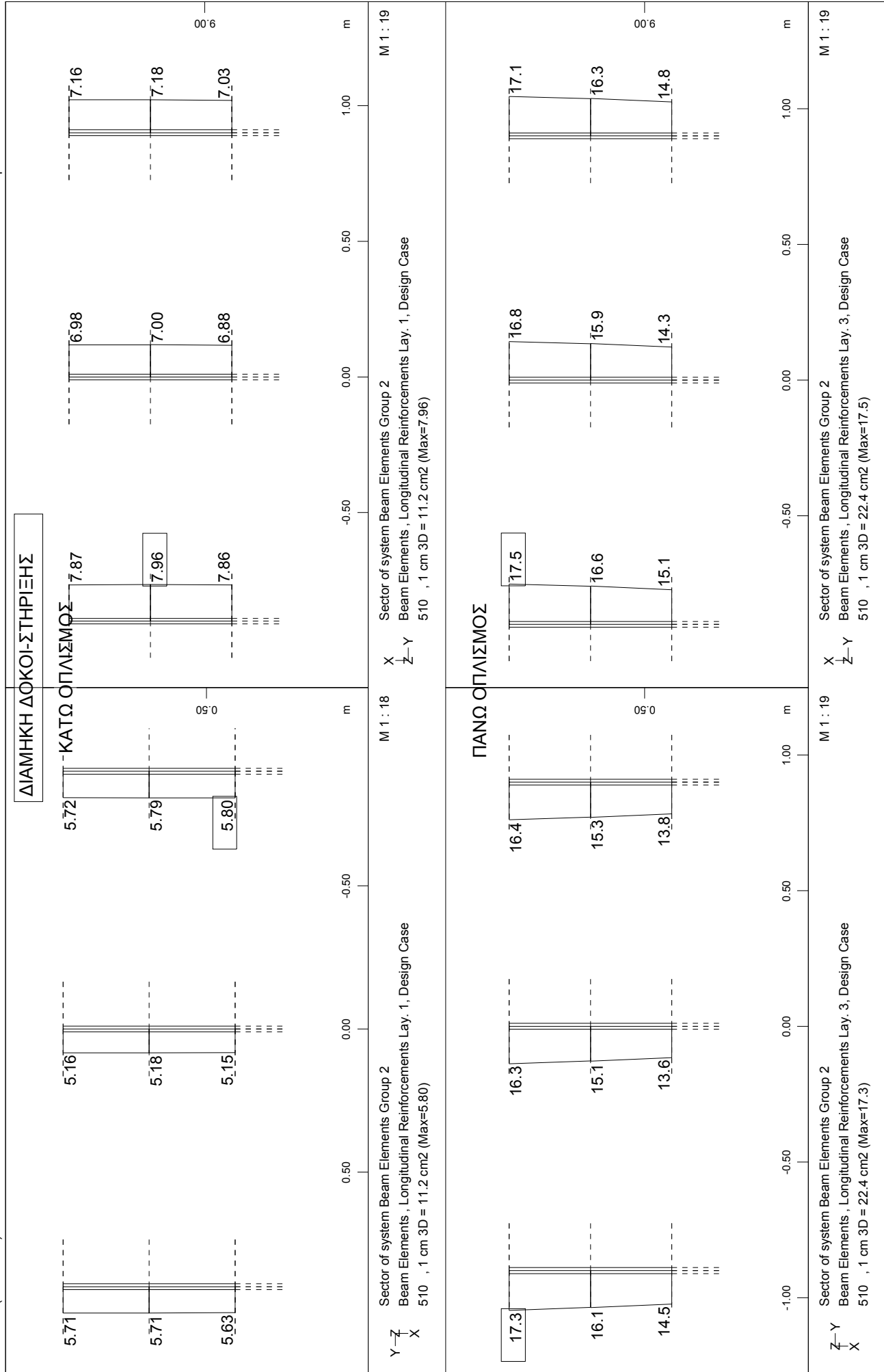


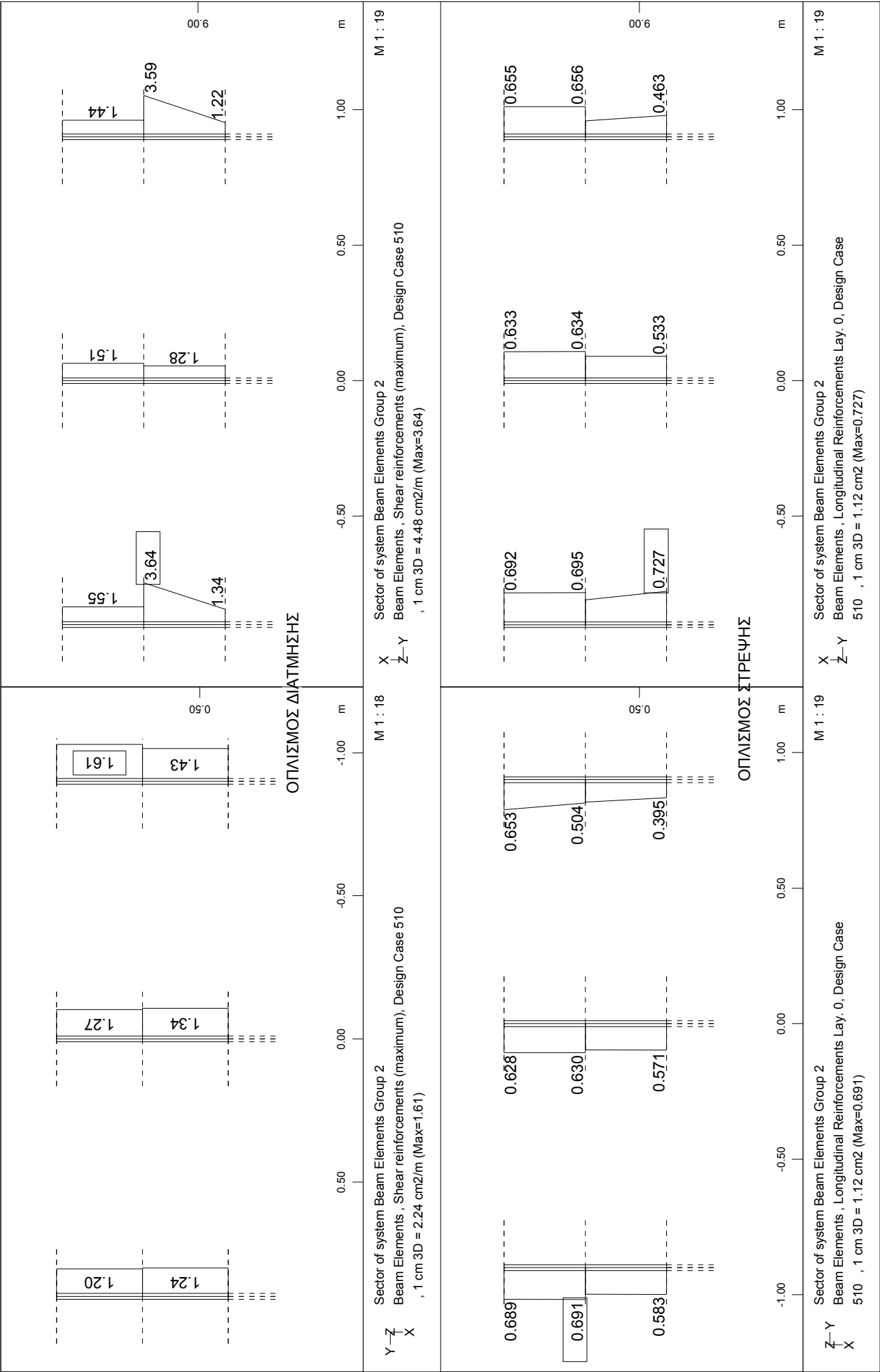


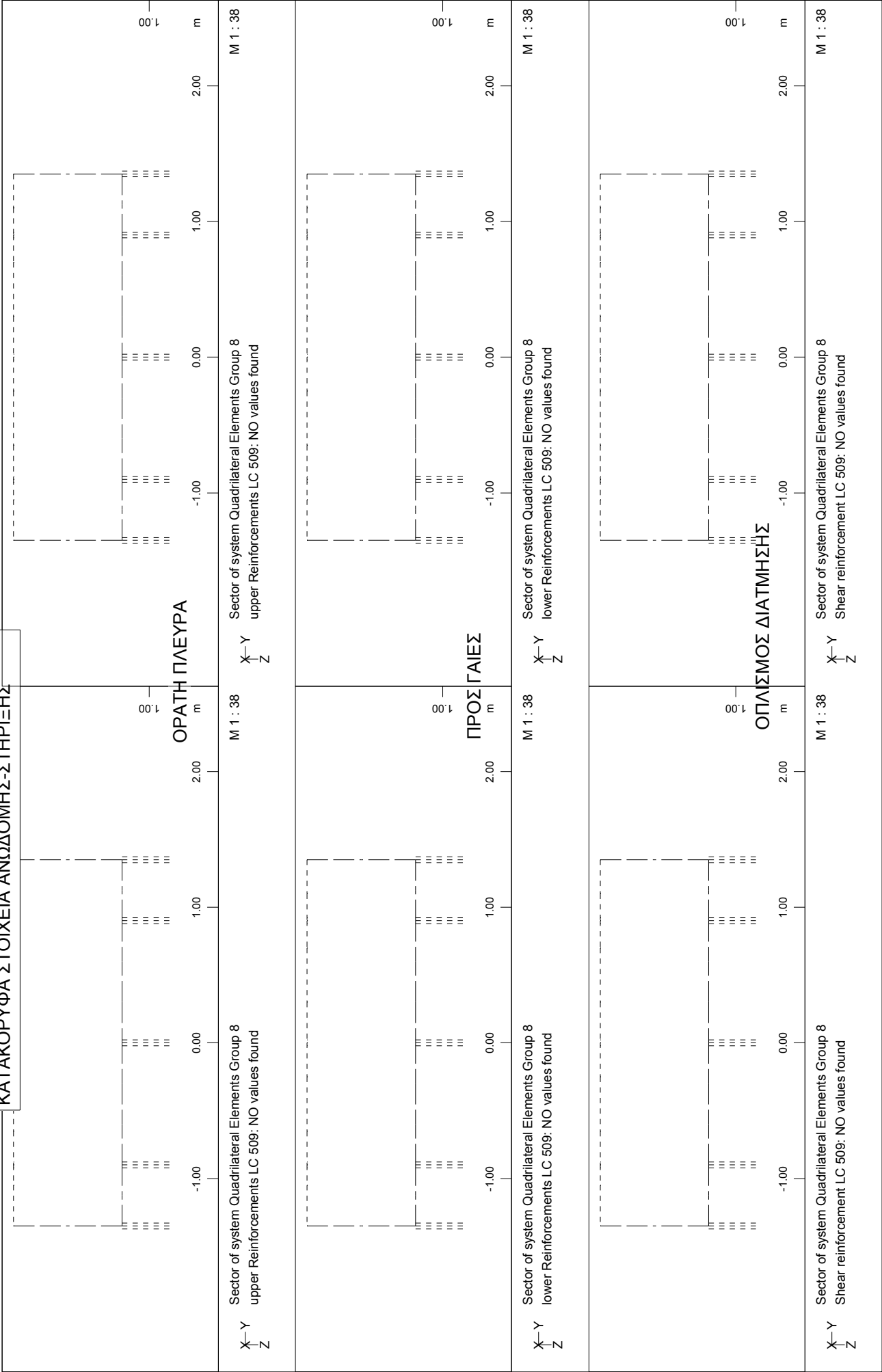
Z-X
Y

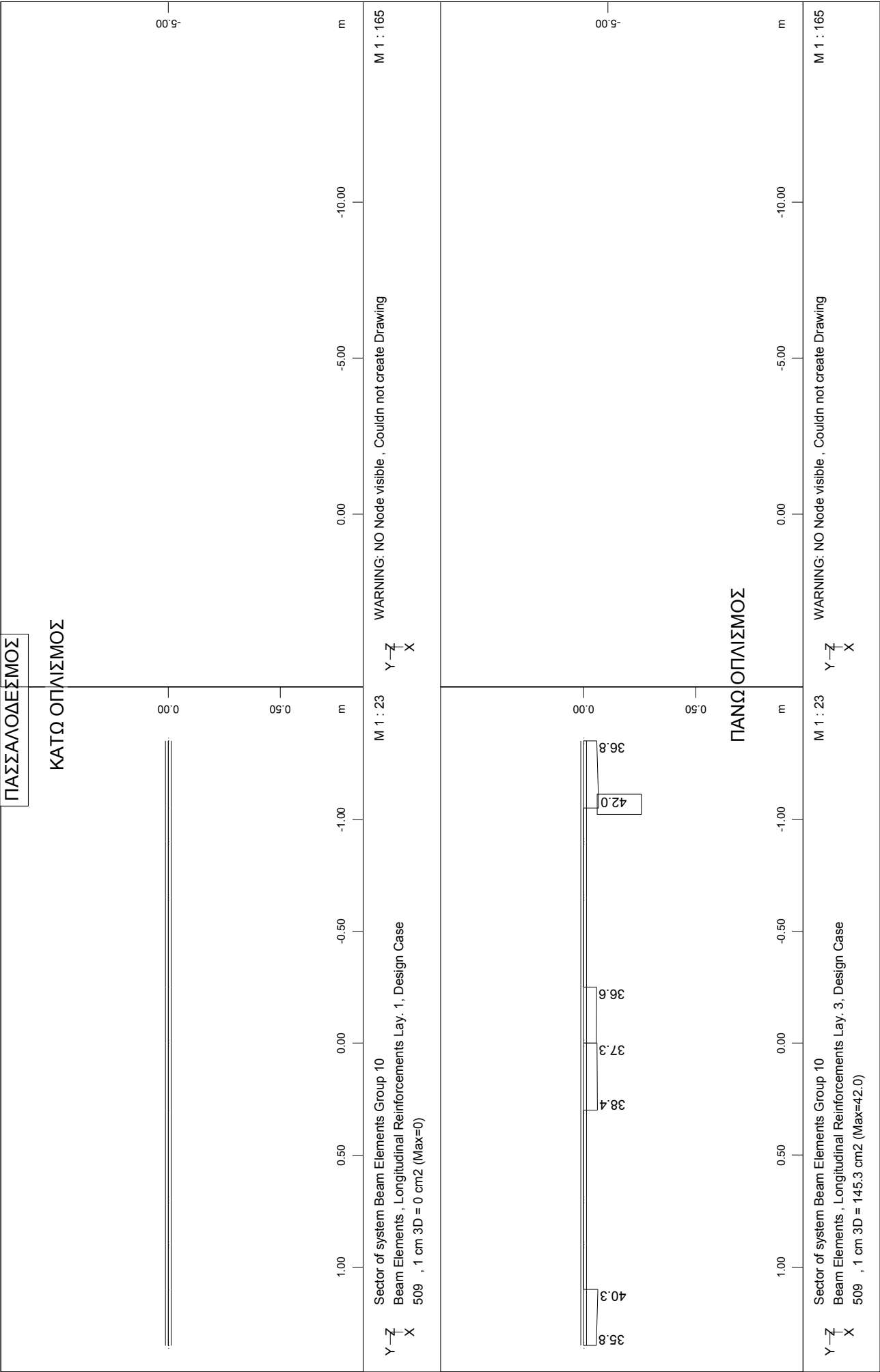


Sector of system Beam Elements Group 1	
Z-X	Beam Elements longitudinal Reinforcements av. 0 Design Case 510 1 cm 3D = 4.48 cm ² (Max=2.37)

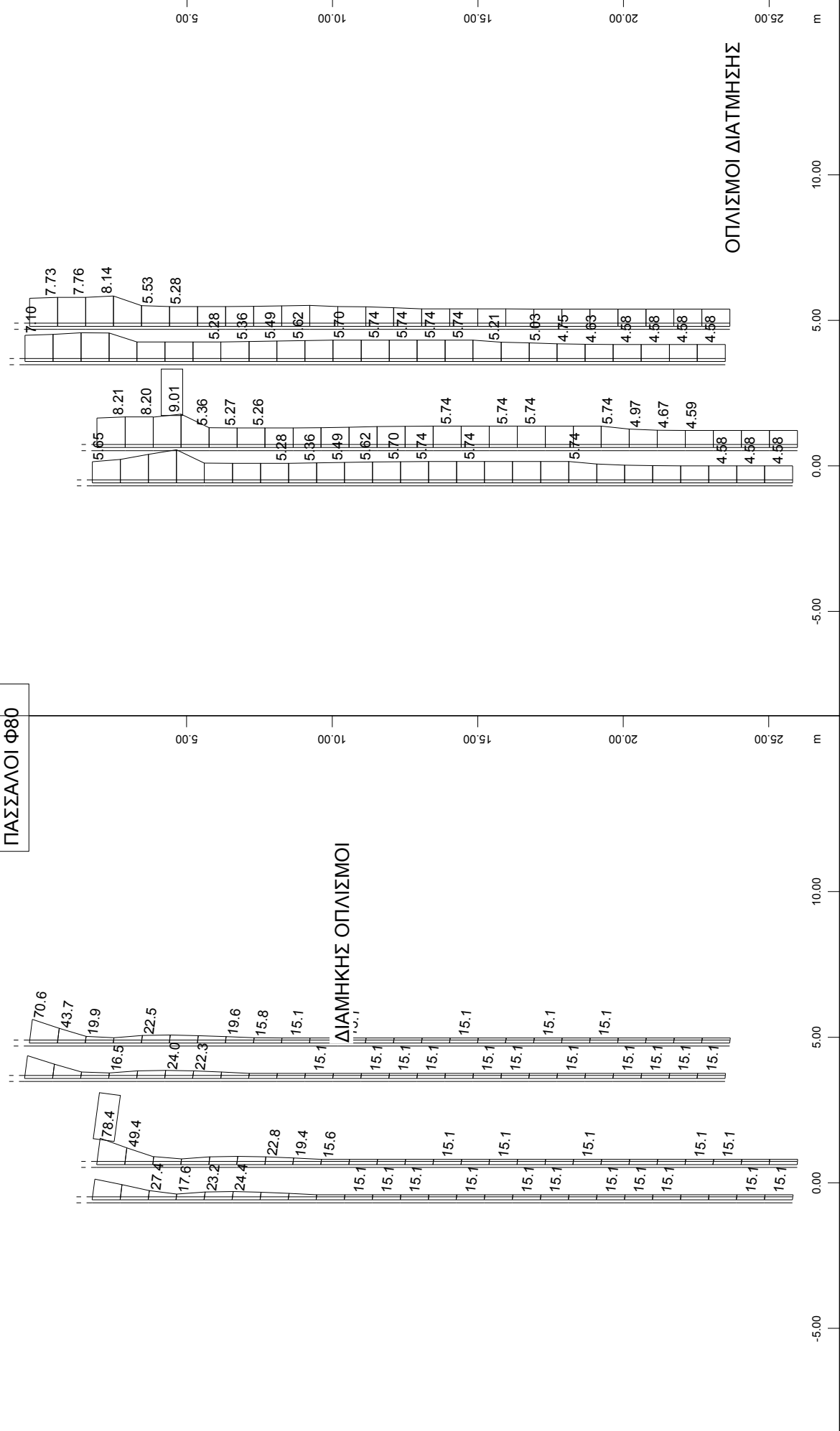




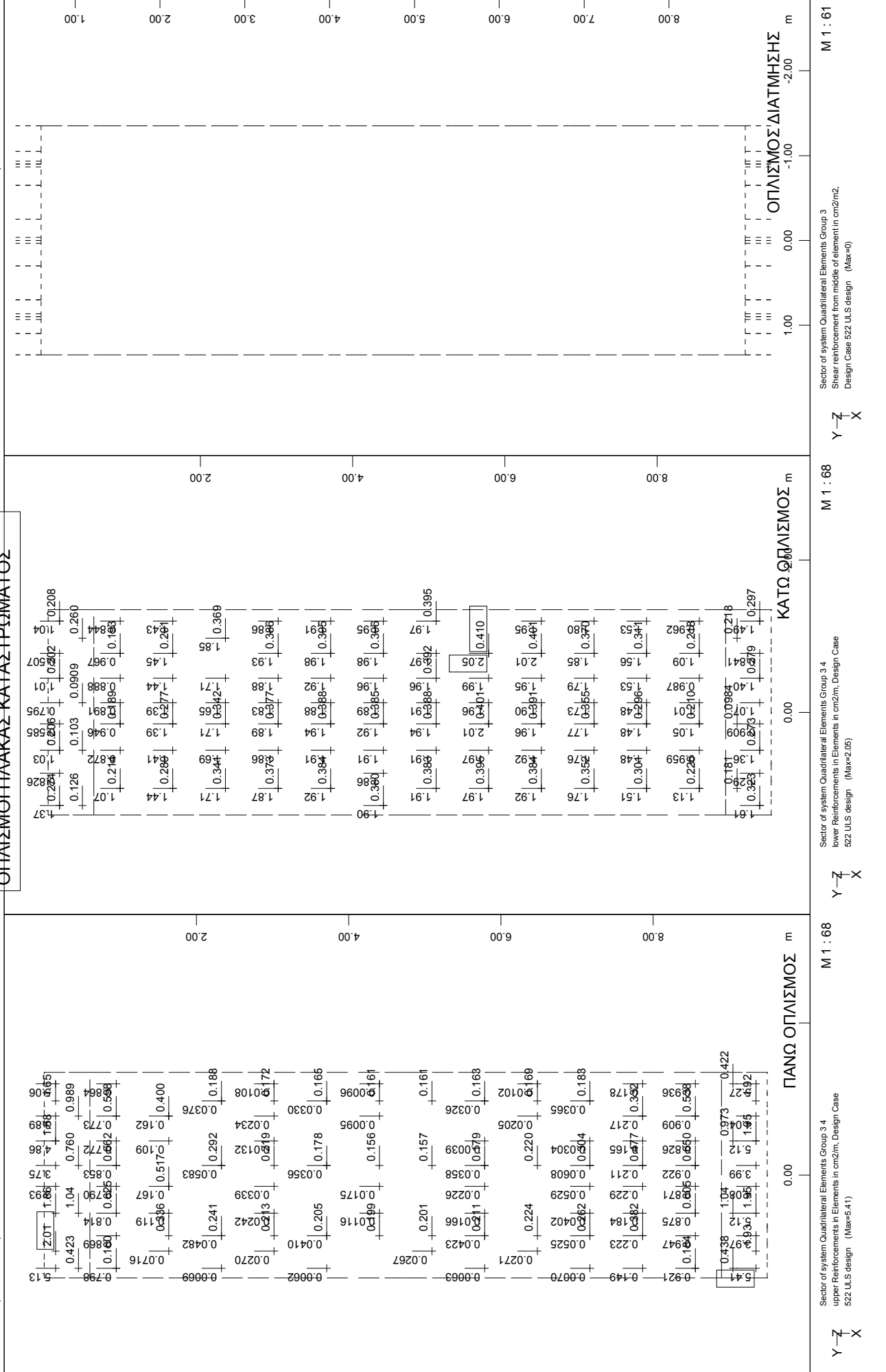




ΠΑΣΣΑΛΟΙ Φ80



ΟΠΑΙΣΜΟΙ ΠΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ



**11) ΦΑΣΗ-2_ ΕΛΕΓΧΟΣ ΦΟΡΕΑ ULS-ΣΕΙΣΜΙΚΑ
(Q=1.00, γBd1=1.25)**

ΟΠΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	1.913	0.366	2.567

Iteration sequence

Iteration 1 Residual	0.003	energy 234.7232 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 234.8435 e/f	0.000	1.001

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	1.913	0.366	1.980

Iteration sequence

Iteration 1 Residual	0.003	energy 230.5289 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 230.6283 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 TB/L=10.70
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	1.913	-0.366	2.567

Iteration sequence

Iteration 1 Residual	0.004	energy 235.0955 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 235.2164 e/f	0.000	1.001

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 TB/L=10.70
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	1.913	-0.366	1.980

Iteration sequence

Iteration 1 Residual	0.003	energy 230.8281 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 230.9277 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
 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	-1.963	0.366	2.567

Iteration sequence

Iteration 1 Residual	0.004	energy 237.0652 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 237.1969 e/f	0.000	1.001

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-1.963	0.366	1.980

Iteration sequence

Iteration 1 Residual	0.003	energy 232.7538 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 232.8632 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-1.963	-0.366	2.567

Iteration sequence

Iteration 1 Residual	0.004	energy 237.4487 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 237.5816 e/f	0.000	1.001

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 TB/L=10.70
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	-1.963	-0.366	1.980

Iteration sequence

Iteration 1 Residual	0.003	energy 233.0642 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 233.1745 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 TB/L=10.70
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	0.556	1.219	2.567

Iteration sequence

Iteration 1 Residual	0.004	energy	204.8810 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy	204.9604 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
 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	0.556	1.219	1.980

Iteration sequence

Iteration 1 Residual	0.004	energy 200.7311 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 200.7967 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 TB/L=10.70
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	0.556	-1.219	2.567

Iteration sequence

Iteration 1 Residual	0.004	energy 206.1353 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 206.2175 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
 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	0.556	-1.219	1.980

Iteration sequence

Iteration 1 Residual	0.004	energy 201.7415 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 201.8089 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 TB/L=10.70
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	-0.606	1.219	2.567

Iteration sequence

Iteration 1 Residual	0.004	energy 205.5798 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 205.6612 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 TB/L=10.70
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	-0.606	1.219	1.980

Iteration sequence

Iteration 1 Residual	0.004	energy	201.3946 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy	201.4619 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
 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	-0.606	-1.219	2.567

Iteration sequence

Iteration 1 Residual	0.004	energy 206.8451 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 206.9300 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
 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	-0.606	-1.219	1.980

Iteration sequence

Iteration 1 Residual	0.004	energy 202.4163 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 202.4859 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 TB/L=10.70
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	0.556	0.366	3.252

Iteration sequence

Iteration 1 Residual	0.001	energy 181.9706 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 181.9896 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 TB/L=10.70
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	0.556	0.366	1.295

Iteration sequence

Iteration 1 Residual	0.001	energy 167.8530 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 167.8629 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 TB/L=10.70
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	0.556	-0.366	3.252

Iteration sequence

Iteration 1 Residual	0.001	energy 182.4322 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 182.4525 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
 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	0.556	-0.366	1.295

Iteration sequence

Iteration 1 Residual	0.001	energy 168.0708 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 168.0809 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-0.606	0.366	3.252

Iteration sequence

Iteration 1 Residual	0.001	energy 182.7142 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 182.7359 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-0.606	0.366	1.295

Iteration sequence

Iteration 1 Residual	0.001	energy 168.4794 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 168.4908 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-0.606	-0.366	3.252

Iteration sequence

Iteration 1 Residual	0.001	energy 183.1792 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 183.2024 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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	-0.606	-0.366	1.295

Iteration sequence

Iteration 1 Residual	0.001	energy 168.7006 e/f	0.000	1.000
Iteration 2 Residual	0.000	energy 168.7124 e/f	0.000	1.000

Statistic nonlinear effects:

Statistic nonlinear effects of spring elements: no of elem.:	4
Number of longitudinal springs:	4
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 ΤΒ/Λ=10.70
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]	Ass [cm ² /m ²]
								VRd,ct/d	
3	3001	maximum	0.25	1.31	0.26	0	1	0.079	
				1.43	0.29	0		0.495	
3	3002	maximum	0.25	0.40	0.08	0	1	0.048	
				1.83	0.37	0		0.496	
3	3003	maximum	0.25	0.01	0.04	0	1	0.048	
				2.03	0.41	0		0.496	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
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 [cm ² /m ²]
3	3004	maximum			0.25	0.01 0.03	0	1	0.042		
						2.11 0.42	0		0.496		
3	3005	maximum			0.25	0.01 0.03	0	1	0.035		
						2.10 0.42	0		0.496		
3	3006	maximum			0.25	0.01 0.03	0	1	0.028		
						2.01 0.40	0		0.496		
3	3007	maximum			0.25	1.21 0.42	0	1	0.062		
						1.57 0.31	0		0.495		
3	3008	maximum			0.25	0.46 0.19	0	1	0.049		
						1.88 0.38	0		0.496		
3	3009	maximum			0.25	0.03 0.15	0	1	0.043		
						2.08 0.42	0		0.496		
3	3010	maximum			0.25	0.03 0.14	0	1	0.037		
						2.16 0.43	0		0.496		
3	3011	maximum			0.25	0.03 0.14	0	1	0.033		
						2.14 0.43	0		0.496		
3	3012	maximum			0.25	0.03 0.14	0	1	0.030		
						2.01 0.40	0		0.496		
3	3013	maximum			0.25	1.39 0.74	0	1	0.065		
						1.40 0.28	0		0.496		
3	3014	maximum			0.25	0.50 0.41	0	1	0.049		
						1.86 0.37	0		0.496		
3	3015	maximum			0.25	0.06 0.31	0	1	0.041		
						2.04 0.41	0		0.496		
3	3016	maximum			0.25	0.05 0.27	0	1	0.039		
						2.13 0.43	0		0.496		
3	3017	maximum			0.25	0.05 0.25	0	1	0.037		
						2.11 0.42	0		0.496		
3	3018	maximum			0.25	0.05 0.24	0	1	0.036		
						1.97 0.39	0		0.496		
3	3019	maximum			0.25	1.28 0.75	0	1	0.066		
						1.31 0.26	0		0.495		
3	3020	maximum			0.25	0.50 0.39	0	1	0.044		
						1.85 0.37	0		0.495		
3	3021	maximum			0.25	0.05 0.23	0	1	0.039		
						2.05 0.41	0		0.496		
3	3022	maximum			0.25	0.03 0.15	0	1	0.032		
						2.14 0.43	0		0.496		
3	3023	maximum			0.25	0.02 0.10	0	1	0.026		
						2.12 0.42	0		0.496		
3	3024	maximum			0.25	0.01 0.07	0	1	0.020		
						2.02 0.40	0		0.496		
3	3025	maximum			0.25	1.26 0.75	0	1	0.066		
						1.49 0.30	0		0.495		
3	3026	maximum			0.25	0.57 0.60	0	1	0.054		
						1.83 0.37	0		0.496		
3	3027	maximum			0.25	0.08 0.39	0	1	0.040		
						2.08 0.42	0		0.496		
3	3028	maximum			0.25	0.04 0.20	0	1	0.033		
						2.18 0.44	0		0.496		
3	3029	maximum			0.25	0.03 0.14	0	1	0.026		
						2.15 0.43	0		0.496		
3	3030	maximum			0.25	0.02 0.11	0	1	0.021		
						2.04 0.41	0		0.496		
3	3031	maximum			0.25	1.36 0.82	0	1	0.060		
						1.35 0.27	0		0.496		
3	3032	maximum			0.25	0.48 0.54	0	1	0.062		
						1.85 0.37	0		0.496		
3	3033	maximum			0.25	0.07 0.35	0	1	0.049		
						2.02 0.40	0		0.496		
3	3034	maximum			0.25	0.05 0.25	0	1	0.047		
						2.11 0.42	0		0.496		
3	3035	maximum			0.25	0.04 0.19	0	1	0.046		
						2.08 0.42	0		0.496		
3	3036	maximum			0.25	0.03 0.17	0	1	0.045		
						1.99 0.40	0		0.496		
3	3037	maximum			0.25	1.21 0.66	0	1	0.061		
						1.37 0.27	0		0.495		
3	3038	maximum			0.25	0.48 0.36	0	1	0.046		
						1.87 0.37	0		0.495		
3	3039	maximum			0.25	0.04 0.20	0	1	0.043		
						2.07 0.41	0		0.495		
3	3040	maximum			0.25	0.02 0.09	0	1	0.034		
						2.16 0.43	0		0.496		

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
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	3041		maximum		0.25	0.01	0.04	0	1	0.028	
						2.12	0.42	0		0.496	
3	3042		maximum		0.25		0.02	0	1	0.023	
						2.06	0.41	0		0.496	
3	3043		maximum		0.25	1.29	0.72	0	1	0.079	
						1.49	0.30	0		0.495	
3	3044		maximum		0.25	0.56	0.47	0	1	0.050	
						1.90	0.38	0		0.496	
3	3045		maximum		0.25	0.05	0.23	0	1	0.039	
						2.13	0.43	0		0.496	
3	3046		maximum		0.25	0.03	0.17	0	1	0.034	
						2.21	0.44	0		0.496	
3	3047		maximum		0.25	0.02	0.12	0	1	0.028	
						2.18	0.44	0		0.496	
3	3048		maximum		0.25	0.02	0.10	0	1	0.025	
						2.11	0.42	0		0.497	
3	3049		maximum		0.25	1.27	0.45	0	1	0.073	
						1.34	0.27	0		0.495	
3	3050		maximum		0.25	0.45	0.23	0	1	0.059	
						1.81	0.36	0		0.497	
3	3051		maximum		0.25	0.04	0.20	0	1	0.051	
						2.07	0.41	0		0.497	
3	3052		maximum		0.25	0.04	0.18	0	1	0.046	
						2.10	0.42	0		0.497	
3	3053		maximum		0.25	0.03	0.17	0	1	0.042	
						2.08	0.42	0		0.497	
3	3054		maximum		0.25	0.03	0.17	0	1	0.040	
						2.04	0.41	0		0.497	
3	3055		maximum		0.25	1.36	0.27	0	1	0.085	
						1.29	0.26	0		0.495	
3	3056		maximum		0.25	0.45	0.15	0	1	0.060	
						1.85	0.37	0		0.495	
3	3057		maximum		0.25	0.01	0.07	0	1	0.056	
						2.06	0.41	0		0.495	
3	3058		maximum		0.25	0.01	0.06	0	1	0.046	
						2.15	0.43	0		0.495	
3	3059		maximum		0.25	0.01	0.05	0	1	0.036	
						2.12	0.42	0		0.496	
3	3060		maximum		0.25	0.01	0.05	0	1	0.025	
						2.06	0.41	0		0.496	
3	3061		maximum		0.25	0.01	0.03	0	1	0.034	
						2.10	0.42	0		0.496	
3	3062		maximum		0.25	0.01	0.03	0	1	0.041	
						2.24	0.45	0		0.496	
3	3063		maximum		0.25	0.01	0.03	0	1	0.047	
						2.26	0.45	0		0.496	
3	3064		maximum		0.25	0.01	0.05	0	1	0.054	
						2.18	0.44	0		0.496	
3	3065		maximum		0.25	0.58	0.12	0	1	0.053	
						1.98	0.40	0		0.496	
3	3066		maximum		0.25	1.47	0.29	0	1	0.083	
						1.59	0.32	0		0.495	
3	3067		maximum		0.25	0.03	0.14	0	1	0.031	
						2.13	0.43	0		0.496	
3	3068		maximum		0.25	0.03	0.14	0	1	0.033	
						2.27	0.45	0		0.496	
3	3069		maximum		0.25	0.03	0.14	0	1	0.038	
						2.30	0.46	0		0.496	
3	3070		maximum		0.25	0.03	0.15	0	1	0.044	
						2.21	0.44	0		0.496	
3	3071		maximum		0.25	0.59	0.16	0	1	0.051	
						2.03	0.41	0		0.496	
3	3072		maximum		0.25	1.37	0.44	0	1	0.066	
						1.69	0.34	0		0.495	
3	3073		maximum		0.25	0.05	0.25	0	1	0.036	
						2.06	0.41	0		0.496	
3	3074		maximum		0.25	0.05	0.26	0	1	0.037	
						2.22	0.44	0		0.496	
3	3075		maximum		0.25	0.06	0.28	0	1	0.039	
						2.26	0.45	0		0.496	
3	3076		maximum		0.25	0.07	0.36	0	1	0.041	
						2.17	0.43	0		0.496	
3	3077		maximum		0.25	0.70	0.48	0	1	0.050	
						1.98	0.40	0		0.496	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
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	3078		maximum		0.25	1.51	0.74	0	1	0.065		
						1.59	0.32	0		0.496		
3	3079		maximum		0.25	0.01	0.07	0	1	0.020		
						2.09	0.42	0		0.496		
3	3080		maximum		0.25	0.02	0.10	0	1	0.026		
						2.25	0.45	0		0.496		
3	3081		maximum		0.25	0.03	0.16	0	1	0.032		
						2.28	0.46	0		0.496		
3	3082		maximum		0.25	0.05	0.25	0	1	0.040		
						2.19	0.44	0		0.496		
3	3083		maximum		0.25	0.60	0.35	0	1	0.044		
						1.99	0.40	0		0.495		
3	3084		maximum		0.25	1.38	0.73	0	1	0.062		
						1.45	0.29	0		0.495		
3	3085		maximum		0.25	0.02	0.11	0	1	0.021		
						2.13	0.43	0		0.496		
3	3086		maximum		0.25	0.03	0.14	0	1	0.026		
						2.28	0.46	0		0.496		
3	3087		maximum		0.25	0.04	0.20	0	1	0.032		
						2.31	0.46	0		0.496		
3	3088		maximum		0.25	0.06	0.31	0	1	0.040		
						2.22	0.44	0		0.496		
3	3089		maximum		0.25	0.67	0.56	0	1	0.054		
						1.99	0.40	0		0.496		
3	3090		maximum		0.25	1.44	0.74	0	1	0.063		
						1.68	0.34	0		0.495		
3	3091		maximum		0.25	0.03	0.17	0	1	0.045		
						2.08	0.42	0		0.496		
3	3092		maximum		0.25	0.04	0.19	0	1	0.046		
						2.21	0.44	0		0.496		
3	3093		maximum		0.25	0.05	0.26	0	1	0.048		
						2.24	0.45	0		0.496		
3	3094		maximum		0.25	0.08	0.38	0	1	0.050		
						2.15	0.43	0		0.496		
3	3095		maximum		0.25	0.68	0.61	0	1	0.064		
						2.00	0.40	0		0.496		
3	3096		maximum		0.25	1.46	0.81	0	1	0.064		
						1.55	0.31	0		0.496		
3	3097		maximum		0.25		0.02	0	1	0.023		
						2.10	0.42	0		0.496		
3	3098		maximum		0.25	0.01	0.04	0	1	0.027		
						2.26	0.45	0		0.496		
3	3099		maximum		0.25	0.02	0.09	0	1	0.034		
						2.30	0.46	0		0.495		
3	3100		maximum		0.25	0.04	0.19	0	1	0.043		
						2.22	0.44	0		0.495		
3	3101		maximum		0.25	0.59	0.31	0	1	0.047		
						2.04	0.41	0		0.495		
3	3102		maximum		0.25	1.34	0.67	0	1	0.062		
						1.53	0.31	0		0.495		
3	3103		maximum		0.25	0.02	0.10	0	1	0.025		
						2.16	0.43	0		0.497		
3	3104		maximum		0.25	0.02	0.12	0	1	0.028		
						2.32	0.46	0		0.497		
3	3105		maximum		0.25	0.03	0.15	0	1	0.033		
						2.36	0.47	0		0.496		
3	3106		maximum		0.25	0.05	0.24	0	1	0.038		
						2.29	0.46	0		0.496		
3	3107		maximum		0.25	0.66	0.40	0	1	0.049		
						2.08	0.42	0		0.496		
3	3108		maximum		0.25	1.47	0.69	0	1	0.080		
						1.71	0.34	0		0.496		
3	3109		maximum		0.25	0.03	0.17	0	1	0.040		
						2.14	0.43	0		0.497		
3	3110		maximum		0.25	0.03	0.17	0	1	0.042		
						2.26	0.45	0		0.497		
3	3111		maximum		0.25	0.04	0.18	0	1	0.045		
						2.27	0.45	0		0.497		
3	3112		maximum		0.25	0.04	0.19	0	1	0.050		
						2.17	0.43	0		0.497		
3	3113		maximum		0.25	0.58	0.21	0	1	0.058		
						1.98	0.40	0		0.497		
3	3114		maximum		0.25	1.37	0.50	0	1	0.078		
						1.55	0.31	0		0.495		

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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 [MPa]	Ass [cm2/m2]
3	3115	maximum			0.25	0.01	0.05	0	1	0.020		
						2.16	0.43	0		0.497		
3	3116	maximum			0.25	0.01	0.05	0	1	0.030		
						2.26	0.45	0		0.496		
3	3117	maximum			0.25	0.01	0.05	0	1	0.040		
						2.30	0.46	0		0.495		
3	3118	maximum			0.25	0.01	0.06	0	1	0.050		
						2.23	0.45	0		0.495		
3	3119	maximum			0.25	0.56	0.11	0	1	0.055		
						2.03	0.41	0		0.495		
3	3120	maximum			0.25	1.47	0.29	0	1	0.082		
						1.49	0.30	0		0.495		
4	4001	maximum			0.25	7.25	1.72	0	1			
						2.90	0.58	0		0.497		
4	4002	maximum			0.25	2.90	0.58	0	1	0.316		
						1.24	0.25	0		0.495		
4	4003	maximum			0.25	5.59	2.54	0	1	0.440		
						1.77	0.35	0		0.495		
4	4004	maximum			0.25	2.39	1.08	0	1	0.309		
						0.85	0.32	0		0.496		
4	4005	maximum			0.25	5.20	1.44	0	2	0.785		15.09
						1.96	0.43	0		0.495		
4	4006	maximum			0.25	2.30	0.91	0	1	0.460		
						0.87	0.21	0		0.496		
4	4007	maximum			0.25	6.82	2.48	0	1			
						2.51	0.50	0		0.497		
4	4008	maximum			0.25	2.47	1.30	0	1	0.303		
						1.10	0.22	0		0.495		
4	4009	maximum			0.25	5.42	2.34	0	2	0.524		10.07
						1.82	0.36	0		0.495		
4	4010	maximum			0.25	2.29	1.08	0	1	0.354		
						0.90	0.18	0		0.496		
4	4011	maximum			0.25	5.21	1.92	0	2	0.591		11.34
						1.94	0.60	0		0.495		
4	4012	maximum			0.25	2.32	0.98	0	1	0.389		
						0.88	0.18	0		0.496		
4	4013	maximum			0.25	6.78	2.50	0	1			
						2.48	0.50	0		0.497		
4	4014	maximum			0.25	2.39	1.20	0	1	0.293		
						1.14	0.23	0		0.496		
4	4015	maximum			0.25	5.34	1.89	0	2	0.644		12.37
						1.63	0.33	0		0.495		
4	4016	maximum			0.25	2.31	1.24	0	1	0.405		
						0.82	0.16	0		0.496		
4	4017	maximum			0.25	5.39	2.23	0	1	0.404		
						1.86	0.53	0		0.495		
4	4018	maximum			0.25	2.13	0.86	0	1	0.330		
						0.75	0.47	0		0.496		
4	4019	maximum			0.25	7.07	1.51	0	1			
						2.60	0.52	0		0.497		
4	4020	maximum			0.25	2.69	0.54	0	1	0.315		
						1.12	0.22	0		0.495		
4	4021	maximum			0.25	3.03	0.61	0	1	0.340		
						1.44	0.29	0		0.495		
4	4022	maximum			0.25	7.73	1.74	0	1			
						3.40	0.68	0		0.497		
4	4023	maximum			0.25	2.43	1.03	0	1	0.335		
						1.02	0.40	0		0.496		
4	4024	maximum			0.25	5.89	2.49	0	1	0.479		
						2.32	0.46	0		0.495		
4	4025	maximum			0.25	2.43	0.97	0	1	0.475		
						1.03	0.21	0		0.496		
4	4026	maximum			0.25	5.56	1.72	0	2	0.772		14.84
						2.32	0.46	0		0.495		
4	4027	maximum			0.25	2.59	1.31	0	1	0.314		
						1.28	0.26	0		0.495		
4	4028	maximum			0.25	7.26	2.65	0	1			
						3.00	0.60	0		0.497		
4	4029	maximum			0.25	2.46	1.04	0	1	0.381		
						1.11	0.22	0		0.496		
4	4030	maximum			0.25	5.69	2.29	0	2	0.567		10.90
						2.26	0.45	0		0.495		
4	4031	maximum			0.25	2.45	1.03	0	1	0.402		
						1.08	0.22	0		0.496		

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
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	
4	4032		maximum		0.25	5.60	2.23	0	2	0.584	11.23
						2.36	0.68	0		0.495	
4	4033		maximum		0.25	2.57	1.26	0	1	0.309	
						1.36	0.27	0		0.496	
4	4034		maximum		0.25	7.26	2.66	0	1		
						3.04	0.61	0		0.497	
4	4035		maximum		0.25	2.47	1.15	0	1	0.441	
						1.03	0.21	0		0.496	
4	4036		maximum		0.25	5.62	1.79	0	2	0.706	13.55
						2.22	0.44	0		0.495	
4	4037		maximum		0.25	2.34	0.97	0	1	0.345	
						0.97	0.44	0		0.496	
4	4038		maximum		0.25	5.77	2.60	0	1	0.383	
						2.34	0.63	0		0.495	
4	4039		maximum		0.25	2.95	0.59	0	1	0.321	
						1.37	0.27	0		0.495	
4	4040		maximum		0.25	7.48	1.67	0	1		
						3.23	0.65	0		0.497	
8	8001		maximum		1.20	0.84	4.20	0	1	0.143	
						1.51	7.53	0		0.352	
8	8002		maximum		1.20	1.67	8.37	0	1	0.488	
						3.96	19.79	0		0.589	
8	8003		maximum		1.20	6.22	31.09	0	1	0.165	
						15.25	59.11	0		0.374	
8	8004		maximum		1.20	3.81	19.04	0	1	0.464	
						6.56	32.78	0		0.585	
8	8005		maximum		1.20	6.67	33.35	0	1	0.236	
						10.54	52.57	0		0.377	
8	8006		maximum		1.20	4.92	24.58	0	1	0.170	
						8.69	43.44	0		0.515	
8	8007		maximum		1.20	1.08	5.40	0	1	0.132	
						1.14	5.70	0		0.396	
8	8008		maximum		1.20	0.82	4.08	0	2	0.356	4.94
						0.45	2.26	0		0.519	
8	8009		maximum		1.20	4.70	23.48	0	1	0.119	
						8.62	43.11	0		0.385	
8	8010		maximum		1.20	3.33	16.63	0	1	0.322	
						6.01	30.06	0		0.515	
8	8011		maximum		1.20	5.38	26.91	0	1	0.145	
						8.97	44.86	0		0.389	
8	8012		maximum		1.20	3.54	17.69	0	1	0.278	
						7.20	35.99	0		0.487	
8	8013		maximum		1.20	1.10	5.48	0	1	0.106	
						1.13	5.66	0		0.398	
8	8014		maximum		1.20	0.90	4.49	0	2	0.357	4.95
						0.41	2.07	0		0.500	
8	8015		maximum		1.20	5.92	29.61	0	1	0.189	
						10.01	49.42	0		0.399	
8	8016		maximum		1.20	4.91	24.53	0	1	0.215	
						7.21	36.06	0		0.502	
8	8017		maximum		1.20	6.39	31.95	0	1	0.164	
						15.76	59.43	0		0.383	
8	8018		maximum		1.20	3.71	18.54	0	1	0.405	
						6.44	32.18	0		0.603	
8	8019		maximum		1.20	0.97	4.83	0	1	0.136	
						1.79	8.95	0		0.356	
8	8020		maximum		1.20	1.70	8.52	0	1	0.420	
						3.26	16.31	0		0.609	
8	8021		maximum		1.20	0.99	4.97	0	1	0.149	
						1.57	7.84	0		0.353	
8	8022		maximum		1.20	7.32	36.59	0	1	0.180	
						16.51	63.01	0		0.379	
8	8023		maximum		1.20	2.10	10.49	0	1	0.488	
						4.06	20.28	0		0.595	
8	8024		maximum		1.20	4.34	21.69	0	1	0.441	
						6.84	34.21	0		0.585	
8	8025		maximum		1.20	7.53	37.66	0	1	0.249	
						13.02	57.01	0		0.375	
8	8026		maximum		1.20	1.22	6.09	0	1	0.122	
						1.20	5.98	0		0.396	
8	8027		maximum		1.20	5.77	28.84	0	1	0.143	
						9.22	46.11	0		0.389	
8	8028		maximum		1.20	5.46	27.28	0	1	0.210	
						8.67	43.33	0		0.518	

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	MAT	GEO No	h [m]	Reinforcement main cross	dphi deg	Shr zon	VEd/d [MPa]	VRd,ct/d	Ass [cm ² /m ²]
8	8029		maximum		1.20	0.92 4.59	0	2	0.390		5.41
						0.48 2.40	0		0.525		
8	8030		maximum		1.20	3.96 19.79	0	1	0.366		
						6.67 33.34	0		0.509		
8	8031		maximum		1.20	6.34 31.69	0	1	0.158		
						10.31 49.23	0		0.391		
8	8032		maximum		1.20	1.24 6.18	0	1	0.106		
						1.19 5.93	0		0.398		
8	8033		maximum		1.20	7.08 35.40	0	1	0.218		
						11.14 52.98	0		0.399		
8	8034		maximum		1.20	4.16 20.82	0	1	0.339		
						7.44 37.18	0		0.487		
8	8035		maximum		1.20	1.02 5.08	0	2	0.389		5.39
						0.50 2.52	0		0.504		
8	8036		maximum		1.20	5.53 27.64	0	1	0.238		
						8.01 40.07	0		0.505		
8	8037		maximum		1.20	8.02 39.29	0	1	0.191		
						19.11 65.69	0		0.387		
8	8038		maximum		1.20	1.22 6.11	0	1	0.129		
						1.99 9.93	0		0.355		
8	8039		maximum		1.20	4.31 21.55	0	1	0.425		
						6.90 34.48	0		0.603		
8	8040		maximum		1.20	2.17 10.86	0	1	0.490		
						3.78 18.91	0		0.610		

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 ΤΒ/L=10.70
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]
4005	15.09	0.79	0.313	1.75	0.181
4009	10.07	0.52	0.209	1.75	0.180
4011	11.34	0.59	0.236	1.75	0.180
4015	12.37	0.64	0.257	1.75	0.180
4026	14.84	0.77	0.308	1.75	0.180
4030	10.90	0.57	0.226	1.75	0.179
4032	11.23	0.58	0.233	1.75	0.180
4036	13.55	0.71	0.282	1.75	0.180
8008	4.94	0.36	0.100	1.75	1.088
8014	4.95	0.36	0.101	1.75	0.782
8029	5.41	0.39	0.109	1.75	0.741
8035	5.39	0.39	0.110	1.75	0.741

OPIΣTIKH MEΛETH/TECHNIKO TB/L=10.70
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											
10010											
10011											
10015											
10016											
10020											
12000	12100	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. 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 [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	
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	
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 [MPa]	tau-rd [MPa]	sigIIQ [MPa]	sigIIT [MPa]	sigIIQ+ [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

434.78

Tolerance for exceeding maximum shear or principal compression stress 0.0200

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
10001	0.000	8	0.39	51.46		15.59T			35.87	
10001	0.250	8	0.39	51.42		10.93T			40.50	
10005	0.000	8	0.55	71.99		33.09T			38.90	
10005	0.300	8	0.54	71.01		33.09T			37.92	
10006	0.000	8	0.45	59.39		23.17T			36.22	
10006	0.250	8	0.40	53.37		16.32T			37.05	
10010	0.000	8	0.40	52.79		10.60T			42.20	
10010	0.300	8	0.39	51.95		15.14T			36.81	
10011	0.000	8	0.39	51.79		15.92T			35.87	
10011	0.250	8	0.39	51.65		11.16T			40.49	
10015	0.000	8	0.50	66.11		27.25T			38.86	
10015	0.300	8	0.49	65.21		27.25T			37.96	
10016	0.000	8	0.50	66.38		30.19T			36.18	
10016	0.250	8	0.51	67.25		30.19T			37.06	
10020	0.000	8	0.40	52.98		10.80T			42.18	
10020	0.300	8	0.40	52.25		15.44T			36.81	
12001	0.000	9	2.25	113.09			113.09T			
12001	1.000	9	1.47	73.74			73.74T			
12002	0.000	9	1.47	73.80			73.80T			
12002	1.000	9	0.72	36.02			36.02T			
12003	0.000	9	0.72	36.11			36.11T			
12003	1.000	9	0.56	28.31			28.31T			
12004	0.000	9	1.89	95.07			95.07T			
12004	1.000	9	1.38	69.17			69.17T			
12005	0.000	9	1.38	69.23			69.23T			
12005	1.000	9	0.80	40.38			40.38T			
12006	0.000	9	0.81	40.48			40.48T			
12006	1.000	9	0.57	28.73			28.73T			
12007	0.000	9	2.07	104.08			104.08T			
12007	1.000	9	1.32	66.38			66.38T			
12008	0.000	9	1.32	66.44			66.44T			
12008	1.000	9	0.61	30.67			30.67T			
12009	0.000	9	0.61	30.75			30.75T			
12009	1.000	9	0.56	28.02			28.02T			
12010	0.000	9	2.06	103.32			103.32T			
12010	1.000	9	1.29	64.85			64.85T			
12011	0.000	9	1.29	64.92			64.92T			
12011	1.000	9	0.58	29.32			29.32T			
12012	0.000	9	0.59	29.43			29.43T			
12012	1.000	9	0.56	28.03			28.03T			
12013	0.000	9	0.57	28.46			28.46T			
12013	1.000	9	0.77	38.47			38.47T			
12014	0.000	9	0.77	38.47			38.47T			
12014	1.000	9	0.82	41.40			41.40T			
12015	0.000	9	0.82	41.40			41.40T			
12015	1.000	9	0.78	39.14			39.14T			
12016	0.000	9	0.78	39.14			39.14T			
12016	1.000	9	0.67	33.90			33.90T			
12017	0.000	9	0.67	33.90			33.90T			
12017	1.000	9	0.57	28.68			28.68T			
12018	0.000	9	0.57	28.68			28.68T			
12018	1.000	9	0.45	22.39			22.39T			
12019	0.000	9	0.45	22.39			22.39T			
12019	1.000	9	0.32	16.18			16.18T			
12020	0.000	9	0.32	16.18			16.18T			
12020	1.000	9	0.30	15.08			15.08T			
12021	0.000	9	0.30	15.08			15.08T			
12021	1.000	9	0.30	15.08			15.08T			
12022	0.000	9	0.30	15.08			15.08T			
12022	1.000	9	0.30	15.08			15.08T			
12023	0.000	9	0.30	15.08			15.08T			
12023	1.000	9	0.30	15.08			15.08T			
12024	0.000	9	0.30	15.08			15.08T			
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			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
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			15.08			
12034	1.000	9	0.30	15.08			15.08			
12035	0.000	9	0.57	28.88			28.88T			
12035	1.000	9	0.77	38.84			38.84T			
12036	0.000	9	0.77	38.84			38.84T			
12036	1.000	9	0.83	41.51			41.51T			
12037	0.000	9	0.83	41.51			41.51T			
12037	1.000	9	0.78	39.02			39.02T			
12038	0.000	9	0.78	39.02			39.02T			
12038	1.000	9	0.67	33.62			33.62T			
12039	0.000	9	0.67	33.62			33.62T			
12039	1.000	9	0.56	27.95			27.95T			
12040	0.000	9	0.56	27.95			27.95T			
12040	1.000	9	0.43	21.51			21.51T			
12041	0.000	9	0.43	21.51			21.51T			
12041	1.000	9	0.31	15.37			15.37T			
12042	0.000	9	0.31	15.37			15.37T			
12042	1.000	9	0.30	15.08			15.08T			
12043	0.000	9	0.30	15.08			15.08T			
12043	1.000	9	0.30	15.08			15.08T			
12044	0.000	9	0.30	15.08			15.08T			
12044	1.000	9	0.30	15.08			15.08T			
12045	0.000	9	0.30	15.08			15.08T			
12045	1.000	9	0.30	15.08			15.08T			
12046	0.000	9	0.30	15.08			15.08T			
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			15.08			
12056	1.000	9	0.30	15.08			15.08			
12057	0.000	9	0.56	28.14			28.14T			
12057	1.000	9	0.76	38.36			38.36T			
12058	0.000	9	0.76	38.36			38.36T			
12058	1.000	9	0.82	41.11			41.11T			
12059	0.000	9	0.82	41.11			41.11T			
12059	1.000	9	0.77	38.53			38.53T			
12060	0.000	9	0.77	38.53			38.53T			
12060	1.000	9	0.68	34.21			34.21T			
12061	0.000	9	0.68	34.21			34.21T			
12061	1.000	9	0.57	28.62			28.62T			
12062	0.000	9	0.57	28.62			28.62T			
12062	1.000	9	0.44	22.07			22.07T			
12063	0.000	9	0.44	22.07			22.07T			
12063	1.000	9	0.31	15.81			15.81T			
12064	0.000	9	0.31	15.81			15.81T			
12064	1.000	9	0.30	15.08			15.08T			
12065	0.000	9	0.30	15.08			15.08T			
12065	1.000	9	0.30	15.08			15.08T			
12066	0.000	9	0.30	15.08			15.08T			
12066	1.000	9	0.30	15.08			15.08T			
12067	0.000	9	0.30	15.08			15.08T			
12067	1.000	9	0.30	15.08			15.08T			
12068	0.000	9	0.30	15.08			15.08T			
12068	1.000	9	0.30	15.08			15.08T			

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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	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]
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			15.08			
12078	1.000	9	0.30	15.08			15.08'			
12079	0.000	9	0.56	28.17			28.17T			
12079	1.000	9	0.76	38.25			38.25T			
12080	0.000	9	0.76	38.25			38.25T			
12080	1.000	9	0.82	41.08			41.08T			
12081	0.000	9	0.82	41.08			41.08T			
12081	1.000	9	0.77	38.73			38.73T			
12082	0.000	9	0.77	38.74			38.74T			
12082	1.000	9	0.67	33.49			33.49T			
12083	0.000	9	0.67	33.49			33.49T			
12083	1.000	9	0.55	27.79			27.79T			
12084	0.000	9	0.55	27.79			27.79T			
12084	1.000	9	0.42	21.24			21.24T			
12085	0.000	9	0.42	21.24			21.24T			
12085	1.000	9	0.31	15.37			15.37T			
12086	0.000	9	0.31	15.37			15.37T			
12086	1.000	9	0.30	15.08			15.08T			
12087	0.000	9	0.30	15.08			15.08T			
12087	1.000	9	0.30	15.08			15.08T			
12088	0.000	9	0.30	15.08			15.08T			
12088	1.000	9	0.30	15.08			15.08T			
12089	0.000	9	0.30	15.08			15.08T			
12089	1.000	9	0.30	15.08			15.08T			
12090	0.000	9	0.30	15.08			15.08T			
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			
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			15.08			
12100	1.000	9	0.30	15.08			15.08			

Shear Reinforcements per Cutted Part of Section LCR 511

Beam	x[m]	Nos	Asl-Mt	SLay-0&5	SLay-1&6	SLay-2&7	SLay-3&8	SLay-4&9
			[cm ² /m]	[cm ² /m]	[cm ² /m]	[cm ² /m]	[cm ² /m]	[cm ² /m]
10001	0.000	8	3.78	14.03				
10001	0.250	8	3.78	14.15				
10005	0.000	8	8.03	12.46				
10005	0.300	8	8.03	12.31				
10006	0.000	8	5.65	10.15				
10006	0.250	8	5.65	10.27				
10010	0.000	8	3.68	13.77				
10010	0.300	8	3.68	13.62				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
10011	0.000	8	3.87	14.07				
10011	0.250	8	3.87	14.20				
10015	0.000	8	6.61	11.65				
10015	0.300	8	6.61	11.50				
10016	0.000	8	7.33	10.89				
10016	0.250	8	7.33	11.02				
10020	0.000	8	3.75	13.78				
10020	0.300	8	3.75	13.63				
12001	0.000	9	0.00	9.85				
12001	1.000	9	0.00	10.65				
12002	0.000	9	0.00	10.65				
12002	1.000	9	0.00	11.11				
12003	0.000	9	0.00	11.11				
12003	1.000	9	0.00	13.67				
12004	0.000	9	0.00	5.41				
12004	1.000	9	0.00	8.45				
12005	0.000	9	0.00	8.45				
12005	1.000	9	0.00	10.13				
12006	0.000	9	0.00	10.14				
12006	1.000	9	0.00	12.73				
12007	0.000	9	0.00	9.62				
12007	1.000	9	0.00	10.37				
12008	0.000	9	0.00	10.37				
12008	1.000	9	0.00	10.80				
12009	0.000	9	0.00	10.80				
12009	1.000	9	0.00	12.56				
12010	0.000	9	0.00	10.02				
12010	1.000	9	0.00	10.32				
12011	0.000	9	0.00	10.32				
12011	1.000	9	0.00	10.68				
12012	0.000	9	0.00	10.68				
12012	1.000	9	0.00	11.96				
12013	0.000	9	0.00	13.67				
12013	1.000	9	0.00	7.07				
12014	0.000	9	0.00	7.07				
12014	1.000	9	0.00	5.38				
12015	0.000	9	0.00	5.38				
12015	1.000	9	0.00	5.38				
12016	0.000	9	0.00	5.38				
12016	1.000	9	0.00	5.42				
12017	0.000	9	0.00	5.42				
12017	1.000	9	0.00	5.51				
12018	0.000	9	0.00	5.51				
12018	1.000	9	0.00	5.60				
12019	0.000	9	0.00	5.60				
12019	1.000	9	0.00	5.67				
12020	0.000	9	0.00	5.67				
12020	1.000	9	0.00	5.72				
12021	0.000	9	0.00	5.72				
12021	1.000	9	0.00	5.74				
12022	0.000	9	0.00	5.74				
12022	1.000	9	0.00	5.74				
12023	0.000	9	0.00	5.74				
12023	1.000	9	0.00	5.74				
12024	0.000	9	0.00	5.74				
12024	1.000	9	0.00	5.74				
12025	0.000	9	0.00	5.74				
12025	1.000	9	0.00	5.74				
12026	0.000	9	0.00	5.74				
12026	1.000	9	0.00	5.74				
12027	0.000	9	0.00	5.74				
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	4.58				
12034	0.000	9	0.00	4.58				
12034	1.000	9	0.00	4.58				
12035	0.000	9	0.00	12.74				
12035	1.000	9	0.00	7.20				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
12036	0.000	9	0.00	7.20				
12036	1.000	9	0.00	5.35				
12037	0.000	9	0.00	5.35				
12037	1.000	9	0.00	5.37				
12038	0.000	9	0.00	5.37				
12038	1.000	9	0.00	5.42				
12039	0.000	9	0.00	5.42				
12039	1.000	9	0.00	5.53				
12040	0.000	9	0.00	5.53				
12040	1.000	9	0.00	5.62				
12041	0.000	9	0.00	5.62				
12041	1.000	9	0.00	5.69				
12042	0.000	9	0.00	5.69				
12042	1.000	9	0.00	5.73				
12043	0.000	9	0.00	5.73				
12043	1.000	9	0.00	5.74				
12044	0.000	9	0.00	5.74				
12044	1.000	9	0.00	5.74				
12045	0.000	9	0.00	5.74				
12045	1.000	9	0.00	5.74				
12046	0.000	9	0.00	5.74				
12046	1.000	9	0.00	5.74				
12047	0.000	9	0.00	5.74				
12047	1.000	9	0.00	5.74				
12048	0.000	9	0.00	5.74				
12048	1.000	9	0.00	5.74				
12049	0.000	9	0.00	5.74				
12049	1.000	9	0.00	5.74				
12050	0.000	9	0.00	5.74				
12050	1.000	9	0.00	5.74				
12051	0.000	9	0.00	5.74				
12051	1.000	9	0.00	5.74				
12052	0.000	9	0.00	5.74				
12052	1.000	9	0.00	5.74				
12053	0.000	9	0.00	5.74				
12053	1.000	9	0.00	5.74				
12054	0.000	9	0.00	5.74				
12054	1.000	9	0.00	5.74				
12055	0.000	9	0.00	5.74				
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	12.55				
12057	1.000	9	0.00	6.59				
12058	0.000	9	0.00	6.59				
12058	1.000	9	0.00	5.35				
12059	0.000	9	0.00	5.35				
12059	1.000	9	0.00	5.35				
12060	0.000	9	0.00	5.35				
12060	1.000	9	0.00	5.40				
12061	0.000	9	0.00	5.40				
12061	1.000	9	0.00	5.50				
12062	0.000	9	0.00	5.50				
12062	1.000	9	0.00	5.60				
12063	0.000	9	0.00	5.60				
12063	1.000	9	0.00	5.67				
12064	0.000	9	0.00	5.67				
12064	1.000	9	0.00	5.72				
12065	0.000	9	0.00	5.72				
12065	1.000	9	0.00	5.74				
12066	0.000	9	0.00	5.74				
12066	1.000	9	0.00	5.74				
12067	0.000	9	0.00	5.74				
12067	1.000	9	0.00	5.74				
12068	0.000	9	0.00	5.74				
12068	1.000	9	0.00	5.74				
12069	0.000	9	0.00	5.74				
12069	1.000	9	0.00	5.74				
12070	0.000	9	0.00	5.74				
12070	1.000	9	0.00	5.74				
12071	0.000	9	0.00	5.74				
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				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
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	4.58				
12079	0.000	9	0.00	11.95				
12079	1.000	9	0.00	6.31				
12080	0.000	9	0.00	6.31				
12080	1.000	9	0.00	5.35				
12081	0.000	9	0.00	5.35				
12081	1.000	9	0.00	5.36				
12082	0.000	9	0.00	5.36				
12082	1.000	9	0.00	5.41				
12083	0.000	9	0.00	5.41				
12083	1.000	9	0.00	5.52				
12084	0.000	9	0.00	5.52				
12084	1.000	9	0.00	5.61				
12085	0.000	9	0.00	5.61				
12085	1.000	9	0.00	5.68				
12086	0.000	9	0.00	5.68				
12086	1.000	9	0.00	5.73				
12087	0.000	9	0.00	5.73				
12087	1.000	9	0.00	5.74				
12088	0.000	9	0.00	5.74				
12088	1.000	9	0.00	5.74				
12089	0.000	9	0.00	5.74				
12089	1.000	9	0.00	5.74				
12090	0.000	9	0.00	5.74				
12090	1.000	9	0.00	5.74				
12091	0.000	9	0.00	5.74				
12091	1.000	9	0.00	5.74				
12092	0.000	9	0.00	5.74				
12092	1.000	9	0.00	5.74				
12093	0.000	9	0.00	5.74				
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	15.56				
12100	0.000	9	0.00	4.58				
12100	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	0.202	0.425	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	0.428	0.000	0.000	0.000	0.000	0.000	1.004	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	0.428	0.425	0.000	0.000	0.000	0.000	1.004	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 ΤΒ/Λ=10.70
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΔΟΚΟΙ

Selected Beam Elements

FROM	TO	INC	X-VALUE	NC	MEMBER	CS0	CS1	CS2	CS3	CS4	CS5
1000	1036	1		1	bending	10	40				
2000	2012	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. 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

parameters for reinforcements					
Minimum reinforcements		compression		min. reinforcement	
Bending.	Compress.	e/d	N/Npl	requ. section	maximum-
0.00 [cm ²]	0.30 [o/o]	3.50	0.0010	0.00	reinforc.
				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	
12	0	1.150	-456.52	-25.00	456.52	25.00	

Shear Design

Design for shear DIN 1045-1 (2003)

Design for shear DIN 1045-1 (2005)						
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	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	

434.78

Tolerance for exceeding maximum shear or principal compression stress 0.0200

Shear Reinforcements per Cutted Part of Section LCR 512

Beam	x[m]	NoS	Asl-Mt	Slay-0&5	Slay-1&6	Slay-2&7	Slay-3&8	Slay-4&9
			[cm ² /m]	[cm ² /m]	[cm ² /m]	[cm ² /m]	[cm ² /m]	[cm ² /m]
1001	0.000	1	1.05	4.45				
1001	0.692	1	1.05	4.29				
1002	0.000	1	0.69	3.97				
1002	0.692	1	0.69	3.81				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
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]
1003	0.000	1	0.60	3.68				
1003	0.692	1	0.60	3.52				
1004	0.000	1	0.60	3.45				
1004	0.692	1	0.60	3.29				
1005	0.000	1	0.60	3.21				
1005	0.692	1	0.60	3.05				
1006	0.000	1	0.57	2.95				
1006	0.692	1	0.57	2.82				
1007	0.000	1	0.53	2.90				
1007	0.692	1	0.53	3.06				
1008	0.000	1	0.49	3.16				
1008	0.692	1	0.49	3.32				
1009	0.000	1	0.43	3.41				
1009	0.692	1	0.43	3.57				
1010	0.000	1	0.39	3.63				
1010	0.692	1	0.39	3.79				
1011	0.000	1	0.48	3.83				
1011	0.692	1	0.48	3.99				
1012	0.000	1	0.86	4.12				
1012	0.692	1	0.86	4.28				
1013	0.000	1	0.98	4.44				
1013	0.692	1	0.98	4.28				
1014	0.000	1	0.69	4.06				
1014	0.692	1	0.69	3.90				
1015	0.000	1	0.61	3.71				
1015	0.692	1	0.61	3.55				
1016	0.000	1	0.57	3.38				
1016	0.692	1	0.57	3.22				
1017	0.000	1	0.50	3.03				
1017	0.692	1	0.50	2.87				
1018	0.000	1	0.40	2.74				
1018	0.692	1	0.40	2.66				
1019	0.000	1	0.31	2.70				
1019	0.692	1	0.31	2.86				
1020	0.000	1	0.26	2.92				
1020	0.692	1	0.26	3.08				
1021	0.000	1	0.35	3.14				
1021	0.692	1	0.35	3.30				
1022	0.000	1	0.42	3.38				
1022	0.692	1	0.42	3.54				
1023	0.000	1	0.50	3.69				
1023	0.692	1	0.50	3.85				
1024	0.000	1	0.83	4.10				
1024	0.692	1	0.83	4.26				
1025	0.000	1	1.10	4.42				
1025	0.692	1	1.10	4.26				
1026	0.000	1	0.89	4.24				
1026	0.692	1	0.89	4.08				
1027	0.000	1	0.75	3.95				
1027	0.692	1	0.75	3.79				
1028	0.000	1	0.60	3.62				
1028	0.692	1	0.60	3.46				
1029	0.000	1	0.42	3.26				
1029	0.692	1	0.42	3.10				
1030	0.000	1	0.23	2.88				
1030	0.692	1	0.23	2.72				
1031	0.000	1	0.10	2.57				
1031	0.692	1	0.10	2.73				
1032	0.000	1	0.18	2.87				
1032	0.692	1	0.18	3.03				
1033	0.000	1	0.37	3.22				
1033	0.692	1	0.37	3.38				
1034	0.000	1	0.55	3.55				
1034	0.692	1	0.55	3.71				
1035	0.000	1	0.70	3.85				
1035	0.692	1	0.70	4.01				
1036	0.000	1	0.96	4.12				
1036	0.692	1	0.96	4.28				
2001	0.000	2	0.40	2.05				
2001	0.300	2	0.40	2.05				
2002	0.000	2	0.34	3.86				
2002	0.300	2	0.34	3.86				
2003	0.000	2	0.33	3.78				
2003	0.300	2	0.33	3.78				
2004	0.000	2	0.39	2.01				
2004	0.300	2	0.39	2.01				
2005	0.000	2	0.38	2.15				
2005	0.300	2	0.38	2.15				

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70
DESIGN-ΣΕΙΣΜΙΚΑ-BEAM-γBd1_ΔΟΚΟΙ

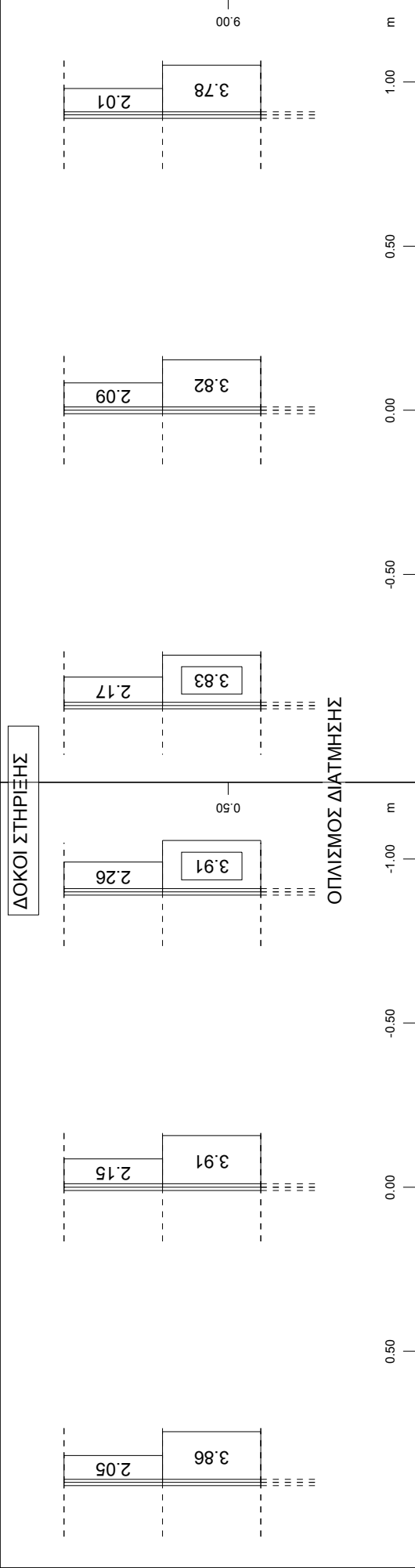
Shear Reinforcements per Cutted Part of Section LCR 512

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]
2006	0.000	2	0.32	3.91				
2006	0.300	2	0.32	3.91				
2007	0.000	2	0.31	3.82				
2007	0.300	2	0.31	3.82				
2008	0.000	2	0.38	2.09				
2008	0.300	2	0.38	2.09				
2009	0.000	2	0.42	2.26				
2009	0.300	2	0.42	2.26				
2010	0.000	2	0.34	3.91				
2010	0.300	2	0.34	3.91				
2011	0.000	2	0.33	3.83				
2011	0.300	2	0.33	3.83				
2012	0.000	2	0.42	2.17				
2012	0.300	2	0.42	2.17				

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	0.347	0.106	0.000	0.000	0.000	0.000	1.006	0.000
		0.000	0.000	0.000	0.000	0.000	1.002	0.000	0.000	0.000	0.000
Cross sect.	2	0.000	0.000	0.089	0.027	0.000	0.000	0.000	0.000	1.002	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	0.347	0.106	0.000	0.000	0.000	0.000	1.006	0.000
		0.000	0.000	0.000	0.000	0.000	1.002	0.000	0.000	0.000	0.000





Y-Z
X

Sector of system Beam Elements Group 2
Beam Elements , Shear reinforcements (maximum), Design Case 512
, 1 cm 3D = 4.48 cm2/m (Max=3.91)

M 1 : 18

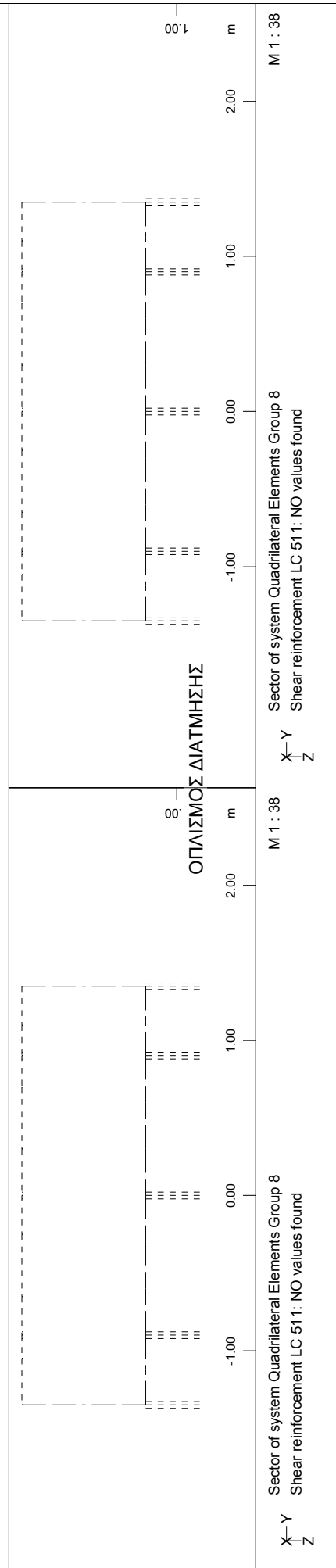
X
Z-Y

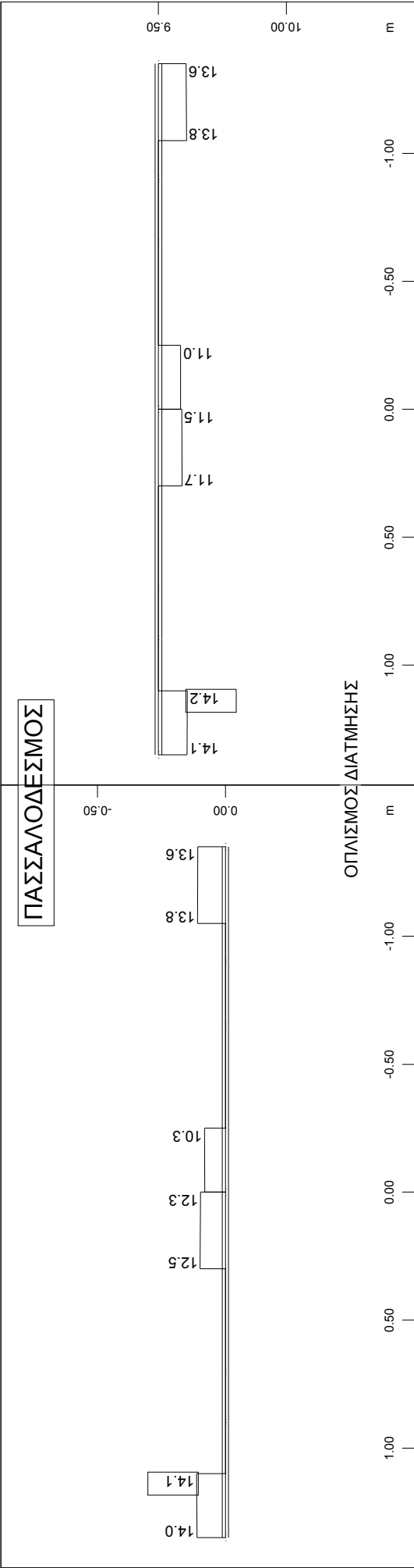
Sector of system Beam Elements Group 2
Beam Elements , Shear reinforcements (maximum), Design Case 512
, 1 cm 3D = 4.48 cm2/m (Max=3.83)

M 1 : 18

ΟΠΛΙΣΜΟΣ ΣΤΡΕΨΗΣ

ΚΑΤΑΚΟΡΥΦΑ ΤΟΙΧΙΑ ΑΝΩΔΟΜΗΣ





Y-Z

X

M 1 : 23

Sector of system Beam Elements Group 10

Beam Elements , Shear reinforcements (maximum), Design Case 511

, 1 cm 3D = 29.1 cm2/m (Max=14.1)

Y-Z

X

M 1 : 23

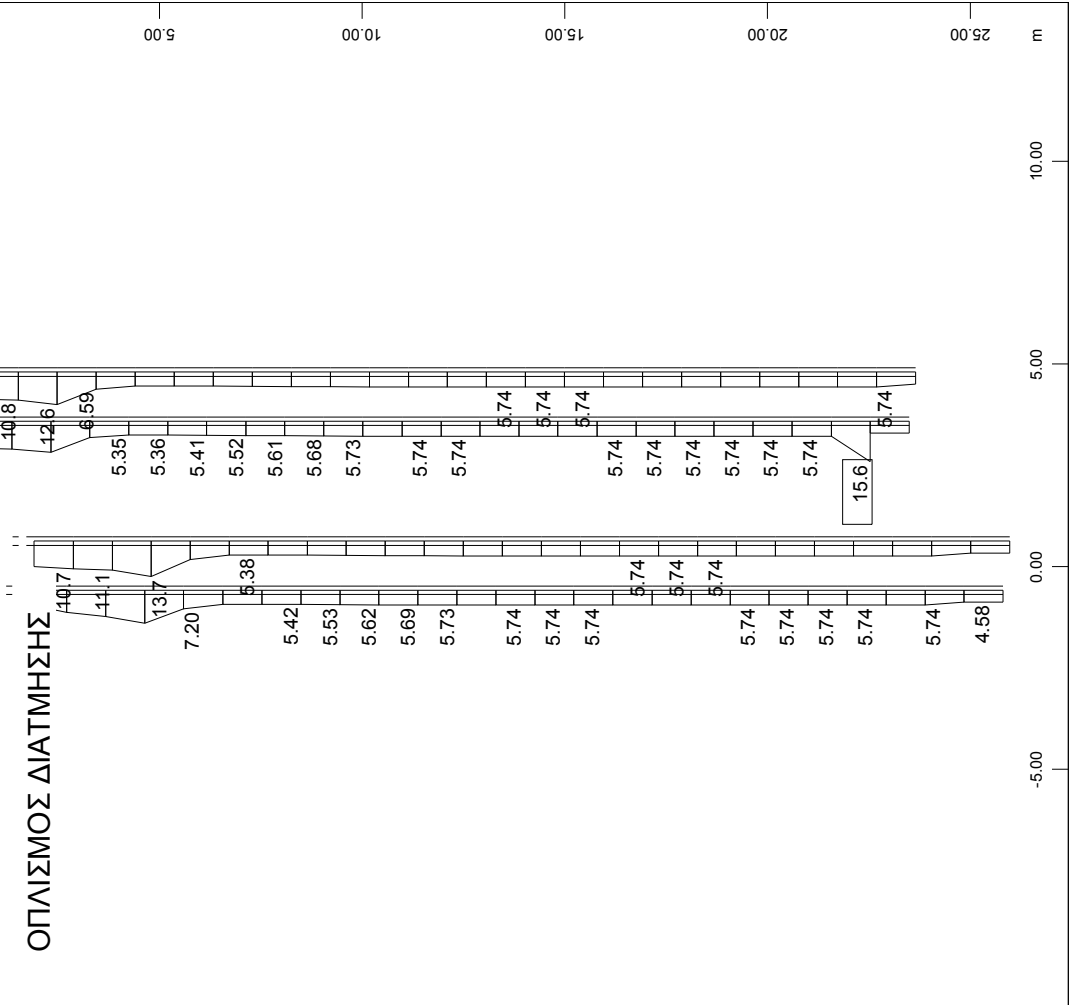
Sector of system Beam Elements Group 10

Beam Elements , Shear reinforcements (maximum), Design Case 511

, 1 cm 3D = 29.1 cm2/m (Max=14.2)

ΠΑΣΣΑΛΟΙ

ΟΠΛΙΣΜΟΣ ΔΙΑΤΜΗΣΗΣ

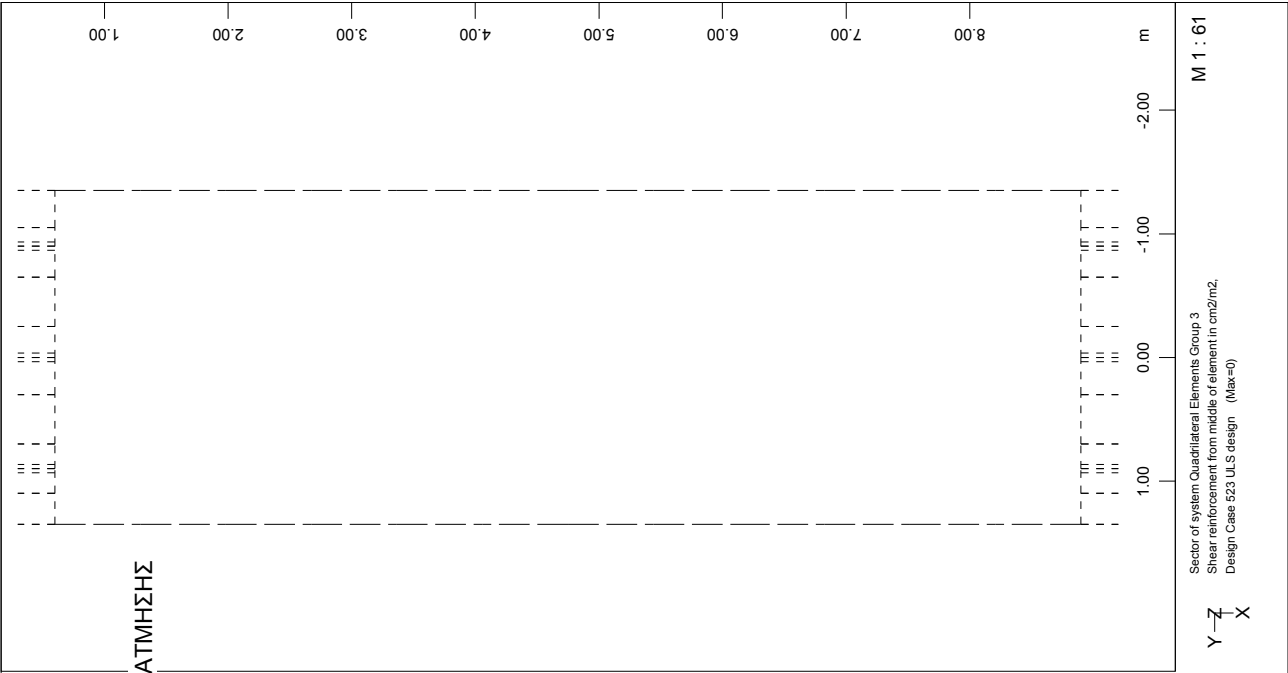


M 1 : 186
X * 0.502
Y * 0.906
Z * 0.962

Sector of system Beam Elements Group 12
Beam Elements , Shear reinforcements (maximum), Design Case
511 , 1 cm 3D = 29.1 cm2/m (Max=15.6)

ΠΛΑΚΑ ΚΑΤΑΣΤΡΩΜΑΤΟΣ

ΟΠΛΙΣΜΟΣ ΔΙΑΤΜΗΣΗΣ
J



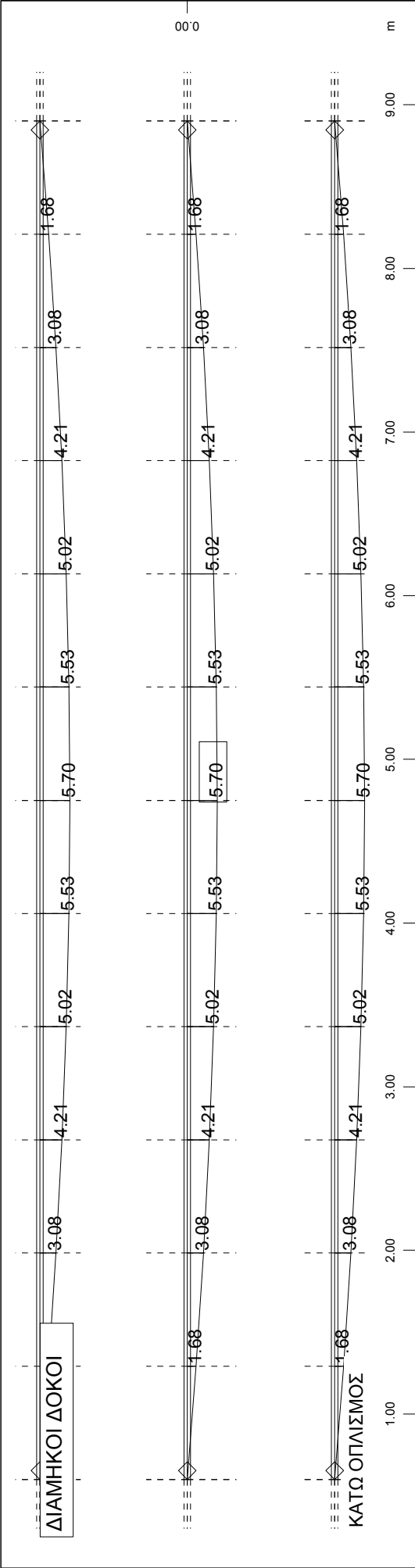
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70
ΠΕΡΙΒΑΛΛΟΥΣΑ ΟΠΛΙΣΜΩΝ ΣΤΑΤΙΚΩΝ ΚΑΙ ΣΕΙΣΜΙΚΩΝ ΦΟΡΤΙΣΕΩΝ

Maximum of reinforcement-distributions

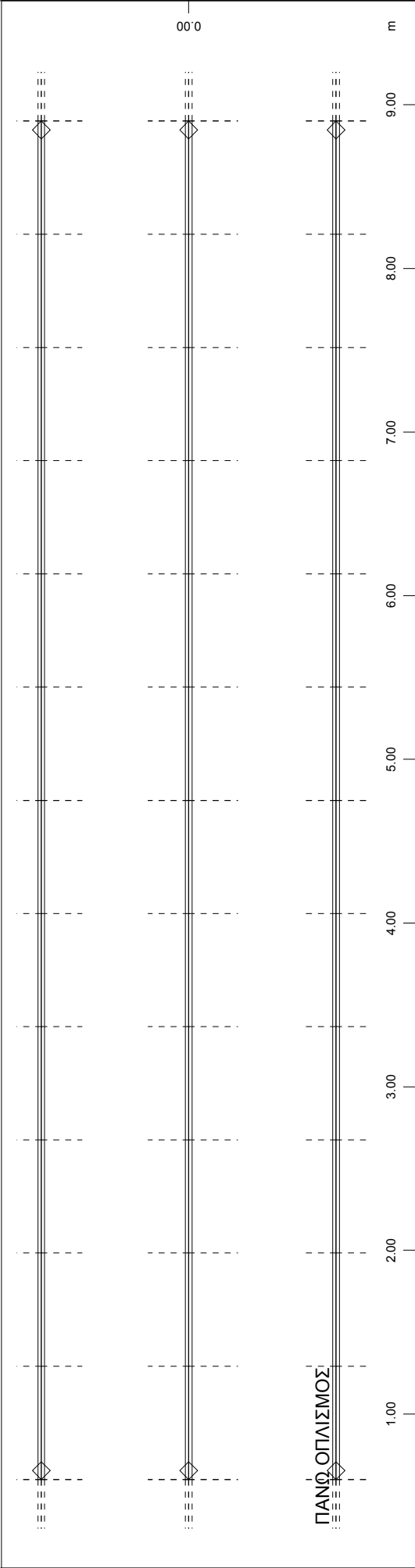
The reinforcement maximum was build out of the numbers of reinforcement-distributions:
521 , 522 , 523
and stored as new reinforcement-distribution 525 .

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70

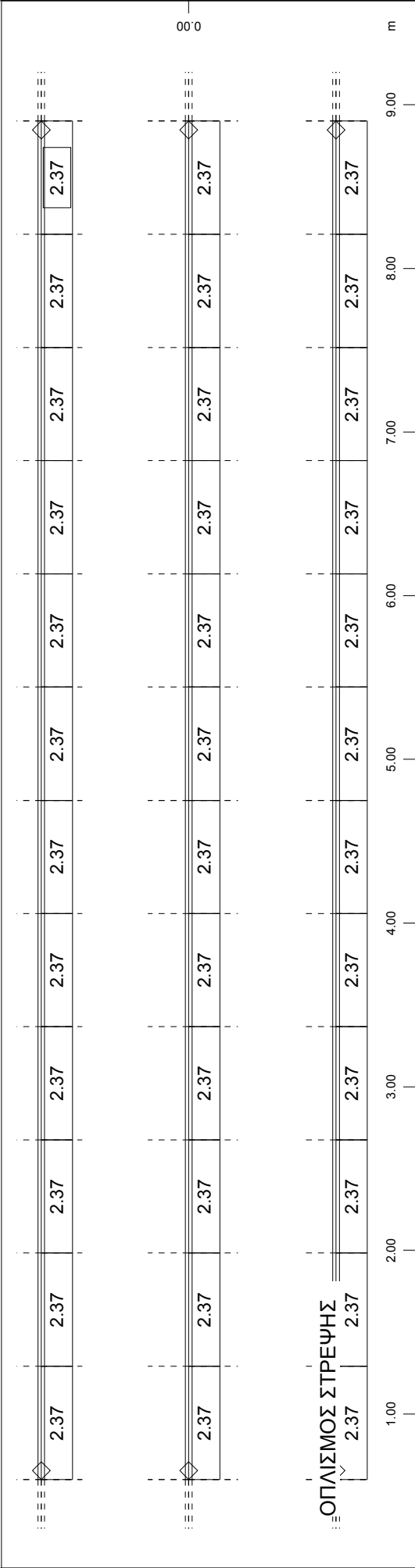
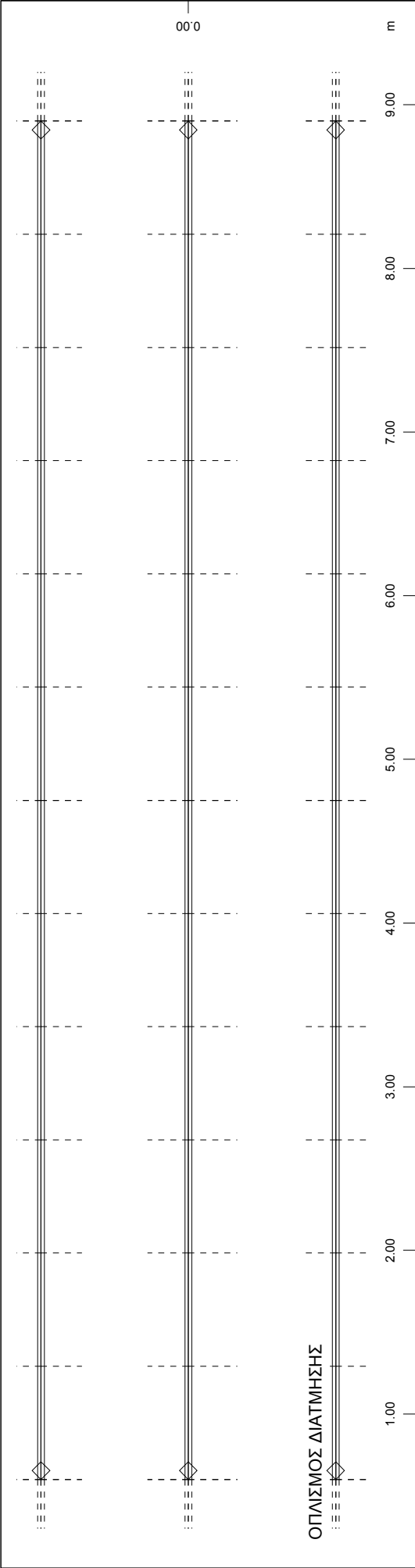
**12) ΣΥΝΟΠΤΙΚΑ ΑΠΟΤΕΛΕΣΜΑΤΑ ΜΕ
ΕΛΑΤΗΡΙΑΚΕΣ ΣΤΑΘΕΡΕΣ ΠΑΣΣΑΛΩΝ x5****5) ΦΑΣΗ-1_ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ ULS-ΣΤΑΤΙΚΑ**

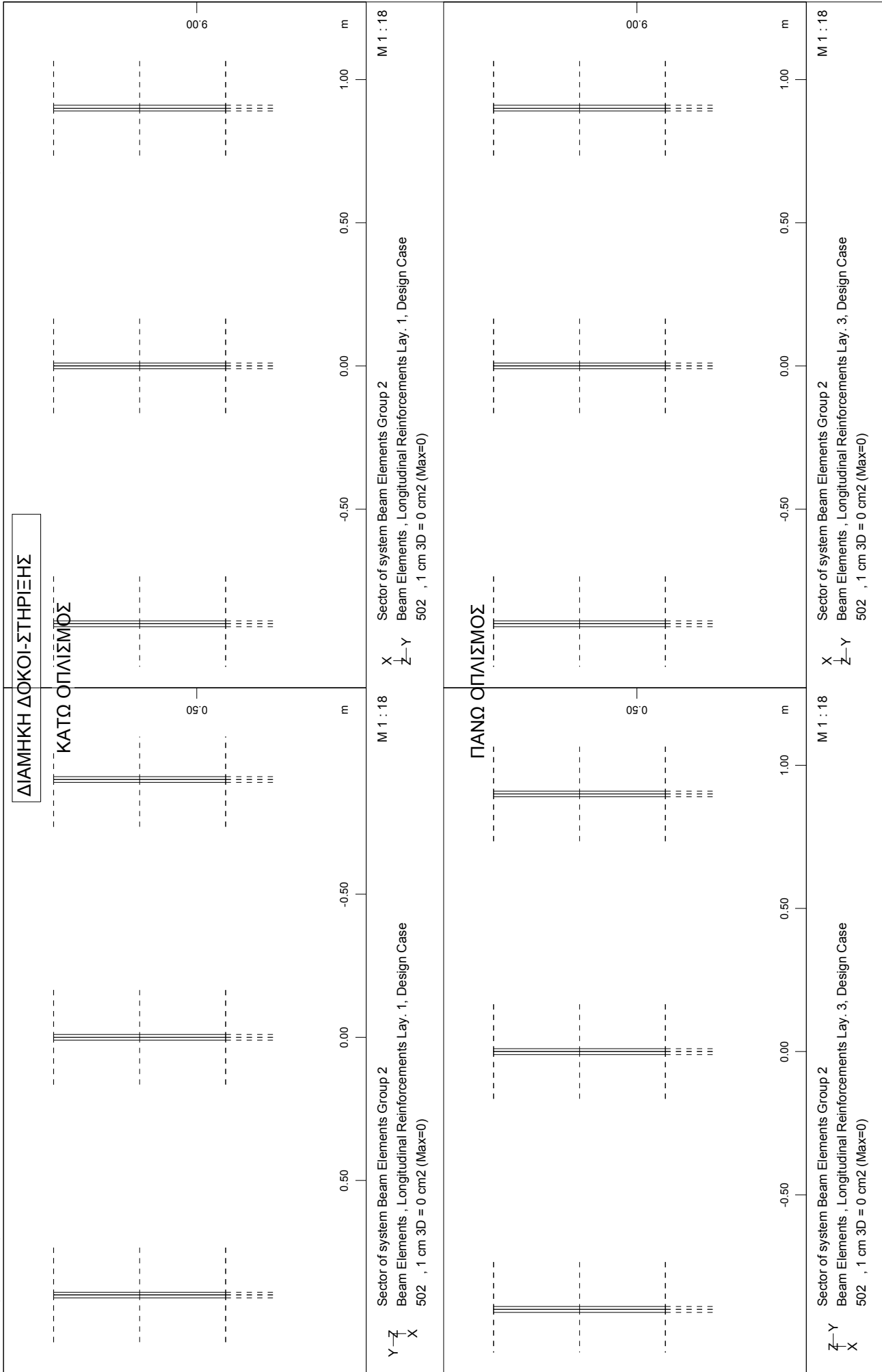


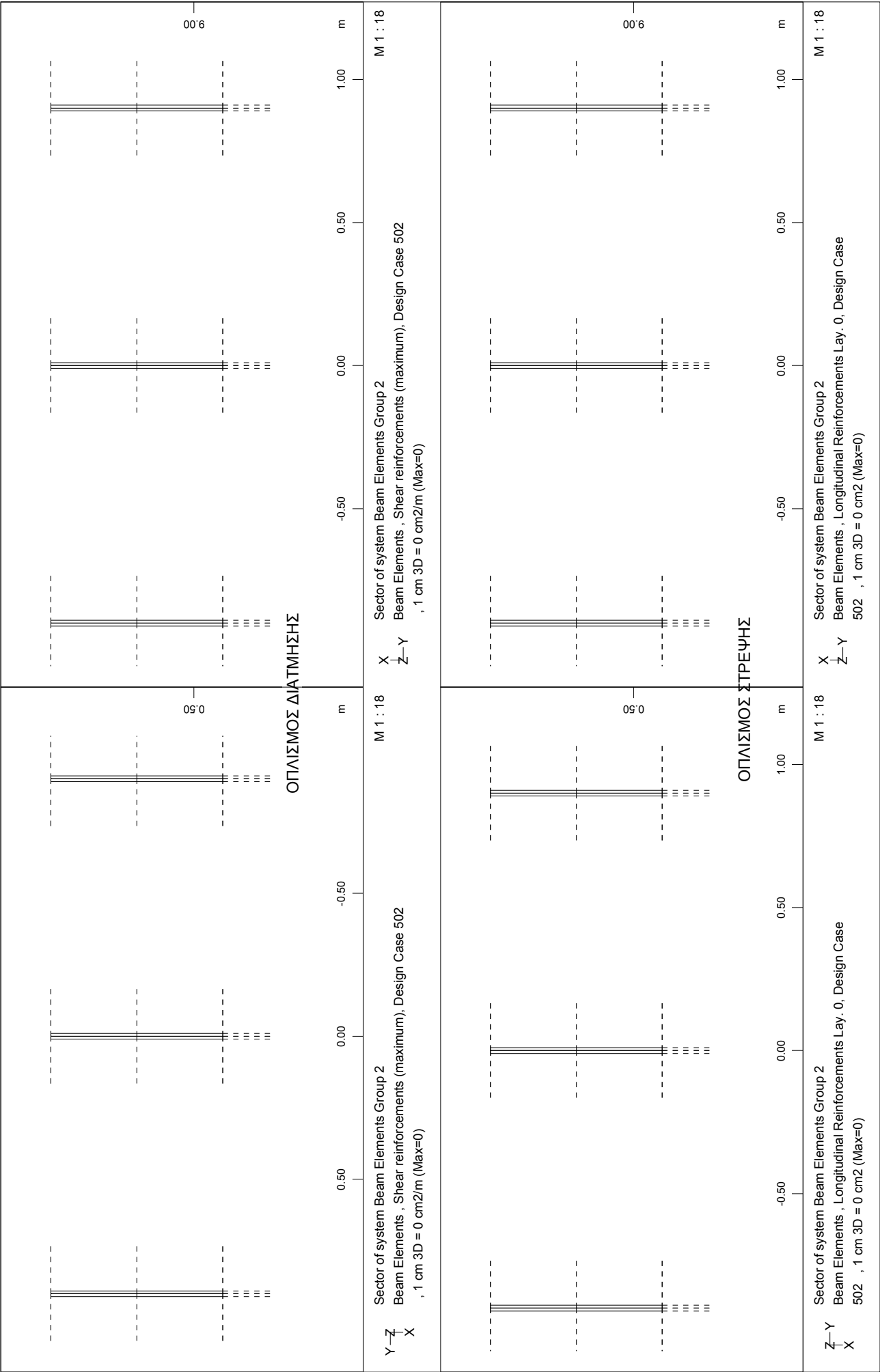
Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 502 , 1 cm 3D = 11.2 cm2 (Max=5.70)

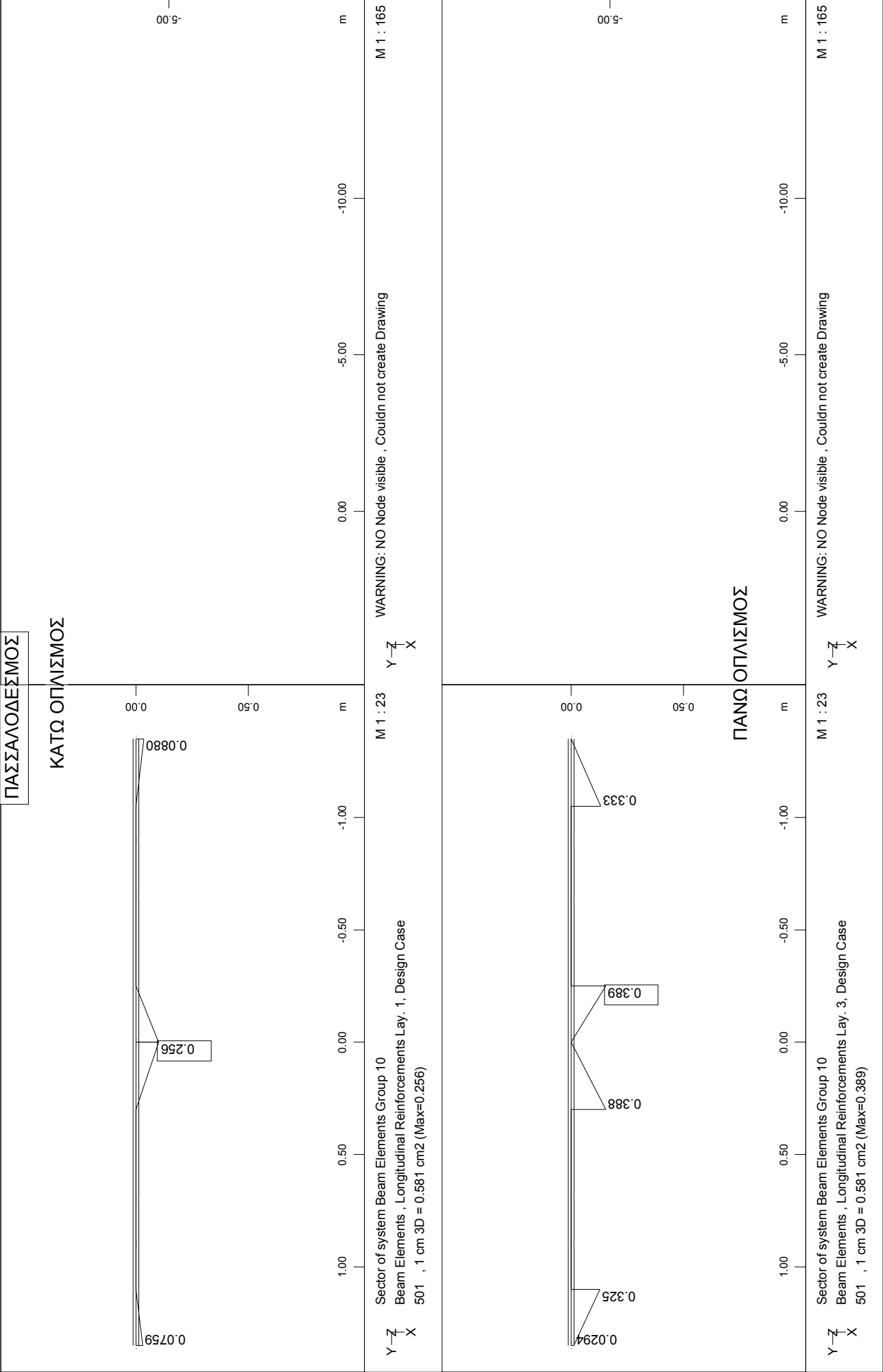


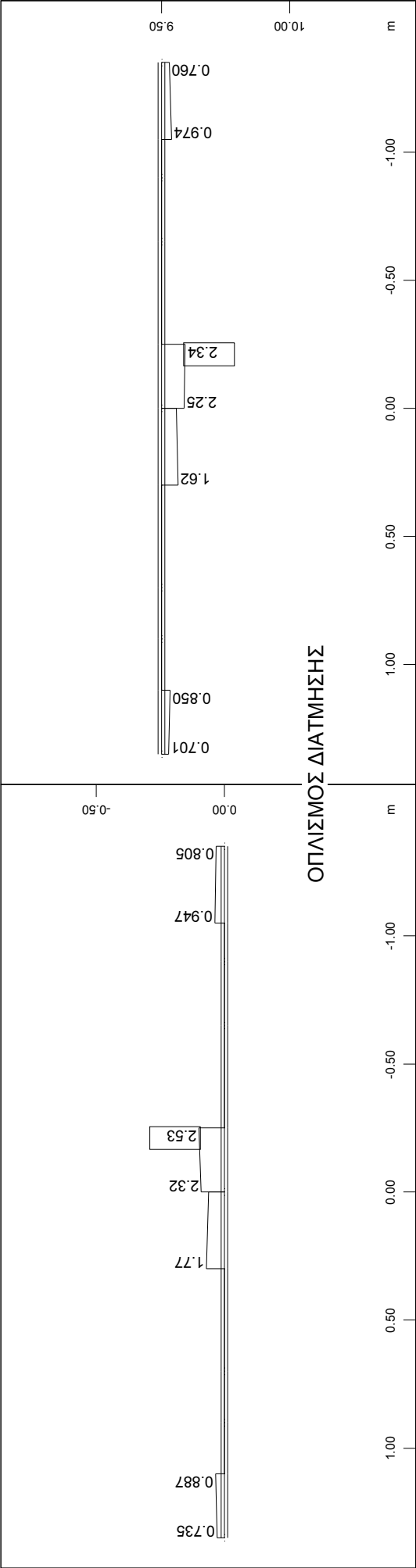
Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case 502 , 1 cm 3D = 0 cm2 (Max=0)



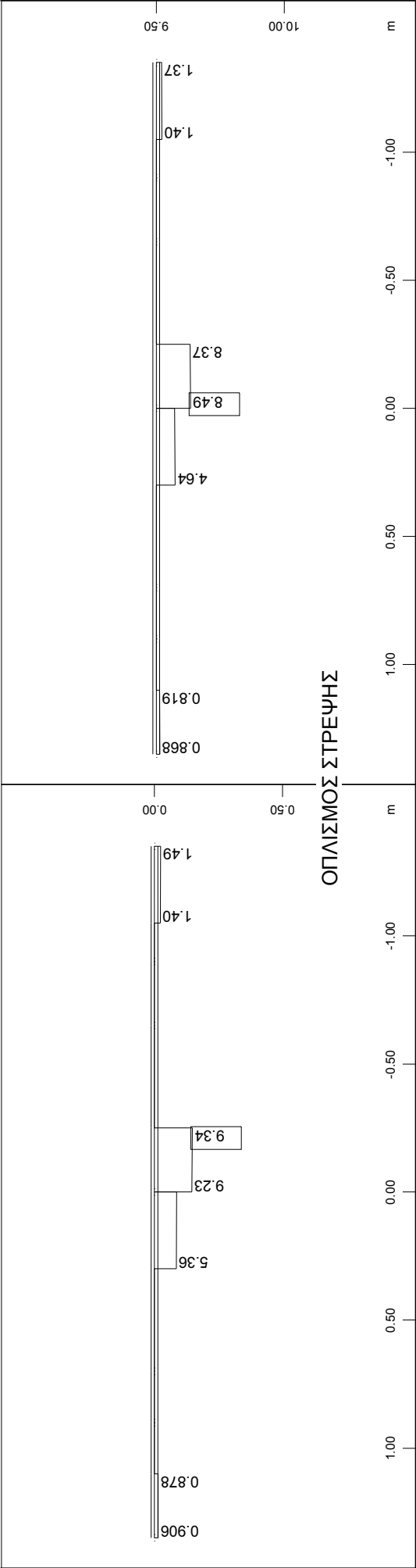




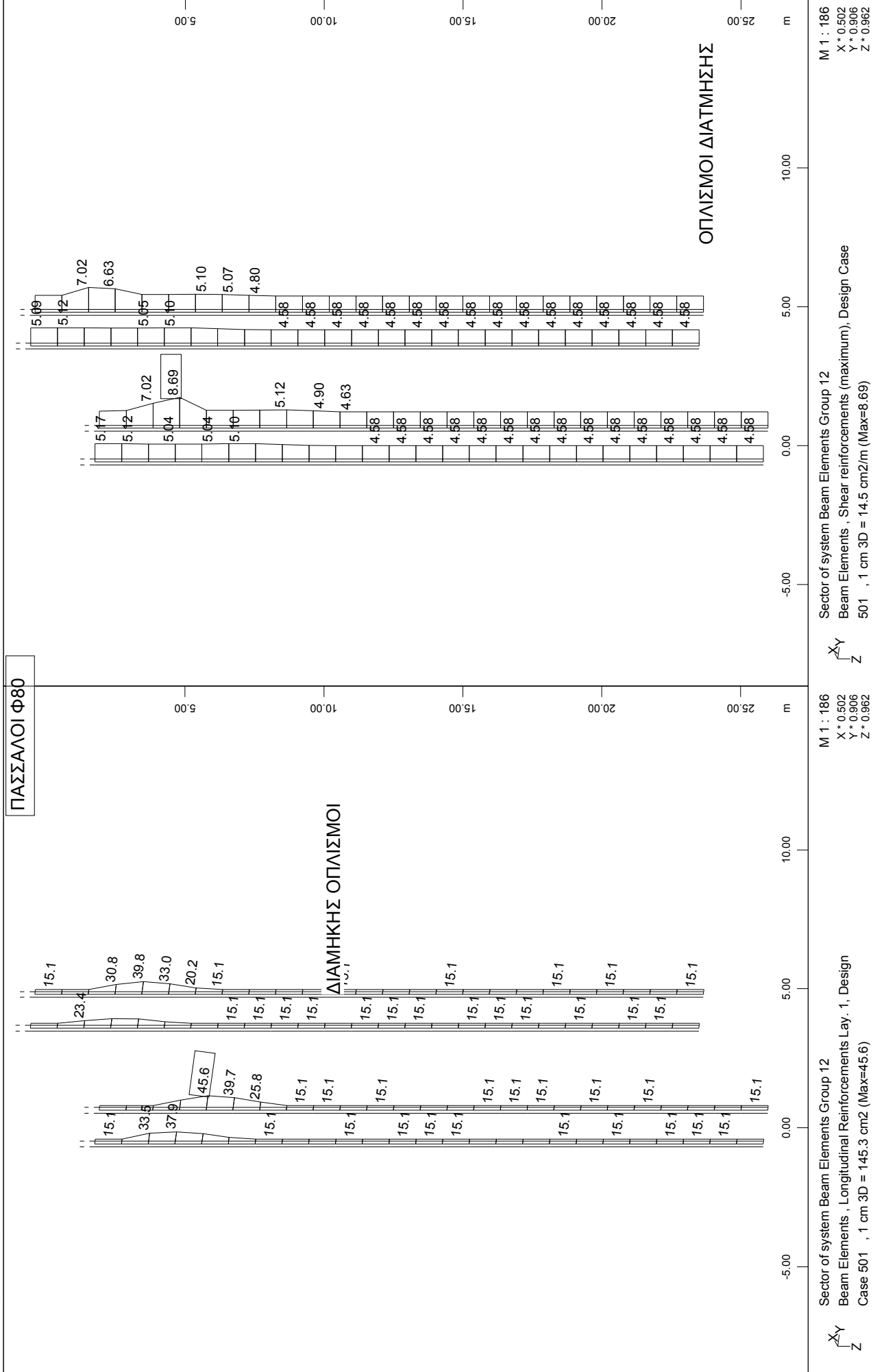




Sector of system Beam Elements Group 10
Beam Elements , Shear reinforcements (maximum), Design Case 501
, 1 cm 3D = 5.81 cm2/m (Max=2.34)

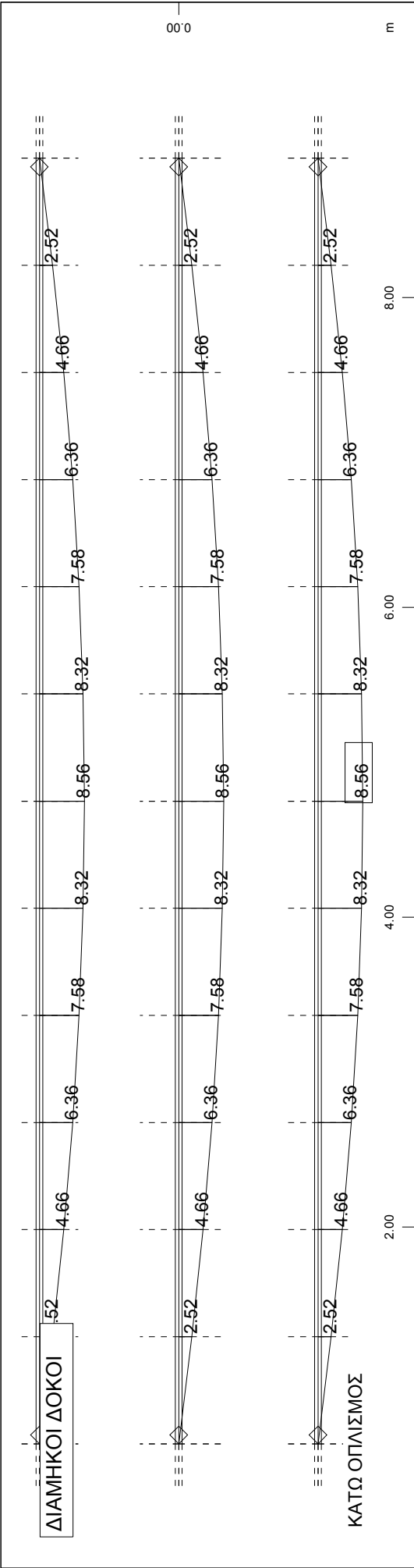


Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 0, Design Case 501 , 1 cm 3D = 14.5 cm2 (Max=8.49)

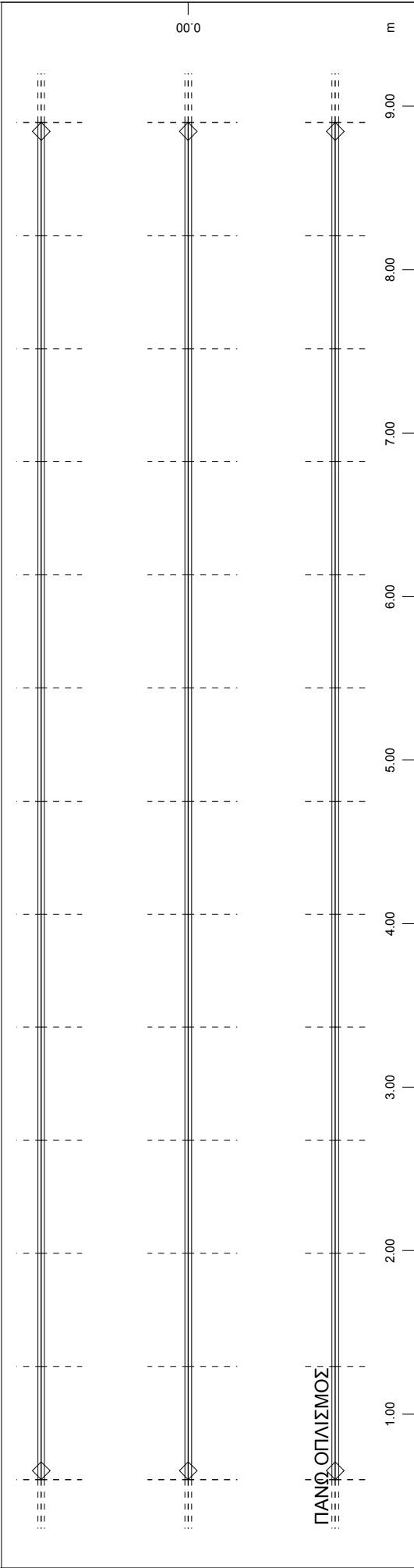


ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/Λ=10.70

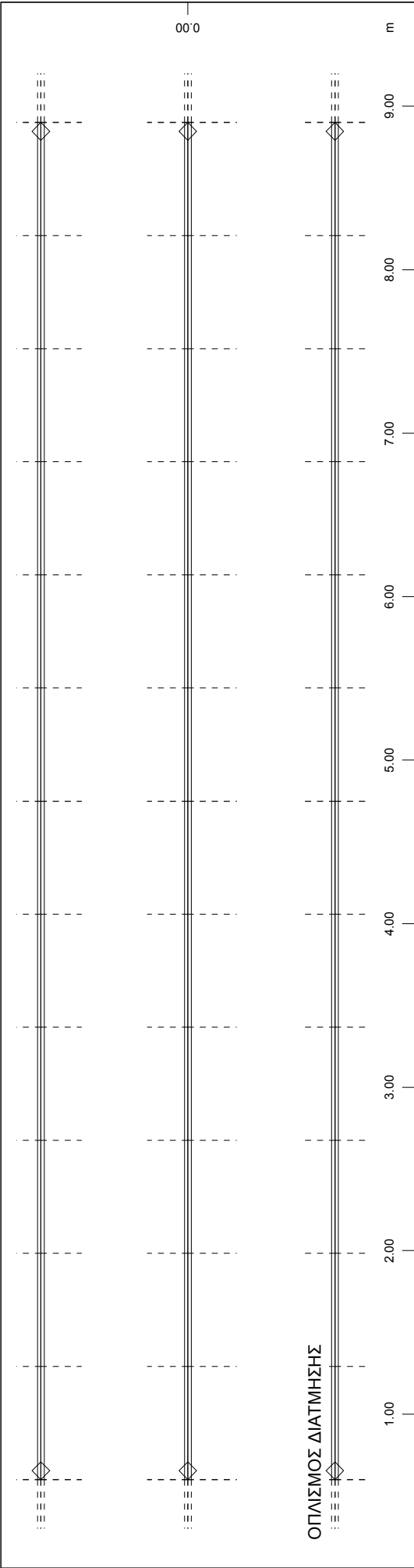
6) ΦΑΣΗ-1 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ SLS



Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 503 , 1 cm 3D = 11.2 cm2 (Max=8.56)

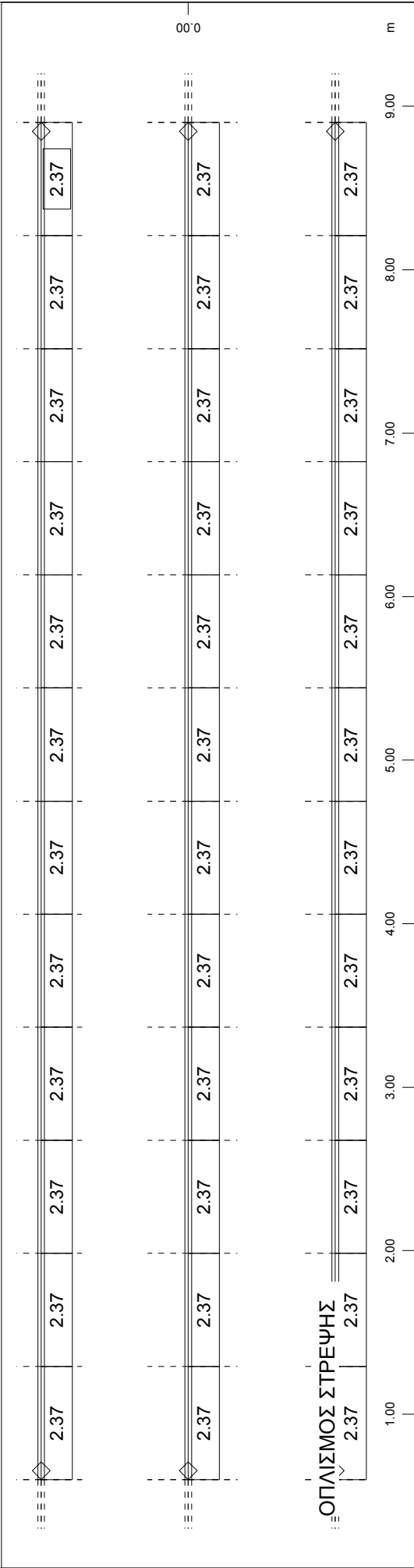


Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case 503 , 1 cm 3D = 0 cm2 (Max=0)



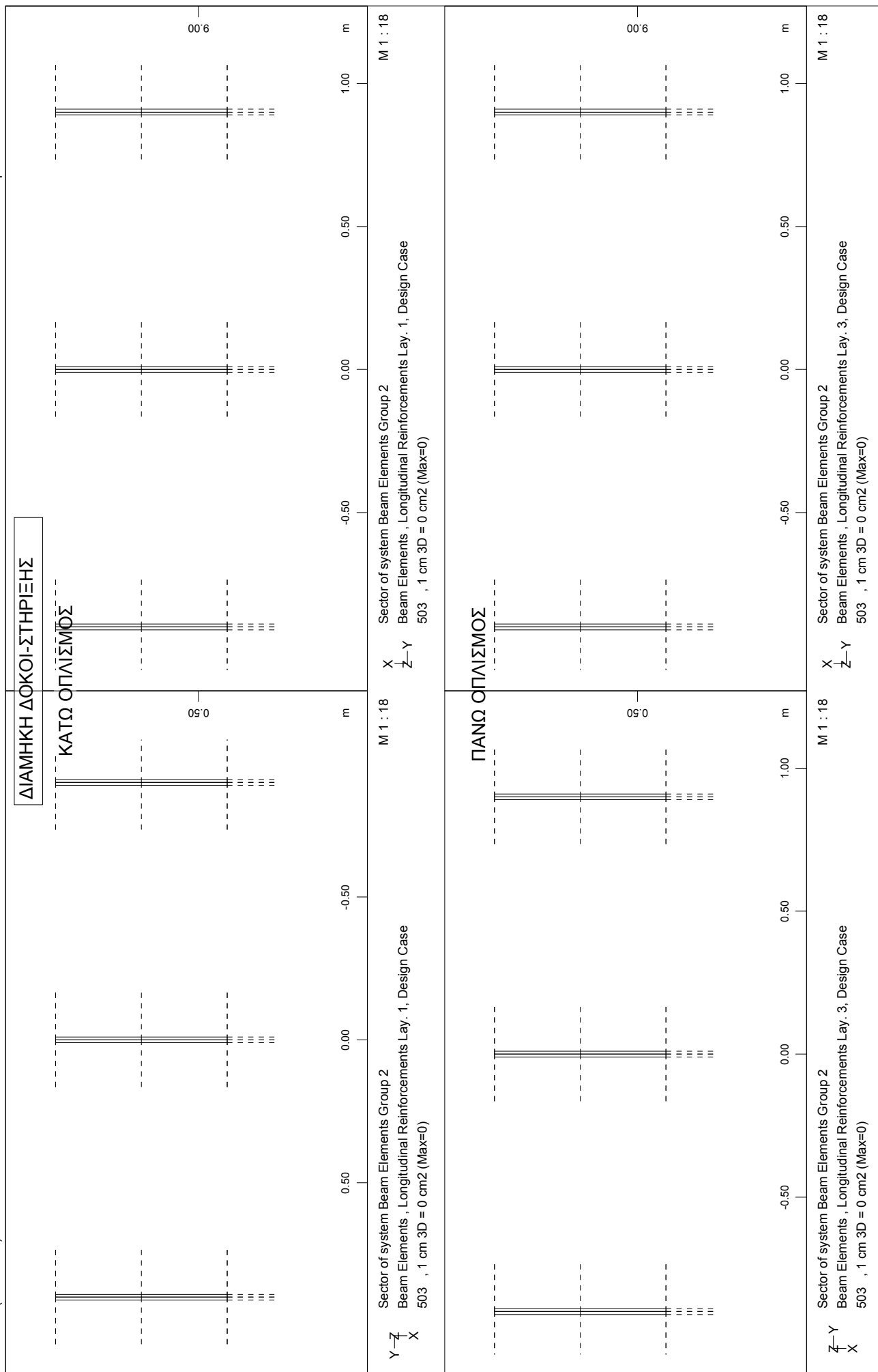
ΟΠΛΙΣΜΟΣ ΔΙΑΤΜΗΣΗΣ

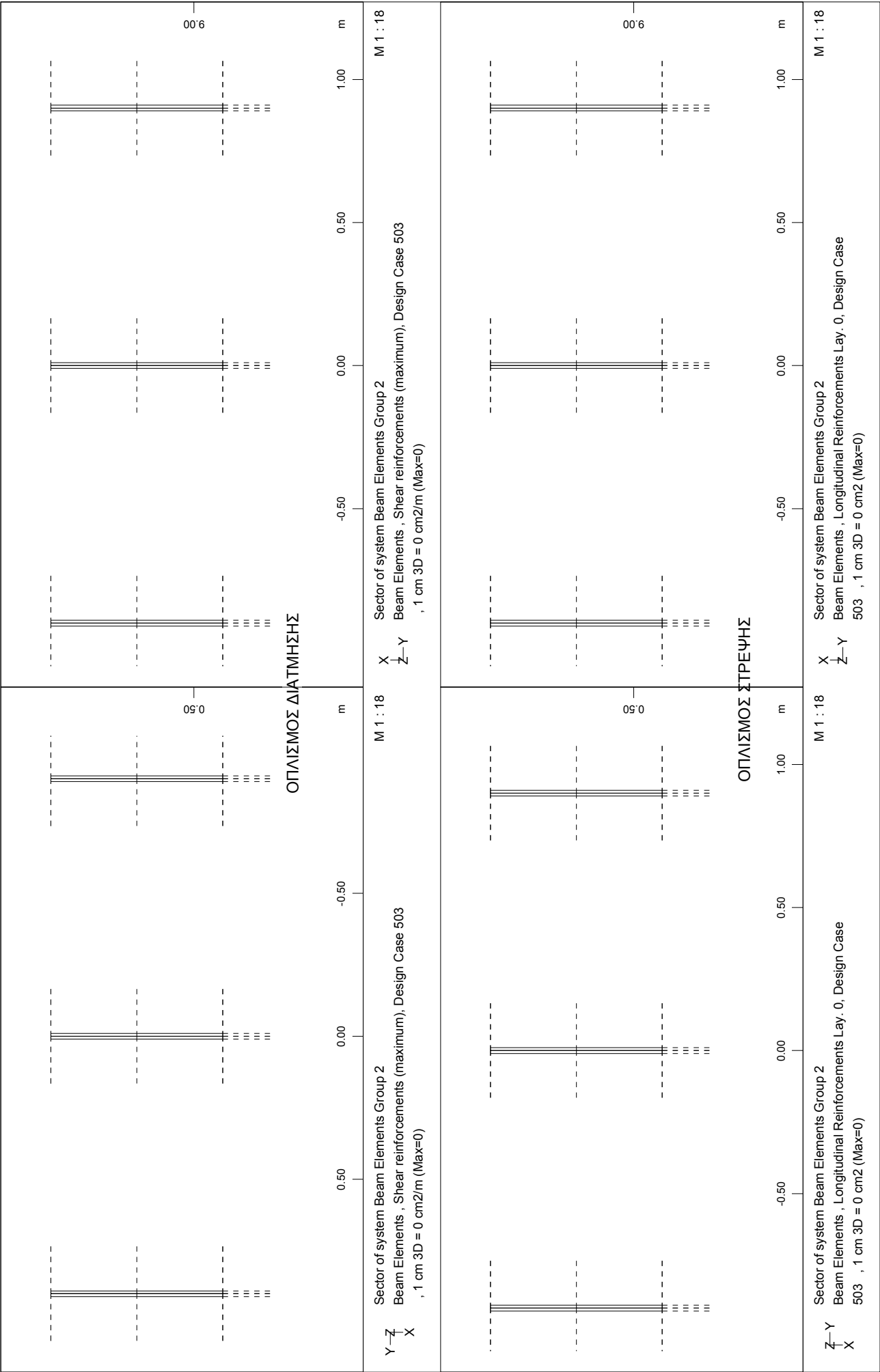
Sector of system Beam Elements Group 1
Beam Elements , Shear reinforcements (maximum), Design Case 503 , 1 cm 3D = 0 cm²/m (Max=0)
M 1 : 36

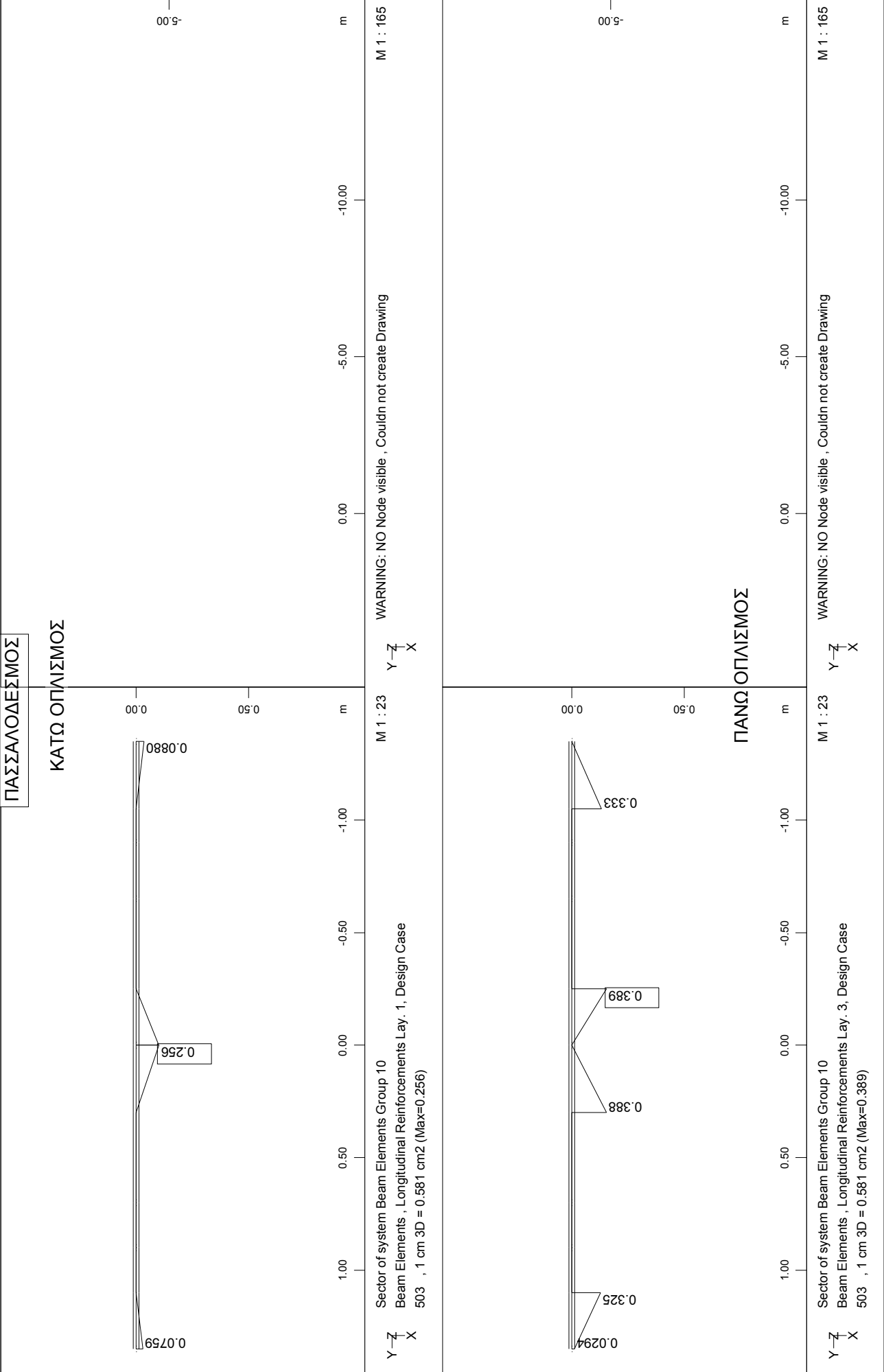


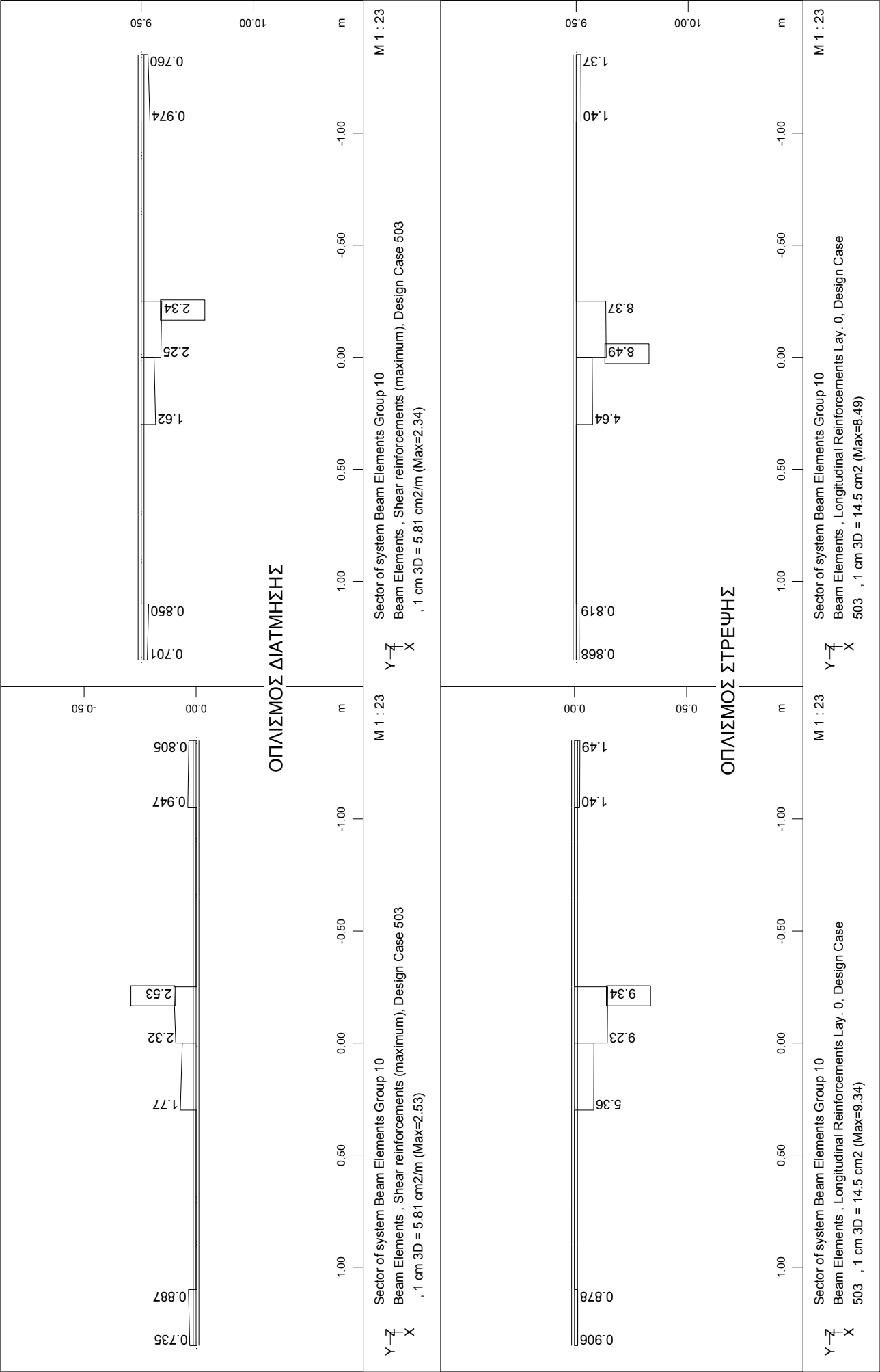
ΟΠΛΙΣΜΟΣ ΣΤΡΕΨΗΣ

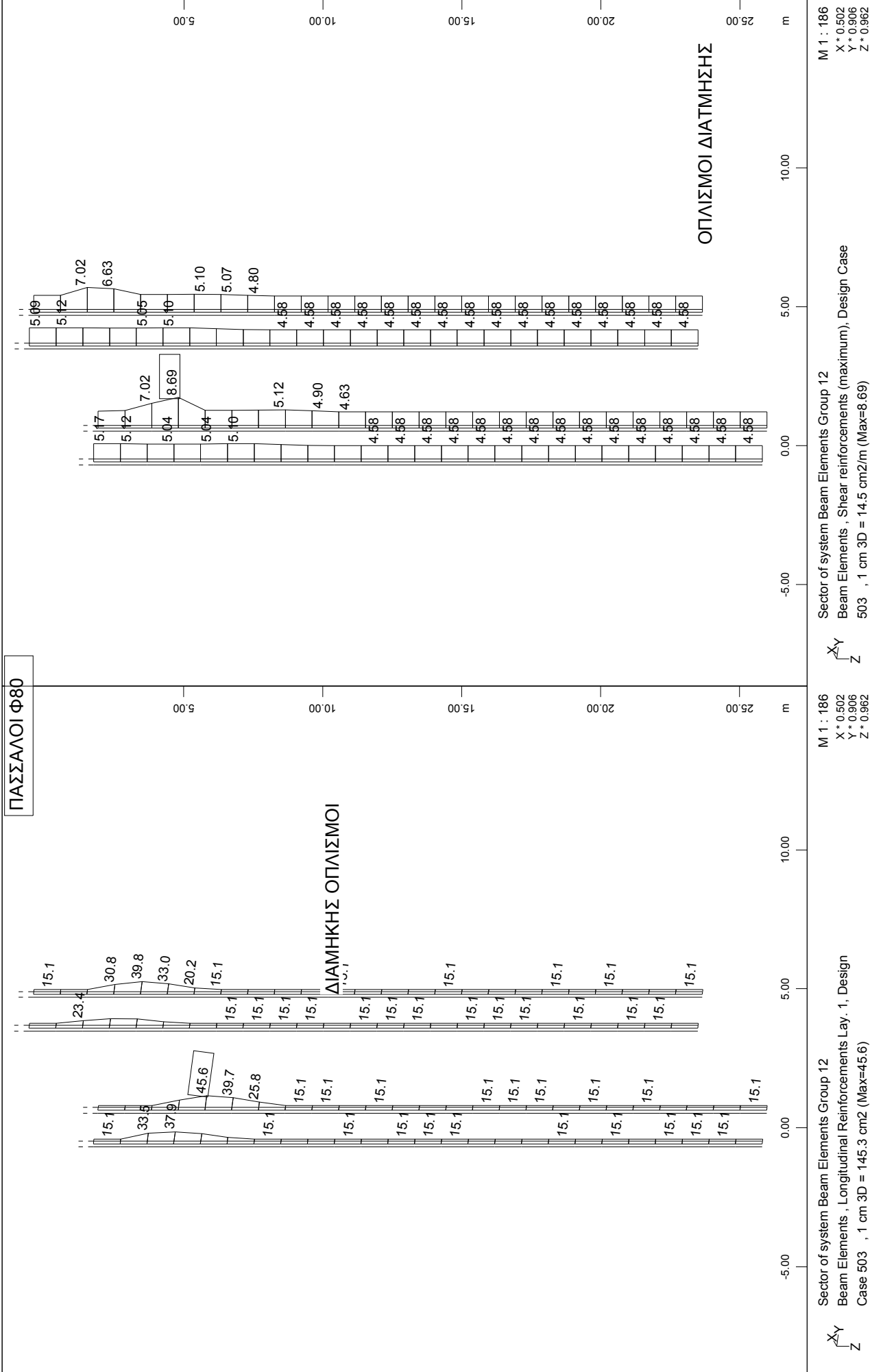
Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 0, Design Case 503 , 1 cm 3D = 4.48 cm² (Max=2.37)
M 1 : 36





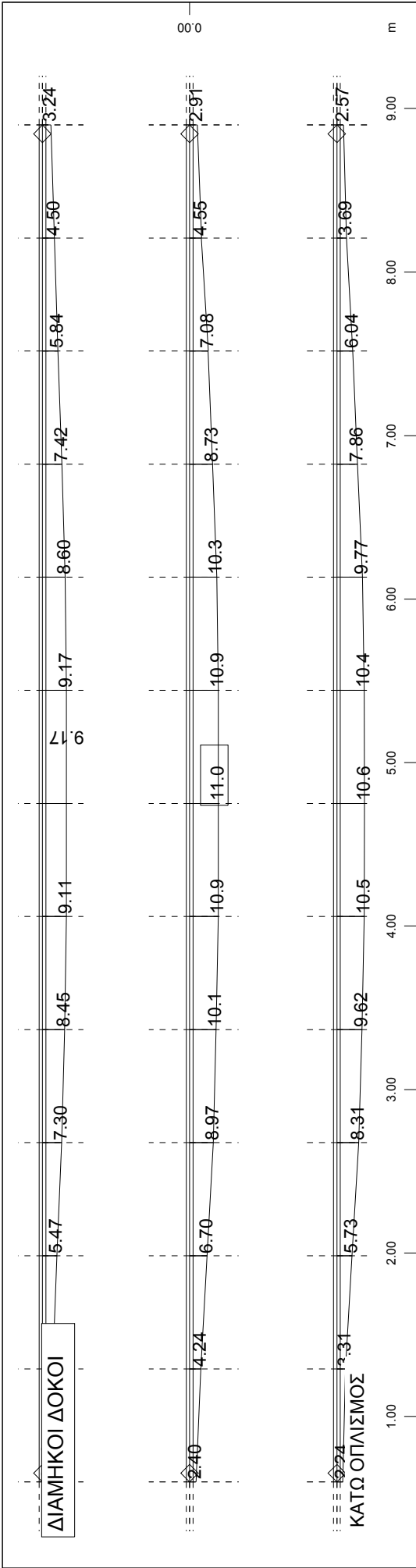




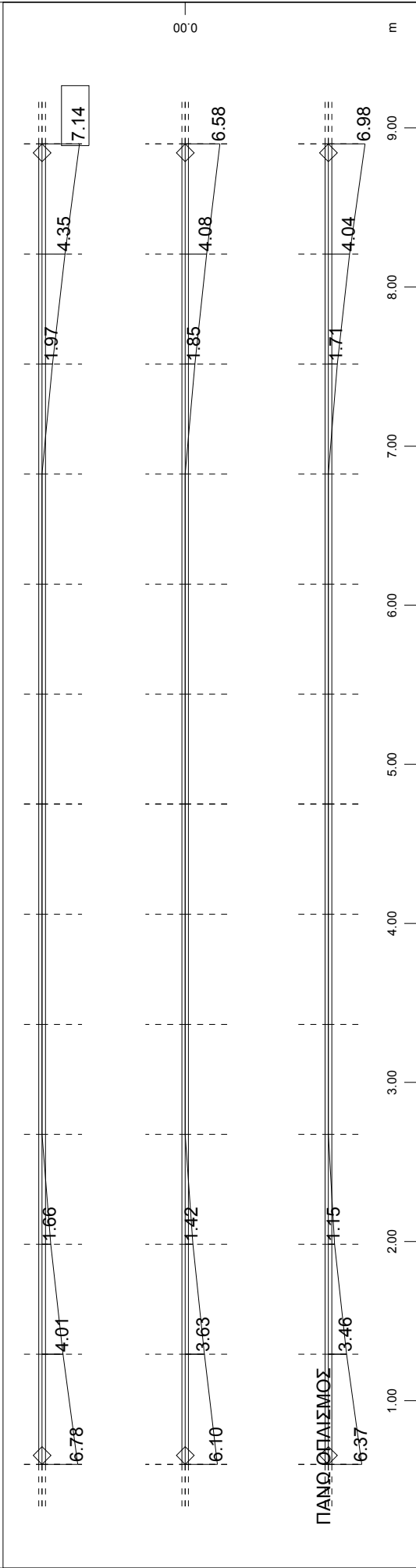


ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70

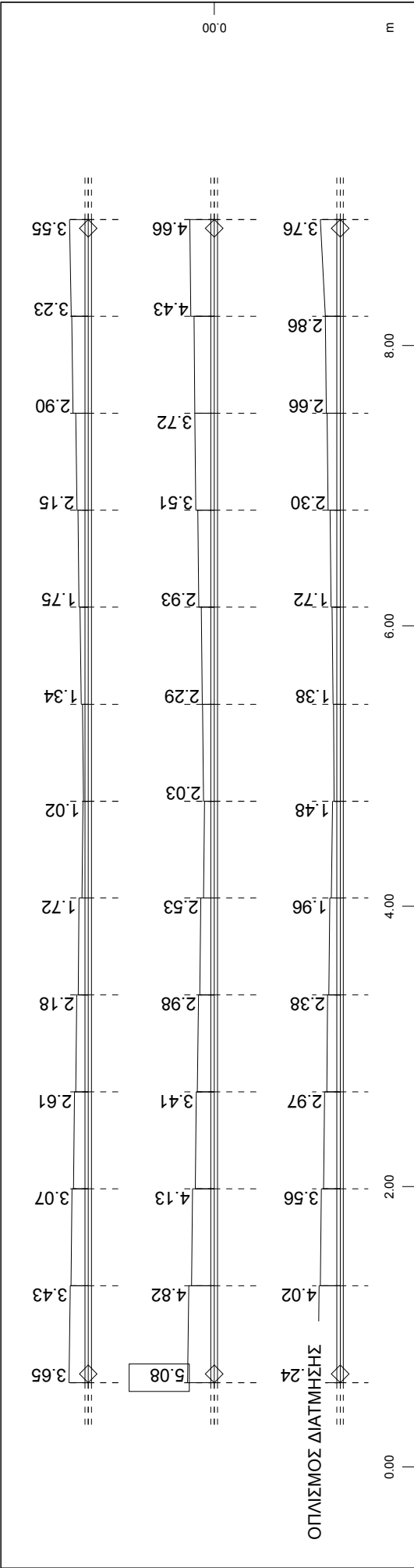
7) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ ULS-STATIKA



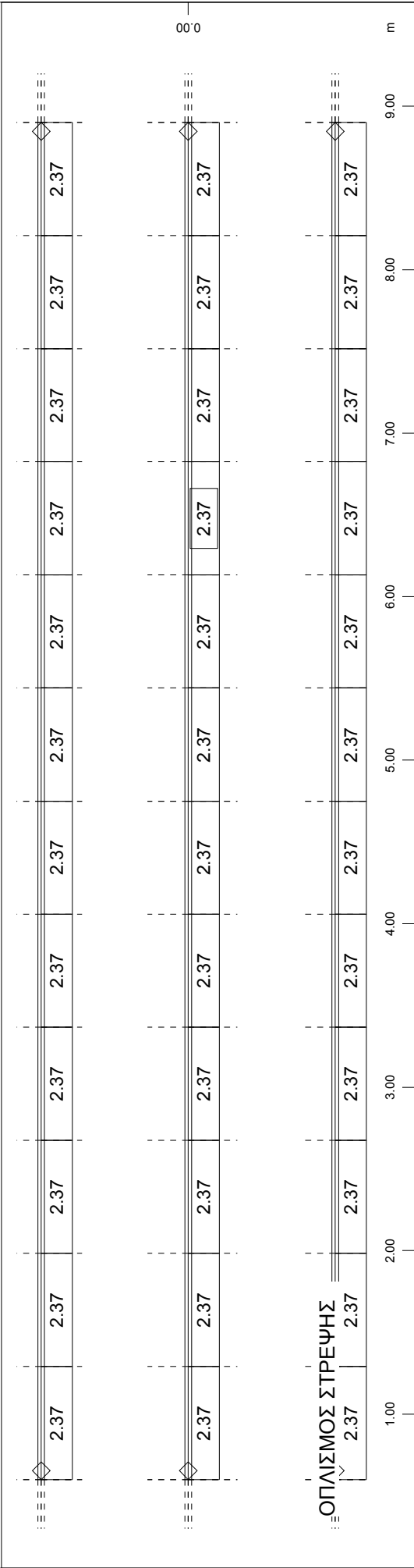
Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 507 , 1 cm 3D = 22.4 cm2 (Max=11.0)



Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case 507 , 1 cm 3D = 11.2 cm2 (Max=7.14)

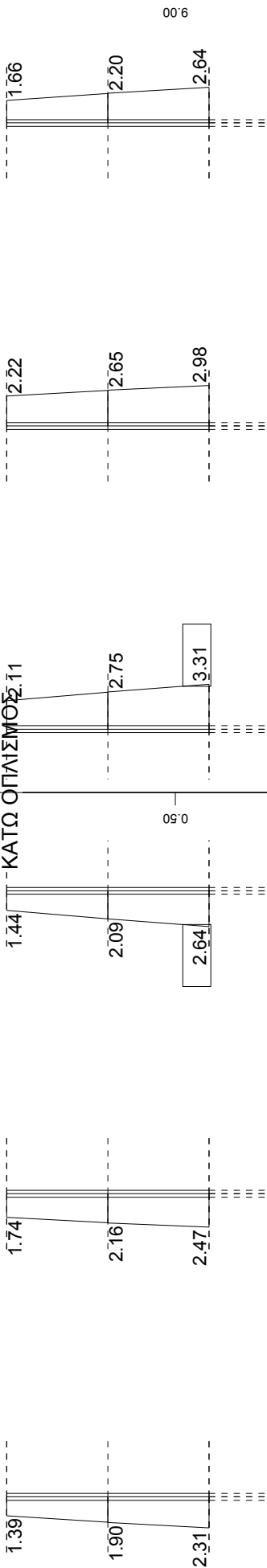


Sector of system Beam Elements Group 1
Beam Elements , Shear reinforcements (maximum), Design Case 507 , 1 cm 3D = 11.2 cm2/m (Max=5.08)



Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 0, Design Case 507 , 1 cm 3D = 4.48 cm2 (Max=2.37)

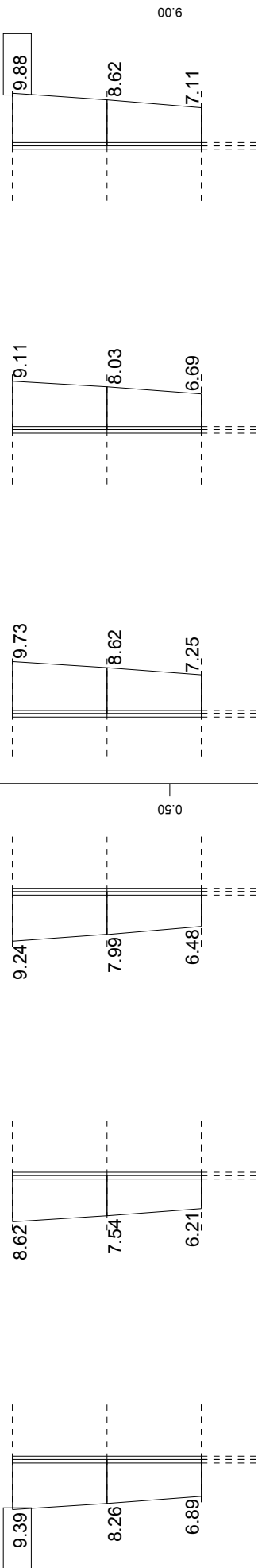
ΔΙΑΜΗΚΗ ΔΟΚΟΙ-ΣΤΗΡΙΞΗΣ



Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case
507 , 1 cm 3D = 4.48 cm2 (Max=2.64)

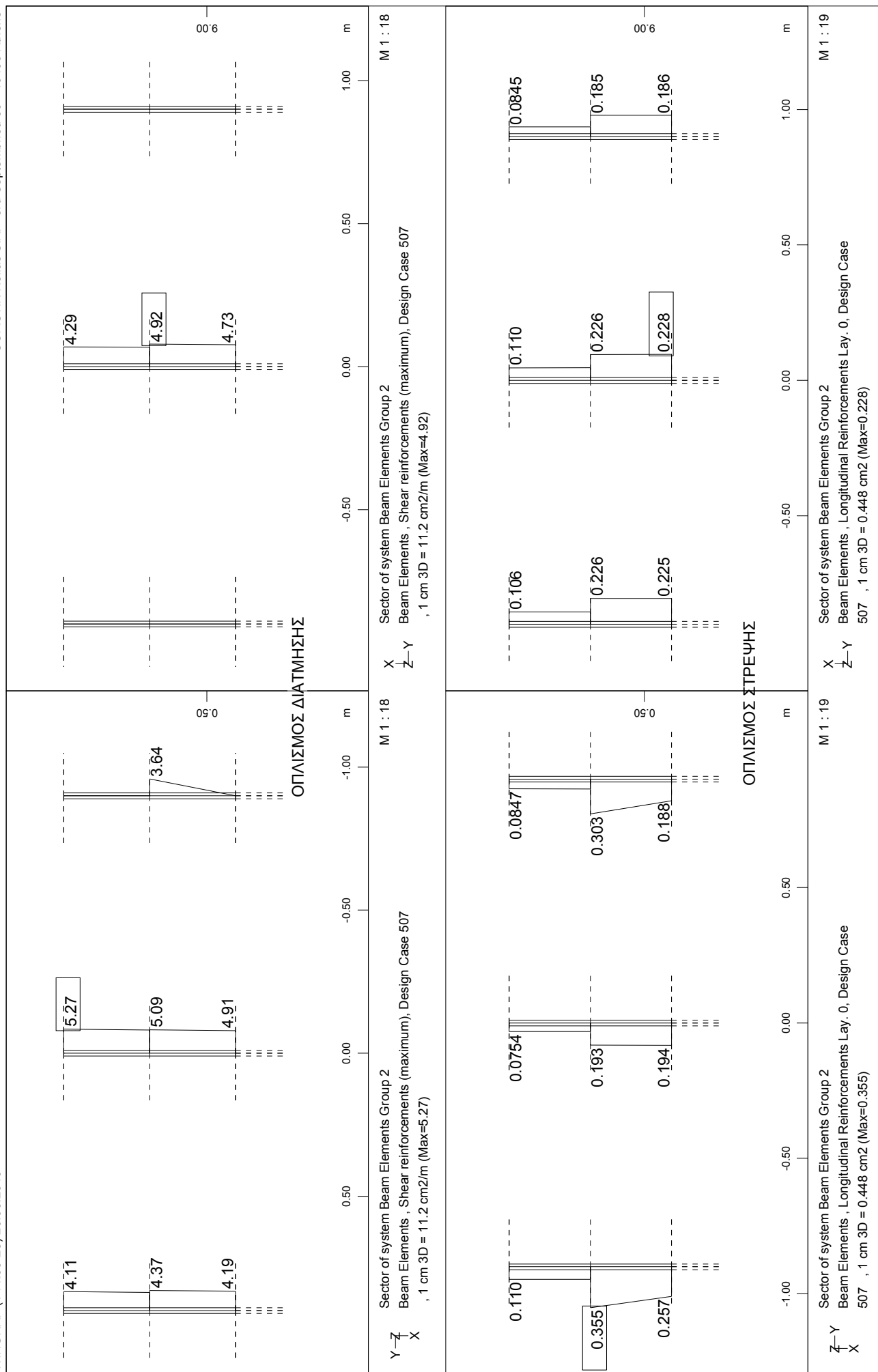
Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case
507 , 1 cm 3D = 4.48 cm2 (Max=3.31)

ΠΑΝΩ ΟΠΛΙΣΜΟΣ

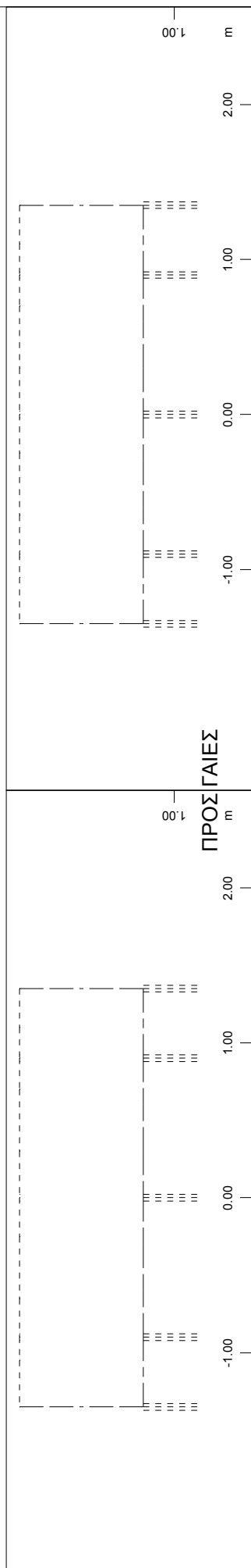
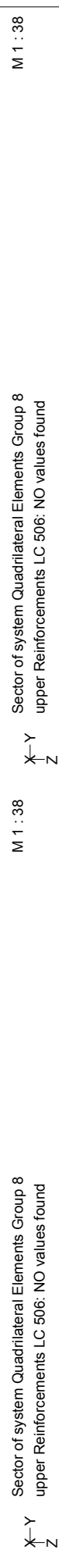
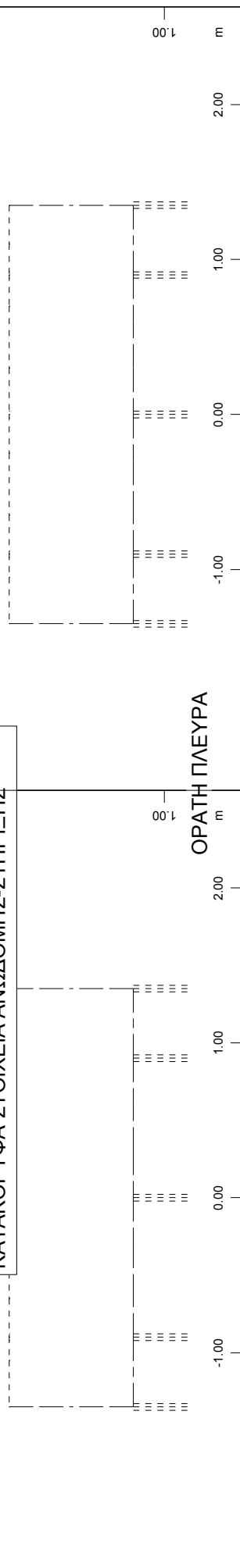


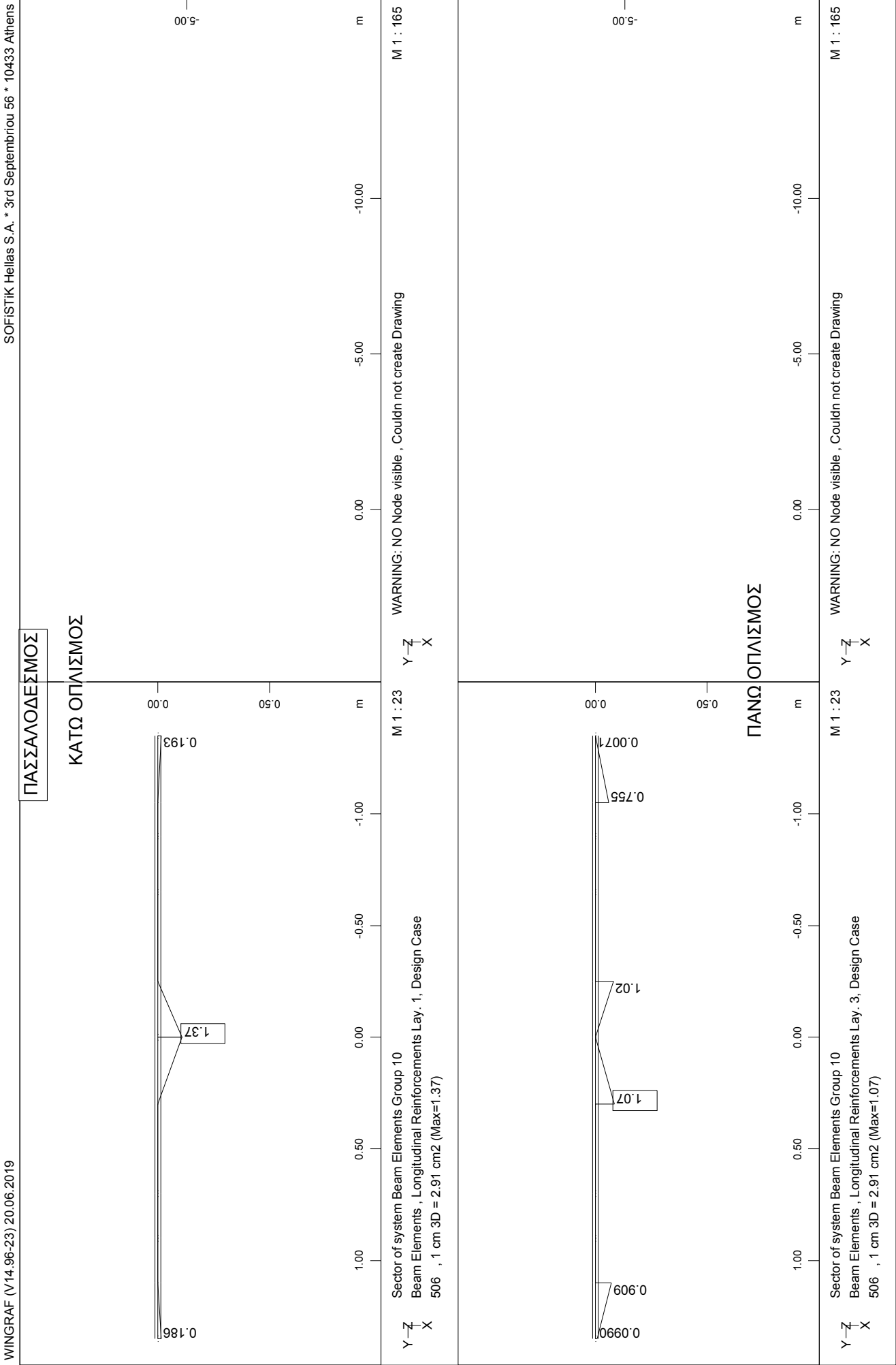
Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
507 , 1 cm 3D = 11.2 cm2 (Max=9.39)

Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
507 , 1 cm 3D = 11.2 cm2 (Max=9.88)



ΚΑΤΑΚΟΡΥΦΑ ΣΤΟΙΧΕΙΑ ΑΝΩΔΟΜΗΣ-ΣΤΗΡΙΞΗΣ





Y-Z

X

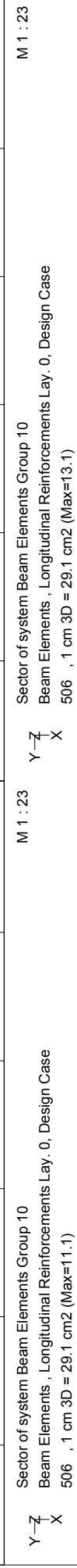
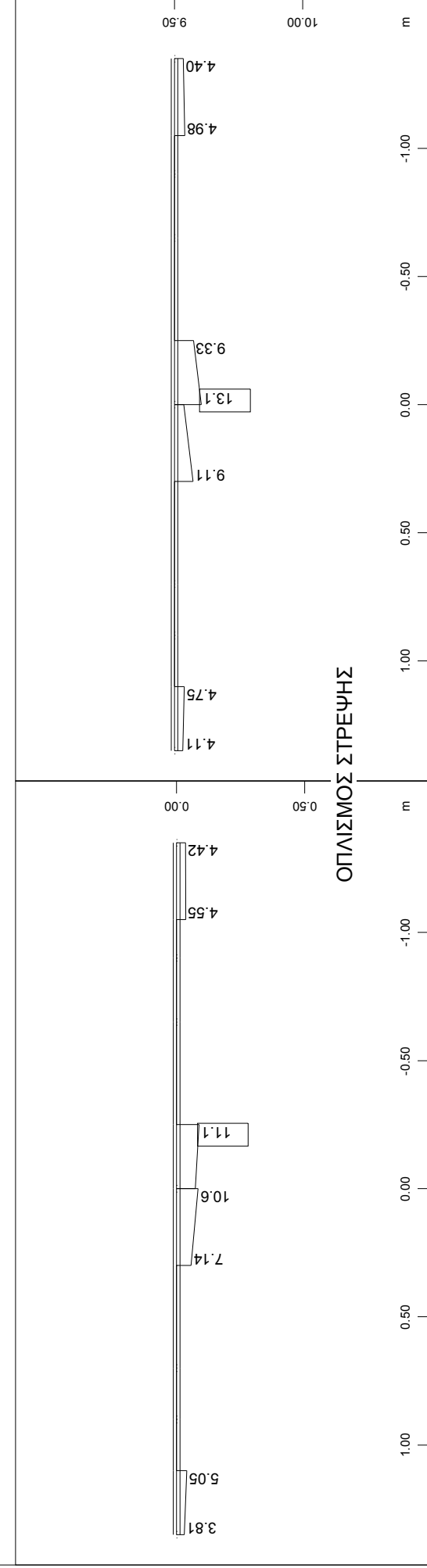
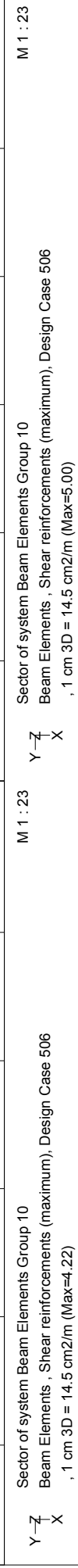
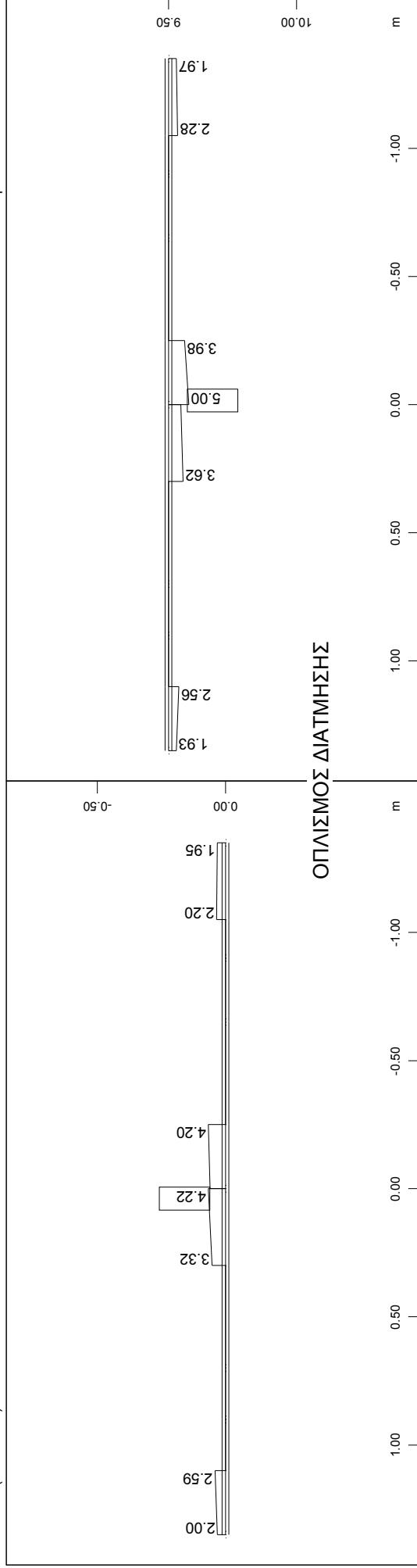
M 1 : 23

Sector of system Beam Elements Group 10
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
506 , 1 cm 3D = 2.91 cm2 (Max=1.07)

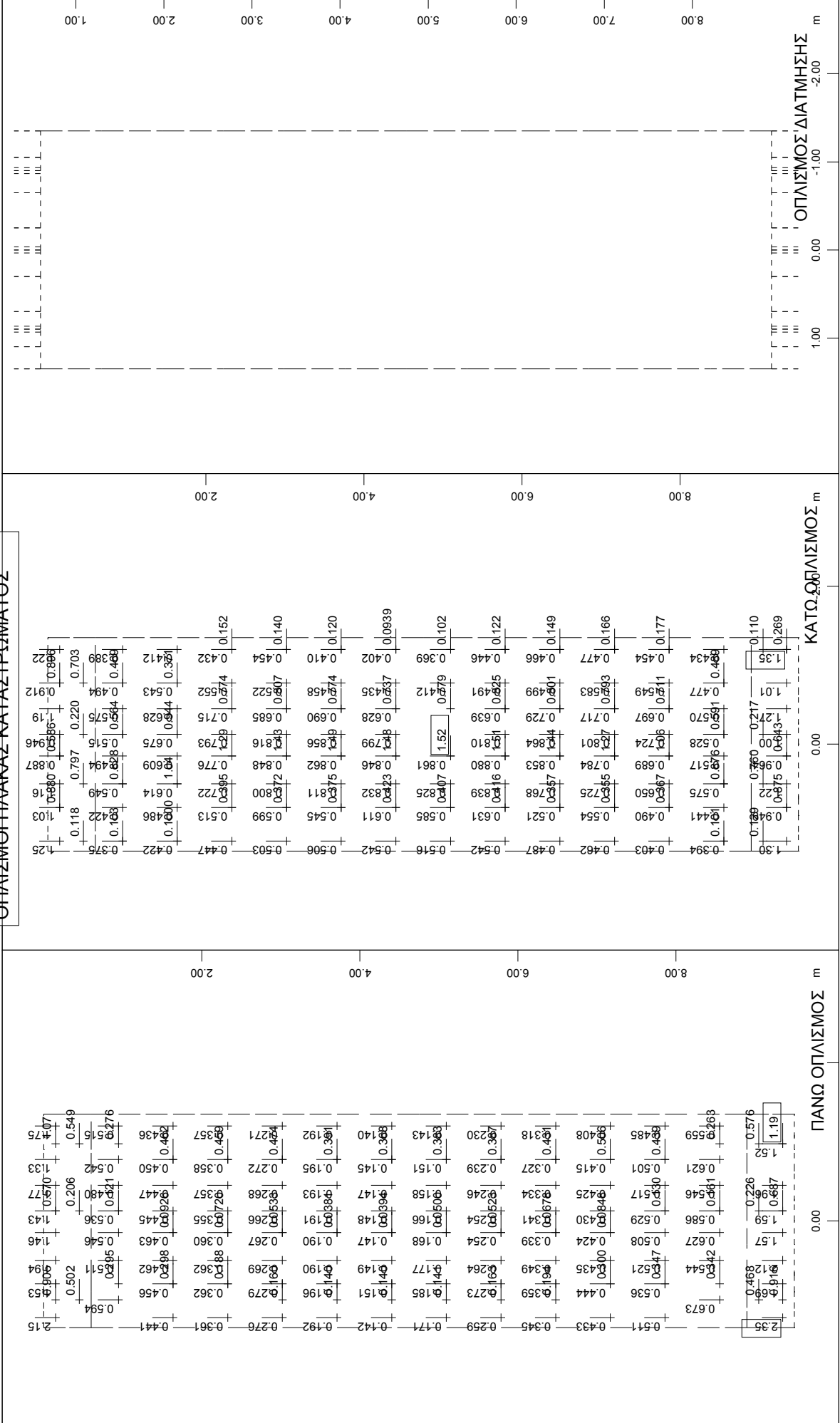
M 1 : 165

ΠΑΝΩ ΟΠΛΙΣΜΟΣ

WARNING: NO Node visible , Couldn not create Drawing



ΟΠΛΙΣΜΟΙ ΠΛΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ



Sector of system Quadrilateral Elements Group 3.4
upper Reinforcements in Elements in cm2/m. Design Case
521 ULS design (Max=2.35)

Sector of system Quadrilateral Elements Group 3.4
lower Reinforcements in Elements in cm2/m. Design Case
521 ULS design (Max=1.52)

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 : 61

M 1 : 68

M 1 : 68

Y-Z

Y-Z

Y-Z

X

X

X

Y-Z

Y-Z

Y-Z

X

X

X

Y-Z

Y-Z

Y-Z

X

X

X

Y-Z

Y-Z

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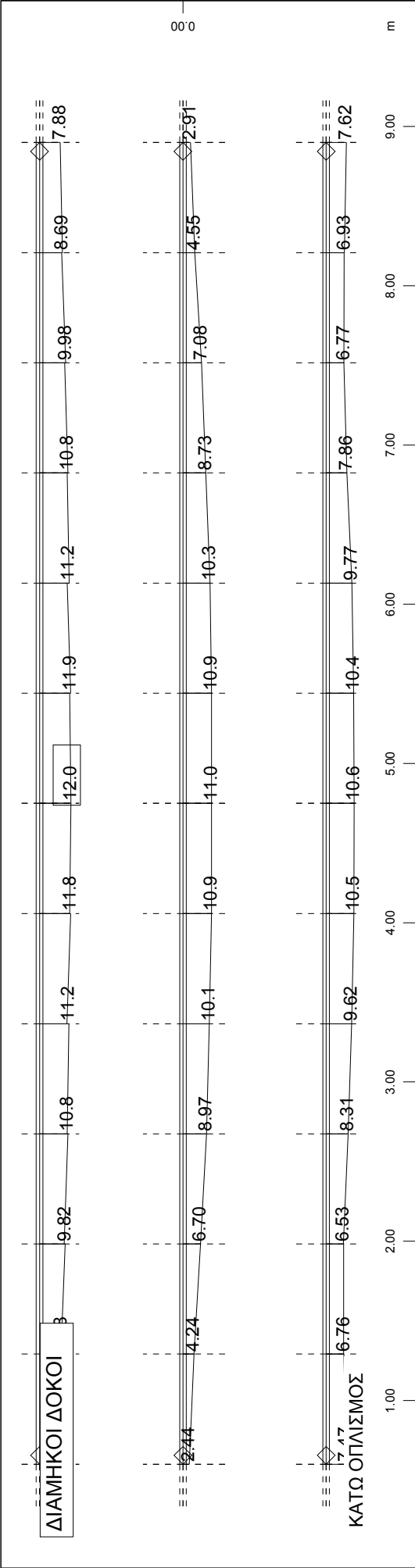
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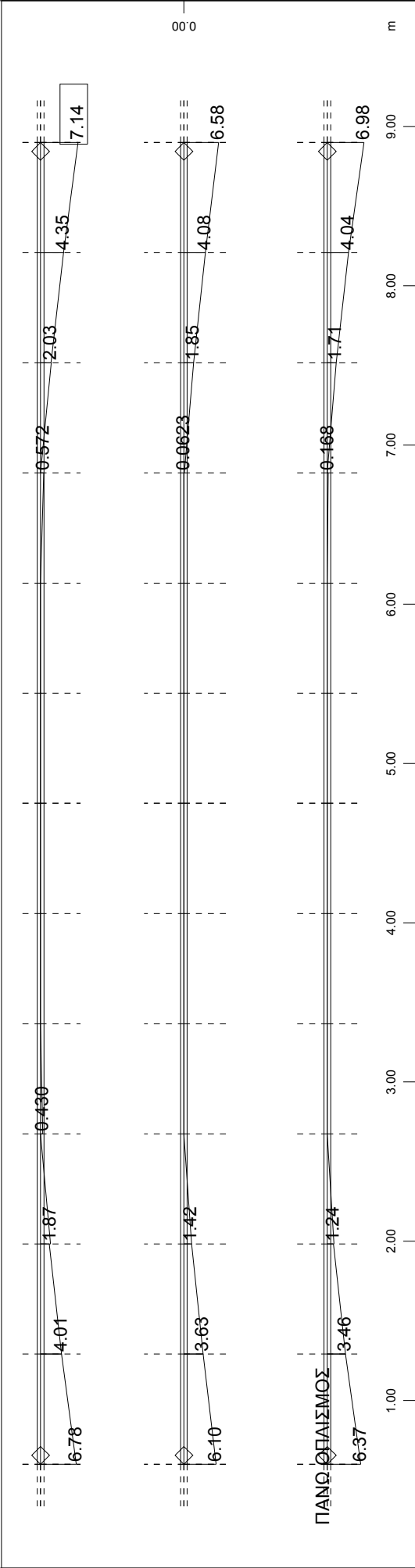
Y-Z

ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70

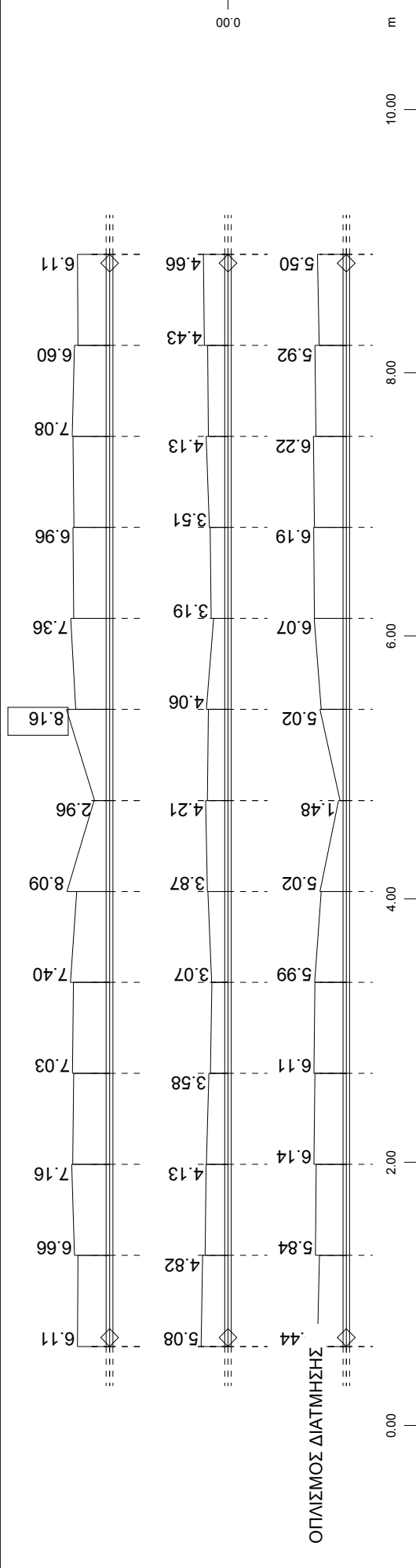
8) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ ULS-ΠΡΟΣΚΡΟΥΣΗΣ



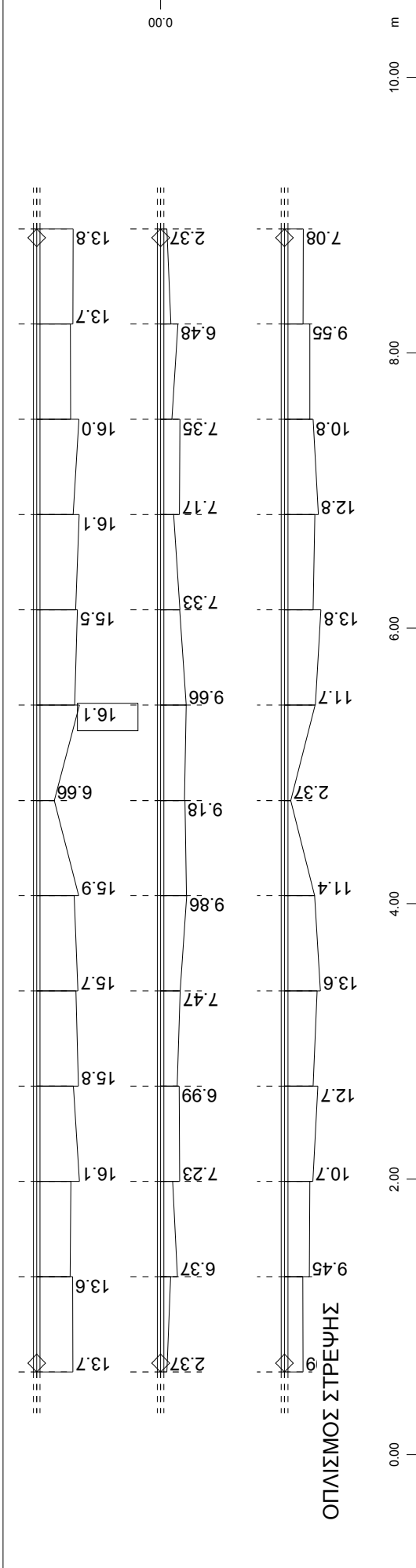
Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 516 , 1 cm 3D = 22.4 cm2 (Max=12.0)



Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case 516 , 1 cm 3D = 11.2 cm2 (Max=7.14)

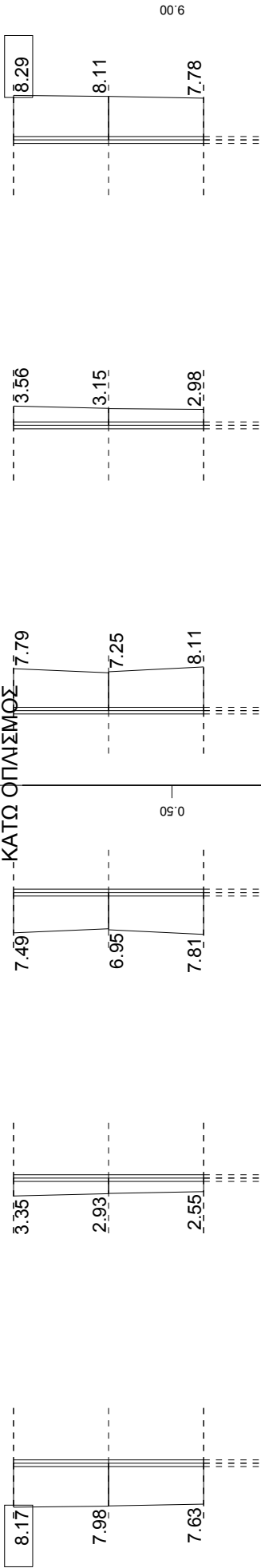


Sector of system Beam Elements Group 1
Beam Elements , Shear reinforcements (maximum), Design Case 516 , 1 cm 3D = 11.2 cm2/m (Max=8.16)



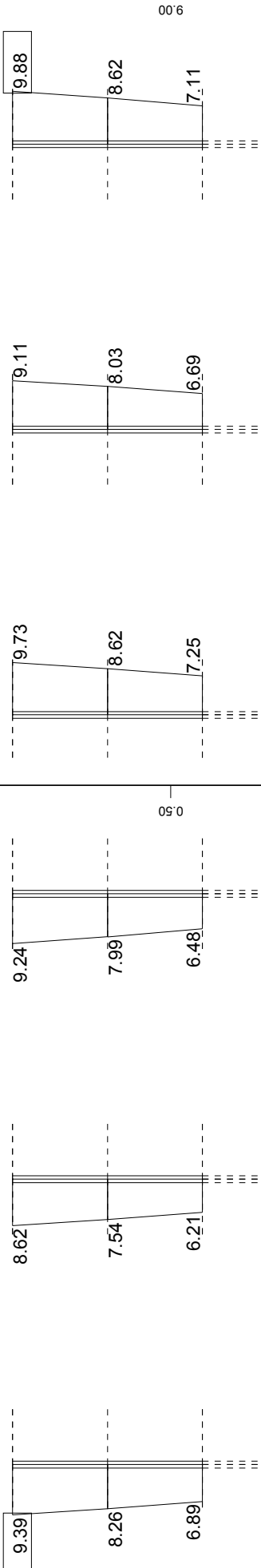
Sector of system Beam Elements Group 1
Beam Elements , Longitudinal Reinforcements Lay. 0, Design Case 516 , 1 cm 3D = 22.4 cm2 (Max=16.1)

ΔΙΑΜΗΚΗ ΔΟΚΟΙ-ΣΤΗΡΙΞΗΣ

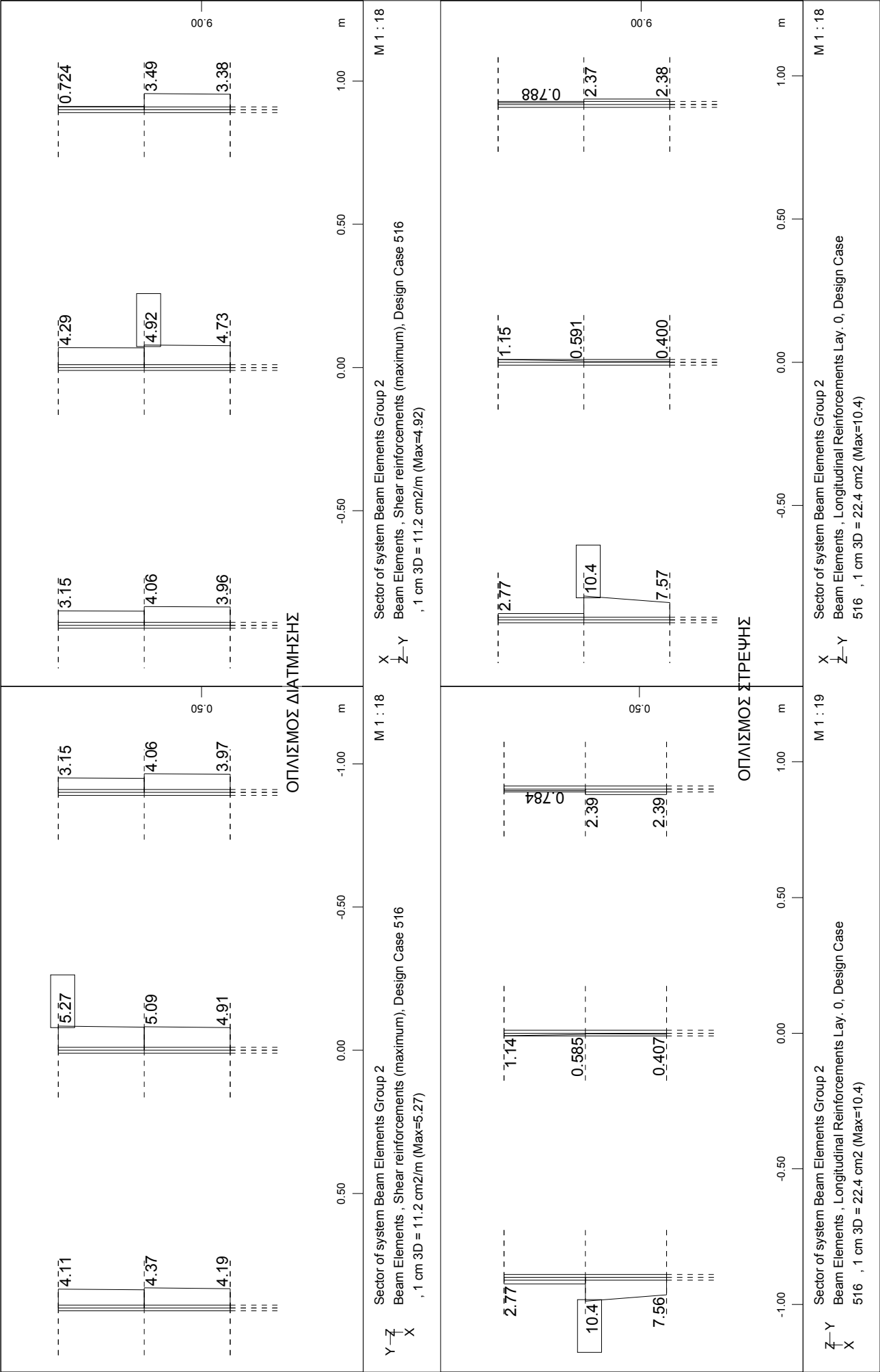


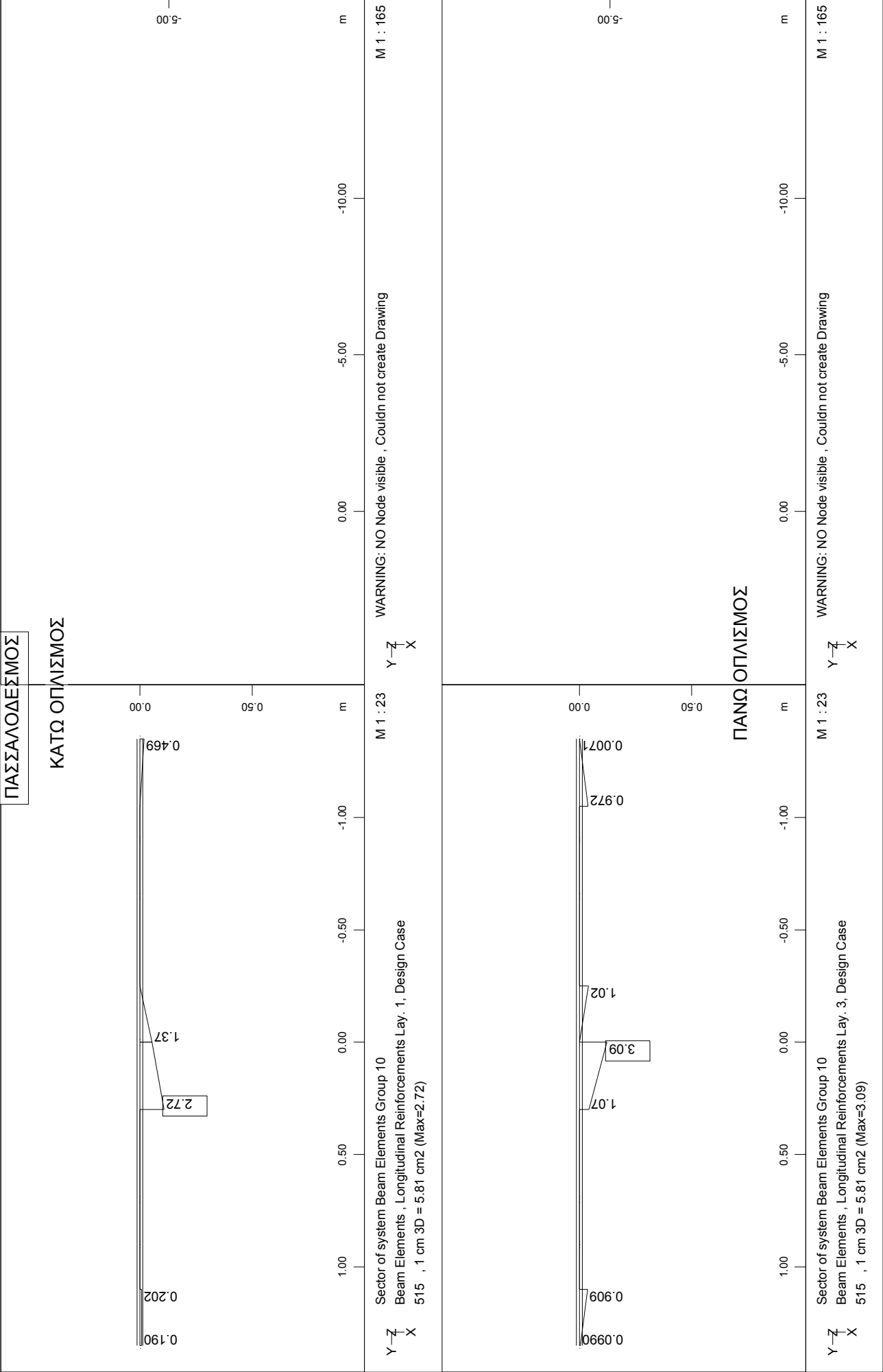
Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case
516 , 1 cm 3D = 11.2 cm2 (Max=8.17)

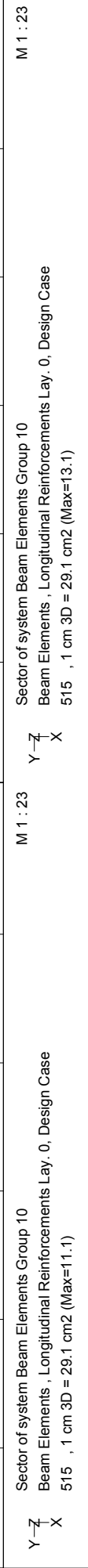
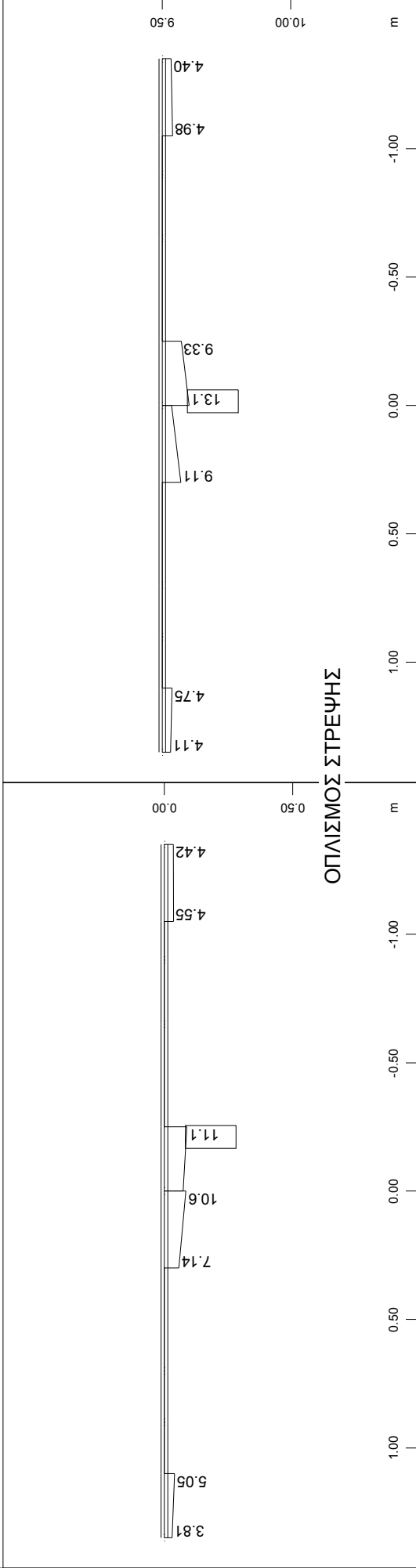
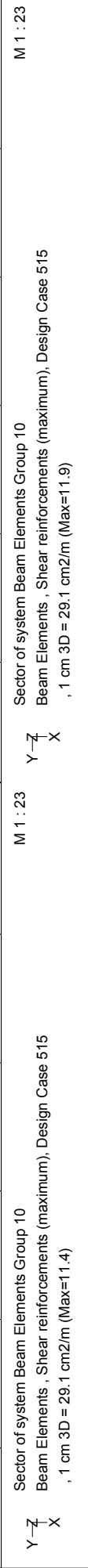
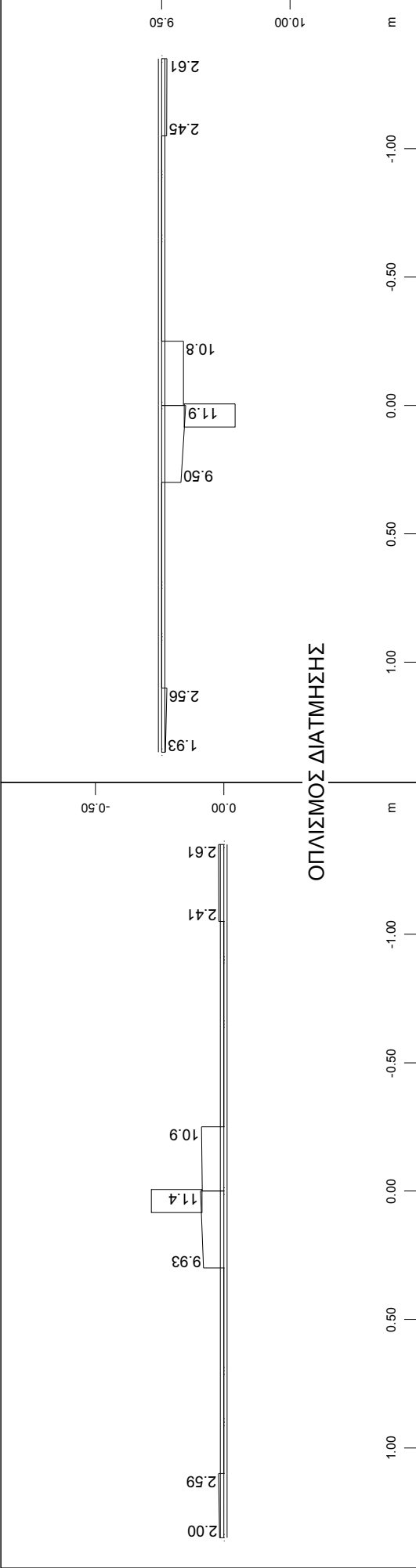
ΠΑΝΩ ΟΠΛΙΣΜΟΣ



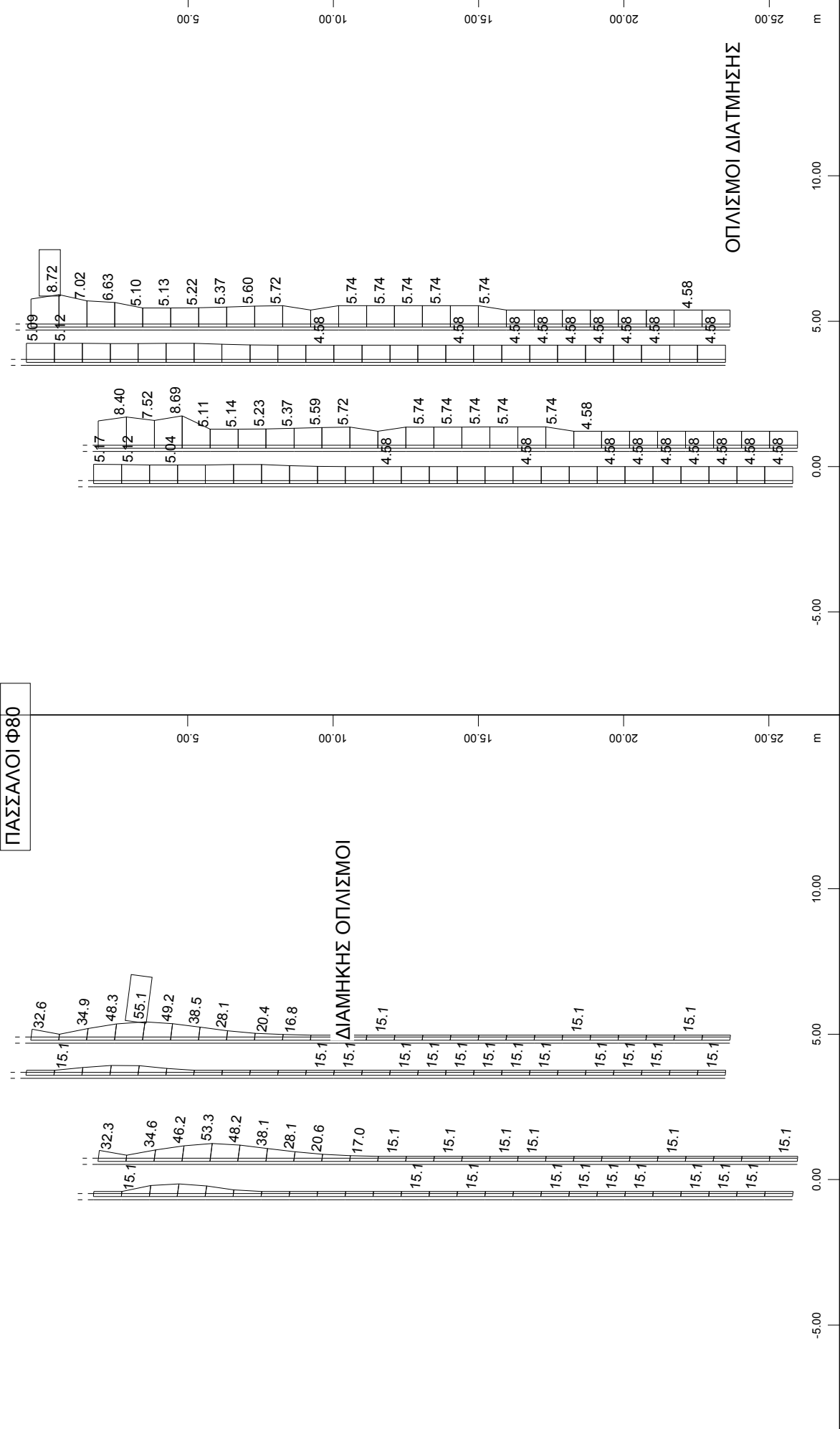
Sector of system Beam Elements Group 2
Beam Elements , Longitudinal Reinforcements Lay. 3, Design Case
516 , 1 cm 3D = 11.2 cm2 (Max=9.39)





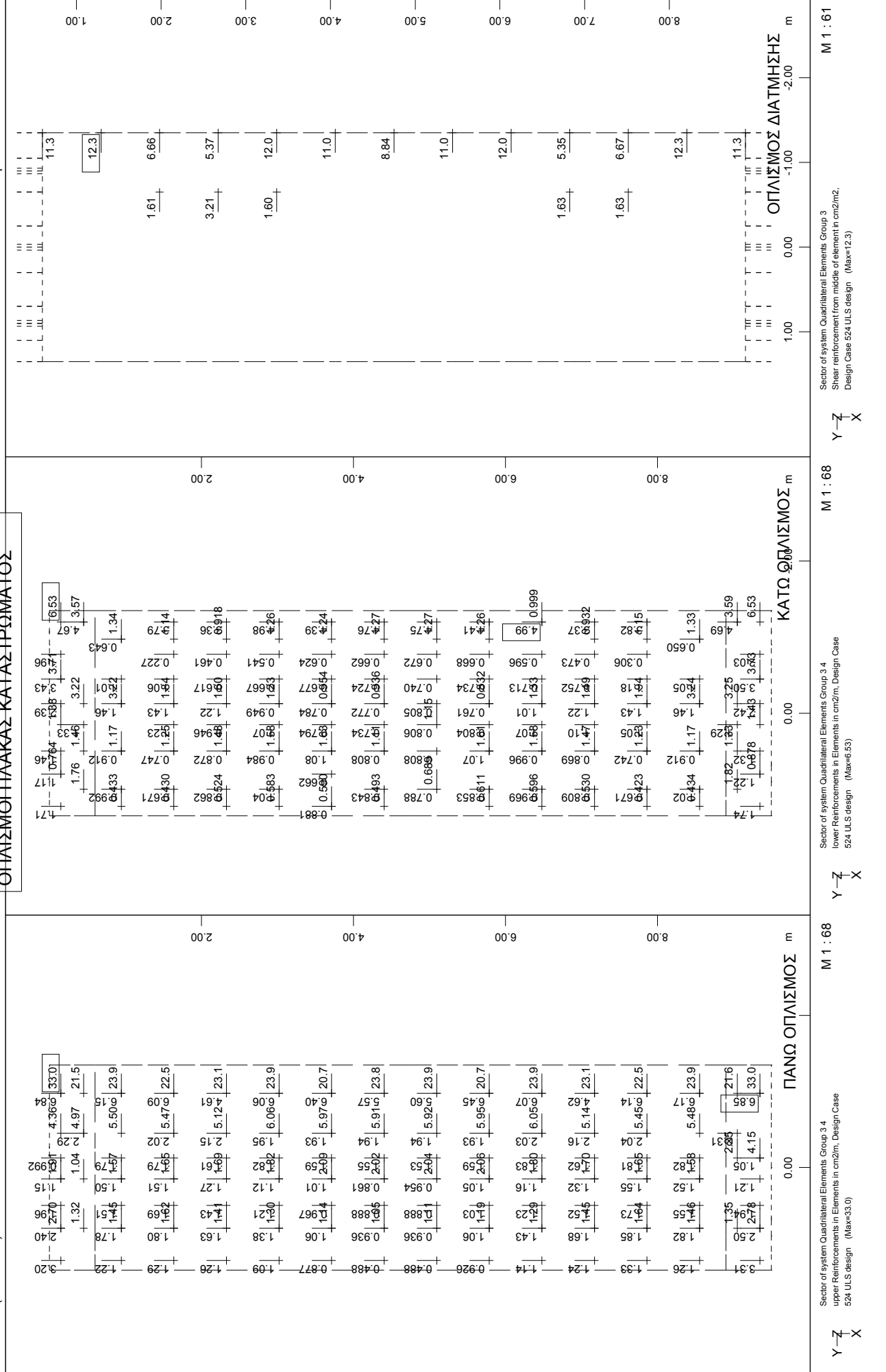


ΠΑΣΣΑΛΟΙ Φ80



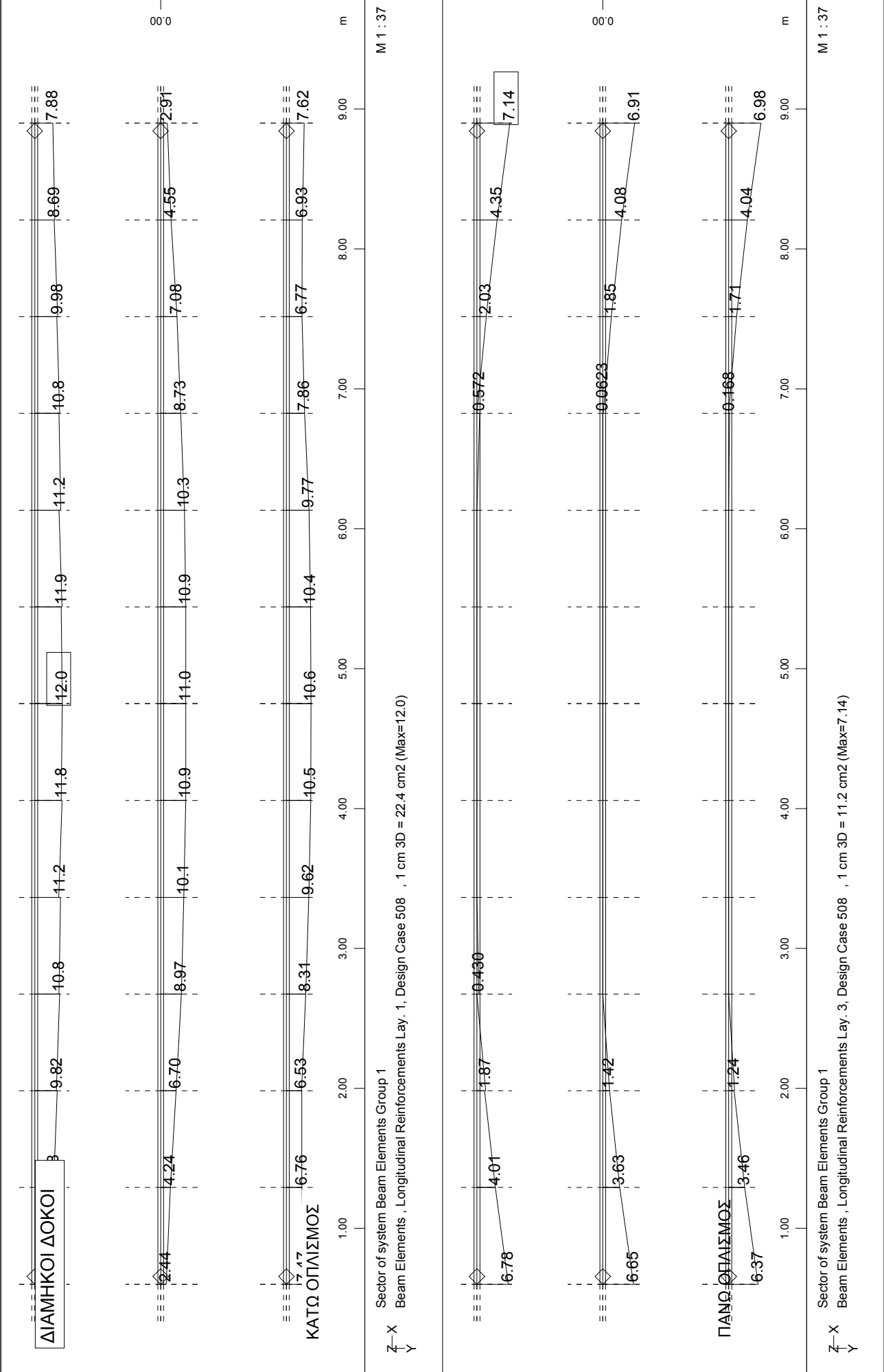
	Sector of system Beam Elements Group 12 Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 515 , 1 cm 3D = 145.3 cm2 (Max=55.1)	M 1 : 186 X * 0.502 Y * 0.906 Z * 0.962
	Sector of system Beam Elements Group 12 Beam Elements , Shear reinforcements (maximum), Design Case 515 , 1 cm 3D = 14.5 cm2/m (Max=8.72)	M 1 : 186 X * 0.502 Y * 0.906 Z * 0.962

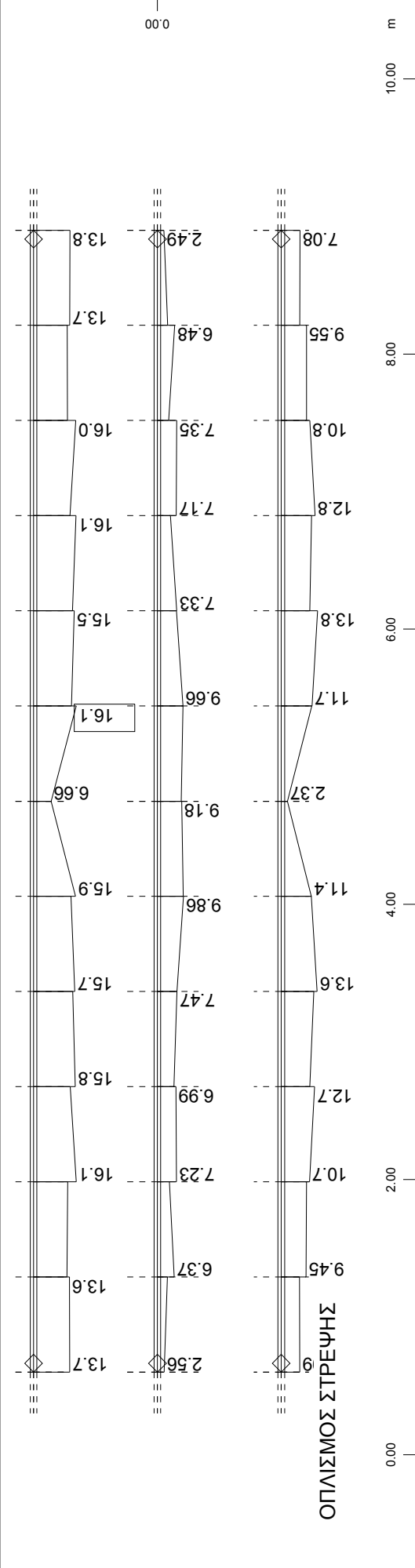
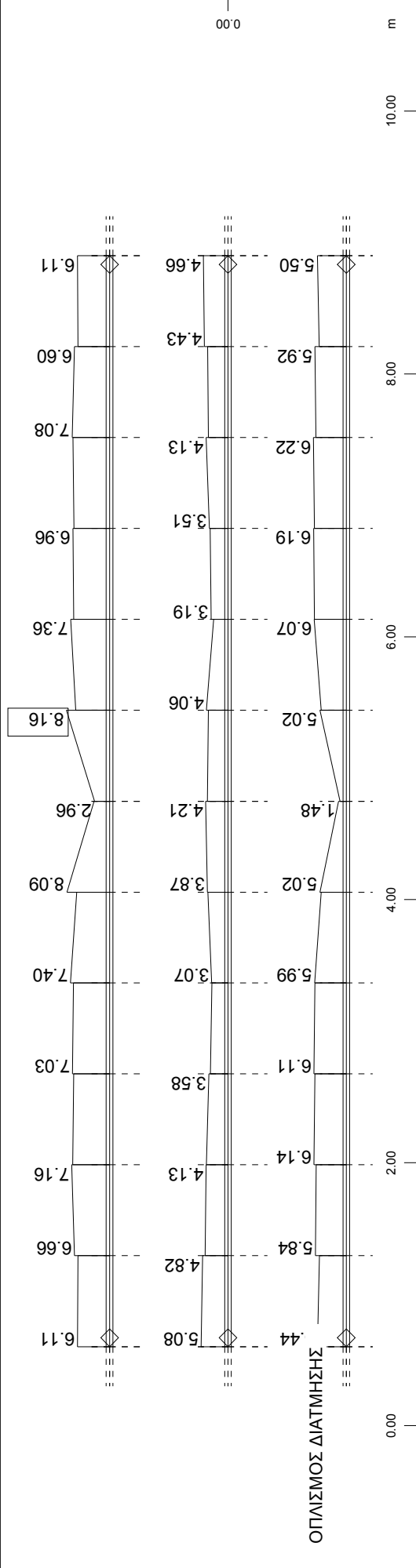
SOFiSTiK Hellas S.A. * 3rd Septembriou 56 * 10433 Athens



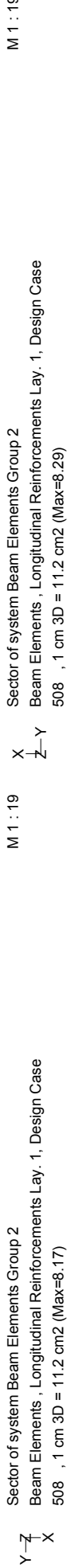
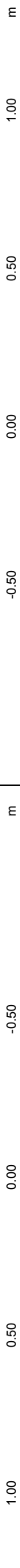
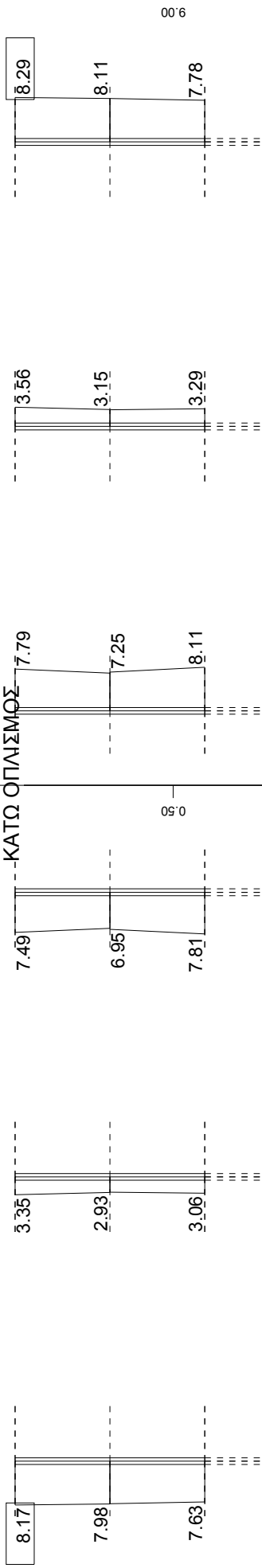
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70

9) ΦΑΣΗ-2 ΕΛΕΓΧΟΣ ΦΟΡΕΑ ΣΕ SLS - ΡΗΓΜΑΤΩΣΗ

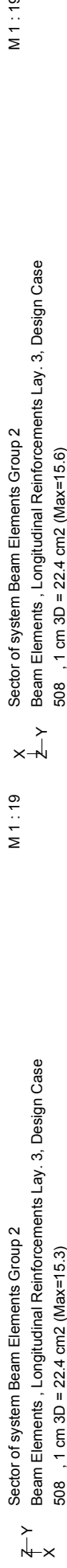
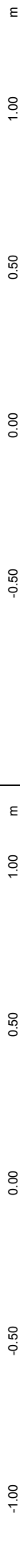
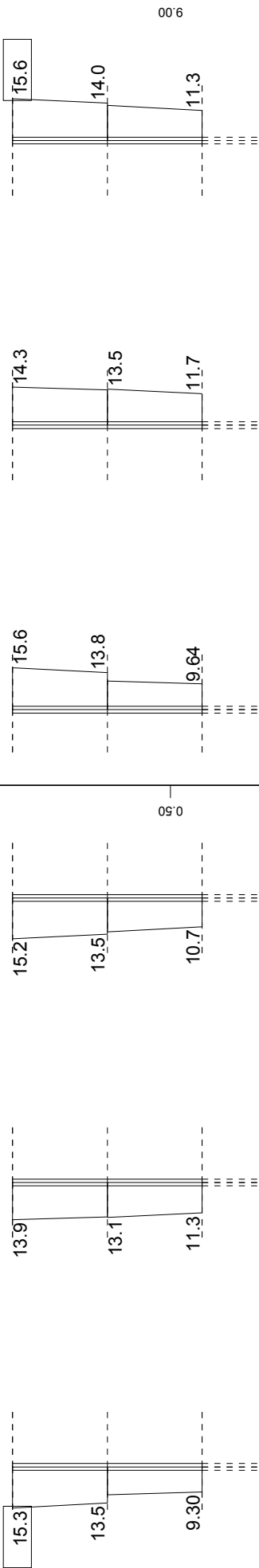


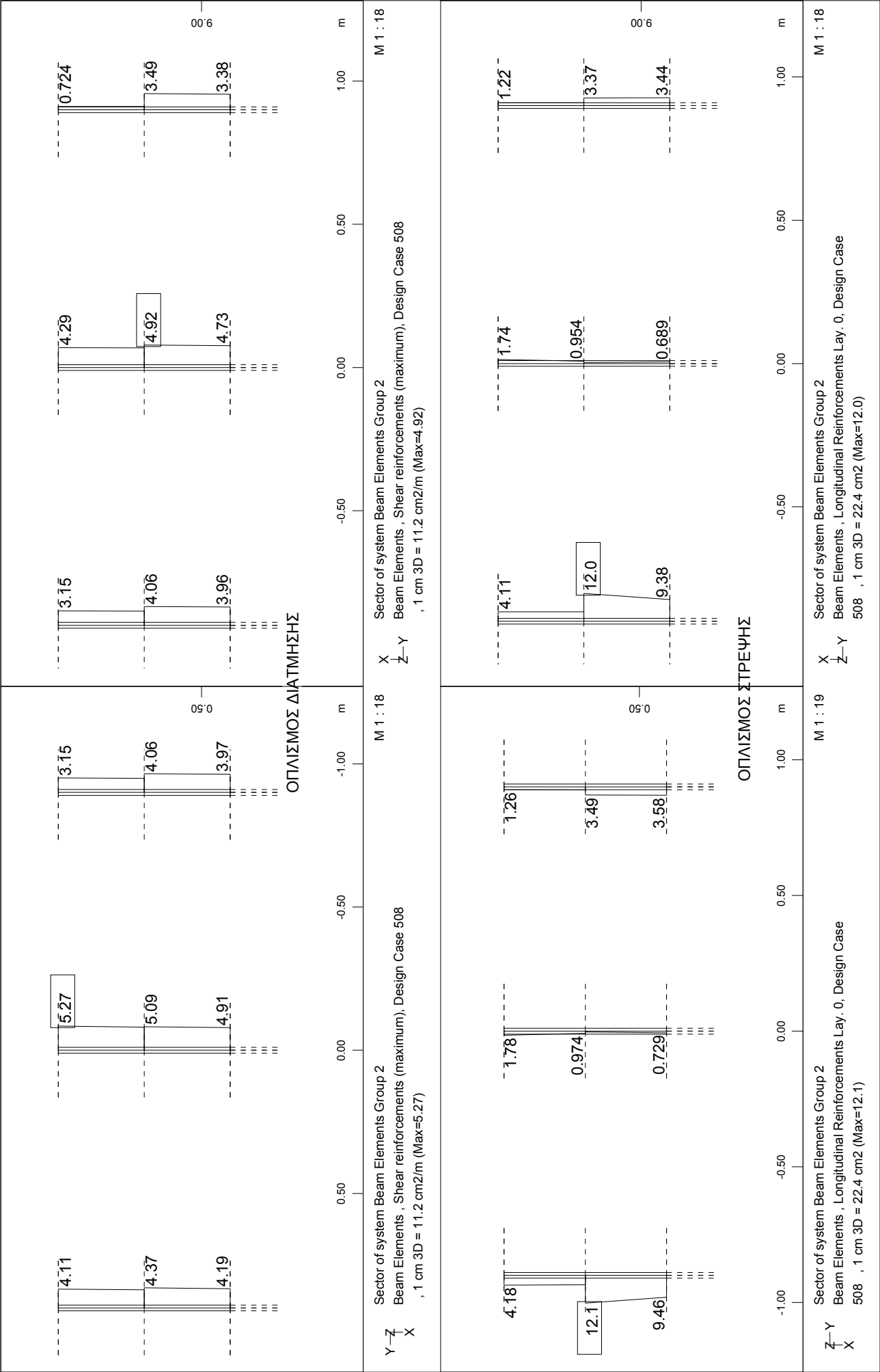


ΔΙΑΜΗΚΗ ΔΟΚΟΙ-ΣΤΗΡΙΞΗΣ

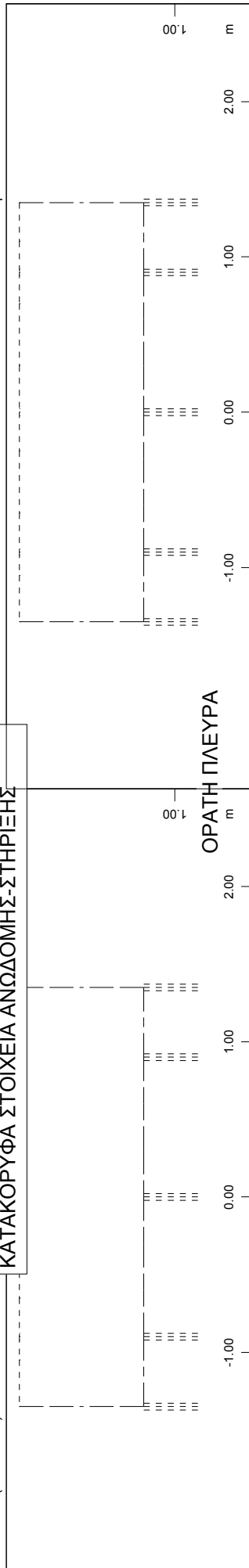


ΠΑΝΩ ΟΠΛΙΣΜΟΣ

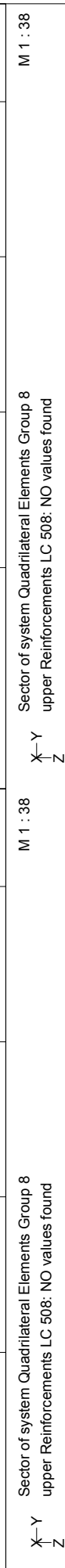




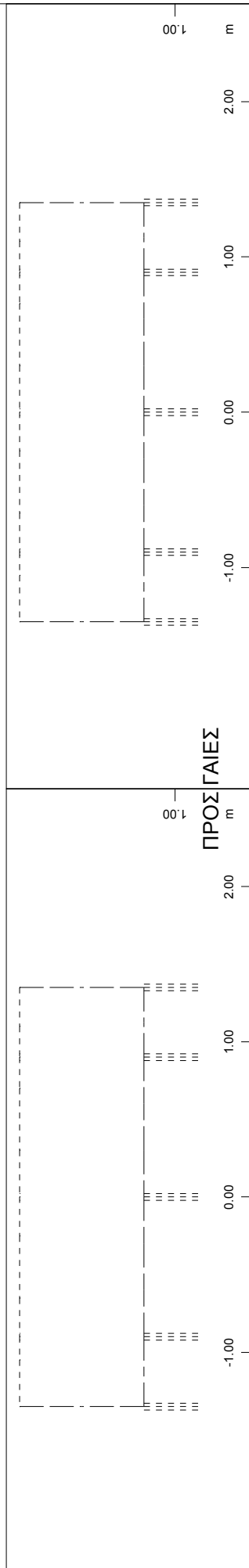
ΚΑΤΑΚΟΡΥΦΑ ΣΤΟΙΧΕΙΑ ΑΝΩΔΟΜΗΣ-ΣΤΗΡΙΞΗΣ



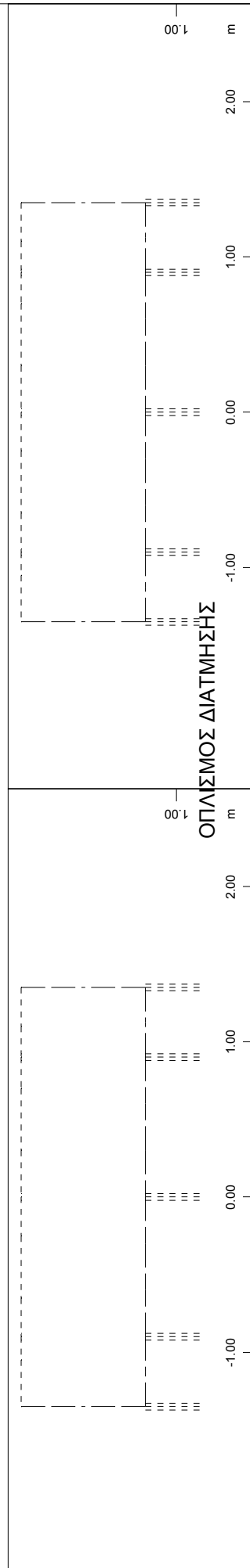
ОРАТН ПЛЕУРА

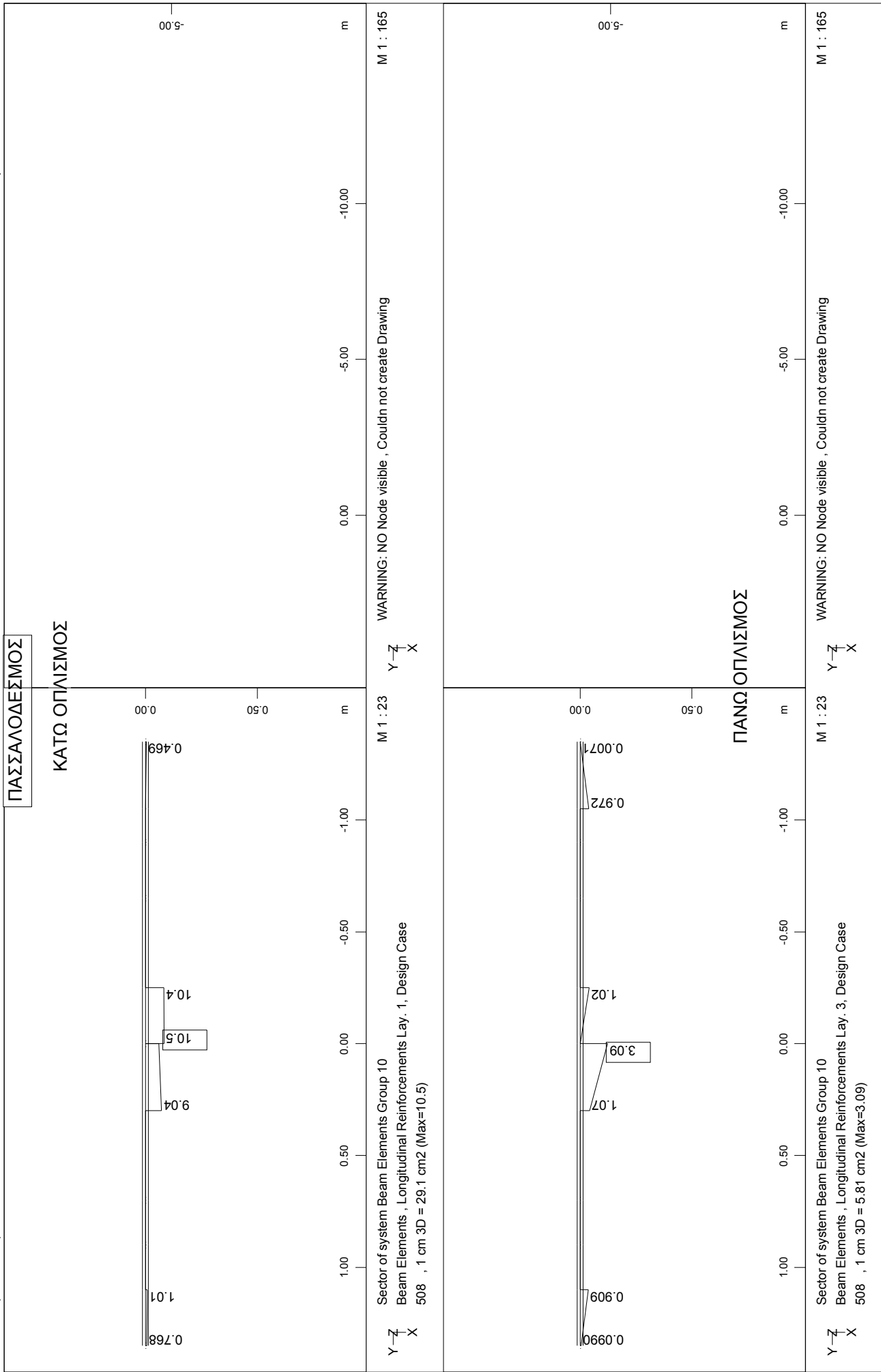


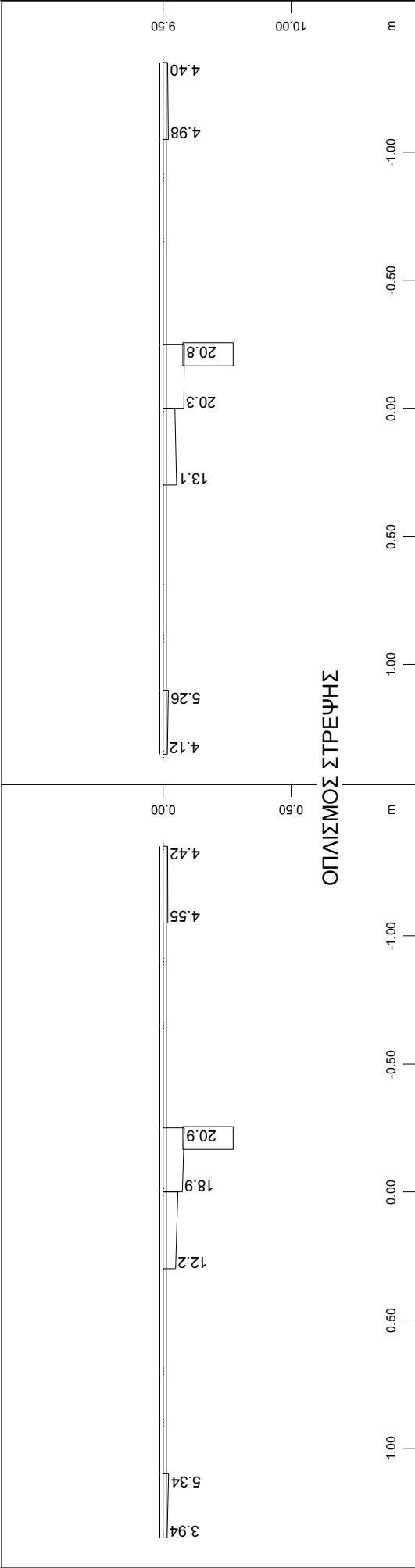
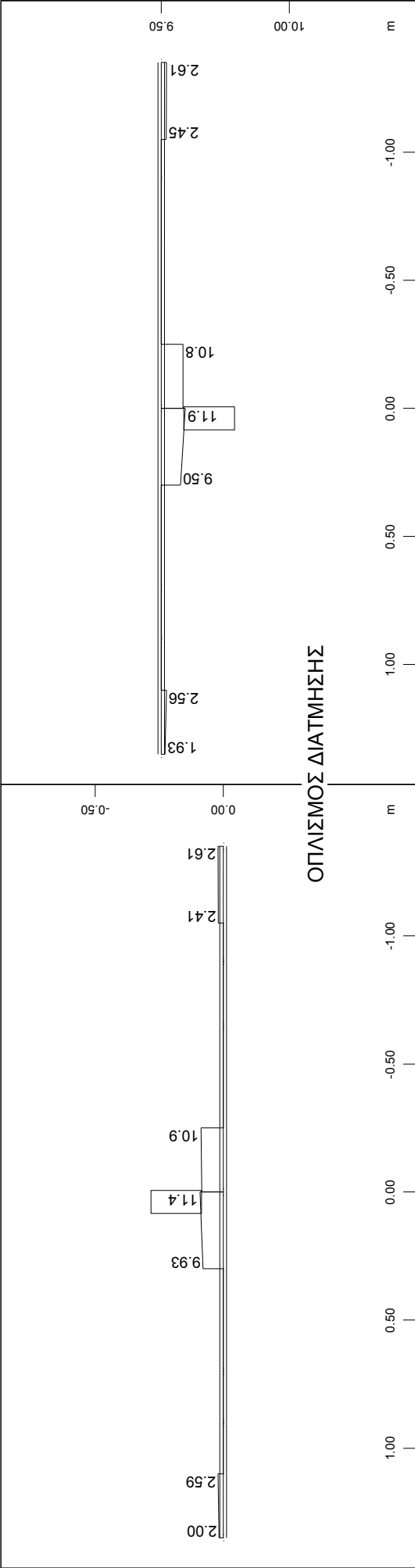
ΠΡΟΣ ΓΑΙΕΣ



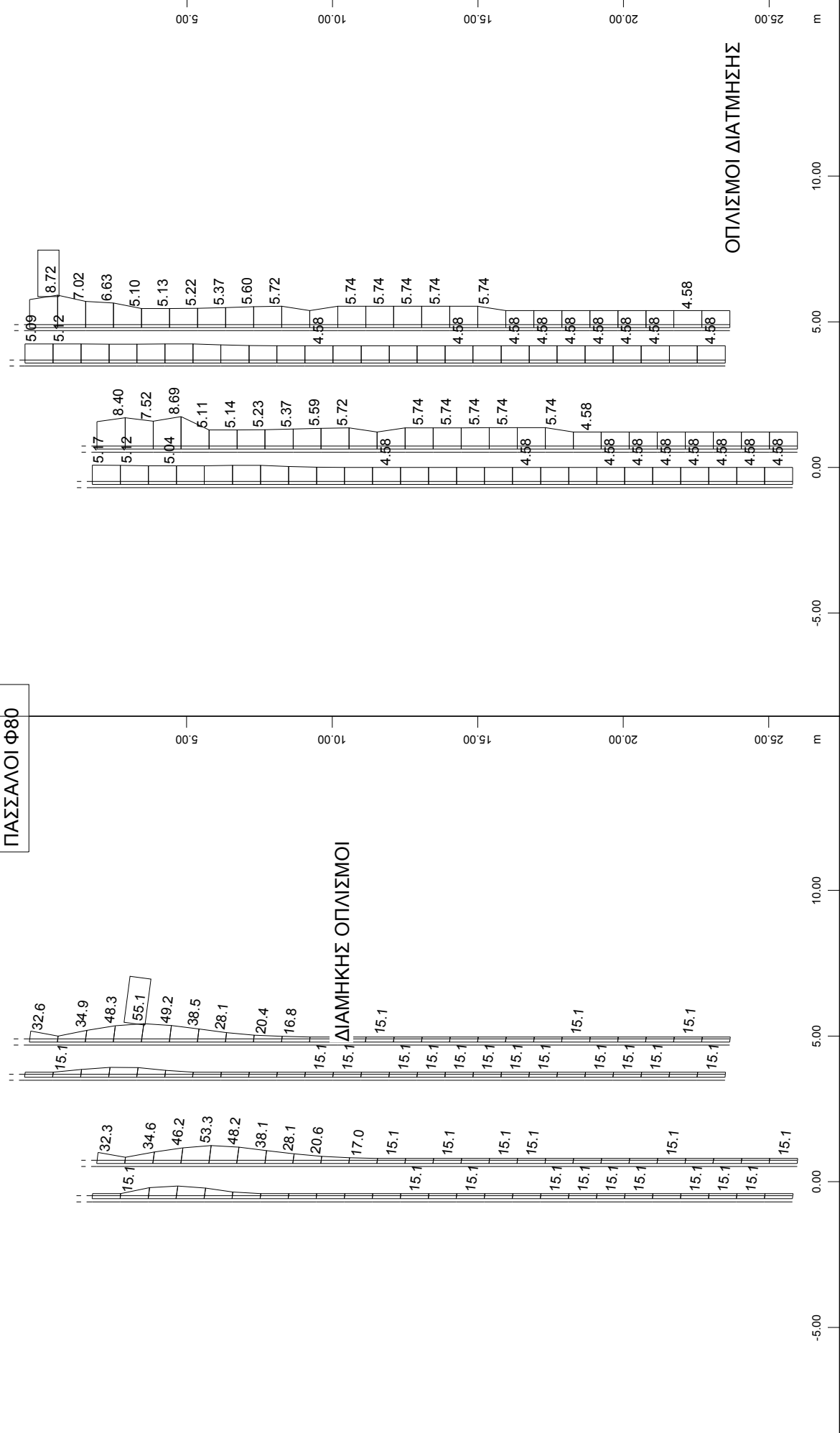
ΟΠΛΙΣΜΟΣ ΔΙΑΤΜΗΣΗΣ^{III}





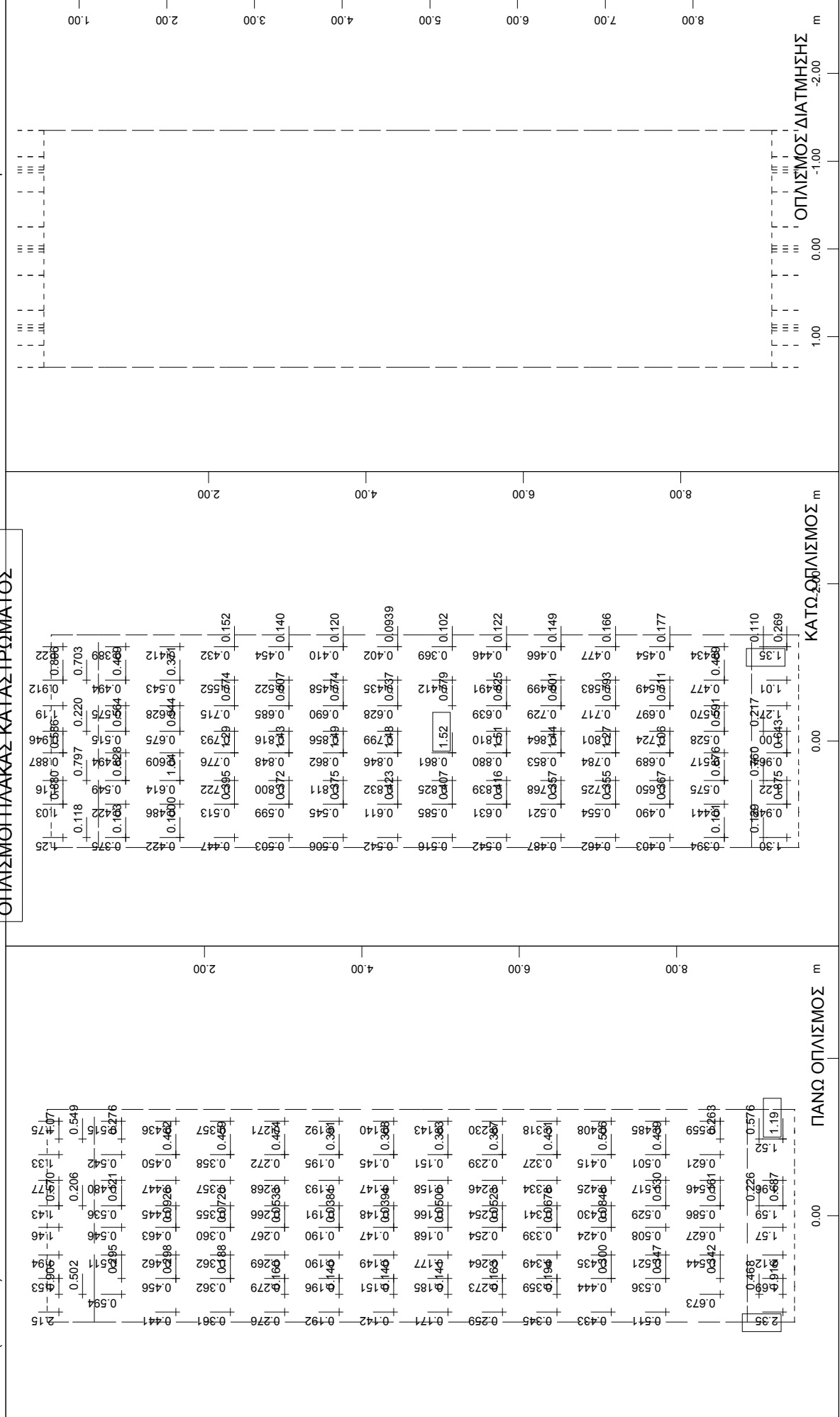


ΠΑΣΣΑΛΟΙ Φ80



	Sector of system Beam Elements Group 12 Beam Elements , Longitudinal Reinforcements Lay. 1, Design Case 508 , 1 cm 3D = 145.3 cm2 (Max=55.1)	M 1 : 186 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 = 14.5 cm2/m (Max=8.72)	M 1 : 186 X * 0.502 Y * 0.906 Z * 0.962

ΟΠΛΙΣΜΟΙ ΠΛΑΚΑΣ ΚΑΤΑΣΤΡΩΜΑΤΟΣ



Sector of system Quadrilateral Elements Group 3.4
upper Reinforcements in Elements in cm2/m. Design Case 521 ULS design (Max=2.35)

M 1 : 68

Y-Z X

Sector of system Quadrilateral Elements Group 3.4
lower Reinforcements in Elements in cm2/m. Design Case 521 ULS design (Max=1.52)

M 1 : 68

Y-Z X

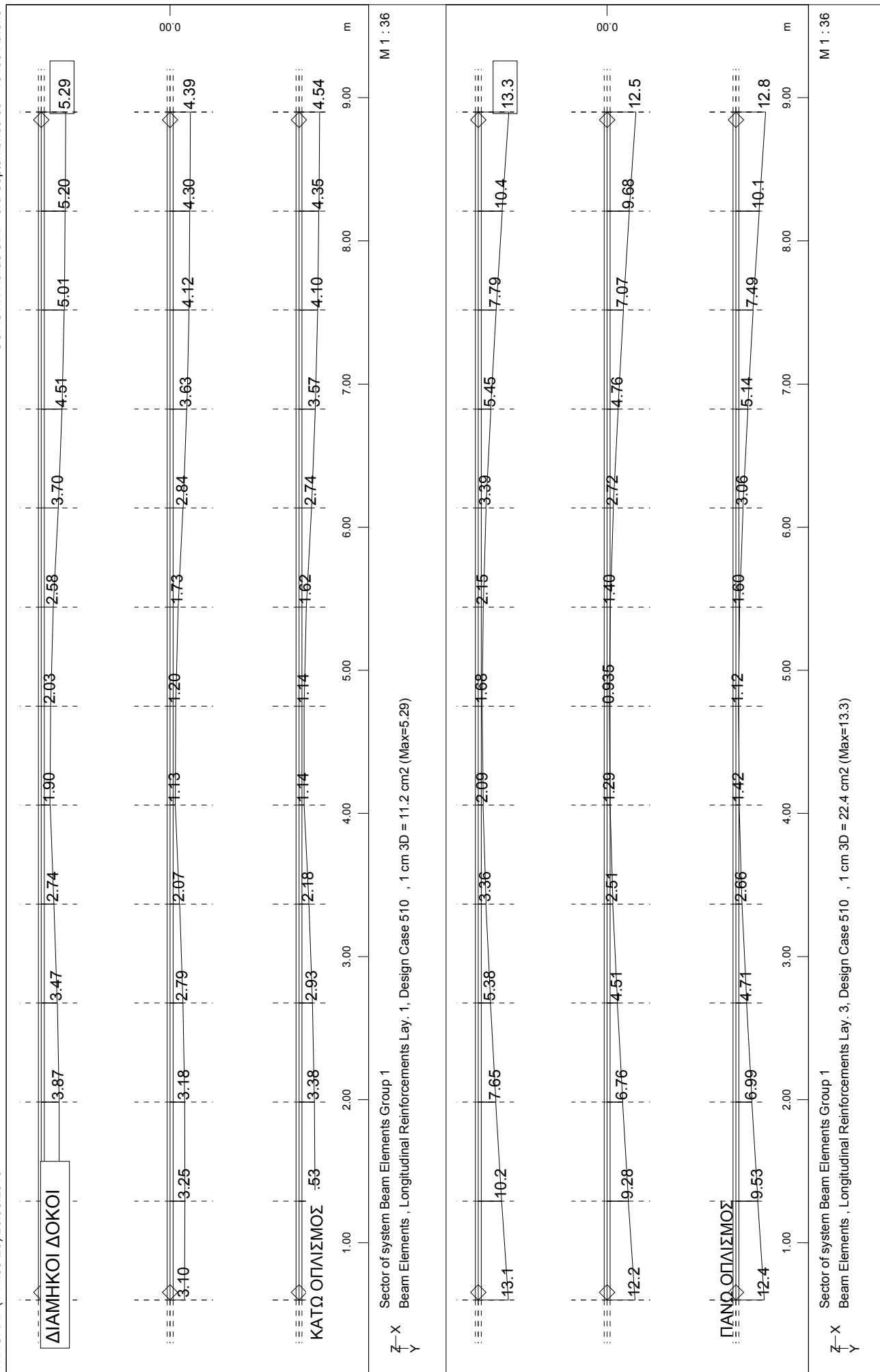
Sector of system Quadrilateral Elements Group 3
Shear reinforcement from middle of element in cm2/m2. Design Case 521 ULS design (Max=0)

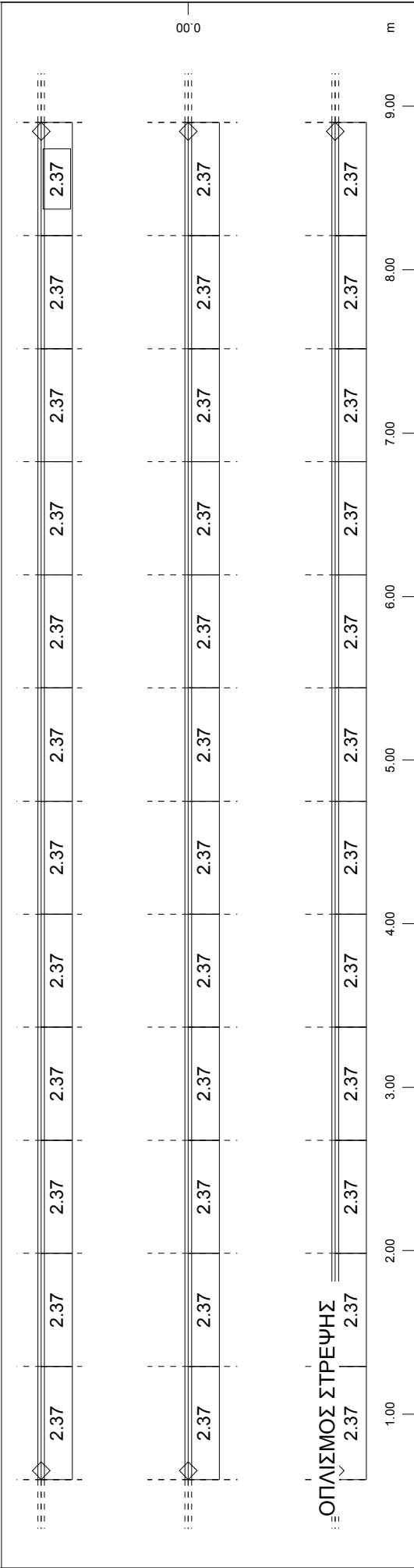
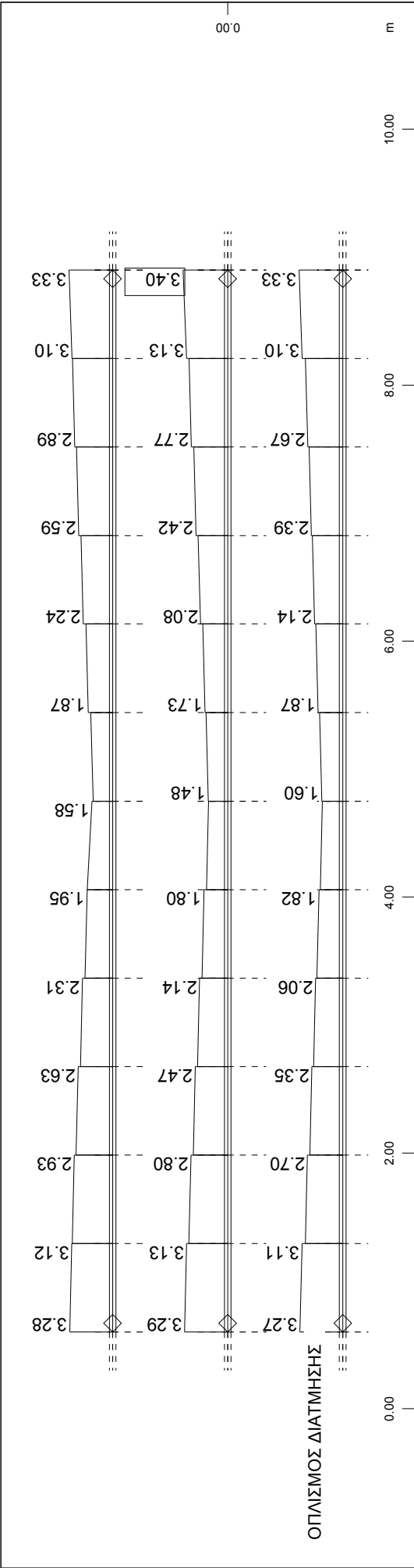
M 1 : 61

Y-Z X

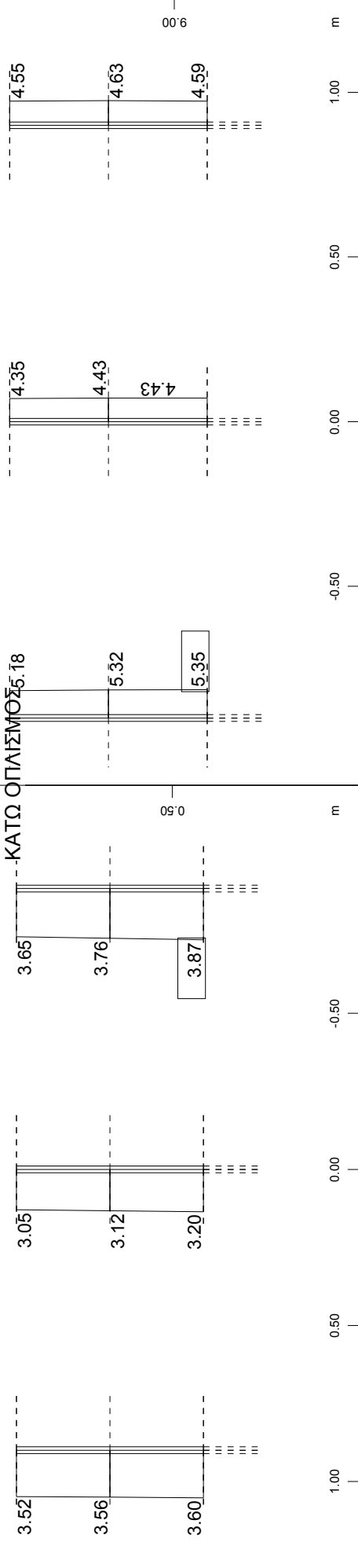
ΟΡΙΣΤΙΚΗ ΜΕΛΕΤΗ/ΤΕΧΝΙΚΟ ΤΒ/L=10.70

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





ΔΙΑΜΗΚΗ ΔΟΚΟΙ-ΣΤΗΡΙΞΗΣ



Y-Z
X

Sector of system Beam Elements Group 2
Beam Elements, Longitudinal Reinforcements Lay. 3, Design Case
510 , 1 cm 3D = 22.4 cm2 (Max=15.6)

M 1 : 19

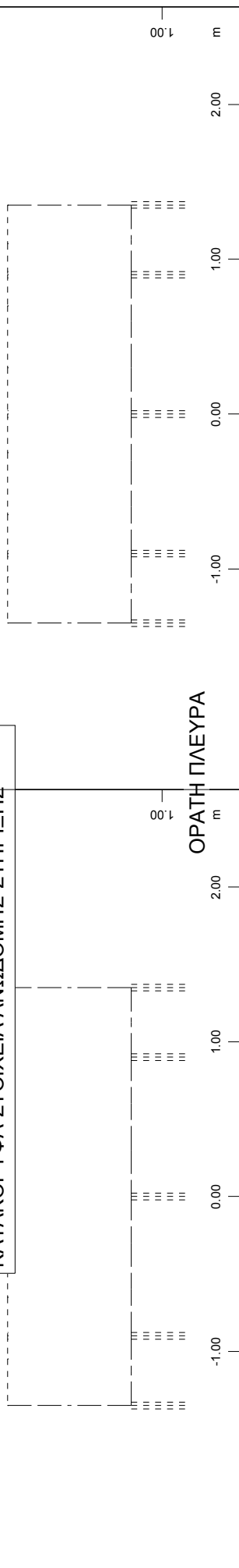
ΚΑΤΩ ΟΠΛΙΣΜΟΣ

ΠΑΝΩ ΟΠΛΙΣΜΟΣ

M 1 : 18

Sector of system Beam Elements Group 2
Beam Elements, Longitudinal Reinforcements Lay. 3, Design Case
510 , 1 cm 3D = 22.4 cm2 (Max=15.7)

ΚΑΤΑΚΟΡΥΦΑ ΣΤΟΙΧΕΙΑ ΑΝΩΔΟΜΗΣ-ΣΤΗΡΙΞΗΣ



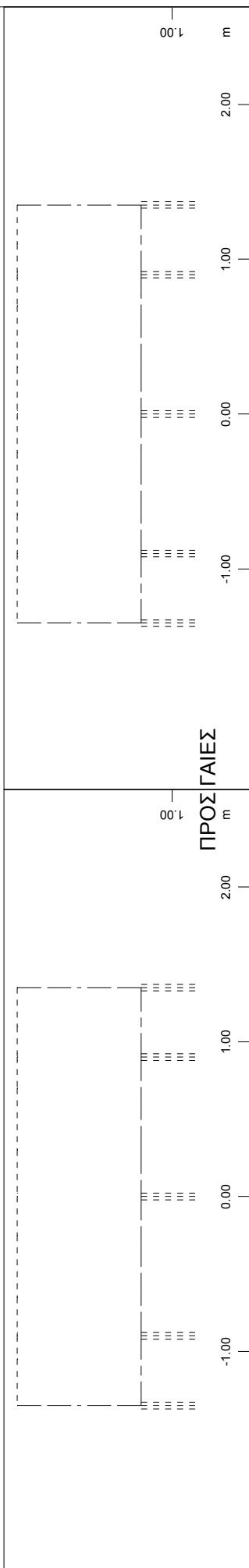
Sector of system Quadrilateral Elements Group 8
upper Reinforcements LC 509: NO values found

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

M 1 : 38

Sector of system Quadrilateral Elements Group 8
upper Reinforcements LC 509: NO values found

M 1 : 38



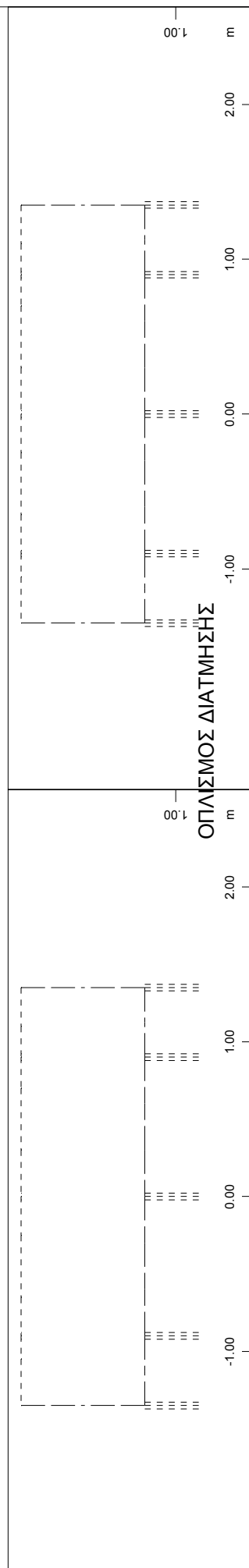
Sector of system Quadrilateral Elements Group 8
lower Reinforcements LC 509: NO values found

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

M 1 : 38

Sector of system Quadrilateral Elements Group 8
lower Reinforcements LC 509: NO values found

M 1 : 38



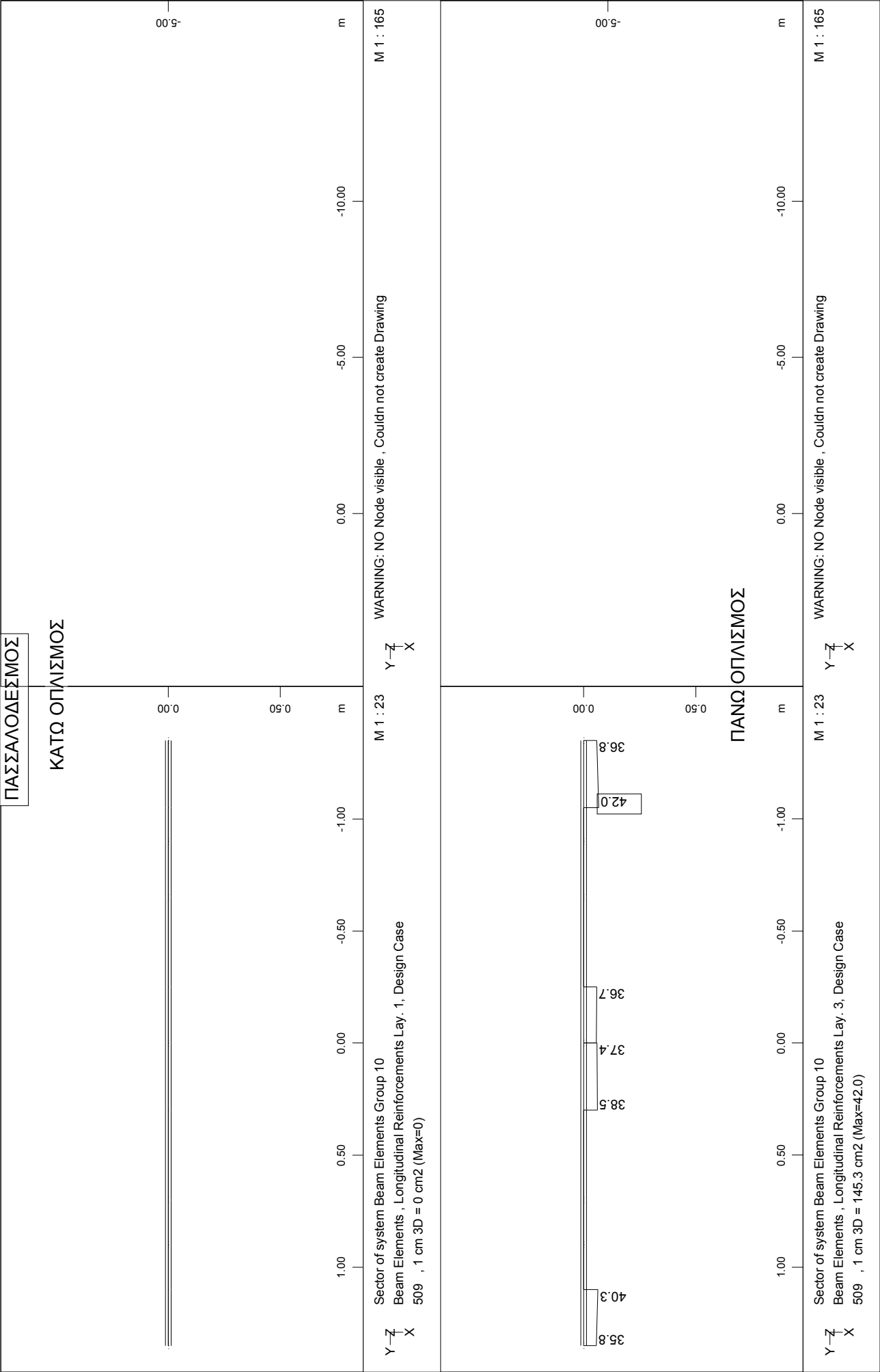
Sector of system Quadrilateral Elements Group 8
Shear reinforcement LC 509: NO values found

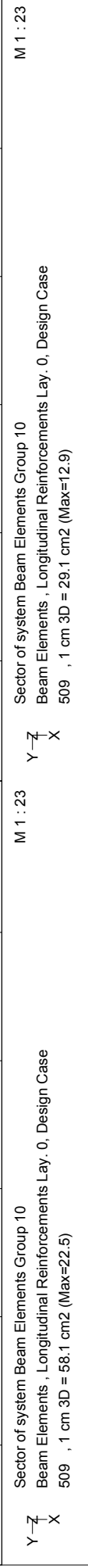
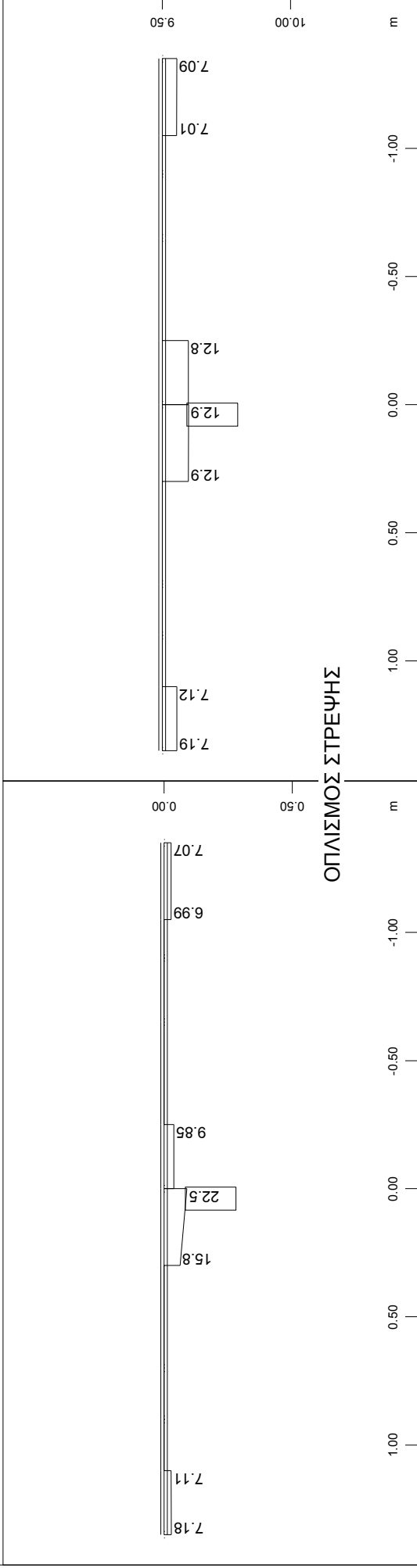
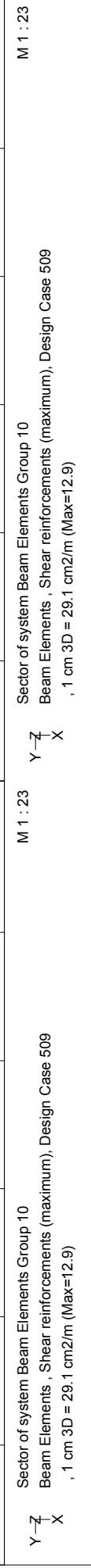
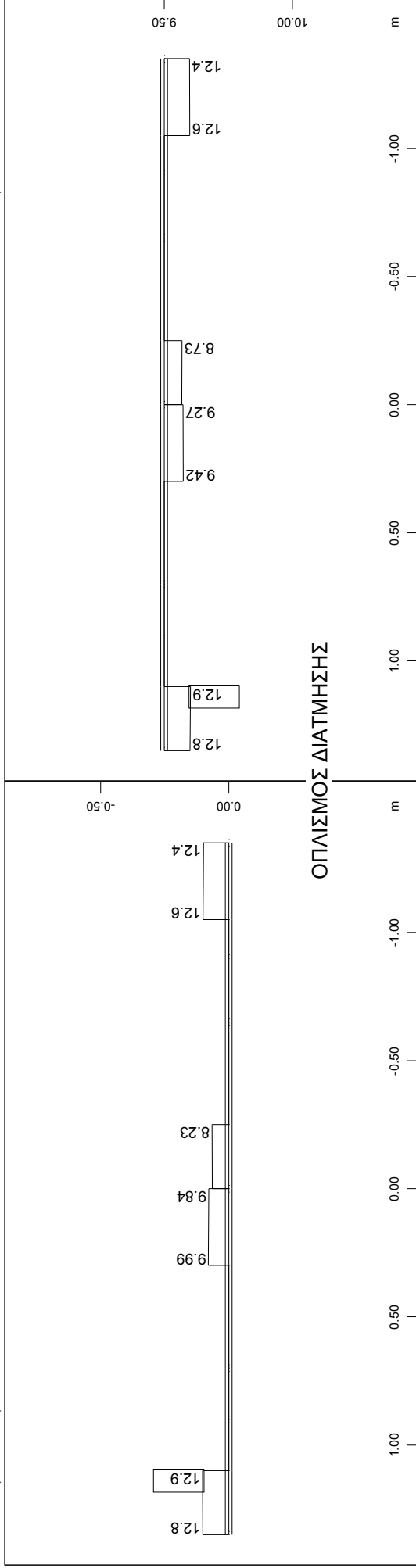
$$\begin{array}{c} Y \\ | \\ X - Z \end{array}$$

M 1 : 38

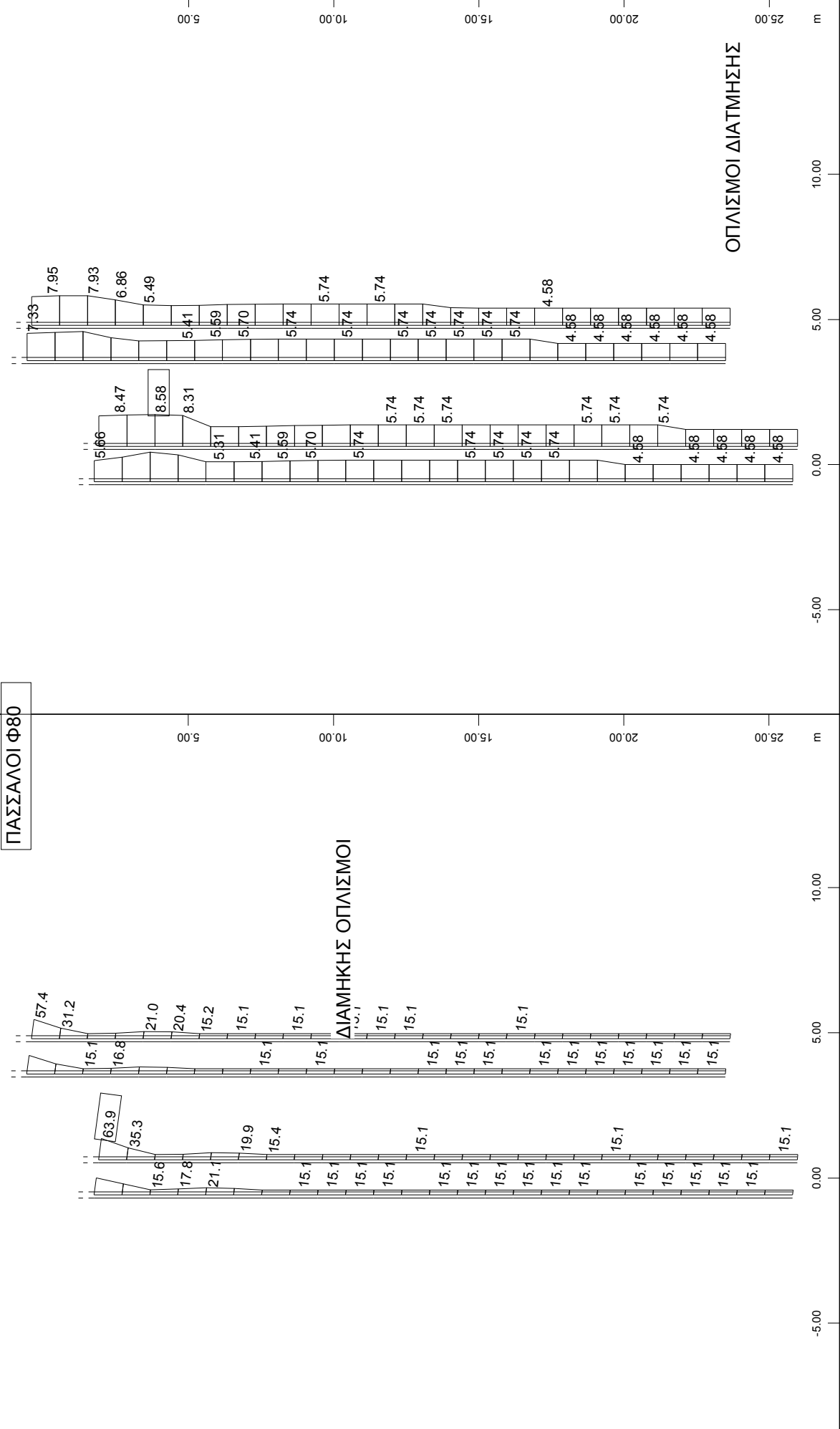
Sector of system Quadrilateral Elements Group 8
Shear reinforcement LC 509: NO values found

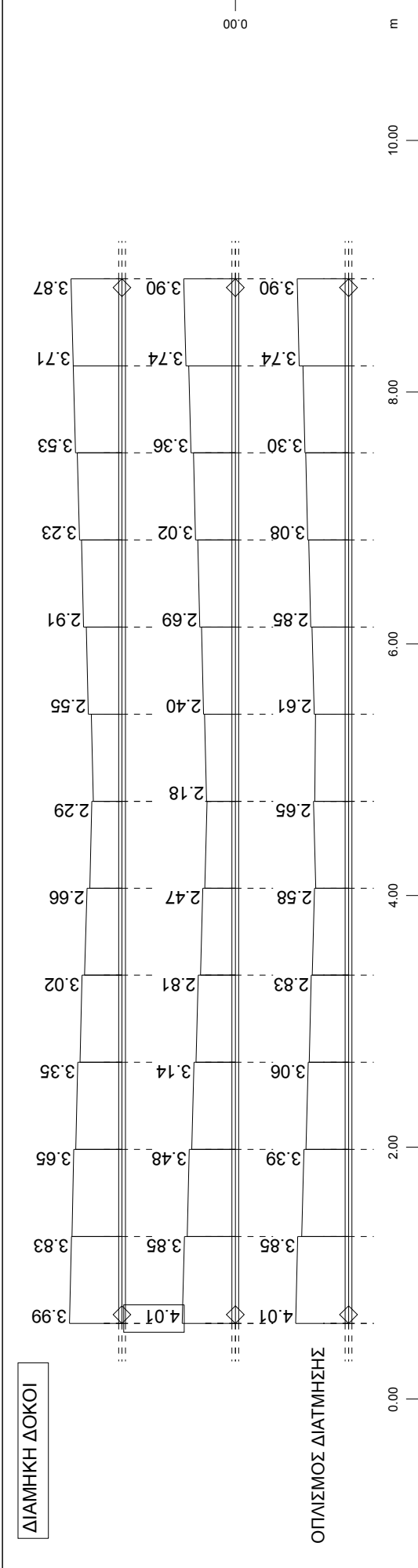
M 1 : 38



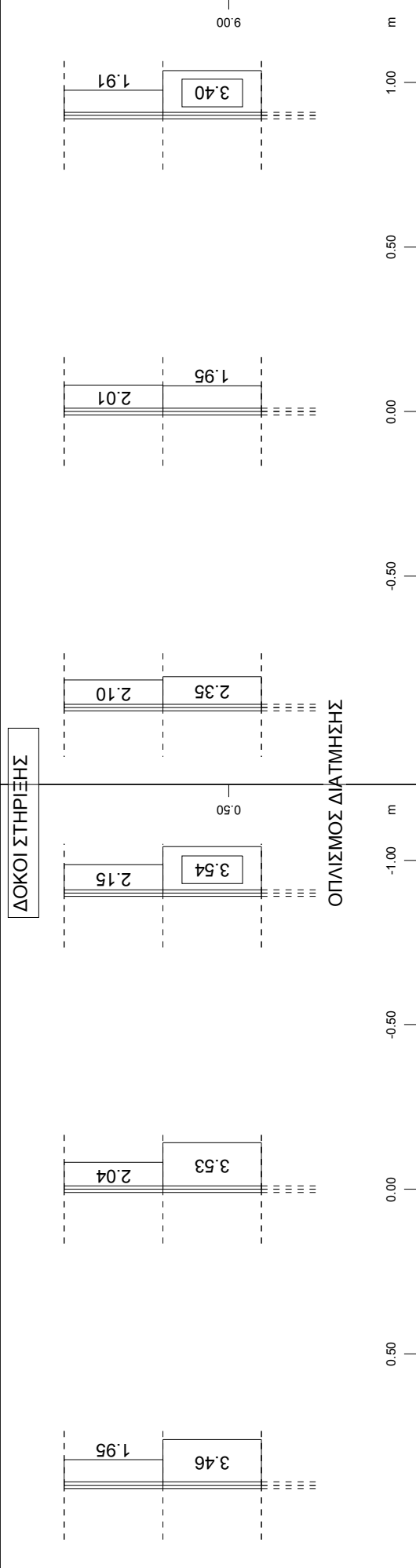


ΠΑΣΣΑΛΟΙ Φ80





Sector of system Beam Elements Group 1
Beam Elements , Shear reinforcements (maximum), Design Case 512 , 1 cm 3D = 4.48 cm2/m (Max=4.01)
M 1 : 47

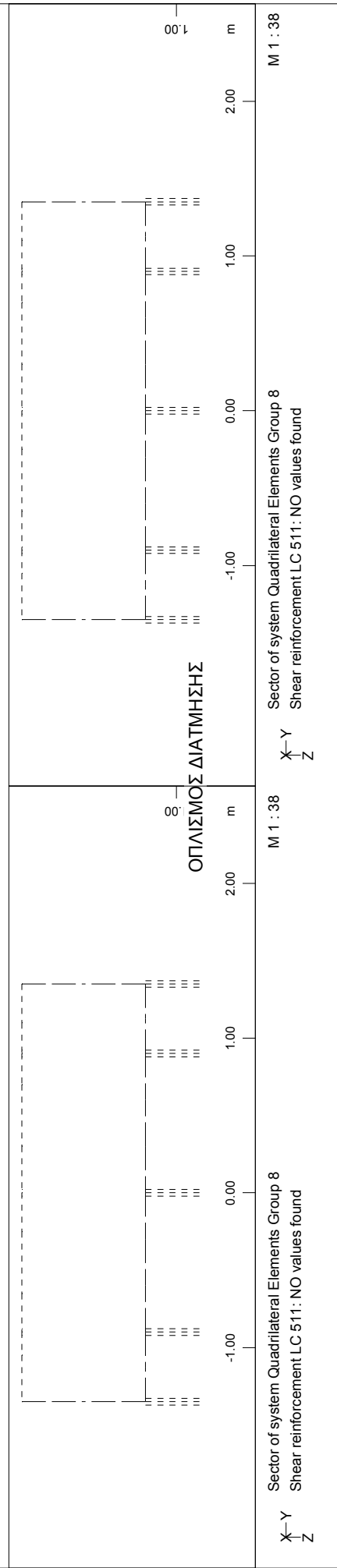


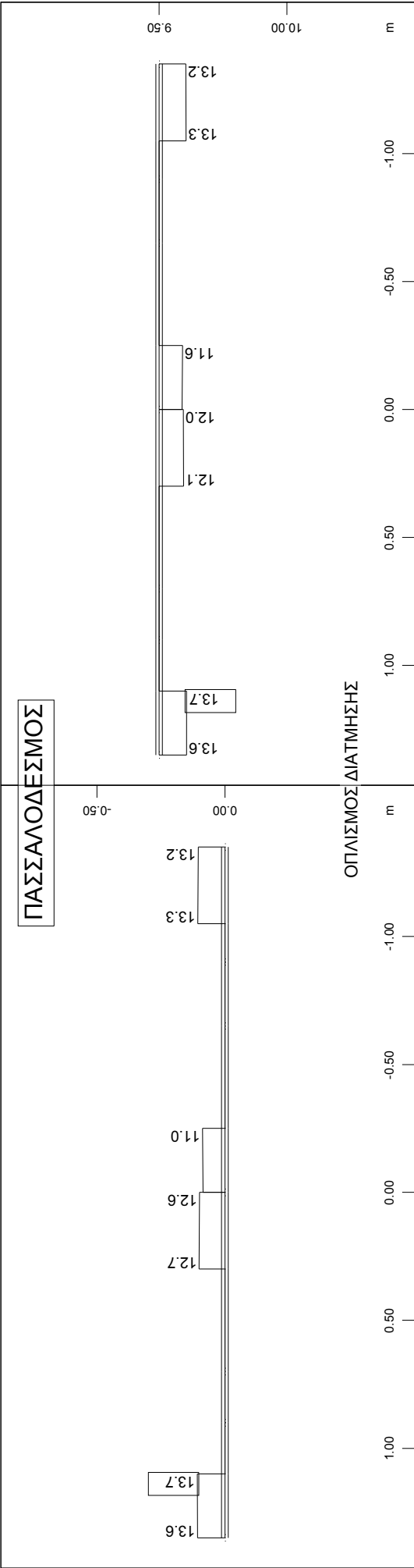
Sector of system Beam Elements Group 2
Beam Elements , Shear reinforcements (maximum), Design Case 512
, 1 cm 3D = 4.48 cm2/m (Max=3.54)

Sector of system Beam Elements Group 2
Beam Elements , Shear reinforcements (maximum), Design Case 512
, 1 cm 3D = 4.48 cm2/m (Max=3.40)

ΟΠΛΙΣΜΟΣ ΣΤΡΕΨΗΣ

ΚΑΤΑΚΟΡΥΦΑ ΤΟΙΧΙΑ ΑΝΩΔΟΜΗΣ





13.6

13.7

12.7

12.6

11.0

13.3

13.2

1.00

0.50

0.00

-0.50

-1.00

13.6

13.7

12.1

12.0

11.6

13.3

13.2

1.00

0.50

0.00

-0.50

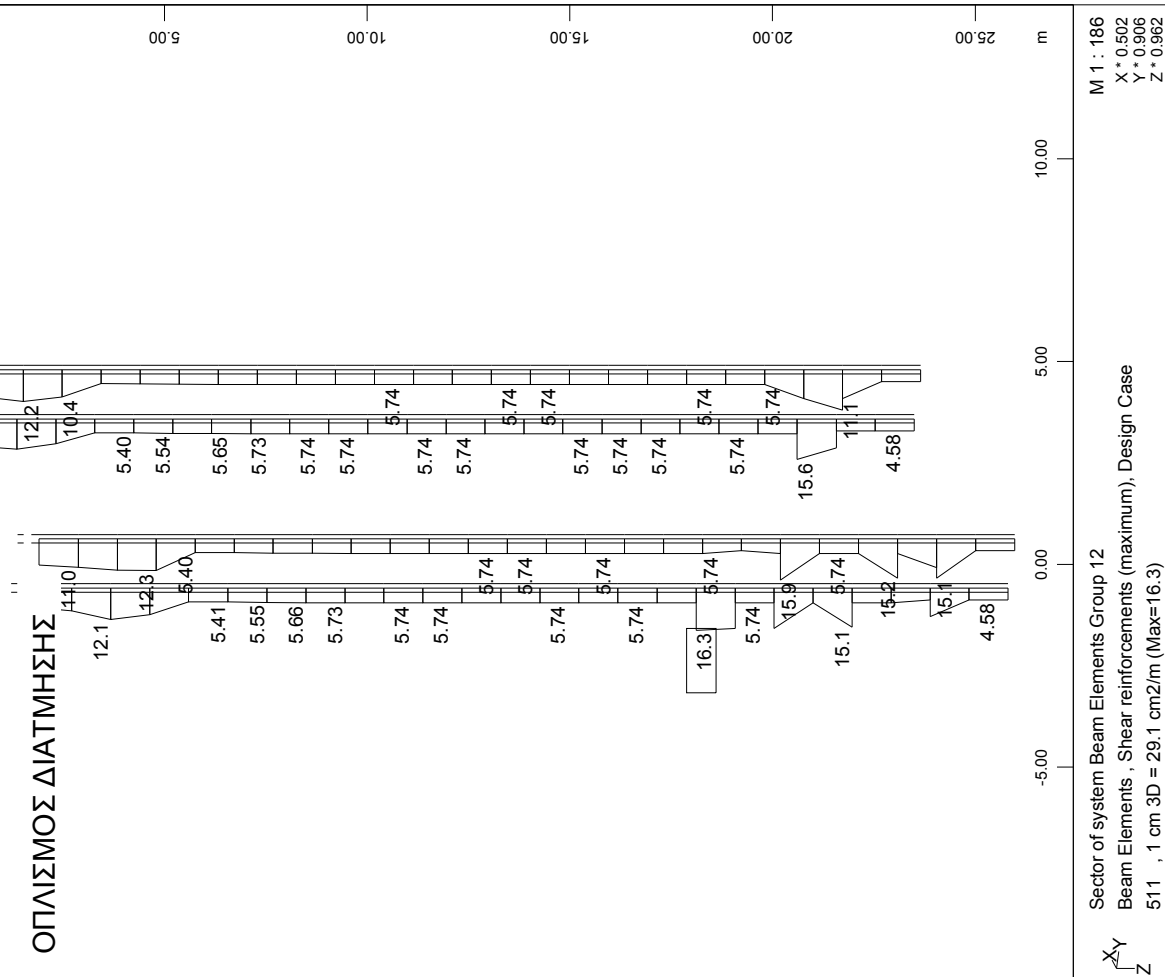
-1.00

9.50

10.00

9.50

ΟΠΛΙΣΜΟΣ ΔΙΑΤΜΗΣΗΣ



ΠΛΑΚΑ ΚΑΤΑΣΤΡΩΜΑΤΟΣ

ΟΠΛΙΣΜΟΣ ΔΙΑΤΜΗΣΗΣ
J

