

ИНВЕСТИЦИОНЕН ПРОЕКТ

ОБЕКТ	: Изграждане на нова сграда за нуждите на РУП Карнобат при ОДМВР -Бургас
МЕСТОПОЛОЖЕНИЕ	: гр. Карнобат, УПИ IX, кв. 91
ЧАСТ	: СК - СТАТИЧЕСКИ ИЗЧИСЛЕНИЯ
ФАЗА	: РП

ПРОЕКТАНТ НА ЧАСТТА :
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УПРАВИТЕЛ :
инж. Зл. Байчева

СТАТИЧЕСКИ ИЗЧИСЛЕНИЯ

I. ПЛОЧА - етажна

Натоварване поле

- собствено тегло мозайка = $0,02 * 22 * 1,35 = 0,594 kN / m^2$

- собствено тегло цименто-пясъчна замазка = $0,03 * 22 * 1,35 = 0,891 kN / m^2$

- собствено тегло плоча = $0,18 * 25 * 1,2 = 5,4 kN / m^2$

- собствено тегло мазилка = $0,015 * 18 * 1,35 = 0,3645 kN / m^2$

$$\Sigma = g = 7,25 kN / m^2$$

Натоварване от тухлен зид - $1,2 kN / m^2$

Временни товари $V_n = 3 kN / m^2$

$$\gamma_f = 1,3 \quad V = 3,9$$

Пълно натоварване

$$q = g + V = 7,25 + 3,9 = 11,2 kN / m$$

Нормативен товар - $8,6 kN / m$

II. ГРЕДИ

Натоварване

Кота +10,80

- собствено тегло греда = $0,25 * 0,40 * 25 * 1,2 = 3,0 kN / m$

- собствено тегло тухлен зид = $0,25(2,8 - 0,4)16 * 1,2 = 11,52 kN / m$

- собствено тегло мазилка = $2 * 0,02(3,0 - 0,1)18 * 1,35 = 2,82 kN / m$

- поле = $1,3 * 2,7 * 0,333 = 10,23 kN / m$

$$\Sigma = g_{gp} = 13,23 kN / m$$

ГРЕДА 1

Проста греда



$$\max M = \frac{q_{gp} * l_0^2}{8} = \frac{13,23 * 2,9^2}{8} = 13,90 kNm$$

$$\max V = \frac{q_0 * l_0}{2} = 19.2 \text{ kN}$$

Бетон C20/25

Стомана B420

$$f_{y,d} = 36.5 \text{ kN/cm}^2$$

$$f_{c,k} = 2 \text{ kN/cm}^2$$

$$f_{c,d} = \frac{\alpha_{cc} * f_{c,k}}{\gamma_c} = \frac{0.85 * 2}{1.5} = 1.13 \text{ kN/cm}^2$$

Конструкция S4; сграда X1

$$c_{min,dur} = 15 \text{ mm}$$

$$c_{min,b} = 14 \text{ mm} \text{ - диаметър на пръта}$$

$$c_{min} = \max[c_{min,dur}; c_{min,b}] = 15 \text{ mm}$$

$$\Delta c = 10 \text{ mm}$$

$$c_{min} = c_{min} + \Delta c = 25 \text{ mm} \quad \text{покрытие до прътите } c = 25 + 6 = 31 \text{ mm}; d = 400 - 31 - 12/2 = 363 \text{ mm}$$

$$Bwd = 25 * 36.3 = 907.5 \text{ кв.см}$$

$$m = \frac{M_{max} * 100}{f_{c,d} * b * d^2} = \frac{13.9 * 100}{1.13 * 25 * 37^2} = 0.035 \rightarrow \eta = 0.978$$

$$A_{s1} = \frac{M_{max} * 100}{f_{y,d} * \eta * d} = \frac{13.9 * 100}{36.5 * 0.978 * 37} = 1.04 \text{ cm}^2 \rightarrow 3N12 \text{ - конструктивно}$$

$$\text{Минимална армировка } 0.22 * 907.5 / 2 * 36.5 = 2.73 \text{ кв.см.}$$

стремена:

$$\rho = \frac{A_s}{b_w * d} = \frac{3.39}{25 * 37} = 0.0036 \rightarrow K_0 = 0.45$$

$$V_{rd,c} = K_0 * b_w * d = 0.45 * 25 * 37 = 416 \text{ N} > V = 24.4 \text{ kN} \rightarrow \text{стремена конструктивно}$$

ГРЕДА 4

$$q = 0.45 * 8.3 * 3 + 3 = 14.2 \text{ kN}$$

Непрекъсната греда

$$M^{(w)} = -\frac{1}{8} * \frac{q * (l_{0,1}^3 + l_{0,2}^3)}{l_{0,1} + l_{0,2}} = -\frac{1}{8} * \frac{14.2 * (2.6^3 + 2.4^3)}{2.6 + 2.4} = -12 \text{ kNm}$$

$$n_r = \infty; n_l = \frac{q * l_{0,l}^2}{M^{(w)}} = \frac{14.2 * 2.6^2}{12} = 8 \rightarrow n = 13.9$$

$$M_{pole} = \frac{q * l_{0,l}^2}{n} = \frac{14.2 * 2.6^2}{13.9} = 6.91 \text{ kNm}$$

поле:

$$m = \frac{M_{\max} * 100}{f_{c,d} * b * d^2} = \frac{6.91 * 100}{1.13 * 25 * 37^2} = 0.018 \rightarrow \eta = 0.985$$

$$A_{sl} = \frac{M_{\max} * 100}{f_{s,d} * \eta * d} = \frac{6.91 * 100}{36.5 * 0.985 * 37} = 0.52 \text{ cm}^2 \rightarrow 3N12 - \text{конструктивно}$$

опора:

$$m = \frac{M_{\max} * 100}{f_{c,d} * b * d^2} = \frac{12 * 100}{1.13 * 25 * 37^2} = 0.031 \rightarrow \eta = 0.98$$

$$A_{sl} = \frac{M_{\max} * 100}{f_{s,d} * \eta * d} = \frac{12 * 100}{36.5 * 0.98 * 37} = 0.90 \text{ cm}^2 \rightarrow 2N12 - \text{конструктивно}$$

стремена:

$$\rho = \frac{A_s}{b_w * d} = \frac{3.39}{25 * 37} = 0.004 \rightarrow K_o = 0.45$$

$$V_{Rd,s} = K_o * b_w * d = 0.45 * 25 * 37 = 416.2 \text{ N} > V = 18.46 \text{ kN} \rightarrow \text{стремена конструктивно}$$

Дължина на закотвяне $40 * 1.2 = 48 \text{ cm}$.

SAP2000 v8.3.3 - File:KARNOBAT - Deformed Shape (ULS) - KN, m, C Units

SAP2000 Nonlinear Version 8.3.3.0 (Analysis Build 8310)
File: D:\HP620\New Folder\KARNOBAT.LOG

BEGIN ANALYSIS
2014/03/20 19:49:38

MAXIMUM MEMORY BLOCK SIZE (BYTES) 123.512 MB
NUMBER OF JOINTS IN THE MODEL = 325

ELEMENT FORMATION
19:49:38

NUMBER OF FRAME ELEMENTS FORMED 92
NUMBER OF SHELL ELEMENTS FORMED = 237
NUMBER OF CONSTRAINTS FORMED = 4

REDUCTION OF CONSTRAINTS AND RESTRAINTS:
NUMBER OF

CONSTRAINT MASTER DOF BEFORE REDUCTION = 9
COUPLED CONSTRAINT/RESTRAINT MASTER DOF = 0
CONSTRAINT MASTER DOF AFTER REDUCTION = 9

LINEAR EQUATION SOLUTION
19:49:39

FORMING STIFFNESS AT ZERO (UNSTRESSED) INITIAL CONDITIONS

TOTAL NUMBER OF EQUILIBRIUM EQUATIONS = 1152
APPROXIMATE "EFFECTIVE" BAND WIDTH = 87
NUMBER OF EQUATION STORAGE BLOCKS = 1
MAXIMUM BLOCK SIZE (8-BYTE TERMS) = 97677
SIZE OF STIFFNESS FILE(S) (BYTES) = 767.617 KB
NUMBER OF EQUATIONS TO SOLVE = 1152

LINEAR STATIC CASES
19:49:39

USING STIFFNESS AT ZERO (UNSTRESSED) INITIAL CONDITIONS

TOTAL NUMBER OF CASES TO SOLVE = 2
NUMBER OF CASES TO SOLVE PER BLOCK = 2

LINEAR STATIC CASES TO BE SOLVED:

CASE: DEAD
CASE: LL

EIGEN MODAL ANALYSIS
19:49:39

CASE: MODAL

USING STIFFNESS AT ZERO (UNSTRESSED) INITIAL CONDITIONS

NUMBER OF STIFFNESS DEGREES OF FREEDOM	=	1152
NUMBER OF MASS DEGREES OF FREEDOM	=	471
MAXIMUM NUMBER OF EIGEN MODES SOUGHT	=	12
MINIMUM NUMBER OF EIGEN MODES SOUGHT	=	1
NUMBER OF RESIDUAL-MASS MODES SOUGHT	=	0
NUMBER OF SUBSPACE VECTORS USED	=	24
RELATIVE CONVERGENCE TOLERANCE	=	1.00E-07
FREQUENCY SHIFT (CENTER) (CYC/TIME)	=	.000000
FREQUENCY CUTOFF (RADIUS) (CYC/TIME)	=	.000000
NUMBER OF EIGEN MODES FOUND	=	12
NUMBER OF ITERATIONS PERFORMED	=	9

MODAL PERIODS AND FREQUENCIES

CASE: MODAL

MODE	PERIOD	FREQUENCY	FREQUENCY	EIGENVALUE	MODAL
MODAL	(T)	(CYC/T)	(RAD/T)	(RAD/T)^2	STIFFNESS
MASS					
1	0.365633	2.734985	17.184415	295.304114	295.304114
1.000000					
2	0.353907	2.825603	17.753787	315.196965	315.196965
1.000000					
3	0.295970	3.378720	21.229123	450.675658	450.675658
1.000000					
4	0.229366	4.359839	27.393677	750.413521	750.413521
1.000000					
5	0.189667	5.272409	33.127524	1097.433	1097.433
1.000000					
6	0.179226	5.579545	35.057313	1229.015	1229.015
1.000000					
7	0.178771	5.593748	35.146555	1235.280	1235.280
1.000000					
8	0.178267	5.609565	35.245937	1242.276	1242.276
1.000000					
9	0.168424	5.937380	37.305660	1391.712	1391.712
1.000000					
10	0.147622	6.774058	42.562664	1811.580	1811.580
1.000000					
11	0.138955	7.196575	45.217413	2044.614	2044.614
1.000000					
12	0.137797	7.257062	45.597466	2079.129	2079.129
1.000000					

MODAL LOAD PARTICIPATION RATIOS

CASE: MODAL

LOAD, ACC, OR LINK/DEF	STATIC	DYNAMIC		
EFFECTIVE				
(TYPE)	(PERCENT)	(PERCENT)		
PERIOD				
0.323863	ACC	UX	99.3193	91.2295
0.354546	ACC	UY	99.3263	92.8939
0.180355	ACC	UZ	90.0663	28.5600
	ACC	RX	98.4633	71.6761

0.345001	ACC	RY	88.49/2	36.6129
0.244161	ACC	RZ	99.6697	93.3149
0.347533				

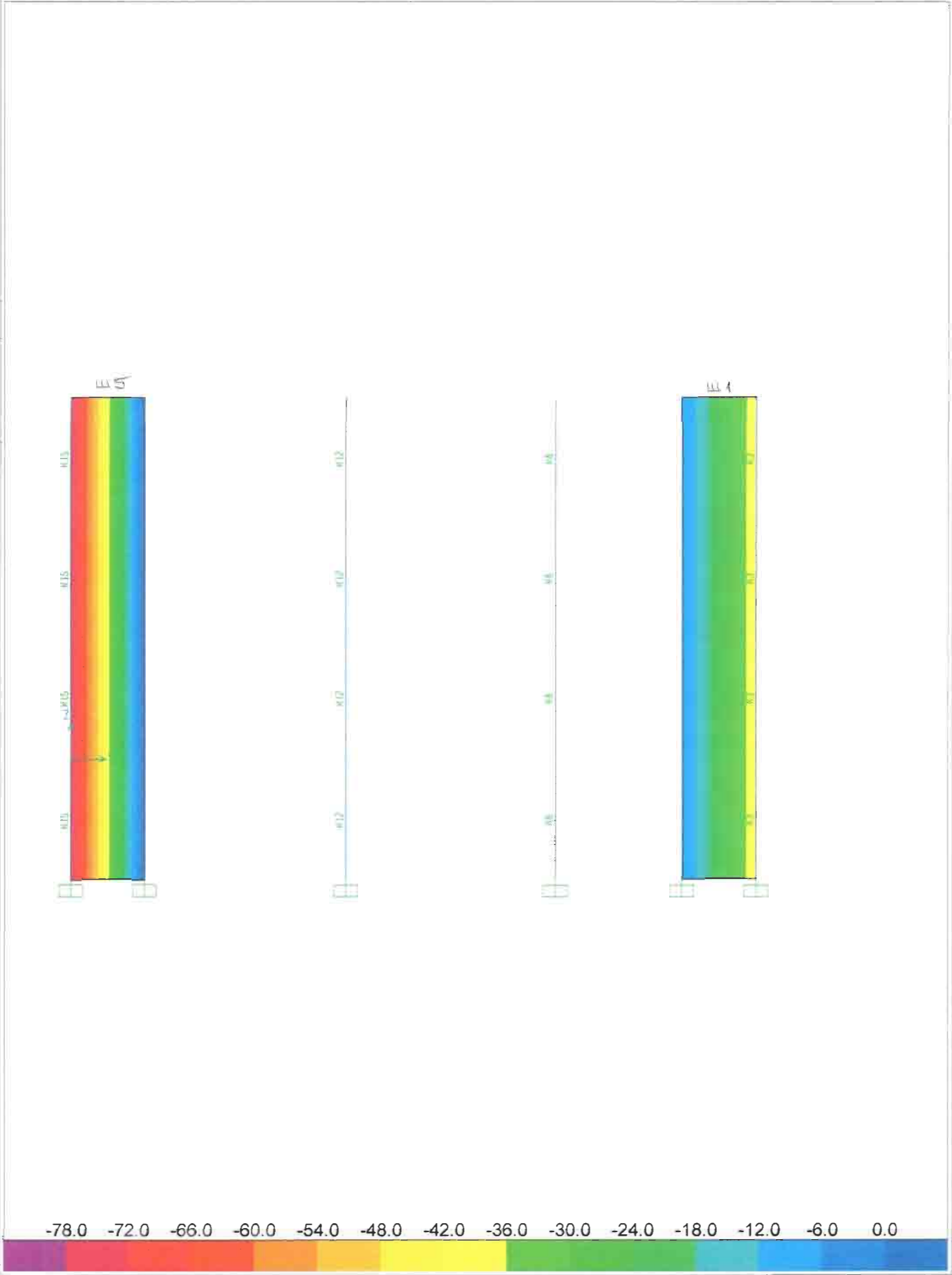
(*) NOTE: DYNAMIC LOAD PARTICIPATION RATIO EXCLUDES LOAD
APPLIED TO NON-MASS DEGREES OF FREEDOM

R E S P O N S E - S P E C T R U M A N A L Y S I S
19:49:40

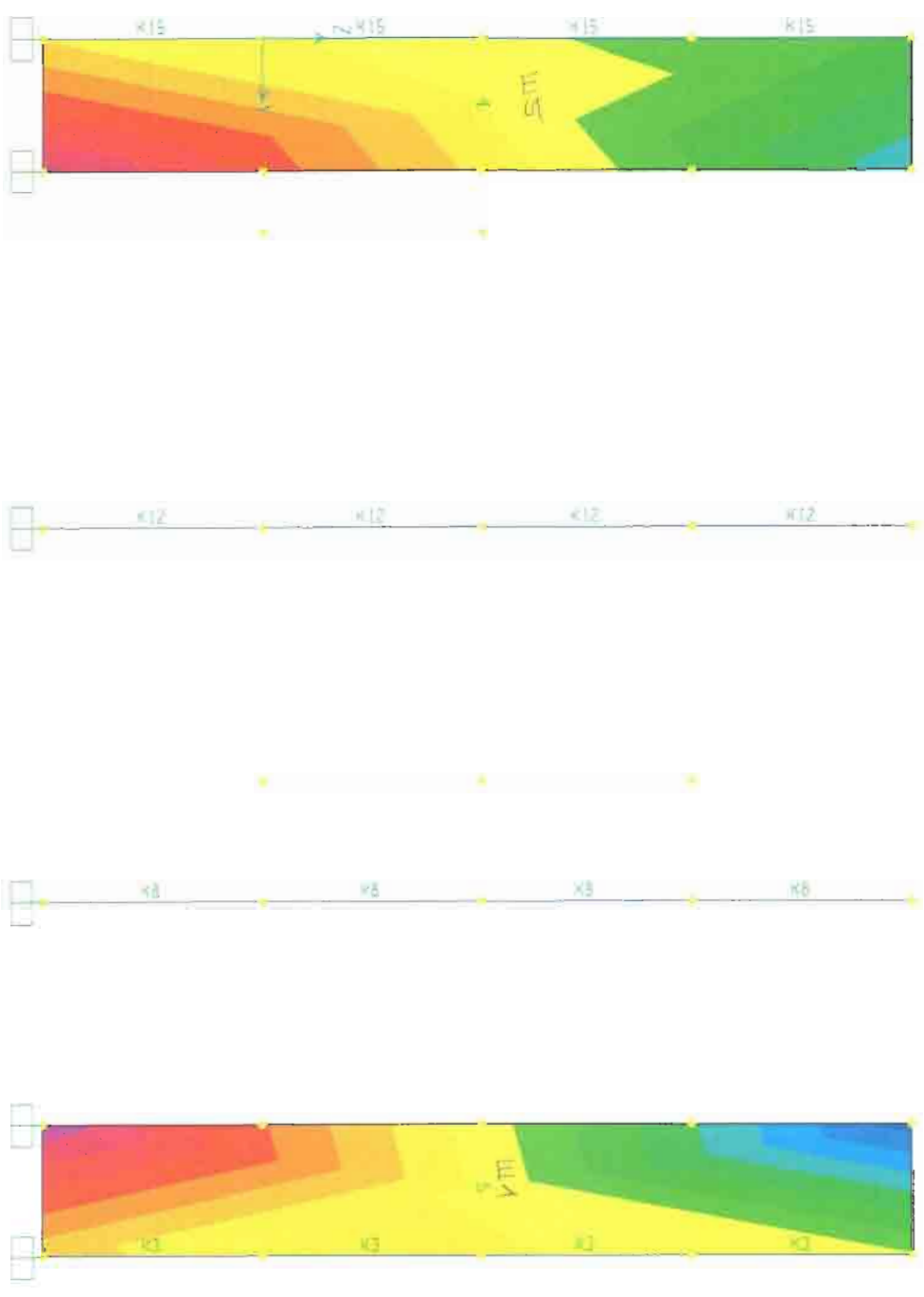
CASE: ACASE1

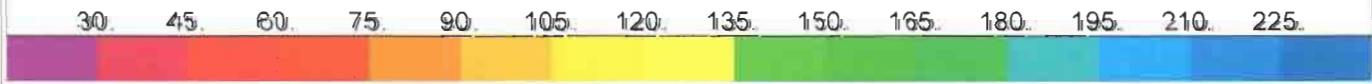
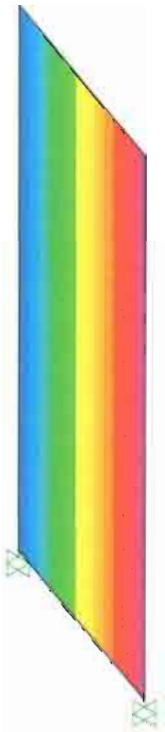
USING MODES FROM CASE: MODAL
NUMBER OF DYNAMIC MODES TO BE USED = 12

A N A L Y S I S C O M P L E T E
2014/03/20 19:49:40



SAP2000 v8.3.3 - File:KARNOBAT - Resultant F22 Diagram (ULS) - KN, m, C Units

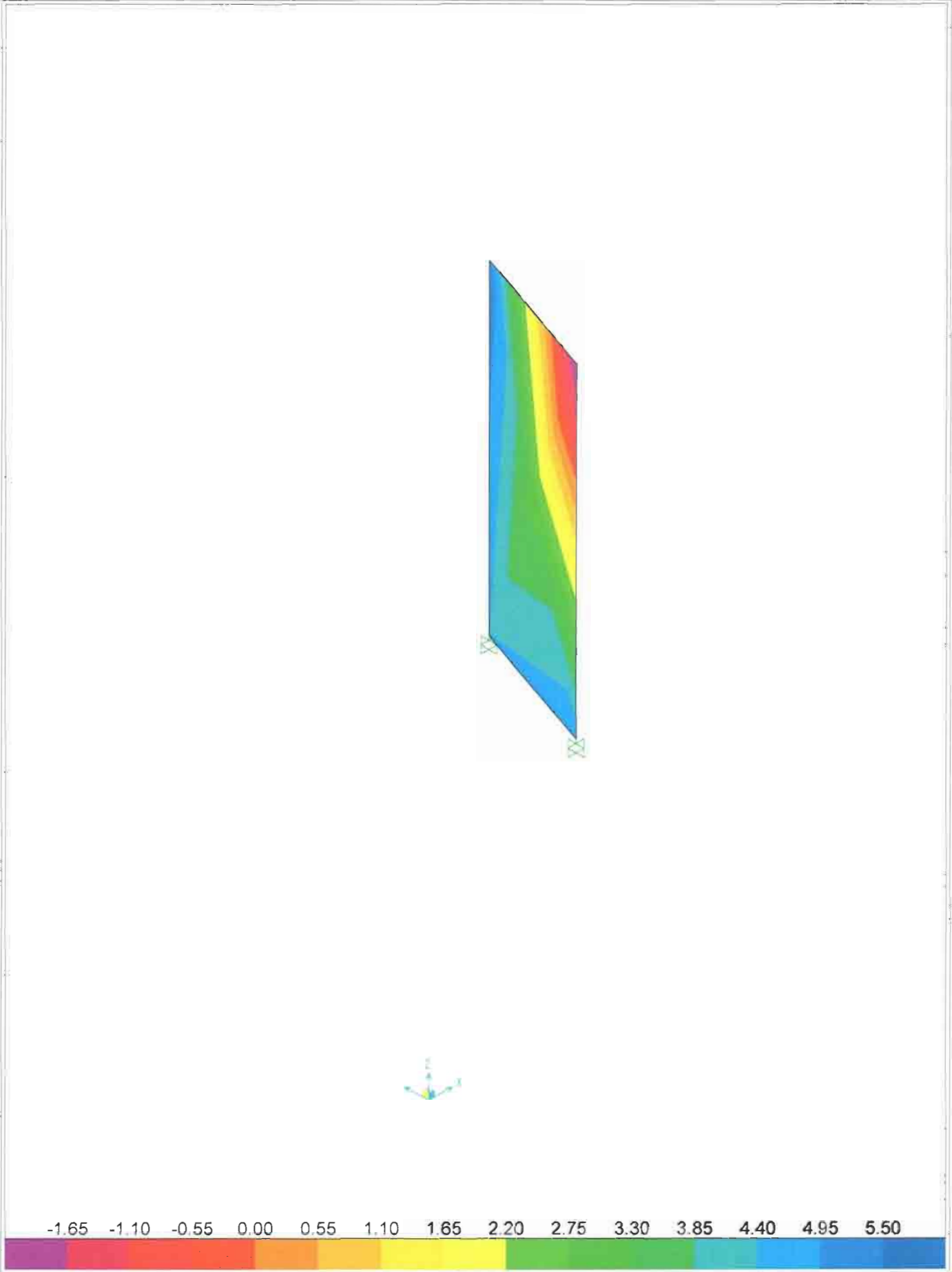




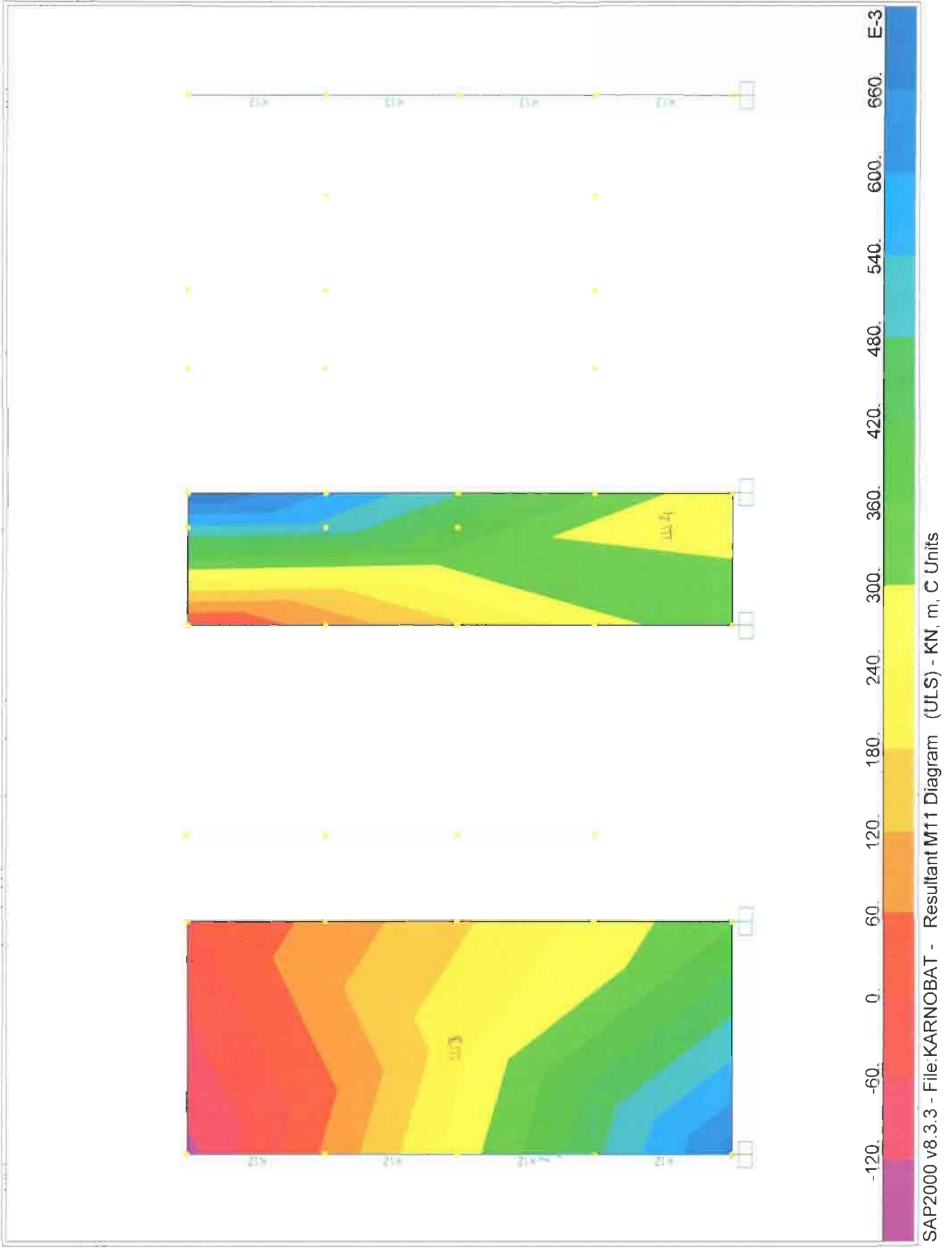
SAP2000 v8.3.3 - File:KARNOBAT - Resultant F22 Diagram (ULS) - KN, m, C Units

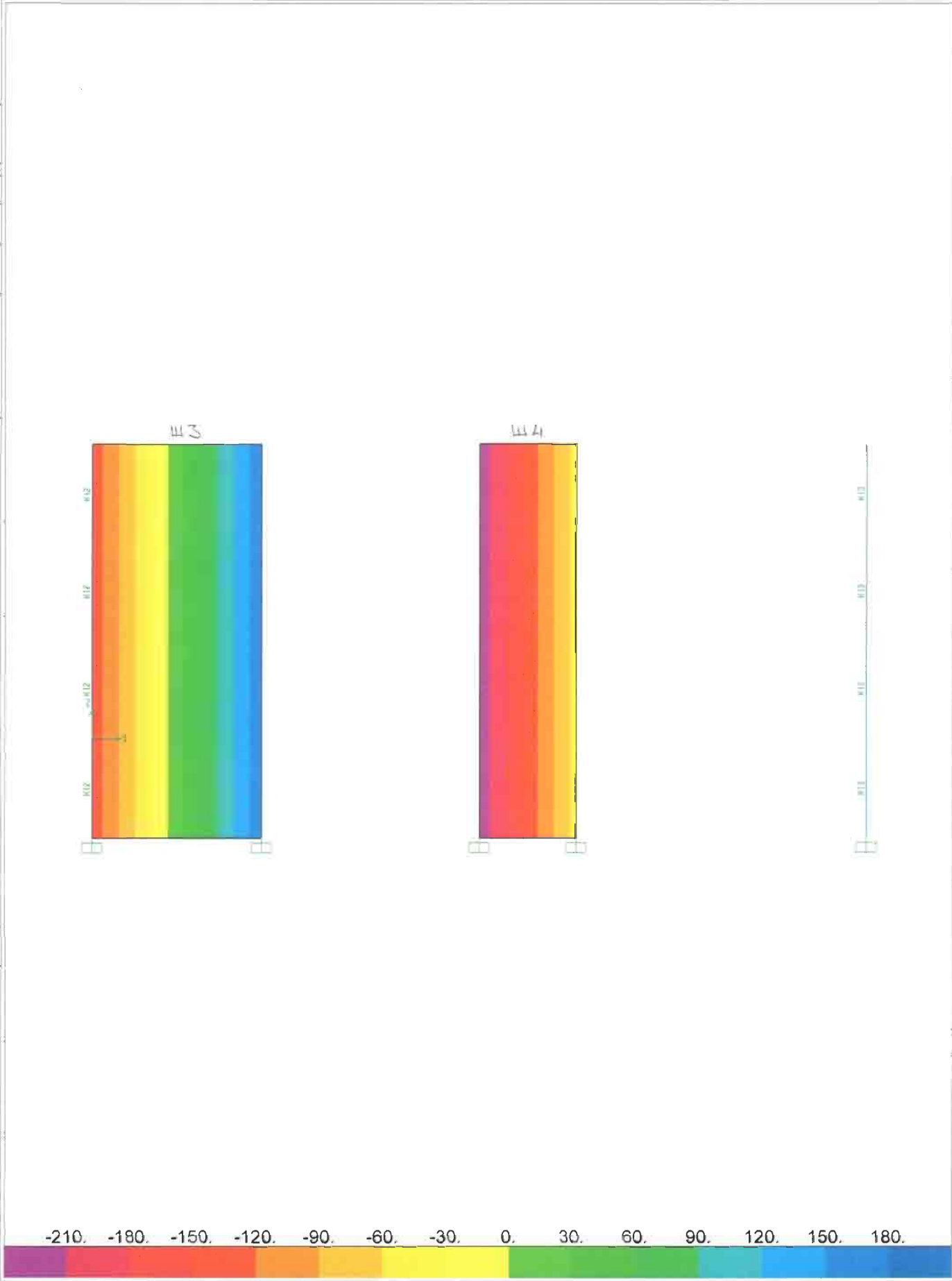


SAP2000 v8.3.3 - File:KARNOBAT - Resultant M11 Diagram (ULS) - KN, m, C Units



SAP2000 v8.3.3 - File:KARNOBAT - Resultant M22 Diagram (ULS) - KN, m, C Units





SAP2000 v8.3.3 - File:KARNOBAT - Resultant F22 Diagram (ULS) - KN, m, C Units



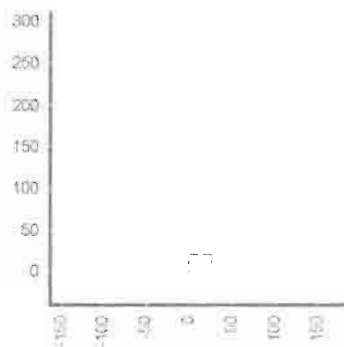
General

Design code: Eurocode 2
Analysis: Design section

Loads: N, Mx

N>0 is compression !

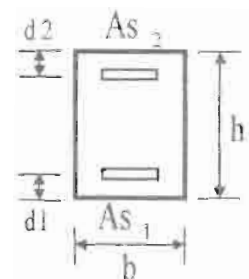
Section



Data [cm]

b = 25
h = 270

d1 = 2.5
d2 = 2.5



Materials

Concrete: C25/30
SSR: Parabolic - linear

$f_{ck} = 2.50 \text{ kN/cm}^2$
 $E_c = 2500.00 \text{ kN/cm}^2$
 $\epsilon_{c2u} = -3.500 \text{ o/oo}$
 $\epsilon_{c2} = -2.000 \text{ o/oo}$
 $\eta = 2.00$

Reinforcing steel: S500
SSR: Standard

$f_{yk} = 50.00 \text{ kN/cm}^2$
 $E_s = 20000.00 \text{ kN/cm}^2$
 $\epsilon_{su} = 10.000 \text{ o/oo}$

Factors

Concrete: $\gamma_{ac} = 1.50$
Steel: $\gamma_{as} = 1.15$

Reinforcement

Symmetric: $A_{s1} = A_{s2}$

Loads

Load	N [kN]	Mx [kNm]
L1	210	480

Solve data

II order moments - Yes Code Eurocode 2

Geometric length: $L_0 = 275.00 \text{ cm}$
Effective length: $k_x = 1.30$ $L_{kx} = 357.50 \text{ cm}$



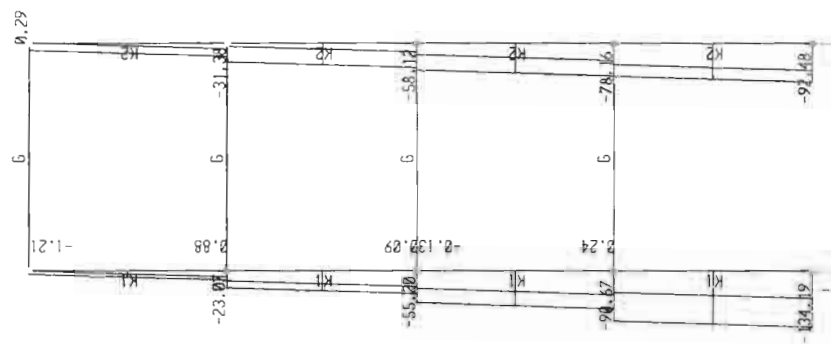
Results

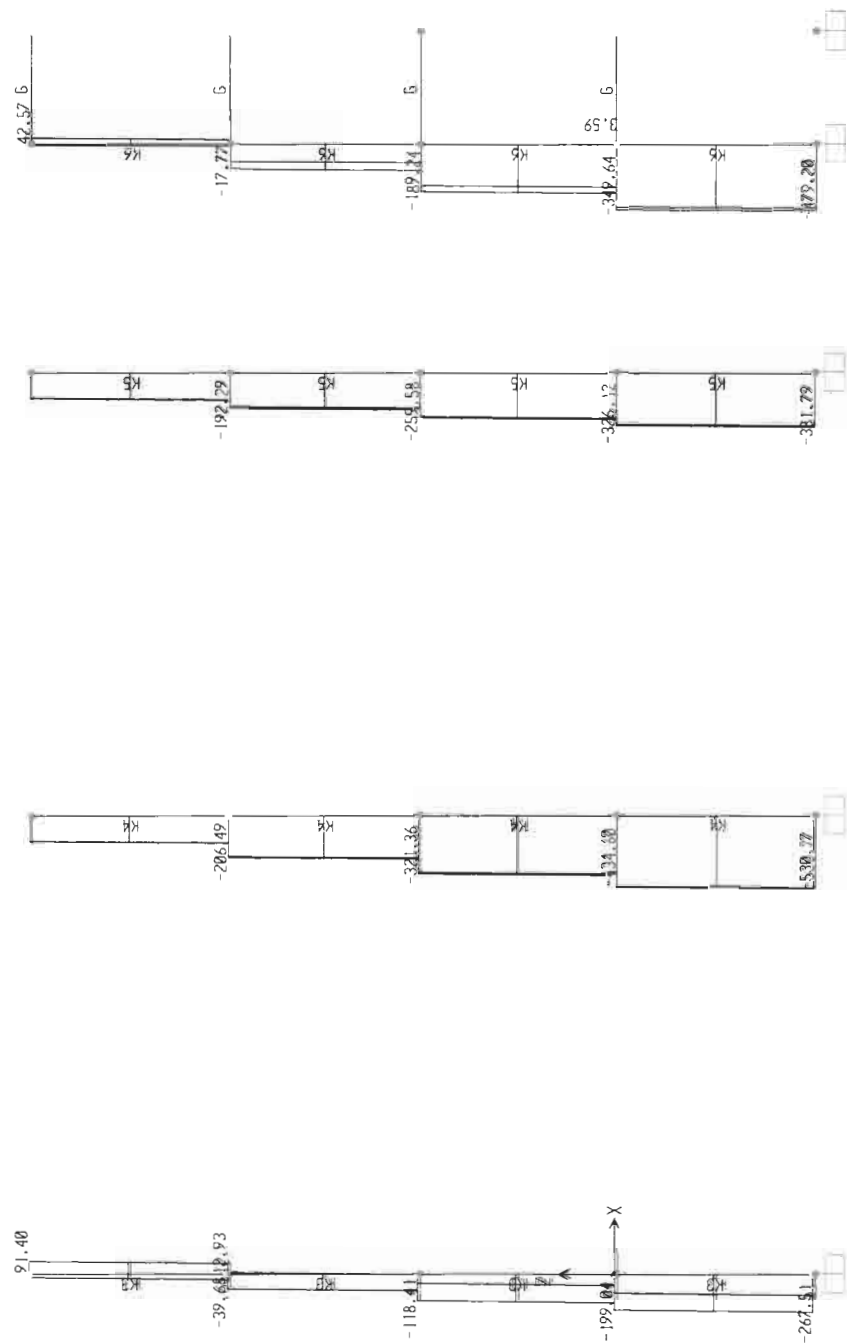
	Area [cm ²]	esi [o/oo]	Stress [kN/cm ²]
As2	2.11	10.000	43.48
As1	2.11	-0.751	-15.01

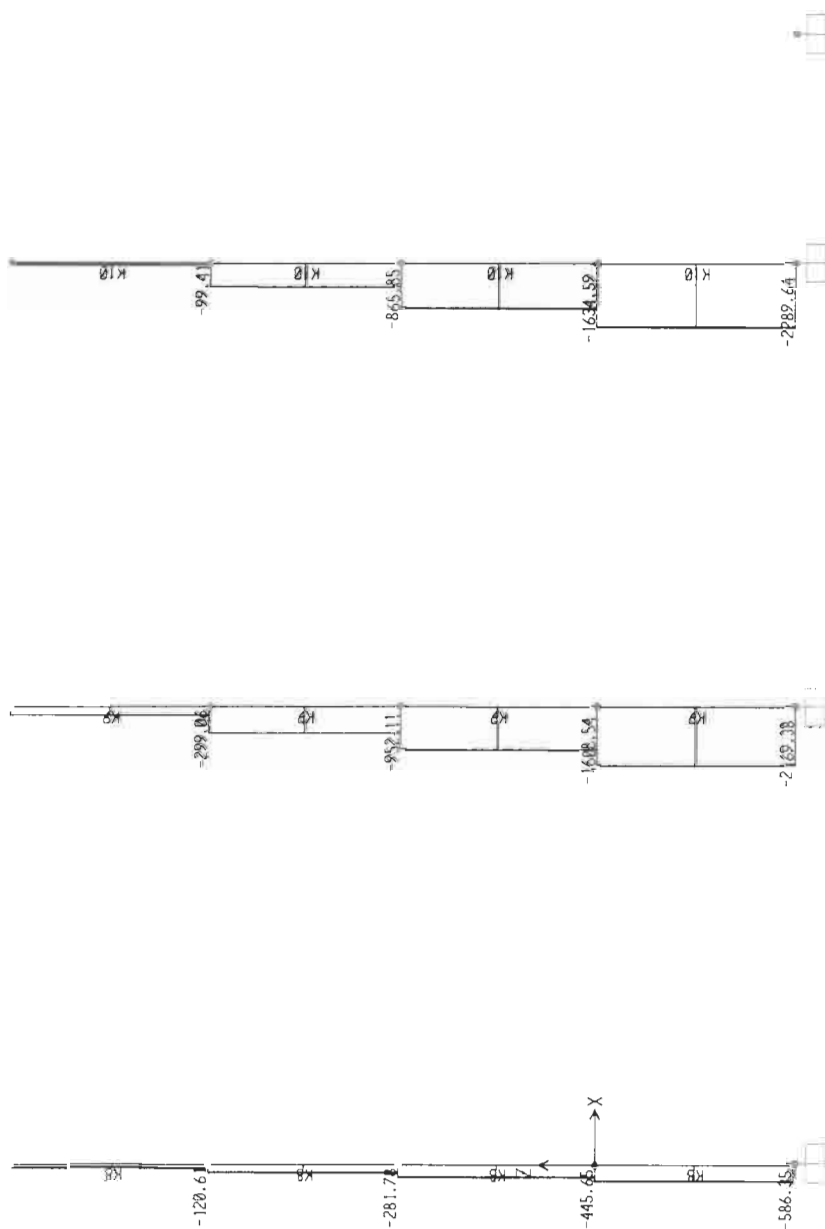
Concrete strain: $\epsilon_{c,min} = -0.852$ o/oo
Compressive zone depth: $x = 21.00$ cm

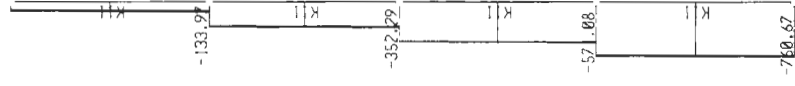
Total reinf. area: $A_{s,tot} = 4.22$ cm²
Reinf. ratio: 0.06 %

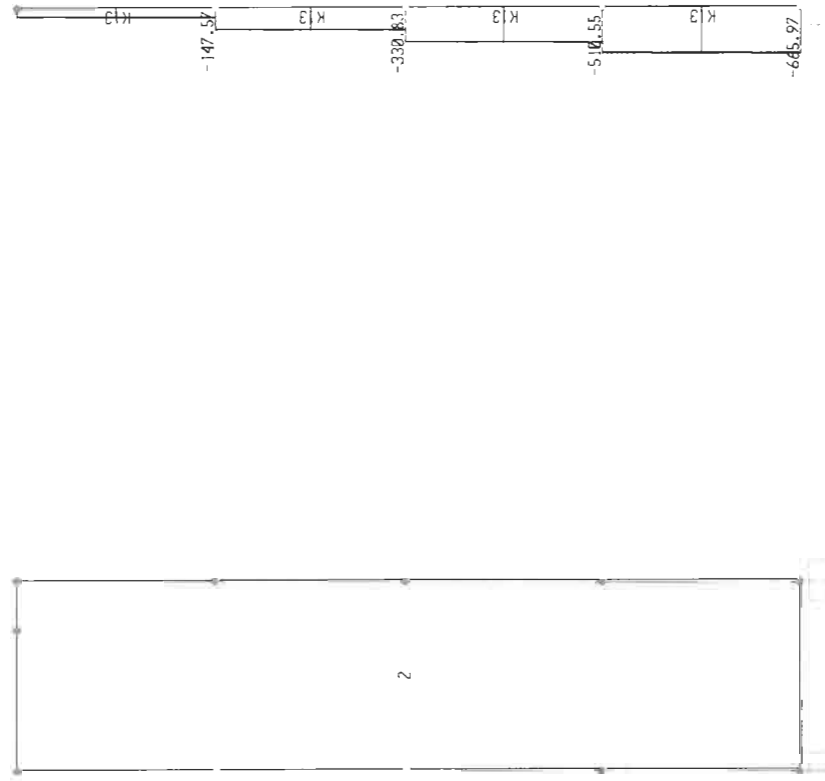
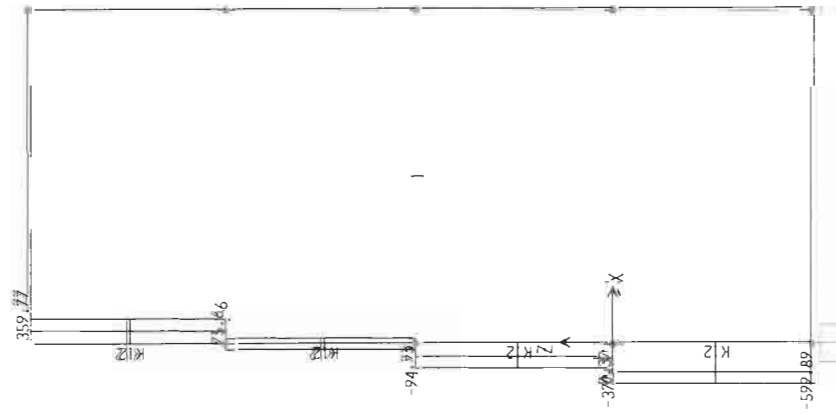
work

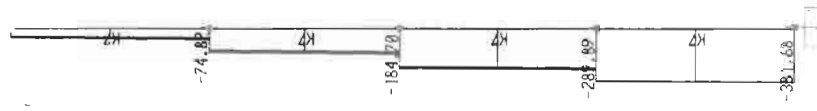
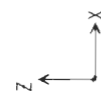


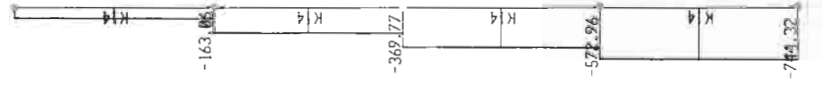


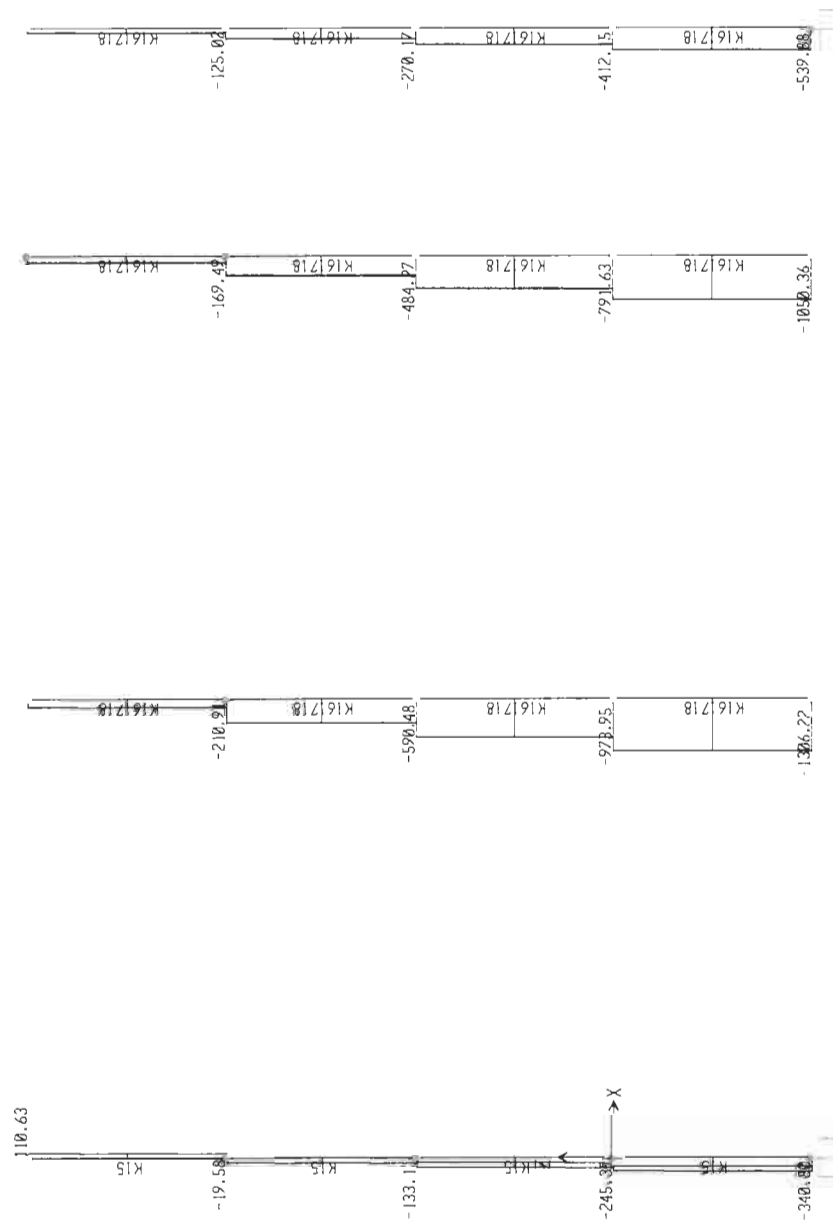




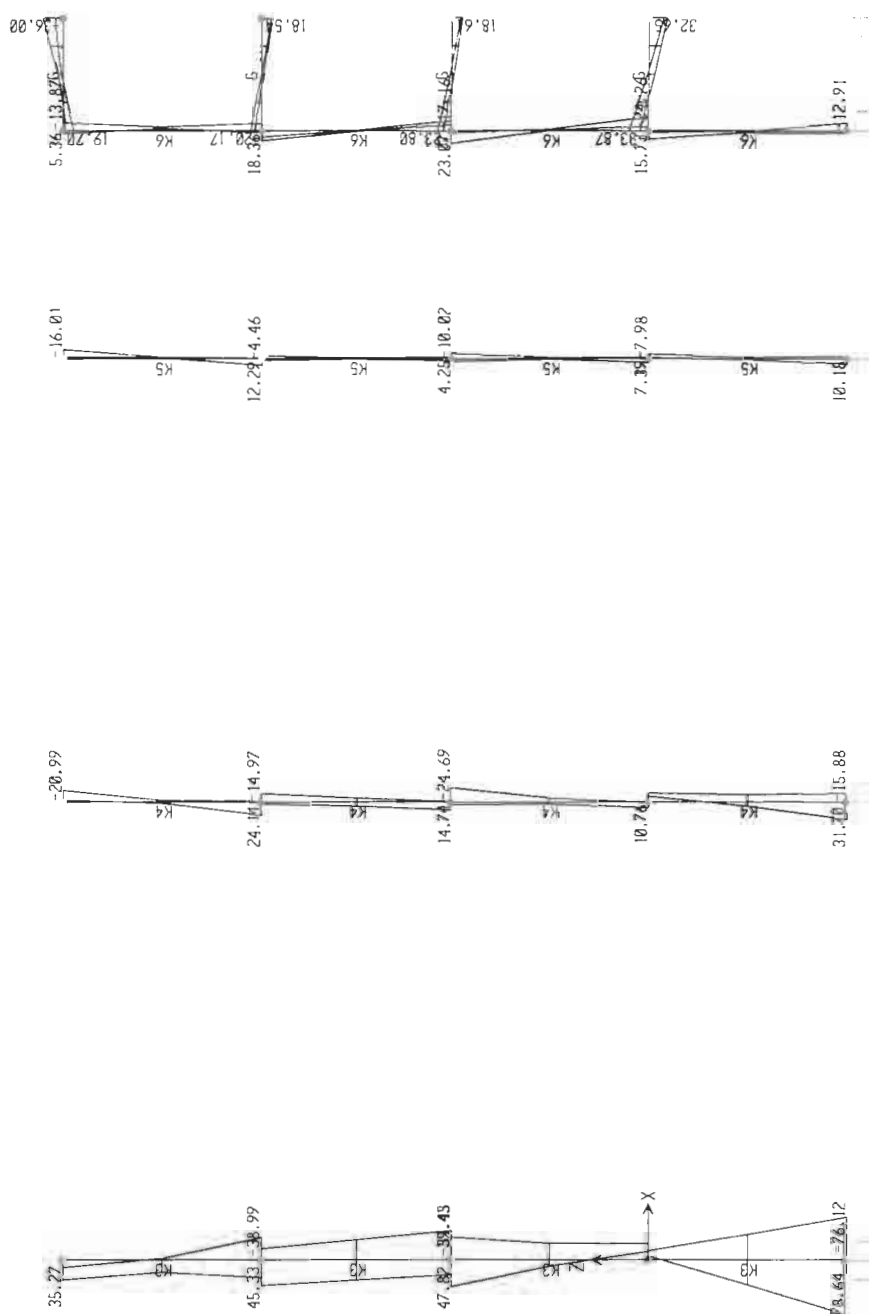




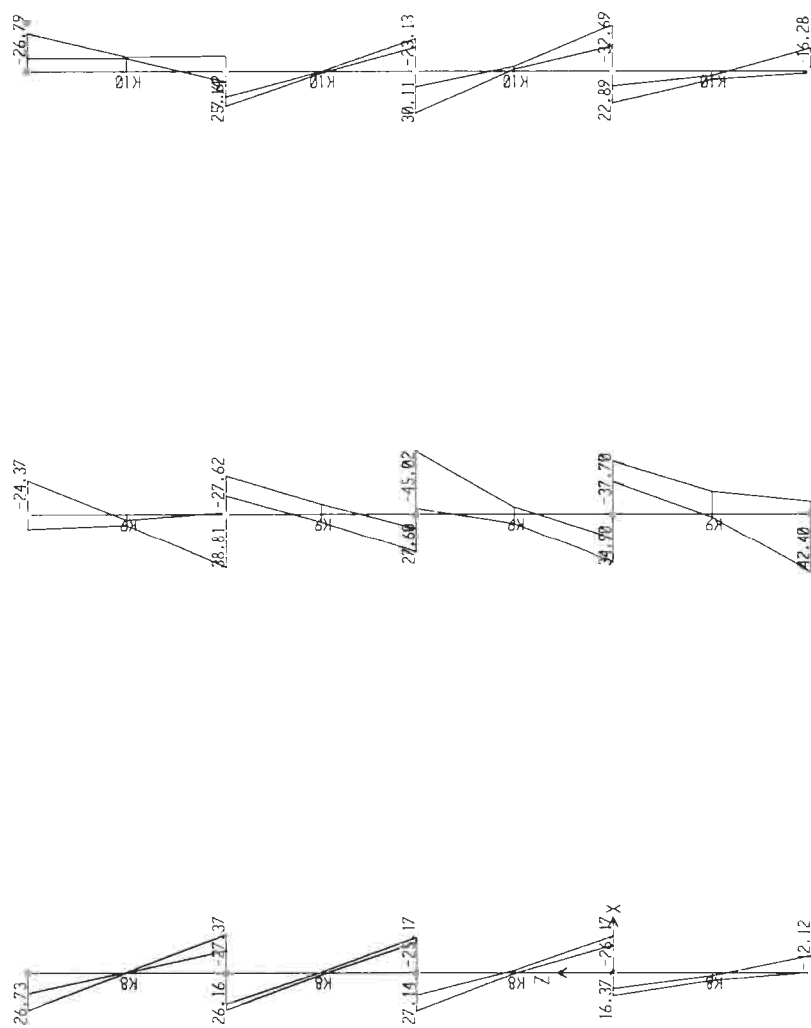




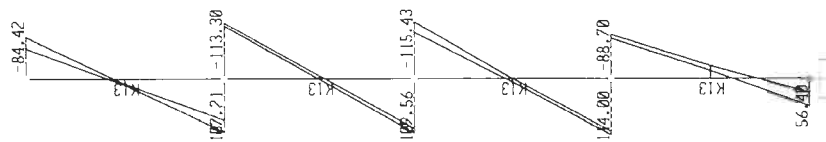
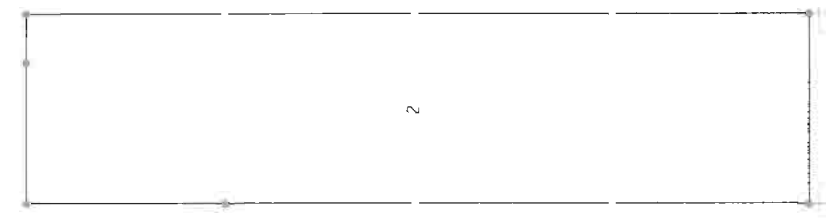
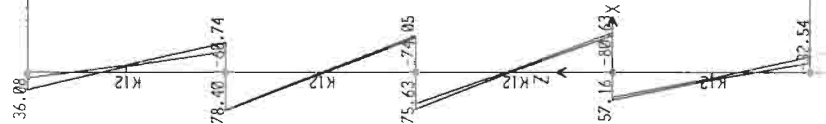




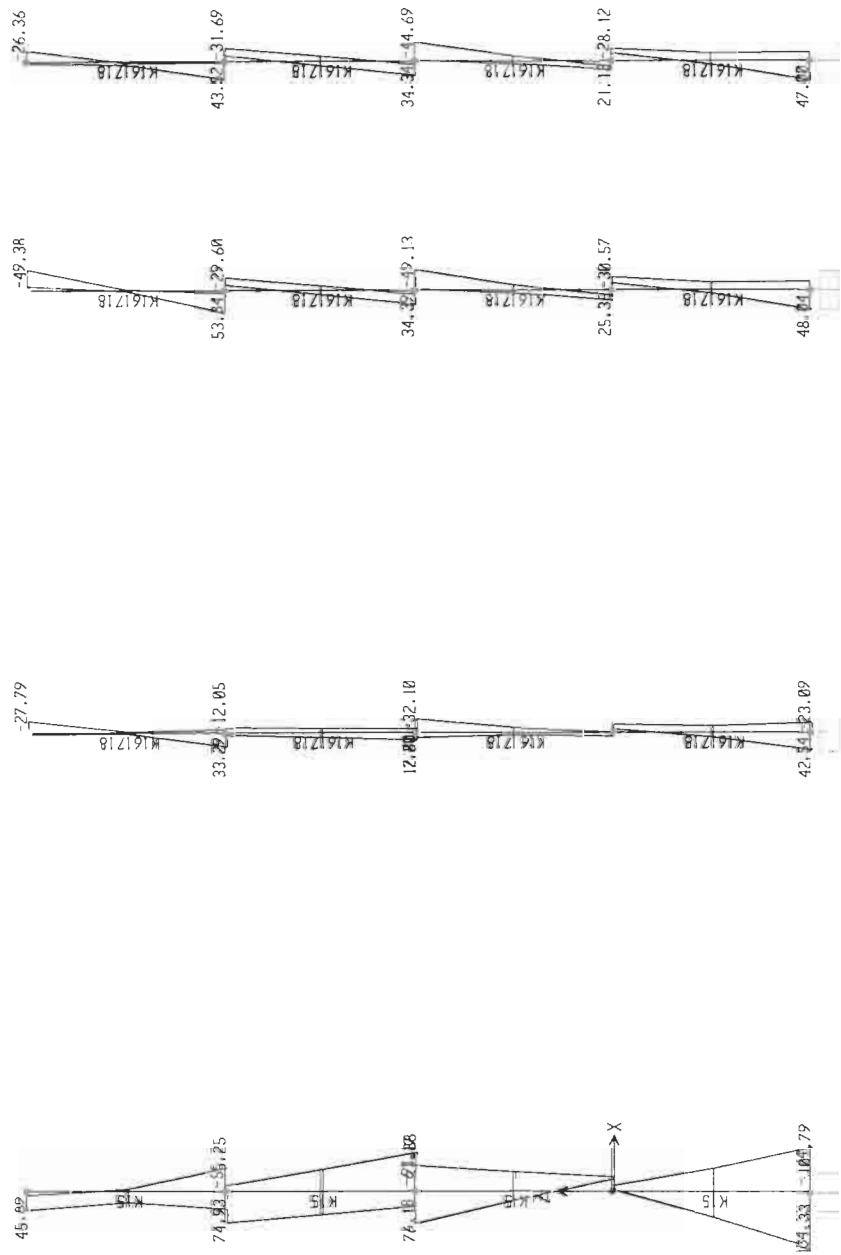


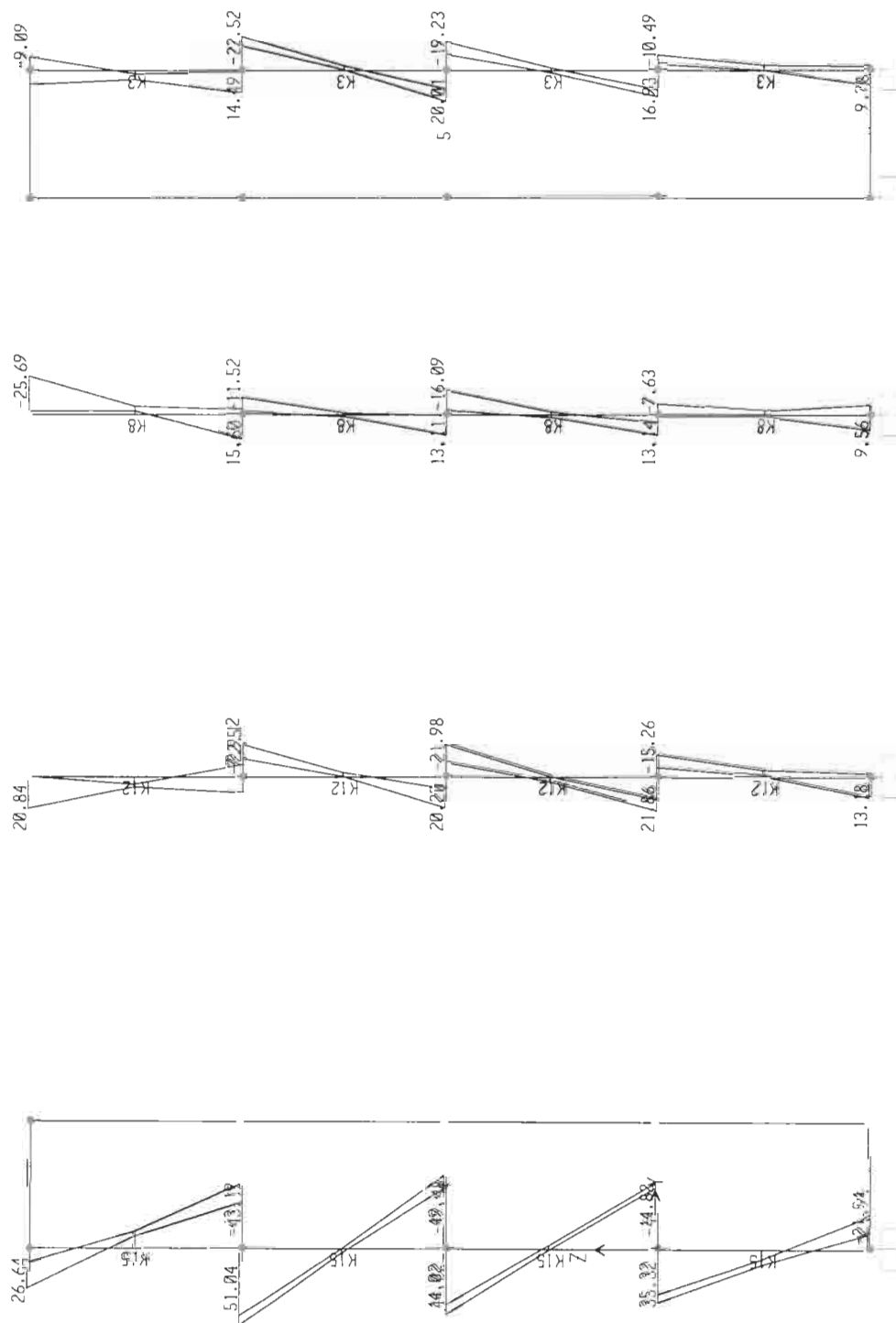


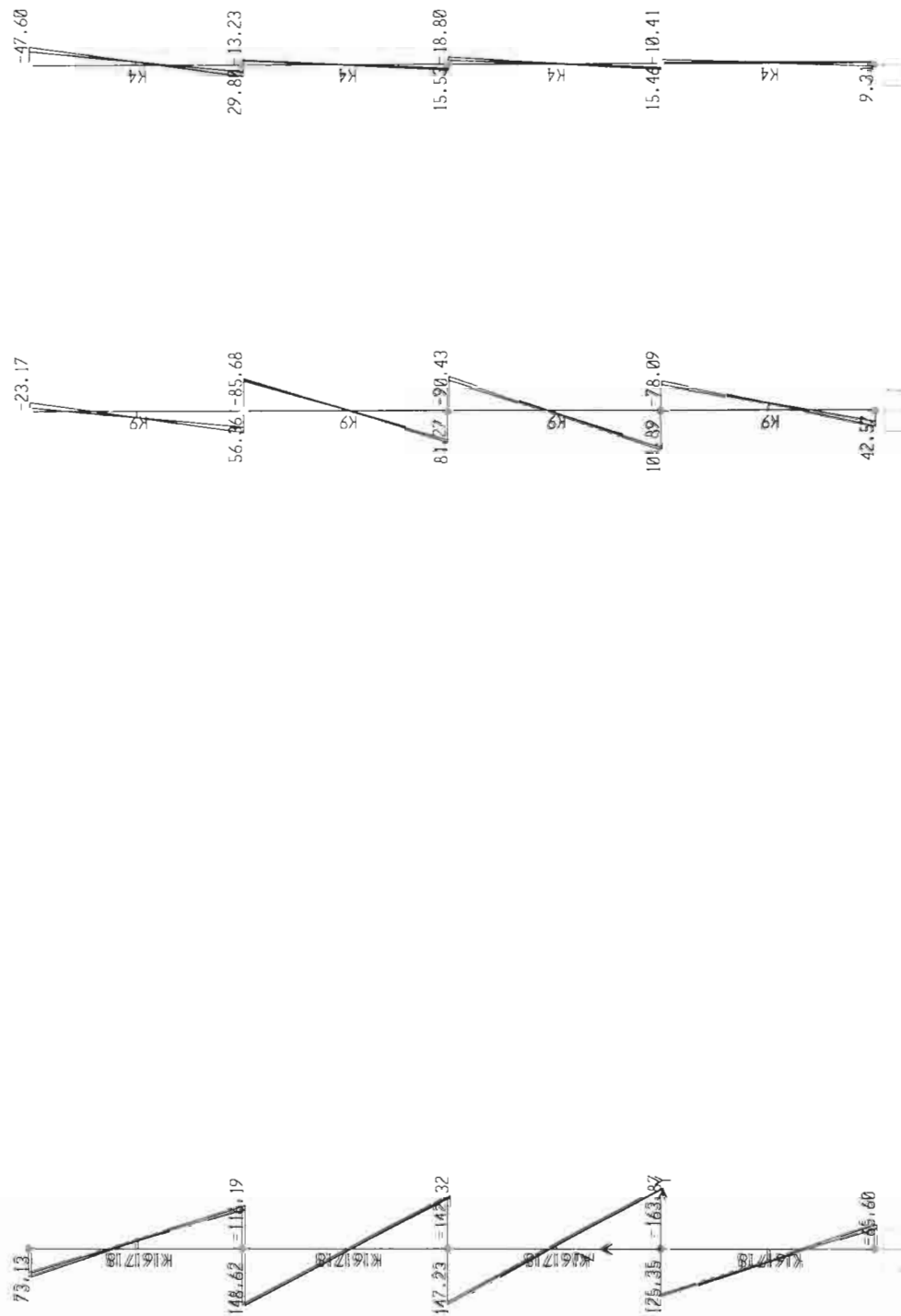


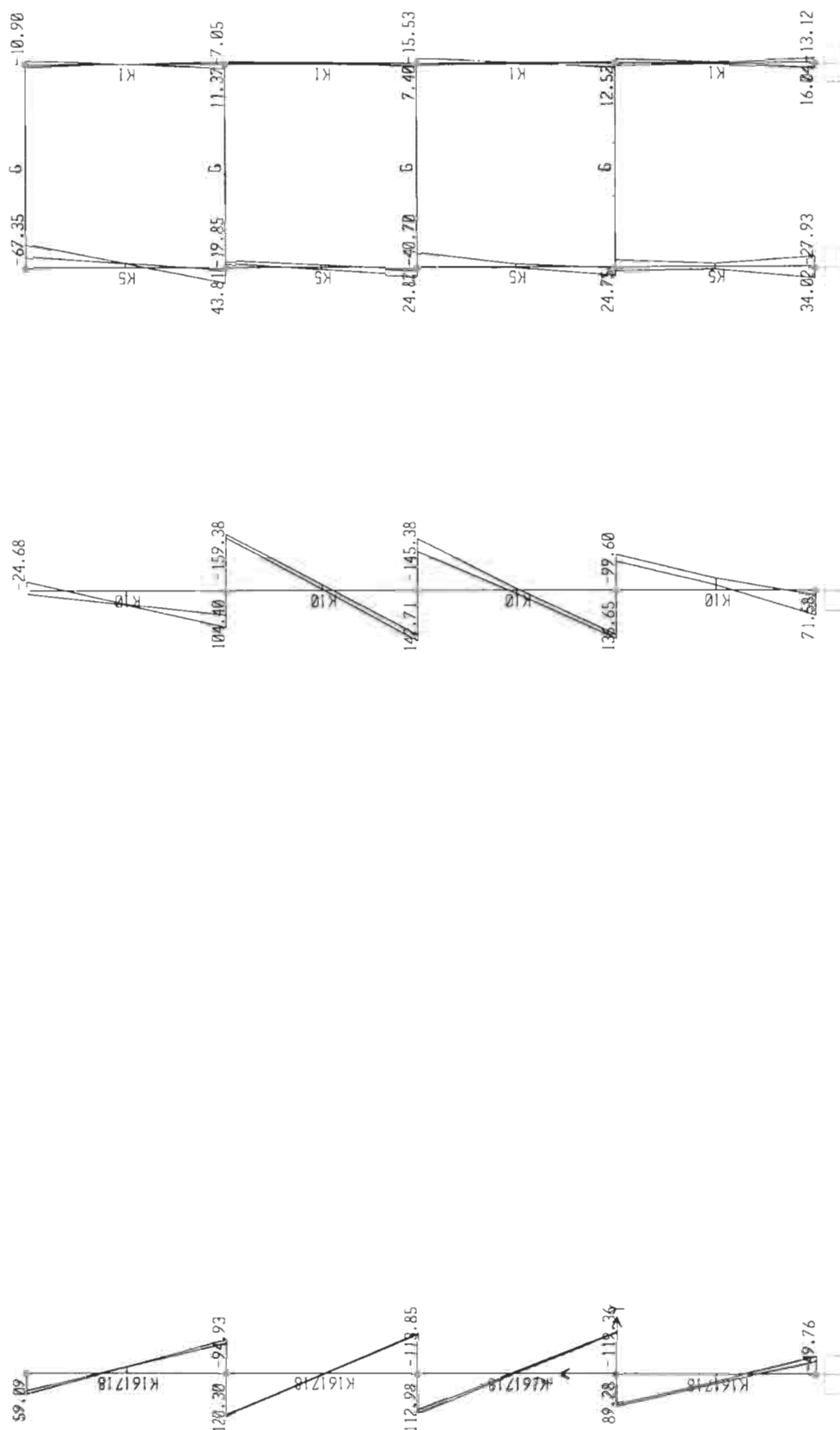


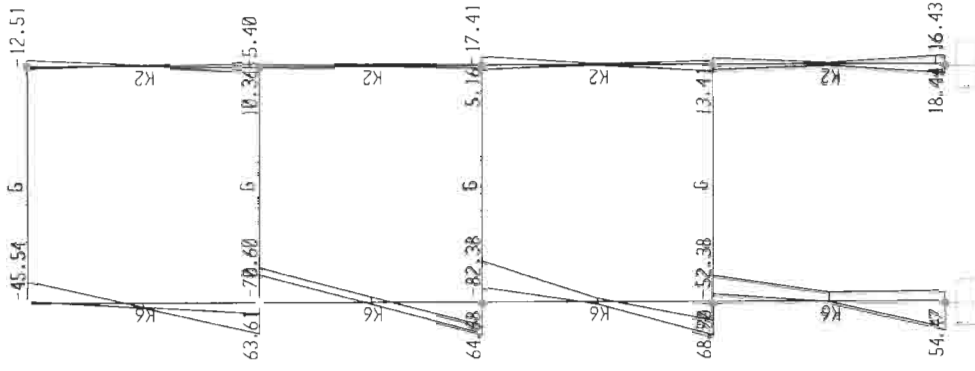
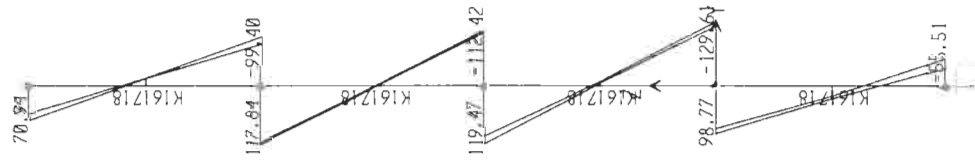


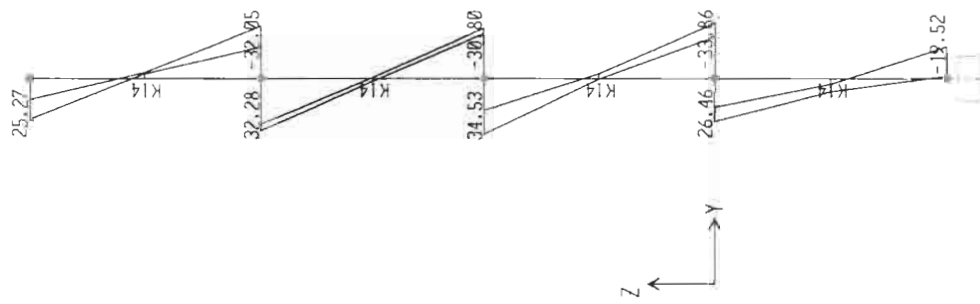


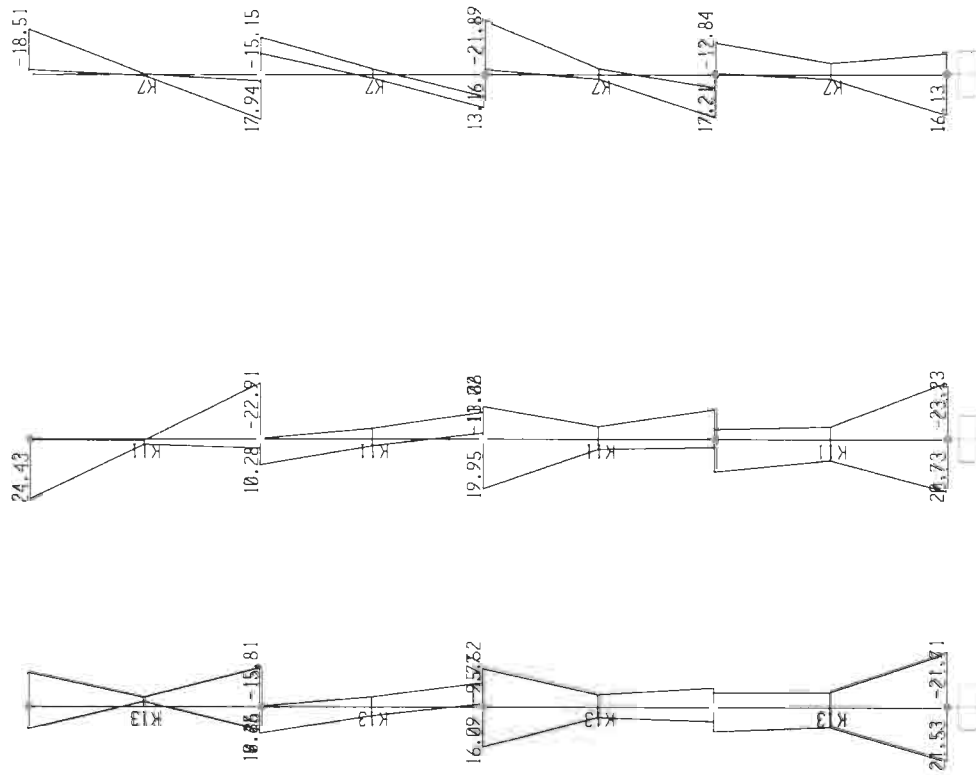














K01 - 8 u 12

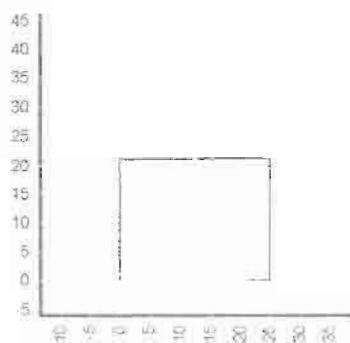
General

Design code: Eurocode 2
Analysis: Design section

Loads: N, Mx

N>0 is compression !

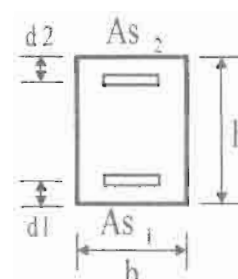
Section



Data [cm]

b = 25
h = 40

d1 = 2.5
d2 = 2.5



Materials

Concrete: C25/30
SSR: Parabolic - linear

fck = 2.50 kN/cm²
Ec = 2500.00 kN/cm²
ec2u = -3.500 o/o
ec2 = -2.000 o/o
n = 2.00

Reinforcing steel: S500
SSR: Standard

fyk = 50.00 kN/cm²
Es = 20000.00 kN/cm²
esu = 10.000 o/o

Factors

Concrete: gama_c = 1.50
Steel: gama_s = 1.15

Reinforcement

Symmetric: As1=As2

Loads

Load	N [kN]	Mx [kNm]
L1	600	80.6

Solve data

II order moments - Yes Code Eurocode 2

Geometric length: Lo = 275.00 cm
Effective length: kx = 1.30 Lkx = 357.50 cm



Results

	Area [cm ²]	esi [o/oo]	Stress [kN/cm ²]
As2	1.88	2.744	43.48
As1	1.88	-3.084	-43.48

Concrete strain: $\epsilon_{c,min} = -3.500$ o/oo
Compressive zone depth: $x = 21.02$ cm

Total reinf. area: $A_{s,tot} = 3.77$ cm²
Reinf. ratio: 0.38 %



K 9

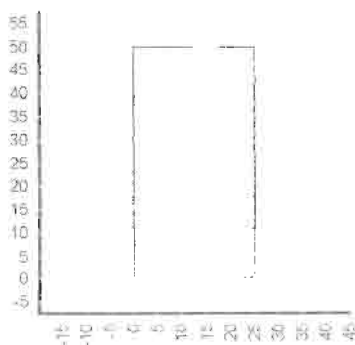
General

Design code: Eurocode 2
Analysis: Design section

Loads: N, Mx

N > 0 is compression !

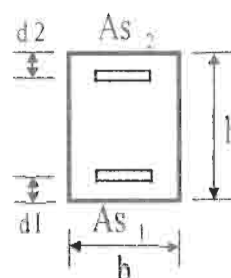
Section



Data [cm]

b = 25
h = 50

d1 = 2.5
d2 = 2.5



Materials

Concrete: C25/30
SSR: Parabolic - linear

fck = 2.50 kN/cm²
Ec = 2500.00 kN/cm²
ec2u = -3.500 o/o
ec2 = -2.000 o/o
n = 2.00

Reinforcing steel: S500
SSR: Standard

fyk = 50.00 kN/cm²
Es = 20000.00 kN/cm²
esu = 10.000 o/o

Factors

Concrete: gama_c = 1.50
Steel: gama_s = 1.15

Reinforcement

Symmetric: As1=As2

Loads

Load	N [kN]	Mx [kNm]
L1	2170	42.4

Solve data

II order moments - Yes Code: Eurocode 2

Geometric length: Lo = 275.00 cm
Effective length: kx = 1.30 Lkx = 357.50 cm



Results

	Area [cm ²]	esi [o/oo]	Stress [kN/cm ²]
As2	10.33	-0.720	-14.40
As1	10.33	-2.769	-43.48

Concrete strain: $\epsilon_{c,min} = -2.883$ o/oo
Compressive zone depth: $x = 50.00$ cm

Total reinf. area: $A_{s,tot} = 20.66$ cm²
Reinf. ratio: 1.65 %



K10

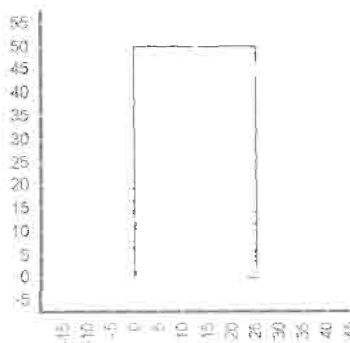
General

Design code: Eurocode 2
Analysis: Design section

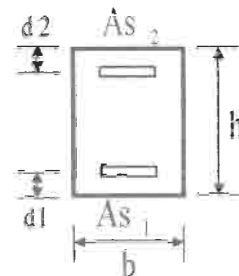
Loads: N, Mx

N>0 is compression !

Section



Data [cm]

b = 25
h = 50d1 = 2.5
d2 = 2.5

Materials

Concrete: C25/30
SSR: Parabolic - linearfck = 2.50 kN/cm²
Ec = 2500.00 kN/cm²
ec2u = -3.500 o/o
ec2 = -2.000 o/o
n = 2.00Reinforcing steel: S500
SSR: Standardfyk = 50.00 kN/cm²
Es = 20000.00 kN/cm²
esu = 10.000 o/o

Factors

Concrete: gama_c = 1.50
Steel: gama_s = 1.15

Reinforcement

Symmetric: As1=As2

Loads

Load	N [kN]	Mx [kNm]
L1	2290	163

Solve data

If order moments - Yes	Code Eurocode 2
Geometric length:	Lo = 275.00 cm
Effective length: kx = 1.30	Lkx = 357.50 cm



Results

	Area [cm ²]	esi [o/oo]	Stress [kN/cm ²]
As2	18.74	-0.211	-4.22
As1	18.74	-3.075	-43.48

Concrete strain: $\epsilon_{c,min} = -3.234$ o/oo
Compressive zone depth: $x = 50.00$ cm

Total reinf. area: $A_{s,tot} = 37.48$ cm²
Reinf. ratio: 3.00 %



K15

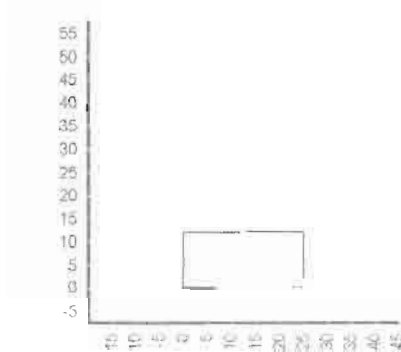
General

Design code: Eurocode 2
Analysis: Design section

Loads: N, Mx

N>0 is compression !

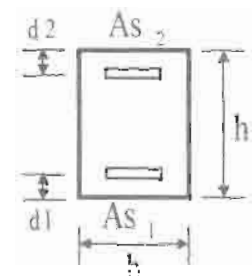
Section



Data [cm]

b = 25
h = 50

d1 = 2.5
d2 = 2.5



Materials

Concrete: C25/30
SSR: Parabolic - linear

fck = 2.50 kN/cm²
Ec = 2500.00 kN/cm²
ec2u = -3.500 o/oo
ec2 = -2.000 o/oo
n = 2.00

Reinforcing steel: S500
SSR: Standard

fyk = 50.00 kN/cm²
Es = 20000.00 kN/cm²
esu = 10.000 o/oo

Factors

Concrete: gama_c = 1.50
Steel: gama_s = 1.15

Reinforcement

Symmetric: As1=As2

Loads

Load	N [kN]	Mx [kNm]
L1	340	184

Solve data

II order moments - Yes Code Eurocode 2

Geometric length: Lo = 275.00 cm
Effective length: kx = 1.30 Lkx = 357.50 cm



Results

	Area [cm ²]	esi [o/oo]	Stress [kN/cm ²]
As2	6.39	10.000	43.48
As1	6.39	-2.751	-43.48

Concrete strain: $\epsilon_{c,min} = -3.459$ o/oo
Compressive zone depth: $x = 12.21$ cm

Total reinf. area: $A_{s,tot} = 12.77$ cm²
Reinf. ratio: 1.02 %



K 13

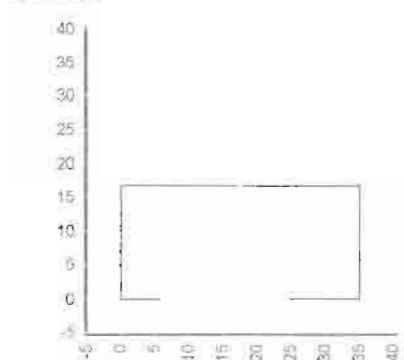
General

Design code: Eurocode 2
Analysis: Design section

Loads: N, Mx

N>0 is compression !

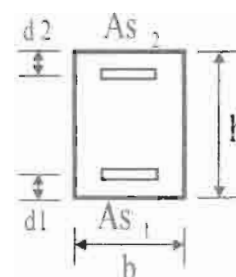
Section



Data [cm]

b = 35
h = 35

d1 = 2.5
d2 = 2.5



Materials

Concrete: C25/30
SSR: Parabolic - linear

fck = 2.50 kN/cm²
Ec = 2500.00 kN/cm²
ec2u = -3.500 o/oo
ec2 = -2.000 o/oo
n = 2.00

Reinforcing steel: S500
SSR: Standard

fyk = 50.00 kN/cm²
Es = 20000.00 kN/cm²
esu = 10.000 o/oo

Factors

Concrete: gama_c = 1.50
Steel: gama_s = 1.15

Reinforcement

Symmetric: As1=As2

Loads

Load	N [kN]	Mx [kNm]
L1	665	114

Solve data

II order moments - Yes Code Eurocode 2

Geometric length: Lo = 275.00 cm
Effective length: kx = 1.30 Lkx = 357.50 cm



Results

	Area [cm ²]	esi [o/oo]	Stress [kN/cm ²]
As2	4.96	3.294	43.48
As1	4.96	-2.977	-43.48

Concrete strain: $\epsilon_{c,min} = -3.500$ o/oo
Compressive zone depth: $x = 16.74$ cm

Total reinf. area: $A_{s,tot} = 9.92$ cm²
Reinf. ratio: 0.81 %



V 11

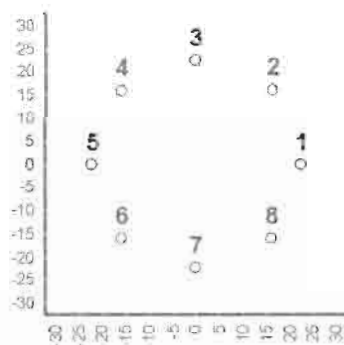
General

Design code: Eurocode 2
Analysis: Design section

Loads: N, Mx

N>0 is compression !

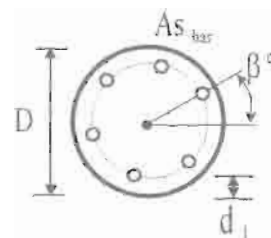
Section



Data [cm]

D = 50

d1 = 2.5



Materials

Concrete: C25/30
SSR: Parabolic - linear

fck = 2.50 kN/cm²
Ec = 2500.00 kN/cm²
ec2u = -3.500 o/oo
ec2 = -2.000 o/oo
eta = 2.00

Reinforcing steel: S500
SSR: Standard

fyk = 50.00 kN/cm²
Es = 20000.00 kN/cm²
esu = 10.000 o/oo

Factors

Concrete: gama_c = 1.50
Steel: gama_s = 1.15

Reinforcement

Bars = 8
beta = 0.00 deg

Loads

Load	N [kN]	Mx [kNm]
L1	760	112

Solve data

II order moments - Yes Code Eurocode 2

Geometric length: Lo = 275.00 cm
Effective length: kx = 1.30 Lkx = 357.50 cm

Results

Bar	Asi [cm ²]	esi {o/oo}	Stress [kN/cm ²]
-----	------------------------	------------	------------------------------



1	0.00	-1.121	-22.42
2	0.00	0.393	7.86
3	0.00	1.020	20.41
4	0.00	0.393	7.86
5	0.00	-1.121	-22.42
6	0.00	-2.635	-43.48
7	0.00	-3.262	-43.48
8	0.00	-2.635	-43.48

Concrete strain: $\epsilon_{c,min} = -3.500$ o/o

Compressive zone depth: $x = 36.78$ cm

Total reinf. area: $A_{s,tot} = 0.00$ cm²

Reinf. ratio: 0.00 %

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МОЩТА НА ПРАВОЪГЪЛНИ

ВА Е ПРИЕТ СЪГЛАСНО

И И ГРАНИЧНИ УСЛОВИЯ.

УМАРНТО ДЕЙСТВИЕ НА

СОНАЛЕН КОМПЮТЕР.

ГОД

СТАТИЧЕСКОТО РЕШЕНИЕ НА ПЛОЧАТА СЕ ИЗВЪРШВА С
КРАЙНИ ЕЛЕМЕНТИ С 12 И 24 СТЕПЕНИ НА СВОБОДА.

ПРИ ФУНДАМЕНТНИ ПЛОЧИ МОДЕЛЪТ НА ЗЕМНАТА ОСН
ХИПОТЕЗАТА НА ВИНКЛЕР.

ЕТАЖНИТЕ ПЛОЧИ СЕ РЕШАВАТ ПРИ ПРОИЗВОЛНИ ПОДПОРИ

ОРАЗМЕРЯВАНЕТО НА ПЛОЧАТА СЕ ИЗВЪРШВА ЗА
ОГЪВАЩИТЕ И УСУКВАЩИ МОМЕНТИ.

ПРОГРАМАТА Е ПРЕДНАЗНАЧЕНА ЗА 16 БИТОВ ПЕР

СЪЗДАДЕНА Е В ЦЕССИ ПРЕЗ 1987

ОБЕКТ: СРЕДНА РПУ - КАРКОВА
ПРОЕКТАНТ: ТОДОРОВ
РЕШЕНИЕ: ГРЕНДИ
ШИФЪР: 2

коша 1 000

W1 ДАННИ ЗА ГЕОМЕТРИЯТА НА ПЛОЧАТА

РАЗМЕР НА ПЛОЧАТА ПО ОС	22.63 m
РАЗМЕР НА ПЛОЧАТА ПО ОС	15.94 m
ДЕБЕЛИНА НА ПЛОЧАТА	0.15 m
НАЧАЛНА СТЕПКА НА ДЕЛЕНЕ НА ПЛОЧАТА	0.05 m

За статическото решение на плочата се използват крайни елементи с 12 степени на свобода

W1 ЧУПКИ И ОТВОРИ В ПЛОЧАТА

ПРЯВОЪГЪЛНА ОБЛАСТ ОГРАНИЧЕНА С ЛИНИИТЕ:			
абсциса дясн Fx6 (m)	абсциса дясн Fx2 (m)	ордината долн Fy6 (m)	ордината горн Fy6 (m)
17.14	19.65	0.00	1.36
17.65	20.62	0.00	6.13
20.62	22.63	0.00	9.42
22.63	22.63	0.00	11.15
12.57	22.63	14.99	15.94

W1 ДАННИ ЗА ПОДПИРАНЕ НА ПЛОЧАТА

W1 данни за линейно подпирание по ос

ордината на линията (m)	начална абсциса (m)	крайна абсциса (m)	ВИД ПОДПИРАНЕ	
			свободно	запъване
0.15	0.00	17.14	свободно	
1.36	17.14	19.65	свободно	
6.13	19.65	20.62	свободно	
9.42	20.62	22.62	свободно	
11.15	22.62	22.63	свободно	
14.99	12.57	22.63	свободно	
15.94	0.00	12.57	свободно	
1.42	0.00	4.32	свободно	
1.42	19.45	17.15	свободно	

W1 данни за линейно подпирание по ос

абсциса на линията (m)	начална ордината (m)	крайна ордината (m)	ВИД ПОДПИРАНЕ	
			свободно	запъване
0.15	0.00	15.94	свободно	
15.23	11.24	15.94	свободно	
17.60	0.00	1.36	свободно	
17.47	1.63	6.13	свободно	

21.88	9.42	11.50	свободно
22.48	11.50	14.98	свободно

W1 данни за подпрени точки

абсциса на точката (m)	ордината на точката (m)
6.00	11.23
12.45	11.23

W1 ДАННИ ЗА НАТОВАРВАНЕТО НА ПЛОЧАТА

Отместване по ос X на центъра O1 на коор.система 01x1y1 за товарите.... 0.00
Отместване по ос Y на центъра O1 на коор.система 01x1y1 за товарите.... 0.00
Общ брой на състоянията на натоварване..... 1
Състояния на натоварване от земите..... 0

W1 зони с разпределен товар

ПРЯКОЪГЪЛНА ОБЛАСТ ОГРАНИЧЕНА ОТ ДЛИНИТЕ:				РАВНОМ. РАЗПР. ТОВАР (kN/m²)	СЪСТО- ЯНИЕ No.
АБСЦИСА ЛЪВ РЪБ (m)	АБСЦИСА ДОСЪН РЪБ (m)	Ордината ДОЛЕН РЪБ (m)	Ордината ГОРЕН РЪБ (m)		
0.00	22.63	0.00	15.94	11.20	1
0.00	22.63	0.00	15.94	6.80	2

W1 КОМБИНАЦИИ ОТ СЪСТОЯНИЯТА НА НАТОВАРВАНЕ

КОМБ. NO.	КОМБЕР НА СЪСТОЯНИЯТА И КОЕФИЦИЕНТИ НА УЧАСТИЕ									
	свст	коэф.	свст	коэф.	свст	коэф.	свст	коэф.	свст	коэф.
1	1	1.00								

W1 ДАННИ ЗА ОРАЗМЕРЯВАНЕ НА ПЛОЧАТА

КЛАС НА БЕТОНА ПО ЯКОСТ НА НАТИСК..... 20
РАЗСТОЯНИЕ ОТ Ц.Т. НА ДОЛНА (ГОРНА) АРМИРОВКА ДО ДОЛЕН (ГОРЕН) РЪБ ПЛОЧА 0.0
м
ИЗЧИСЛИТЕЛНО СЪПРОТИВЛЕНИЕ НА НАДЛЕЖНАТА АРМИРОВКА..... 400
Раз
МИНИМАЛЕН ПРОЦЕНТ НА АРМИРАНЕ НА ПЛОЧАТА..... 54

25	20.292	1.956	<u>3.513</u>	2.150	3.135	1.787	11.528
26		1.956	3.513	2.150	3.135	1.787	11.528
27	12.422	1.956	<u>4.170</u>	2.975	5.214	10.923	20.735
28		1.956	4.170	2.975	5.214	10.923	20.735
29		1.956	4.170	2.975	5.214	10.923	20.735
30	-1.784	1.956	3.513	2.150	3.135	1.787	11.528
31		1.956	3.513	2.150	3.135	1.787	11.528
32		1.956	3.513	2.150	3.135	1.787	11.528
33	36.224	1.956	<u>3.402</u>	-15.700	20.308	1.193	16.904
34		1.956	3.402	-15.700	20.308	1.193	16.904
35	74.129	1.956	<u>57.901</u>	-112.541	-35.416	.000	25.318
36		1.956	57.901	-112.541	-35.416	.000	25.318
37		1.956	57.901	-112.541	-35.416	.000	25.318
38		1.956	57.901	-112.541	-35.416	.000	25.318
39		1.956	57.901	-112.541	-35.416	.000	25.318
40		1.956	57.901	-112.541	-35.416	.000	25.318
41		1.956	57.901	-112.541	-35.416	.000	25.318
42		1.956	57.901	-112.541	-35.416	.000	25.318
43		1.956	57.901	-112.541	-35.416	.000	25.318
44		1.956	57.901	-112.541	-35.416	.000	25.318
45		1.956	57.901	-112.541	-35.416	.000	25.318
46		1.956	57.901	-112.541	-35.416	.000	25.318
47		1.956	57.901	-112.541	-35.416	.000	25.318
48		1.956	57.901	-112.541	-35.416	.000	25.318
49		1.956	57.901	-112.541	-35.416	.000	25.318
50		1.956	57.901	-112.541	-35.416	.000	25.318
51		1.956	57.901	-112.541	-35.416	.000	25.318
52		1.956	57.901	-112.541	-35.416	.000	25.318
53		1.956	57.901	-112.541	-35.416	.000	25.318
54		1.956	57.901	-112.541	-35.416	.000	25.318
55		1.956	57.901	-112.541	-35.416	.000	25.318
56		1.956	57.901	-112.541	-35.416	.000	25.318
57		1.956	57.901	-112.541	-35.416	.000	25.318
58		1.956	57.901	-112.541	-35.416	.000	25.318
59		1.956	57.901	-112.541	-35.416	.000	25.318
60		1.956	57.901	-112.541	-35.416	.000	25.318
61		1.956	57.901	-112.541	-35.416	.000	25.318
62		1.956	57.901	-112.541	-35.416	.000	25.318
63		1.956	57.901	-112.541	-35.416	.000	25.318
64		1.956	57.901	-112.541	-35.416	.000	25.318
65		1.956	57.901	-112.541	-35.416	.000	25.318
66		1.956	57.901	-112.541	-35.416	.000	25.318
67		1.956	57.901	-112.541	-35.416	.000	25.318
68		1.956	57.901	-112.541	-35.416	.000	25.318
69		1.956	57.901	-112.541	-35.416	.000	25.318
70		1.956	57.901	-112.541	-35.416	.000	25.318
71		1.956	57.901	-112.541	-35.416	.000	25.318
72		1.956	57.901	-112.541	-35.416	.000	25.318
73		1.956	57.901	-112.541	-35.416	.000	25.318
74		1.956	57.901	-112.541	-35.416	.000	25.318
75		1.956	57.901	-112.541	-35.416	.000	25.318
76		1.956	57.901	-112.541	-35.416	.000	25.318
77		1.956	57.901	-112.541	-35.416	.000	25.318
78		1.956	57.901	-112.541	-35.416	.000	25.318
79		1.956	57.901	-112.541	-35.416	.000	25.318
80		1.956	57.901	-112.541	-35.416	.000	25.318
81		1.956	57.901	-112.541	-35.416	.000	25.318
82		1.956	57.901	-112.541	-35.416	.000	25.318
83		1.956	57.901	-112.541	-35.416	.000	25.318
84		1.956	57.901	-112.541	-35.416	.000	25.318
85		1.956	57.901	-112.541	-35.416	.000	25.318
86		1.956	57.901	-112.541	-35.416	.000	25.318
87		1.956	57.901	-112.541	-35.416	.000	25.318
88		1.956	57.901	-112.541	-35.416	.000	25.318
89		1.956	57.901	-112.541	-35.416	.000	25.318
90		1.956	57.901	-112.541	-35.416	.000	25.318
91		1.956	57.901	-112.541	-35.416	.000	25.318
92		1.956	57.901	-112.541	-35.416	.000	25.318
93		1.956	57.901	-112.541	-35.416	.000	25.318
94		1.956	57.901	-112.541	-35.416	.000	25.318
95		1.956	57.901	-112.541	-35.416	.000	25.318
96		1.956	57.901	-112.541	-35.416	.000	25.318
97		1.956	57.901	-112.541	-35.416	.000	25.318
98		1.956	57.901	-112.541	-35.416	.000	25.318
99		1.956	57.901	-112.541	-35.416	.000	25.318
100		1.956	57.901	-112.541	-35.416	.000	25.318

↓
X = 12.57

34

Y = 1.66

50.505	-44.777	-44.470	5.077	79.275	-111.217	33.
<u>4.192</u>	3.956	<u>15.230</u>	<u>18.040</u>	X = 17.0		
491	12.479	-3.441	-1.147	7.940	7.2	
956	3.956	3.956	3.956			
340	1.474	2.954	.600	14.322	3.438	
956	3.956	3.956	3.956			
237	-1.728	2.748	.619	.412	4.026	75.
956	3.956	3.956	3.956			
1138	-7.430	-6.660	-1.278	-7.842	-14.	
956	3.956	3.956	3.956			
1140	-1.428	-12.794	.600	-16.925	9.820	
956	3.956	3.956	3.956			
6.734	-10.441	-8.416	2.040	-1.220	2.931	15.
956	3.956	3.956	3.956			
460	10.622	7.340	3.777	1.470	11.060	15.

Y = 1.80

0.705	24.212	-2.331	5.162	1.944	17.092	
956	<u>4.228</u>	3.956	3.956	X = 3.27		
6.124	27.553	-5.282	6.279	2.700	21.891	
956	<u>4.613</u>	3.956	3.956			
0.804	28.885	-4.297	6.907	3.267	23.992	
956	<u>4.697</u>	3.956	3.956			
9.095	29.517	-3.572	7.534	5.237	25.927	56.
956	<u>4.401</u>	3.956	3.956			

102	1	6.567	27.289	1.37	<i>Y=27.18</i>	6.905	28.132	
57	71.465	3.956	4.343	3.956	3.956			
107								
57	28.738	3.378	31.106	7.20	7.977	11.096	30.828	
109		3.956	4.247	3.956	3.956			
07	28.094	6.237	30.524	2.470	7.818	11.606	32.953	6.
105		3.956	4.576	3.956	3.956			
- None -								

32	27.460	7.662	70.820	3.420	7.479	11.082	34.240	4.
108		3.956	4.765	3.956	3.956			
11	27.170	5.503	70.670	3.490	7.049	9.996	34.167	
107		3.956	4.752	3.956	3.956			
30	26.896	3.126	27.496	3.746	6.532	5.072	32.442	
108		3.956	4.562	3.956	3.956			
5	4.734	3.971	16.627	2.073	5.980	6.084	23.671	
107		3.956	3.792	3.956	3.956			
	24.019	6.977	26.281	2.262	5.606	6.855	28.54	
		3.956	3.956	3.956	3.956			
	764	644	77.881	2.627	5.534	10.690	28.506	5.
		956	3.956	3.956	3.956			
	442	9.832	16.971	3.509	4.647	13.341	30.46	
		3.956	3.956	3.956	3.956			
	.24	9.104	5.985	5.742	3.275	15.447	11.728	
None --		3.956	3.956	3.956	3.956			

14	27.277	4.572	-19.158	8.122	1.371	12.694	-11.	
		3.956	3.956	3.956	3.956			
11	-29.673	-52.775	-61.941	13.732	1.066	-55.713	-48.	36
111		3.956	3.956	13.227	14.934			

$X = 14.45$
 EASY TATEHIG CENHEHE
 1 -120.27
 -25.816
 -27.222
 83.412
 1.000
 -121.742

122		1.956	7.956	10.162	1.000	11.602	19.86	
		3.956	3.956	3.956	3.956			
		1.497	12.490	6.757	1.000	6.285	19.24	
		3.956	3.956	3.956	3.956			
			-2.750	-1.926	-1.340	2.148		

	3.955	3.955	3.955	3.955	3.955	3.955	3.955
	14.544	-2.184	2.402	5.544	9.250		
1.954	7.954	7.954	7.954	7.954	7.954	7.954	7.954
5.14	20.515	-2.040	4.944	7.018	10.088		
1.954	7.954	7.954	7.954	7.954	7.954	7.954	7.954
1.917	21.143	-2.001	6.357	8.007	24.		
1.954	7.954	7.954	7.954	7.954	7.954	7.954	7.954
9.10	31.070	-4.004	7.207	8.207			
1.954	7.954	7.954	7.954	7.954	7.954	7.954	7.954
2.00	33.075	4.007					
1.954	7.954	7.954	7.954	7.954	7.954	7.954	7.954
1.954	7.954	7.954	7.954	7.954	7.954	7.954	7.954
14.501	20.074	-1.755	10.442	12.442	20.422	24.	
1.954	7.954	7.954	7.954	7.954	7.954	7.954	7.954

$y = 2.66$

$x = 4.32$

V

134		34.174	1.774	10.205	15.004	20.000	
134	70	4.057	1.954	3.954			
134	71	34.003	2.737	9.745	15.118	20.000	18.
134		5.049	1.954	7.954			
		2.134	25.481	4.064	9.402	12.775	20.004
		7.954	5.981	1.954	3.954		
		4.402	35.071	3.236	8.737	9.002	36.007
		3.954	5.417	1.954	3.954		
		5.017	33.905	1.455	8.007	7.001	35.440
		7.954	4.041	1.954	3.954		
201	32.160	1.419	-1.041	1.000	0.000	10.000	7.
140		4.441	3.954	3.954			
608	31.912	10.570	-1.242	7.207	5.217	20.008	
141		4.410	3.954	3.954			
None	1	8.163	27.985	12.507	8.913	5.074	25.475 10
867	-11.454	-1.524	-2.275	9.341	-1.139	8.805	1.012
156		3.954	3.954	3.954	7.954		
128	1	-1.109	-1.926	4.019	-1.346	3.910	1.073
157	-5.945	3.954	3.954	3.954	3.954		
877	1	1.079	-1.446	3.424	1.000	2.152	1.084
159	-4.082	1.954	3.954	3.954	3.954		
		15.27	10.303	4.513	2.375		

$x = 12.57$

58.

854	14.975	354	18.738	3.956	4.421	12.154	22.51
(30)		354	3.956	3.956			
126	22.252	354	25.391	3.956	3.956	6.578	27.35
111		354	3.956	3.956			
129	21.903	354	27.402	3.956	3.956	3.141	25.137
162		354	4.412	3.956	3.956		6.
104	25.445	354	30.81	3.956	3.956	4.112	24.172
None		354	4.048	3.956	3.956		43.

$$y = 3.53$$

$$x = 4.32$$

167		17.472	30.788	-4.452	3.996	8.738	25.336
91	35.240	3.956	4.912	3.956	3.956		
104		17.669	30.288	-2.128	10.727	14.943	28.162
95	22.414	3.956	4.408	3.956	3.956		19
165		18.969	30.453	2.203	10.845	19.162	
	18.256	3.956	4.533	3.956	3.956		
		21.949	31.457	4.955	13.360	17.904	
	26.592	3.956	5.004	3.956	3.956		
		7.239	32.377	5.334	9.502	12.623	
	27.012	3.956	5.387	3.956	3.956		
		3.348	32.324	3.066	8.535	6.414	
	29.258	3.956	4.934	3.956	3.956		
		2.408	30.877				
	31.477	3.956	4.351				
			28.534				



912	21.654	3.956	4.417	3.956	3.956		
171							
158	31.968	3.956	28.139	-3.827	3	24.308	
172		3.956	4.433	3.956	3.956		
271	22.356	3.956	26.406	-5.943	8.861	-1.504	20.467
173		3.956	4.458	3.956	3.956		
202	30.979	3.956	22.935	-8.944	8.392	13.096	10.
174		3.956	4.230	3.956	3.956		
486	27.229	3.956	16.856	-10.371	5.493	-1.262	6.487
175		3.956	3.956	3.956	3.956		20.
877	22.047	3.956	14.727	-7.118	4.282	-2.360	7.812
176		3.956	3.956	3.956	3.956		
752	16.545	3.956	12.641	3.272	3.364	3.793	5.117
		3.956	3.956	3.956	3.956		

$$x = 14.17$$

236	9.1	255	12.434	3.335	3.403	-4.444	15.04
179			3.956	3.956	3.956		
More							
250							
103	-9.851	1.714	.342	9.194	.003	.905	7.538
251		3.956	3.956	3.956	3.956		
1							
90	-21.132	-3.468	-14.618	6.514	.132	048	-8.104
252		3.956	3.956	3.956	3.956		
1							
94	-27.972	-4.843	-23.020	4.952	.252	109	-13.038
253		3.956	3.956	3.956	3.956		
1							
98	-43.802	-8.045	-35.151	8.451	.352	436	-24.701
254		3.956	3.956	3.956	3.159		
1							
23	-73.108	-65.602	-48.571	31.338	.574	-38.884	17.252
255		3.956	3.956	4.340	10.647		
1							
16	-27.281	-12.702	-25.426	-8.246	2.422	-22.147	12.666
256		3.956	3.956	3.956	6.218		
1							
10	-10.549	15.858	-12.819	-3.270	4.754	12.708	-10.009
257		3.956	3.956	3.956	3.956		13.
1							
More		74.274	-4.754	-2.127	6.31	22.108	-6.63

$$y = 6.13$$

$$x = 5.16$$

351	-2.627	.956	3.956	3.956	3.956		
258							
1							
411	-4.172	25.271	-5.252	-1.120	6.456	24.171	-5.377
259		3.956	3.956	3.956	3.956		21
1							
699	-18.712	18.714	-14.740	3.275	5.104	858	-11.465
260		3.956	3.956	3.956	3.956		
1							
706	-49.243	-10.927	-38.434	10.777	2.260	147	-27.405
261		3.956	3.956	3.956	7.022		
1							
547	-28.202	-49.942	-51.490	-25.275	.956	75.237	75.235
262		.956	3.956	14.852	11.343		48
1							
302	-32.873	.782	-37.512	-4.948	.479	-11.741	-12.472
263		.956	3.956	3.956	5.991		
1							
309	-34.249	.110	-32.515	1.737	.467	-4.362	30.762
264		.956	3.956	3.956	4.766		
1							
	-43.447	.647	-28.002	5.444	.482	-2.103	17.957
265		.956	3.956	3.956	3.136		
More							
(285)							
1							
197	-53.278	-53.458	-37.824	15.434	.567	70.985	-22.716
266		3.956	3.956	10.510	3.647		-70.
1							
17	-12.452	-1.917	-25.181	-12.720	5.422	-14.442	35.977
267		3.956	3.956	3.956	5.117		10.

$$x = 10.45$$

$$x = 13.15$$

60.

26	1	15.558	-1.702	-7.555	4.472	9.782	31.255	25.
758		3.956	.956	3.956	3.956			
18	1	21.710	8.745	-5.408	5.317	15.902	1.377	25.
236		3.956	.956	3.956	3.956			
28	1	23.737	7.042	-3.378	4.736	16.943	3.671	25.
230		3.956	.956	3.956	3.956			
34	1	12.987	8.273	-5.147	4.775	14.640	3.146	25.
271		3.956	.956	3.956	3.956			
14	1	20.556	9.650	5.171	2.556	25.729	24.822	15.
225		3.956	.956	3.956	3.956			
ДОСТАТОЧНО СЕЧЕНИЕ								
1		-89.544	10.294	33.575	1.000	-126.121	-161.070	-52.
More --								

$$y = 6.13$$

$$x = 19.48$$

-91.718								
<u>273</u>								
27.257	1	25.875	-55.954	-1.111	-35.257	-80.849	21.	
		3.956	13.135	12.189				
			$X=19.65$					
11.573	1	15.874	1.508	1.000	18.700	5.185	15.	
		3.956	3.956	3.956				
		5.664	-1.250	1.177	1.004	.315		
		3.956	3.956	3.956	3.956			
		6.711	2.121	7.666	-1.009	6.075	9.887	
		3.956	3.956	3.956	3.956			
		1.106	-1.222	1.274	1.000	3.475	7.382	
		3.956	3.956	3.956	3.956			
		1.050	-10.479	4.821	1.050	.771	7.180	
		3.956	3.956	3.956	3.956			
		1.077	-28.430	4.059	1.100	-1.810	1.424	
		3.956	3.956	3.956	3.956			
			$f=6.28$					
			$X=2.35$					

$$x = 19.65$$

$$y = 6.28$$

$$x = 2.35$$

-75.120		-25.147	3.777	1.144	-2.827	-14.600	-19.
265		3.956	3.956	5.561			
1	1	27.340	15.071	42.774	1.245	-47.166	-140.
		3.956	3.956	24.935	15.402	-24.072	
1	1	17.517	170.882	-6.344	2.104	-13.661	-1.
		3.956	3.956	3.956	6.558	-42.226	
1	1	15.008	-14.757	-1.761	4.465	14.100	12.
		3.956	3.956	3.956	3.956	-45.746	
1	1	11.064	-5.605	-1.658	6.040	22.208	24.
		3.956	3.956	3.956	3.956	-56.463	
-4.847							
209							
110	5.	25.231	-6.350	-1.677	5.182	24.352	
290		3.956	3.956	3.956	3.956		

347	-13,307	3,954	3,954	3,954	3,954	15,379	-14,898	17
271								
733	-50,488	-4,514	-42,489	2,718	2,345	3,704	-34,251	12
-- More --		3,954	3,954	956	7,245			

$$y = 6.28$$

$$x = 9.56$$

252								
856	-30,571	-20,650	-78,371	-45,800	.271	-144,450	-122,172	52
293		3,954	3,954	25,987	28,408			
134	-34,394	-7,178	-37,437	-1,044	.213	-8,222	-38,481	-6
294		3,954	3,954	3,954	5,361			
245	-32,268	-4,309	-34,692	-5,424	.209	-8,793	-37,116	
795		3,954	3,954	3,954	5,138			
464	-35,808	7,064	-38,606	-2,798	.205	-10,062	-41,494	
294		3,954	3,954	3,954	5,828			
124	-37,188	.232	-37,298	33,691	.036	-42,342	25,467	
295		3,954	3,954	17,001	14,465			
970	-14,969	3,235	-24,800	-7,635	.212	.400	-31,238	
298		3,954	3,954	3,954	4,764			
177	-4,504	17,749	-1,200	-5,504	4,775	12,315	4,500	27
299		3,954	3,954	3,954	3,954			
		401	6,437	-4,581	5,216	10,040		

$$x = 10.45$$

$$x = 11.45$$

$$x = 13.15$$

627	10,973	3,954	3,954	3,954	3,954			
299								
607		3,954	3,954	3,954	3,954			
951		3,954	3,954	3,954	3,954			
577	10,000	3,954	3,954	3,954	3,954	15,718	.549	
377	-1,407	17,487	-5,237	-4,630	2,592	12,577	1063	
301		3,954	3,954	3,954	3,954			
968	-48,234	-84,737	-53,107	12,131	.072	-73,605		
304		3,954	3,954	15,141	5,313			
498	5,600	-54,510	-9,407	-28,911	.000	-60,521	55,414	-28
305		3,954	3,954	12,146	4,937			
181	5,191	.000	.000	2,171	.000	4,101	2,171	
306		3,954	3,954	3,954	3,954			
687		9,356	4,558	.000	.000	6,425	3,914	
311		956	3,954	3,954	3,954			
-- More --								
755	20,562	20,562	19,884	-1,776	.00	3,197	19,106	4
312		3,954	3,954	3,954	3,954			
998	-1,888	.000	.000	3,238	.000	3,298	3,698	62
313		3,954	3,954	3,954	3,954			

332	-20.34	3.956	3.956	3.956	3.956	1.000	-1.598	-18.570	-8.
314									
700	-39.926	3.956	3.956	3.956	3.956	1.000	240	30.504	-11.
315									
390	-43.548	3.956	3.956	3.956	3.956	1.000	362	-25.096	-16.
316									
HEADSTATYLING SECHENIE									
12	-137.537	137.222	-106.216	47.319	1.000	-89.904	-50.879	-104.5	
717									
706	-47.717	12.518	-42.078	5.635	1.865	16.149	-38.447	6.	
318		3.956	3.956	3.956	3.956				
More		14.817	-15.903	3.377		16.196	-12.526		
142	-17.787	95.	7.956	3.956	3.956				
319									
320	-1.471	23.717	-6.570	-1.677	5.796	21.648	-18.429	25.	
321		3.956	3.956	3.956	3.956				
322	-4.450	25.077	-7.049	2.559	9.950	22.513	599	22.	
323		3.956	3.956	3.956	3.956				
324	-17.806	19.361	-15.952	3.055	4.802	15.305			
325		3.956	3.956	3.956	3.956				
326	-40.525	17.124	-44.234	-3.707	2.412	13.41	174		
327		3.956	3.956	3.956	3.956				
HEADSTATYLING SECHENIE									
1	-142.171	-117.892	-46.125	1.000	-100.				
724									
328	-27.757	7.158	-35.751	-4.700	1.000	-13.546	101		
329		3.956	3.956	3.956	3.956				
330	-37.800	1.339	-36.496	-2.876	1.000	-10.235	270		
More		3.956	3.956	3.956	3.956				
331									
332	-30.564	334	-36.551	34.107	1.000	-13.441	-42.		
333		95.	3.956	3.956	3.956				
12	-128.209	10.365	-94.111	34.177	1.000	-74.167	51.924		
338		3.956	3.956	25.453	21.027				
1	-20.401	19.161	-24.566	-4.180	2.052	15.001	20.766		
339		3.956	3.956	3.956	3.956				
340		1.817	1.120	-9.826	4.770	13.007	-1.746	22	
341		3.956	3.956	3.956	3.956				
342	11.505	21.501	6.281	-5.243	5.221	18.337	1.038	26	
343		3.956	3.956	3.956	3.956				
344	11.635	20.508	8.895	-4.730	4.620	15.778	2.165	25	
345		3.956	3.956	3.956	3.956				
346		11.095	7.950	-4.726	4.726	11.751	7.101	28	

$$y = 6.42$$

$$x = 4.32$$

$$x = 10.45$$

$$x = 13.15$$

333									
More --	1	13.890	-11.441	-6.707	2.832	4.953	20.340	22	
334									
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$$y = 6.42$$

$$x = 19.47$$

$$y = 7.42$$

$$x = 4.32$$

$$x = 9.56$$

$$64.$$

355	1	8.573	-22.124	1.619	-1.245	-1.765	-14.214	
582	-30.073	3.956	3.956	3.956	4.153			
356	1	112	-17.302	-2.171	-3.376	-13.284	-19.473	
640	-15.171	956	3.956	3.956	3.956			
357	1	-42.441	-17.127	-4.359	-249	-17.831	-21.527	
651	-12.742	3.956	3.956	3.956	3.956			
358	1	-71.407	-6.707	-9.915	698	-41.342	-14.622	
610	3.209	3.956	3.956	5.818	3.956			
359	1	-11.191	-7.016	9.825	1.718	-1.326	2.846	
654	-15.991	3.956	3.956	3.956	3.956			
360	1	14.452	2.750	4.147	3.672	18.601	6.077	
-- More --								
669	-1.646	3.046	6.469	7.115	2.	10.162	13.584	
421	1	3.674	10.475	-1.630	3.715	3.244	6.865	
125	1	3.956	3.956	3.956	3.956			
656	14.344	459	7.447	-7.427	3.090	-1.008	-1.050	
425	1	3.139	7.137	-8.344	3.137	.845	-1.20	
534	15.431	3.956	3.956	3.956	3.956			
426	1	14.541	4.843	-7.504	3.012	7.437	2.661	25
445	12.145	3.956	3.956	3.956	3.956			
427	1	910	-3.409	-5.478	1.704	1.532	-8.007	
487	2.062	956	3.956	3.956	3.956			
428	1	6.893	12.805	-4.252	1.417			15
145	17.056	3.956	3.956	3.956	3.956			
429	1	4.576	-23.197	1.326	1.000	100.704	-57.527	25
651	-46.071	3.956	3.956	12.232	15.674			
-- More --								
4								
126	21.846	21.756	-15.524	-37.370	-1.064	57.127	52.	
471	1	3.956	3.956	3.956	7.589			
504	275	12.111	2.482	.343	1.000	11.319		
432	1	3.956	3.956	3.956	3.956			
127	262	-1.687	-4.164	.117	1.000	.054	-1.067	
435	1	3.956	3.956	3.956	3.956			
128	296	-2.926	-5.477	-5.101	-1.289	-6.162	1.652	
436	1	3.956	3.956	3.956	3.956			
142	265	-2.957	-1.191	-7.095	1.000	-0.940	1.284	
437	1	3.956	3.956	3.956	3.956			
141		12.710	5.703	-6.436	1.854	6.274	230	
438	1	3.956	3.956	956	3.956			
		15.337	8.179	3.026	7.062			

$$y = 2.142$$

$$x = 13.15$$

$$y = 9.142$$

$$x = 20.67$$

142	-14.240	3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
484		3.955	-32.121	-5.023	.004	.145	-39.170		
590	-14.136	3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
485		43.711	-58.757	14.554	.000	-32.554	-44.43		
491	-12.140	3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
494		4.104	-26.586	8.072	.945	12.371	-10.57		
466	-34.730	3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
487		4.435	-13.297		.163	1.295	-15.79		
-- More --									

$$y = 11.15$$

$$x = 16.23$$

458	.514	3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
780	.000	12.017	1.237	-45.724	2.287	10.253	4.527	21	
495		3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
444	287	10.974	5.819	-5.170	2.091	5.504			
496		3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
701	540	7.675	6.602	-5.046	1.950	2.426	1.950		
491		3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
500	900	6.437	9.217	4.710	.992	.147	14.327		
497		3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
948	188	.740	6.980	6.600	.627	.547	12.188		
497		3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
484	254	.717	-2.563	-2.226	.000	15.141	-4.61		
494		3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
504		35.116	-14.257	-11.812	-4.047	46.128	-26.467	-22	
495	345	3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
495									
-- More --									

$$x = 22.02$$

503									
626	-23.354	7.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
504		83.606	-70.743	5.340	.061	-80.267	-67.403	-24	
445	-4.187	3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
505		3.147	-26.130	6.834	1.582	.62	11.296	12	
532	-34.985	3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
506		3.454	-6.773	1.333	3.566	14.78	5.44	12	
120	191	3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
507									
857	512	290	3.043	-1.577	4.792		2.432	20	
508		951	3.955	3.955	3.955	3.955	3.955	3.955	3.955
845	289	20.299	6.633	-1.666	4.911	17.633	5.967	20	
509		3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
735	108	15.270	4.649	.541	3.945	15.06	5.191	14	
510		3.955	3.955	3.955	3.955	3.955	3.955	3.955	3.955
-- More --									

$$y = 11.24$$

$$x = 6$$

004
511
838
512
463
513
836
514
021
515
708
516
825
517
785
518

3.956
-52.746
3.956
-40.812
3.956
-9.364
3.956
5.155
3.956
1.606
3.956
-30.764
3.956
-5.167
3.956

3.956
5.092
8.371
7.451
6.701
6.472
3.956
4.104
3.956
-3.904
3.956
3.659
4.704
6.797
3.956

3.956
-47.653
-32.602
-23.161
-28.622
-15.529
-4.420
-23.076
-23.076
-27.706
-3.094
-12.951
-41.1

$$y = 11.24$$

$$x = 12.45$$

185
534
652
535
947
536
743
537
181
538
717
539
754
540
845
541

3.956
-17.447
3.956
-82.064
3.956
-10.019
3.956
13.334
3.956
20.074
3.956
20.745
3.956
15.542
3.956

3.956
-9.795
3.956
1.883
8.357
11.325
3.956
4.153
3.956
1.384
3.956
-1.389
3.956
-1.403
3.956

3.956
-23.242
-32.916
-3.956
-60.120
-26.704
-63.956
1.768
1.306
-10.173
-21.956
17.467
-11.491
4.662
21.477
5.470
19.970
6.904
14.136
3.714

$$y = 11.50$$

$$x = 6$$

181
542
180
543
484
544
320
545
607
546

3.956
-14.005
3.956
33.618
3.956
10.296
3.956
777
3.956

3.956
3.218
5.345
7.080
5.729
8.932
3.956
3.870
3.956

3.956
-31.733
-10.766
-4.820
-28.552
-6.481
-2.244
-6.519
-10.956
1.101
-2.244
-6.519
18.647
-5.530

$$x = 12.45$$

553	-9.550	3.956	3.956	3.956	3.956				
547	1								
785	-6.994	-22.251	-4.450	2.544	.000	19.708	-1.906	-24	
548	1	3.956	3.956	3.956	3.956				
381	-13.795	-4.571	-8.985	4.610	.607	239	-4.176		
-- More --		3.956	3.956	3.956	3.956				
549	1								
414	-13.959	1.820	-9.364	3.594	.790	1.774	-5.770	-5	
550	1	3.956	3.956	3.956	3.956				
612	7.614	.682	.682	-2.779	2.1	2.150	-1.647		
551	1	3.956	3.956	3.956	3.956				
774	16.574	11.487	5.948	-4.326	2.147	121	1.971	15	
552	1	3.956	3.956	3.956	3.956				
638	10.676	.285	6.324	-4.753	2.037	.753	1.971	15	
553	1	3.956	3.956	3.956	3.956				
	557	4.727	3.556	-7.201	1.109	1.576	.456		
554	1	3.956	3.956	3.956	3.956				
115	16.377	.623	-2.551	.962	4.964	11.278			
555	1	3.956	3.956	3.956	3.956				
576	-36.500	44.171	-45.761	-6.601	.000	-52.672	-54.161	-25	
556	1	3.956	3.956	7.586	7.776	$x = 21.88$			
-- More --		37	-14.299	-14.777	-3.025	-31.409	-29.672		
926	474	302	-3.330	-5.824	3.097	4.378	-9.154	12	
557	1	3.956	3.956	3.956	3.956				
12	-6.931	-14.444	-18.062	-11.132	1.570	-25.576	-29.194		
558	1	3.956	3.956	3.956	4.031				
13	21.500	-52.257	-18.703	2.507	.754	-49.450	-15.676	-55	
559	1	3.956	3.956	7.930	3.956				
908	-31.454	-11.238	-18.669	12.717	1.926	1.571	-5.916	-24	
560	1	3.956	3.956	3.956	4.752				
967	-9.961	13.225	-3.859	5.942	3.774	17.167	7.08		
561	1	3.956	3.956	3.956	3.956				
627	604	17.671	5.453	2.449	4.903	22.430	7.762		
570	1	3.956	3.956	3.956	3.956				
728	502	21.278	6.353	.250	5.014	21.028	9.00		
571	1	3.956	3.956	3.956	3.956				
924	9.247	15.718	6.241	-2.006	4.063	13.712	4.235		
-- More --		3.956	3.956	3.956	3.956				
572	1								
277	1.245	664	-3.877	-5.142	2.116	-2.966			
		956	3.956	3.956	3.956				

777	10.054	1	-2.157	-7.536	2.216	3.956	3.956	3.956	-26.741	-5.018	
574			3.956	3.956	4.445	3.956	3.956	3.956			
719	12.356	1	-17.672	-6.010	4.846	3.956	3.956	3.956	1.231	-23.023	-3.154
575			3.956	3.956	4.542	3.956	3.956	3.956			
096	307		1.105	-11.745	7.961	3.956	3.956	3.956	-0.015	-3.144	-3.384
576			3.956	3.956	3.956	3.956	3.956	3.956			
262	720	1	4.333	-8.659	4.071	3.956	3.956	3.956	.034		-4.538
577			3.956	3.956	3.956	3.956	3.956	3.956			
612	700	1	.453	-9.622	-1.842	3.956	3.956	3.956	-0.078	-5.295	11.464
578			.956	3.956	3.956	3.956	3.956	3.956			
513	795	1	.732	-3.954	2.441	3.956	3.956	3.956	.000	-17.321	-1.514
579			.956	3.956	3.956	3.956	3.956	3.956			
-- More --			.062	-6.420	3.683				.789	-1.377	-2.757
725	-10.087		3.956	3.956	3.956	3.956	3.956	3.956			
580											
752	-10.102	1	2.280	-6.649	3.492	3.956	3.956	3.956	.945	.233	-3.117
581			3.956	3.956	3.956	3.956	3.956	3.956			
778	4.750	1	4.799	2.371	-1.979	3.956	3.956	3.956	2.125	2.820	.392
582			3.956	3.956	3.956	3.956	3.956	3.956			16.
218	11.506	1	1.867	6.969	-4.351	3.956	3.956	3.956	2.156	.517	.616
583			3.956	3.956	3.956	3.956	3.956	3.956			
170	10.745	1	2.923	7.635	-3.710	3.956	3.956	3.956	2.057	.213	.326
584			3.956	3.956	3.956	3.956	3.956	3.956			
744	6.410	1	5.092	4.161	-2.250	3.956	3.956	3.956	1.170	.942	.711
585			3.956	3.956	3.956	3.956	3.956	3.956			
808	3.701	1	6.256	2.147	-1.552	3.956	3.956	3.956	1.014		.578
586			3.956	3.956	3.956	3.956	3.956	3.956			
887	-22.471	1	6.744	-16.172	6.470	3.956	3.956	3.956	.023	-26.696	16.172
587			3.956	3.956	3.956	3.956	3.956	3.956			-40.
-- More --											
455	-20.533	1	4.446	-14.585	6.006	3.956	3.956	3.956	.000	-26.440	-6.578
588			3.956	3.956	5.585	3.956	3.956	3.956			-40
329	-6.729	1	.000	.000	6.329	3.956	3.956	3.956	.000	6.329	
589			3.956	3.956	3.956	3.956	3.956	3.956			
404	-7.064	1	6.415	-2.075	4.907	3.956	3.956	3.956	.000	1.574	
590			3.956	3.956	3.956	3.956	3.956	3.956			
257	-4.633	1	-1.126	-1.502	3.131	3.956	3.956	3.956	-1.375	3.005	
591			3.956	3.956	3.956	3.956	3.956	3.956			
539	-7.409	1	1.306	-1.280	3.121	3.956	3.956	3.956	.000	1.722	
592			3.956	3.956	3.956	3.956	3.956	3.956			
182	5.709	1	4.316	7.832	2.123	3.956	3.956	3.956	2.579	6.440	
593			3.956	3.956	3.956	3.956	3.956	3.956			

$$y = 11.65$$

$$x = 12.57$$

$$y = 11.65$$

$$x = 21.88$$

874	13.776	1	3.956	12.503	-1.273	4.245	18.329	11.250	20.
884				3.956	3.956	3.956			
179	18.360	1	3.956	13.838	-4.824	4.819	13.121	9.311	22.
-- More				3.956	3.956	3.956			
664									
486	18.327	1	3.956	8.022	-7.305	1.874	-1.155	1.112	14.
885				3.956	3.956	3.956			
900	6.124	1	3.956	-1.987	-8.093	990	-1.286	-10.002	15.
888				3.956	3.956	3.956			
377	30.251	1	3.956	-38.530	-3.237		45.571	-46.749	-27.
887				3.956	3.956	3.956			
419	61.525	1	3.956	-31.909	-25.031	1.000	-50.354	-11.878	-36.
887				3.956	3.956	3.956			
	5.498	1	3.956	1.678	-3.820	1.000	3.484	-2.142	1.
887				3.956	3.956	3.956			
764				1.004	-2.593	1.000	-2.307	-1.409	
886				3.956	3.956	3.956			
814	174	1	3.956	1.340	-2.734	1.000	-2.454	-1.334	
871				3.956	3.956	3.956			
-- More				1.000	3.388	1.000	3.388	3.788	
501	13.278		3.956	3.956	3.956	3.956			
885				3.956	3.956	3.956			
478	14.716	1	3.956	-6.937	-7.365	1.585	-1.135	-1.452	17.
896				3.956	3.956	3.956			
338	5.781	1	3.956	-5.048	-10.635	1.814	-5.372	-15.680	18.
877				3.956	3.956	3.956			
450	-32.612	1	3.956	-24.507	8.155	-1.052	-17.740	-16.491	-23.
898				3.956	3.956	3.956			
488	56.751	1	3.956	-32.074	24.276	-1.075	-4.543	-7.376	-37.
879				3.956	3.956	3.956			
952				5.440	1.478	-1.094	1.908	2.919	3.
700				3.956	3.956	3.956			
572	182	1	3.956	-1.958	-2.500	1.000	1.645	-3.585	
701				3.956	3.956	3.956			
697	289	1	3.956	1.717	-1.572	1.018	0.521	-1.255	
882				3.956	3.956	3.956			
-- More									
-- More				1.096	-1.412	-1.370	4.000	-1.31	
423	507		3.956	3.956	3.956	3.956			
883				3.956	3.956	3.956			
	781	1	3.956	1.059	-4.132	-1.340	0.532	-4.273	
				3.956	3.956	3.956			

$$y = 14.82$$

$$x = 12.45$$

$$y = 14.98$$

$$x = 12.45$$

.824	-1.175	-6.727	-1.37
7.954	7.954	7.954	7.954
1.336	.419	-10.761	-1.132
7.954	7.954	7.954	7.954
15.412	2.367	-8.512	.07
7.954	7.954	7.954	7.954
.624	-1.409	-7.743	.014
7.954	7.954	7.954	7.954

776	-2.128	24.
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-5.432	-4.457
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4.12 T. СТОМАНА ЗА НАДЪЛЪЖНА АРМИРОВКА
 71.25 КГ СТОМАНА ЗА 1 М3 БЕТОН
 57.89 М3 БЕТОН

Ц Е С С И
СОФИЯ
пл. ЛЕНИН 6

С Л Я В А Н Е С Т А Т И Ч Е С К О И З Ч И

абсциса на линията	начална ордината	крайна ордината	ВИД ПОДПРАВАНЕ	
			свободно	завъзвено
0.15	0.00	1.85	свободно свободно свободно	
0.15	14.06	15.94		
19.34	11.24	14.98		

данни за подпрени точки

абсциса на точката (m)	ордината на точката (m)
6.00	0.15
12.32	0.15
15.70	0.15
19.43	2.50
20.62	6.33
21.80	9.60
22.40	14.60
6.00	11.23
12.45	11.23
0.15	11.23
6.00	15.74
12.15	15.74

данни за натоварването на плочата

Отместване по ос X на центъра O1 на коор.система O1x1y1 за товарите.
Отместване по ос Y на центъра O1 на коор.система O1x1y1 за товарите.
Съв. брой на състоянията на натоварване.....
Състояния на натоварване от земотрес.....

00
00
1
0

товарни печати

символи на товара	координати на центъра на печата		размер на печата	
	абсциса (m)	ордината (m)	по ос X (m)	по ос Y (m)
3	6.29	15.74	12.59	0.15
	14.35	14.63	3.58	0.25
	22.40	13.24	0.25	3.48
4	21.85	10.43	0.25	2.00
5	20.67	7.77	0.25	3.29
6	19.48	3.89	0.25	4.46
7	18.41	1.81	2.48	0.25
8	17.00	0.83	0.25	1.65
9	8.58	0.15	7.77	7.77

10	0.15	7.97	0.25	15.94
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ВЕРТИКАЛНИ ТОВАРИ

ОЗНАЧЕНИЕ НА ТОВАРА	СТОЙНОСТ НА ТОВАРА (КН)	СЪСТОЯНИЕ НА НАТОВАРВАНЕ
1	187.00	1
2	54.00	1
3	53.00	1
4	32.00	1
5	50.00	1
6	67.00	1
7	38.00	1
8	25.00	1
9	258.00	1
10	239.00	1

W1 ЗОНИ С РАЗПРЕДЕЛЕН ТОВАР

ПРЪВЪРЪГЪЛНА ОБЛАСТ ОГРАНИЧЕНА ОТ ЛИНИИТЕ:				РАВНОМ. ЕВЪФ. ТОВАР	СЪСТО- ЯНИЕ
АБСЦИСА ДЪЛ. РЪБ (m)	АБСЦИСА ДЕСЕН РЪБ (m)	ОРДИНАТА ДОЛЕН РЪБ (m)	ОРДИНАТА ГОРЕН РЪБ (m)	(КН. m²)	№.
0.00	22.63	0.00	15.94	11.20	1

W1 КОМБИНАЦИИ ОТ СЪСТОЯНИЯТА НА НАТОВАРВАНЕ

КОМС. №.	НОМЕРА НА СЪСТОЯНИЕ И Я ПОЗИЦИИ НА ЧАСТИТЕ									
	СЪСТ	ЕВЪФ.	СЪСТ	ЕВЪФ.	СЪСТ	ЕВЪФ.	СЪСТ	ЕВЪФ.	СЪСТ	ЕВЪФ.
1	1	1.00								

W1 ДАННИ ЗА ОРАЗМЕРЯВАНЕ НА ПЛОЧАТА

КЛАС НА БЕТОНА ПО ЯКОСТ НА НАТИСК,	25
РАЗСТОЯНИЕ ОТ Ц.Т. НА ДОЛНА (ГОРНА) АРМИРОВКА ДО ДОЛЕН (ГОРЕН) РЪБ ПЛОЧА m	0.15
КОЕФИЦИЕНТНО СЪПРОТИВЛЕНИЕ НА НАДЛЪЖНАТА АРМИРОВКА,	420
Минимален процент на армиране на плочата,	0.20

ОПРЕДЕЛЕНИЕ

СРЕДНЕЙ ТЕПЛОТЫ

НМ

НМ

СМ2-М

ОПРЕДЕЛЕНИЕ

ОПРЕДЕЛЕНИЕ

НМ НМ НМ НМ НМ НМ НМ

1 1,100 1,805 2,161 -1,023 3,254 4,646
755 5,574 5,574 5,574 5,574

1 5,100 -1,132 3,666 51
1,887 5,574 5,574 5,574 5,574

НМ

4 4,100 1,500 -1,136 754 41,255 -1,136 44
1 5,574 5,574 5,574 5,574

$y=0$

1,580 7,039 5,574 -13,607 1,580 5,574 5,574
X = 2.93

12 12,775 12,372 -2,276 12,053 5,079 2
7,372 5,574 5,574 5,574
X = 4.32

12,525 -1,224 5,079 -1,224 90
5,574 5,574 11,079 5,574
X = 6

1 7,527 2,531 15,250 4,340 52,47
1,509 5,574 5,574 5,574

5,257 1,287 4,473 5,257 51,025
1,257 5,574 5,574 5,574
X = 8.96

11,009 -1,057 -12,773 2,795 20,115
7,175 5,574 5,574 5,574
X = 10.47

77,785 -5,289 -17,834 1,412 -1,580
5,574 5,574 12,300 5,574
X = 12.15

82,585 1,212 -9,955 8,71 75,540 -8,344
5,574 5,574 12,155
X = 12.32 78.

Moran 11.265 17,900 2. 448 31.245

50	-8.715	5.574	5.574	5.574	5.574			
1		17.821	30.276	18.620	2.344	4.000	57.096	-38
52	19.452	5.574	5.794	5.574	5.574	X=17.4Y		
1		1.273	5.535	-2.218	547.612	-1.04	3.220	
53	7.750	5.574	5.574	5.574	5.574			
1		1.974	.919	-4.142	549.428	2.10		
54		5.574	5.574	5.574	5.574			
1		1.905	-2.864	1.114	547.614	-9.866		
55	172	5.574	5.574	5.574	5.574			
1		2.125	10.939	-2.105	550.541	-8.220	495	3.
56	204	5.574		5.574	5.574			
1		1.105	7.300	7.125	-1.774	-5.11	10.425	
57		5.574	5.574	5.574	5.574			
1		7.261	.732	7.934	.000	.564	6.936	
58	-7.202	5.574	5.574	5.574	5.574			
25								
Moran								

$Y = 1.66$

1		1.829	49.257	-9.371	7.554	-12.011	19.725	
59		5.574	1.985	5.574	5.574	X=12.32		
1		11.842	44.017	-2.551	7.429	17.791		
60		5.574	5.961	5.574	5.574			
1		5.281	27.274	-4.631	7.023	-10.214		
61		5.574	5.574	5.574	5.574			
1		24.223	-1.507	7.139	-11.280			
62		5.574	5.574	5.574				
1		20.604	-2.711	7.640	-1.256	24.193		
63		5.574	5.574	5.574				
1		3.246	0.408	10.569	46.170			
64		5.574	5.574	5.574				
1		515.615	5.578.620	30.454	30.081			

80

1		572	8.486	5.574	5.574	X=17		
65								
1		79.411	45.262	34.135	8.537	167.545	778	
66		14.039	9.742	5.574	5.574	X=17.1Y		
1		21.746	-5.936	3.828	-1.434	25.575	106	
67		5.574	5.574	5.574	5.574			
1		7.172	-1.552	-2.301	-2.261	4.891	-2.85	
68		5.574	5.574	5.574	5.574			

80.

432	90	3.501	5.574	5.574	5.574	5.574		
431	91	101.008	5.574	98.937	5.574	482.616	-1.850	78.807
431	92	105.296	5.574	99.831	5.574	484.809	-4.257	94.287
417	93	106.461	5.574	100.144	5.574	485.053	-4.715	73.828
-- More --								
978	14	108.005	5.574	100.200	5.574	485.908	-8.732	92.378
117	15	116.795	5.574	102.739	5.574	487.713	24.915	27.208
101	16	125.637	5.574	107.076	5.574	490.000	7.191	45.758
277	17	134.530	5.574	115.435	5.574	492.874	27.850	22.0
			5.574	119.602	5.574	496.400	23.291	11.18
			5.574	125.112	5.574	500.408	8.138	5.855
			5.574	131.858	5.574	504.777	-19.200	30
			5.574	138.883	5.574	509.526	25.	
More --								
708		147.807	5.574	147.807	5.574	514.616		
524		157.147	5.574	157.147	5.574	519.194	11.208	17.794
31		166.545	5.574	166.545	5.574	524.367	29.770	42.
708		175.991	5.574	175.991	5.574	529.178	55.855	28.978
		185.475	5.574	185.475	5.574	534.633	93.240	42.931
472		195.022	5.574	195.022	5.574	540.740	-12.832	18.862
812		204.647	5.574	204.647	5.574	547.490	-8.858	15.069
443		214.348	5.574	214.348	5.574	554.893	-2.11	20.869
More --								

$$y = 1.66$$

$$X = 22.40$$

$$X = 22.40$$

$$X = 22.78$$

$$y = 1.85$$

$$X = 22.63$$

$$X = 0$$

$$X = 0.15$$

$$X = 17$$

$$X = 17.17$$

y=185

505	117.567	117.567	111.049	-7.518	473.652	-2.138	198.537	
107		5.574	14.707					
265	117.552	117.552	112.655	-5.477	475.668	-3.728	198.550	
103		5.574	15.229					
684	118.444	118.444	112.291	-6.153	476.417	-4.424	198.132	
134		5.574	15.471					
267	122.344	122.344	115.780	-6.564	476.971	-7.559	198.416	
125		5.574	16.092					
802	-25.754	-25.754	-7.654	18.106	477.117	17.398	19.446	18
		5.574	5.574					
578	-17.477	-17.477	1.979	19.022	477.627	17.64		
		5.574	5.574					
		21.950	9.748	16.456	5.754	24.450	22.246	
		5.574	5.574	5.574	5.574			
		22.516	22.019	-3.497	8.	208	18.576	25.
		5.574	5.574	5.574	5.574			
207	47.277		1898	5.574	5.574			
137								
742	48.781	-6.212	41.808	-7.553	9.332			
133		5.574	5.845	5.574	5.574			
208	48.302	-5.543	41.411	-6.051	9.350			
137		5.574	5.678	5.574	5.574			
985	44.344	5.702	36.481	-6.257	10.279			
14		5.574	5.574	5.574	5.574			
791		10.512	24.740	-2.428	11.26			
191		5.574	5.574	5.574	5.574			
211		26.519	30.998	3.357	11.401			
147		5.574	5.574	5.574	5.574			
751		41.985	24.901	6.254	10.687	42.247	21.915	25.
147		5.732	5.574	5.574	5.574			
875	18.574	55.000	24.347	8.770	10.853	24.375	22.115	40
148		5.735	5.574	5.574	5.574			
800								
889	-32.653	13.072	-44.036	-11.105	4.000	-24.142	-55.125	
145		5.574	5.574	5.574	5.574			
629	-33.652	-5.740	-44.061	-10.429	-5.311	-20.129	54.510	
146		5.574	5.574	5.574	5.574			
728	38.500	1.740	46.020	-10.468	-1.359	-12.206	50.490	5.
152		5.574	5.574	5.574	5.717			
770	144.217	1.347	141.386	-3.761	440.709	2.671	30.405	7.
157		5.574	19.829	5.574	5.574			
		252	142.237	-3.757	442.871		23.100	82.
		5.574	5.574					

y=2150

X=22

x=22.40

X=22.48

x=22.63

X=17.14

X=19.43

X=19.48

X=19.65

X=22

x=22.7477

154		2.484	142.574	$y = 2.50$	443.341	-2.762	748	5.
171	145.70	5.574	20.073	5.574	5.574	$x = 22.48$		
155								
225	146.87	5.574	143.315	-2.478	444.255	-2.760	29	
156		5.574	20.282	5.574	5.574	$x = 22.63$		
319		5.574	27.897	15.828	1.527	16.133		
- - Nor		5.574	5.574	5.574	5.574			

		1.620	26.031	$y = 3.89$	-8.231	13.290	23.108	17.099	24.
		5.574	5.574	5.574	5.574				
		4.472	21.453	-8.575	13.930	25.873	12.674	43.	
		5.574	5.574	5.574	5.574				
		1.744	22.076	-13.061	13.743	26.843	9.015	55.	
		5.527	5.574	5.574	5.574	$x = 17.19$			
	45.452	12.216	36.739	-14.713	8.374	-2.477	13.928	24	
		5.574	5.574	5.574	5.574				
		5.508	30.215	10.852	4.257	-5.445	17.562		
	54.7	5.574	5.574	5.574	5.574				
		3.878	33.266	-10.577	3.426	-7.181	32.609		
973	45.344	5.574	5.574	5.574	5.574				
102									
		5.63	125.416	-3.454	369.272	-3.171	121.962		
717	126.370	574	17.158	5.574	5.574	$x = 22$			
134									
		1.764	125.782	-1.512	171.433	-1.147	124.		
876	127.254	5.574	16.897	5.574	5.574	$x = 22.7$			
- - More - -									

105									
		488	125.937	-2.752	371.419	-2.265	125.185		
218	26.487	5.574	16.798	5.574	5.574	$x = 22.48$			
136									
			26.777	16.93	372.859	1.369			
247	26.794	5.574	16.926	5.574	5.574	$x = 22.63$			
137									
		1.390	12.785	10.037	1.167	10.327	22.822		
		5.574	5.574	5.574	5.574				
		4.447	11.573	10.785	1.296	4.822			
		5.574	5.574	5.574	5.574				
		2.110	3.971	13.209	2.366				
		5.574	5.574	5.574	5.574				
		1.313	-1.219	5.143	3.332	1.451	3.524		
		5.574	5.574	5.574	5.574				
		3.586	9.431	6.560	4.546	1.021	15.691		
		5.574	5.574	5.574	5.574				
		7.725	7.350	-7.954	7.276	1.781	-7.694		

954	41.351	1	45.845	$y = 4.92$	2.348	-3.240	50.378	121
214			<u>2.942</u>	5.574	5.574	$x = 19.65$		
550	11.204	1	51.821	-2.413	208.020	-3.274	54.408	
215			<u>7.326</u>	5.574	5.574	$x = 22$		
471	54.899	1	58.018	1.120	288.251	1.787	59.147	
216			<u>7.057</u>	5.574	5.574	$x = 22.7$		
761	55.437	1	50.117	1.640	388.731	2.519	59.757	
217			<u>7.135</u>	5.574	5.574	$x = 22.78$		
723	55.444	1	50.628	3.164	289.443	3.445	61.812	
218			<u>7.401</u>	5.574	5.574	$x = 22.63$		
170	43.397	1	-1.630	-38.938	9.529	6.22	14.380	
219			<u>5.574</u>	5.574	5.707	7.925		
750		1	-4.460	-29.407	18.327	4.443	-71.083	
220			<u>5.574</u>	5.574	5.574	3.600		
- More			-74.931	4.960	.150	-2.730	-29.94	122

649	-39.891		5.574	5.574	5.574	5.574		
221								
561	-45.614	1	-9.201	-39.854	5.880	.250	-1.541	14.734
222			<u>5.574</u>	5.574	5.574	5.574		
795	-37.516	1	68.712	-60.44	37.073	.770	-71.629	239
223			<u>5.574</u>	5.574	<u>12.520</u>	<u>12.257</u>	$x = 4.32$	305
			5.574	-18.704	-5.075	4.214	17.470	-27.770
			<u>5.574</u>	5.574	5.574	5.574		
			5.574	-2.267	3.432	5.949	30.255	2.816
			<u>5.574</u>	5.574	5.574	5.574		
			17.475	-28.925	6.637	3.704	20.174	20.270
			<u>5.574</u>	5.574	5.574	5.574		
			75.503	-64.041	-35.327	.408	-112.430	-199.770
			<u>5.574</u>	5.574	<u>14.532</u>	<u>12.803</u>	$x = 40.45$	-38
842		1	-7.373	38.211	2.670	.446	-4.803	-35.54
226			<u>5.574</u>	5.574	5.574	5.574		
- More								

5.574	-38.757	2.353	.450	-3.320	34.444	-3.
<u>5.574</u>	5.574	5.574	5.574			
49261	-40.374	3.301	.451	-1.760	-17.474	
<u>5.574</u>	5.574	5.574	5.574			
7753	-58.413	10.300	.447	4.347	-47.913	-17.
<u>5.574</u>	5.574	5.574	5.574			
16.728	-63.300	55.514	.548	-46.614	-16.750	-161
<u>5.574</u>	5.574	<u>20.125</u>	<u>15.687</u>	$x = 13.15$		
2.650	-70.431	-12.010	4.975	-2.953	-42.373	84.

28.937	7.333	-8.788	10.115	20.021	.38
5.574	5.574	5.574	5.574		
32.250	14.507	-7.279	11.930	24.971	7.22
5.574	5.574	5.574	5.574		
8.882	20.978	-7.403	12.885	31.458	13.573
5.574	5.574	5.574	5.574		46.

$$y = 6.13$$

42.130	22.107	-19.101	12.933	32.026	12.474	51.
5.574	5.574	5.574	5.574	$x = 18.18$		
45.647	-5.398	5.775	7.817	51.424	.489	29.
5.574	5.574	5.574	5.574	$x = 19.43$		
42.691	-6.397	-2.125	7.358	40.517	-9.172	44.
5.574	5.574	5.574	5.574	$x = 19.48$		
38.323	-22.147	3.987	8.443	92.795	-18.180	84.
5.574	5.574	5.574	5.574	$x = 19.65$		
36.038	4.158	-23.498	-5.512	-61.535	-10.2	
5.574	5.574	5.574	5.574	$x = 20.62$		
32.008	.541	-15.822	-1.678	-47.2	16.2	
5.574	5.574	5.574	5.574			
2.588	2.706	-9.624	-1.742			
5.574	5.574	5.574	5.574			
	75.940	-3.231	192.474	-3.34		

$$y = 6.33$$

051	51.158	-91.464	-92.572	-41.613	.000	127.07	.528	-57.
294		5.574	5.574	18.864	18.818	$x = 4.32$		
245	-10.325	75.257	-18.510	-5.088	3.817	30.18	.578	
296		5.574	5.574	5.574	5.574			
482	-8.570	-2.823	-5.017	-5.809	5.588	26.17	1.40	
255		5.574	5.574	5.574	5.574			
246		24.943	-24.723	2.847	2.488		18.	29.
257		5.574	5.574	5.574	5.574			
157	-1.768	158	-97.327	56.441	.000	-53.71	42.	157.
158		574	5.574	12.511	20.812	$x = 10.45$		
084	.174	223	-31.817	3.558	.000	-2.78	28.	14.
257		574	5.574	5.574	5.574			
		152	-35.913	1.822	.000	-5.88	14.390	13.
		574	5.574	5.574	5.574			
		080	-35.331	4.351			10.780	
		574	5.574	5.574	5.574			

NO. 6

353	-23.094								
354	-23.094								
355	-23.094								
356	-23.094								
357	-23.094								
358	-23.094								
359	-23.094								
360	-23.094								
361	-23.094								
362	-23.094								
363	-23.094								
364	-23.094								
365	-23.094								
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376	-23.094								
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380	-23.094								
381	-23.094								
382	-23.094								
383	-23.094								
384	-23.094								
385	-23.094								
386	-23.094								
387	-23.094								
388	-23.094								
389	-23.094								
390	-23.094								
391	-23.094								
392	-23.094								
393	-23.094								
394	-23.094								
395	-23.094								
396	-23.094								
397	-23.094								
398	-23.094								
399	-23.094								
400	-23.094								

$$y = 6.33$$

$$x = 1315$$

$$x = 1965$$

$$x = 2016$$

$$x = 2202$$

$$x = 2240$$

328	-46.736	5.574	-41.228	5.574	-1.079	-2.534	-35.72	
284		5.574	5.574	5.574	5.574			
340	-35.045	5.574	-75.047	5.574	-41.004	-1.427	-122.048	-117.05
285					<u>15.044</u>	<u>15.251</u>	$\cdot X = 4.32$	
More --	1	23.770	-19.131	7.357	3.658	34.13		19.

$$y = 6.42$$

403	-24.498	5.574	5.574	5.574	5.5			
286								
169	-35.547	5.574	5.574	5.574	5.574	5.401	21.998	714
287								
167	-77.216	5.574	5.574	5.574	5.574	3.327	24.282	994
288								
6-1	-171.712	5.574	5.574	5.574	5.574	-1.158	-39.740	34
289								
345	-36.219	5.574	5.574	5.574	5.574	-2.934	-4.172	-42.000
290								
977	-42.252	5.574	5.574	5.574	5.574	2.771	-5.172	-4.394
291								
166	-45.904	5.574	5.574	5.574	5.574	-1.173	.845	-34
292								
416	-31.115	5.574	5.574	5.574	5.574	6.431	-1.179	17.272
293								
Mar								

$$x = 10.45$$

HELOC 1-7-79	294	-57.414	-80.828	-1.171	-205.128	1.7.740	
294							
	171	-30.758	-7.356	4.346	.985	-49.	
	574	5.574	5.574	5.574			
45	11.001	5.574	5.574	5.574	5.574	20.534	.570
250	19.050	5.574	5.574	5.574	5.574	26.050	7.071
		18.178	-7.415	12		317	19.762
		5.574	5.574	5.574	5.574		45.
		23.100	13.410	-7.482	12.005	30.884	11.126
		5.574	5.574	5.574	5.574		45.
		24.570	4.135	-13.961	7.612	25.209	-4.625
		<u>2.340</u>	5.574	5.574	5.574	$\cdot X = 19.43$	
	41	2.387	-11.954	7.438	29.379	-6.578	5

$$x = 19.48$$

240	15.754	5.574	5.574	5.574			
761							

		51.736	-14.248	-4.212	-5.537	-18.854	-38.730	72
277	8,114	<u>5.574</u>	5.574	5.574	5.574	$x = 19.65$		
302	1	4,262	-13,327	-23,048	245	-43	-42,144	14
781	15,451	5.574	5.574	5.574	5.574			
303	1	1,423	-17,110	-24,204	-9,094	-35.62	-41,313	12
791	9,594	5.574	5.574	5.574	5.574			
304	1	-8,600	-35,714	-23,552	-1,105	-22,212	-59,266	14
801	-12,167	5.574	5.574	5.574	<u>7,072</u>	$x = 20.8$		
307	1	-7,173	-64,467	-1,457	176,368	-4,651	-65,923	-1
737	-62,910	5.574	5.574	5.574	<u>7,237</u>	$x = 22$		
308	1	4,315	-60,127	5,782	178,616	1,44	-54,366	10
677	-65,889	5.574	5.574	5.574	<u>7,933</u>	$x = 22.4$		
314	1	4,273	-59,688	5,351	179,079	1,07	-54,337	
627	-65,039	5.574	5.574	5.574	<u>7,821</u>	$x = 22.48$		
315								
-	More							

$$y = 4.92$$

333	1	10.360	38.242	-17.372	3.939	-9.052	18.650	27.
752	57.174	5.574	<u>4.565</u>	5.574	5.574	$x = 20\%$		
774								
142	1	0.250	39.206	-15.396	3.811	-7.256	23.720	24.
335	55.423	5.574	<u>4.589</u>	5.574	5.574	$x = 20.6\%$		
423	1	11.239	42.565	-15.782	3.277	-4.142		
738	62.247	5.574	<u>7.470</u>	5.574	5.574	$x = 20.8$		

340	НЕДОСТАТОЧНО СЕЧЕНИЕ							
1	14,804	-227,157	14,805	77,893	31,091	-212,268		
2	-242,047							
341	НЕДОСТАТОЧНО СЕЧЕНИЕ							
		30,720	15,587	76,614	7,752	-216,057	-23,	
-- None --								
721	9,625	5,574	5,574	5,574	5,574			
345								
1	-7,804	-23,084	12,743	3,587	8,929	39,643	-24,	
547	6,321	5,574	5,574	5,574	5,574			
346								
1	-30,250	26,203	54,779	3,311	12,529	20,982		
43	-28,575	5,574	9,959	11,547	5,574	$x \rightarrow 20.82$		
347								
НЕДОСТАТОЧНО СЕЧЕНИЕ								
1	-528,693	-87,444	197,554	1,706	-371,145	110,116	-760	
52	-284,958							
348								
НЕДОСТАТОЧНО СЕЧЕНИЕ								
1	186,399	372,915	1216,397	1,753	826,098	4589,312	1606,6	
91	-843,482							
349								
НЕДОСТАТОЧНО СЕЧЕНИЕ								
1	-340,27	-2897,164	1128,767	2,241	388,516	-1526,375		
43	-4225,974							
350								
НЕДОСТАТОЧНО СЕЧЕНИЕ								
1	24,51	-226,956	211,677	3,044	287,187	84,740	-336	
67	-528,657							
-- None --								
НЕДОСТАТОЧНО СЕЧЕНИЕ								
1	-12,797	204,386	117,229	3,173	103,296	-85,157	-125,	
9	-328,615							
352								
НЕДОСТАТОЧНО СЕЧЕНИЕ								
1	4,031	-187,611	60,730	3,381	64,762	-122,881		
9	-248,341							
141	40,012	574	29,575	-16,317	1,863	-18,474	12,256	
354			5,574	5,574	5,574			
1	7,032	29,899	-15,973	2	-8,001	13,966	27	
965	45,522	5,574	5,574	5,574	5,574			
355								
1	519	10,505	-10,758	3,279				
133	21,277	5,574	5,574	5,574	5,574			
356								
1	512	7,100	1,411	3,322	7,922	6,51		
101	5,658	5,574	5,574	5,574	5,574			
357								
1	116	1,926	11,915	2	778	13,651	-14,	
601	-9,976	5,574	5,574	5,574	5,574			
-- None --								
1	23,173	4,543	-2,397	2,083	16,776	-1,655	29,	
570	90,546	5,574	5,574	5,574	5,574			
56		4,742	-4,828	5,602	17,70			

89.

395									
021	-1.896	13.047	19.071	21.068	3.224	34.115	49.137	-8.	
396		5.574	5.574	5.574	5.574				
180	1	19.970	25.875	30.181	3.415	52.131	67.354	12.	
397		5.143	5.189	5.574	5.574				
415	1	52.217	45.705	77.733	2.981	134.852	123.438	25.	
398	-32.029	17.254	18.268	5.574	5.574				
HEADSTATYBHO CENENHE									
05	1	-72.149	-265.475	174.585	,0000	102.425	-108.910	-248.	
399									
HEADSTATYBHO CENENHE									
400	1	-62.979	-663.878	149.932	-2.144	66.954	-613.946	-232	
401									
More	-								

HEADSTATYBHO CENENHE									
32	1	7.284	-266.980	87.767	-1.711	125.053	-174.192	-52	
404									
405	1	-41.614	-64.169	-14.767	-1.488	-174.801	70.68		
406		5.574	5.574	5.574	5.581				
407	1	0.76	-49.130	-14.257	,0000	-36.03			
408		5.574	5.574	5.574	7.603				
409	1	424	3.150	-10.404	3.932	17.048	-7.25		
410		5.574	5.574	5.574	5.574				
411	1	24.586	4.716	-4.716	5.617	19.8			
412		5.574	5.574	5.574	5.574				
413		-1.514	-8.714	5.505	3.114	26.			
414		5.574	5.574	5.574	5.574				
415		01.451	-84.718	9.945	,0000	-71.5			
416		5.574	5.574	11.418	11.827				
417		17.172	-14.540	-5.408	2.981	11.7			
More									

578	-9.135	5.574	5.574	5.574	5.574				
579									
580	1	24.137	2.210	-4.592	5.229				
417		5.574	5.574	5.574	5.574				
581	1	7.302	,088	3.405	4.332	25.807	4.293	13.	
418		5.574	5.574	5.574	5.574				
582	1	26.879	-36.499	3.871	,497	-22.707	-32.528		
419		5.574	5.574	5.574	5.574				
583	1	45.170	-48.525	4.030	,188	-41.160	44.524	-49.	
420		5.574	5.574	5.797	5.220				
421									
584	1	70.500	-73.713	7.749	,0000	-84.751	85.625	-80.	
422		5.574	5.574	9.858	10.025				
423		47.138	-49.191	8.076	-1.122	-58.157			

90.

103	-58,167	5.574	5.574	5.574	5.574	5.574	5.574	5.574	5.574
417									
	1	-12,917	-27,901	7,549	-1,277	-5,239	-20,373	-20,373	-20,373
464	-35,439	5.574	5.574	5.574	5.574	5.574	5.574	5.574	5.574
418									
Hor									
		4,764	-18,213	10,423	-1,130	15,187	5,790	-5,790	-5,790
		5.574	5.574	5.574	5.574	5.574	5.574	5.574	5.574
		15,579	-44,813	-12,287	-1,255	-27,808	57,106	-57,106	-57,106
		5.574	5.574	5.574	5.574	5.574	5.574	5.574	5.574
		74,621	-98,080	29,547	1,000	-45,100	66,532	-66,532	-66,532
		5.574	5.574	5.574	5.574	5.574	5.574	5.574	5.574
		-4,511	-47,969	21,274	1,377	18,724	28,714	-28,714	-28,714
		5.574	5.574	5.574	5.574	5.574	5.574	5.574	5.574
		1,434	-28,267	5,930	1,624	9,354			
		5.574	5.574	5.574	5.574	5.574			
982	5,290	27,808	-1,878	-7,178	4,404	22,629	9,072	-9,072	-9,072
474		574	5.574	5.574	5.574	5.574	5.574	5.574	5.574
198	16,710	27,138	-1,652	-8,011	4,037	20,1			
475		5.574	5.574	5.574	5.574	5.574	5.574	5.574	5.574
924	10,448	27,052	-3,528	-13,972	3,918	12,080	17,438	-17,438	-17,438
Hor		5.574	5.574	5.574	5.574	5.574	5.574	5.574	5.574
		808	-23,570	-19,760	2,145	-21,955	-42,149	42,149	42,149
		574	5.574	5.574	5.574	5.574	5.574	5.574	5.574
		15,045	-23,546	-21,387	2,01		-672	672	672
438		5.574	5.574	5.574	5.574	5.574	5.574	5.574	5.574
272	5,983	6,750	-28,505	-22,542	1,630	-12,772			
429		5.574	5.574	5.574	5.574	5.574	5.574	5.574	5.574
778	68,380	37,571	40,510	-25,873	-1,117	67,547			
130		5.574	7,997	7,897	5.574	5.574	5.574	5.574	5.574
		32,874	41,436	14,139	-1,354	-43,6			
		5.574	5.574	5.574	5.574	5.574	5.574	5.574	5.574
		1,530	61,943	17,738	-1,804	-17,68			
		5.574	5.574	5.574	5.574	5.574	5.574	5.574	5.574
		1,164	13,239	-3,057	-2,487	-21,241			
		5.574	5.574	5.574	5.574	5.574	5.574	5.574	5.574
901		-6,712	-1,553	-3,842	-2,573	-12,154	-5,794	5,794	5,794
470									
474									
	1	1,434	1,291	-3,503	1,84				
972		5.574	5.574	5.574	5.574	5.574	5.574	5.574	5.574

940	8.088	5.574	5.574	5.574	5.574	5.574	7.135	-4.220	22.
575	1	-5.541	.556	1.738	.391	-3.805	2.292	-7.	
572	-1.180	5.574	5.574	5.574	5.574				
572	1	30.036	-6.057	11.086	.000	19.199	5.026	-41.	
572	-17.144	5.574	5.574	5.574	5.574				
348	1	4.578	.576	6.923	-1.049				
348	-6.348	5.574	5.574	5.574	5.574				
810	1	-5.875	-1.149	5.974	-1.063	.137	4.825	-41.	
810	-7.123	5.574	5.574	5.574	5.574				
229	1	15.217	-2.817	6.732	-1.250	-8.495			
229	-9.539	5.574	5.574	5.574	5.574				
-- None --									

625	1	25.111	10.865	20.302	5.411	55.413	31.127		
507	-6.477	5.574	5.574	5.574	5.574				
					$x = 4.32$				
27.562	1	25.127	-25.366	2.196	.000	-102.933		107.	
		5.574	5.574	13.752	5.574				
					$x = 6$				
18.937	1	25.094	10.170	-18.787	4.231	6.332		47.	
		5.574	5.574	5.574	5.574				
9.486	1	42.336	4.650	-4.830	8.108	37.506		48.	
		5.574	5.574	5.574	5.574				
-4.278	1	42.950	10.078	14.356	6.577	58.7.		57.	
		5.549	5.574	5.574	5.574				
					$x = 10.45$				
71.051	1	-51.791	-15.402	19.249	.000	-23.35			
		5.574	5.574	5.495	5.574				
					$x = 12.15$				
28.470	1	-23.877	-10.711	17.766	-1.508	-4.13			
		5.574	5.574	5.574	5.574				
71.771	1	2.808	-14.619	17.732	1.017	10.86		-24.	
		5.574	5.574	5.574	5.574				

$$y = 15.84$$

$$x = 4.32$$

$$x = 6$$

$$x = 10.45$$

$$x = 12.15$$

$$y = 15.94$$

$$x = 2.93$$

$$x = 4.32$$

94.

MEI

827	1	-113.987	-1.440	2.048	35	-1	1172
480		5.574	5.574	15.214		$x=6$	
550							
1		32.100	2.400	-14.115	14		

$y=15,97$

		5.574					
	5.780	1.204	-1.440	8.092	47.926	-2.199	
		5.574	5.574	5.574			
47.048		.827	13.171	8.434	80.077	17.670	
-172		5.574	5.574	5.574			
					$x=10,45$		
92.481	-1.827	10.330	-1.707	-31.151	18.504		
5.574	5.574	8.192	5.574				
29.816	-1.200	4.395	-1.252	14.405	19.111		
5.574	5.574	5.574	5.574				
10.094	-1.082	3.308	-1.440	2.306	8.113		
5.574	5.574	5.574	5.574				
7.150	5.111	2.346	-1.787	-1.504	7.752		
5.574	5.574	5.574	5.574				

СТОМАНА ЗА НАДЛЕЖНА АРХИТЕКТУРА
СТОМАНА ЗА 1 МЗ БЕТОН
БЕТОН

100.00
50.00
Модуль = 1

Грета 2
машин

Всесия 1.1/януари 1967

(Изложение на статистическо изследване и изследване на превозните средства на територията на производни товари)

10

Всесия 1.1/януари 1967			Всесия 1.1/януари 1967			
1	2	3	4	5	6	7
Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967
Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967
Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967
Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967
Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967
Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967
Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967
Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967	Всесия 1.1/януари 1967

Общият изход

340

Общият изход

1 = -0.970
2 = -0.970
3 = -0.970

Полн # 1

М. 1967	1.1.1967	П. 1967	1.1.1967
В. 1967	-0.970	В. 1967	9.500
В. 1967	1.1.1967	В. 1967	0.000
В. 1967	1.1.1967	В. 1967	1.800

Получено

М. К. К. К.	=	-11.341
Д. К. К. К.	=	+12.388
А. М. К. К.	=	+13.384
И. М. К. К.	=	-11.341

М. К. К. К.	=	+5.000
Д. К. К. К.	=	+8.338
А. М. К. К.	=	+13.380
И. М. К. К.	=	+0.000

$m_{max} \cdot l = 93,8 \text{ kNm}$

покрытие го покрытие - $C = 31 \text{ mm}$

$d = 400 - 31 - \frac{14}{2} = 362 \text{ mm}$

$b_{wd} = 25 \cdot 36,2 = 905 \text{ cm}^2$

$m = \frac{9380}{1,13 \cdot 25 \cdot 36,2} = 0,25 - \eta = 0,849$

$A_s = \frac{9380}{36,5 \cdot 0,849 \cdot 36,2} = 8,56 \text{ cm}^2 - \frac{4 \times 18}{10,18 \text{ cm}^2}$

опора - $l = 113,4 \text{ kNm}$

$m = \frac{11340}{1,13 \cdot 25 \cdot 36,2} = 0,30 - \eta = 0,81$

$A_s = \frac{11340}{36,5 \cdot 0,81 \cdot 36,2} = 10,6 \text{ cm}^2$ +ал. $2,26 \text{ cm}^2$ $\frac{5 \times 18}{4 \times 20}$