

Osnovni podaci o modelu

Datoteka: tp pip 1.0.twp
Datum proračuna: 16.2.2011

Nacin proračuna: 3D model

- ☒ Teorija I-og reda ☐ Modalna analiza ☐ Stabilnost
☐ Teorija II-og reda ☐ Seizmicki proračun ☐ Faze gradjenja
☐ Nelinearan proračun

Velicina modela

Broj cvorova: 1240
Broj pločastih elemenata: 1206
Broj grednih elemenata: 25
Broj granicnih elemenata: 3780
Broj osnovnih slučajeve opterećenja: 2
Broj kombinacija opterećenja: 2

Jedinice mera

Duzina: m [cm,mm]
Sila: kN
Temperatura: Celsius

Ulazni podaci - Konstrukcija

Tabela materijala

No	Naziv materijala	E[kN/m ²]	μ	γ [kN/m ³]	α [1/C]	Em[kN/m ²]	μ m
1	Betoni MB 30	3.150e+7	0.20	25.00	1.000e-5	3.150e+7	0.20

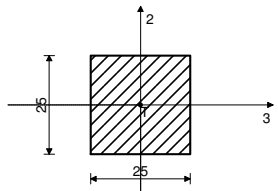
Setovi ploca

No	d[m]	e[m]	Materijal	Tip proračuna	Ortotropija	E2[kN/m ²]	G[kN/m ²]	α
<1>	0.200	0.100	1	Tanka ploca	Izotropna			
<2>	0.250	0.125	1	Tanka ploca	Izotropna			

Setovi greda

Set: 1 Presek: b/d=25/25, Fiktivna ekscentricnost

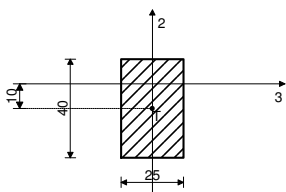
Mat.	A1	A2	A3	I1	I2	I3
1 - Betoni MB 30	6.250e-2	5.208e-2	5.208e-2	5.501e-4	3.255e-4	3.255e-4



[cm]

Set: 2 Presek: b/d=25/40, Fiktivna ekscentricnost

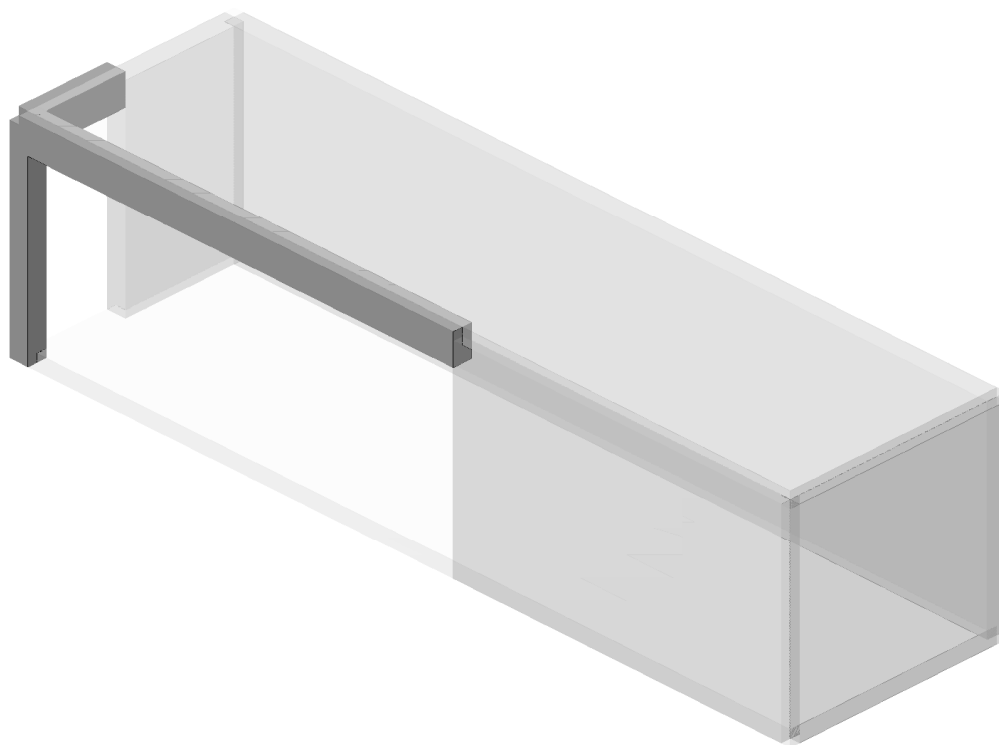
Mat.	A1	A2	A3	I1	I2	I3
1 - Betoni MB 30	1.000e-1	8.333e-2	8.333e-2	1.273e-3	5.208e-4	1.333e-3



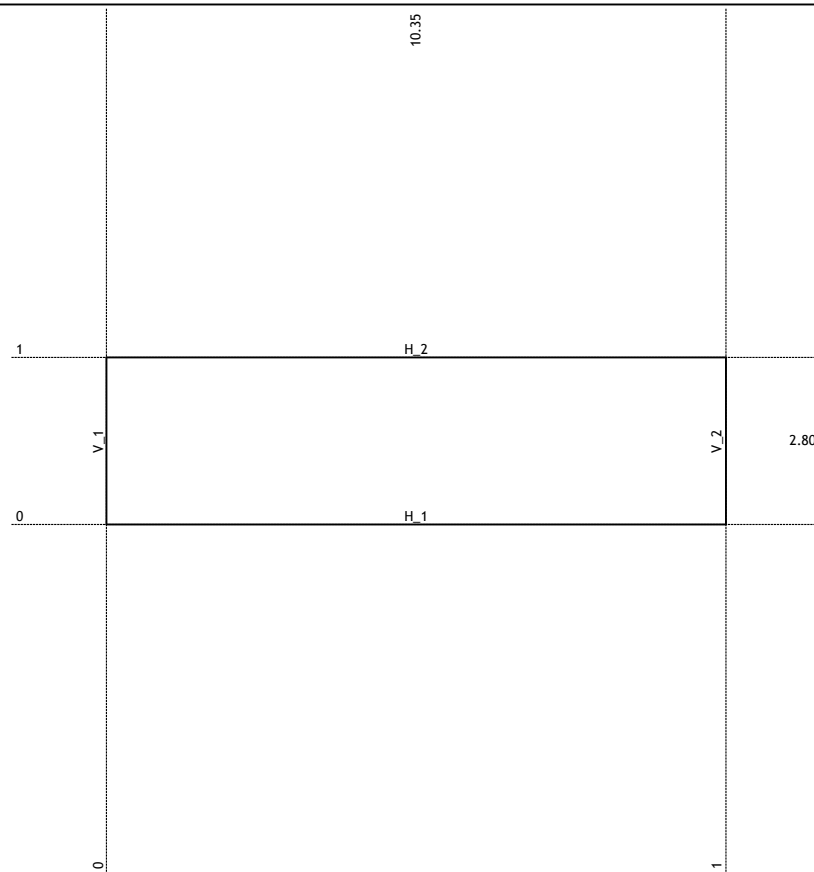
[cm]

Setovi povrinskih oslonaca

Set	K,R1	K,R2	K,R3
1	4.000e+3	4.000e+3	4.000e+3



Izometrija



Dispozicija ramova

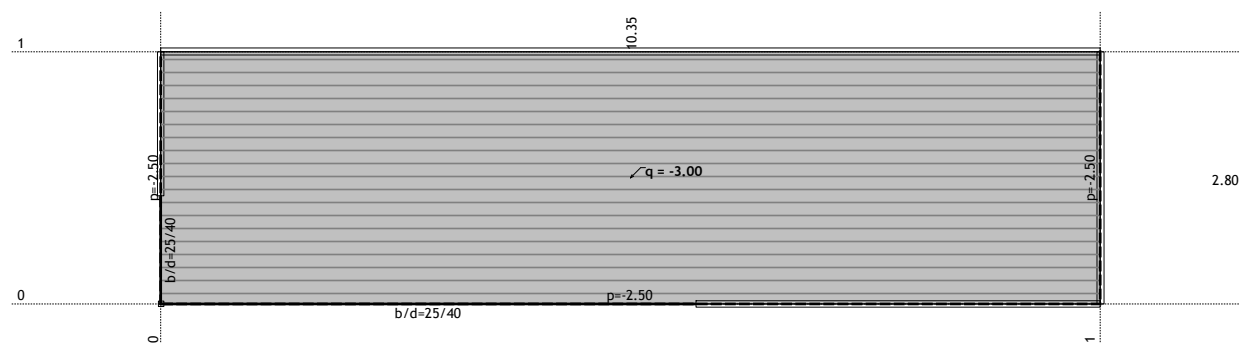
Ulazni podaci - Opterećenje

Lista slučajeva opterećenja

No	Titulli
1	g (g)
2	p

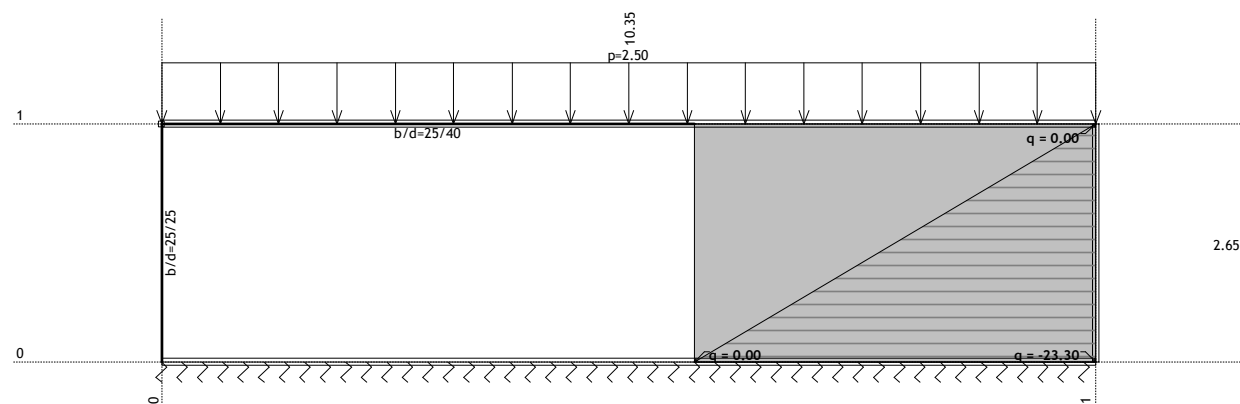
Opt. 1: g (g)

3	Komb.: I+II
4	Komb.: 1.6xI+1.8xII



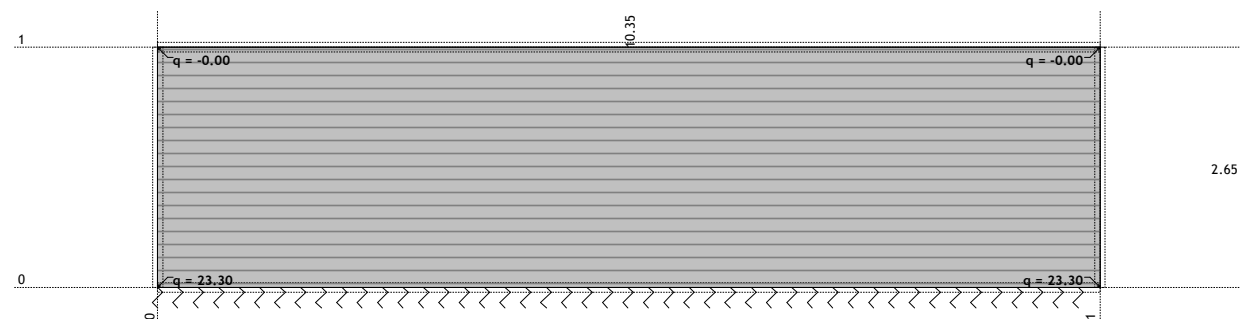
Nivo: gornja ploca [0.00 m]

Opt. 1: g (g)



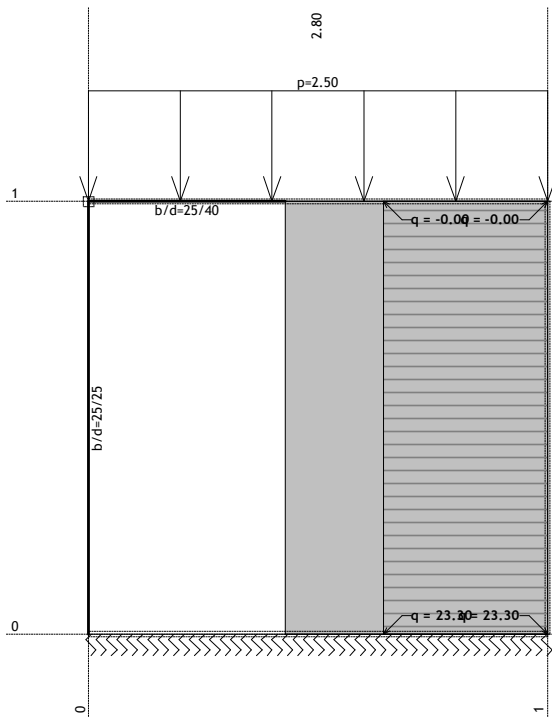
Ram: H_1

Opt. 1: g (g)

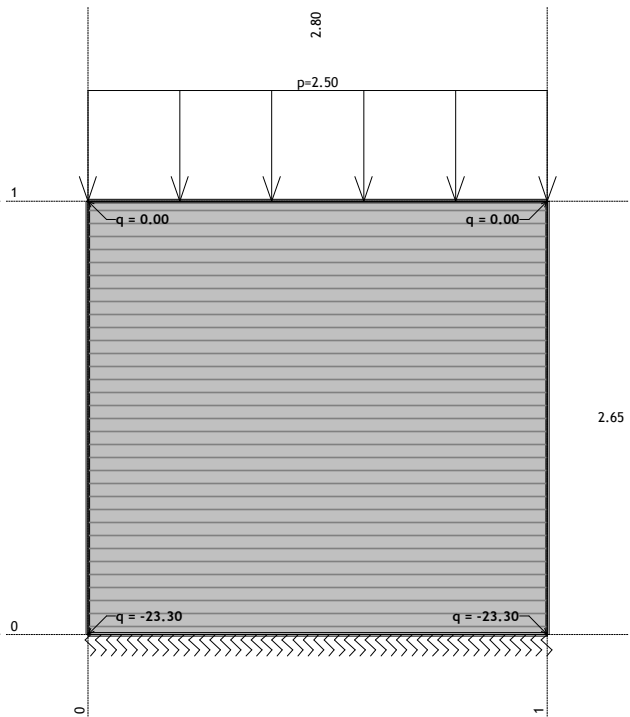


Ram: H_2

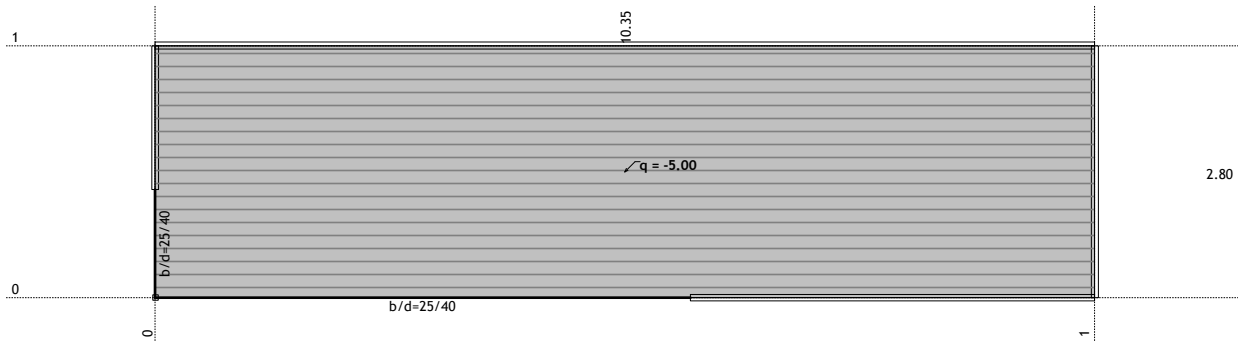
Opt. 1: g (g)



Opt. 1: g (g)

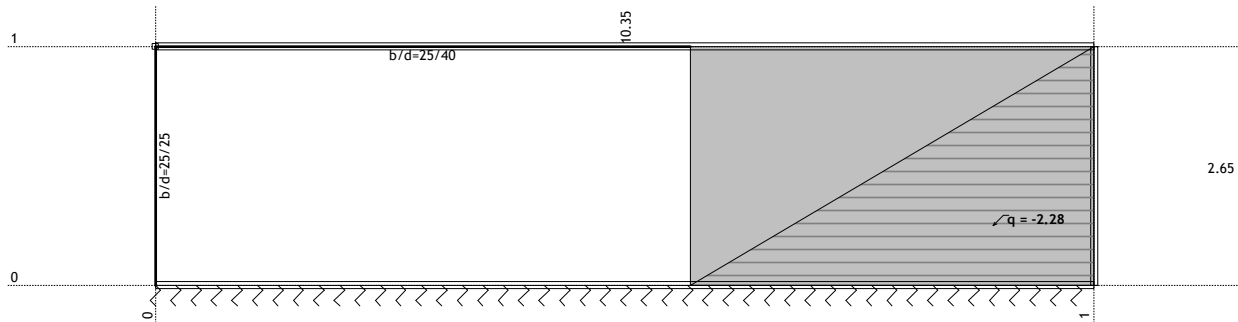


Ram: V_1
Opt. 2: p



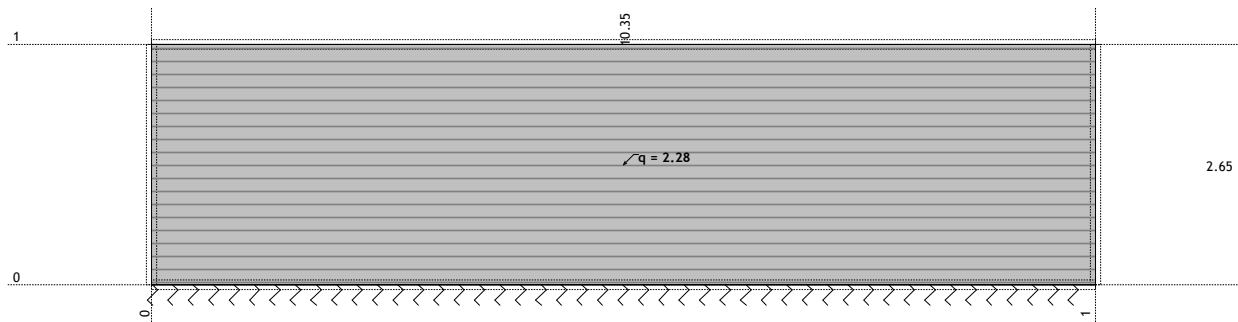
Ram: V_2

Nivo: gornja ploca [0.00 m]
Opt. 2: p

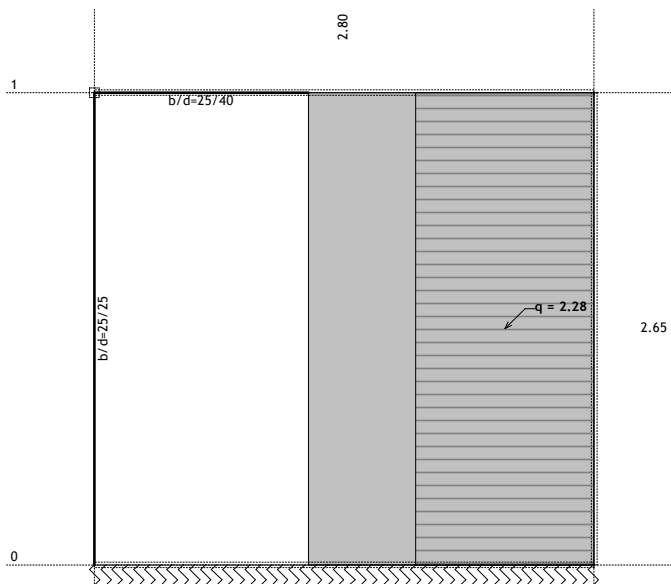


Ram: H_1

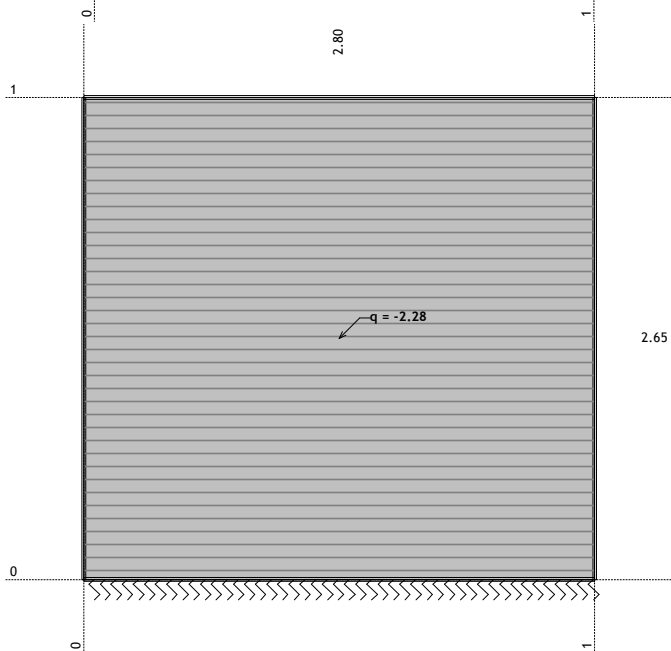
Opt. 2: p



Ram: H_2
Opt. 2: p

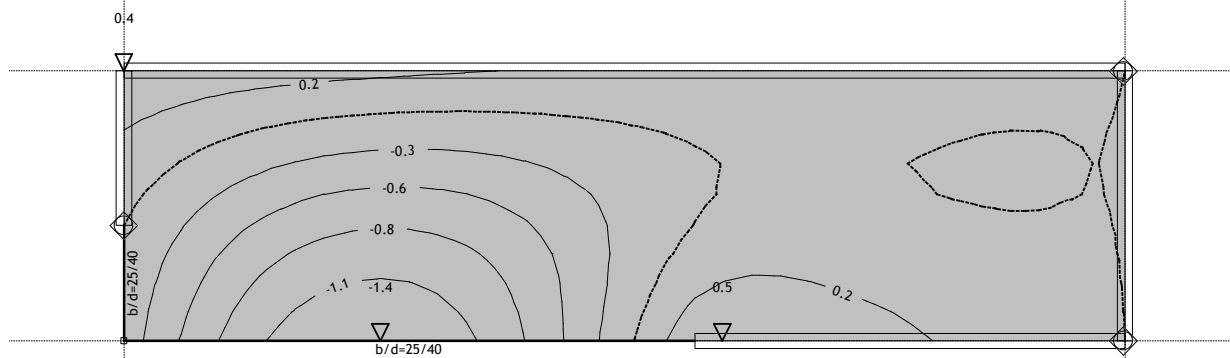


Ram: V_1
Opt. 2: p

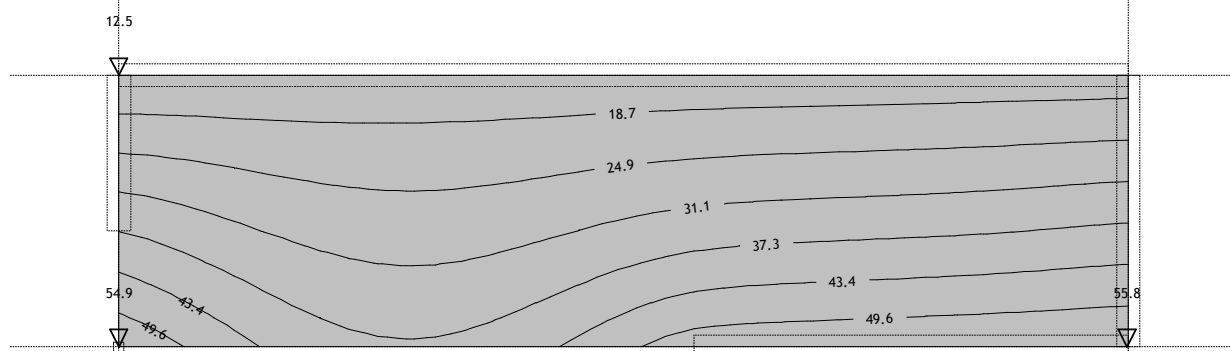


Ram: V_2

Opt. 3: I+II

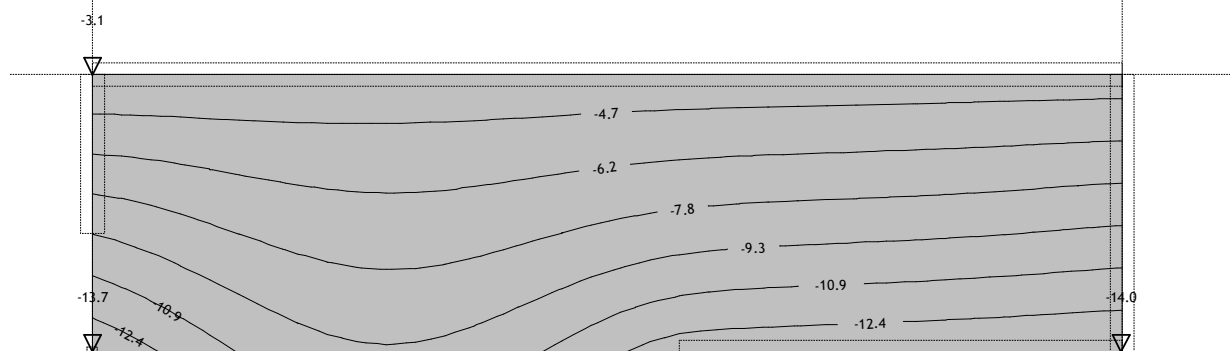


Nivo: gornja ploca [0.00 m]
Relativni ugib ploca: max $w_r = 0.5$ / min $w_r = -1.4$ m / 1000
Opt. 3: I+II



Nivo: donja ploca [-2.65 m]
Uticaji u pov. osloncu: max $\sigma_{tla} = 55.8$ / min $\sigma_{tla} = 12.5$ kN/m²

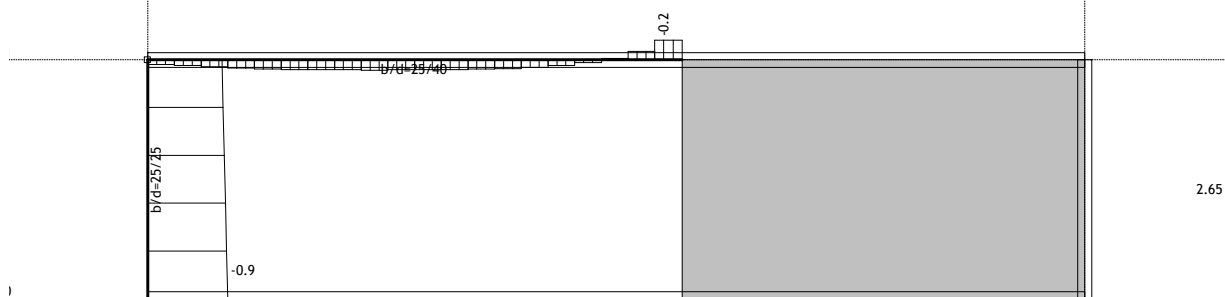
Opt. 3: I+II



Nivo: donja ploca [-2.65 m]

Uticaji u pov. osloncu: max s,tla= -3.1 / min s,tla= -14.0 m / 1000

Opt. 3: I+II

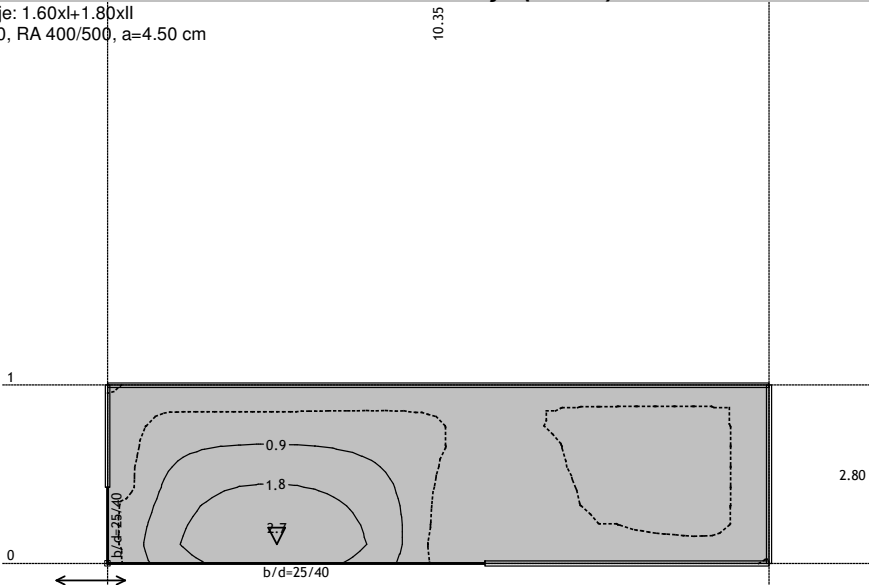


Ram: H_1

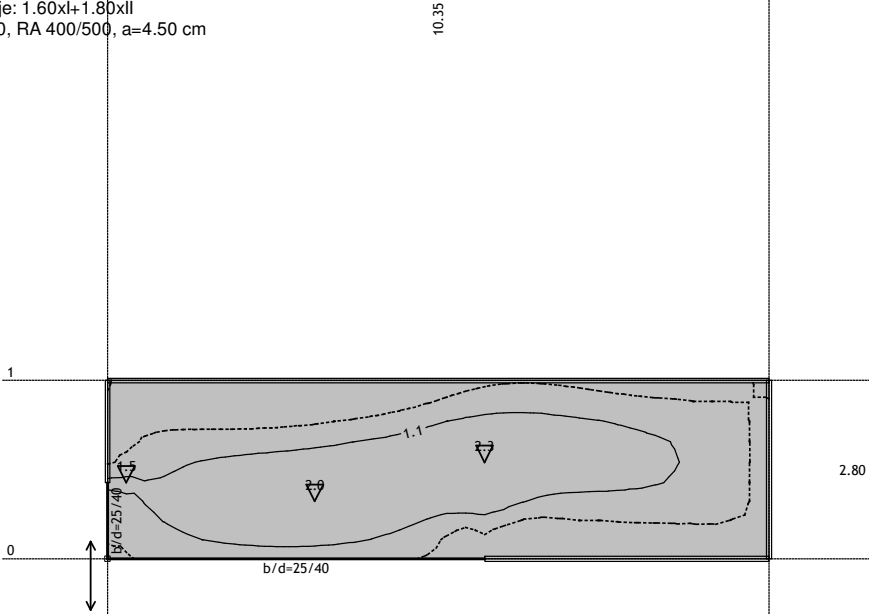
Uticaji u gredi: max σ_0 = 0.1 / min σ_0 = -0.9 MPa

Dimenzionisanje (beton)

Merodavno opterecenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500, a=4.50 cm



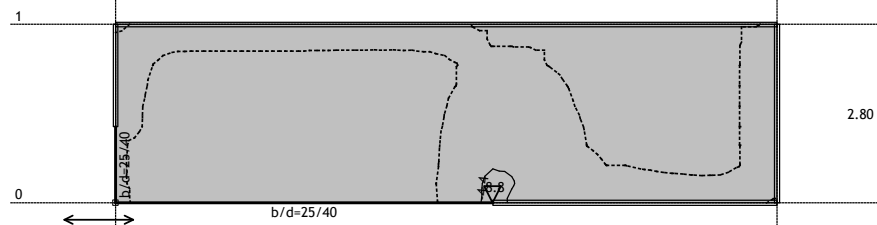
Nivo: gornja ploca [0.00 m]
Aa - d.zona - Pravic 1 - max Aa1, d= 2.7 cm2/m
Merodavno opterecenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500, a=4.50 cm



Nivo: gornja ploca [0.00 m]
Aa - d.zona - Pravic 2 - max Aa2, d= 2.3 cm2/m

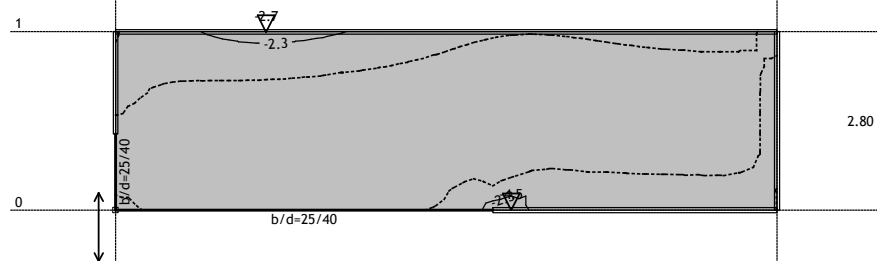
Merodavno opterečenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500, a=4.50 cm

10.35



Nivo: gornja ploča [0.00 m]
Aa - g.zona - Pravec 1 - max Aa1,g = -8.8 cm²/m
Merodavno opterečenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500, a=4.50 cm

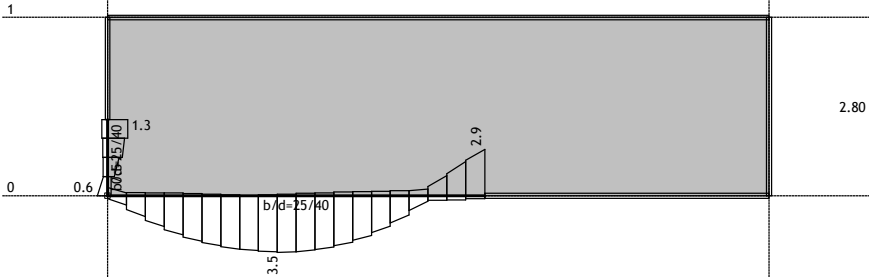
10.35



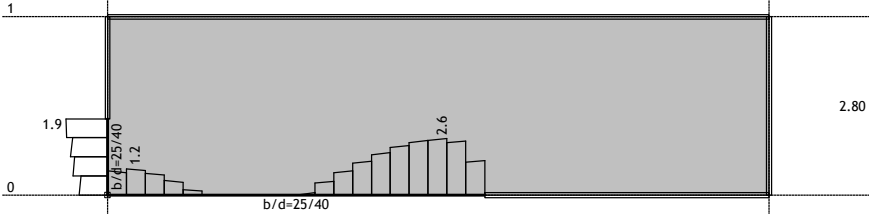
Nivo: gornja ploča [0.00 m]
Aa - g.zona - Pravec 2 - max Aa2,g = -4.5 cm²/m

1

Merodavno opterećenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500



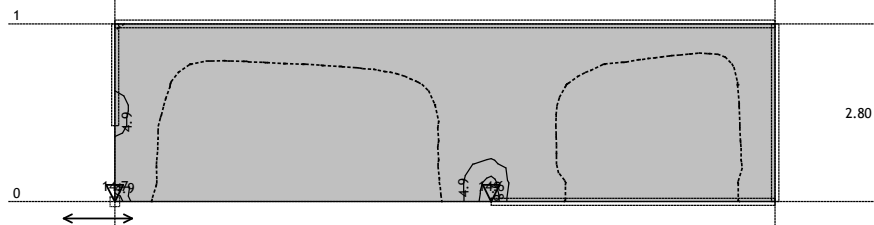
Nivo: gornja ploca [0.00 m]
Armatura u gredama: max $A_{a2}/A_{a1}=3.6$ cm²
Merodavno opterećenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500



Nivo: gornja ploca [0.00 m]
Armatura u gredama: max $A_{a,uz}=2.6$ cm²

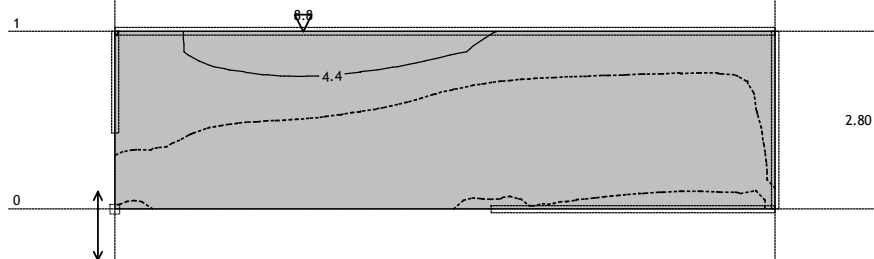
Merodavno opterečenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500, a=4.50 cm

10.35



Nivo: donja ploča [-2.65 m]
Aa - d.zona - Pravac 1 - max Aa1, d= 14.7 cm2/m
Merodavno opterečenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500, a=4.50 cm

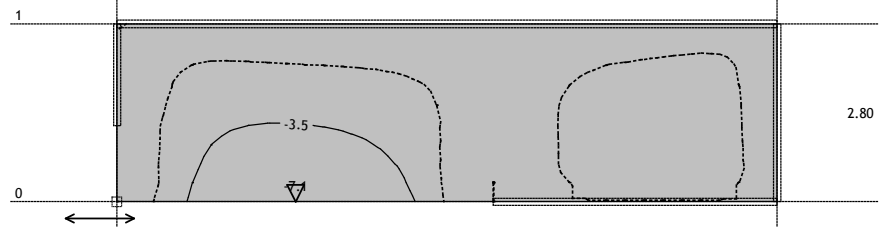
10.35



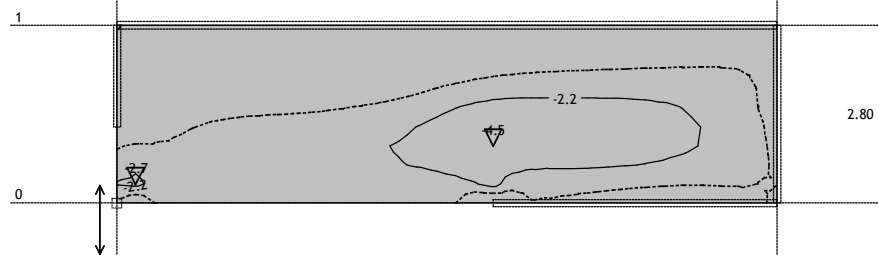
Nivo: donja ploča [-2.65 m]
Aa - d.zona - Pravac 2 - max Aa2, d= 8.8 cm2/m

1

10.35



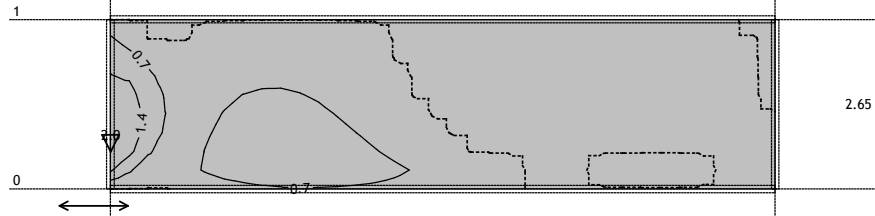
10.35



1

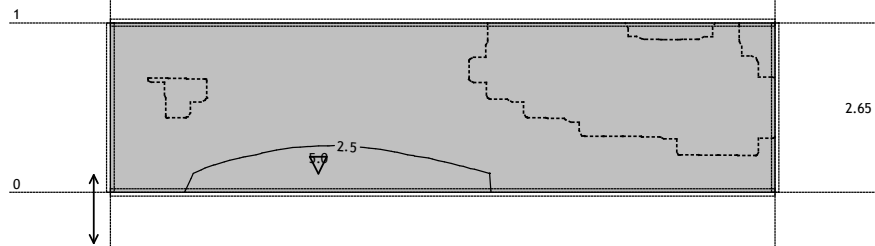
Merodavno opterečenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500, a=4.50 cm

10.35



Ram: H_2
Aa - d.zona - Pravec 1 - max Aa1, ϕ = 2.0 cm²/m
Merodavno opterečenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500, a=4.50 cm

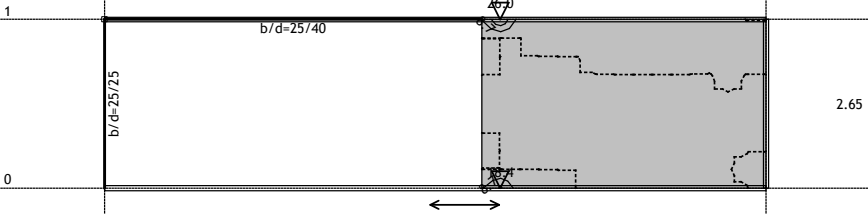
10.35



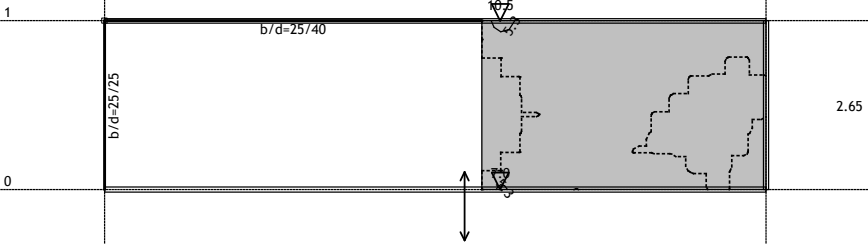
Ram: H_2
Aa - d.zona - Pravec 2 - max Aa2, ϕ = 5.0 cm²/m

1

Merodavno opterečenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500, a=4.50 cm

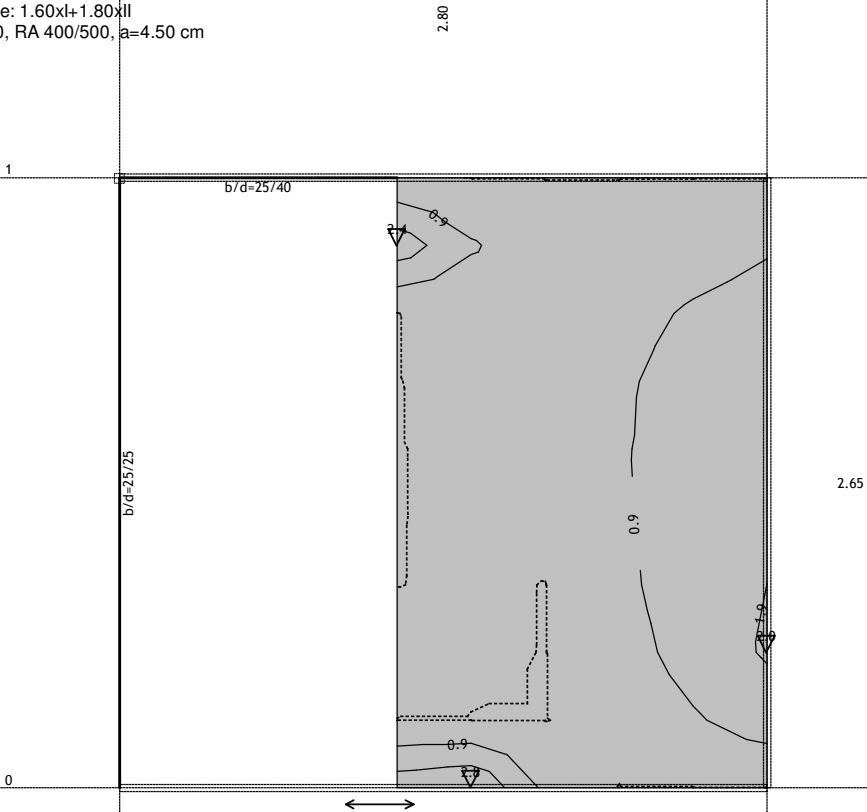


Ram: H_1
Aa - d.zona - Pravec 1 - max Aa1, $\sigma_s = 26.0$ cm²/m
Merodavno opterečenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500, a=4.50 cm

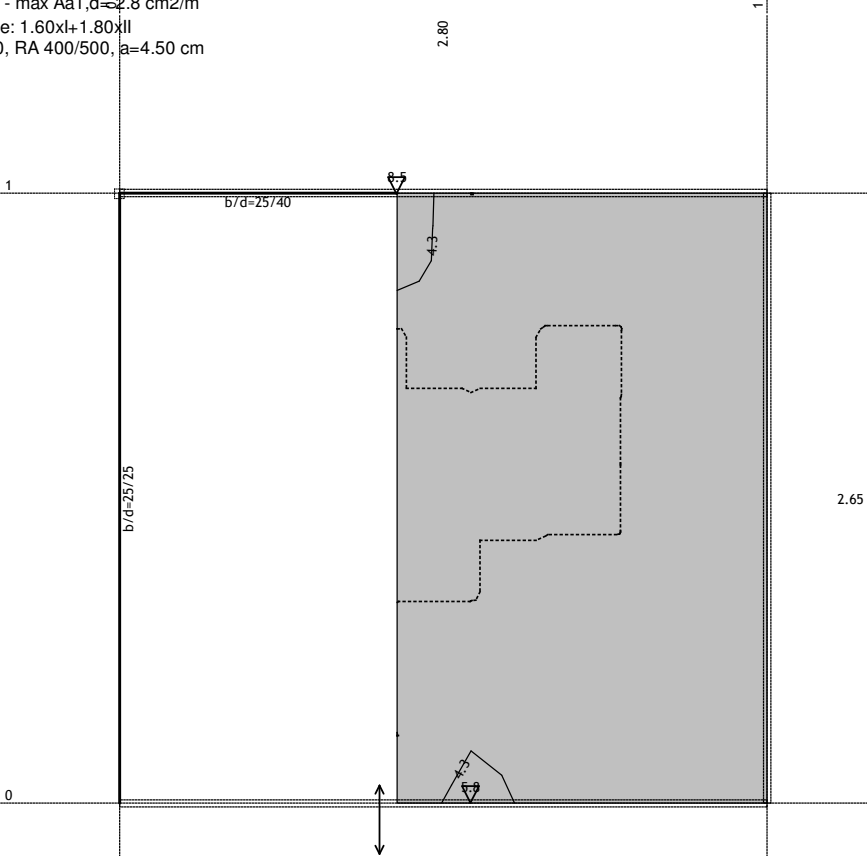


Ram: H_1
Aa - d.zona - Pravec 2 - max Aa2, $\sigma_s = 10.5$ cm²/m

Merodavno opterečenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500, a=4.50 cm

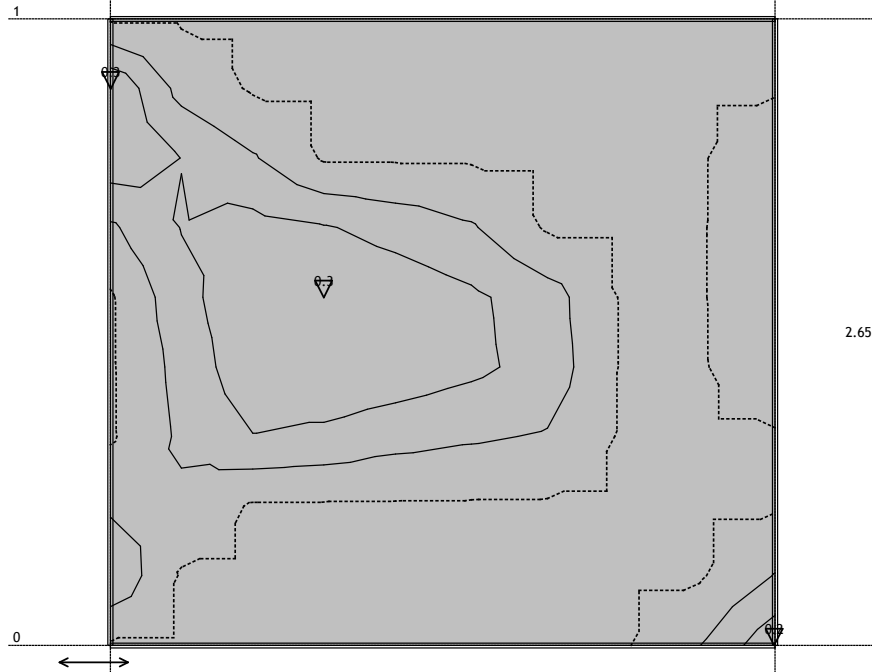


Ram: V_1
Aa - d.zona - Pravec 1 - max Aa1,d=2.8 cm2/m
Merodavno opterečenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500, a=4.50 cm

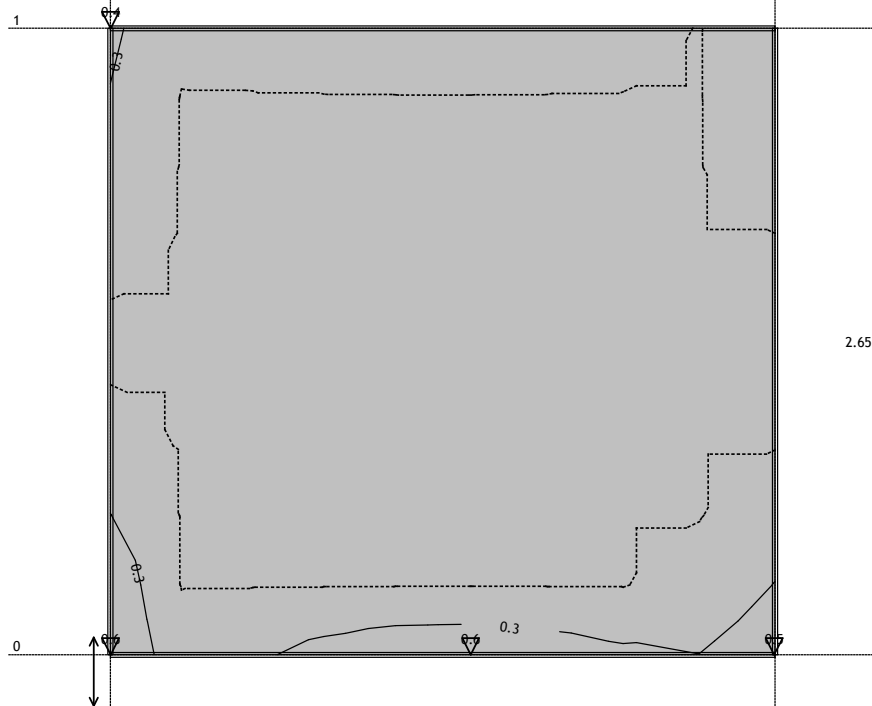


Ram: V_1
Aa - d.zona - Pravec 2 - max Aa2,d=3.5 cm2/m

Merodavno opterečenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500, a=4.50 cm



Ram: V_2
Aa - d.zona - Pravac 1 - max Aa1, $\phi = 0.3 \text{ cm}^2/\text{m}$
Merodavno opterečenje: 1.60xl+1.80xll
@1@PBAB 87, MB 30, RA 400/500, a=4.50 cm



Ram: V_2
Aa - d.zona - Pravac 2 - max Aa2, $\phi = 0.6 \text{ cm}^2/\text{m}$