

Grupa A

Zadatak 1

b	40 cm
h	60 cm
d ₁ , d ₂	5 cm
d	55 cm
f _{ck}	30 Mpa
f _{cd}	20 Mpa
f _{yk}	500 Mpa
f _{yd}	434.80 Mpa
M _{sd}	440.0 kNm
μ _{sd}	0.182
x	14.25 cm
z	49.06 cm
M _{Rd,lim}	384.78 kNm
A _{s1}	20.58 cm ²
A _{s2}	2.54 cm ²
ε _{s1}	10.0 ‰
ε _{c2}	3.5 ‰
ξ	0.259
ζ	0.892
μ _{sd,lim}	0.159

Zadatak 2

b	30 cm	f _{ck}	25 Mpa
h	50 cm	f _{cd}	16.7 Mpa
d ₁ , d ₂	5 cm	f _{yk}	500 Mpa
d	45 cm	f _{yd}	434.80 Mpa
		ε _{s1}	10.0 ‰
(1)			
M _{sd}	70.0 kNm		
N _{sd}	-30.0 kN		
M _{sds}	76.0 kNm	M _{Rd}	161.31 kNm
μ _{sd}	0.075	ε _{c2}	1.8 ‰
x	6.89 cm	ξ	0.153
z	42.48 cm	ζ	0.944
A _{s1}	3.42 cm ²		
A _{s2}	0.00 cm ²		
(2)			
M _{sd}	400.0 kNm		
N _{sd}	-70.0 kN		
M _{sds}	414.0 kNm	M _{Rd}	161.31 kNm
μ _{sd}	0.408	ε _{c2}	3.5 ‰
x	11.66 cm	ξ	0.259
z	40.14 cm	ζ	0.892
A _{s1}	22.16 cm ²		
A _{s2}	14.53 cm ²		
(3)			
M _{sd}	150.0 kNm		
N _{sd}	50.0 kN		
M _{sds}	140.0 kNm	M _{Rd}	161.31 kNm
μ _{sd}	0.138	ε _{c2}	3.0 ‰
x	10.40 cm	ξ	0.231
z	40.82 cm	ζ	0.907
A _{s1}	9.04 cm ²		
A _{s2}	0.00 cm ²		

Grupa B**Zadatak 1**

b	40 cm
h	60 cm
d_1, d_2	5 cm
d	55 cm
f_{ck}	30 Mpa
f_{cd}	20 Mpa
f_{yk}	500 Mpa
f_{yd}	434.80 Mpa
M_{sd}	450.0 kNm
μ_{sd}	0.186
x	14.25 cm
z	49.06 cm
$M_{Rd,lim}$	384.78 kNm
A_{s1}	21.04 cm ²
A_{s2}	3.00 cm ²
ϵ_{s1}	10.0 ‰
ϵ_{c2}	3.5 ‰
ξ	0.259
ζ	0.892
$\mu_{sd,lim}$	0.159

Zadatak 2

b	30 cm	f_{ck}	25 Mpa
h	50 cm	f_{cd}	16.7 Mpa
d_1, d_2	5 cm	f_{yk}	500 Mpa
d	45 cm	f_{yd}	434.80 Mpa
		ϵ_{s1}	10.0 ‰

(1)

M_{sd}	120.0 kNm		
N_{sd}	-30.0 kN		
M_{sds}	126.0 kNm	M_{Rd}	161.31 kNm
μ_{sd}	0.124	ϵ_{c2}	2.7 ‰
x	9.59 cm	ξ	0.213
z	41.22 cm	ζ	0.916
A_{s1}	6.34 cm ²		
A_{s2}	0.00 cm ²		

(2)

M_{sd}	410.0 kNm		
N_{sd}	-60.0 kN		
M_{sds}	422.0 kNm	M_{Rd}	161.31 kNm
μ_{sd}	0.416	ϵ_{c2}	3.5 ‰
x	11.66 cm	ξ	0.259
z	40.14 cm	ζ	0.892
A_{s1}	22.85 cm ²		
A_{s2}	14.99 cm ²		

(3)

M_{sd}	150.0 kNm		
N_{sd}	20.0 kN		
M_{sds}	146.0 kNm	M_{Rd}	161.31 kNm
μ_{sd}	0.144	ϵ_{c2}	3.2 ‰
x	10.89 cm	ξ	0.242
z	40.55 cm	ζ	0.901
A_{s1}	8.74 cm ²		
A_{s2}	0.00 cm ²		

Grupa C

Zadatak 1

b	40 cm
h	60 cm
d ₁ , d ₂	5 cm
d	55 cm
f _{ck}	30 Mpa
f _{cd}	20 Mpa
f _{yk}	500 Mpa
f _{yd}	434.80 Mpa
M _{sd}	460.0 kNm
μ _{sd}	0.190
x	14.25 cm
z	49.06 cm
M _{Rd,lim}	384.78 kNm
A _{s1}	21.50 cm ²
A _{s2}	3.46 cm ²
ε _{s1}	10.0 ‰
ε _{c2}	3.5 ‰
ξ	0.259
ζ	0.892
μ _{sd,lim}	0.159

Zadatak 2

b	30 cm	f _{ck}	25 Mpa
h	50 cm	f _{cd}	16.7 Mpa
d ₁ , d ₂	5 cm	f _{yk}	500 Mpa
d	45 cm	f _{yd}	434.80 Mpa
		ε _{s1}	10.0 ‰

(1)

M _{sd}	120.0 kNm		
N _{sd}	-80.0 kN		
M _{sds}	136.0 kNm	M _{Rd}	161.31 kNm
μ _{sd}	0.134	ε _{c2}	3.0 ‰
x	10.40 cm	ξ	0.231
z	40.82 cm	ζ	0.907
A _{s1}	5.82 cm ²		
A _{s2}	0.00 cm ²		

(2)

M _{sd}	410.0 kNm		
N _{sd}	-90.0 kN		
M _{sds}	428.0 kNm	M _{Rd}	161.31 kNm
μ _{sd}	0.422	ε _{c2}	3.5 ‰
x	11.66 cm	ξ	0.259
z	40.14 cm	ζ	0.892
A _{s1}	22.51 cm ²		
A _{s2}	15.33 cm ²		

(3)

M _{sd}	160.0 kNm		
N _{sd}	50.0 kN		
M _{sds}	150.0 kNm	M _{Rd}	161.31 kNm
μ _{sd}	0.148	ε _{c2}	3.3 ‰
x	11.16 cm	ξ	0.248
z	40.41 cm	ζ	0.898
A _{s1}	9.69 cm ²		
A _{s2}	0.00 cm ²		

Grupa D

Zadatak 1

b	40 cm
h	60 cm
d ₁ , d ₂	5 cm
d	55 cm
f _{ck}	30 Mpa
f _{cd}	20 Mpa
f _{yk}	500 Mpa
f _{yd}	434.80 Mpa
M _{sd}	430.0 kNm
μ _{sd}	0.178
x	14.25 cm
z	49.06 cm
M _{Rd,lim}	384.78 kNm
A _{s1}	20.12 cm ²
A _{s2}	2.08 cm ²
ε _{s1}	10.0 ‰
ε _{c2}	3.5 ‰
ξ	0.259
ζ	0.892
μ _{sd,lim}	0.159

Zadatak 2

b	30 cm	f _{ck}	25 Mpa
h	50 cm	f _{cd}	16.7 Mpa
d ₁ , d ₂	5 cm	f _{yk}	500 Mpa
d	45 cm	f _{yd}	434.80 Mpa
		ε _{s1}	10.0 ‰
(1)			
M _{sd}	100.0 kNm		
N _{sd}	-80.0 kN		
M _{sds}	116.0 kNm	M _{Rd}	161.31 kNm
μ _{sd}	0.114	ε _{c2}	2.5 ‰
x	9.00 cm	ξ	0.2
z	41.49 cm	ζ	0.922
A _{s1}	4.59 cm ²		
A _{s2}	0.00 cm ²		
(2)			
M _{sd}	410.0 kNm		
N _{sd}	-100.0 kN		
M _{sds}	430.0 kNm	M _{Rd}	161.31 kNm
μ _{sd}	0.424	ε _{c2}	3.5 ‰
x	11.66 cm	ξ	0.259
z	40.14 cm	ζ	0.892
A _{s1}	22.39 cm ²		
A _{s2}	15.45 cm ²		
(3)			
M _{sd}	120.0 kNm		
N _{sd}	50.0 kN		
M _{sds}	110.0 kNm	M _{Rd}	161.31 kNm
μ _{sd}	0.108	ε _{c2}	2.4 ‰
x	8.73 cm	ξ	0.194
z	41.63 cm	ζ	0.925
A _{s1}	7.23 cm ²		
A _{s2}	0.00 cm ²		