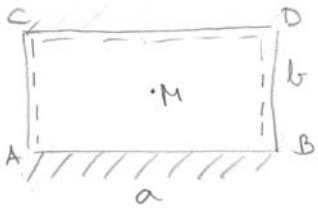


Same notation	Multiplier	l_x/l_y										
		0,50	0,60	0,70	0,80	0,90	1,00	1,00/0,90	1,00/0,80	1,00/0,70	1,00/0,60	1,00/0,50
ν_0	$10^{-2} \frac{N \cdot m^3}{K}$	4,88	4,52	4,07	3,66	3,23	2,79	3,61	4,63	5,93	7,50	9,27
M_x	$10^{-2} p l_{min}^4$	-12,13	-11,60	-10,67	-10,07	-9,24	-8,47	-9,26	-10,15	-11,01	-11,70	-12,18
M_x	$10^{-2} p l_{min}^4$	5,84	5,38	4,85	4,28	3,72	3,18	3,30	3,25	3,10	2,68	2,04
M_y		0,60	1,04	1,51	1,88	2,21	2,43	3,32	4,24	5,54	7,07	8,81

Određiti ugib sredine i momen izljoštenja pravougaone ploče i momen izljoštenja pravougaone ploče $a = 3 \text{ m}$ $b = 1,5 \text{ m}$ za



$$E = 2 \cdot 10^{10} \frac{N}{m^2}$$

$$\nu = 0,22$$

$$h = 0,12 \text{ m} \text{ - debljina ploče}$$

$$p = 10 \cdot 10^5 \frac{N}{m^2} \text{ - intenzitet uniformnog kontinualnog opterećenja}$$

$$K = \frac{E h^3}{12(1-\nu^2)} = \frac{2 \cdot 10^{10} \cdot (0,12)^3}{12(1-0,22^2)} = \frac{160 \cdot 10^6}{11,4192} = 14,01 \cdot 10^6$$

$$f(M) = \frac{p \cdot m^4}{K} = \frac{10^{-3} \cdot p \cdot l_{min}^4}{K} \cdot m$$

$$\frac{l_x}{l_y} = \frac{b}{a} = \frac{1,5}{3} = 0,5 \Rightarrow m = 4,88$$

iz tablica

$$f(M) = \frac{10^{-3} \cdot 1 \cdot 10^5 \cdot (1,5)^4}{14,01 \cdot 10^6} \cdot 4,88 = \frac{2470,5}{14,01 \cdot 10^6} = 1,76 \cdot 10^{-4} \text{ m}$$

$$m = 10^{-2} \cdot p \cdot l_{min}^2 \cdot n$$

$$n = -12,13 \text{ (iz tablica)}$$

$$\Rightarrow m = 10^{-2} \cdot 10^5 \cdot (1,5)^2 \cdot (-12,13) = -27,293 \cdot 10^3 \text{ Nm/m}$$

Plate Disp:DZ (m)

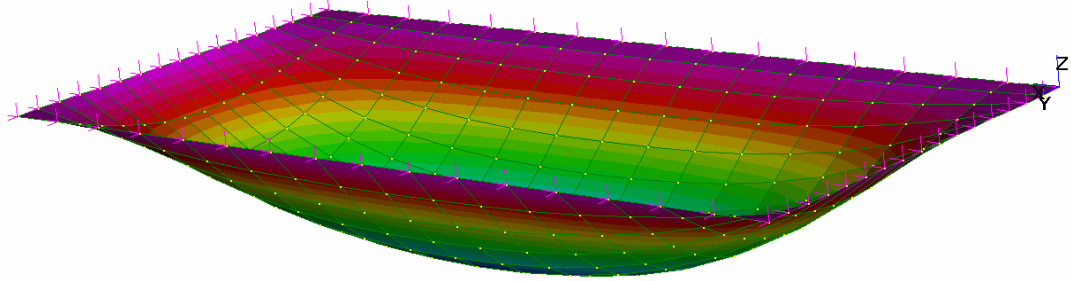
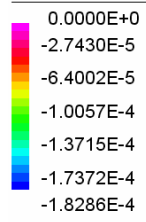


Plate Moment:YY (N.m/m)

