

27.2. TABLICE ZA PRORAČUN PLOČA NOSIVIH U DVA OKOMITA SMJERA

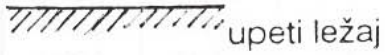
$$\lambda = \frac{l_y}{l_x}$$

$$M_{x\text{maks}} = \frac{q l_x^2}{\varphi_x} \quad \text{EI9}$$

$$M_{y\text{maks}} = \frac{q l_y^2}{\varphi_y}$$

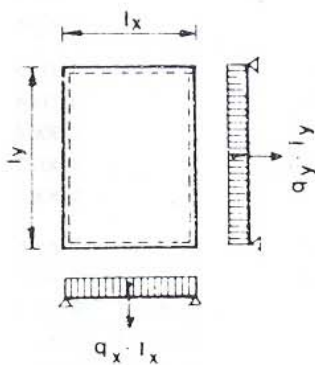
$$q_x = \kappa \cdot q$$

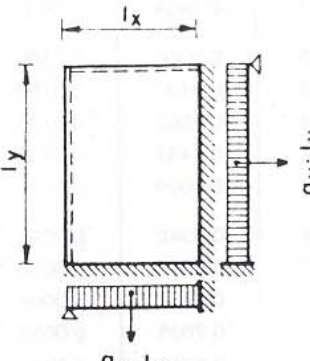
$$q_y = (1 - \kappa)q$$

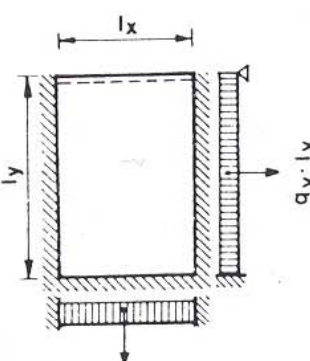


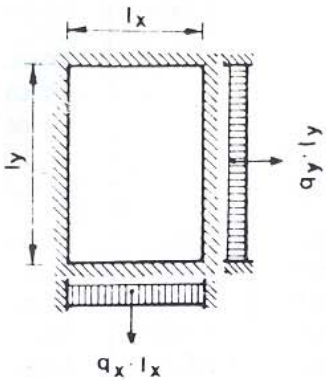
slobodno položeni ležaj

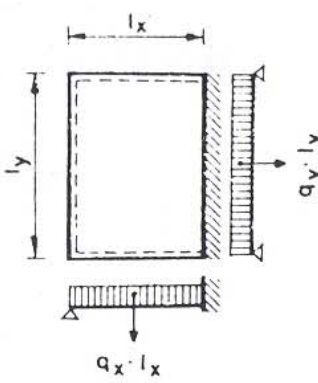
Slučaj 1	λ	φ_{1x}	Δ	φ_{1y}	Δ	κ_{1x}	Δ
	1	2	3	4	5	6	7
	0.50	169.17		10.57		0.0588	
	0.55	125.10	8.814	11.35	0.156	0.0838	0.0050
	0.60	94.94	6.031	12.30	0.190	0.1147	0.0062
	0.65	75.31	3.927	13.44	0.228	0.1515	0.0073
	0.70	61.60	2.741	14.79	0.270	0.1936	0.0084
	0.75	51.69	1.983	16.35	0.313	0.2404	0.0093
	0.80	43.97	1.544	18.01	0.331	0.2906	0.0100
	0.85	38.29	1.136	20.15	0.427	0.3430	0.0105
	0.90	34.26	0.807	22.36	0.444	0.3962	0.0106
	0.95	30.44	0.764	24.79	0.486	0.4489	0.0105
	1.00	27.43	0.602	27.43	0.527	0.5000	0.0102
	1.10	22.79	0.464	33.37	0.594	0.5942	0.0094
	1.20	19.45	0.334	40.34	0.697	0.6747	0.0080
	1.30	17.02	0.244	48.60	0.826	0.7407	0.0066
	1.40	15.22	0.180	58.45	0.985	0.7935	0.0053
	1.50	13.87	0.135	70.22	1.176	0.8351	0.0042
	1.60	12.88	0.099	84.43	1.421	0.8666	0.0033
	1.70	12.06	0.082	100.77	1.634	0.8931	0.0025
	1.80	11.45	0.061	121.69	2.092	0.9130	0.0020
	1.90	10.97	0.048	143.00	2.131	0.9287	0.0016
	2.00	10.57	0.040	169.17	2.617	0.9412	0.0012

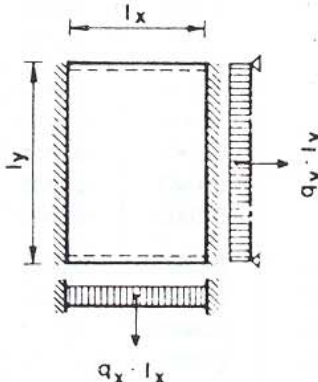


Slučaj 4	λ	φ_{4x}	Δ	φ_{4y}	Δ	κ_{4x}	Δ
	22	23	24	25	26	27	28
	0.50	271.75		16.98		0.0588	
	0.55	194.98	6.707	17.84	0.171	0.0838	0.0050
	0.60	145.73	4.414	18.89	0.209	0.1147	0.0062
	0.65	112.92	2.942	20.16	0.254	0.1515	0.0073
	0.70	90.16	2.270	21.65	0.298	0.1936	0.0084
	0.75	73.99	1.676	23.41	0.353	0.2404	0.0093
	0.80	62.18	1.259	25.47	0.411	0.2906	0.0100
	0.85	53.34	1.768	27.84	0.465	0.3430	0.0105
	0.90	46.58	1.352	30.56	0.543	0.3962	0.0106
	0.95	41.52	1.052	33.65	0.619	0.4489	0.0105
	1.00	37.15	0.833	37.15	0.700	0.5000	0.0102
	1.10	31.09	0.606	45.52	0.837	0.5942	0.0094
	1.20	27.01	0.408	56.01	1.063	0.6747	0.0080
	1.30	24.17	0.285	69.02	1.287	0.7407	0.0066
	1.40	22.12	0.204	84.99	1.596	0.7935	0.0053
	1.50	20.62	0.150	104.38	1.940	0.8351	0.0042
	1.60	19.49	0.113	127.72	2.334	0.8676	0.0033
	1.70	18.62	0.087	155.54	2.782	0.8931	0.0025
	1.80	17.95	0.068	188.41	3.287	0.9130	0.0020
	1.90	17.41	0.053	226.93	3.852	0.9287	0.0016
2.00	16.98	0.043	271.75	4.882	0.9412	0.0012	

Slučaj 5	λ	φ_{5x}	Δ	φ_{5y}	Δ	κ_{5x}	Δ
	29	30	31	32	33	34	35
 <p>UUVIJEK PARALELNO SA SLOBODNO POLOŽENIM RUBOM</p>	0.50	246.42		17.88		0.1111	
	0.55	186.97	11.831	19.12	0.251	0.1547	0.0087
	0.60	138.61	9.671	20.68	0.313	0.2058	0.0102
	0.65	110.30	5.661	22.60	0.384	0.2631	0.0114
	0.70	90.65	3.931	24.92	0.464	0.3244	0.0123
	0.75	76.58	2.814	27.69	0.555	0.3876	0.0126
	0.80	66.24	2.068	30.98	0.658	0.4503	0.0125
	0.85	58.46	1.556	34.84	0.772	0.5108	0.0121
	0.90	52.51	1.191	39.35	0.900	0.5675	0.0114
	0.95	47.86	0.980	44.56	1.043	0.6196	0.0104
	1.00	44.18	0.736	50.57	1.201	0.6667	0.0094
	1.10	38.84	0.535	65.30	1.474	0.7454	0.0079
	1.20	35.27	0.357	84.25	1.895	0.8057	0.0060
	1.30	32.79	0.248	108.24	2.398	0.8510	0.0045
	1.40	31.01	0.178	138.11	2.987	0.8848	0.0038
	1.50	29.71	0.130	174.79	3.669	0.9101	0.0025
	1.60	28.73	0.093	219.29	4.450	0.9291	0.0019
	1.70	27.97	0.075	272.65	5.337	0.9435	0.0014
	1.80	27.38	0.059	336.02	6.337	0.9545	0.0011
	1.90	26.92	0.047	410.58	7.456	0.9631	0.0009
2.00	26.54	0.038	497.61	8.702	0.9697	0.0007	

Slučaj 6	λ	φ_{6x}	Δ	φ_{6y}	Δ	κ_{6x}	Δ
	36	37	38	39	40	41	42
 <p>The diagram shows a rectangular frame cross-section with width l_x and height l_y. It is subjected to internal forces q_x and q_y. The frame is shown with hatching on the outer edges, indicating it is a thick-walled section.</p>	0.50	436.53		27.28		0.0588	
	0.55	310.15	25.276	28.38	0.220	0.0838	0.0050
	0.60	229.50	16.130	29.74	0.273	0.1147	0.0062
	0.65	175.97	10.706	31.41	0.334	0.1515	0.0073
	0.70	139.24	7.346	33.43	0.404	0.1936	0.0084
	0.75	113.30	5.189	35.85	0.483	0.2404	0.0093
	0.80	94.51	3.757	38.71	0.573	0.2906	0.0100
	0.85	80.60	2.782	42.08	0.673	0.3430	0.0105
	0.90	70.10	2.100	46.00	0.784	0.3962	0.0106
	0.95	62.04	1.614	50.53	0.907	0.4489	0.0105
	1.00	55.74	1.259	55.74	1.043	0.5000	0.0102
	1.10	46.77	0.897	68.48	1.274	0.5942	0.0094
	1.20	40.90	0.588	84.80	1.632	0.6747	0.0080
	1.30	36.89	0.400	105.38	2.057	0.7407	0.0066
	1.40	34.08	0.282	130.92	2.555	0.7935	0.0053
	1.50	32.04	0.204	162.22	3.130	0.8351	0.0042
	1.60	30.54	0.151	200.13	3.790	0.8676	0.0033
	1.70	29.40	0.114	245.53	4.540	0.8931	0.0025
	1.80	28.52	0.088	299.38	5.385	0.9130	0.0020
	1.90	27.75	0.077	362.69	6.331	0.9267	0.0016
2.00	27.28	0.047	436.53	7.384	0.9412	0.0012	

Slučaj 2	λ	φ_{2x}	Δ	φ_{2y}	Δ	κ_{2x}	Δ
	8	9	10	11	12	13	14
 <p>l_y UVIJEK PARALELNO S UKLIJEŠTENIM RUBOM</p>	0.50	140.91		11.28		0.1351	
	0.55	107.37	6.707	12.38	0.217	0.1862	0.0102
	0.60	85.30	4.414	13.70	0.266	0.2447	0.0117
	0.65	70.59	2.942	15.29	0.320	0.3086	0.0128
	0.70	59.24	2.270	17.19	0.379	0.3751	0.0133
	0.75	50.86	1.676	19.41	0.444	0.4417	0.0133
	0.80	44.56	1.259	21.99	0.516	0.5059	0.0129
	0.85	39.70	0.971	24.96	0.595	0.5661	0.0121
	0.90	35.74	0.792	28.37	0.683	0.6212	0.0110
	0.95	32.54	0.640	32.30	0.786	0.6706	0.0099
	1.00	29.93	0.522	36.75	0.890	0.7143	0.0087
	1.10	26.02	0.391	47.58	1.083	0.7854	0.0071
	1.20	23.33	0.269	61.38	1.381	0.8383	0.0053
	1.30	21.43	0.191	78.75	1.736	0.8772	0.0039
	1.40	20.04	0.138	100.28	2.153	0.9057	0.0029
	1.50	19.02	0.103	126.64	2.636	0.9268	0.0021
	1.60	18.30	0.071	158.52	3.189	0.9425	0.0016
	1.70	17.63	0.067	196.69	3.817	0.9543	0.0012
	1.80	17.05	0.059	239.81	4.312	0.9633	0.0009
	1.90	16.67	0.037	295.08	5.527	0.9702	0.0007
2.00	16.50	0.021	357.03	6.195	0.9756	0.0005	

Slučaj 3	λ	φ_{3x}	Δ	φ_{3y}	Δ	κ_{3x}	Δ
	15	16	17	18	19	20	21
 <p>l_y UVIJEK PARALELNO S UKLIJEŠTENIM RUBOM</p>	0.50	136.06		12.48		0.2381	
	0.55	107.42	5.728	14.10	0.323	0.3139	0.0152
	0.60	87.62	3.960	16.12	0.404	0.3932	0.0159
	0.65	73.76	2.772	18.60	0.496	0.4716	0.0157
	0.70	63.69	2.014	21.16	0.603	0.5456	0.0148
	0.75	56.16	1.505	25.24	0.725	0.6127	0.0134
	0.80	50.42	1.148	29.56	0.864	0.6709	0.0116
	0.85	45.97	0.891	34.66	1.021	0.7230	0.0104
	0.90	42.48	0.698	40.65	1.199	0.7664	0.0087
	0.95	39.70	0.555	47.64	1.338	0.8029	0.0073
	1.00	37.47	0.446	55.74	1.620	0.8333	0.0061
	1.10	34.18	0.329	75.33	1.959	0.8798	0.0046
	1.20	31.93	0.225	101.68	2.635	0.9120	0.0032
	1.30	30.34	0.159	134.65	3.298	0.9346	0.0023
	1.40	29.18	0.116	175.88	4.123	0.9505	0.0016
	1.50	28.31	0.087	226.65	5.077	0.9620	0.0012
	1.60	27.64	0.067	288.36	6.171	0.9704	0.0008
	1.70	27.12	0.052	362.50	7.414	0.9766	0.0006
	1.80	26.71	0.041	450.72	8.822	0.9813	0.0005
	1.90	26.37	0.034	555.49	10.377	0.9849	0.0004
2.00	26.09	0.028	675.81	12.132	0.9877	0.0003	