

**Tabel centralizator pentru dimensionarea armaturii pentru preluarea momentelor negative pe reazeme**

Momento de calcul [kNm]	secțiunea 5		secțiunea 6		secțiunea 7		secțiunea 8		secțiunea 9		secțiunea 10		secțiunea 11		secțiunea 12		secțiunea 13		secțiunea 14		secțiunea 15	
	f. marginala	f. centrala	f. marginala	f. centrala	f. marginala	f. centrala	f. marginala	f. centrala	f. marginala	f. centrala	f. marginala	f. centrala	f. marginala	f. centrala	f. marginala	f. centrala	f. marginala	f. centrala	f. marginala	f. centrala	f. marginala	f. centrala
b (mm)			-68.8	-34.36	-142.98	-103.14	-236.64	-191.13	-348.71	-297.5	-480.14	-422.99	-314.21	-271.78	-208.23	-170.43	-119.63	-86.45	-48.16	-19.82		
h (mm)			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
a (mm)			54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54	54
d (mm)			936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936	936
$f_{ck}$ (N/mm <sup>2</sup> )			16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
$f_{cd}$ (N/mm <sup>2</sup> )			9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07	9.07
$f_{ctm}$ (N/mm <sup>2</sup> )			1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90	1.90
$f_{yk}$ (N/mm <sup>2</sup> )			500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500	500
$f_{td}$ (N/mm <sup>2</sup> )			434.78	434.78	434.78	434.78	434.78	434.78	434.78	434.78	434.78	434.78	434.78	434.78	434.78	434.78	434.78	434.78	434.78	434.78	434.78	434.78
$\lambda$			0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
$\eta$			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
$A_{smin}$ (mm <sup>2</sup> )			924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77
x (mm)			10.18	5.07	21.25	15.29	35.39	28.50	44.67	73.00	64.06	47.23	40.74	31.08	25.38	17.76	12.80	7.12	2.89			
$A_{sreqd}$ (mm <sup>2</sup> )			924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77	1,217.82	1,068.65	924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77	924.77
$\Phi$ (mm)			20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
$A_{1g}$ (mm <sup>2</sup> )			314.16	314.16	314.16	314.16	314.16	314.16	314.16	314.16	314.16	314.16	314.16	314.16	314.16	314.16	314.16	314.16	314.16	314.16	314.16	314.16
$n_{bare}$			3	3	3	3	3	3	3	3	4	4	3	3	3	3	3	3	3	3	3	3
$n_{real\_bare}$			3	3	3	3	6	6	6	6	10	10	6	6	6	6	3	3	3	3	3	3
$A_{sreal}$ (mm <sup>2</sup> )			942.48	942.48	942.48	942.48	1884.96	1884.96	1884.96	1884.96	3141.59	3141.59	1884.96	1884.96	1884.96	1884.96	942.48	942.48	942.48	942.48	942.48	942.48
$x_{real}$ (mm)			56.4944331	56.4944331	56.494433	56.4944331	112.988866	112.988866	112.98887	112.98887	188.314777	188.314777	112.988866	112.988866	112.98887	112.988866	56.4944331	56.4944331	56.4944331	56.4944331	56.4944331	56.4944331
$M_{Rd}$ (kNm)			374.29	374.29	374.29	374.29	730.06	730.06	730.06	730.06	1175.60	1175.60	730.06	730.06	730.06	730.06	374.29	374.29	374.29	374.29	374.29	374.29
CP			5.4	10.9	2.6	3.6	3.1	3.8	2.1	2.5	2.4	2.8	2.3	2.7	3.5	4.3	3.1	4.3	7.8	19.1		
$M_{Rd} > M_{calcul}$			TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE