

Highest permissible loads in concrete C20/25

Approved loads for single anchor without influence of spacing and edge distance. Total safety factor as per ETAG 001 included (γ_M and γ_F).

Loads and performance data	Slagankare EKD / EKD-K		M8x30 ¹⁾	M8x40	M10x40	M10x30 ¹⁾	M12x50	M16x65	M20x80
Mean ultimate loads, tension (Screw 8.8)	C25/30 Num	[kN]	11,5	13,5	16,9	15,6	24,1	36,4	50,5
Mean ultimate loads, shear (Screw 8.8)	C25/30 Vum	[kN]	11,1	11,1	13,5	13,5	29,5	50,4	76,4
Approved loads, tension (Screw 5.6 to 8.8)	C20/25 appr. N	[kN]	3,3	3,6	5,1	3,3	7,1	10,5	14,3
	C25/30 appr. N	[kN]	3,6	3,8	5,6	3,6	7,8	11,5	15,7
	C30/37 appr. N	[kN]	4,0	4,0	6,2	4,0	8,6	12,8	17,4
	C40/50 appr. N	[kN]	4,7	4,4	7,2	4,7	10,0	14,9	20,3
	C50/60 appr. N	[kN]	5,1	4,6	7,9	5,1	11,0	16,3	22,2
Approved loads, shear (Screw 5.6)	≥ C20/25 appr. V	[kN]	3,9	3,9	4,1	4,0	9,0	16,8	26,2
Approved loads, shear (Screw 5.8)	≥ C20/25 appr. V	[kN]	3,9	3,9	4,1	4,0	11,1	18,0	28,6
Approved loads, shear (Screw 8.8)	≥ C20/25 appr. V	[kN]	3,9	3,9	4,1	4,0	11,1	18,0	28,6
Approved bending moments (Screw 5.6)	appr. M	[Nm]	8,1	8,1	15,8	15,8	27,8	71,0	138,6
Approved bending moments (Screw 5.8)	appr. M	[Nm]	10,9	10,9	21,1	21,1	37,1	94,9	185,1
Approved bending moments (Screw 8.8)	appr. M	[Nm]	17,1	17,1	34,3	33,7	60,0	152,0	296,6
Spacing and edge distance									
Effective anchorage depth	h_{ef}	[mm]	30	40	40	30	50	65	80
Characteristic spacing	$s_{cr, N}$	[mm]	90	120	120	90	150	195	240
Characteristic edge distance	$c_{cr, N}$	[mm]	45	60	60	45	75	97,5	120
Minimum spacing	s_{min}	[mm]	60	80	100	100	120	150	160
Minimum edge distance	c_{min}	[mm]	95	95	135	115	165	200	260
Minimum thickness of concrete slab	h_{min}	[mm]	100	100	120	120	130	160	200
Installation parameters									
Drill hole diameter	d_o	[mm]	10	10	12	12	15	20	25
Diameter of clearance hole in the fixture	d_r	[mm]	9	9	12	12	14	18	22
Depth of drill hole	h_o	[mm]	30	40	40	30	50/80 ³⁾	65/80 ⁴⁾	80
Installation torque	≤ T_{inst}	[Nm]	8	8	15	15	35	60	120
Minimum screwing depth	L_{sd}	[mm]	9	9	11	10	13	18	22
Maximum screwing depth	L_{th}	[mm]	13	20	15	12	18/45 ³⁾	23/38 ⁴⁾	34

¹⁾ Valid only for statically indeterminate systems.

²⁾ Not part of approval.

³⁾ E/ES M12x50