

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_P).

| 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