

ResiFIX technical data in concrete

Fastening in concrete with Polyester PYSF

Permissible loads F_{per} in [kN] in non-cracked concrete C20/25 for single anchor without influence of spacing and edge distance, installation parameters and unit dimensions. Total safety factors as per ETAG 001 included (γ_M und γ_P). See ETA-approval for design and calculations.

Anchor rods RESI AST, VA AST		M8	M10	M12	M16
Drill hole $\varnothing$	d_0 [mm]	10	12	14	18
Embedment depth $h_{ef,min}/h_{ef,stand}/h_{ef,max}$	[mm]	60/80/160	60/90/200	70/110/240	80/125/320

Tension load ¹⁾ (24 °C / 40 °C) ²⁾ in non-cracked concrete (dry or wet)

Zinc plated 5.8	N_{per} [kN]	5,1/6,8/8,6	6,0/9,0/13,8	8,4/13,2/20,0	12,8/19,9/37,1
Stainless steel A4	N_{per} [kN]	5,1/6,8/9,9	6,0/9,0/15,7	8,4/13,2/22,5	12,8/19,9/42,0

Shear load ¹⁾ (24 °C / 40 °C) ²⁾

Zinc plated 5.8	V_{per} [kN]	5,1	8,6	12,0	22,3
Stainless steel A4	V_{per} [kN]	6,0	9,2	13,7	25,2
Bending moment (Zinc plated 5.8)	M_{per} [Nm]	10,9	21,1	37,7	94,9
Bending moment (Stainless steel A4)	M_{per} [Nm]	11,9	23,8	42,1	106,7

Spacing and edge distance

Spacing	$s_{cr,N}$ [mm]	185	253	304	375
Edge distance	$c_{cr,N}$ [mm]	92	126	152	188
Minimum spacing distance	s_{min} [mm]	40	50	60	80
Minimum edge distance	c_{min} [mm]	40	50	60	80
Minimum thickness of concrete	h_{min} [mm]	$h_{ef} + 30 \text{ mm} \geq 100 \text{ mm}$			$h_{ef} + 2d_0$
Installation torque	$T_{inst} \leq$ [Nm]	10	20	40	80

¹⁾ Increasing factors for non-cracked concrete C30/37 = 1.08, C40/50 = 1.15, C50/60 = 1.19.

²⁾ Max. long term temperature / max. short term temperature after installation. For temperature range 50°C/80°C please see ETA-approval.

³⁾ Depends on h_{ef} . Values are valid for $h_{ef,stand}$.

If underrun the char. space or edge distance (C_{cr} or S_{cr}) the loads must be reduced. h_{min} , S_{min} and C_{min} must be observed.

