

ResiFIX technical data in masonry

Fastening in masonry with Polyester PYSF

Permissible loads in [kN] and installation parameters - selection; for additional brick types and application conditions see ETA-approval.

Fastenings in solid and hollow masonry

Suitable building materials	Density ρ [kg/dm³]	Compressive strength f_b [N/mm²]	Anchor rods RESI AST, VA AST Size	Sleeve Size	Min. embedment dept h_{ef} [mm]	Use category dry / dry 24°C/40°C ¹⁾	
						Tension load N_{per} [kN]	Shear V_{per} [kN]
Solid sand-lime brick KSV 	≥ 2,0	≥ 20	M8	without / SH 12-80	80 / 80	1,29 / 1,14	1,29 / 1,14
			M10	without / SH 16-85	90 / 85	1,29 / 1,14	1,29 / 1,29
			M12	without / SH 20-85	100 / 85	1,60 / 1,14	1,43 / 1,43
			M16	without / SH 20-85	100 / 85	1,29 / 1,14	1,43 / 1,43
Solid brick Mz 	≥ 1,64	≥ 20	M8	without / SH 12-80	80 / 80	0,71 / 0,86	1,29 / 1,14
			M10	without / SH 16-85	90 / 85	0,71 / 0,86	1,57 / 1,43
			M12	without / SH 20-85	100 / 85	0,57 / 0,86	2,14 / 1,43
			M16	without / SH 20-85	100 / 85	1,00 / 0,86	2,14 / 1,43
Aerated concrete AAC4 	≥ 0,50	≥ 4	M8	without	80	0,32	0,54
			M10	without	90	0,90	0,71
			M12	without	100	0,90	0,90
			M16	without	100	1,25	1,25
Hollow sand-lime brick KSL (KSL 3DF) 	≥ 1,4	≥ 12	M8	SH 12-80	80	0,57	0,71
			M10	SH 16-85	85	0,57	1,00
			M10	SH 16-130	130	1,00	1,29
			M12	SH 20-85	85	0,57	1,00
Hollow brick HLz (HLz 16DF) 	≥ 0,83	≥ 12	M8	SH 12-80	80	0,43	1,00
			M10	SH 16-85	85	0,71	1,71
			M10	SH 16-130	130	1,00	2,30
			M12	SH 20-85	85	1,00	1,71
			M16	SH 20-85	85	1,00	1,71

N_{per} , V_{per} : Permissible loads incl. safety factors (γ_M and $\gamma_S = 1,4$), without influence of spacing and edge distance.

Drilling method: KSV and MZL hammer drilling; aerated concrete, KSL and HLz: rotary drilling

¹⁾ Max. long-term temperature / max. short-term temperature after installation.

Spacing and edge distances

Suitable building materials	Anchor rod	Sleeve	Min. edge distance $C_{cr} = C_{min}$ [mm]	Min. spacing parallel to the bearing joint $S_{min, } = S_{cr, }$ [mm]	Min. spacing perpendicular to the bearing joint $S_{min,\perp} = S_{cr,\perp}$ [mm]
Solid sand-lime brick KSV	M8	without	120	240	240
	M10	without	135	270	240
	M12	without	150	300	300
	M16	without	150	300	300
Solid brick Mz	M8	without	120	240	240
	M10	without	135	270	270
	M12	without	150	300	300
	M16	without	150	300	300
Aerated concrete AAC6	M8	SH 12-80	120	240	240
	M10	SH 16-85	135	270	270
	M10	SH 16-130	150	300	300
	M12,M16	SH 20-85	150	300	300
Hollow sand-lime brick KSL (KSL 3DF)	M8	SH 12-80	100	240	113
	M10	SH 16-85	100	240	113
	M10	SH 16-130	100	240	113
	M12,M16	SH 20-85	120	240	113
Hollow brick HLz (HLz 16DF)	M8	SH 12-80	100	497	238
	M10	SH 16-85	100	497	238
	M10	SH 16-130	100	497	238
	M12,M16	SH 20-85	120	497	238

Bending moment

Steel			Anchor size			
			M8	M10	M12	M16
Zinc plated 5.8	M_{per}	[Nm]	10,8	21,2	37,7	94,8
Stainless steel A4	M_{per}	[Nm]	11,9	23,8	42,1	106,7

