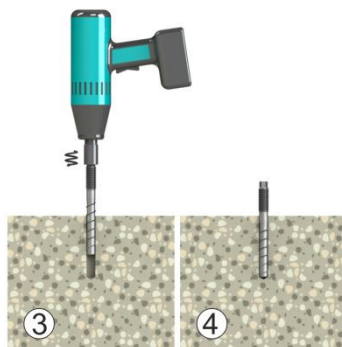
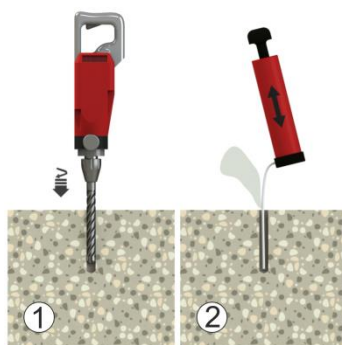
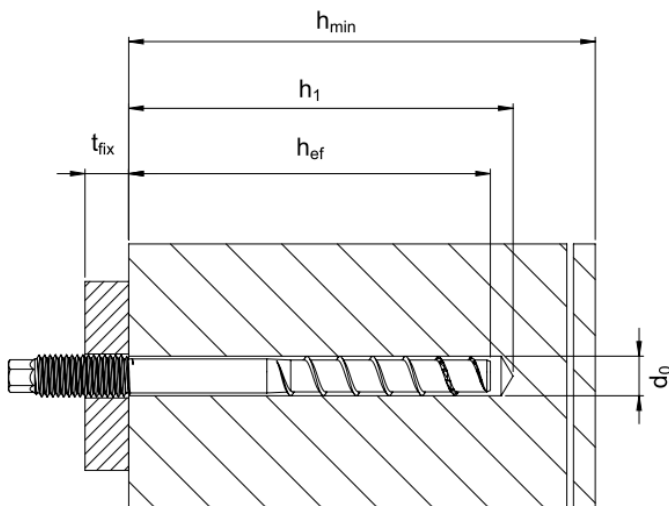


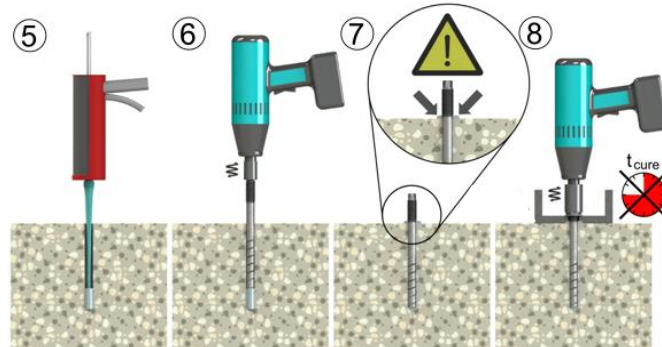
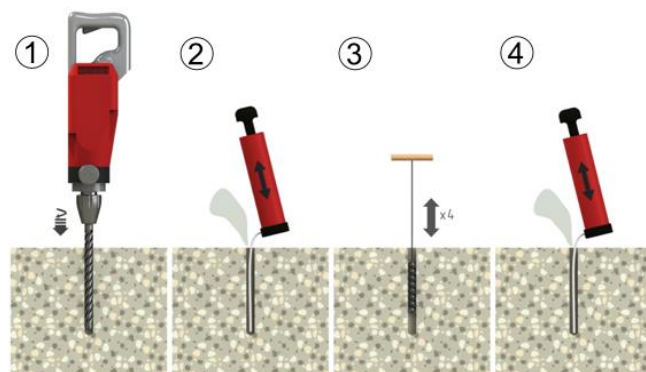


Technical data

Toge concrete screw TSM 14x165 M 16x35 SW 12



Installation instruction without chemical component



Installation instruction with chemical component



technical characteristics without fire exposure

			TSM 14 x 100	
			without chemical component	with chemical component
drill bit diameter	d_0	[mm]	14	14
depth of drill hole	h_1	[mm]	135	125
embedment depth of anchor	h_{nom}	[mm]	125	125
effective anchorage depth	h_{ef}	[mm]	125	125
minimum thickness of member	h_{min}	[mm]	200	195
minimum edge distance	c_{min}	[mm]	100	60
minimum spacing	s_{min}	[mm]	100	60
characteristic edge distance	$c_{cr,N}$	[mm]	$1,5 \times h_{ef}$	
characteristic spacing	$s_{cr,N}$	[mm]	$3 \times h_{ef}$	
installation torque	T_{inst}	[Nm]	80	
permissible tension load in non-cracked concrete C 20/25 ^{1) 2)}	N_{per}	[kN]	23,9	28,3
permissible tension load in cracked concrete C 20/25 ^{1) 2)}	N_{per}	[kN]	17,1	28,3
permissible shear load in cracked and non cracked concrete C 20/25 to C 50/60 ^{1) 2)}	V_{per}	[kN]	30,5	30,5

1) The partial safety factor for material resistance $\gamma_M = 1.5$ as well the partial safety factor for load actions $\gamma_F = 1.4$ are considered.

2) The value applies without influence of spacing and edge distance.