

TOGE TID

The insulating anchor for cold-, heat- and fire-protection



Fire protection

Fire protection up to fire resistance class R120.

Maximum thickness

Screw lengths up to 300 mm enable the fastening of insulating panels up to a thickness of 260 mm.

Cover cap

Optional cover caps with textured structure made of polyethylene in different colors for a coherent look of the entire surface.

Corrosion resistance

The A2 stainless steel design provides optimum corrosion protection even in humid environments.

Approval

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General technical approval Z-21.8.1970.

Base Material

Approval for concrete strength classes from C20/25 bis C50/60.

Cracked and non-cracked concrete.



Technical Characteristics

Without fire exposure for multiple fastening TID according Z-21.8-1970

Insulating anchor TID			
Nominal diameter of drill bit	d_0	[mm]	8
Depth of drill hole	$h_0 \geq$	[mm]	45
Effective anchorage depth	$h_{nom} \geq$	[mm]	40
Approved load in cracked and non-cracked concrete ¹⁾	N_{zul}	[kN]	0,07
Minimum edge distance	C_{min}	[mm]	60
Minimum spacing	S_{min}	[mm]	120
Minimum thickness of member	h_{min}	[mm]	80

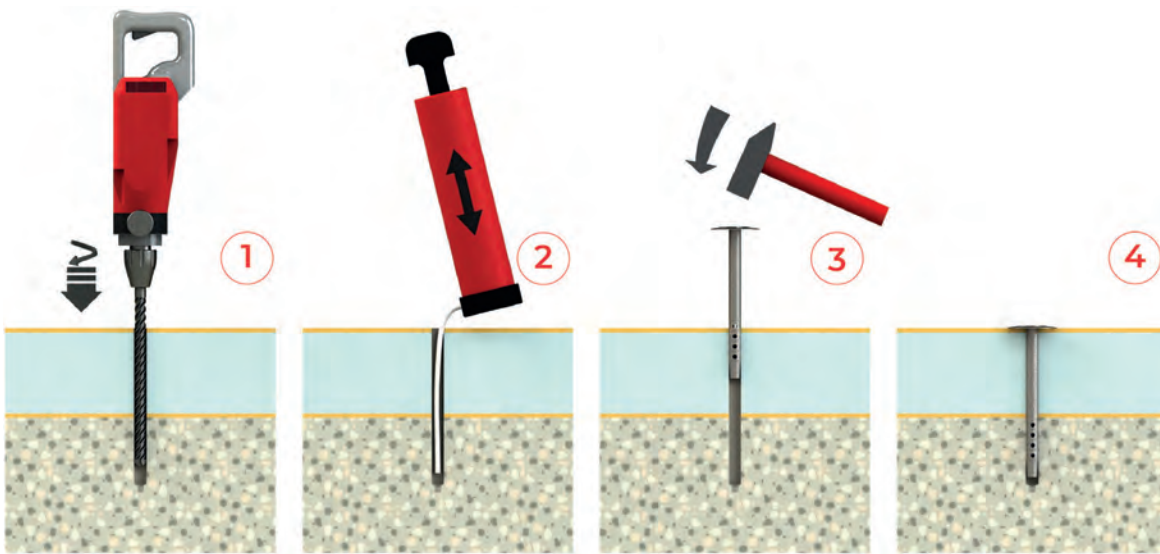
¹⁾ The partial safety factor for material resistance from the approval $\gamma_M=1,5$ as well a partial safety factor for load actions $\gamma_F=1,4$ were considered for determining the load.

Under fire exposure for multiple fastening TID according Z-21.8-1970

Insulating anchor TID				
Approved load under tensile and shear use ($F_{zul,fi} = N_{zul,fi} = V_{zul,fi}$)				
Fire resistance class				
R 30	Approved load ²⁾	$F_{zul,fi 30}$	[kN]	0,07
R 60		$F_{zul,fi 60}$	[kN]	0,07
R 90		$F_{zul,fi 90}$	[kN]	0,07
R 120		$F_{zul,fi 120}$	[kN]	0,06
Edge distance				
R 30 bis R 120	$C_{cr,fi}$	[mm]	80	
The edge distance must be at least 300 mm if the fire load attacks from more than one side.				
Spacing				
R 30 to R 120	$S_{cr,fi}$	[mm]	160	

²⁾ The partial safety factor for material resistance from the approval $\gamma_M=1,0$ as well a partial safety factor for load actions $\gamma_F=1,0$ were considered for determining the load.

Installation Instructions



- 1) Create borehole.
- 2) Clean the borehole thoroughly.
- 3) Drive the insulating anchor through the insulating plate with a hammer.
- 4) The dowel plate must rest completely on the attachment part.