Insulation anchor TID, TID-K

Material

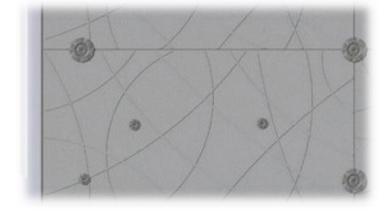
- galvanised steel- TID S
- A2 stainless steel TID R
- cap: polythylene

Base material

- approved for concrete strength C 20/25 to C 50/60
- cracked and non-cracked concrete

Product features

- approved for multiple fastening of insulation panels
- high load-bearing capacity in cracked and non-cracked concrete
- small drill holes
- quick and safe installation





TOGE

Z-21.8.1970

Institut für Massivbau Technische Universität Darmstadt

Technical characteristics without fire exposure

			Toge insulation anchor TID
drill bit diameter	d₀	[mm]	8
depth of drill hole	h₁ ≥	[mm]	45
effective anchorage depth	h _{ef} ≥	[mm]	40
minimum thickness of member	h _{min}	[mm]	80
edge distance	с	[mm]	60
spacing	s	[mm]	120
permissible load in cracked and non-cracked concrete C20/25 - C50/60 ¹⁾²⁾	Nzul	[kN]	0,074

1) The partial safety factor for material resistance from the approval $y_M = 1.5$ as well a partial safety factor for load actions $y_F = 1.4$ were considered for determining the load

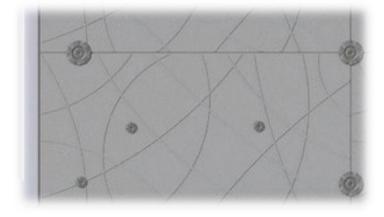




Technical characteristics under fire exposure

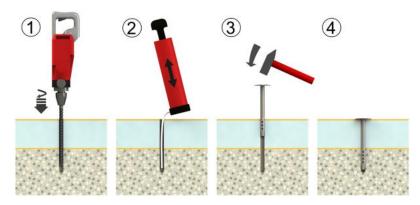
			Toge insulation anchor TID
fire resistance class			
R 30	permissible load F _{fi,per,30} ¹⁾	[kN]	0,09
R 60	permissible load F _{fi,per,60} 1)	kN]	0,09
R 90	permissible load F _{fi,per,90} 1)	[kN]	0,09
R 120	permissible load F _{fi,per,120} 1)	[kN]	0,09
R 180	permissible load F _{fi,per,180} 1)	[kN]	0,06
R 30 - R 120	spacing s _{fi}	[mm]	120
	edge distance c _{fi}	[mm]	60

1) The partial safety factor for material resistance from the approval $y_M = 1.0$ as well a partial safety factor for load actions $y_F = 1.0$ were considered for determining the load.





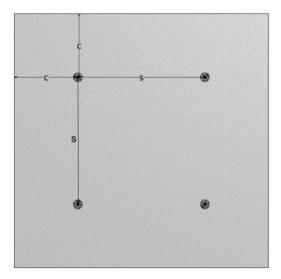
Installation instructions



- 1) set drill hole
- 2) clean out drill hole from the base
- 3) knock insulation fastener

through the insulation panel with a hammer

4) anchor disc must fully contact the insulation panel



Minimum 4 anchors per square meter for insulation panel. The dimension between axes and edge distance is valid without fire exposure. Assumed that an application is forced with fire exposure, please check the anchor layout from the general appraisal certificate No P-3444/7404-MPA BS.



