TX - Segment Anchor
ETA Option 1

Applications:

- anchor designed for fastening elements of building structures, façades, balconies, handrails etc. in the medium load range,
- fixing storage racks,
- fixing of devices and installation elements for ceilings in cracked concrete,
- basic anchor for fixing all types of installations inside buildings.

Benefits:

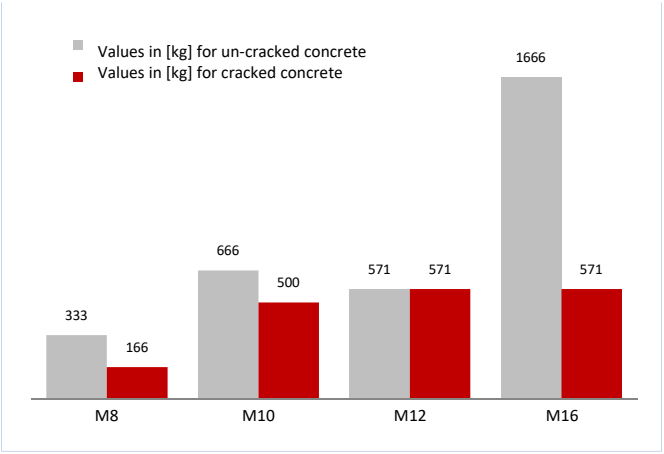
- one anchor for fixing into both non-cracked and cracked concrete,
- easy and quick assembly,
- fire resistance in the range from R30 to R120
- expanding clip made of stainless steel,
- cold formed dowel,
- marking the anchor depth on the anchor thread.

DesignFiX®

Anchor material:
The TX anchor bolts are made of carbon steel, cold-rolled C-1035, and are coated with a layer of galvanized steel not less than 5µm thick. The expansion ring is made of SS430 stainless steel.

Substrate material:
Concrete cracked and non-cracked class min C20 / 25 to C50 / 60

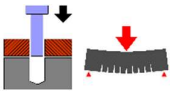
Load capacity calculated for pulling out concrete C20 / 25 in kg



ETA-16/0574

ETAG 001
Opcja 1 do betonu zarysowanego

Odporność Ogniowa
R120



The method of marking the TX anchor		
Trutek Throughbolt	Thread size d [mm]	Anchor length L [mm]
TX	**08**	**065**

Technical parameters of anchors TX

Product code	Thread Size	Hole Diameter	Min. Hole Depth	Effective embedment depth	Min. Substrate thickness	Max. fixture thickness	Min. Hole Diameter in fixture	Anchor length
	mm	mm	mm	mm	mm	mm	mm	mm
	d	d_o	h_1	h_{ef}	h_{min}	t_{fix}	d_f	L
TX08065	8	8	55	40	100	10	9	65
TX08075						20		75
TX08095						40		95
TX08115						60		115
TX10085	10	10	75	60	120	5	12	85
TX10100						20		100
TX10120						40		120
TX10130						50		130
TX12090	12	12	75	60	120	5	14	90
TX12100						15		100
TX12120						35		120
TX12135						50		135
TX12175						90		175
TX16125	16	16	100	80	160	15	18	125
TX16150						40		150

values by European Technical Assessment ETA-16/0574

Tel.: +48 22 701 93 24-25
Fax: +48 22 100 12 31
www.trutekfasteners.eu
e-mail: info@trutek.com.pl

Design strengths of individual TX anchors in C20 / 25 concrete acc. ETAG 001, found

Technical Data	TX08	TX10	TX12	TX16
Effective anchoring depth hef [mm]	40	60	60	80
Tensile strength NRd [kN] - uncracked concrete	3,33	6,66	5,71	16,66
Tensile strength NRd [kN] - cracked concrete	1,66	5,0	5,71	5,71
Shear strength VRd [kN] - uncracked concrete	6,48	14,08	19,76	36,72
Shear strength VRd [kN] - cracked concrete	4,32	9,38	13,17	24
Anchor spacing scr, N [mm]	120	180	180	240
The minimum distance between anchors of smin [mm]	65	80	80	85
Distance from the edge ccr, N [mm]	60	90	90	120
The minimum distance from the edge cmin [mm]	65	60	80	85
Torque Tinst [Nm]	30	50	70	130

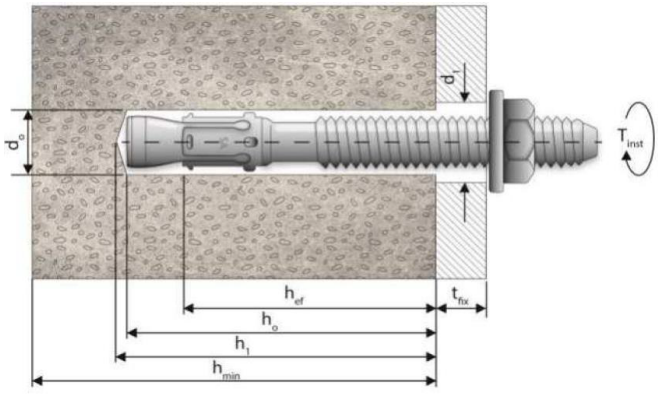
When designing, please consider the entire technical evaluation ETA-16/0574

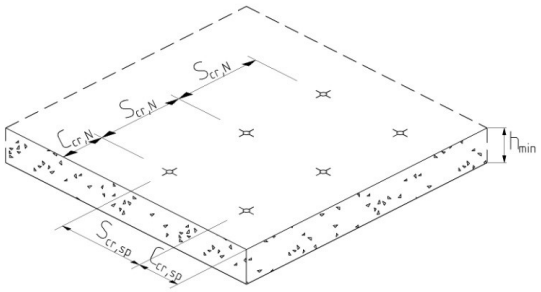
Characteristic strength of TX anchors in cracked and uncracked concrete of min. C20 / 25 in case of fire by acc. ETAG 001, found

Technical Data	TX08	TX10	TX12	TX16
Effective anchoring depth hef [mm]	40	60	60	80
Tensile and shear strength R30 NRk, s, fi [kN]	0,4	0,9	1,7	3,1
Tensile and shear strength R60 NRk, s, fi [kN]	0,3	0,8	1,3	2,4
Tear and shear strength R90 NRk, s, fi [kN	0,3	0,6	1,1	2,0
Strength and shear resistance R120 NRk, s, fi [kN]	0,2	0,5	0,8	1,6
Anchor spacing scr, N, fi [mm]	160	240	240	320
Distance from the edges ccr, N, fi [mm]	80	120	120	160
Torque Tinst [Nm]	30	50	70	130

The TR020 technical report covers design for fire conditions on the one hand. In case of fire from both sides, the distance must be increased to cmin≥300mm and ≥2xhef

Installation diagram of TX anchor





Installation diagram of TX anchors