

Declaration of Performance

Nr: TDX/01/20190424/1488-CPR-0502/Z



Revision No:	1
Revision carried out by:	Tomasz Golon
Revision date:	24.04.2019

1. Unique identification code of product-type:

DROP IN ANCHOR TDX

2. Intended use/es:

Deformation-controlled expansion anchors for multiple use for non-structural applications in concrete

3. Manufacturer:

Name: Trutek Fasteners Polska Sp. z o.o.
Address: Al. Krakowska 38, Sękocin Janki
05-090 Raszyn, Polska

4. System/s of AVCP:

System: 2+

5. European Assessment Document:

In accordance with regulation (EU) No 305/2011 on the basis of Guideline for European Technical Approval ETAG 001, Edition April 2013 "Metal anchors for use in concrete – Part 1: Anchors in general and Part 6: Anchors for multiple use for non-structural applications", used as European Assessment Document (EAD).
European Technical Assessment: ETA-17/0677 of 17th of August 2017
Issued by: ITB - Building Research Institute in Warsaw

6. Notified body/ies:

Name: Certification Department of ITB - Building Research Institute in Warsaw
Notified body/ies No: 1488
No of Certificate of Constancy of Performance: 1488-CPR-0502/Z

7. Declared performance/es:

Mechanical resistance and stability (BWR 1)

Essential characteristic	Performance
Characteristic resistance for all load directions	Annex C1
Edge distances and spacing	Annex C1

Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire	Anchor satisfy requirements for Class A1
Resistance to fire	Annex C2

The performance of the product identified above is in conformity with the set of declared performance/es. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Janki, 24th of April 2019

Signed for and on behalf of the manufacturer by:

Tomasz Golon



Kierownik Produktu / Product Manager

Table C1: Characteristic resistance in concrete C20/25 to C50/60 (design acc. to ETAG 001, Annex C, method B)

Anchor			DROP IN ANCHOR TDX					
Size			TDX06	TDX8	TDX10S	TDX10	TDX12TS	TDX12
All load directions (fastening screw or threaded rod property class \geq 4.6)								
Characteristic resistance in concrete C20/25 to C50/60	F_{Rk}	[kN]	1,5	2,0	3,0	3,0	4,0	5,0
Partial (installation) safety factor	γ_2	[-]	1,4	1,4	1,4	1,4	1,4	1,4
Spacing	s_{cr}	[mm]	200	200	200	200	200	200
Edge distance	c_{cr}	[mm]	150	150	150	150	150	150
Minimum member thickness	h_{min}	[mm]	80	80	80	80	100	100
Shear load: steel failure with lever arm								
Characteristic bending moment: screw class 4.6	$M_{Rk,S}^0$	[Nm]	6,1	15,0	29,9	29,9	52,4	52,4
Characteristic bending moment: screw class 4.8	$M_{Rk,S}^0$	[Nm]	6,1	15,0	29,9	29,9	52,4	52,4
Characteristic bending moment: screw class 5.8	$M_{Rk,S}^0$	[Nm]	7,6	18,8	37,4	37,4	65,6	65,6
Characteristic bending moment: screw class 6.8	$M_{Rk,S}^0$	[Nm]	9,2	22,5	44,9	44,9	78,7	78,7
Characteristic bending moment: screw class 8.8	$M_{Rk,S}^0$	[Nm]	12,2	30,0	59,9	59,9	104,9	104,9

DROP IN ANCHOR TDX
Performances
 Characteristic resistance

Annex C1
 of European
 Technical Assessment
 ETA-17/0677



Table C2: Characteristic resistance under fire exposure in concrete C20/25 to C50/60 (design acc. to ETAG 001, Annex C, method B)

Anchor		DROP IN ANCHOR TDX						
Size		TDX06	TDX8	TDX10S	TDX10	TDX12TS	TDX12	
Fire resistance class (fastening screw or threaded rod property class ≥ 4.6)								
R30	Characteristic resistance $F_{Rk,f}$ ¹⁾	[kN]	0,2	0,5	0,8	0,8	1,0	1,3
R60		[kN]	0,2	0,5	0,8	0,8	1,0	1,3
R90		[kN]	0,1	0,4	0,8	0,8	1,0	1,1
R120		[kN]	0,1	0,3	0,6	0,6	0,8	0,8
Spacing	$s_{cr,f}$	[mm]	4 x h_{ef}					
Edge distance	$c_{cr,f}$	[mm]	2 x h_{ef}					
The design method covers anchors with a fire attack from one side only. In case of fire attack from more than one side, the edge distance shall be ≥ 300 mm. ¹⁾ In the absence of other national regulations a partial safety factor $\gamma_{m,1} = 1,0$ is recommended								

DROP IN ANCHOR TDX

Performances
Characteristic resistance under fire exposure

Annex C2
of European
Technical Assessment
ETA-17/0677