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European Technical Assessment

**ETA 25/0178
of 30/04/2025**

Technical Assessment Body issuing the ETA: Technical and Test Institute
for Construction Prague

Trade name of the construction product

TAB Rod Hanger

**Product family to which the construction
product belongs**

Product area code: 33
Concrete screw for use in concrete for
redundant non-structural systems

Manufacturer

Trutek Fasteners Polska Sp. z o.o.
ul. Wojska Polskiego 3
39-300 Mielec, Poland

Manufacturing plant

Production plant no.1

**This European Technical Assessment
contains**

8 pages including 6 Annexes which form an
integral part of this assessment

**This European Technical Assessment is
issued in accordance with regulation
(EU) No 305/2011, on the basis of**

EAD 330747-00-0601
Fasteners for use in concrete for redundant
non-structural systems

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1. Technical description of the product

The TAB Rod Hanger is a concrete screw made of carbon steel.

The anchor is screwed into a drilled cylindrical hole. The special thread of the anchor cuts an internal thread into the member while setting. The anchorage is characterised by mechanical interlock in the special thread.

The installed anchor is shown in Annex A1.

2. Specification of the intended use in accordance with the applicable EAD

The performances given in Section 3 are only valid if the anchor is used in compliance with the specifications and conditions given in Annex B.

The provisions made in this European Technical Assessment are based on an assumed working life of the anchor of 50 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be regarded only as a means for choosing the products in relation to the expected economically reasonable working life of the works.

3. Performance of the product and references to the methods used for its assessment

3.1 Safety in case of fire (BWR 2)

Essential characteristic	Performance
Reaction to fire	Class A1 according to EN 13501-1
Resistance to fire	See Annex C 1

3.2 Safety and accessibility in use (BWR 4)

Essential characteristic	Performance
Characteristic resistance for all load directions and modes of failure for simplified design	See Annex C 1
Durability	See Annex B 1

4. Assessment and verification of constancy of performance (AVCP) system applied with reference to its legal base

According to the Decision 97/161/EC of the European Commission, the system 2+ of assessment verification of constancy of performance (see Annex V to the Regulation (EU) No 305/2011) apply.

5. Technical details necessary for the implementation of the AVCP system, as provided in the applicable EAD

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at Technical and Test Institute for Construction Prague.

Issued in Prague on 30.04.2025

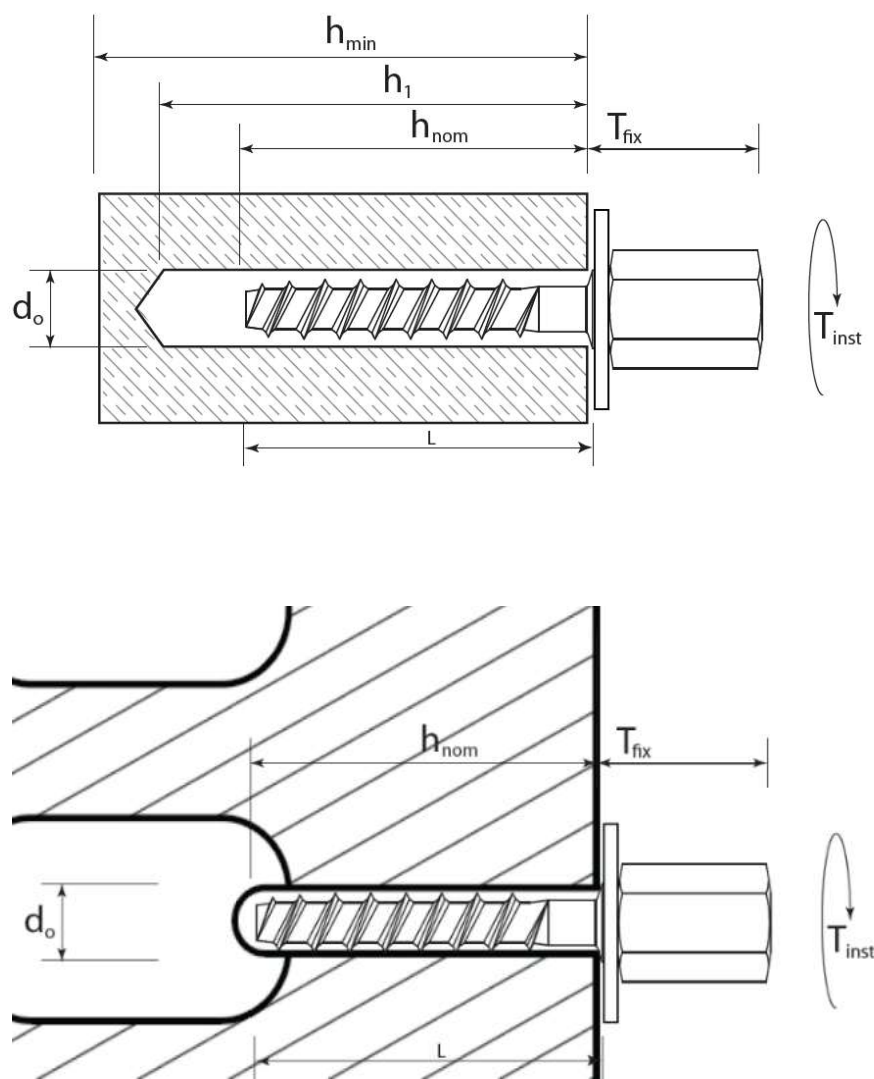
By

Ing. Jiří Studnička, Ph.D.

Head of the Technical Assessment Body



Installed conditions



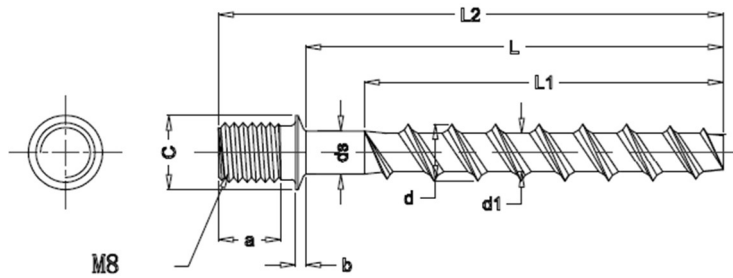
TAB Rod Hanger

Product description
Installed conditions

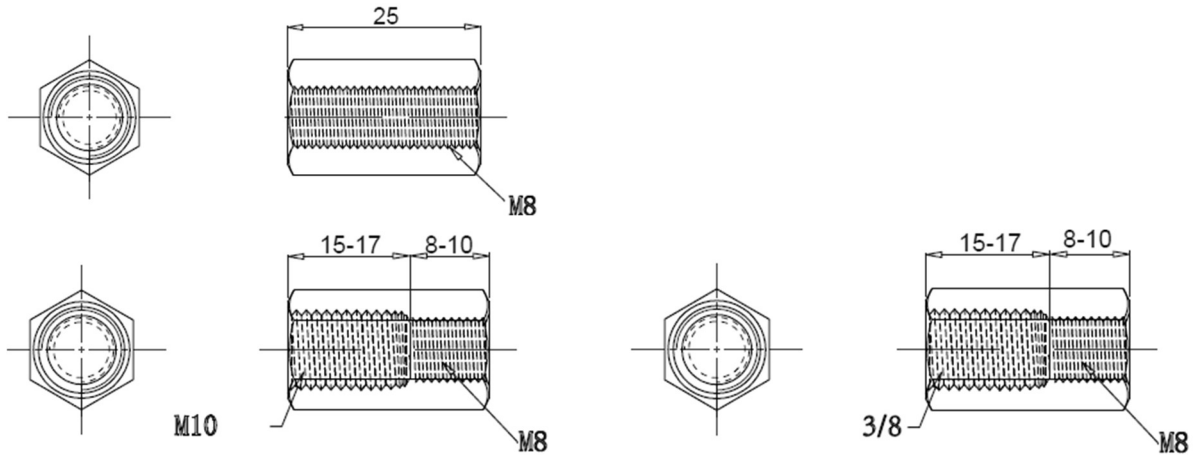
Annex A 1

TAB Rod Hanger

1



2



3

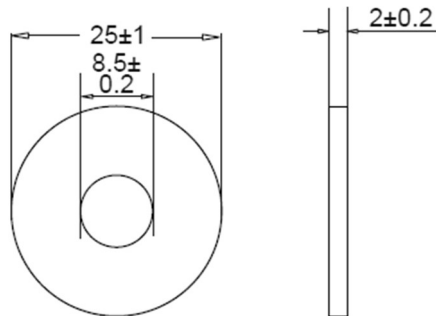


Table A1 Materials

Part	Designation	Material
1	Screw	Carbon steel 10B21
2	Nut	Carbon steel Q195
3	Washer	Carbon steel Q195

Table A2 Dimensions

Size	L2±1 [mm]	L±1 [mm]	L1±1 [mm]	ds [mm]	d [mm]	d1 [mm]
6 x 35	46,6	35,0	27,8	5,70 5,80	7,45 7,60	4,95 5,25
6 x 55	66,6	55,0	47,8	5,70 5,80	7,45 7,60	4,95 5,25

TAB Rod Hanger

Product description
Materials
Dimensions

Annex A 2

Specifications of intended use

Anchorage subject to:

- Static and quasi-static loads
- Fire exposure

Base materials

- Compacted reinforced and unreinforced normal weight concrete without fibres (cracked and uncracked) according to EN 206:2013+A2:2021.
- Strength classes \geq C20/25 to C50/60 according to EN 206:2013+A2:2021.
- Prestressed hollow core slabs with wall thickness \geq 35 mm and strength classes \geq C40/50 to C50/60.

Use conditions (Environmental conditions)

- Structures subject to dry internal conditions.

Design:

- The anchorages are designed under the responsibility of an engineer experienced in anchorages and concrete work.
- The anchorages are designed in accordance with the EN 1992-4:2018, design method B
- Anchorages under fire exposure have to be designed in accordance with EN 1992-4, Annex D.
- Verifiable calculation notes and drawings are prepared taking account of the loads to be anchored. The position of the anchor is indicated on the design drawings (e.g. positions of the fastener relative to reinforcement or to support, etc.).

Installation:

- Anchor installation carried out by appropriately qualified personnel and under the supervision of the person responsible for technical matters of the site.
- Use of the anchor only as supplied by the manufacturer without exchanging any components of the anchor.
- Anchor installation in accordance with the manufacturer's specifications and drawings using the appropriate tools.
- Effective anchoring depth, edge distance and spacing not less than the specified values without minus tolerance.
- In case of aborted drill hole: new drilling at a minimum distance away of twice the depth of the aborted hole or smaller distance if the aborted drill hole is filled with high strength mortar and if under shear or oblique tension load it is not in the direction of load application.

TAB Rod Hanger	Annex B 1
Intended use Specifications	

Table B1 Installation parameters – Solid concrete

Anchor size		TAB 6 x 35	TAB 6 x 55
Nominal drill hole diameter	d_o [mm]	6	6
Total length of the connector	L_2 [mm]	46,6	66,6
Anchoring length	L [mm]	35	55
Drill hole depth	$h_1 \geq$ [mm]	45	65
Diameter of clearance hole in the fixture	$d_f \leq$ [mm]	8	8
Nominal embedment depth	h_{nom} [mm]	35	55
Effective embedment depth	h_{ef} [mm]	25	41
Minimum concrete thickness	h_{min} [mm]	80	80
Minimum spacing	s_{min} [mm]	200	200
Minimum edge distance	c_{min} [mm]	100	125
Required setting torque	T_{inst} [Nm]	10	10

Table B2 Installation parameters - Prestressed hollow core slabs with min 35 mm thickness

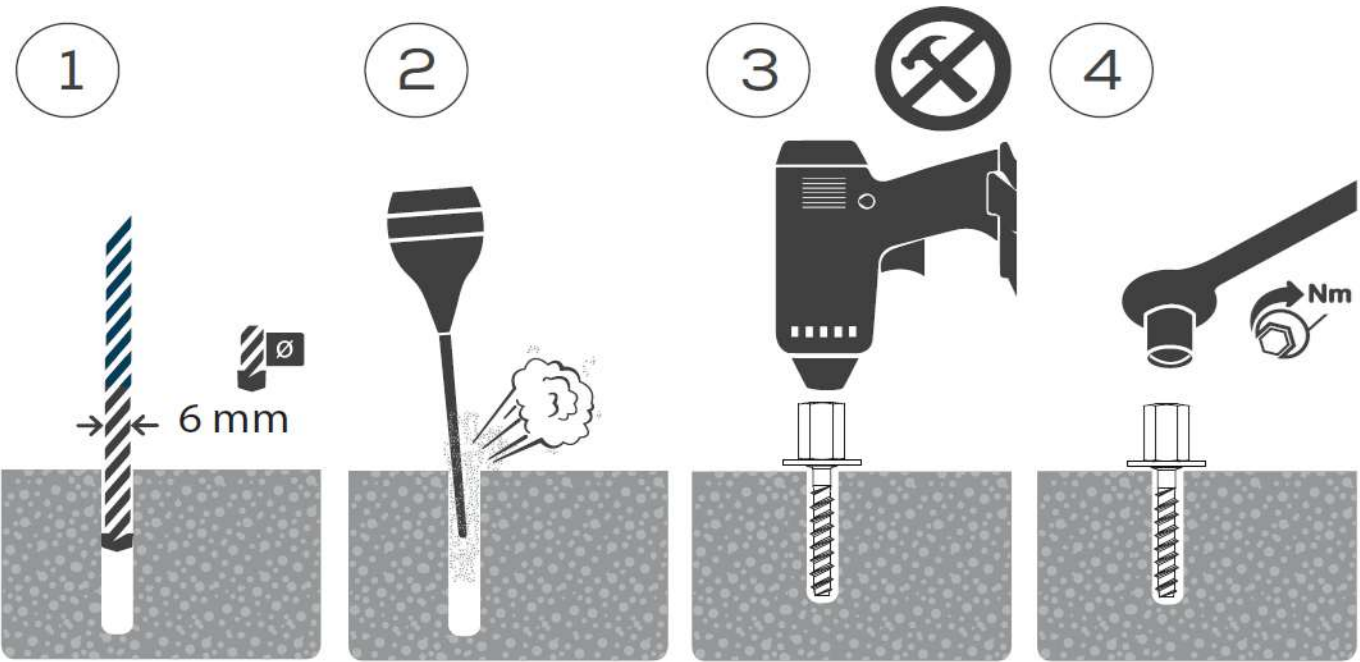
Anchor size		TAB 6 x 35
Nominal drill hole diameter	d_o [mm]	6
Total length of the connector	L_2 [mm]	46,6
Anchoring length	L [mm]	35
Drill hole depth	$h_1 \geq$ [mm]	45
Diameter of clearance hole in the fixture	$d_f \leq$ [mm]	8
Nominal embedment depth	h_{nom} [mm]	35
Effective embedment depth	h_{ef} [mm]	25
Minimum concrete thickness	h_{min} [mm]	35
Minimum spacing	s_{min} [mm]	200
Minimum edge distance	c_{min} [mm]	100
Required setting torque	T_{inst} [Nm]	6

TAB Rod Hanger

Intended use
Installation parameters

Annex B 2

Installation instructions



TAB Rod Hanger

Intended use
Installation instructions

Annex B 3

Table C1 Characteristic resistance for all load directions

Size			6	
Concrete solid material \geq C20/25				
Nominal embedment depth	h_{nom}	[mm]	35	55
Characteristic resistance	F^0_{Rk}	[mm]	4,0	4,5
Robustness	γ_{inst}	[-]	1,4	1,2
Characteristic spacing	s_{cr}	[mm]	200	200
Characteristic edge distance	c_{cr}	[mm]	100	125
Pre-stressed hollow core slabs \geq C40/50 with wall thickness \geq 35 mm				
Nominal embedment depth	h_{nom}	[mm]	35	
Characteristic resistance	F^0_{Rk}	[mm]	5,0	
Robustness	γ_{inst}	[-]	1,2	
Characteristic spacing	s_{cr}	[mm]	200	
Characteristic edge distance	c_{cr}	[mm]	100	
Shear load: steel failure with lever arm				
Characteristic bending moment	$M^0_{Rk,s}$	[Nm]	12,09	
Partial safety factor	$\gamma_{Ms}^{1)}$	[-]	1,5	

¹⁾ In absence of other national regulations

Table C2 Characteristic resistance for all load directions under fire exposure

Size		6		
Concrete solid material ≥ C20/25 and Pre-stressed hollow core slabs ≥ C40/50 with wall thickness ≥ 35 mm				
Nominal embedment depth	h_{nom}	[mm]	35	55
Characteristic fire resistance (R30)	$F^0_{Rk,fi(30)}$	[mm]	0,15	
Characteristic fire resistance (R60)	$F^0_{Rk,fi(60)}$	[mm]	0,14	
Characteristic fire resistance (R90)	$F^0_{Rk,fi(90)}$	[mm]	0,11	
Characteristic fire resistance (R120)	$F^0_{Rk,fi(120)}$	[mm]	0,08	
Characteristic fire bending moment (R30)	$M^0_{Rk,s,fi(30)}$	[Nm]	0,14	
Characteristic fire bending moment (R60)	$M^0_{Rk,s,fi(60)}$	[Nm]	0,13	
Characteristic fire bending moment (R90)	$M^0_{Rk,s,fi(90)}$	[Nm]	0,10	
Characteristic fire bending moment (R120)	$M^0_{Rk,s,fi(120)}$	[Nm]	0,07	

Note:

In case of fire attack from more than one side, the edge distance of the anchor has to be ≥ 300 mm and $\geq 2 h_{ef}$

TAB Rod Hanger

Performances
Characteristic resistance

Annex C 1