

DECLARATION OF PERFORMANCE  
DoP No. 1343 - CPR - M 561-10 - EN

1. Unique identification code of the product-type: **Toge ceiling anchor TDN 6**
2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4):

**ETA 06/0259, annex A2**  
**Batch number: see packaging of the product.**

3. Intended use or uses of the construction product, in accordance with the applicable harmonised technical specification, as foreseen by the manufacturer:

<b>generic type</b>	Deformation-controlled expansion anchor
<b>for use in</b>	Cracked and non-cracked concrete C 20/25-C 50/60 (EN 206) only for multiple point fixings for non-structural systems covered sizes: 6
<b>option / category</b>	Part 6
<b>loading</b>	static or quasi-static
<b>material</b>	<u>zinc-plated steel:</u> dry internal conditions only covered sizes: 6

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5):  
**Toge Dübel A. Gerhard KG, Illesheimer Strasse 10, 90431 Nuernberg**
5. Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2): --
6. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V: **System 2+**
7. In case of the declaration of performance concerning a construction product covered by a harmonised standard: --
8. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:

**Deutsches Institut für Bautechnik, Berlin**

has issued the following:

**ETA-06/0259**

on the basis of

**ETAG 001-1, Part 6**

The notified body **1343-CPR** performed

- i) determination of the product-type on the basis of type testing (including sampling ), type calculation, tabulated values or descriptive documentation of the product ;
- ii) factory production control.
- iii ) testing of samples taken at the factory in accordance with a prescribed test plan.

**and has issued the following:** certificate of conformity 1343-CPR-M561-10/11.14

9. Declared performance:

Essential Characteristics	Design Method	Performance	Harmonized Technical Specification
characteristic resistance	ETAG 001 annex C	annex B1	ETAG 001-06
spacing and edge distance	ETAG 001 annex C	annex C1	
characteristic resistance under fire exposure	ETAG 001 annex C	annex C2	

Where pursuant to Article 37 or 38 in the Specific Technical Documentation has been used, the requirements with which the product complies: --

10. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9.

This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by:



**Waldemar Gunkel**  
Dipl.-Wirtsch.-Ing. (FH), B.Eng.  
Anwendungstechnik und Technische Dokumente

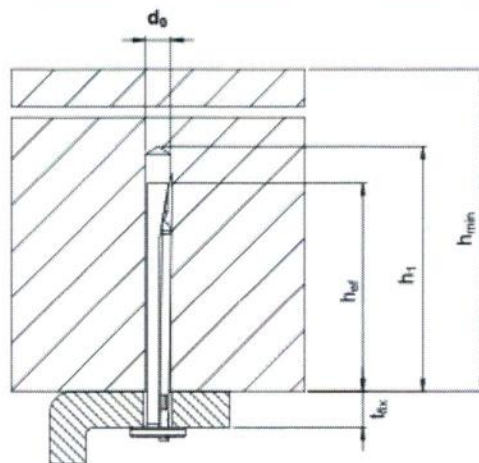
**Nuernberg, 2016-02-10**

**Andreas Gerhard**  
CEO

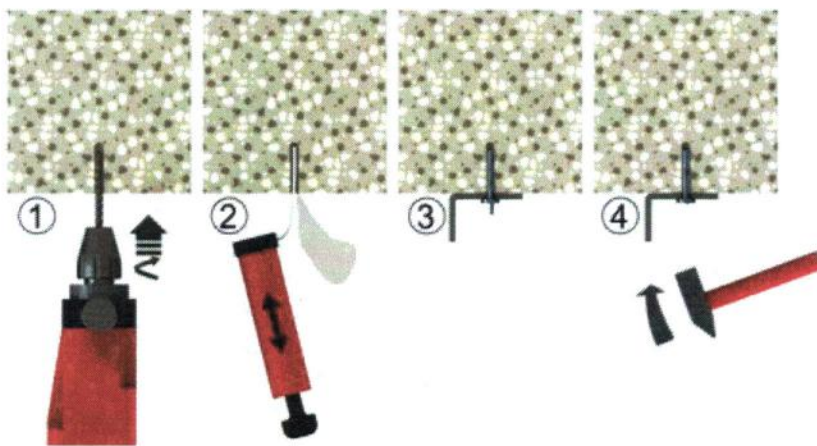
**Nuernberg, 2016-02-10**

**Table B 1: Installation parameters**

Anchorsize			TDN 6	
			6/5	6/35
nominal drill bit diameter	$d_0$	[mm]	6,0	
cutting diameter of drill bit	$d_{out}$	≤ [mm]	6,40	
depth of drill hole	$h_1$	≥ [mm]	40	
effective anchorage depth	$h_{ef}$	≥ [mm]	32	
Minimum thickness of member	$h_{min}$	[mm]	80	
Minimum edge distance	$c_{min}$	[mm]	150	
Minimum spacing	$s_{min}$	[mm]	200	
Maximale Anbauteildicke			5	35



**Installation Instructions**



**TOGE ceiling anchor TDN 6**

**Intended use**

Installation parameters

**Annex B 2**

**Table C 1: Characteristic values for design method C according ETAG 001 Annex C or for design method C according CEN TS 1992-4**

Anchorsize			TDN 6
<b>For all load directions and for all failures</b>			
Characteristic resistance in cracked and non-cracked concrete C20/25 to C50/60	$F_{Rk}$	[kN]	5,0
Partial safety factor	$\gamma_2^{1)} = \gamma_{inst}^{2)}$	[ - ]	1,0
<b>Shear load with lever arm</b>			
Characteristic bending moment	$M_{Rk,s}^0$ <sup>3)</sup>	[Nm]	5,4

<sup>1)</sup> Parameter relevant only for design according to CEN/TS 1992-4:2009

<sup>2)</sup> Parameter relevant only for design according to ETAG 001 Annex C

<sup>3)</sup> Characteristic bending moment see ETAG 001, Annex C, paragraph 5.2.3.2 b)

**TOGE ceiling anchor TDN 6**

**Performances**

Characteristic values for design method C according to ETAG 001 or to CEN TS 1992-4

**Annex C 1**

**Table C2: Characteristic resistance under fire exposure**

Anchorsize			TDN 6	
<b>Steel failure for tension and shear load (<math>F_{Rk,s,fi} = N_{Rk,s,fi} = V_{Rk,s,fi}</math>)</b>				
Fire resistance class				
R30	Characteristic resistance	$F_{Rk,s,fi30}$	[kN]	0,8
R60		$F_{Rk,s,fi60}$	[kN]	0,7
R90		$F_{Rk,s,fi90}$	[kN]	0,6
R120		$F_{Rk,s,fi120}$	[kN]	0,4
R30	Characteristic resistance	$M_{Rk,s,fi30}^0$	[Nm]	0,62
R60		$M_{Rk,s,fi60}^0$	[Nm]	0,54
R90		$M_{Rk,s,fi90}^0$	[Nm]	0,46
R120		$M_{Rk,s,fi120}^0$	[Nm]	0,31
<b>Edge distance</b>				
R30 bis R120		$c_{cr, fi}$	[mm]	150
<b>Spacing</b>				
R30 bis R120		$s_{cr, fi}$	[mm]	200

The characteristic resistance for pull-out failure, concrete cone failure, concrete pry-out failure and concrete edge failure shall be calculated according to TR 020 or CEN/TS 1992-4.

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**Performances**

Characteristic values for design method C according to ETAG 001 or to CEN TS 1992-4

**Annex C 2**