

DICHIARAZIONE DI PRESTAZIONE

DoP_19-0553_01 (IT)

1. Codice di identificazione unico del prodotto-tipo:

Viti HECO-TOPIX-plus, HECO-TOPIX-plus-T, HECO-TOPIX-plus-CC

2. Numero di tipo, lotto, serie o qualsiasi altro elemento che consenta l'identificazione del prodotto da costruzione ai sensi dell'articolo 11, paragrafo 4:

Identificazione del prodotto in acc. a Allegato A del Benestare ETA-19/0553

3. Uso previsto del prodotto da costruzione in accordo alla specifica tecnica armonizzata:

ETA-19/0553 Capitolo 1

Oggetto dell'omologazione	Viti HECO-TOPIX-plus, HECO-TOPIX-plus-T, HECO-TOPIX-plus-CC
Diametro	3,5 mm; 4,0 mm; 4,5 mm; 5,0 mm; 6,0/6,5 mm; 8,0/8,5 mm; 10,0 mm
Uso	Viti autofilettanti come mezzi di giunzione per legno
Carichi	Carico prevalentemente statico o quasi statico
Campo di applicazione	Viti zincate Classe di utilizzo 1 - 2 in base a Eurocode 5
	Viti in acciaio inox Classe di utilizzo 3 in base a Eurocode 5

4. Nome, denominazione commerciale e indirizzo del fabbricante ai sensi dell'articolo 11, paragrafo 5:

HECO-Schrauben GmbH & Co. KG

Dr.-Kurt-Steim-Str. 28

78713 Schramberg (Germania)

5. Sistema o sistemi di valutazione e verifica della costanza della prestazione del prodotto da costruzione di cui all'allegato V:

Sistema 3

6. Nel caso di una dichiarazione di prestazione relativa ad un prodotto da costruzione per il quale è stata rilasciata una valutazione tecnica europea:

ETA-19/0553 rilasciato da ETA-Danmark A/S sulla base di **EAD 130118-01-0603**

7. Prestazione dichiarata

Tabelle 1.1: HECO-TOPIX-plus, HECO-TOPIX-plus-T, HECO-TOPIX-plus-CC screws made of carbon steel without MagicClose

Characteristic		Screws Ø	HECO-TOPIX-plus screws								HECO-TOPIX-plus- CC screws		HECO-TOPIX-plus T screws	
			3,5	4,0	4,5	5,0	6,0	8,0	10,0	6,0/6,5	8,0/8,5	8,0	10,0	
Mechanical resistance and stability (BWR 1)														
1	$l, l_g, d_1, d, d_s, d_{head}, p$	[mm]	according to ETA-19/0553 Annex A											
2	$M_{y,k}$	ETA-19/0553 chapter 3.9	[Nm]	2,3	2,8	4,5	5,9	9,5	20,0	36,0	9,5	20,0	20,0	36,0
3	α_{bend}	ETA-19/0553 chapter 1	[°]	39	37	36	35	33	30	29	32	30	30	29
4a	$f_{ax,k}$	ETA-19/0553 chapter 3.9	[N/mm ²]	13,7	13,7	13,7	11,8	11,8	11,8	11,8	12,5	12,5	10,5	10,5
4b	$f_{ax,k}$ <small>LVL, Buche, Träger BauBuche GL75</small>	ETA-19/0553 chapter 3.9	[N/mm ²]	-	-	-	35,0	35,0	35,0	30,0	-	-	-	-
4c	$f_{ax,k}$ <small>Particle Board, OSB</small>	ETA-19/0553 chapter 3.9	[N/mm ²]	-	10,0	10,0	10,0	10,0	-	-	-	-	-	-
5a	$f_{head,k}$	ETA-19/0553 chapter 3.9	[N/mm ²]	$f_{head,k} = 14,0 \text{ N/mm}^2$ for $d_h < 23 \text{ mm}$; $f_{head,k} = 9,4 \text{ N/mm}^2$ for $23 \text{ mm} < d_h < 35 \text{ mm}$										
5b	$f_{head,k}$ <small>LVL, Buche, Träger BauBuche GL75</small>	ETA-19/0553 chapter 3.9	[N/mm ²]	$f_{head,k} = 32,0 \text{ N/mm}^2$ for $d_h < 35 \text{ mm}$										
6	$f_{tens,k}$	ETA-19/0553 chapter 3.1	[kN]	3,8	4,7	6,4	7,9	11,3	20,0	30,0	10,0	18,0	20,0	25,0
7	$R_{0,2,k}$		[Nmm ²]	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
8	$f_{tor,k}$	ETA-19/0553 chapter 3.1	[Nm]	2,2	2,9	4,5	6,5	11,0	25,0	42,0	10,0	23,0	24,0	42,0
9	$R_{tor,mean}$	ETA-19/0553 chapter 3.1	[Nm]	1,5	1,9	3,0	4,3	7,3	16,7	28,0	6,7	15,3	16,0	28,0
10	$a_1; a_2; a_{1,CG}; a_{2,CG}$	ETA-19/0553 Annex B	[mm]	according to ETA-19/0553 Annex B										
11	K_{ser}	ETA-19/0553 chapter 3.9	[N/mm]	Softwood: $K_{ser} = 25 \times d \times l_{ef}$; Hardwood: $K_{ser} = 30 \times d \times l_{ef}$										
12	Corrosion protection	ETA-19/0553 chapter 3.10		Table 2										
Safety in case of fire (BWR 2)														
13		ETA-19/0553 chapter 3.2		Class A1										
Safety and accessibility in use (BWR 4)														
14				-										

Tabelle 1.2: HECO-TOPIX-plus, HECO-TOPIX-plus-T, HECO-TOPIX-plus-CC screws made of carbon steel with MagicClose

Characteristic	Screws Ø	HECO-TOPIX-plus screws									HECO-TOPIX-plus-CC screws		HECO-TOPIX-plus-T screws	
		3,5	4,0	4,5	5,0	6,0	8,0	10,0	6,0/6,5	8,0/8,5	8,0	10,0		
Mechanical resistance and stability (BWR 1)														
1	$l, l_g, d_1, d, d_s, d_{head}, p$	[mm]	according to ETA-19/0553 Annex A											
2	$M_{y,k}$	[Nm]	2,3	2,8	4,5	5,9	9,5	-	-	-	-	-	-	-
3	α_{bend}	[°]	39	37	36	35	33	-	-	-	-	-	-	-
4a	$f_{ax,k}$	[N/mm ²]	11,8	11,8	11,8	11,8	11,8	-	-	-	-	-	-	-
4b	$f_{ax,k}$ <small>LVL Buche, Träger BauBuche GL75</small>	[N/mm ²]	-	-	-	-	-	-	-	-	-	-	-	-
4c	$f_{ax,k}$ <small>Particle Board, OSB</small>	[N/mm ²]	-	10,0	10,0	10,0	10,0	-	-	-	-	-	-	-
5a	$f_{head,k}$	[N/mm ²]	$f_{head,k} = 14,0 \text{ N/mm}^2$ for $d_h < 23 \text{ mm}$; $f_{head,k} = 9,4 \text{ N/mm}^2$ for $23 \text{ mm} < d_h < 35 \text{ mm}$											
5b	$f_{head,k}$ <small>LVL Buche, Träger BauBuche GL75</small>	[N/mm ²]	$f_{head,k} = 32,0 \text{ N/mm}^2$ for $d_h < 35 \text{ mm}$											
6	$f_{tens,k}$	[kN]	3,4	4,4	5,6	7,9	11,3	-	-	-	-	-	-	-
7	$R_{0,2,k}$	[Nmm ²]	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD
8	$f_{tor,k}$	[Nm]	2,1	2,9	4,5	6,2	11,0	-	-	-	-	-	-	-
9	$R_{tor,mean}$	[Nm]	1,4	1,9	3,0	4,1	7,3	-	-	-	-	-	-	-
10	$a_1; a_2; a_{1,CG}; a_{2,CG}$	[mm]	according to ETA-19/0553 Annex B											
11	K_{ser}	[N/mm]	Softwood: $K_{ser} = 25 \times d \times l_{ef}$; Hardwood: $K_{ser} = 30 \times d \times l_{ef}$											
12	Corrosion protection	ETA-19/0553 chapter 3.10	Table 2											
Safety in case of fire (BWR 2)														
13		ETA-19/0553 chapter 3.2	Class A1											
Safety and accessibility in use (BWR 4)														
14			-											

Tabelle 1.3: HECO-TOPIX-plus, HECO-TOPIX-plus-T, HECO-TOPIX-plus-CC screws made of stainless steel without MagicClose

Characteristic	Screws Ø	HECO-TOPIX-plus screws									HECO-TOPIX-plus-CC screws		HECO-TOPIX-plus-T screws	
		3,5	4,0	4,5	5,0	6,0	8,0	10,0	6,0/6,5	8,0/8,5	8,0	10,0		
Mechanical resistance and stability (BWR 1)														
1	$l, l_g, d_1, d, d_s, d_{head}, p$	[mm]	according to ETA-19/0553 Annex A											
2	$M_{y,k}$	ETA-19/0553 chapter 3.9	[Nm]	1,9	2,8	3,4	4,4	7,1	17,0	30,0	-	-	15,0	27,0
3	α_{bend}	ETA-19/0553 chapter 1	[°]	39	37	36	35	33	30	29	-	-	30	29
4a	$f_{ax,k}$	ETA-19/0553 chapter 3.9	[N/mm ²]	13,7	13,7	13,7	11,8	11,8	11,8	11,8	-	-	11,8	11,8
4b	$f_{ax,k}$ <small>LVL Buche, Träger BauBuche GL75</small>	ETA-19/0553 chapter 3.9	[N/mm ²]	-	-	-	35,0	35,0	35,0	30,0	-	-	-	-
4c	$f_{ax,k}$ <small>Particle Board, OSB</small>	ETA-19/0553 chapter 3.9	[N/mm ²]	-	10,0	10,0	10,0	10,0	-	-	-	-	-	-
5a	$f_{head,k}$	ETA-19/0553 chapter 3.9	[N/mm ²]	$f_{head,k} = 14,0 \text{ N/mm}^2$ for $d_h < 23 \text{ mm}$; $f_{head,k} = 9,4 \text{ N/mm}^2$ for $23 \text{ mm} < d_h < 35 \text{ mm}$										
5b	$f_{head,k}$ <small>LVL Buche, Träger BauBuche GL75</small>	ETA-19/0553 chapter 3.9	[N/mm ²]	$f_{head,k} = 32,0 \text{ N/mm}^2$ for $d_h < 35 \text{ mm}$										
6	$f_{tens,k}$	ETA-19/0553 chapter 3.1	[kN]	2,9	3,8	4,8	5,9	7,5	15,0	22,0	-	-	14,0	22,0
7	$R_{0,2,k}$		[Nmm ²]	NPD	NPD	NPD	NPD	NPD	NPD	NPD	-	-	NPD	NPD
8	$f_{tor,k}$	ETA-19/0553 chapter 3.1	[Nm]	2,0	2,9	3,5	5,0	7,0	19,0	35,0	-	-	18,0	37,0
9	$R_{tor,mean}$	ETA-19/0553 chapter 3.1	[Nm]	1,3	1,9	2,3	3,3	4,7	12,7	23,3	-	-	12,0	24,7
10	$a_1; a_2; a_{1,CG}; a_{2,CG}$	ETA-19/0553 Annex B	[mm]	according to ETA-19/0553 Annex B										
11	K_{ser}	ETA-19/0553 chapter 3.9	[N/mm]	Softwood: $K_{ser} = 25 \times d \times l_{ef}$; Hardwood: $K_{ser} = 30 \times d \times l_{ef}$										
12	Corrosion protection	ETA-19/0553 chapter 3.10		Table 2										
Safety in case of fire (BWR 2)														
13		ETA-19/0553 chapter 3.2		Class A1										
Safety and accessibility in use (BWR 4)														
14				-										



Tabelle 1.4: HECO-TOPIX-plus, HECO-TOPIX-plus-T, HECO-TOPIX-plus-CC Screws made of stainless steel with MagicClose

Characteristic	Screws Ø	HECO-TOPIX-plus screws								HECO-TOPIX-plus-CC screws		HECO-TOPIX-plus-T screws		
		3,5	4,0	4,5	5,0	6,0	8,0	10,0	6,0/6,5	8,0/8,5	8,0	10,0		
Mechanical resistance and stability (BWR 1)														
1	$l, l_g, d_1, d, d_s, d_{head}, p$	[mm]	according to ETA-19/0553 Annex A											
2	$M_{y,k}$	ETA-19/0553 chapter 3.9	[Nm]	-	-	3,7	4,9	-	-	-	-	-	-	-
3	α_{bend}	ETA-19/0553 chapter 1	[°]	-	-	36	35	-	-	-	-	-	-	-
4a	$f_{ax,k}$	ETA-19/0553 chapter 3.9	[N/mm ²]	-	-	11,8	11,8	-	-	-	-	-	-	-
4b	$f_{ax,k}$ <small>LVL Buche, Träger BauBuche GL75</small>	ETA-19/0553 chapter 3.9	[N/mm ²]	-	-	-	-	-	-	-	-	-	-	-
4c	$f_{ax,k}$ <small>Particle Board, OSB</small>	ETA-19/0553 chapter 3.9	[N/mm ²]	-	-	10,0	10,0	-	-	-	-	-	-	-
5a	$f_{head,k}$	ETA-19/0553 chapter 3.9	[N/mm ²]	$f_{head,k} = 14,0 \text{ N/mm}^2$ for $d_h < 23 \text{ mm}$; $f_{head,k} = 9,4 \text{ N/mm}^2$ for $23 \text{ mm} < d_h < 35 \text{ mm}$										
5b	$f_{head,k}$ <small>LVL Buche, Träger BauBuche GL75</small>	ETA-19/0553 chapter 3.9	[N/mm ²]	$f_{head,k} = 32,0 \text{ N/mm}^2$ for $d_h < 35 \text{ mm}$										
6	$f_{tens,k}$	ETA-19/0553 chapter 3.1	[kN]	-	-	5,3	7,4	-	-	-	-	-	-	-
7	$R_{0,2,k}$		[Nmm ²]	-	-	NPD	NPD	-	-	-	-	-	-	-
8	$f_{tor,k}$	ETA-19/0553 chapter 3.1	[Nm]	-	-	4,1	6,0	-	-	-	-	-	-	-
9	$R_{tor,mean}$	ETA-19/0553 chapter 3.1	[Nm]	-	-	2,7	4,0	-	-	-	-	-	-	-
10	$a_1; a_2; a_{1,CG}; a_{2,CG}$	ETA-19/0553 Annex B	[mm]	according to ETA-19/0553 Annex B										
11	K_{ser}	ETA-19/0553 chapter 3.9	[N/mm]	Softwood: $K_{ser} = 25 \times d \times l_{ef}$; Hardwood: $K_{ser} = 30 \times d \times l_{ef}$										
12	Corrosion protection	ETA-19/0553 chapter 3.10		Table 2										
Safety in case of fire (BWR 2)														
13		ETA-19/0553 chapter 3.2		Class A1										
Safety and accessibility in use (BWR 4)														
14				-										



8. La prestazione del prodotto di cui ai punti 1 e 2 è conforme alla prestazione dichiarata di cui al punto 7. Si rilascia la presente dichiarazione di prestazione sotto la responsabilità esclusiva del fabbricante di cui al punto 4.

Firmato a nome e per conto di:

Schramberg, 01.06.2020

ppa.

A handwritten signature in black ink, appearing to read "A. Hettich", is written over the "ppa." text.

Andreas Hettich, Head of Business Development