

# DECLARATION OF PERFORMANCE

DoP\_19-0553\_06 (GB)

1. Unique identification code of the product-type:

**HECO-TOPIX-plus, HECO-TOPIX-plus-T, HECO-TOPIX-plus-CC screws**

2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4):

**Identification acc. ETA-19/0553, Annex A**

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

**ETA-19/0553, chapter 1**

<b>Generic Type</b>	HECO-TOPIX-plus (or HTP or HT-plus), HECO-TOPIX-plus-T (or HTP-T or HT-plus-T) and HECO-TOPIX-plus-CC (or HTP-CC or HT-plus-CC) screws
<b>Diameters</b>	3,5 mm; 4,0 mm; 4,5 mm; 5,0 mm; 6,0/6,5 mm; 7,0 mm 8,0/8,5 mm; 10,0 mm; 12,0 mm
<b>Intendend use</b>	self-tapping screws for use in timber construction
<b>Loads</b>	static or quasi-static loading
<b>Durability</b>	screws zinc plated service classes 1 - 2 acc. Eurocode 5
	screws made of stainless-steel service classes 3 acc. Eurocode 5

4. Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article 11(5):

**HECO-Schrauben GmbH & Co. KG**  
**Dr.-Kurt-Steim-Str. 28**  
**78713 Schramberg (Germany)**

5. System or systems of assessment and verification of constancy of performance of the construction product as set out in Annex V:

**System 3**

6. In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:

**ETA-19/0553 (28.03.2025)** has been issued by the ETA-Danmark A/S on the basis of **EAD 130118-01-0603**



## 7. Declared performance

**Table 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		HECO-TOPIX-plus- T		HECO-TOPIX-plus- HC		
			3,5	4,0	4,5	5,0	6,0	7,0	8,0	10,0	12,0	6,0/6,5	8,0/8,5	8,0	10,0	8,0	10,0		
<b>Mechanical resistance and stability (BWR 1)</b>																			
1	$l_l, d_1, d, d_s, d_{head}, P$	[mm]	according to ETA-19/0553 Annex A																
2	$M_{y,k}$	ETA-19/0553 chapter 3.4	[Nm]	2,3	2,8	4,5	5,9	9,5	-	20,0	36,0	60,0	9,5	20,0	20,0	36,0	20,0	38,0	
3	$\alpha_{bend}$	ETA-19/0553 chapter 1	[°]	38,7	37,1	35,7	34,6	32,8	-	30,5	29,0	27,9	32,1	30,5	30,5	29,0	30,5	29,0	
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	45,0	10,0	18,0	20,0	25,0	25,0	38,0	
7	$R_{0,2,k}$		[Nmm <sup>2</sup> ]	NPD	NPD	NPD	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	75,0	10,0	23,0	24,0	42,0	30,0	55,0	
9	Core hardness		HV	≤ 390	≤ 390	≤ 390	≤ 390	≤ 360	-	≤ 360	≤ 360	≤ 360	≤ 360	≤ 360	≤ 360	≤ 360	≤ 360	≤ 360	
10	$R_{tor,mean}$	ETA-19/0553 chapter 3.1	[Nm]	1,5	1,9	3,0	4,3	7,3	-	16,7	28,0	50,0	6,7	15,3	16,0	28,0	20,0	36,7	
11	$a_1; a_2; a_{1,CG}; a_{2,CG}$	ETA-19/0553 Annex B	[mm]	according to ETA-19/0553 Annex B															
12	$K_{ser}$	ETA-19/0553 chapter 3.4	[N/mm]	Softwood: $K_{ser} = 25 \times d \times l_{ef}$ ; Hardwood: $K_{ser} = 30 \times d \times l_{ef}$															
13	Corrosion protection	ETA-19/0553 chapter 3.5		Table 2															
<b>Safety in case of fire (BWR 2)</b>																			
14		ETA-19/0553 chapter 3.2		Class A1															
<b>Safety and accessibility in use (BWR 4)</b>																			
15				-															



**Table 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		HECO-TOPIX-plus- T		HECO-TOPIX-plus- HC		
			3,5	4,0	4,5	5,0	6,0	7,0	8,0	10,0	12,0	6,0/6,5	8,0/8,5	8,0	10,0	8,0	10,0		
<b>Mechanical resistance and stability (BWR 1)</b>																			
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 3.4	[Nm]	2,3	2,8	4,5	5,9	9,5	-	-	-	-	-	-	-	-	-	-	
3	$\alpha_{bend}$	ETA-19/0553 chapter 1	[°]	39	37	36	35	33	-	-	-	-	-	-	-	-	-	-	
6	$f_{tens,k}$	ETA-19/0553 chapter 3.1	[kN]	3,4	4,4	5,6	7,9	11,3	-	-	-	-	-	-	-	-	-	-	
7	$R_{0,2,k}$		[Nmm <sup>2</sup> ]	NPD	NPD	NPD	NPD	NPD	-	-	-	-	-	-	-	-	-	-	
8	$f_{tor,k}$	ETA-19/0553 chapter 3.1	[Nm]	2,1	2,9	4,5	6,2	11,0	-	-	-	-	-	-	-	-	-	-	
9	Core hardness		HV	≤ 390	≤ 390	≤ 390	≤ 390	≤ 360	-	-	-	-	-	-	-	-	-	-	
10	$R_{tor,mean}$	ETA-19/0553 chapter 3.1	[Nm]	1,4	1,9	3,0	4,1	7,3	-	-	-	-	-	-	-	-	-	-	
11	$a_1; a_2; a_{1,CG}; a_{2,CG}$	ETA-19/0553 Annex B	[mm]	according to ETA-19/0553 Annex B															
12	$K_{ser}$	ETA-19/0553 chapter 3.4	[N/mm]	Softwood: $K_{ser} = 25 \times d \times l_{ef}$ ; Hardwood: $K_{ser} = 30 \times d \times l_{ef}$															
13	Corrosion protection	ETA-19/0553 chapter 3.5		Table 2															
<b>Safety in case of fire (BWR 2)</b>																			
14		ETA-19/0553 chapter 3.2		Class A1															
<b>Safety and accessibility in use (BWR 4)</b>																			
15				-															



**Table 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		HECO-TOPIX-plus- T		HECO-TOPIX-plus- HC	
			3,5	4,0	4,5	5,0	6,0	7,0	8,0	10,0	12,0	6,0/6,5	8,0/8,5	8,0	10,0	8,0	10,0	
<b>Mechanical resistance and stability (BWR 1)</b>																		
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 3.4 [Nm]	1,9	2,8	3,4	4,4	7,1	10,0	17,0	30,0	-	-	-	15,0	27,0	-	-	
3	$\alpha_{bend}$	ETA-19/0553 chapter 1 [°]	39	37	36	35	33	32	30	29	-	-	-	30	29	-	-	
6	$f_{tens,k}$	ETA-19/0553 chapter 3.1 [kN]	2,9	3,8	4,8	5,9	7,5	12,0	15,0	22,0	-	-	-	14,0	22,0	-	-	
7	$R_{0,2,k}$	[Nmm <sup>2</sup> ]	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	-	-	-	NPD	NPD	-	-	
8	$f_{tor,k}$	ETA-19/0553 chapter 3.1 [Nm]	1,8	2,7	4,1	6,0	8,0	12,0	19,0	35,0	-	-	-	18,0	37,0	-	-	
9	$R_{tor,mean}$	ETA-19/0553 chapter 3.1 [Nm]	1,2	1,8	2,7	4,0	5,3	8,0	12,7	23,3	-	-	-	12,0	24,7	-	-	
10	$a_1; a_2; a_{1,OG}; a_{2,OG}$	ETA-19/0553 Annex B [mm]	according to ETA-19/0553 Annex B															
11	$K_{ser}$	ETA-19/0553 chapter 3.4 [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 3.5	Table 2															
<b>Safety in case of fire (BWR 2)</b>																		
13		ETA-19/0553 chapter 3.2	Class A1															
<b>Safety and accessibility in use (BWR 4)</b>																		
14			-															



**Table 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		HECO-TOPIX-plus-T		HECO-TOPIX-plus-HC	
		3,5	4,0	4,5	5,0	6,0	7,0	8,0	10,0	12,0	6,0/6,5	8,0/8,5	8,0	10,0	8,0	10,0		
<b>Mechanical resistance and stability (BWR 1)</b>																		
1	$l_{lg}, d_1, d, d_s, d_{head}, P$	[mm]	according to ETA-19/0553 Annex A															
2	$M_{y,k}$	[Nm]	1,9	2,8	3,7	4,9	7,9	-	-	-	-	-	-	-	-	-	-	
3	$\alpha_{bend}$	[°]	39	37	36	35	33	-	-	-	-	-	-	-	-	-	-	
6	$f_{tens,k}$	[kN]	3,4	4,4	5,3	7,4	10,0	-	-	-	-	-	-	-	-	-	-	
7	$R_{0,2,k}$	[Nmm <sup>2</sup> ]	NPD	NPD	NPD	NPD	NPD	-	-	-	-	-	-	-	-	-	-	
8	$f_{tor,k}$	[Nm]	1,8	2,7	4,1	6,0	8,0	-	-	-	-	-	-	-	-	-	-	
9	$R_{tor,mean}$	[Nm]	1,2	1,8	2,7	4,0	5,3	-	-	-	-	-	-	-	-	-	-	
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 3.5	Table 2															
<b>Safety in case of fire (BWR 2)</b>																		
13		ETA-19/0553 chapter 3.2	Class A1															
<b>Safety and accessibility in use (BWR 4)</b>																		
14			-															



**Table 1.5: HECO-TOPIX-plus (all materials) characteristic withdrawal parameter + characteristic head pull-through parameter**

Characteristic		Screws Ø	HECO-TOPIX-plus screws										HECO-TOPIX-plus- CC		HECO-TOPIX-plus- HC			
			3,5	4,0	4,5	5,0	6,0	7,0	8,0	10,0	12,0	6,0/6,5	8,0/8,5	8,0	10,0			
1	$f_{ax,k}$	ETA-19/0553 chapter 3.4	[N/mm <sup>2</sup> ]	15,1	13,8	13,7	12,7	12,0	14,0	12,3	11,6	11,3	12,5	12,5	12,3	11,6		
2	$f_{ax,k}$ pre-drilled <small>LVL, Buche, Träger, BauBuche GL75</small>	ETA-19/0553 chapter 3.4	[N/mm <sup>2</sup> ]	-	-	-	34,4	36,4	35,3	35,3	29,3	19,5	-	-	35,3	29,3		
3	$f_{ax,k}$ non pre-drilled <small>LVL, Buche, Träger, BauBuche GL75</small>	ETA-19/0553 chapter 3.4	[N/mm <sup>2</sup> ]	-	-	-	38,2	38,7	38,7	39,2	32,8	20,0	-	-	39,2	32,8		
4	$f_{ax,k}$ <small>Particle Board, OSB</small>	ETA-19/0553 chapter 3.4	[N/mm <sup>2</sup> ]	-	10,0	10,0	10,0	10,0	-	-	-	-	-	-	-	-		
5	$f_{w,k}$	ETA-19/0553 chapter 3.4	[N/mm <sup>2</sup> ]	17,2	15,8	15,7	14,5	13,7	15,6	14,0	13,3	12,7	-	-	13,3	12,7		
6	$f_{w,k}$ pre-drilled <small>LVL, Buche, Träger, BauBuche GL75</small>	ETA-19/0553 chapter 3.4	[N/mm <sup>2</sup> ]	-	-	-	41,3	43,7	42,4	42,4	35,1	21,9	-	-	42,4	35,1		
7	$f_{w,k}$ non pre-drilled <small>LVL, Buche, Träger, BauBuche GL75</small>	ETA-19/0553 chapter 3.4	[N/mm <sup>2</sup> ]	-	-	-	45,9	46,4	46,4	47,0	39,3	24,0	-	-	47,0	39,3		
8	$l_t$ <small>length tip</small>	drawing	mm	4,9	5,6	6,3	7,0	8,4	9,8	11,2	14,0	16,8	-	-	11,2	14,0		
9	$f_{head,k}$	ETA-19/0553 chapter 3.4	[N/mm <sup>2</sup> ]	$f_{head,k} = 14,0 \text{ N/mm}^2$ for $d_h \leq 23 \text{ mm}$ ; $f_{head,k} = 9,4 \text{ N/mm}^2$ for $23 \text{ mm} < d_h < 35 \text{ mm}$														
10	$f_{head,k}$ <small>Ash, Beech, Oak <math>\geq 20 \text{ mm}</math></small>	ETA-19/0553 chapter 3.4	[N/mm <sup>2</sup> ]	$f_{head,k} = 20,0 \text{ N/mm}^2$ for $d_h \leq 20 \text{ mm}$ ; $f_{head,k} = 15 \text{ N/mm}^2$ for $d_h > 20 \text{ mm}$														
11	$f_{head,k}$ <small>LVL, Buche, Träger, BauBuche GL75</small>	ETA-19/0553 chapter 3.4	[N/mm <sup>2</sup> ]	$f_{head,k} = 32,0 \text{ N/mm}^2$ for $d_h \leq 18 \text{ mm}$ ; $f_{head,k} = 29 \text{ N/mm}^2$ for $18 \text{ mm} < d_h < 22 \text{ mm}$														

8. The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 7. 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:

Schramberg, 28.03.2025

ppa.

Andreas Hettich, Head of Business Development