

DECLARATION OF PERFORMANCE

HECO-DoP_ETA_11/0452_HU_1607_GB

1. Unique identification code of the product-type:

HECO-UNIX-top and HECO-UNIX-plus 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 11/0452 Annex 3

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

ETA 11/0452 chapter 1

Generic Type	HECO-UNIX-top and HECO-UNIX-plus screws
Diameters	3,5 mm; 4,0 mm; 4,5 mm; 5,0 mm; 6,0 mm
Intendend use	self-tapping screws for use in timber construction
Loads	static or quasi-static loading
Durability	screws zinc plated service classes 1 - 2 acc. EN 1995-1-1
	screws made of stainless steel service classes 1-3 acc. EN 1995-1-1

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-11/0452 has been issued by the DIBt on the basis of **EAD DP 15-13-0118-06.03**

7. Declared performance

Table 1.1: HECO-UNIX-top and HECO-UNIX-plus screws made of carbon steel

	characteristic		HECO-UNIX-plus and HECO-UNIX-top screws							
			screws Ø	3,5	4,0	4,5	5,0	6,0	8,0	10,0
Mechanical resistance and stability (BWR 1)										
1.1	$l, d, d_k, l_g, d_r,$		[mm]	according ETA 11/0452 Annex						
1.2	$M_{y,k}$	ETA 11/0452 Table A.2.1	[Nm]	2,3	2,8	4,5	5,9	9,5	-	-
1.3	$F_{ax,k}$	ETA 11/0452 2.3.1	[N/mm ²]	11,8	11,8	11,8	11,8	11,8	-	-
1.4	$f_{head,k}$	ETA 11/0452 2.3.2	[N/mm ²]	13,0	13,0	13,0	13,0	13,0	-	-
1.5	$f_{tens,k}$	ETA 11/0452 Table A.2.1	[kN]	3,4	4,4	5,6	7,9	11,3	-	-
1.6	$R_{0,2,k}$		[Nmm ²]	NPD	NPD	NPD	NPD	NPD	-	-
1.7	$f_{tor,k}$	ETA 11/0452 Table A.2.1	[Nm]	2,1	2,9	4,5	6,2	11,0	-	-
1.8	$f_{inst,m}$	ETA 11/0452 2.5	[Nm]	1,4	1,9	3,0	4,1	7,3	-	-
1.9	$a_1; a_2; a_{1,t}; a_{1,c};$ $a_{2,t}; a_{2,c}$	ETA 11/0452 2.4	[mm]	according ETA 11/0452 Annex 2.4						
1.10	K_{ser}	ETA 11/0452 2.3	[N/mm]	$= 780 \cdot d^{0,2} \cdot j_{ef}^{0,4}$						
1.11	Corrosion protection	ETA 11/0452 2.6		Table A.2.3						
Safety in case of fire (BWR 2)										
2.1		ETA-11/0452 Chapter 3.2		Class A1						
Hygiene, health and the environment (BWR 3)										
3.1		ETA-11/0452 Chapter 3.3		Not applicable						
Safety and accessibility in use (BWR 4)										
4.1		ETA-11/0452 Chapter 3.4		same as BWR 1						
Protection against noise (BWR 5)										
5.1		ETA-11/0452 Chapter 3.5		Not applicable						
Energy economy and heat retention (BWR 6)										
6.1		ETA-11/0452 Chapter 3.6		Not applicable						
Sustainable use of natural resources (BWR 7)										
7.1		ETA-11/0452 Chapter 3.7		NPD						

Table 1.2: HECO-UNIX-top and HECO-UNIX-plus screws made of stainless steel

	characteristic		HECO-UNIX-plus and HECO-UNIX-top screws							
			screws Ø	3,5	4,0	4,5	5,0	6,0	8,0	10,0
Mechanical resistance and stability (BWR 1)										
1.1	l, d, d _k , l _g , d ₁ ,		[mm]	according ETA 11/0452 Annex						
1.2	M _{y,k}	ETA 11/0452 Table A.2.1	[Nm]	-	-	3,7	4,9	-	-	-
1.3	F _{ax,k}	ETA 11/0452 A 2.3.1	[N/mm ²]	-	-	11,8	11,8	-	-	-
1.4	f _{head,k}	ETA 11/0452 A 2.3.2	[N/mm ²]	-	-	13,0	13,0	-	-	-
1.5	f _{tens,k}	ETA 11/0452 Table A.2.1	[kN]	-	-	5,3	7,4	-	-	-
1.6	R _{0,2,k}		[Nmm ²]	-	-	NPD	NPD	-	-	-
1.7	f _{tor,k}	ETA 11/0452 Table A.2.1	[Nm]	-	-	4,1	6,0	-	-	-
1.8	f _{inst,m}	ETA 11/0452 A 2.5	[Nm]	-	-	2,7	4,0	-	-	-
1.9	a ₁ ; a ₂ ; a _{1,t} ; a _{1,c} ; a _{2,t} ; a _{2,c}	ETA 11/0452 A 2.4	[mm]	according ETA 11/0452 Annex 2.4						
1.10	K _{ser}	ETA 11/0452 A 2.3	[N/mm]	$= 780 \cdot d^{0,2} \cdot j_{ef}^{0,4}$						
1.11	Corrosion protection	ETA 11/0452 A 2.6		Usage class 1, 2 und 3 according EN 1995-1-1						
Safety in case of fire (BWR 2)										
2.1		ETA-11/0452 Chapter 3.2		Class A1						
Hygiene, health and the environment (BWR 3)										
3.1		ETA-11/0452 Chapter 3.3		Not applicable						
Safety and accessibility in use (BWR 4)										
4.1		ETA-11/0452 Chapter 3.4		same as BWR 1						
Protection against noise (BWR 5)										
5.1		ETA-11/0452 Chapter 3.5		Not applicable						
Energy economy and heat retention (BWR 6)										
6.1		ETA-11/0452 Chapter 3.6		Not applicable						
Sustainable use of natural resources (BWR 7)										
7.1		ETA-11/0452 Chapter 3.7		NPD						



8. 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:

A handwritten signature in black ink, appearing to read "A. Hettich", is written over a horizontal line.

Schramberg, 23.11.2016

p.p.

Andreas Hettich, Head of PM/Marketing