

DECLARATION OF PERFORMANCE

HECO-DoP_ETA_11/0284_HFP-HT_1607_GB

1. Unique identification code of the product-type:

HECO-FIX-plus, HECO-TOPIX, HECO-TOPIX-T and HECO-TOPIX-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 11/0284 Annex 6

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

ETA 11/0284 chapter 1

Generic Type	HECO-FIX-plus, HECO-TOPIX, HECO-TOPIX-T and HECO-TOPIX-CC screws
Diameters	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
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. 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-11/0284 has been issued by the DIBt on the basis of **EAD DP 15-13-0118-06.03**



7. Declared performance

Table 1.1: HECO-TOPIX and HECO-FIX-plus screws made of carbon steel

Characteristic	Screws Ø	HECO-TOPIX- and HECO-FIX-plus screws									HECO-TOPIX- CC screws		HECO-TOPIX- 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 an stability (BWR 1)														
1.1	l, d, d _h , l _g , d ₁	[mm]	according ETA-11/0284 Annex 6											
1.2	M _{y,k}	ETA-11/0284 Table A.2.1 & A.2.2 [Nm]	2,3	2,8	4,5	5,9	9,5	20,0	36,0	9,5	20,0	20,0	36,0	
1.3	F _{ax,k}	ETA-11/0284 A.2.3.1 [N/mm²]	13,7	13,7	13,7	11,8	11,8	11,8	11,8	12,5	12,5	10,5	10,5	
1.4	f _{head,k}	ETA-11/0284 A.2.3.2 [N/mm²]	f _{head,k} = 14,0 N/mm² for d _h < 23 mm; f _{head,k} = 9,8 N/mm² for 23 mm < d _h < 35 mm											
1.5	f _{tens,k}	ETA-11/0284 Table A.2.1 [kN]	3,8	4,7	6,4	7,9	11,3	20,0	30,0	10,0	18,0	20,0	25,0	
1.6	R _{0,2,k}	[Nmm²]	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	NPD	
1.7	f _{tor,k}	ETA-11/0284 Table A.2.1 [Nm]	2,2	2,9	4,5	6,5	11,0	25,0	42,0	10,0	23,0	24,0	42,0	
1.8	f _{inst,m}	ETA-11/0284 A.2.5 [Nm]	1,5	1,9	3,0	4,3	7,3	16,7	28,0	6,7	15,3	16,0	28,0	
1.9	a ₁ ; a ₂ ; a _{1,i} ; a _{1,c} ; a _{2,i} ; a _{2,c}	ETA-11/0284 A.2.4 [mm]	according ETA 11/0284 A.2.4											
1.10	K _{ser}	ETA-11/0284 A.2.3 [N/mm]	Softwood: K _{ser} = 780 * d ^{0,2} * l _{ef} ^{0,4} ; Hardwood: K _{ser} = 870 * d ^{0,2} * l _{ef} ^{0,4}											
1.11	Corrosion protection	ETA-11/0284 A.2.6	Table A.2.5											
Safety in case of fire (BWR 2)														
2.1		ETA-11/0284 Chapter 3.2	Class A1											
Hygiene, health and the environment (BWR 3)														
3.1		ETA-11/0284 Chapter 3.3	not applicable											
Safety and accessibility in use (BWR 4)														
4.1		ETA-11/0284 Chapter 3.4	same as BWR 1											
Protection against noise (BWR 5)														
5.1		ETA-11/0284 Chapter 3.5	not applicable											
Energy economy and heat retention (BWR 6)														
6.1		ETA-11/0284 Chapter 3.6	not applicable											
Sustainable use of natural resources (BWR 7)														
7.1		ETA-11/0284 Chapter 3.7	NPD											





Table 1.2: HECO-TOPIX and HECO-FIX-plus screws made of stainless steel

Characteristic	Screws Ø	HECO-TOPIX- and HECO-FIX-plus screws								HECO-TOPIX-CC screws		HECO-TOPIX-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 an stability (BWR 1)														
1.1	l, d, d _k , l _g , d ₁	[mm] according ETA-11/0284 Annex 6												
1.2	M _{y,k}	ETA-11/0284 Table A.2.1 & A.2.2	[Nm]	1,9	2,8	3,4	4,4	7,1	17,0	30,0	-	-	15,0	27,0
1.3	F _{ax,k}	ETA-11/0284 A.2.3.1	[N/mm ²]	13,7	13,7	13,7	11,8	11,8	11,8	11,8	-	-	10,5	10,5
1.4	f _{head,k}	ETA-11/0284 A.2.3.2	[N/mm ²]	f _{head,k} = 14,0 N/mm ² for d _h < 23 mm; f _{head,k} = 9,8 N/mm ² for 23 mm < d _h < 35 mm										
1.5	f _{tens,k}	ETA-11/0284 Table A.2.1	[kN]	2,9	3,8	4,8	5,9	7,5	15,0	22,0	-	-	14,0	22,0
1.6	R _{0,2,k}		[Nmm ²]	NPD	NPD	NPD	NPD	NPD	NPD		-	-	NPD	NPD
1.7	f _{tor,k}	ETA-11/0284 Table A.2.1	[Nm]	2,0	2,9	3,5	5,0	7,0	19,0	35,0	-	-	18,0	37,0
1.8	f _{inst,m}	ETA-11/0284 A.2.5	[Nm]	1,3	1,9	2,3	3,3	4,7	12,7		-	-	12,0	24,7
1.9	a ₁ ; a ₂ ; a _{1,i} ; a _{1,c} ; a _{2,i} ; a _{2,c}	ETA-11/0284 A.2.4	[mm]	according ETA 11/0284 A.2.4										
1.10	K _{ser}	ETA-11/0284 A.2.3	[N/mm]	Softwood: K _{ser} = 780 * d ^{0,2} * l _{ef} ^{0,4} ; Hardwood: K _{ser} = 870 * d ^{0,2} * l _{ef} ^{0,4}										
1.11	Corrosion protection	ETA-11/0284 A.2.6		according ETA-11/0284 A.2.6										
Safety in case of fire (BWR 2)														
2.1		ETA-11/0284 Chapter 3.2		Class A1										
Hygiene, health and the environment (BWR 3)														
3.1		ETA-11/0284 Chapter 3.3		not applicable										
Safety and accessibility in use (BWR 4)														
4.1		ETA-11/0284 Chapter 3.4		same as BWR 1										
Protection against noise (BWR 5)														
5.1		ETA-11/0284 Chapter 3.5		not applicable										
Energy economy and heat retention (BWR 6)														
6.1		ETA-11/0284 Chapter 3.6		not applicable										
Sustainable use of natural resources (BWR 7)														
7.1		ETA-11/0284 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:

Schramberg, 29.07.2016

p.p.

Andreas Hettich, Head of PM/Marketing

