



# **DECLARATION OF PERFORMANCE**

according to Annex III of the Regulation (EU) Nr. 305/2011 (Construction Products Regulation)

Hilti S-IT fasteners and S-IW load plates for systems of mechanically fastened flexible roof waterproofing membrane No. Hilti-SF-DoP-007

- **1. Unique identification code of the product-type**: Hilti S-IT fasteners and S-IW load plates for systems of mechanically fastened flexible roof waterproofing membrane
- 2. Type, batch or serial number or any other element allowing identification of the construction product as required pursuant to Article 11(4): Type and Lot-Number displayed on the packaging
- 3. Intended use or uses of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:

Generic type and use	Fastening for systems of mechanically fastened flexible roof waterproofing membrane on steel
Product size covered	Screw diameter 4.8, 6.3; Load plate diameter 40, 64x64, 40x40, 80x40
Base material	Steel according to EN 10346
Fastener material	Screws: coated galvanized carbon steel Load plates: galvanized steel
Loading	Static & quasi static (wind loading)

- **4.** Name, registered trade name or registered trade mark and contact address of the manufacturer as required pursuant to Article **11(5)**: Hilti Aktiengesellschaft, Business Unit Direct Fastening, 9494 Schaan, Fürstentum Liechtenstein
- 5. Where applicable, name and contact address of the authorised representative whose mandate covers the tasks specified in Article 12(2): n.a.
- **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 harmonized standard: n.a.
- **8.** In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued: ETA-Danmark A/S issued ETA-17/0346 on the basis of ETAG 006-2012. The notified body Karlsruher Institut für Technologie (KIT) 0769 performed third party tasks under system 2+ and issued the certificate of conformity of the production control 0769-CPR-VAS-00682.

9. Declared performance:

Essential characteristics	Performance data	Harmonized technical specification
Characteristic axial loading resistance	Annex 1; ETA-17/0346, Annex B1	
Corrosion class	Annex 2; ETA-17/0346, Annex B3	ETA-17/0346
Resistance to unwinding	Annex 3; ETA-17/0346, Annex B3	ETAG 006-2012
Mechanical resistance/brittleness	Annex 4; ETA-17/0346, Annex B4	

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:

**Lars Taenzer** 

Head of Business Unit Direct Fastening

Pierre Hohmeier

**Head of Quality Screw Fastening** 

Hilti Aktiengesellschaft, Schaan, 01.07.2017



#### Annex 1:

## ETA-17/0346, Annex B1

English translation prepared by ETA-Danmark

Fastener	Thickness of support t [mm]	Characteristic axial loading resistance N <sub>Rk</sub> [N]	Substrate	
Profiled metal decking substrate (standard)				
S-IT 01C 4.8xL + S-IW 4.9 AZ 40	0.75	1370		
S-IT 01C 4.8xL + S-IW 4.9 AZ 40x40	0.75	1370	Steel, S320GD	
S-IT 01C 4.8xL + S-IW 4.9 AZ 64x64	0.75	1370	5320GD EN 10346	
S-IT 01C 4.8xL + S-IW 4.9 AZ 80x40	0.75	1370	EN 10540	
Profiled metal decking substrate (acoustic)				
S-IT 01C 6.3xL + S-IW 6.6 AZ 40	0.75	1680		
S-IT 01C 6.3xL + S-IW 6.6 AZ 40x40	0.75	1680	Steel	
S-IT 01C 6.3xL + S-IW 6.6 AZ 64x64	0.75	1680	S320GD EN 10346	
S-IT 01C 6.3xL + S-IW 6.6 AZ 80x40	0.75	1680	111 10340	

### Annex 2:

### ETA-17/0346, Annex B3

English translation prepared by ETA-Danmark

Fastener	Corrosion class 1)
S-IT 01C 4.8xL + S-IW 4.9 AZ 40	C15
S-IT 01C 4.8xL + S-IW 4.9 AZ 40x40	C15
S-IT 01C 4.8xL + S-IW 4.9 AZ 64x64	C15
S-IT 01C 4.8xL + S-IW 4.9 AZ 80x40	C15
S-IT 01C 6.3xL + S-IW 6.6 AZ 40	C15
S-IT 01C 6.3xL + S-IW 6.6 AZ 40x40	C15
S-IT 01C 6.3xL + S-IW 6.6 AZ 64x64	C15
S-IT 01C 6.3xL + S-IW 6.6AZ 80x40	C15

class C2 = surface corrosion = 0 % after 2 cycles class C7 = surface corrosion ≤ 5 % after 7 cycles class C15 = surface corrosion ≤ 15 % after 15 cycles

### Annex 3:

### ETA-17/0346, Annex B3

English translation prepared by ETA-Danmark

The fasteners are assessed as resistant to:

- rotation of the fastener head ≤ ¼ turn after 500 cycles
- rotation of the fastener head ≤ ½ turn after 900 cycles
- vertical movement ≤ 1mm after 900 cycles



#### Annex 4:

# ETA-17/0346, Annex B4

English translation prepared by ETA-Danmark

Fastener	Mechanical resistance before and after heat ageing:  drop height [m] 1)
S-IT 01C 4.8xL + S-IW 4.9 AZ 40	not relevant
S-IT 01C 4.8xL + S-IW 4.9 AZ 40x40	not relevant
S-IT 01C 4.8xL + S-IW 4.9 AZ 64x64	not relevant
S-IT 01C 4.8xL + S-IW 4.9 AZ 80x40	not relevant
S-IT 01C 6.3xL + S-IW 6.6 AZ 40	not relevant
S-IT 01C 6.3xL + S-IW 6.6 AZ 40x40	not relevant
S-IT 01C 6.3xL + S-IW 6.6 AZ 64x64	not relevant
S-IT 01C 6.3xL + S-IW 6.6AZ 80x40	not relevant

 $<sup>^{1)}</sup>$  Heat ageing of the plastic part of the fastener for 28 days at 80 °C  $\pm$  2 °C. Drop height  $\geq$  1.0 m is checked.