



EN

## DECLARATION OF PERFORMANCE

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

Hilti fixing element XI-FV

No. Hilti-DX-DoP-006

**1. Unique identification code of the product-type:**

Hilti fixing element XI-FV

**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 are 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:**

Intended use	Powder-actuated fastener for the fixing of bonded thermal insulation composite systems according EAD 330965-00-0601 and ETAG 004. The fixing element may only be used for transmission of wind suction loads.
Base material	Reinforced or unreinforced normal weight concrete C12/15 – C35/45. The concrete can either be uncoated or coated according Annex 1 and Annex 2 of ETA-17/0304.
Environmental condition	Structures subject to dry conditions and structures subject to external atmospheric atmospheres. Temperature range: -20 °C to +60 °C
Available lengths (insulation thickness)	60 mm, 80 mm, 100 mm, 120 mm, 130mm, 140 mm, 150mm, 160 mm, 180 mm, 200 mm

**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:**

DIBt, Deutsches Institut für Bautechnik issued ETA-17/0304 on the basis of EAD 330965-00-0601. The notified body MPA-Stuttgart 0672 performed third party tasks under system 2+ and issued the certificate of conformity of the factory production control 0672-CPR-0719.



## 9. Declared performance:

Essential characteristics	Performance
Characteristic tension resistance in uncoated concrete – fastener pull-out	$N_{Rk,p} = 1.0 \text{ kN}$
Characteristic tension resistance in coated concrete – fastener pull-out Note: Applicable for concrete coated with cement plaster complying with general purpose plastering mortar (GP) of compressive strength category CS III or CS IV according EN 998-1. If the plaster specification is unknown or deviates from the above specification or if the concrete is coated with tiles, job-site tests according EOTA Technical Report TR 052 may be done to determine the characteristic pull-out resistance in coated concrete.	$N_{Rk,p} = 0.9 \text{ kN}$
Partial safety factor for fastener pull-out Note: In the absence of national regulations	$\gamma_M = 2.0$
Characteristic tension resistance – plastic part	$N_{Rk,pl} = 1.1 \text{ kN}$
Partial safety factor for plastic part Note: In the absence of national regulations	$\gamma_{M,pl} = 1.3$
Minimum allowable spacing	$s_{min} = 100 \text{ mm}$
Minimum allowable edge distance	$c_{min} = 75 \text{ mm}$
Diameter of the anchor plate	$d = 60 \text{ mm}$
Load resistance of the plate	$N_{Rk,plate} = 1.6 \text{ kN}$
Plate stiffness	$c = 0.4 \text{ kN/mm}$
Displacement at tension load $N = 0.33 \text{ kN}$	$\delta_N = 0.8 \text{ mm}$
Point thermal transmittance for insulation thickness: $60 \text{ mm} \leq h_D < 140 \text{ mm}$	$\chi = 0.002 \text{ W/K}$
Point thermal transmittance for insulation thickness: $140 \text{ mm} \leq h_D \leq 200 \text{ mm}$	$\chi = 0.001 \text{ W/K}$

**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:

**Mario Grazioli**

Head of Quality Direct Fastening

Hilti Aktiengesellschaft, Schaan: June 21, 2021