



EN

DECLARATION OF PERFORMANCE

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

Hilti powder-actuated fasteners X-ALH and X-DKH 48

ETA-22/0587

Nr. Hilti-DX-DoP-011

1. Unique identification code of the product-type:

Hilti powder-actuated fasteners X-ALH and X-DKH 48 for top fixing of suspended ceilings.

Fasteners X-ALH without predrilling: X-SCH ALH32, X-SCR M6 ALH32, X-SCR M8 ALH32, X-SCO/M ALH37

Fasteners X-DKH 48 with predrilling: X-CC DKH 48 P8 S15, X-HS M6 DKH 48 P8 S15, X-HS M6 DKH 48 P8 S15, X-HS M10 DKH 48 P8 S15 und X-DKH 48 P8 S15

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 fasteners and fixtures are intended to be used for redundant non-structural applications specifically for use as top fixings of suspended ceilings.
Base material	Reinforced or unreinforced normal weight concrete of strength class C20/25 bis C40/50 für fasteners X-ALH without predrilling. Reinforced or unreinforced normal weight concrete of strength class C20/25 bis C50/60 für fasteners X-DKH 48 with predrilling.
Environmental condition	Structures subject to dry indoor conditions.
Products without predrilling	X-SCH ALH32 for the connection of hook hangers X-SCR M6 ALH32, X-SCR M8 ALH32 for threaded rod connection X-SCO/M ALH37, for the connection with 4 mm thick eyelet wire and nonius hanger (with a nominal sheet thickness of 1.0 bis 1.2 mm)
Products with predrilling	X-CC DKH 48 P8 S15 for the connection of hook hangers X-HS M6 DKH 48 P8 S15, X-HS M6 DKH 48 P8 S15 and X-HS M10 DKH 48 P8 S15 for threaded rod connection X-DKH 48 P8 S15 for general connections and for the connection with 4 mm thick eyelet wire and nonius hanger (with a nominal sheet thickness of 1.0 bis 1.2 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-22/0587 on the basis of EAD 330083-04-0601, Edition 07/2023.

The notified body MPA-Stuttgart 0672 performed third party tasks under system 2+.

9. Declared performance:

Powder-actuated fasteners X-ALH without predrilling X-SCH ALH32, X-SCR M6 ALH32, X-SCR M8 ALH32, X-SCO/N ALH37	
Essential characteristic	Performance
Characteristic tension resistance	$N_{Rk} = 0.34 \text{ kN}$
Partial factor (in the absence of national regulations)	$\gamma_M = 1.5$
Spacing	$s_{min} = 200 \text{ mm}$
Edge distance	$c_{min} = 150 \text{ mm}$
Displacement in tension direction at $N = 0.15 \text{ kN}$	$\delta_{N0} = \delta_{N\infty} \leq 0.1 \text{ mm}$
Reaction to fire	Class A1
Resistance to fire	No assessment

Powder-actuated fastener X-DKH 48 P8 S15 with predrilling	
Essential characteristic	Performance
Characteristic tension resistance for the single fastener without fixture	$N_{Rk} = 2.0 \text{ kN}$
Characteristic tension resistance with fixture	$N_{Rk} = 1.2 \text{ kN}$
Partial factor (in the absence of national regulations)	$\gamma_M = 1.5$
Spacing	$s_{min} = 100 \text{ mm}$
Edge distance	$c_{min} = 150 \text{ mm}$
Displacement in tension direction at $N = 0.9 \text{ kN}$	$\delta_{N0} = \delta_{N\infty} \leq 0.1 \text{ mm}$
Reaction to fire	Class A1
Resistance to fire	No assessment

Powder-actuated fastener X-DKH 48 and fixture with predrilling X-CC DKH 48 P8 S15, X-HS M6 DKH 48 P8 S15, X-HS M8 DKH 48 P8 S15, X-HS M10 DKH 48 P8 S15	
Essential characteristic	Performance
Characteristic tension resistance	$N_{Rk} = 1.8 \text{ kN}$
Partial factor (in the absence of national regulations)	$\gamma_M = 1.5$
Spacing	$s_{min} = 100 \text{ mm}$
Edge distance	$c_{min} = 150 \text{ mm}$
Displacement in tension direction at $N = 0.8 \text{ kN}$	$\delta_{N0} = \delta_{N\infty} \leq 0.1 \text{ mm}$
Reaction to fire	Class A1
Resistance to fire	No assessment

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:

Rafael Garcia

Head of Business Unit Direct Fastening

Klaus Bertsch

Head of Quality Direct Fastening

Hilti Aktiengesellschaft, Schaan: 03. Oktober 2023