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Authorised and notified
according to Article 29 of the
Regulation (EU)
No 305/2011 of the European
Parliament and of the Council
of 9 March 2011

MEMBER OF EOTA



European Technical Assessment ETA-22/0466 of 2022/09/06

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the construction product:

IKO hybritech

Product family to which the above construction product belongs:

Liquid applied roof waterproofing kit on the basis of hybrid polymers

Manufacturer:

IKO NV
D'Herbouvillekaai 80
BE-2020 Antwerpen

Manufacturing plant:

IKO NV
D'Herbouvillekaai 80
BE-2020 Antwerpen

This European Technical Assessment contains:

8 pages including 1 annex which form an integral part of the document

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of:

European Assessment document (EAD) no. European Assessment Document EAD 030350-00-0402 for Liquid applied roof waterproofing kits

This version replaces:

Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and should be identified as such.

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1 Technical description of the product

1.1 IKO hybritech is a roof waterproofing kit consisting of is a single-component resin based on hybrid polymers, and polyester reinforcing scrim. As an assembled system, the kit forms a homogeneous roof waterproofing. The kit is used to produce a system to a minimum specification of:

- Primer — IKO hybritech Bitumen Primer (when required) 0.1 to 0.2 l/m²
- IKO hybritech – a modified polyurethane liquid applied roof waterproofing 2.5 kg/m².
- Reinforcement – IKO polyester Fleece 110 polyester fleece of 110 g/m²

1.2 The minimum total dry film thickness of the system must be 1.85 mm.

1.3 The kit has been assessed for use on substrates of:

- Un-primed concrete
- Primed bitumen carrier membrane over insulation

2 Specification of the intended use(s) in accordance with the applicable European Assessment Document (hereinafter EAD)

The kit is for use as a liquid-applied roof waterproofing to resist the passage of water to the building's internal structure, where Essential Requirements 2 *Safety in the case of fire*, 3 *Hygiene, health and the environment* and 4 *Safety in use*, including the aspect of durability, apply.

The provisions made in this European Technical Assessment are based on an assumed working life for the roof of 25 years. The indications given in the working life cannot be interpreted as a guarantee given by the producer or the Technical Assessment Body, but are to be regarded only as a means for choosing the right products in relation to the expected economically reasonable working life of the works.

3 Performance of the product and references to the methods used for its assessment

3.1 Safety in case of fire (BWR 2)

Characteristic	Classification
External fire performance	B roof (t1) and B roof (t4) – see annex A
Reaction to fire	No performance assessed

3.2 Health, hygiene, and the environment (BWR 3)

Characteristic	Performance
Content, emission and/or release of dangerous substances	No performance assessed
Water vapour resistance factor – μ (mean)	1391
Water vapour diffusion – equivalent air layer thickness – Sd (m) (mean)	4.65
Watertightness	Watertight
Resistance to wind loads	> 50 Pa
Resistance to delamination (kPa) (mean)	
– concrete	1593 kPa
– bitumen carrier membrane on PIR insulation	62 kPa
Resistance to mechanical damage (perforation)	
Dynamic indentation at 23°C	
– steel	I4
– bitumen carrier membrane/ PIR insulation	I4
Static indentation at 23°C	
– steel	L4
– bitumen carrier membrane/ PIR insulation	L4
Resistance to fatigue movement	
– 1000 cycles	W3
Resistance to the effects of low and high temperatures	
Low temperatures – Dynamic indentation	
– Steel substrate at –30°C	I4
Crack bridging	Pass
Effects of high surface temperature on steel at 90°C	L4

Characteristic	Performance
Resistance to ageing media Resistance to heat ageing - 200 days at 70°C Tensile strength (N per 50 mm) - control, mean - aged, mean Resistance to heat ageing (cont) Elongation at maximum load (%) - control - aged	I4 807 N 641 N 30 % 13 %
Resistance to water exposure 180 days at 60°C Delamination (kPa) - concrete - bitumen carrier membrane on PIR insulation Static indentation at 90°C – steel	1413 kPa 105 kPa L2
UV radiation in the presence of water 1000 MJ/m ² (50°C) Dynamic indentation – steel at –10°C Tensile strength (N per 50 mm) – control, mean – aged, mean Elongation at maximum load (%) – control, mean – aged, mean	I4 807 N 687 N 30 % 22 %
Resistance to root penetration	No performance assessed
Effects of variation in kit components and site practices Tensile strength (N per 50 mm) - control, mean - prepared at +5°C, mean - prepared at +30°C, mean Elongation at maximum load (%) - control, mean - prepared at +5°C, mean - prepared at +30°C, mean Dynamic indentation – steel - prepared at +5°C, mean - prepared at +30°C, mean	807 N 814 N 531 N 30 % 43 % 39 % I4 I4
Effects of day joints	1272 kPa

3.3 Safety in use (BWR4)

Characteristic	Performance
Slipperiness	No performance assessed

4 Assessment and verification of constancy of performance (hereinafter AVCP) system applied, with reference to its legal base

According to Decision 98/599/EC of the European Commission⁽¹⁾ and amended by Decision 2001/596/EC of the European Commission⁽²⁾, the AVCP system (see Annex V to Regulation (EU) No 305/2011) given in the following table applies.

Product	Intended use	Level or class	System
Liquid-applied roof waterproofing kits	For all roof waterproofing uses	–	3

(1) Official Journal of the European Communities L 287 of 24.10.1998.

(2) Official Journal of the European Communities L 209 of 02.08.2001.

5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD.

5.1 Tasks of the Manufacturer

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark A/S prior to CE marking.

Issued in Copenhagen on 2022-09-06 by



Thomas Bruun

Managing Director, ETA-Danmark A/S

ANNEX A CATEGORISATION OF LEVELS OF PERFORMANCE OF IKO HYBRITECH

Minimum layer thickness	1.85 mm
Minimum quantity consumed	2.5 kg/m ²

Levels of use categories according to EAD 030350-00-0402 with relation to:

Expected working life	W3 (25 years)
Climatic zones	M (moderate climate)
Imposed user loads	P4 (non-compressible and compressible substrate)
Roof slope	S1 to S4
Lowest surface temperature	TL4 (-30°C)
Highest surface temperature	TH4 (+90°C)

The kit has the following characteristics:

External fire performance	Broof(t1)* and Broof(t4)**
Reaction to fire	No Performance Assessed
Watertightness	watertight
Water vapour resistance factor	$\mu \approx 1391$
Water vapour diffusion	equivalent air layer thickness 4.65
Resistance to wind loads	>50 kPa
Root resistance	No Performance Assessed
Statement on dangerous substances	No Performance Assessed

* The classification is valid for the system described in this ETA for the following conditions

- Range of pitches < 20°
- Range of supporting decs:
 - Any continuous timber deck.
 - Any non-combustible deck with gaps not exceeding 5 mm (including non-perforated steel deck)

** The classification is valid for the system described in this ETA for the following conditions

- Range of pitches $\leq 10^\circ$
- Deck: Plywood (18 mm or more, 450 kg/m³)