Deutsches Institut für Bautechnik

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Approval body for construction products and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and Laender Governments

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European Technical Assessment

ETA-04/0021 of 4 June 2018

English translation prepared by DIBt - Original version in German language

General Part

Technical Assessment Body issuing the European Technical Assessment:	Deutsches Institut für Bautechnik
Trade name of the construction product	Roof waterproofing "ENKRYL"
Product family to which the construction product belongs	Liquid applied roof waterproofing on the basis of water dispersible polymers
Manufacturer	ENKE-WERK Johannes Enke GmbH & Co. KG Hamburger Straße 16 40221 Düsseldorf
Manufacturing plant	ENKE-Werk Johannes Enke GmbH & Co. KG Hamburger Str. 16 40221 Düsseldorf
This European Technical Assessment contains	6 pages including 2 annexes which form an integral part of this assessment
This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of	ETAG 005 Part 8: "Specific stipulations for kits based on water dispersible polymers", used as EAD according to Article 66 Paragraph 3 of Regulation (EU) No 305/2011.
This version replaces	ETA-04/0021 issued on 21 June 2013

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Specific part

1 Technical description of the product

The liquid applied roof waterproofing "ENKRYL" is a kit, which consists of the components:

- Primer, depending on the type of substrate
- liquid applied roof waterproofing on the basis of a pure acrylate dispersion
- polyester fleece as reinforcement

For an adequate adhesion of the waterproofing layer – depending on the type of substrate – a primer on the basis of an acrylate polymer dispersion or a vinyl chlorine copolymer is required. In general the primer belonging to the substrate is given in the manufacturer technical documents[1]. In single cases the manufacturer is responsible to give guidance which pretreatment/primer is required.

The minimum layer thickness of the roof waterproofing applied is 1.7 mm.

As an assembled system these components form a homogeneous seamless roof waterproofing.

The components and the system build-up of the roof waterproofing "ENKRYL" are given in Annex A.

2 Specification of the intended use in accordance with the applicable European Assessment Document

The product is used for the waterproofing of roof surfaces against penetration of atmospheric water.

The product is suitable for compressible substrates (e. g. insulation boards with or without bitumen sheeting) and non-compressible substrates (e. g. steel, concrete).

In the technical file the manufacturer give information concerning the substrates which the product is suitable for and on how these substrates shall be pre-treated.

The levels of use categories are given in Annex A.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the liquid applied roof waterproofing of at least 25 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, 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.

The levels of use categories and performances given in Section 3 are only valid if the liquid applied roof waterproofing is used in compliance with the specifications and conditions given in Annex B and the installation instructions of the manufacturer stated in the technical documents.

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

3.1 Safety in case of fire (BWR 2)

Essential characteristic	Performance
External fire performance	See Annex A
Reaction to fire	See Annex A

[1] The manufacturer's technical documents comprises all information necessary for the production and the installation of the product as well as for repair of the roof waterproofing made from that and it is deposited with DIBt.

3.2 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Water vapour permeability	See Annex A
Watertightness	See Annex A
Release of dangerous substances	no performance assessed
Resistance to mechanical damage (perforation)	See Annex A
Resistance to plant roofs	See Annex A

3.3 Safety and accessibility in use (BWR 4)

Essential characteristic	Performance
Resistance to wind loads	See Annex A
Slipperiness	See Annex A

3.4 General aspects

The verification of durability and serviceability is part of testing the essential characteristics. Durability and serviceability are only ensured if the specifications of intended use according to Annex B and the specifications of the technical file of the manufacturer are kept.

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

In accordance with ETAG 005 used as EAD, the applicable European legal act is: 98/599/EC.

The system to be applied is: 3

In addition, with regard to e. g. reaction to fire for products covered by this ETAG the applicable European legal act is: 2001/596/EC

The system to be applied is: 3

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

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 4 June 2018 by Deutsches Institut für Bautechnik

BD Dipl.-Ing. Andreas Kummerow
Head of Department

beglaubigt:
Hannoun

Components:
1 Primer (if necessary)
2 Liquid synthetic material
3 Polyester fleece layer with at least a weight of 110g/m²

Applicable to the roof waterproofing **"ENKRYL":**

Minimum layer thickness		1.7 mm
Minimum quantity consumed:		3.4 kg/m²
Levels of use categories according to ETAG 005 with relation to:		
Working life:		W3 (25 years)
Climatic zones		M and S (moderate and severe climatic)
Resistance to mechanical damage (perforation)		P1 to P4 for some compressible substrates, e.g. foam plate covered with bitumen sheeting and non-compressible substrate, e.g. concrete/steel
		P1 for compressible substrate, e.g. foam plate
Roof slope		S1 to S4 (each slope)
Lowest surface temperature		TL4 (-30 °C)
Highest surface temperature		TH4 (90 °C)
Use category related to BWR 3:		S/W 2
Performance of the product:		
External fire performance	EN 13501-5	B_{ROOF} (t1)*
Reaction to fire	EN 13501-1	F
Water vapour diffusion resistance factor µ		µ ≈ 2370
Watertightness		watertight
Statement on dangerous substances		no performance assessed
Resistance to plant roots		no performance assessed
Resistance to wind loads		≥ 50 kPa
Resistance to slipperiness		no performance assessed

* Class **B_{ROOF} (t1)**
The classification is valid for the following supporting decks:

- all roof pitches.
- any wooden continuous deck;
- any non-combustible deck with gaps not exceeding 5 mm
- with/without vapour control layer
- with expanded polystyrene (EPS) in accordance with EN 13163 (thickness ≥ 50 mm, density ≥ 20 kg/m³)
- covered with two layers of bitumen sheets for roof waterproofing (base sheet with fiberglass fleece ≥ 100 g/m2, top sheet.with fibreglass reinforcement ≥ 200 g/m2)
- any other roof systems for which classification documents for B_{ROOF} (t1) according EN 13501-5 are available.

Roof waterproofing "ENKRYL" ENKE WERK Johannes Enke GmbH & Co. KG	Annex A
Systeme built-up, levels of use categories an performances of the product	

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Installation

The levels of use categories and the performances of the roof waterproofing can be assumed only, if the installation is carried out according to the installation instructions stated in the technical file of the manufacturer, in particular taking account of the following points:

- installation by appropriately trained personnel,
- installation of only those components which are marked components of the kit,
- installation with the required tools and adjuvants,
- precautions during installation,
- inspecting the roof surface for cleanliness and correct preparation, if need be, applying a primer before applying the product,
- inspecting compliance with suitable weather and curing conditions,
- ensuring a thickness of the cured waterproofing of at least 1.7 mm by processing appropriate minimum quantities of material,
- inspections during installation and of the finished product and documentation of the results.