

Approval body for construction products  
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and  
Laender Governments



## European Technical Assessment

ETA-05/0126  
of 21 May 2019

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 "BISOPUR 1K"

Product family  
to which the construction product belongs

Liquid applied roof water proofing on the basis of  
polyurethane

Manufacturer

Binné & Sohn GmbH & Co. KG  
Mühlenstraße 60  
25421 Pinneberg

Manufacturing plant

Binné & Sohn GmbH & Co. KG  
Produktionsanlage 4

This European Technical Assessment  
contains

7 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 6: "Specific stipulations for kits based on  
polyurethane",  
used as EAD according to Article 66 Paragraph 3 of  
Regulation (EU) No 305/2011.

This version replaces

ETA-05/0126 issued on 6 June 2013

The European Technical Assessment is issued by the Technical Assessment Body in its official language. Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and shall be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full. However, partial reproduction may only be made with the written consent of the issuing Technical Assessment Body. Any partial reproduction shall be identified as such.

This European Technical Assessment may be withdrawn by the issuing Technical Assessment Body, in particular pursuant to information by the Commission in accordance with Article 25(3) of Regulation (EU) No 305/2011.

## Specific part

### 1 Technical description of the product

The liquid applied roof waterproofing "BISOPUR 1K" is a kit, which consists of:

- Primer, depending on the type of substrate
- Liquid applied roof waterproofing on the basis of a moisture reactive polyurethane prepolymer
- Polyester fleece as reinforcement

For an adequate adhesion of the waterproofing layer – depending on the type of substrate – a primer is required. In general the primer belonging to the substrate is given in the manufacturer's technical documents<sup>1</sup>. 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 2.1 mm.

As an assembled system applied on the substrate these components form a homogeneous, seamless roof waterproofing.

The components and the system build-up of the roof waterproofing "BISOPUR 1K" 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) and non-compressible substrates (e. g. steel, concrete).

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 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 performance 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.

<sup>1</sup> 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 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

#### 3.2 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Water vapour permeability	see Annex A
Watertightness	see Annex A
Content of dangerous substances	no performance assessed
Resistance to mechanical damage (perforation)	see Annex A, Levels of use categories
Resistance to plant roots	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 documents 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 005-6 used as EAD, the applicable European legal act is: 98/599/EC.

The system to be applied is: 3

In addition, with regard to 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

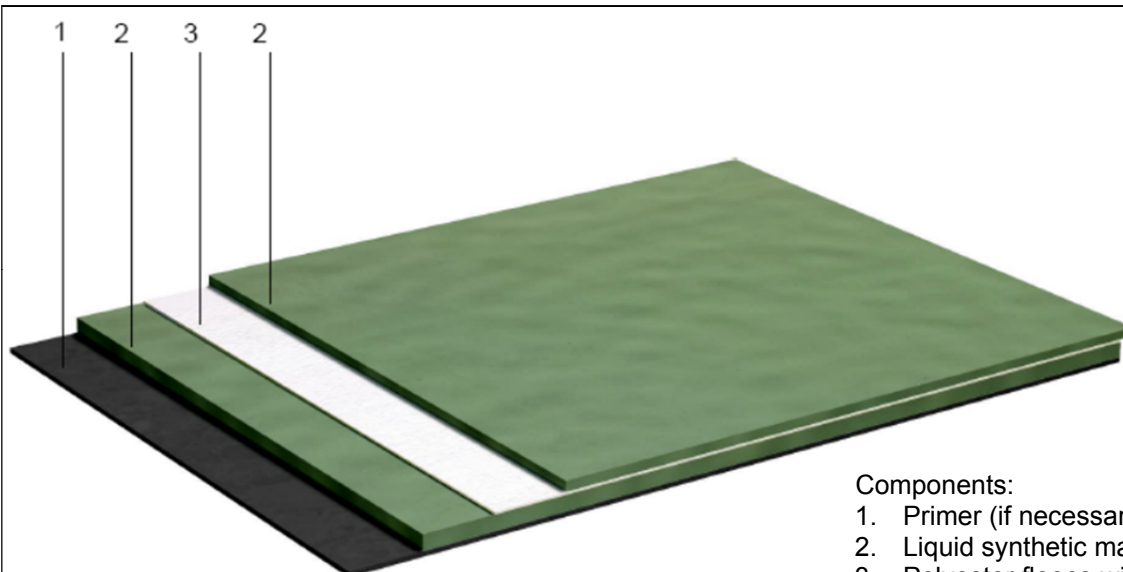
**5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD**

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 21 May 2019 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 with a nominal weight of approx. 110 g/m<sup>2</sup>

Applicable to the roof waterproofing "**BISOPUR 1K**":

Minimum layer thickness	2.1 mm	
Minimum quantity consumed:	3.1 kg/m <sup>2</sup>	
<b>Levels of use categories according to ETAG 005 with relation to:</b>		
Working life:	W3 (25 years)	
Climatic zones	M and S (moderate and severe climatic)	
Resistance to mechanical damage (perforation) (Compressible and non-compressible substrates)	P1 to P4 (from low to high)	
Roof slope	S1 to S4 (each roof slope)	
Lowest surface temperature	TL4 (-30 °C)	
Highest surface temperature	TH4 (90 °C)	
Use category related to BWR 3:	S/W 2	
<b>Performance of the product:</b>		
External fire performance	EN 13501-5	B <sub>ROOF</sub> (t <sub>1</sub> )*
Reaction to fire	EN 13501-1	E
Water vapour diffusion resistance factor μ	μ ≈ 1460	
Watertightness	pass	
Statement on dangerous substances	no performance assessed	
Resistance to plant roots	root resistant	
Resistance to wind loads	≥ 50 kPa	
Resistance to slipperiness	no performance assessed	

\* Class **B<sub>ROOF</sub> (t<sub>1</sub>)**

The classification is valid for the following supporting decks:

- all roof pitches
- any wooden continuous deck with a minimum thickness of 16 mm and gaps not exceeding 5 mm
- any other roof systems for which classification documents for B<sub>ROOF</sub> (t<sub>1</sub>) according to EN 13501-5 are available.

**Roof waterproofing "BISOPUR 1K"**

Binné & Sohn GmbH & Co. KG

**System built-up, levels of use categories and performance of the product**

Annex A

## Installation

The levels of use categories and the performance of the roof waterproofing can be assumed only, if the installation is carried out according to the installation instructions stated in the technical documents 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 2.1 mm by processing appropriate minimum quantities of material,
- inspections during installation and of the finished product and documentation of the results.

<b>Roof waterproofing "BISOPUR 1K"</b> Binné & Sohn GmbH & Co. KG	Annex B
<b>Intended use</b> Specifications	