

Approval body for construction products  
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and  
Laender Governments



## European Technical Assessment

ETA-15/0206  
of 26 October 2020

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

ISOFLEX-PU 500  
ISOFLEX-PU 500A

Product family  
to which the construction product belongs

Liquid applies roof waterproofing kit based on  
polyurethane

Manufacturer

ISOMAT S.A.  
17th km Thessaloniki - Agios Athanasios Road  
570 03 AGIOS ATHANASIOS  
GRIECHENLAND

Manufacturing plant

ISOMAT S.A.  
17th km Thessaloniki - Agios Athanasios Road  
570 03 AGIOS ATHANASIOS  
GRIECHENLAND

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 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-15/0206 issued on 23 March 2017

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## Specific part

### 1 Technical description of the product

The liquid applied roof waterproofing "ISOFLEX-PU 500/ISOFLEX-PU 500A" is a kit, which consists of the components:

- Primer "Primer-PU 100", ", if required on mineral and/or porous substrates
- liquid applied roof waterproofing "ISOFLEX-PU 500/ISOFLEX-PU 500A" on the basis of a one-component polyurethane for brush application
- 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 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 2.5 mm

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

The components and the system build-up of the roof waterproofing "ISOFLEX-PU 500/ISOFLEX-PU 500A" are given in Annex A.

### 2 Specification of the intended use in accordance with the applicable EAD

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

In the technical file the manufacturer gives information concerning the substrates which the product is suitable for and 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 product 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

<sup>1</sup> The manufacturer's technical documents comprise 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	The chemical composition of the product has to be in compliance with the composition deposited at the Technical Assessment Body (DIBt). The product does not contain dangerous substances according to EOTA TR 034 (version May 2014)
Resistance to mechanical damage (perforation)	See Annex A, Levels of use categories
Resistance to plant roofs	See Annex A

a) In accordance with Regulation (EC) No 1272/2008

b) Assessment based on the detailed manufacturer's statements

### 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 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

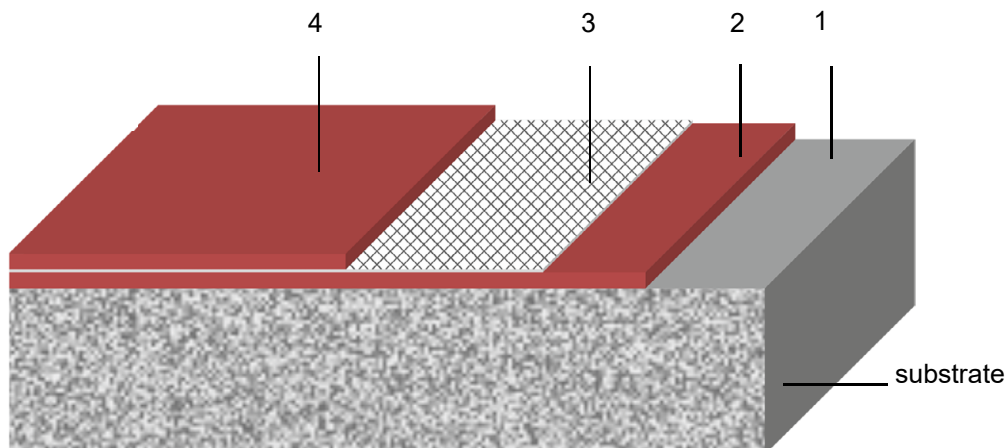
## 5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

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 29 October 2020 by Deutsches Institut für Bautechnik

BD Dipl.-Ing. Andreas Kummerow  
Head of Department

*beglaubigt:*  
Gnamou



Components:

- 1 Primer (if necessary)
- 2 Waterproofing: liquid synthetic material "ISOFLEX-PU 500/ISOFLEX-PU 500A"
- 3 Polyester fleece with a nominal weight of 120 g/m<sup>2</sup>
- 4 Waterproofing: liquid synthetic material "ISOFLEX-PU 500/ISOFLEX-PU 500A"

Applicable to the roof waterproofing "ISOFLEX-PU 500/ISOFLEX-PU 500A"

Minimum layer thickness	2.5 mm	
minimum quantity consumed:	2.5 kg/m <sup>2</sup>	
<b><u>Levels of use categories according to ETAG 005 with relation to:</u></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 (from < 5° to > 30°)	
Lowest surface temperature	TL4 (-30 °C)	
Highest surface temperature	TH4 (90 °C)	
Use category related to BWR 3:	S/W 2	
<b><u>Performance of the product:</u></b>		
External fire performance	EN 13501-5	B <sub>Roof</sub> (t1)
Reaction to fire	EN 13501-1	no performance assessed
Water vapour diffusion resistance factor $\mu$		$\mu \approx 1800$
Watertightness		pass
Statement on dangerous substances		see section 3.2
Resistance to plant roots		no performance assessed
Resistance to wind loads		$\geq 50$ kPa
Resistance to slipperiness		no performance assessed

**ISOFLEX-PU 500  
ISOFLEX-PU 500A**

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

Annex A

### External fire performance

\* class B<sub>ROOF</sub> (t1)

The classification is valid for the following supporting decks:

- roof pitches < 20°
- any non-combustible continuous support/reinforced calcium silicate board of (11 ± 2) mm of thickness and (870 ± 50) kg / m<sup>3</sup> of density as established in the EN 13238<sup>1</sup>

Any other roof systems for which classification documents for B<sub>ROOF</sub> (t<sub>1</sub>) according EN 13501-5 are available.

### 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 2.5 mm by processing appropriate minimum quantities of material
- inspections during installation and of the finished product and documentation of the results

<sup>1</sup>EN 13238:2010 Reaction to fire tests for building products – Conditioning procedures and general rules for selection of substrates

<b>ISOFLEX-PU 500</b> <b>ISOFLEX-PU 500A</b>	<b>Annex B</b>
<b>Reaction to external fire &amp; specifications</b>	