

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-20/0364
of 4 September 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

DISBON PMMA-Abdichtung

Product family
to which the construction product belongs

Liquid applied roof waterproofing on the basis of
polymethylmethacrylate

Manufacturer

DAW SE
Roßdörfer Straße 50
64372 Ober-Ramstadt
DEUTSCHLAND

Manufacturing plant

Produktionsanlage
164593

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

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Specific part

1 Technical description of the product

The liquid applied roof waterproofing "DISBON PMMA-Abdichtung" is a kit, which consists of the components:

- Primer "DisbonPMMA 741 Grundierung", depending on the type of substrate
- liquid applied roof waterproofing "DisboPMMA 744 Abdichtung"/"DisboPMMA 745 THIX Abdichtung" on the basis of a polymethylmethacrylate
- polyester fleece layer "DisboADD 970 PMMA Vlies"

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 documents¹. 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 1.8 mm.

As an assembled system these components form a homogeneous seamless roof waterproofing. The components and the system build-up of the roof waterproofing "DISBON PMMA-Abdichtung" 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.

The product is suitable for compressible substrates (e.g. insulation boards) 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 verification and assessment methods on which this European Technical Assessment is based lead to the assumption of working life of the product of 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.

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.

English translation prepared by 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/B
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
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 TR 034 (version September 2015)
Resistance to mechanical damage (perforation)	See Annex A, Levels of use categories
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 is 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 005-4 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/EG
The system to be applied is: 3

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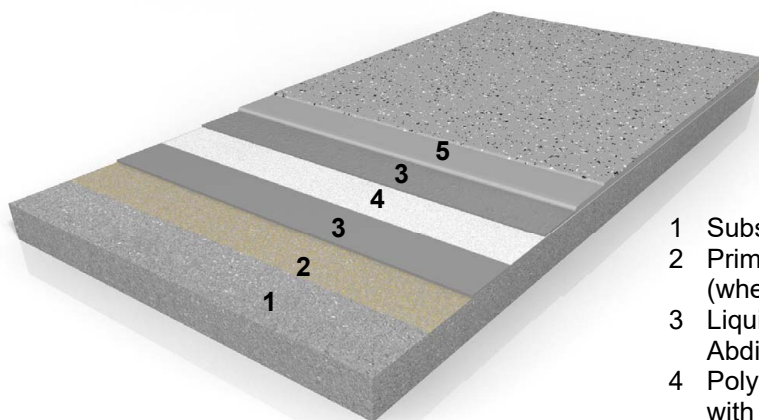
5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

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 September 2020 by Deutsches Institut für Bautechnik

BD Dipl.-Ing. Andreas Kummerow
Head of Department

beglaubigt:
Gnamou



- 1 Substrate
- 2 Primer "DisboPMMA 741 Grundierung" (where required)
- 3 Liquid synthetic material "DisboPMMA 744 Abdichtung" or "DisboPMMA 745 THIX Abdichtung"
- 4 Polyester fleece layer "DisboADD 970 PMMA Vlies" with a nominal weight of 120 resp. 165 g/m²
- 5 Topping (optional: decorative finish)

Applicable to the roof waterproofing "**DISBON PMMA-Abdichtung**"

Minimum layer thickness	1.8 mm	
minimum quantity consumed:	2.5 kg/m ²	
Levels of use categories according to ETAG 005 with relation to:		
Working life:	W3 (25 years)	
Climatic zones	M and S (moderate to severe climate)	
Resistance to mechanical damage (perforation) (non compressible substrates e.g. steel, concrete and compressible substrates e.g. insulation board)	P1 to P4 (from low to high)	
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	class E
Water vapour diffusion resistance factor μ		$\mu \approx 6600$
Watertightness		watertight
Statement on dangerous substances		see section 3.2
Resistance to plant roots		root resistant for a minimum layer thickness 2.0 mm
Resistance to wind loads		≥ 50 kPa
Resistance to slipperiness		no performance assessed

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System built-up and classifications

Annex A

External fire performance

* class B_{ROOF} (t1)

The classification is valid for the following supporting decks:

- roof pitches $\leq 20^\circ$
- any non-combustible continuous deck with a minimum thickness of 5 mm

Any other roof systems for which classification documents for B_{ROOF} (t₁) 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,
- finding out the mix ratio depending on the ambient temperature,
- ensuring a thickness of the cured waterproofing of at least 1.8 mm by processing appropriate minimum quantities of material,
- inspections during installation and of the finished product and documentation of the results.

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Reaction to external fire & specifications

Annex B