

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-22/0097
of 23 February 2022

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

TS PU-Elastic

Product family
to which the construction product belongs

Liquid applied roof waterproofing on the basis of
polyurethane

Manufacturer

Grouttech Bouwchemische Producten
Industrieweg 51
8071 CS NUNSPEET
NIEDERLANDE

Manufacturing plant

Produktionsanlage GT 053

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

EAD 030350-00-0402

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Specific part

1 Technical description of the product

The liquid applied roof waterproofing "TS PU-Elastic" is a kit, which consists of the components:

- primer "TS BaseCoat WE"
- surface filler "TS BaseCoat WE" with "TS Filler"
- liquid applied roof waterproofing on the basis of a polyurethane "TS PU-Elastic"
- UV protection coat "TS PU-Finish" (if required)

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 pre-treatment/primer is required.

The liquid applied roof waterproofing Materials can be applied by pouring and/or brushing.

The minimum layer thickness of the roof waterproofing applied is 1.9 mm.

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

The liquid applied roof waterproofing "TS PU-Elastic" does not contain any substances that are intended to inhibit or prevent root penetration (root protection agents).

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

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

The liquid applied roof waterproofing is used for the waterproofing of roof surfaces, terraces and balconies.

The product is suitable for non-compressible substrates (e.g. concrete).

The product can be used for new roofs or for upgrading existing roof waterproofing. It can also be used for the waterproofing of details on vertical surfaces.

The categorisation according to use is 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 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 Performance of the product and references to the methods used for its assessment

3.1 Basic Works Requirement 2: Safety in case of fire

| Essential characteristic | Performance |
|---------------------------|-------------|
| External fire performance | see Annex A |
| Reaction to fire | see Annex A |

3.2 Basic Works Requirement 3: Hygiene, health and the environment

| Content, emission and/or release of dangerous substances | |
|--|--|
| Release scenario | S/W 2 |
| Substance/s classified as EU-cat. Carc. 1A and/or 1B ^{a)} | The kit does not contain these dangerous substances. ^{b)} |
| Substance/s classified as EU-cat. Muta. 1A and/or 1B ^{a)} | |
| Substance/s classified as EU-cat. Repr. 1A and/or 1B ^{a)} | |
| Essential characteristic | Performance |
| Resistance to water vapour | see annex A |
| Watertightness | see annex A |
| Resistance to wind loads | see annex A |
| Resistance to mechanical damage (perforation) | see annex A, levels of use categories |
| Resistance to fatigue movement | see annex A |
| Resistance to the effects of low and high surface temperature | see annex A |
| Resistance to ageing media (heat and water) | see annex A |
| Resistance to UV radiation in the presence of moisture (climate zones) | see annex A |
| Resistance to plant roots | see annex A |
| Effects of variations in kit components and site practices | see annex A |
| Effects of day joints | see annex A |

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

^{b)} Assessment based on the detailed manufacturer's statements

3.3 Basic Works Requirement 4: Safety and accessibility in use

| Essential characteristic | Performance |
|--------------------------|-------------|
| 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 EAD 030350-00-0402 the applicable European legal act is: 98/599/EC and amended by Commission Decision 2001/596/EC.

The system to be applied is: 3

With regard to external fire exposure and reaction to fire for products covered by this EAD, the system to be applied is: 3

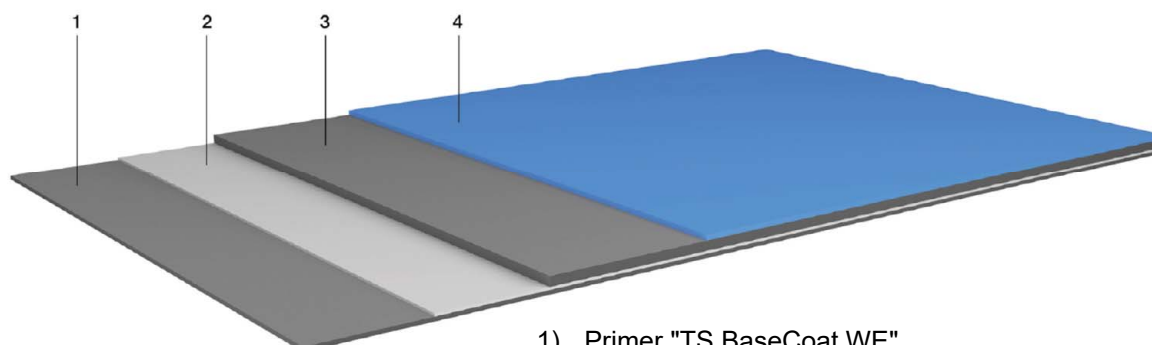
5 Technical details necessary for the implementation of the AVCP system, as provided for in the applicable EAD

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 23 February 2022 by Deutsches Institut für Bautechnik

Bettina Hemme
Head of Section

beglaubigt:
Gnamou



- 1) Primer "TS BaseCoat WE"
- 2) Surface filler "TS BaseCoat WE" with "TS Filler"
- 3) Liquid applied roof waterproofing "TS PU-Elastic"
- 4) UV protection coat "TS PU-Finish" (if required)

| Description of the product | | | |
|---|----------|--------------------------|---|
| Minimum layer thickness | | | 1.9 mm |
| minimum quantity consumed: | | | 1.8 kg/m ² component A, 0.2 kg/m ² component B |
| Roof slope | | | S1 to S4 (each slope) |
| Performance of the product: | | | Description / Class / Level |
| External fire performance | | EN 13501-5 | F _{Roof} |
| Reaction to fire | | EN 13501-1 | class E |
| Content, emission and/or release of dangerous substances | | | see section 3.2 |
| resistance to water vapour (Water vapour diffusion resistance factor) | | | μ ≈ 1700 |
| Watertightness | | | watertight |
| Resistance to wind loads | | | ≥ 50 kPa |
| Resistance to mechanical damage (perforation) (non-compressible substrates) | | | P1 to P4 (from low to high) |
| Resistance to fatigue movement | | | W3 |
| Resistance to the effects of | | low surface temperature | TL4 (-30 °C) |
| | | high surface temperature | TH4 (90 °C) |
| Working life according to the resistance to ageing media (heat and water) | | | W3 (25 years) |
| Resistance to UV radiation in the presence of moisture (climatic zones) | | | M and S (moderate and severe climatic) |
| Resistance to plant roots | | | no performance assessed |
| Effects of variations in kit components and site practices | at 8 °C | Maximum tensile strength | 213 N |
| | | Elongation | 511 % |
| | | Dynamic indentation | P4 |
| | at 40 °C | Maximum tensile strength | 215 N |
| | | Elongation | 516 % |
| | | Dynamic indentation | P4 |
| Effects of day joints | | | 1330 kPa |
| Slipperiness | | | no performance assessed |

TS PU-Elastic
Grouttech Bouwchemische Producten

System built-up, categorisation of use and classifications

Annex A

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 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 waterproofing of at least 1.9 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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Annex B

Intended use, specifications