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## European Technical Assessment ETA-22/0393 of 2022/06/02

I General Part

Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark A/S

Trade name of the construction product:

Sprügel SP-SOLUT 260 SK/ND

Product family to which the above construction product belongs:

Membrane for use as roof underlay

Manufacturer:

Gerhard Sprügel GmbH Karl-Schwarz-Straße 19 D-74653 Stachenhausen Internet: www.spruegel.com

**Manufacturing plant:** 

Gerhard Sprügel GmbH Manufacturing plant II

This European Technical Assessment contains:

7 pages

This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of: EAD 030218-01-0402 - Membrane for use as roof underlay

This version replaces:

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#### II SPECIFIC PART OF THE EUROPEAN TECHNICAL ASSESSMENT

## 1 Technical description of product and intended use

## Technical description of the product General

The membranes consist of multilayer flexible sheets. They are diffusion open membranes with perforation resistance, resistance to water pressure and tightness of perforations from nails and screws.

The membranes consist of a nonwoven polyester and a polyurethane coating.

| Designation                 | Sprügel SP-SOLUT 260 SK/ND                |  |  |
|-----------------------------|---|--|--|
| Characteristics             |   |  |  |
| Composition                 | Nonwoven polyester /                      |  |  |
|                             | Polyurethane coating                      |  |  |
| Total weight                | 270 g/m <sup>2</sup> , tolerances -20/+40 |  |  |
| Minimum slope               | ≥ 14°                                     |  |  |
| Assembly method in overlaps | Gluing                                    |  |  |

The roofing membrane is fastened to the timber joists with non-corrosive flat headed nails or staples. The overlaps are sealed by integrated tape, where the lines are removed and manual pressure is added to the overlaps for fixing. In the case of non-full-surface, the nail and screw holes are waterproofed with Sprügel nail sealing tape.

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

The membranes are intended for use as underlays, which are to be used under roof covering of roofs with roof pitch from  $14^{\circ}$  to  $90^{\circ}$ .

The membranes are intended to be used and exposed to weathering (UV) for a defined extended period, up to 3 months.

The provisions made in this European Technical Assessment are based on an assumed intended working life of the roof underlay of 10 years.

The indications given on the working life cannot be interpreted as a guarantee given by the producer or Assessment Body, 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.

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

| Characteristic  | Assessment of characteristic  |   |  |
|---|---|---|--|
| 3.2 Safety in case of fire (BWR2)  Reaction to fire  3.3 Hygiene, health and the environment (BWR3) | The membrane obtains a reaction to fire <b>class E- d2</b> in accordance with EN 13501-1  |   |  |
| Resistance to water penetration   | W1 according to EN 13859-1  |   |  |
| Water vapour transmission   | $S_d = 0,15 \text{ m} \pm 0,05 \text{ according to EN } 12572$  |   |  |
|   | Designation   | Sprügel SP-SOLUT 260 SK/ND  |  |
| Tensile properties  | Characteristics Tensile properties Longitudinal, initial Longitudinal, aged Transverse, initial Transverse, aged                    | Mean value: $F_{max} = 532 \text{ N/50mm}$ $Elongation: 56\%$ Mean value: $F_{max} > 491 \text{ N/50mm}$ $Elongation: 63 \%$ Mean value: $F_{max} = 424 \text{ N/50mm}$ $Elongation: 94\%$ $F_{max} > 454 \text{ N/50mm}$ $Elongation: 95 \%$ |  |
| Resistance to tearing   | Designation  Characteristics  Resistance to tearing Longitudinal, initial  Longitudinal, aged Transverse, initial  Transverse, aged | Sprügel SP-SOLUT 260 SK/ND  Mean value: $F_{max} = 360 \text{ N}$ NPA  Mean value: $F_{max} = 365 \text{ N}$ NPA  |  |
| Resistance to perforation   | No Performance Asses  | ssed  |  |

| Characteristic                                  | Assessment of characteristic  |   |  |
|---|---|---|--|
| Dimensional stability                           | < 1 % both longitudinal and transverse  |   |  |
| Flexibility at low temperature                  | $T_B \le -30$ °C  |   |  |
| Resistance to artificial ageing:                |   |   |  |
| Exposure to heat                                | Tensile properties  | Sprügel SP-SOLUT 260 SK/ND                                |  |
| Emposare to near                                | Longitudinal, initial   | Mean value:   |  |
|   |   | $F_{\text{max}} = 532 \text{ N/50mm}$                     |  |
|   |   | Elongation: 56%   |  |
|   | Longitudinal, aged  | Mean value:   |  |
|   |   | $F_{\text{max}} > 491 \text{ N/50mm}$                     |  |
|   |   | Elongation: 63 %  |  |
|   | Transverse, initial   | Mean value:   |  |
|   |   | $F_{\text{max}} = 424 \text{ N/50mm}$                     |  |
|   | TD 1  | Elongation: 94%   |  |
|   | Transverse, aged  | $F_{max} > 454 \text{ N/50mm}$<br><b>Elongation: 95 %</b> |  |
| UV resistance 5000h Prolonged exposure to heat  | Resistance to water before- and No performance assessed No performance assessed                 |   |  |
| Resistance to penetration of air                | $0,\!370~m^3/\left(m^2\times h\times 50~Pa\right)$  |   |  |
| Water tightness of seams                        | No Performance Assessed   |   |  |
| Emissivity                                      | No Performance Assessed   |   |  |
|   | Sprügel SP-SOLUT 260 SK/ND  |   |  |
| Tightness of perforations from nails and screws | No additional nail sealing material is necessary on a full-surface pressure-resistant substrate | With Sprügel nail sealing tape, in                        |  |
|   | Heavy rain of $21/m^2 \times min$ up to a wind pressure of 600 Pa.                              |   |  |

#### Aspects related to the performance of the product

The European Technical Assessment is issued for the product on the basis of agreed data/information, deposited with ETA-Danmark, which identifies the product that has been assessed and judged. Changes to the product or production process, which could result in this deposited data/information being incorrect, should be notified to ETA-Danmark before the changes are introduced. ETA-Danmark will decide if such changes affect the ETA and consequently the validity of the CE marking based on the ETA and if so whether further assessment or alterations to the ETA, shall be necessary.

The performance of the membranes results from the characteristic values and categories.

The supplementing statements of the manufacturer stated in the MTD for design and application of the membrane for creating a roof underlay with the appropriate performance shall be considered

The performance of the membranes in use as roof underlay can be assumed only, if the following aspects are considered:

- only those ancillary components which are specified by the ETA can be used,
- the appropriate tools shall be used and adjuvant, precautions shall be taken,
- inspecting the substrate surface for appropriateness and correct treatment,
- inspection in the process of establishing the roof underlay and of the finished installation and documentation of the results.

The information as to the handling of waste products shall be observed.

It is the manufacturer's responsibility to make sure that all those who utilize the membrane will be appropriately informed about the specific conditions according to this ETA and the not confidential parts of the MTD deposited to this ETA.

## 4 Attestation and verification of constancy of performance (AVCP)

#### 4.1 AVCP system

According to the Decision 99/90/EC and 2001/596/EC of the European Commission as amended, the system(s) of assessment and verification of constancy of performance (see Annex V to Regulation (EU) No 305/2011) is 3.

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

Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited at ETA-Danmark prior to CE marking.

Issued in Copenhagen on 2022-06-02 by

Thomas Bruun Managing Director, ETA-Danmark