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Authorised and notified according
to Article 29 of the Regulation (EU)
No 305/2011 of the European
Parliament and of the Council of 9
March 2011

MEMBER OF EOTA



European Technical Assessment ETA-19/0771 of 2019/12/03

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:

Berner Dach-USB 270 ND SK

Product family to which the above construction product belongs:

Membrane for use as roof underlay

Manufacturer:

Berner Trading Holding GmbH
Bernerstraße 6
DE-74653 Künzelsau
Telephone: +49 7940 121-0
Internet: www.berner-group.com

Manufacturing plant:

Berner Trading Holding 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 030218-00-0402 - 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	Berner Dach-USB 270 ND SK
Characteristics	
Composition	Nonwoven polyester / Polyurethane coating
Total weight	270 g/m ² , tolerances -20/+40
Minimum slope	≥ 10°
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 nail sealing tape Berner 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 10° to 90°.

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

The membrane obtains a reaction to fire **class E- d2** in accordance with EN 13501-1

3.3 Hygiene, health and the environment (BWR3)

Resistance to water penetration

W1 according to EN 13859-1 and EN 1928 method A

Water vapour transmission

S_d = 0,15 m ± 0,05 according to EN 12572

Tensile properties
EN 13859-1, Annex A

Designation	Berner Dach-USB 270 ND SK
Characteristics	
Tensile properties Longitudinal, initial	Mean value: F _{max} = 532 N/50mm Elongation: 56%
Longitudinal, aged	Mean value: F _{max} > 491 N/50mm Elongation: 63 %
Transverse, initial	Mean value: F _{max} = 424 N/50mm Elongation: 94%
Transverse, aged	F _{max} > 454 N/50mm Elongation: 95 %

Resistance to tearing

Designation	Berner Dach-USB 270 ND SK
Characteristics	
Resistance to tearing Longitudinal, initial	Mean value: F _{max} = 360 N/200 mm
Longitudinal, aged	NPA
Transverse, initial	Mean value: F _{max} = 365 N/200 mm
Transverse, aged	NPA

Resistance to perforation

No Performance Assessed

Characteristic	Assessment of characteristic										
Dimensional stability EN 1107-2	< 1 % both longitudinal and transverse										
Flexibility at low temperature	T _B ≤ -30 °C										
Resistance to artificial ageing: UV resistance 5000h Exposure to heat	<table><tr><th>Tensile properties</th><th>Berner Dach-USB 270 ND SK</th></tr><tr><td>Longitudinal, initial</td><td>Mean value: F_{max} = 532 N/50mm Elongation: 56%</td></tr><tr><td>Longitudinal, aged</td><td>Mean value: F_{max} > 491 N/50mm Elongation: 63 %</td></tr><tr><td>Transverse, initial</td><td>Mean value: F_{max} = 424 N/50mm Elongation: 94%</td></tr><tr><td>Transverse, aged</td><td>F_{max} > 454 N/50mm Elongation: 95 %</td></tr></table>	Tensile properties	Berner Dach-USB 270 ND SK	Longitudinal, initial	Mean value: F _{max} = 532 N/50mm Elongation: 56%	Longitudinal, aged	Mean value: F _{max} > 491 N/50mm Elongation: 63 %	Transverse, initial	Mean value: F _{max} = 424 N/50mm Elongation: 94%	Transverse, aged	F _{max} > 454 N/50mm Elongation: 95 %
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Resistance to water before- and after aging:	Class W1										
Resistance to penetration of air	0,370 m³/ (m² × h × 50 Pa)										
Water tightness of seams	No Performance Assessed										
Emissivity	No Performance Assessed										
Tightness of perforations from nails and screws	<table><tr><th colspan="2">Berner Dach-USB 270 ND SK</th></tr><tr><td>No additional nail sealing material is necessary on a full-surface pressure-resistant substrate</td><td>With nail sealing tape Berner nail sealing tape, in the case of non-full-surface</td></tr><tr><td colspan="2">Heavy rain of 2 l / m² × min up to a wind pressure of 600 Pa.</td></tr></table>	Berner Dach-USB 270 ND SK		No additional nail sealing material is necessary on a full-surface pressure-resistant substrate	With nail sealing tape Berner nail sealing tape, in the case of non-full-surface	Heavy rain of 2 l / m² × min up to a wind pressure of 600 Pa.					
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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)

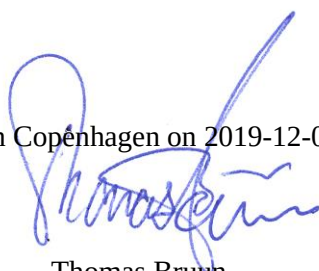
4.1 AVCP system

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 2019-12-03 by



Thomas Bruun
Managing Director, ETA-Danmark