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European Technical Assessment Body  
for construction products



## European Technical Assessment

ETA-24/0826  
of 19 September 2024

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

Butler pro BP-U ND 170 SK+

Product family  
to which the construction product belongs

Membranes for use as roof underlays

Manufacturer

mdm NT Sp. z o.o.  
ul. Bestwińska 143  
43-346 BIELSKO- BIAŁA  
POLAND

Manufacturing plant

mdm NT Sp. z o.o.  
ul. Bestwińska 143  
43-346 BIELSKO- BIAŁA  
POLAND

This European Technical Assessment  
contains

8 pages including 3 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 030218-01-0402

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## Specific part

### 1 Technical description of the product

"Butler pro BP-U ND 170 SK+" is a double-layered roof underlay membrane, which consists of the following layers, which are laminated together by gluing:

- spunbond polyester nonwoven,
- vapour-permeable thermoplastic polyurethane film (TPU film) on the upper side.

"Butler pro BP-U ND 170 SK+" is provided with a factory-integrated self-adhesive seam strip along one edge.

The membranes do not contain any substances that are intended to inhibit or prevent root penetration (root protection agents) or any fire retardants.

The roof underlay membranes are fastened to the timber joists with nails or screws, e.g., by means of nailed or screwed counter battens.

For an adequate application of product – depending on the specific roof design, e. g., roof slope, roof built-up, details – other adjuvants may be needed, e. g., mastic sealant, adhesive tape, nail-sealing tape. These adjuvants are given in the manufacturer's technical documents<sup>1</sup>.

A specific product description is given in Annex A.

### 2 Specification of the intended use in accordance with the applicable European Assessment Document

The membranes are intended for use as roof underlay under roof covering of discontinuous roofs. In the technical documents the manufacturer gives information concerning the substrates, roof build-ups, roof pitches and exposure time to weathering which the product is suitable for.

The performance given in Section 3 is only valid if the roof underlay membranes are used in compliance with the specifications and conditions given in Annex B.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the roof underlay membranes of at least 10 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.

### 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
Reaction to fire	see Annex A
External fire performance of roofs	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 the repair and it is deposited with DIBt.

### 3.2 Hygiene, health and the environment (BWR 3)

Essential characteristic	Performance
Resistance to water penetration	see Annex A
Water column resistance	see Annex A
Water vapour transmission properties	see Annex A
Tensile properties	see Annex A
Resistance to tearing	see Annex A
Hail resistance	see Annex A
Dimensional stability	see Annex A
Flexibility at low temperature	see Annex A
Resistance to penetration of air	see Annex A
Water tightness of seams	see Annex A
Emissivity	see Annex A
Tightness of perforations from nails and screws	see Annex A
Content, emission and/or release of dangerous substances	see Annex A

### 3.3 Aspects of durability

Essential characteristic	Performance
Artificial ageing behaviour by exposure to combination of UV radiation (336 h) and elevated temperature and to heat	see Annex A
High heat resistance	see Annex A
Artificial ageing behaviour by exposure to combination of UV radiation (5000 h) and elevated temperature and to heat	see Annex A
Artificial ageing behaviour by prolonged exposure to heat with accelerated air-speed $5 \pm 2$ m/s	see Annex A

## 4 Assessment and verification of constancy of performance (AVCP) system applied, with reference to its legal base

In accordance with EAD No. 030218-01-0402, the applicable European legal act is: Decision 1999/90/EC.

The system to be applied is: 3

In addition, with regard to reaction to fire for products covered by this EAD the applicable European legal act is: Decision 1999/90/EC, as amended by 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**

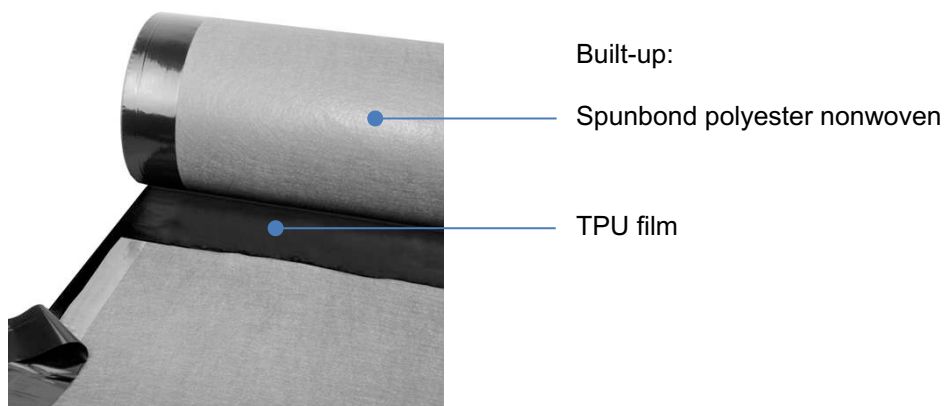
Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 19 September 2024 by Deutsches Institut für Bautechnik

Bettina Hemme  
Head of Section

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Hannoun

### Description of the roof underlay membrane "Butler pro BP-U ND 170 SK+"



Built-up:  
Spunbond polyester nonwoven  
TPU film

Length	50 m (+ 0.5 % / - 0 %)
Width	1.5 m (+ 1.5 % / - 0.5 %)
Straightness	≤ 30 mm/10 m
Mass per unit area	170 g/m <sup>2</sup> (± 10 %)

### Performance of the roof underlay membrane "Butler pro BP-U ND 170 SK+"

Essential characteristic	Performance
Reaction to fire	Class B-s1,d0 <sup>1)</sup>
	Class D-s2,d0 <sup>1)</sup>
	Class E <sup>1)</sup>
External fire performance of roofs	NPA
Resistance to water penetration	Class W1 <sup>2)</sup>
Water column resistance	NPA
<b>Water vapour transmission properties</b> Water vapour diffusion-equivalent air layer thickness (s <sub>d</sub> )	0.12 m
<b>Tensile properties</b>	
Maximum tensile force	longitudinal / transverse 400 N/50 mm / 390 N/50 mm
Elongation	longitudinal / transverse 55 % / 65 %
<b>Resistance to tearing</b>	longitudinal / transverse 300 N / 310 N

(NPA: no performance assessed)

<sup>1)</sup> Class according to EN 13501-1

The tests for reaction to fire have been performed regarding mounting and fixing as follows:

- Class B-s1,d0: at distance ≥ 80 mm from substrates of classes A1 or A2-s1,d0 with a density ≥ 652 kg/m<sup>3</sup> and thickness ≥ 11 mm
- Class D-s2,d0: at distance ≥ 80 mm from wood and wood-based substrates with a density ≥ 377 kg/m<sup>3</sup> and thickness ≥ 9 mm
- Class E: for all other end use applications.

<sup>2)</sup> Class according to EN 13859-1

**Butler pro BP-U ND 170 SK+**  
mdm NT Sp. z o.o.

**Description and performance of product**

Annex A1

Performance of the roof underlay membrane "Butler pro BP-U ND 170 SK+" (continued)	
Essential characteristic	Performance
Hail resistance (damaging velocity $v_d$ )	NPA
Dimensional stability	longitudinal / transverse NPA
Flexibility at low temperature	- 40 °C
Resistance to penetration of air	NPA
Water tightness of seams	NPA
Emissivity ( $\epsilon_n$ )	NPA
<b>Tightness of perforations from nails and screws</b>	
Laboratory test (wind-driven rain test)	No dripping water (eligible for the hygrothermal simulation)
- on a full-surface and pressure-resistant substrate (at fastening points)	
- with integrated self-adhesive seam strips	
- roof pitch $\geq 14^\circ$	
- heavy rain $\leq 2 \text{ l/m}^2 \times \text{min}$ and wind pressure $\leq 600 \text{ Pa}$	
Hygrothermal assessment (hygrothermal simulation) of a roof structure with rain entry <sup>3)</sup> through nail penetrations into the roof rafters:	No additional nail-sealing material necessary
- exposure time (without roof covering) of 3 months + drying phase (ventilated roof covering) of 5 years	
- central European climate conditions (altitudes $\leq 690 \text{ m}$ above sea level with an average total annual rainfall $\leq 1185 \text{ mm/a}$ )	
<b>Content, emission and/or release of dangerous substances</b>	NPA
<b>Artificial ageing behaviour by exposure to combination of UV radiation (336 h) and elevated temperature and to heat</b>	
Resistance to water penetration after aging	Class W1 <sup>2)</sup> (resistant to artificial ageing; 336 h UV + 90 d at 70 °C)
Tensile properties after aging	
Maximum tensile force	longitudinal / transverse 350 N/50 mm / 320 N/50 mm
Elongation	longitudinal / transverse 40 % / 60 %
<b>High heat resistance</b>	NPA
<b>Artificial ageing behaviour by exposure to combination of UV radiation (5000 h) and elevated temperature and to heat</b>	NPA
<b>Artificial ageing behaviour by prolonged exposure to heat with accelerated air-speed <math>5 \pm 2 \text{ m/s}</math></b>	NPA

(NPA: no performance assessed)

<sup>2)</sup> Class according to EN 13859-1

<sup>3)</sup> Rain entry in the hygrothermal simulation = moisture entry obtained in the laboratory test

<b>Butler pro BP-U ND 170 SK+</b> mdm NT Sp. z o.o.	Annex A2
<b>Performance of product</b>	

### Installation

The performance of the roof underlay membranes can be assumed only, if the installation is carried out according to the installation instructions stated in the technical documents of the manufacturer, in particular taking account of the following points:

- installation by appropriately trained personnel;
- installation with the required tools and adjuvants;
- precautions during installation;
- substrate, roof build-up, roof pitch and exposure time to weathering in accordance with manufacturer's instructions;
- inspecting the roof structure for sufficient stability;
- appropriate fixation in accordance with manufacturer's instructions, e. g., permanent fixation with nailed or screwed counter battens, maximum / minimum fixing distances;
- treatment of overlaps and details, e. g., eave, ridge, free end, in accordance with manufacturer's instructions;
- where applicable, inspecting the overlapping and bonding areas which shall be clean, dry and free of dust, frost and grease;
- inspecting compliance with suitable weather conditions, e. g., considering the respective installation temperatures;
- applying a nail-sealing tape where necessary (in accordance with manufacturer's instructions), e. g., in case of non-full-surface or non-pressure-resistant substrate at fastening points or in case of a not appropriate roof pitch.

<b>Butler pro BP-U ND 170 SK+</b> mdm NT Sp. z o.o.	Annex B
<b>Intended use</b> Specifications for installation	