

Approval body for construction products
and types of construction

Bautechnisches Prüfamt

An institution established by the Federal and
Laender Governments



European Technical Assessment

ETA-21/0227
of 12 July 2021

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

mdm® Ventia Neo 170
mdm® Ventia Neo 170 T

Product family
to which the construction product belongs

Membrane for use as roof underlay

Manufacturer

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

Manufacturing plant

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

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

"mdm® Ventia Neo 170" and "mdm® Ventia Neo 170 T" are double-layer roof underlay membranes consist of the following layers, which are laminated together by gluing:

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

"mdm® Ventia Neo 170 T" is provided with a factory-integrated self-adhesive seam tape along one edge: integrated seam tape (T).

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. In general, these adjuvants are given in the manufacturer's technical documents¹.

An additional 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 underlays, which are to be used under roof covering of roofs with roof pitch from 14° to 90°.

In the technical documents the manufacturer gives information concerning the substrates/roof build-up which the product is suitable for.

The membranes are intended to be exposed to weathering (UV rays) in accordance with EN 13859-1.

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

¹ 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 vapour transmission	see Annex A
Tensile properties	see Annex A
Resistance to tearing	see Annex A
Resistance to perforation: - Hail resistance - Resistance to persons stepping through the membrane	see Annex A
Dimensional stability	see Annex A
Flexibility at low temperature	see Annex A
Resistance to artificial ageing: - Artificial ageing behaviour (standard) - UV resistance 5000 h and exposure to heat - Prolonged exposure to heat with accelerated air-speed 5±2 m/s	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

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

English translation prepared by DIBt

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

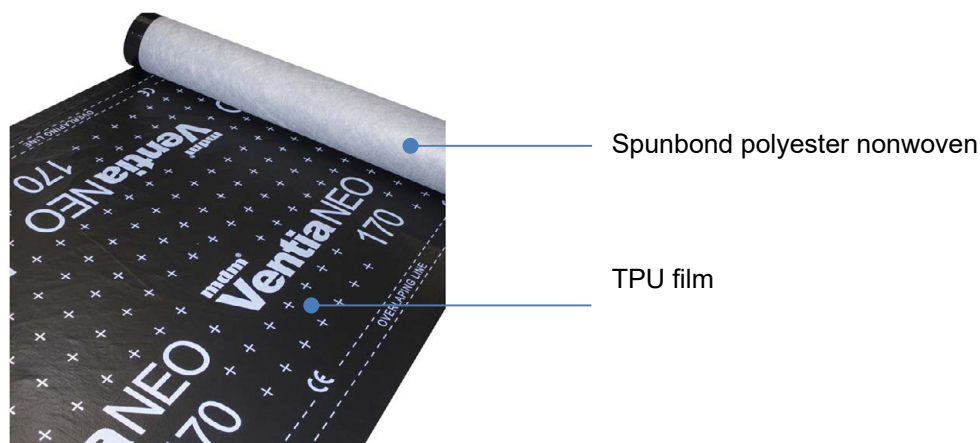
Technical details necessary for the implementation of the AVCP system are laid down in the control plan deposited with Deutsches Institut für Bautechnik.

Issued in Berlin on 12 July 2021 by Deutsches Institut für Bautechnik

Bettina Hemme
Head of Section

beglaubigt:
Hannoun

Roof underlay membranes "mdm® Ventia Neo 170" / "mdm® Ventia Neo 170 T"
consist of two factory-laminated layers:



Description of the roof underlay membranes "mdm® Ventia Neo 170" / "mdm® Ventia Neo 170 T"

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 ² (+ 10 % / - 10 %)

Performance of the roof underlay membranes "mdm® Ventia Neo 170" / "mdm® Ventia Neo 170 T"

Essential characteristic	Performance
Reaction to fire	Class ¹⁾ B-s1,d0 at distance ≥ 80 mm from substrates of classes ¹⁾ A1 or A2-s1,d0 with a density ≥ 652 kg/m ³ and thickness ≥ 11 mm
	Class ¹⁾ D-s2,d0 at distance ≥ 80 mm from wood and wood-based substrates with a density ≥ 377 kg/m ³ and thickness ≥ 9 mm
	Class ¹⁾ E for all other end use applications

¹⁾ Class according to EN 13501-1

mdm® Ventia Neo 170 mdm® Ventia Neo 170 T	mdm NT Sp. z o.o.	Annex A1
Description and performance of product		

Performance of the roof underlay membranes "mdm® Ventia Neo 170" / "mdm® Ventia Neo 170 T" (continued)		
Essential characteristic	Performance	
Resistance to water penetration	Class ²⁾ W1	
Water vapour transmission	S _d = 0.12 m	
Tensile properties		
F _{max} longitudinal / transverse	400 N/50 mm / 390 N/50 mm	
Elongation longitudinal / transverse	55 % / 65 %	
Resistance to tearing (nail shank) longitudinal / transverse	300 N / 310 N	
Resistance to perforation:		
- Hail resistance	No performance assessed	
- Resistance to persons stepping through the membrane	No performance assessed	
Dimensional stability longitudinal / transverse	No performance assessed	
Flexibility at low temperature	- 40 °C	
Resistance to artificial ageing:		
- Artificial ageing behaviour (standard)		
Resistance to water penetration after aging	Class ²⁾ W1 (resistant against 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 %	
- UV resistance 5000 h and exposure to heat	No performance assessed	
- Prolonged exposure to heat with accelerated air-speed 5±2 m/s	No performance assessed	
Resistance to penetration of air	No performance assessed	
Water tightness of seams	No performance assessed	
Emissivity	No performance assessed	
Tightness of perforations from nails and screws	No additional nail sealing material is necessary under the following boundary conditions: <ul style="list-style-type: none"> - on a full-surface and pressure-resistant substrate (at fastening points), - heavy rain ≤ 2 l/m²×min and wind pressure ≤ 600 Pa, - central European climate conditions (altitudes ≤ 690 m above sea level with an average total annual rainfall ≤ 1185 mm/a). 	
Content, emission and/or release of dangerous substances	No performance assessed	
²⁾ Class according to EN 13859-1		
mdm® Ventia Neo 170 mdm® Ventia Neo 170 T	mdm NT Sp. z o.o.	Annex A2
Performance of product		

Installation

The performance of the roof underlay membrane 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,
- inspecting the substrate in the overlapping (and bonding) areas which shall be clean, dry and free of dust, frost and grease,
- inspecting the roof structure for sufficient stability,
- inspecting compliance with suitable weather conditions, e. g. during gluing of overlaps,
- appropriate fixation in accordance with manufacturer’s instructions, e.g. permanent fixation with nailed or screwed counter battens, maximum / minimum fixing distances,
- treatment of details in accordance with manufacturer’s instructions, e.g. eave, ridge, free end,
- 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.

Electronic copy of the ETA by DIBt: ETA-21/0227

<p>mdm® Ventia Neo 170 mdm® Ventia Neo 170 T</p>	<p>mdm NT Sp. z o.o.</p>
<p>Intended use Specifications</p>	<p>Annex B</p>