

Public-law institution jointly founded by the
federal states and the Federation

**European Technical Assessment Body
for construction products**



European Technical Assessment

**ETA-26/0331
of 2 June 2026**

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

VALUT AIR KM 05-25 VARIO

Product family
to which the construction product belongs

Humidity-dependent vapour control layer

Manufacturer

BayWa AG
Arabellastraße 4
81925 München
GERMANY

Manufacturing plant

Werk 1

This European Technical Assessment
contains

6 pages including 1 annex which form an integral part of
this assessment

This European Technical Assessment is
issued in accordance with Article 95(4) of
Regulation (EU) 2024/3110, on the basis of

EAD 030271-00-0605

The European Technical Assessment is issued by the Technical Assessment Body in its official language. Translations of this European Technical Assessment in other languages shall fully correspond to the original issued document and shall be identified as such.

Communication of this European Technical Assessment, including transmission by electronic means, shall be in full. However, partial reproduction may only be made with the written consent of the issuing Technical Assessment Body. Any partial reproduction shall be identified as such.

This European Technical Assessment may be withdrawn by the issuing Technical Assessment Body, in particular pursuant to information by the Commission in accordance with Article 36(3) of Regulation (EU) No 2024/3110.

Specific part

1 Technical description of the product

The VALUT AIR KM 05-25 VARIO is a humidity-dependent vapour control layer. The VALUT AIR KM 05-25 VARIO consists of a polypropylene non-woven, an integrated scrim and a humidity-dependent coating.

The thickness of VALUT AIR KM 05-25 VARIO is 0.46 mm ± 0.02 mm and the mass per unit is 99 g/m² -3 g/ +10 g.

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

The performances given in Section 3 are only valid if the humidity-dependent vapour control layer VALUT AIR KM 05-25 VARIO is used in compliance with the specifications and conditions given in Annex 1.

The verifications and assessment methods on which this European Technical Assessment is based lead to the assumption of a working life of the humidity-dependent vapour control layer VALUT AIR KM 05-25 VARIO of at least 50 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	Euroclass E* in accordance with EN 13501-1 ¹
* only when used with edges protected against direct flame exposure	

3.2 Safety and accessibility in use (BWR 4)

Essential characteristic	Performance
Resistance to tearing (nail shank)	See Annex 1.2.1
Water vapour transmission properties	See Annex 1.2.2
Durability of water vapour transmission properties – artificial ageing by long-term exposure to elevated temperature	See Annex 1.2.2
Tensile properties	See Annex 1.2.3
Durability of tensile properties – artificial ageing by long-term exposure to elevated temperature and exposure to UV and heat	See Annex 1.2.3
Air permeability	See Annex 1.2.4

¹ EN 13501-1:2018

Fire classification of construction products and building elements - Part 1:
Classification using data from reaction to fire tests

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

In accordance with EAD No.030271-00-0605, the applicable European legal act is: [1999/90/EC(EU)] amended by Commission decision [2001/596/EC].

The system to be applied is: 3

For reaction to fire 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 2 June 2026 by Deutsches Institut für Bautechnik

Anja Dewitt
Head of Section

Beglaubigt
Vössing

Annex 1.1 Specification of intended use

EN 1995-1-1¹ applies for the installation of the humidity-dependent vapour control layer VALUT AIR KM 05-25 VARIO.

Annex 1.2 Specification of essential characteristics

A.1.2.1 Resistance to tearing (nail shank)

The resistance to tearing in longitudinal and transverse direction of the humidity-dependent vapour control layer VALUT AIR KM 05-25 VARIO in accordance with EN 12310-1² fulfil the values with Table A.1.2.1.

Table A.1.2.1: Resistance to tearing of VALUT AIR KM 05-25 VARIO in [N]

Vapour control layer	Direction	Resistance to tearing [N]
VALUT AIR KM 05-25 VARIO	longitudinal	192
	transverse	151

A.1.2.2 Durability of water vapour transmission properties – ageing by long-term exposure to elevated temperature

The initial values of the s_d -values for the humidity-dependent vapour control layer VALUT AIR KM 05-25 VARIO tested in accordance with EN ISO 12572³ meet the values in Table A.1.2.2.

The values after artificial ageing of the s_d -values for the humidity-dependent vapour control layer VALUT AIR KM 05-25 VARIO tested in accordance with EN 1296⁴ and the test plan deposited with DIBt fulfil the values in accordance with Table A.1.2.2.

Table A.1.2.2: s_d -values for initial value and after storage at 80(±2) °C for 24 weeks of VALUT AIR KM 05-25 VARIO in [m]

Conditionings / Arithmetic average of dry point and wet point		23°C, 0/50% rel. hum. / 25 % rel. humidity [m]	23°C, 50/93% rel. hum. / 72 % rel. humidity [m]	23°C, 83/97% rel. hum. / 90 % rel. humidity [m]
VALUT AIR KM 05-25 VARIO	Initial value	51.644	0.654	0.135
	Aged value	54.040	1.522	0.189

¹ EN 1995-1-1: 2004+AC:2006+A1:2008+A2:2014

² EN 12310-1:1999

³ EN ISO 12572:2017

⁴ EN 1296:2000

Eurocode 5: Design of timber structures – Part 1-1: General - Common rules and rules for buildings

Flexible sheets for waterproofing – Part 1: Bitumen sheets for roof waterproofing; determination of resistance to tearing (nail shank)

Hygrothermal performance of building materials and products - Determination of water vapour transmission properties - Cup method

Flexible sheets for waterproofing. Bitumen, plastic and rubber sheets for roofing. Method of artificial ageing by long term exposure to elevated temperature

VALUT AIR KM 05-25 VARIO	Annex 1
Specification of essential characteristics	

A.1.2.3 Durability of tensile properties – artificial ageing by long-term exposure to elevated temperature and exposure to UV and heat

The initial values and the values after artificial ageing of the maximum tensile force and the maximum tensile force elongation for the humidity-dependent vapour control layer VALUT AIR KM 05-25 VARIO determined in accordance with EN 13984⁵ and EN 13859-1⁶ correspond to the values in Table A.1.2.3 for both the longitudinal and transversal directions of the sheet. The specifications of the test standard with regard to the number and selection of test specimens have been fully complied with.

Table A.1.2.3: Values of tensile force and elongation at maximum force before and after exposure

Vapour control layer		longitudinal		transversal	
		Strength F_H [N / 50 mm]	Elongation ϵ_H [%]	Strength F_H [N / 50 mm]	Elongation ϵ_H [%]
VALUT AIR KM 05-25 VARIO	Initial value	299	20.8	310	18.8
	Aged value Heat resistance	350	23.1	347	19.4
	Aged value UV resistance	128	4.9	200	15.6

A.1.2.4 Air permeability

The maximum air permeability Q_{50} [$\text{m}^3/(\text{m}^2 \cdot \text{h} \cdot 50 \text{ Pa})$], tested in accordance with EN 13859-2⁷, clause 4.3.4 and EN 12114⁸ with edge gluing on steel frame with adhesive tape, expressed in maximum area-related reference permeability at 50 Pa see Table A.1.2.4.

Table A.1.2.4: Maximum air permeability of the humidity-dependent vapour control layer VALUT AIR KM 05-25 VARIO

Vapour control layer	Max. air permeability Q_{50} [$\text{m}^3/(\text{m}^2 \cdot \text{h} \cdot 50 \text{ Pa})$]
VALUT AIR KM 05-25 VARIO	0.000

- ⁵ EN 13984:2013 Flexible sheets for waterproofing – Plastic and rubber vapour control layers – Definitions and characteristics
- ⁶ EN 13859-1:2014 Flexible sheets for waterproofing - Definitions and characteristics of underlays - Part 1: Underlays for discontinuous roofing
- ⁷ EN 13859-2:2014 Flexible sheets for waterproofing – Definitions and characteristics of underlays – Part 2: Underlays for walls
- ⁸ EN 12114:2000 Thermal performance of buildings – Air permeability of building components and building elements

VALUT AIR KM 05-25 VARIO	Annex 1
Specification of essential characteristics	