

# INTELLO® PLUS

Reinforced hydrosafe® high-performance vapour control membrane, suitable for all fibrous insulation materials



## Technical data

Material		
Fleece	Polypropylene	
Functional film	Polyethylene copolymer	
Reinforcement	Polypropylene non-woven fabric	
Property		
Regulation	Value	
Colour	White-translucent	
Surface weight	BS EN 1849-2	110 g/m <sup>2</sup>
Thickness	BS EN 1849-2	0.4 mm
Water vapour resistance factor $\mu$	BS EN 1931	35 000
sd value	BS EN 1931	14 m
sd value, humidity-variable	BS EN ISO 12572	0.25 - >25 m
g value		70 MN·s/g
g value, humidity-variable	EN ISO 12572	1.25 - >125 MN·s/g
Hydrosafe value	DIN 68800-2	2 m
Reaction to fire classification	BS EN 13501-1	E
Airtightness	BS EN 12114	Tested
Tensile strength MD/CD	BS EN 13859-1 (A)	340 N/5 cm / 220 N/5 cm
Elongation MD/CD	BS EN 13859-1 (A)	15% / 15%
Nail tear-resistance MD/CD	BS EN 13859-1 (B)	200 N / 200 N
Durability after artificial ageing	ETA-18/1146	Passed
Temperature resistance	EN 1109, EN 1296, EN 1297	Permanent -40 °C to 80 °C
Thermal conductivity		0.04 W/(m·K)
Passive House Certification	Passivhaus Institut	phA
CE labelling	ETA-18/1146	Yes

## Areas of application

Vapour control (alternate terms: vapour check or retarder) membrane for use on roofs, walls, ceilings and floors on structures that are open or closed to diffusion on the exterior, e.g. flat/pitched roofs and green roofs, after appropriate design calculations have been carried out.

## Supply form

Art. no.	Length	Width	Folded	Contents	Weight	Sales unit	Container	GTIN
10093	20 m	1.5 m		30 m <sup>2</sup>	4 kg	1	42	4026639011237
10092	50 m	1.5 m		75 m <sup>2</sup>	9 kg	1	20	4026639011244
10076	50 m	3 m		150 m <sup>2</sup>	18 kg	1	20	4026639011992
12222	50 m	3 m	☒	150 m <sup>2</sup>	18 kg	1	20	4026639122223

## Advantages

- ✓ Best possible protection against moisture damage to structures and mould because this product is humidity-variable with a variation of a factor of over 100
- ✓ Can be combined with all fibrous insulation materials (including blown-in insulation)
- ✓ Long-term protection: performance tested and certified by independent testing authority (ETA-18/1146)
- ✓ Protected winter building sites thanks to hydrosafe® behaviour
- ✓ Test winner in April 2012 with the German product-testing foundation 'Stiftung Warentest'
- ✓ Easy to work with: dimensionally stable, no splitting or tear propagation
- ✓ Excellent values in hazardous substance testing, has been tested according to the ISO 16000 evaluation scheme

## General conditions

Where possible, INTELLO PLUS should be installed in such a way that adhesion can be carried out using single-sided adhesive tape on the smooth (printed) side of the sheeting. It should be installed taut and without slack either in parallel with or perpendicular to the supporting structure, e.g. the rafters. In the case of horizontal installation (perpendicular to the supporting structure), the separation distance of the supporting structure is limited to a maximum of 100 cm. After installation, perpendicular battens on the inside at a separation distance of a maximum of 50 cm must be fitted to carry the weight of the insulation material.

If regular tensile loads on adhesive tape bonds are to be expected – for example, due to the weight of the insulation material – when using mat or panel-shaped insulation materials, an additional supporting batten should be fitted over the overlap sealing. When attaching the membranes in the case of mat or panel-shaped insulation materials, a maximum separation distance of 10 to 15 cm applies for the fastening staples, which must be at least 10 mm wide by 8 mm long. The overlaps between the membrane strips must be approx. 8 to 10 cm.

Airtight seals can only be achieved on vapour control membranes that have been installed without folds or creases. Ventilate regularly to prevent excessive humidity (e.g. during the construction phase). Occasional, intermittent ventilation is not sufficient to remove large quantities of moisture due to construction work from a building; use a dryer if necessary.

To prevent condensation formation, INTELLO PLUS should be sealed and taped in an airtight manner immediately after the installation of mat or panel-shaped thermal insulation materials. This particularly applies when working in winter.

### Additional instructions for blown-in insulation materials

INTELLO PLUS can also be used as a boundary layer for blown-in insulation materials of all types. A reinforcement structure ensures that there is little expansion during the blowing-in process. Installation in parallel with the supporting structure has the advantage that the joint will be on a solid base and is protected by this base.

The separation distance between the staples used to fasten the membrane strips must be a maximum of 5 to 10 cm. Staples should be oriented parallel with construction timber so that membranes do not tear at the staples when insulation material is being blown in. If installation is carried out perpendicular to the supporting structure, a supporting batten should be fitted directly over the membrane strip overlap with its airtight sealing in order to avoid tensile loading on the adhesive bond.

When working in cold outdoor climates, the blown-in insulation material should be inserted immediately after installation of INTELLO PLUS. This will protect the membrane against condensation formation.



The information provided here is based on practical experience and the current state of knowledge. We reserve the right to make changes to the recommended designs and processing or to make alterations due to technical developments and associated improvements in the quality of our products. We would be happy to inform you of the current technical state of the art at the time you use our products.

Further information about application and construction is given in the pro clima planning documentation and application recommendations. If you have any questions, please call the pro clima technical hotline Ireland and UK:

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