

INTELLO PLUS

Reinforced hydrosafe high-performance vapour retarder, suitable for all fibrous insulation materials



Technical data

		Substance
Fleece		Polypropylene
Membrane		Polyethylene copolymer
Reinforcement		Polypropylene non-woven fabric
Attribute	Regulation	Value
Colour		white-transparent
Surface weight	EN 1849-2	110 ±15 g/m ² ; 0.36 ±0.05 oz/ft ²
Thickness	EN 1849-2	0.40 ±0.1 mm ; 16 ±4 mils
Water vapor resistance factor μ	EN 1931	18 750
sd-value	EN 1931	7.50 ±0.25 m
sd-value humidity variable	EN ISO 12572	0.25 - >25 m
g-value		37.50 ±1.25 MN-s/g
g-value humidity variable		1.25 - >125 MN-s/g
Vapor permeance	ASTM E96-A	0.17 US perms
Vapor permeance humidity variable	EN ISO 12572	< 0.13 - 13 US perms
Hydrosafe value (sd)	DIN 68800-2	2 m
Surface burning characteristics	ASTM E84	Class A (Flame Spread 0; Smoke development index 35)
Reaction to fire	EN 13501-1	E
Airtightness	EN 12114	tested
Airtightness	ASTM E2178	≤ 0.004 cfm/ft ²
Tensile strength MD/CD	EN 13859-1 (A)	350 N/5 cm / 290 N/5 cm ; 40 lb/in / 33 lb/in
Elongation MD/CD	EN 13859-1 (A)	15 % / 15 %
Nail tear resistance MD/CD	EN 13859-1 (B)	200 N / 200 N ; 45 lbf / 45 lbf
Artificial ageing by long term	EN 1296 / EN 1931	passed
Temperature resistance		permanent -40 °C to 80 °C ; -40 °F to 176 °F
Thermal conductivity		0.17 W/(m-K) ; 1.18 BTU-in/(h-ft ² -F)
National technical approval (DE)	DIN 68800-2	Z-9.1-853
CE labelling	EN 13984	available

Area of application

Can be used as a vapour check and airtightness membranes for all externally diffusion-open structures, e.g. with roof underlay (pro clima SOLITEX), softwood fibreboard or MDF board. For a high level of protection against moisture induced failures in structurally challenging constructions such as diffusion-resistant flat/pitched roofs. Also suitable in extreme environments such as in high mountain regions. Further information is given in the study "Calculating potential freedom from structural damage of thermal insulation structures in timber-built and steel systems".

Advantages

- ✓ The best possible protection for insulation structures thanks to humidity-variable diffusion adaptation with a variation of a factor of over 100
- ✓ Test winner in April 2012 with the German product-testing foundation »Stiftung Warentest«
- ✓ Permanent protection: Officially tested and certified performance
- ✓ Protected winter building sites thanks to hydrosafe behaviour
- ✓ Very low coefficient of expansion when combined with spray insulation materials
- ✓ Lowest VOC rating in hazardous substance test

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.

General conditions

pro clima INTELLO PLUS should be laid with the side with the plastic film (the printed side) facing the installer. They can be laid flat either at right angles to or along the sub-structure (such as the rafters) without sagging. If laid horizontally (at right angles to the sub-structure) then the maximum space permitted between the rafters is 100 cm (3'3"). After laying, it is necessary to support the weight of the insulation with lathing on the inside. The laths should be no more than 50 cm (1'8") apart. If, when using insulation mats and boards, for example, you expect systematic tension as a result of the insulation weight on the adhesive tape joins, an additional supporting lath should be placed on the overlap. Alternatively, the adhesive tape can be reinforced along the overlap by sticking strips of adhesive tape at right angles to the overlap every 30 cm (12").

Airtight seals can only be achieved on vapour control membranes that have been laid without folds or creases. Ventilate regularly to prevent excessive humidity (e.g. during the construction phase). Occasional rush/inrush ventilation is not adequate to quickly evacuate large amounts of construction-related humidity from the building. Use a dryer if necessary.

To prevent condensation, INTELLO PLUS should be stuck down so that it is airtight immediately after installing the thermal insulation. This particularly applies when working in winter.

Additional instructions for blown-in insulation materials

INTELLO PLUS can also be used for blown-in insulation materials of all types. Its reinforcement structure ensures that there is little elongation during the blowing-in process.

Installing it parallel with the supporting structure has the advantage that the joint overlap will be over a solid structure and the taped joint will be supported by it. If installed perpendicular to structure, please make sure to support taped overlap with a batten or "stitch" tape this joint with perpendicular reinforcing TESCON strips every 30 cm (12").

Note: To avoid condensation formation in the structure during installation, the blown-in insulation material should be installed immediately after the completion of the airtightness layer. This applies particularly to work carried out in winter.



Feuchtevariable Dampfbremsbahn INTELLO zur Verwendung entsprechend DIN 68800-2:2012-02



Hydrosafe 2 m



*Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions)



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