



Technical data

		Material
Protective and covering fleece		Polypropylene
Functional film		Polyethylene copolymer
Reinforcement		Polypropylene non-woven fabric

Property	Regulation	Value
Colour		Light grey
Surface weight	EN 1849-2	160 g/m ² ; 0.52 oz/ft ²
Thickness	EN 1849-2	0.6 mm ; 24 mils
Water vapour resistance factor μ	EN 1931	23 300
sd value	EN 1931	14 m
sd value, humidity-variable	EN ISO 12572	0.25 - >25 m
g value		70 MN-s/g
g value, humidity-variable		1.25 - >125 MN-s/g
Vapour permeance	ASTM E96-A	0.23 perms
Vapour permeance, humidity-variable	EN ISO 12572	< 0.13 - 13 perms
Hydrosafe value (sd)	DIN 68800-2	2 m
Surface burning characteristics	ASTM E84	Class A (Flame Spread 0; Smoke development index 105)
Fire class	EN 13501-1	E
Outdoor exposure		2 months
Outdoor exposure for refurbishment betw. 2 insulation layers		14 days ; 7 days at ≤ 10 °C (≤ 50 °F)
UV resistance		Can be permanently exposed to diffuse UV light
Watertightness to liquid water	EN 1928	W1
Water column	EN ISO 811	> 2 500 mm ; > 8' 2"
Tensile strength MD/CD	EN 12311-2	490 N/5 cm / 300 N/5 cm ; 56 lb/in / 34 lb/in
Elongation MD/CD	EN 12311-2	20% / 20%
Nail tear resistance MD/CD	EN 12310-1	280 N / 280 N ; 63 lbf / 63 lbf
Durability after artificial ageing	EN 1296	Passed
Temperature resistance	EN 1109, EN 1296, EN 1297	Permanent -40 °C to 80 °C ; -40 °F to 176 °F
Thermal conductivity	EN 1109, EN 1296, EN 1297	0.04 W/(m·K) ; 0.3 BTU-in/(h·ft ² ·°F)
CE labelling	EN 13984	Yes

Areas of application

Vapour control (alternate terms: vapour check or retarder) membrane for use on the inside of insulation installed between rafters or wall framework, or directly on top of a hard subsurface underneath exterior insulation in combination with all fibrous insulation materials – including blown-in insulation materials.

This membrane can be permanently exposed to diffuse UV light – e.g. in unconverted spaces without inner cladding.

In the case of refurbishment from the outside and installation between two layers of insulation, the choice of insulation materials for the two layers is limited to mineral or rock wool. The thickness of the external mineral wool insulation needs to be calculated on a project-specific basis; please contact Technical Support at pro clima in Germany for assistance.

It can be used on building components that are diffusion-open to the outside or are diffusion-tight, e.g. pitched, flat or green roofs, after appropriate design calculations have been carried out.

Supply forms

Art. no.	GTIN	Length	Width	Contents	Weight	Sales unit	Container
1AR03017	4026639230171	50 m	1.5 m	75 m ²	14 kg	1	20

Advantages

- ✓ Excellent protection against mould and moisture damage to structures thanks to humidity-variable diffusion resistance
- ✓ Can be combined with all fibrous insulation materials
- ✓ Easier handling: can be used with insulation installed between rafters or wall framework and with external insulation
- ✓ Protects building structure against weathering during the construction phase for roof pitches of 10° (2.1:12) and higher
- ✓ Protected winter building sites thanks to hydrosafe® behaviour
- ✓ Excellent values in hazardous substance testing, has been tested according to the ISO 16000 evaluation scheme

General conditions

pro clima INTELLO X PLUS should be installed with the printed side facing the installer. The membrane is to be installed horizontally (parallel to the eave) in a taut manner.

Airtight seals can only be achieved on vapour control membranes that have been fitted with no folds or creases. Ventilate regularly and systematically to prevent build-up of 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 avoid condensation formation, the thermal insulation should be installed immediately after the airtight installation of INTELLO X PLUS. This particularly applies when working in winter.

Fastening

Overlap the membranes by at least 10 cm (4"). Use fastening staples that are at least 10 mm (3/8") wide by 8 mm (5/16") long to attach the membranes. The membranes can only be fastened in a protected manner in the overlap area. The maximum distance between fasteners is 10 to 15 cm (4"-6"); in the case of blown-in insulation: 5 to 10 cm (2" to 4"). Fasteners may not be applied in areas where water runs off in a collected manner (e.g. in roof valleys).

If exposure to the elements is planned, it is recommended to provide additional mechanical support for the membranes (e.g. with counter battens). TESCON NAIDECK mono adheres to counter battens, seals nail holes and improves the level of rain protection.



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 installation and design details is available in the pro clima planning documentation. If you have any questions, please contact [pro clima Technical Support](<https://proclima.com/service/technical-support>).

MOLL

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