

CLIMA CONTROL NET 160

MEMBRANE WITH VARIABLE VAPOUR DIFFUSION AND REINFORCEMENT GRID

VARIABLE DIFFUSION

Variable resistance to vapour diffusion: maximum protection for walls and excellent security in insulation.

ENERGY RECONDITIONING

Ideal to increase energy performance for packages and solutions for re-conditioning of existing structures.

REINFORCING GRID

Thanks to its composition, the membrane is not affected by mechanical stresses caused by staples, nails or wear caused by walking.

COMPOSITION

- ① top layer: non-woven PP fabric
- ② reinforcing layer: reinforcing PE grid
- ③ bottom layer: PA functional film

CODES AND DIMENSIONS

CODE	description	tape	H [m]	L [m]	A [m ²]	H [ft]	L [ft]	A [ft ²]	
CLIMATT160	CLIMA CONTROL NET 160 TT	TT	1,5	50	75	5	164	807	25



WEAR RESISTANCE

During installation on the roof, mechanical stresses are applied due to wear from walking, which the reinforcement grid can compensate for.

SMART

It is breathable when internal relative humidity is too high, and serves as a vapour control layer when internal humidity is at suitable levels.



TECHNICAL DATA

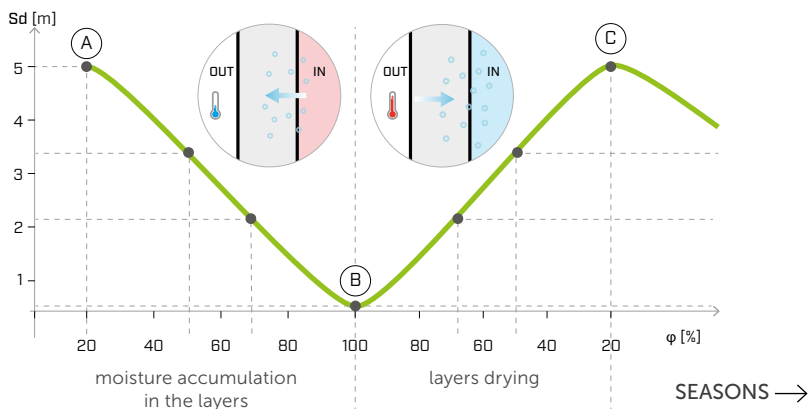
Properties	standard	value	USC units
Mass per unit area	EN 1849-2	160 g/m ²	0.52 oz/ft ²
Thickness	EN 1849-2	0,5 mm	20 mil
Variable water vapour transmission (Sd)	EN 1931/EN ISO 12572	0,5/5 m	7/0.7 US Perm
Maximum tensile force MD/CD ⁽¹⁾	EN 12311-2	400/270 N/50 mm	46/31 lbf/in
Elongation MD/CD ⁽¹⁾	EN 12311-2	20/20 %	-
Resistance to nail tearing MD/CD ⁽¹⁾	EN 12310-1	240/250 N	54/56 lbf
Watertightness	EN 1928	compliant	-
Water vapour resistance:			
- after artificial ageing	EN 1296/EN 1931	compliant	-
- in the presence of alkalis	EN 1847/EN 12311-2	npd	-
Reaction to fire	EN 13501-1	class E	-
Resistance to penetration of air	EN 12114	< 0,02 m ³ /(m ² h50Pa)	< 0.001 cfm/ft ² at 50Pa
Resistance to temperature	-	-40/80 °C	-40/176 °F
UV stability ⁽²⁾	EN 13859-1/2	336h (3 months)	-
Thermal conductivity (λ)	-	0,3 W/(m·K)	0.17 BTU/h·ft·°F
Specific heat	-	1800 J/(kg·K)	-
Density	-	approx. 320 kg/m ³	approx. 20 lbm/ft ³
Variable water vapour resistance factor (μ)	-	approx. 1000/10000	approx. 2.5/25 MNs/g
VOC	-	not relevant	-
Water column	ISO 811	> 250 cm	> 98 in

⁽¹⁾Average values obtained from laboratory tests. Consult the Declaration of Performance for the minimum values.

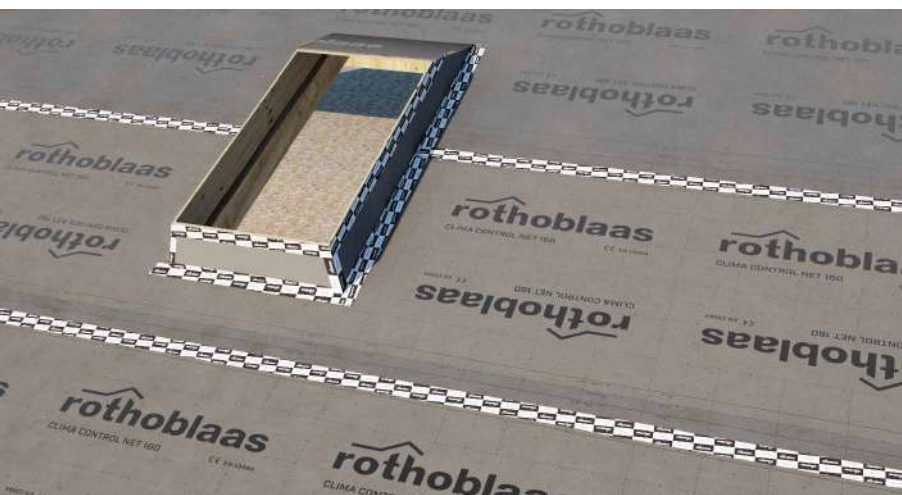
⁽²⁾Laboratory ageing test data cannot reproduce unforeseeable causes of the product's degradation, or consider the stresses to which it will be subjected during its service life. To ensure its integrity, as a precautionary measure, exposure to weathering during construction should be limited to a maximum of 4 weeks.

Waste classification (2014/955/EU): 17 02 03.

USA and CA Properties	standard	value
Dry/wet cup water vapour transmission	ASTM E96/ E96M	2.86/7.91 US Perm 153/452 ng/(s·m ² ·Pa)



- (A) DRY LAYERS: Sd 5 m**
maximum protection - vapour control layer to limit the passage of vapour in view of the season when moisture accumulates within the layers
- (B) HUMID LAYERS: Sd 0.5 m**
maximum breathability - breathable membrane to allow drying during the reverse steam diffusion phenomenon
- (C) DRY LAYERS: Sd 5 m**
maximum protection for the start of a new year and a new cycle



HYGROMETRIC PROPERTIES

The special PA film gives the product the ability to adapt to the hygrometric conditions of the building. If the membrane comes into contact with high humidity levels, it transforms from a vapour control layer into a breathable product, keeping the structure and planking dry.