

# Monarperm Plus



EN 13859-1  
EN 13859-2

10

## TECHNICAL DATA SHEET

Surface Upper	Polypropylene (PP) non woven UV stable
Middle Layer	PP microporous UV stable film
Surface Lower	PP non woven UV stable
Colour	Anthracite upper / Anthracite lower

Characteristic	Test method	Value or statement	Units	Tolerance
Length	EN 1848-1	50.0	m	-0 / +2 %
Width	EN 1848-1	1.0    1.5	m	-1 / +1 %
Straightness	EN 1848-1	< 30	mm/10m	-
Mass per unit area	EN 1849-2	140	g·m <sup>-2</sup>	- 5 / + 5 %
Tensile strength	EN 12311-1	245 (MD); 260 (TD)	N/50 mm	± 40
Elongation	EN 12311-1	100 (MD); 120 (TD)	%	± 25
Nail Tear Strength	EN 12310-1	195 (MD); 185 (MD)	N	± 20
Dimensional stability	EN 1107-1	< 3	%	-
Resistance to Cold Bend	EN 1109	-40	°C	-
Reaction to fire	EN 13501-1	Class F	-	-
Equiv. air thickness	EN 12572 (C)	S <sub>d</sub> = 0.04	m	± 0.03
Air permeability	EN 12114	0.025	m <sup>3</sup> /(m <sup>2</sup> ·h·50 Pa)	± 0.005
Water tightness	EN 1928 (A)	pass (class W1)	-	-
After artificial ageing	EN 1297 & EN 1296			
Tensile Strength	EN 12311-1	225 (MD); 240 (TD)	N/50 mm	± 30
Elongation	EN 12311-1	70 (MD); 70 (TD)	%	± 30
Watertightness	EN 1928 (A)	pass (class W1)	-	-

NPD =No Performance Declared. MD = Machine Direction. TD =Transverse Direction.

### Description of product

Monarperm Plus is a vapour permeable polypropylene underlay, and is used to reduce wind load on roof slates and tiles and to provide a secondary water-shedding layer against wind-driven rain or snow.

### Type of application

Monarperm Plus is a vapour permeable membrane intended as an underlay for discontinuous roofing for use in application on pitched roofs over rafters in ventilated and non-ventilated roof constructions, or as underlay in walls. Membranes should be installed in accordance with the manufacturer's guidelines.

### Compatibility

The material is compatible with all materials normally used in its application. There are no harmful side effects associated with this material.

### Storage & Transportation

Rolls are delivered on pallets, covered with shrink wrapped bag. These materials should, when removed from pallets, be stored on side, under cover and on a flat, level surface, and protected from mechanical damage and heat sources. During storage exposure to direct sunlight is to be avoided.

Factory Ref: S001-01-102

NOTE: This information is given in good faith being based on the latest knowledge known to Icopal Limited. Whilst every effort has been made to ensure the contents of the publication are current while going to press, customers are advised that products, techniques and Codes of Practice are under constant review and liable to change without notice.