

# Icopal Universal<sup>®</sup> WS



EN 13707

06

0620-CPR-74170

## TECHNICAL DATA SHEET

Surface Upper	Polypropylene (PP) spunbond with printed overlap fixing line along one edge
Surface Lower	Polypropylene (PP) spunbond
Material	Polyolefin copolymerisate binder (POCB)
Type of Reinforcement	Polyester-scrim glass fleece combination

Characteristic	Test method	Value or statement	Tolerance	Units
Visible defects	EN 1850-2	pass	-	-
Length	EN 1848-1	10.0	±0.1	m
Width	EN 1848-1	1.0	±0.02	m
Straightness	EN 1848-1	< 10	-	mm/10m
Mass per unit area	EN 1849-1	3.28	±10%	kg.m <sup>-2</sup>
Effective thickness	EN 1849-2	3.2	±0.2	mm
Water tightness	EN 1928 (B)	Pass (≥300 kPa)	-	-
External fire performance*	EN 13501-5	F <sub>ROOF</sub> (t4)	-	-
Reaction to fire	EN 13501-1	Class F	-	-
Root Resistance	EN 13948	pass	-	-
Tensile strength	EN 12311-2 (A)	1250 (MD); 1150 (TD)	±20%	N/50 mm
Elongation	EN 12311-2 (A)	30 (MD); 30 (TD)	±10%	%
Resistance to static load (soft)	EN 12730 (A)	≥10	-	kg
Resistance to impact (soft)	EN 12691 (B)	≥1250	-	mm
Resistance to tearing	EN 12310-1	300	-0.0 / +300	N
Peel resistance of joints	EN 12316-1	50	-0.0 / +100	N/50 mm
Shear resistance of joints	EN 12317-1	800	-0.0 / +700	N/50 mm
Flexibility at low temperature	EN 1109	≤ -25	-	°C
Durability: UV heat and water	EN 1297	pass	-	-
Dimensional stability	EN 1107-1	≤ 1	-	%
Flow resistance at elev. temp	EN 1110	≥150	-	°C
Water vapour permeability	EN 1931	20'000	-	μ

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

\* The external fire performance of a roof is dominated by the built-up roof system. No performance can be assessed for the product alone.

### Description of Product

Icopal Universal WS is a polyester/glass reinforced POCB bitumen membrane with root inhibitors.

### Type of application

Icopal Universal WS is suitable for use as the waterproofing membrane in limited access exposed roofs, or buried single layer roof systems beneath ballasted, inverted or garden roofs. Membranes should be installed in accordance with manufacturer's guidelines.

### Compatibility

The material is compatible with all materials normally used in roofing structures and finishes and may be cut and formed using techniques described in BS 8217:2005. There are no harmful side effects associated with this material.

**Hydrocarbon solvent based products, such as naphtha, paraffin and creosote will have a harmful effect and should not be allowed to come in to contact with the material.**

### Storage & Transportation

Rolls are delivered on pallets, covered with shrink wrapped bag. These materials should, when removed from pallets, be stored upright on a firm flat surface, kept dry and protected from mechanical damage and heat sources. **Do not store rolls laid flat.** Storage temperatures should be between 0°C and 40°C. **Stacking two pallets high is only permitted if the lower pallet rolls are reeled on a cardboard core. Plywood spacer boards must be placed between pallets.** Icopal is not responsible for damage when the above instructions are not followed.

Factory Ref: S0001-01-107

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.