iSHIELD™ 500PP

POLY PROPYLENE FLEECE SURFACED ASPHALTIC PROTECTION BOARD

DESCRIPTION

iShield 500PP is a multi-layer asphaltic protection board which is manufactured by thermally bonding polymer modified bitumen onto a high strength, rot proof and UV stable Poly Propylene Fleece.
Due to the high mechanical and puncture resistant properties of the Poly Propylene fleece, iShield 500PP is ideally suitable for application as the protection layer on waterproofing membranes and coatings applied on below ground PCC structures.

FIELDS OF APPLICATION

iShield 500PP has been designed for use as a permanent protection to waterproofing systems, applied on below ground PCC structures. iShield 500PP can absorb the high impact shock imparted by aggregates and steel reinforcement during the RCC construction stage.

MAIN FEATURES

- Non-bio-degradable
- Weather, warp, and rot proof
- UV Stable. Highly durable
- Excellent mechanical properties. High resistance to impact, puncture and tear.
- Self-healing – the polymerized bitumen compound has self-sealing property against minor punctures.
- Excellent chemical resistance – withstands corrosive conditions of ground water, chlorides, and sulphates in soil.
- High flexibility- Can be easily applied over curved profiles and other critical details.

TECHNICAL PARAMETERS

Physical Properties	Test Method	Typical Values
Thickness, (mm)	EN 1849-1	5.0
Top Surfacing film	-	Polypropylene Fleece
Mass per unit area, (kg/m²)	EN 1849-1	4.2±0.05
Softening point (R&B), (°C)	ASTM D36	>140
Heat resistance @80°C	EN 52123	No Flow
Tensile Strength, (N/5cm)	UEAtc	>700
Tear Strength, (N)	ASTM D 4073	>750
Puncture Resistance, (N)	ASTM E 154	>1800
Resistance to static Load	EN 12730	L25
Hydrostatic pressure @5 bar (50m)	BS EN 12390 (Part 8)	Pass
Chemical resistance, (pH)	ASTM D 543	2.2 - 11.5
Low Temp Flexibility @0°C	EN 52123	Pass

All values given are subject to 5 – 10% tolerance.

APPLICATION INSTRUCTION

The application of iShield 500PP should be carried out when the ambient temperature is between 10°C and 45°C and should avoided in case of extreme weather conditions such as sandstorms, rain, etc. Unroll the iShield 500PP board and cut it to the right size as required for the substrate. Lay the board on the surface and ensure that the alignments are done correctly. iShield 500PP can be fixed on top of the waterproofing membrane by using a double-sided adhesive tape or an NBR based contact adhesive iBond N20. When applied on vertical surfaces, suitable support/props must be used to keep the protection board in place till the adhesive is strong enough to hold the board. Subsequent boards shall be laid continuously by butt joining on the edges.

SUPPLY

iShield 500PP	0.9mx6.7mx5.0mm(Roll),Wt-25kg
iStik TS	50mm x 10mx1.5mm(Roll),Wt-0.6Kg
iBond N20	5Lt (Metal Can)

HANDLING & STORAGE

iShield 500PP rolls are vertically stacked on pallets and shrink wrapped for easy handling. The pallets should be covered and stored in a dry and shaded area away from sunlight, UV, and sources of heat. Do not stack one pallet on top of the other. It is recommended to open the shrink wrap only during application. The shelf life is 12 months when stored as per the recommendations. Excessive exposure to sunlight and UV will result in the deterioration of the quality of the product and reduce its shelf life.

HEALTH & SAFETY

iShield 500PP might leave bitumen stains on the skin and hands during application. This can be removed by washing with a mild detergent soap or a suitable solvent cleaner. The Impervious gloves and standard PPE should be used when handling these products.

Disclaimer: All technical data of this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control. Please note that because of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields. Information on this datasheet is subject to change without notice and should not be used for writing specification. For additional information on specific applications, please contact INNOBIT. The information contained herein, provides recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted based on the contents of this data sheet, or any verbal advice given, unless there is a case of willful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product. Innobit reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned copies of which will be supplied on request. All values given are subject to 5 – 10% tolerance. #Values achieved within 7 days after casting specimen at 25°C and 50% RH.

Innobit Industries LLC
Umm Al Thoub, New Industrial Area, Umm Al-Quwain, UAE
Tel: +971 6 706 9111 Email: info@innobit.me