iSTIK™ 400R

POLYPROPYLENE SURFACED SELF-ADHESIVE WATERPROOFING AND PROTECTION MEMBRANE

DESCRIPTION

iStik 400R is a 3.5mm thick high-performance self-adhesive Waterproofing and protection membrane manufactured with a blend of high grade SBS polymers, selected additives, and bitumen. The polymer modified bitumen compound is laminated onto a tough, rot proof Polypropylene fleece.

Due to the high mechanical and puncture resistant properties of the fleece, iStik 400R is ideally suitable for application as a waterproofing membrane as well as a protection membrane for the waterproofing membranes and coatings in below ground concrete structures. iStik 400R conforms to the requirements of BS 8102

RECOMMENDED APPLICATIONS

- Manholes
- Underpasses and tunnels
- Bridge Piers and Viaducts
- Other buried concrete structures
- Roof Gardens and planter areas
- Sound dampning underlayment on wooden floors
- Concrete basements and foundations, rafts and retaining walls.

FEATURES & BENEFITS

- Anti-root property
- Excellent resistance to water and vapour
- Excellent mechanical properties. High resistance to impact, puncture, and tear.
- Cold applied – easy and fast application without torching, increasing site safety.
- Self-adhering – easy peel and stick method without the need for complicated tools.
- Self-healing – the polymerized bitumen compound has self-sealing property against minor punctures.
- High flexibility- Can be easily applied over curved profiles and other critical details.
- Excellent chemical resistance – withstands corrosive conditions of ground water, chlorides, and sulphates in soil.

TECHNICAL PARAMETERS

PHYSICAL PROPERTIES	TEST METHOD	VALUE
Thickness, [mm]	EN 1849-01	3.5
Top Surfacing, [g/m^2]	-	350 Polypropylene Fabric
Tensile strength (L/T), [N/5cm]	EN 12311-1	700/550
Elongation of Compound, [%]	ASTM D 412	≥1500
Tear Resistance (L/T), [N]	ASTM D 5147	500/500
UV Resistance	ASTM G 154	Excellent
Puncture resistance, [N]	ASTM E 154	≥1800
Adhesion to Primed surface, [N/mm]	ASTM D 100	>1.8
Softening point, [°C]	ASTM D 36	>120
Chemical resistance, [pH]	ASTM D 543	2.5-11.5
Low temperature flexibility	EN 52123	Pass
Hydrostatic pressure @5 bar	BS EN 12390	Pass
VOC, [g/l]	ASTM D 3960	<50

All values given are subject to 5 – 10% tolerance

APPLICATION INSTRUCTION

The application temperature should be between 10°C to 45°C. Application procedures may vary slightly depending upon site conditions. Recommended guidelines for the application of the iStik 400R as protection membrane is as follows:

SUBSTRATE PREPARATION

Clean the surface of the underlying waterproofing membrane or coating surface on which the protection membrane will be applied of all accumulated dust and other contaminants.

MEMBRANE APPLICATION

iStik 400R membrane should always be placed from the lower points to the higher levels. On circular areas a square piece of iStik 400R shall be placed with the edges star cut to ensure full bonding.

Unroll the membrane and cut it to the right size as required for the substrate. Lay the membrane on the surface and ensure that the alignments are done correctly. Then peel of the first 5 cm of the membrane and stick the top portion. Reroll the membrane on the core until the adhered area.

Pull the release membrane off for a length of 20 centimeters and press it on to the surface. While pressing the membrane, care should be taken to press from the center and then push towards the outer edges. This method will ensure that air entrapment and improve the adhesion. The side and end overlaps will be butt joints. To provide a water tight seal and restrict any water penetration through these butt joints, a 200mm wide strip of a double sided bitumen adhesive membrane (iStik TS) shall be laid on that area prior to the application of the membrane. Once the TS bitumen strip is put in place, remove the silicone release film from the top and expose the self adhesive bitumen. iStik 400R membrane will then be applied on top of the exposed iStik TS overlap ping by 100mm. the subsequent membrane will then be overlapped with the other 100mm of iStik TS.

PRECAUTIONS

- The bitumen compound of the membrane tends to become soft and tacky at elevated temperatures, which makes the application difficult. Membrane application in hot climatic regions during the summer months shall be done during the early morning or late evening times.
- For application in submerged structures, contact the Innobit Technical team prior to application.
- Conditioning of both the membrane and the concrete surface would be required for application below 15°C by the use of a hot air blower or any other suitable means to increase the temperatures.
- Apply iKote SB41 as the primer prior to the application of iStik 400R when it applied as a waterproofing membrane on the concrete surface

PACKAGING

iStik 400R 3.5mm	1m x 8m x 3.5mm

STORAGE

Store all materials in a covered, cool and dry place.The storage temperatures should always be between 5°C-30°C. The shelf life of the product is 12 months from the date of manufacture and if stored as per manufacturer's recommendations.

HEALTH & SAFETY

Caution should be exercised while applying the product as it is with any other construction chemical. iStik 400R contains tacky bituminous compound that may adhere to human skin if it comes in contact. 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 data sheet 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.

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