iSTIK™ 100G

GLASS FIBRE REINFORCED BITUMEN MODIFIED SELF-ADHESIVE MEMBRANE

DESCRIPTION

iStik 100G is a self-adhesive waterproofing membrane made with high performance tropical grade SBS polymer modified bitumen, coated on to a reinforcement core of rot proof glass fibre mat. The membrane has excellent dimensional stability and has a high fatigue resistance. iStik 100G conforms to the requirements of BS 8102.

RECOMMENDED APPLICATIONS

iStik 100G is best suited for protection of below grade concrete structures. The membrane is used for both damp proofing and waterproofing applications. Ideally suited for foundations, retaining walls, underpasses etc.

- Underpasses and tunnels
- Retaining walls and foundations
- Lift pits and manholes
- Foundations of water retaining structures
- As DPC layer under block work for mitigating rising dampness

IMPORTANT FEATURES

- Cold applied – easy and fast application without torching increasing site safety.
- High Dimensional stability.
- Chemical resistance – withstands corrosive conditions of ground water and soil.
- Self-adhering – easy peel and stick method without the need for complicated tools
- Factory controlled thickness – ensure equal cover on the whole surface regardless of points, protrusions, and pits.

TECHNICAL PARAMETERS

PHYSICAL PROPERTIES	TEST METHOD	VALUE
Thickness, [mm]	EN 1849-1	1.5/1.6
Reinforcement, [g/m²]	EN 1849-1	50gsm Glass Fibre Mat
Softening point, [°C]	ASTM D 36	>105
Tensile strength (L/T), [N/5cm]	EN 12311-1	250/180
Tear strength (L/T), [N/5cm]	EN 12310-1	50/70
Crack Bridging ability, [mm]	ASTM C 1305	>1 mm
Puncture resistance, [N]	ASTM E 154	>100
Resistance to Hydrostatic Pressure @2Bar	BS EN 12390	Pass
Adhesion to primed concrete, [N/mm]	ASTM D 1000	2.2
Adhesion to self, [N/mm]	ASTM D 1000	2.0
Chemical resistance	ASTM D 543	2.5 to 11.5
Application temperature (Ambient), [°C]	-	10 to 45
Service temperature (Surface), [°C]	-	-20 to 75

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 coating system is as follows:

SURFACE PREPERATION

The surface must be clean and structurally sound. Any loose particles on the surface should be removed. Use industrial grade detergent or degreasing compounds for removing oil or grease and wax contaminants. Cement laitance, mold, release agents, curing membranes and other contaminants must be removed from the surface by grinding or scarifying followed by vacuum cleaning.

PRIMING

All surfaces should be primed with iKote SB41. Application of the primer can be done by a brush or roller. Commence further activities only after the primed surface becomes touch dry. If the primed area is left open for more than 48hours, repriming might be required depending on the dust accumulation on the surface.

PLACING

Membranes should always be placed from the lower points to the higher levels. This is to ensure that the overlap edges are never against the flow or water. Internal Corner joints should be prepared with sand cement mortar fillet or a preformed fillet. External joints shall be chamfered to remove the sharp pointed edges. A coat of liquid membrane is required to be applied on the corner joint if fillet cannot be placed. The corner joints should be treated with the 300mm reinforcement strip of iStick 100G which is laid first. On circular areas a square piece of iStik 100G 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. 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 film off for a length of 20mm and press the membrane on to the surface. While pressing, care should be taken to press the center area and then push towards the sides. This method helps to avoid air entrapment and ensure better adhesion with the substrate. Adjacent rolls are laid with a side overlap of 50mm and end overlap of 100mm. The overlaps should be pressed firmly either with a roller or cloth press for proper sealing.

iStik 100G should be protected from subsequent construction activities with iShield protection board immediately after application of the membrane. The protection board can either be spot bonded with iBond N20 or with iStik TS. On horizontal surfaces the membrane may also be protected by a sand cement screed. All detailing works on expansion and construction joints, pipe penetrations, internal and external corners must be done as per the manufacturer's guidelines. Kindly consult the Innobit Technical Department for the relevant drawings.

IMPORTANT GUIDELINES

- Application of the protection course (Board/membrane/screed) is recommended to be done immediately of iStik 100G membrane. In situations where the application gets delayed due to certain unavoidable site activities, then it is recommended that the applied membrane is temporarily protected by a Geo-textile fleece or any other suitable means from UV and sunlight as this might lead to the formation of bubbles on the surface and seams and overlaps of the membrane which in turn will affect the waterproofing integrity of the structure.
- The bitumen compound of the membrane tends to become soft and tacky at high temperatures, which makes the application very difficult. Membrane application in hot climatic regions during the summer months shall be done during the early morning or late evening times.
- Minor wrinkles on the surface of the membrane does not affect the integrity of the waterproofing
- For application in submerged structures, contact the Innobit Technical team prior to application.
- iStik 100G is not designed to be used on top of slabs which will be subjected to vehicular traffic.
- 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.

PACKAGING

iStik 100G 1.5mm/1 .6mm iStik 100G 1.5mm/1 .6mm	1m x 10m 1m x 20m

STORAGE & SHELFLIFE

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 AND SAFETY

Caution should be exercised while applying the product as it is with any other bit.Caution should be exercised while applying the product as it is with any other bitumen material. Impervious gloves and barrier cream should be used when handling these products. Bitumen stains on skin can be

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