AquaShield[®]

Atactic Polypropylene Modified Glass Fiber Reinforced Bituminous Membrane



Description

AquaShield[®] is APP modified non-woven glass fiber sheet reinforced bituminous membrane (2 mm, 3 mm, 4 mm) for superior waterproofing. This type of membrane shows excellent tensile strength and dimensional stability. The torch side of the membrane is covered with polyethylene film for protection of the membrane.

Approvals / Standards

ASTM D 5147, IS 16526:2017

Technical Information at 25°C and 50% RH

Property	Standard	3 mm & above	Below 3 mm
Penetration, dmm	IS 1203	15 ± 5	15 ± 5
Softening Point, °C	IS 1205 / ASTM D 36	≥150	≥150
Flow Resistance, 120°C, for 2 hrs.	IS 13826 - Part 5	0	0
Cold Flexibility, °C	IS 13826 Part 2 / ASTM D 5147	Does not crack at +2	Does not crack at +2
Water Absorption, %	ASTM D 5147	0.2 - 0.6	0.2 - 0.6
Pressure Head Test	IS 13826 - Part 4	No sign of leakage	No sign of leakage
Elongation, % • Longitudinal • Transverse	IS 13826 - Part 1 / ASTM D 5147	5 ± 10 5 ± 10	15 ± 10 15 ± 10
Tensile Strength, N / 5 cm • Longitudinal • Transverse	IS 13826 Part 1 / ASTM D 5147	450 ± 50 350 ± 50	300 ± 20 100 ± 20
Tear Strength, N Longitudinal Transverse 	ASTM D 5147	>150 >75	>150 >75

Application

Waterproofing and damp proofing membrane for the protection of various substrates in wide range of applications:

- Medium to large roof slabs (domestic, commercial, industrial)
- Underground car parks
- Swimming pools
- Bridges & tunnels
- Podiums

Advantages

- Low cold flexibility
- High tensile strength, elongation, puncture resistance
- Resistance to ageing and weathering
- Good resistance to ageing if applied properly as per proper system
- High flexibility helps application in both hot and cold climates

Application Information

- **Substrate Temperature** +5°C Min / +45°C Max
- ✓ Ambient Temperature +5°C Min / +45°C Max
- ✓ Substrate Moisture Content < 5%

Application Methodology

Substrate Preparation

- New concrete should be cured for at least 28 days.
- Cementitious or Mineral based substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and to achieve an open textured surface.
- Loose friable material and weak concrete must be completely removed and surface defects such as blowholes and voids must be fully exposed.
- Build-up proper gradient of the surface with PCC admixed with ShaliPlast IW.
- Ensure that level of all drain mouth is lower than deck slab level by at least 15 mm.
- The concrete must be carefully assessed for moisture content, air entrapment, and surface finish prior to any primer application.

Waterproofing Application Method/Tools

- Apply a coat of **ShaliTex Primer** @ 0.3 L / m² and allow it to dry till tack free.
- After the primer applied surface gets dried align **AquaShield**[®] on the substrate by unrolling the membrane.
- Re-roll the roll into its original form so that alignment is not disturbed.
- Point the torch towards the primed surface and then on the underside of the membrane. Torch till the compound reaches its softening points.
- The best visual to confirm this is when the embossing on the membrane starts to disappear.
- Roll the membrane forward while firmly pressing it to the substrate so that it bonds Keep overlap margin for minimum 100 mm between two adjoining membranes for end laps and a minimum of 75 mm for side laps.
- Ensure that a constant flow of bitumen is maintained across the whole width of the roll and that a bead of bitumen is extruded from all edge which demonstrates that a good seal has obtained.
- AquaShield[®] applied all over the terrace must be finished with a coating of SuperSilverShield for non-trafficable area. For foot trafficable area, overlay with PCC dosed with ShaliPlast IW of 50 mm thick / tiles loosely laid or fixed, over a separation layer of spot bonded ShaliGeoText 120 / 150 GSM.

Precautions

- Do not apply during rain or extreme temperature.
- Avoid abuses which may lead to puncturing of membrane.
- Ensure that the product is applied at least 6 inches inside the drain pipe.
- Apply parapet to parapet to envelope the entire building for long term performance.

Value base of product data

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control and different test methods.

Health and Safety information

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent **Material Safety Data Sheet**.

- Store in a cool, dry place. Keep out of reach of children and away from eatables.
- May be harmful if swallowed.
- In case of ingestion seek immediate medical attention.

- Eye protection during application is recommended.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- In case of skin contact, wash with soap and plenty of water. Get medical attention if irritation develops or persists.
- It is recommended to wear suitable nose pad during torching application and surface preparation. Dispose as per recommendation mentioned above.
- No added Lead, Mercury or Chromium compounds.







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Enhancing Structures' Life

Product Range

Waterproofing and Insulation Road Surfacing
 Sealants and Additives Pipeline Coating
 Protective / Anti-Corrosive Coating Epoxy Flooring
 Grouts / Admixtures RestoFix- Repair / Rehabilitation
 Other Construction Chemicals



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