FCSC SHIELD 3N

TECHNICAL DATA SHEET

ATACTIC POLYPROPYLENE(APP) MODIFIED BITUMINOUS SHEET

Description

This type of membrane is manufactured by modifying premium grade asphalts with atactic polypropylene and specially reinforced with nonwoven polyester. This type of membrane shows excellent strength, elasticity and durability.

Uses

It is used as waterproofing membrane for protection of various substrates in wide range of applications.

- Medium to large roof slabs (domestic, commercial and industrial)
- Underground car parks etc.
- Podiums
- Bridges & Underpass

Advantages

- Low Cold Flex Temperature
- Durability
- In House Production, high level of availability and short lead times

Packaging

Roll Size: 10X1m; length-10M, Width-1M

Technical Data

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Appearance	Black membrane,
	Upper finish: PE Film,
	Underside finish: PE
	Film
Packaging	Roll: 10 X 1m
Shelf Life	12 months if stored as
	per recommendations
Thickness	3MM
Tensile Strength	650 ± 100 N/5cm
Elongation	50 ± 10 %
Tear Strength	350 ± 100 N
Softening Point	> 150 °C
Water Absorption	0.14%
Ambient Air	+ 10 °C min / + 50 °C
Temperature	max
Substrate Moisture	
Content	< 6%
Flow Resistance	0 @ 120 °C after 2 hrs

Application Methodology

Surface Preparation: New concrete should be cured for at least 28 days and should have a pull off strength ≥ 1.5 N/mm2. 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. The concrete must be carefully assessed for moisture content, air entrapment, and surface finish prior to any primer application.

Procedure/Application: Apply a bituminous primer to the concrete substrate by a brush, roller or a spray machine. After the primer applied surface gets dried align the membrane on the substrate by unrollinng the membrane. Post its alignment re-roll the membrane half way from both sides. Use gas burner to heat the substrate and thermo-fusible film on the underside on lower face of the membrane. Side bearing FCSC logo should be on the top. When the thermo-fusible film and the layer of bitumen melts after torching the membrane is ready to stick. Roll and press firmly against the substrate to bond. The bitumen should ooze out from the edges which will make the edges watertight. After the first roll is torched align the second roll next to the first and repeat the same procedure as above, also the overlap must be minimum 80mm for the side and 150 mm at the ends. The membranes should be laid in a staggered manner so that the seams are not in a line. All the details at edges, parapet walls, pipe penetrations etc shoud also be sealed with extra care to ensure full bondage. The edges should be sealed well into the grooves. Detailings must be treated with utmost care such as Pipe Penetrations, Lightening Conductors Clips, Pedestals etc with proper overlaps. FCSC Technical Services team to be consulted in case of any guery. The Bitumen membrane applied all over the terrace, must be finished with a coating of aluminum paint for non trafficable area. For foot trafficable area, overlay with concrete screed mortar.



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Limitation

Do not apply during rains or extreme temperatures. 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.

Storage & shelf life

The membranes must be vertically stacked and stored in a shaded area covered by a thick fabric and tied securely in a manner that will minimize exposure to sunlight and UV. The membranes should be protected from all sources of heat and extreme temperatures. The shelf life is 5 years.

Safety precautions

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

Note

All Technical Data Sheets of FIRSTCHOICE SPECIALITY CHEMICALS are updated on regular basis; it is the user's responsibility, to obtain the most recent issue. Field services where provided, does not constitute supervisory responsibility, for additional information contact our local representative.

Disclaimer

Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.