ECMASHIELD SA

Self-Adhesive SBS Modified Bituminous Waterproofing Membrane

Description

ECMASHIELD SA is a self-adhesive (peel & stick type), factory made, cold applied, easy to install, reinforced waterproofing membrane designed to meet the high mechanical performance. ECMASHIELD SA is made from Bitumen/Asphalt compound modified with SBS and high tack resins, stabilizers and inert fillers to improve cold weather flexibility and upper surfaces is finished with a cross laminated high-density polyethylene (HDPE) film.

Areas of Application

- Waterproofing of pile caps, tie beams and raft foundations
- As a damp proofing course for tanking Underground structures like subways, basements
- Waterproofing of sewerage concrete manholes
- As a vapor barrier membrane for concrete protection

Advantages

- Quick and easy application even on vertical walls
- Cold Application-No flame needed for application
- Elastomeric and stable membrane
- Reinforced to have high tensile strength and puncture resistance
- Highly resistant to acids, alkalis and other contaminations
- Excellent cold flexibility
- Neat and clean application
- Suitable for differed substrates like concrete, plywood, cement boards

Technical Specifications

Appearance	Black
Thickness	1.5 mm
Tensile Strength, Longitudinal, ASTM D412	300± 50 N/5cm
Tensile Strength, Transversal, ASTM D 412	300± 50 N/5cm
Elongation % ASTM D 412	>50
Low Temperature Flexibility, ASTM D 1053 (-10°C)	No Crack
Resistance to Hydrostatic Pressure, ASTM D5385	No leakage
Peel Adhesion to Primed Concrete ASTM D 1000	>1 N/mm
Lap Adhesion Strength	>1.5 N/mm
Vapor Transmission Rate ASTM E 96	0.3g/m ² /24 hrs
Water Absorption, ASTM D570	<1 %
Flow resistance at high temp. °C	>60
Softening Point, ASTM D 36	>115°C
Tear Strength Longitudinal DIN EN 12310-2	240 ±40 N
Tear Strength Transversal DIN EN 12310-2	240 ±40 N
Puncture Resistance, ASTM E 154	>280 N



Note: ECMASHIELD SA is also available with protective Geo-textile fleece with 2.1 mm thickness

Application Instructions

Surface Preparation: Surfaces should be cleaned properly, remove all deposits, dust, loose particles, fungus, contaminations, etc. and make surface free from oil, grease, etc. and sharp edges. Concrete surfaces shall be fully cured and free from mold release agents and curing compound. This can be done by scarifying, grinding, water blasting, sand blasting, or using any other approved Method. Repair surfaces for any blow holes, cracks, honeycombs, depressions & damages using ECMAS Polymer mortar ECMAREP 502 or with Hi-Finish putty and leave it for at least 1 day before priming.

Application of ECMAPRIME BITU: The cleaned surface must be primed with ECMAPRIME BITU @ 4-5 Sqm/ liter which is compatible with the membrane and provide excellent bonding with SBS membrane. The primer must be spread evenly and allowed to dry completely.

Application of ECMASHIELD SA: Unroll the required length of membrane, cut the piece to the desired shape and size, if required. Start from lowest point and apply ECMASHIELD SA membrane on the area to be covered. Remove the release film from the self-adhesive side and maintain a minimum overlap of 80 mm on side and 100 mm on end joints. Start unrolling the membrane and press it firmly against the surface, from the middle to the edges in order to drive out entrapped air with a wooden press. For successful installation, surface to be overlapped should be dust free and the membrane must be firmly pressed down to ensure a watertight bond. A heavy roller should be used to press the overlapping strip to ensure complete adhesion and continuity between the two membranes resulting in a secure joint.

Protection of Membrane: After application, ECMASHIELD SA membrane should not be left exposed for more than a few hours and should be protected against site abuse and physical damage by suitable means.

Packaging

1m x 15 m Roll

Shelf Life

24 months from the date of manufacturing when Store out of direct sunlight, clear of the ground and keep on pallets.

Storage & Handling

- Material should be stored in cool and dry shade at a temperature from $+5^{\circ}\text{C}$ to 40°C
- Store in cool and covered shade and keep rolls in upright position
- Protect rolls from direct sunlight and keep away from naked flames
- Handle carefully during transport.

Safety Precautions

Wear all PPE's at the time of application and handling of product like Safety boot, Safety Goggles, Hand Gloves, Mask, etc. This Membrane is not hazardous.



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