Technical Data Sheet

PRIME ROOFMEMBRANE S-901
Acrylic Liquid Water Proofing Membrane

SHOOLIN

DESCRIPTION
PRIME ROOFMEMBRANE S-901 is a liquid membrane, which is a highly elastic, solvent free, natural rubber like ACRYLIC water proofing system. It is a one component and not a complicated mixture. It is supplied ready-to-use for cold application. It forms flexible coating, which can be painted over if a light, reflective surface is preferred. PRIME ROOFMEMBRANE S-901 contains no solvent and is suitable for both indoor and outdoor sealing.

FEATURES / ADVANTAGES
- It dries to form a seamless, highly elastic and waterproof membrane
- It is suitable for horizontal and vertical surfaces- above and below ground
- It bridges surface stresses and hairline cracks
- It adheres well to dry, wet, absorbent and non-absorbent surfaces
- It is resistant to all– dilute acids or alkali, fumes or fluid gases commonly encountered in the construction industry
- It is cold and heat resistant to weathering and aging, remains durable, elastic and waterproof
- In normal roof layer construction it is not affected by spark or radiant heat
- It is not damaged by roots and not attacked by rodents

APPLICATIONS
- It acts as an adhesive-for bonding, insulation board, and expanded polystyrene and cork tiles
- It is suitable for both indoor and outdoor sealing and waterproof coating
- External cellar sealing
- Silos, store rooms or stable Retaining walls
- Roof superstructures and connections
- Terraces balconies
- Foundations, Under ground structures
- Damp & wet rooms
- Flat or sloping roofs
- Bridges

TECHNICAL CHARACTERSTICS
Std Approved & test Method:
IS101,ASTM D 2240, ASTM D-412, ASTM D-570, IS 2645, ASTM D 751, ASTM E-96, ASTM D 5589, ASTM D 5590, ASTM C -1202-08, ASTM C 836, ASTM E 1980, ASTM D4587

Test Parameters	Standards	Results
Solid Content	IS 101/1964	Min. 80 %
Density	IS 101/1964	1.6
Hardness (Shore A)	ASTM D 2240	Min. 40
Elongation	ASTM D 412	Min. 600 %
Adhesion Strength after 14 days of curing on concrete surface	EN 1542	Passes
Water Absorption (% by Mass)	ASTM D570	Passes
Resistance to Alkali (10% NaOH after 24hrs)	IS101- Part7:Sec2	Passes
Solar direct reflectance	ASTM E1980	Passes
Solar reflectance index		
Resistance to ageing due to UV radiation	ASTM D 4587	Passes
Tensile Strength	ASTM D 412	Min. 1.5 MPa
Resistance to Water pressure	ASTM D-751	Passes
Water Vapour Transmission	ASTM E-96	Passes
Crack Bridge properties	ASTM C-836	Min. 3.2 mm
Crack resistance	IS101- Part5:Sec2	Passes
Pull off adhesion	ASTM D 4541	Passes
Recovery after 200% elongation	ASTM D-412	90%
Resistance to standing water		Passes
Algae & Fungal Growth	ASTM D -5590/5589-97	Passes
Rapid chloride penetration	ASTM C -1202-03	Very low
Water permeability	IS 2645	Passes
Accelerated weathering, 500 hours	ASTM D 4587	No cracking, no blistering & No fading
DFT		1 mm
Coverage		1.7 to 1.8 kg/m2. It may be varied as per the porosity of substrate (Site condition)

RECOMMENDED APPLICATIONS

- **Roof Waterproofing**

All surfaces to be waterproofed should be sound, clean and dry. Concrete surfaces should have a light steel-trowel followed by a fine hair broom or equivalent finish which is dry and free of dust, oil and other contaminants. All high spots should be removed. Moss and laitance must be removed physically followed by treatment with fungicidal wash to kill any spores and inhibit further growth. After treatment wash down thoroughly with clean water and allow drying. All metal surfaces should be made clean of paint, oils, rust and other contaminants.

- **Basement Waterproofing**

PRIME ROOFMEMBRANE S-901 provides economical roof sealing. None of the usual equipment or materials, such as boiler, gas cylinder, burners or adhesives is required. It seals flat, inclined or vertical surfaces, joints to super structures etc. It can be painted over with reflective and elastic water based paint. The roof surfaces should preferably be slightly inclined to ensure adequate drainages and prevent formation of puddles. Thick coatings of PRIME ROOFMEMBRANE S-901 act as a vapor barrier and water drainage should be provided beneath the coating e.g. with perforated bitumen sheet if vapor pressure build-up is anticipated. For accessible roofs a protective screed should be provided. A PE vapor barrier sheet should be placed between the PRIME ROOFMEMBRANE S-901 and the screed. The cement / sand screed should be at least 30 mm thick. Use SBR based polymer in screed as an additive. PRIME ROOFMEMBRANE S-901 is solvent –free thus eliminating any danger of fire, explosion or health-risks and permitting application in confined spaces.

DIRECTIONS FOR USE

1.SURFACE PREPARATION

All surfaces to be waterproofed should be sound, clean and dry. Concrete surfaces should have a light steel-trowel followed by a fine hair broom or equivalent finish which is dry and free of dust, oil and other contaminants. All high spots should be removed. Moss and laitance must be removed physically followed by treatment with fungicidal wash to kill any spores and inhibit further growth. After treatment wash down thoroughly with clean water and allow drying. All metal surfaces should be made clean of paint, oils, rust and other contaminants

2.CRACKS

All shrinkage and rigid structural cracks should be pre treated with a polymer modified mortar. Allow to cure overnight before general application.

3.APPLICATION PROCEDURE

- The dry film thickness (DFT) of PRIME ROOFMEMBRANE S-901 should not be minimum 1.0mm .Rou textured surfaces will reduce the coverage rate and consequently more material must be allowed to achieve the minimum DFT.
- PRIME ROOFMEMBRANE S-901 is a membrane coating, not paint and as such protection is only ach with a high film build. The membrane can be applied in 1 mm coat or two 0.5 mm coats maintaining min DFT of 1mm &above.

- Two coats are recommended on uneven and jointed surfaces to minimize the possibility of thin patches, missed areas and pin holing. Also sloping or vertical surfaces will only accept 0.5 mm per coat. In the case of two-coat application, it is important to re-coat within 24 hours of the first coat becoming sufficiently cured to allow operator access.
- The minimum application life (after opening the pack) is up to 48 hours if stored in closed containers.
- A short haired synthetic coating brush should be used.
- If a water test is to be done, the membrane should be fully cured.
- For better durability and strength in critical areas use Geotextile Mesh of 45 GSM in 'Sandwich Layer System'

4.COVERAGE

PRIME ROOFMEMBRANE S-901 should be applied @1.7-1.8kg/sq.mt/2coats/mm thickness. Depending upon the requirements and also on the gravity of the leakages, PRIME ROOFMEMBRAN may be applied in 2 or 3 coats.

STORAGE & SHELF LIFE

In originally sealed packages, the material can be stored for 12 months

CLEANING

Tools & equipments should be cleaned with water immediately after use.

PACKING

- 5 Kg
- 20 Kg

PRECAUTIONS

- Wear protective gloves and goggles when processing the material. When carrying out injection work, make sure to protect the surrounding work area from injection resin that may be discharged from the wall, packers, drill holes, etc. Do not stand directly behind the packers during injection.