

WATERGUARD PU MEMBRANE

POLYURETHANE BASED TOUGH ELASTOMERIC WATERPROOFING MEMBRANE

BENEFITS

- Chemical resistant : Resists deterioration from dilute acids and alkali, oil, salts, bacteria, and common fuels.
- Single component, Easy to apply.
- Applied by roller, brush, or airless spray.
- Tenacious adhesion and high elastic recovery.
- Long term resistance to ponded water.
- High elongation, permits membrane to stretch with movement in the substrate.
- Excellent crack bridging properties.
- Continuous monolithic (seamless) layer completely bonded to the substrate, eliminates horizontal migration of water between membrane and the substrate. Thus if the membrane is punctured, a leak can only occur directly below the damaged section of the membrane, allowing fast location and inexpensive repairs.

USES

WATERGUARD PU MEMBRANE is used as a waterproofing or vapor barrier for protection of Foundations & Basement, Ground floors, Kitchens & bathrooms, Split slab, Terraces, balconies & patios, Car Park decks, Inverted roofs & sunken slabs, Tunnels.

DESCRIPTION

WATERGUARD PU MEMBRANE is a pitch extended polyurethane based elastomeric coating, formulated to give long lasting, maintenance free, and superior waterproofing protection for concrete and steel structures. The coating curing forms a tough elastomeric membrane which offers the most advanced waterproofing technology and provides long term performance and security of the waterproof environment.

PROPERTIES

Color	: Black
Form	: Viscous Black liquid
Tensile strength, (as per ASTM D 412)	: >1.5
Shore A Hardness (as per ASTM D 2240)	: 40-50%

Tensile set recovery (As per ASTM D 412)	: 900%
Elongation (as per ASTM D 412)	: >500 kN/m
Tear resistance (as per ASTM D 1004)	: >6
Water permeability (as per BS EN 12390)	: Nil @5 bar
Crack bridging (as per ASTM C 836)	: 1.5 mm
Low temperature flexibility (as per ASTM C 836)	: -15 °C
Adhesion in peel (as per ASTM C 794)	: >50 N/inch
Chemical resistance (as per ASTM D 543)	: pH 2.0- 11.5
Re-coat interval @25°C 50% RH	: 24 hours
Full cure @25°C, 7 days	
Application temperature	: 5°C to 35°C

APPLICATION

Surface Preparation : Surface must be structurally sound, clean dry and free from dust, grease, curing compounds, paint coatings, and other loose debris. Surface should ideally have a "sand paper" profile roughness. Recommended methods for preparing concrete are by sand or captive shot blasting; wire brushing or by pneumatic (scabbling) tools. Shrinkage and non structural cracks should be pre-treated with a 1mm thick coating of **WATERGUARD PU MEMBRANE** reinforced with WATERGUARD GRS - fiber reinforce sheet extending at least 50mm on both sides of the crack. Allow to cure for 24 hours. Right angle or corner should have cant strips installed. A suitable cant strip can be prepared by mixing 1 part cement and 1 part fine clean sand and FAIRCRETE FBR additive. First apply 0.5mm thick **WATERGUARD PU MEMBRANE** on the corners. Embed a 100mm width reinforcing WATERGUARD GRS - fiber reinforce sheet on the bedding coat then apply a second coat of **WATERGUARD PU MEMBRANE** 0.5mm thick completely covering the reinforcement. Allow to cure at least 12 - 24 hours. Install mortar canting on the corners extending on both sides by 50mm. Allow cure for 24 hours prior to general application.

Priming : Normally **WATERGUARD PU MEMBRANE** can



be applied directly onto the surface and does not require priming. However, for highly porous surfaces apply WATERGUARD PU MEMBRANE PRIMER @ 5 - 6 m²/kg. Allow to cure for at least 4 - 5 hours prior to over coating with **WATERGUARD PU MEMBRANE**.

Application : The product requires thorough mixing (for at least 3 - 5 minutes) with a mechanical drill (300-400 rpm) fitted with a proprietor paddle prior to application so that a homogenous mix is achieved. Application should commence as soon as product mixing is completed. Apply the coating @ 1.2 kg/m²/coat to achieve a dry film thickness of 1000 microns. The coating can be applied in either one or two coats. If applying in two coats ensure that the second coat is applied only after the first coat has become tack free. The second coat is recommended to be applied in the opposite direction to the first coat as this will allow the polyurethane in the mix to be distributed more uniformly. The coating will achieve its full mechanical properties after a period of 7 days.

Cleaning : Clean all the tools with water after use. Hardened materials can be removed mechanically only. Allow the waste to cure. Seal into a suitable container and bury in landfill. Use licensed waste disposal contractor and consult the local authorities when disposing.

PACKING & COVERAGE

WATERGUARD PU MEMBRANE is supplied in 20 kg. Pail. **WATERGUARD PU MEMBRANE** has a coverage of 1.2 kg/m² for 1000 microns DFT. **WATERGUARD PU MEMBRANE PRIMER** has a coverage of 5 m²/kg.

NOTE : Theoretical coverage only applies to a smooth, non porous substrate. When estimating quantity take off, it is normal practice to add 10-15 % to the initial estimate to account for wastage and surface irregularity.

SHELF LIFE & STORAGE

WATERGUARD PU MEMBRANE will have a shelf life of **12 months** in unopened containers when kept in dry conditions at a temperature between 5°C to 45°C. Storage at higher temperature or high humidity may reduce shelf life.

HEALTH & SAFETY

Always use protective clothing, eye goggles and rubber hand gloves when handling this product. Avoid contact with skin or eyes. If spilled on the skin, wash immediately with soap and plenty of water. Accidental splashes on the eyes should be immediately cleansed with water and medical attention sought.

SPECIFICATION

WATERGUARD PU MEMBRANE is a polyurethane based elastomeric coating which forms a tough elastomeric membrane on curing, supplied in 20 kg. pail having a coverage of 1.2 kg/m², used strictly in accordance with the instruction of FAIRMATE.

HAMCO SARL manufactures a complete industrial chemical range ,protective coatings ,wood coatings ,decorative paints ,water proofing system.

TECHNICAL SERVICES

While new advances and changes will take place but one thing will never change is quality and meeting special needs of our customers. Our laboratory in Baroda and technical personnel & experts are available to provide additional information and technical assistance. We are eager to work with you in development of new product and resolve your problem.

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