PU SHIELD

PU SHIELD is a hybrid polyurethane-based single-component waterproofing membrane. It composed of PUD's, selected fillers, additives and weathers durable pigments. It provides waterproofing properties against moisture and standing water. PU SHIELD can be used as weatherproofing and waterproofing for Terraces, Roofs, Balconies, Fountain areas, Swimming Pools, Bathrooms, Basements, Wet areas, Retaining Walls, Pile Heads, Tunnels and Bridge Decks.

RECOMMENDED APPLICATION

- Concrete
- PCC
- Sunshades IPS
- Podium slabs
- Retaining walls
- Renders
- Parapets
- Cement Boards
- Terraces
- Balconies
- RCC Wall
- Painted Walls
- Textured Walls
- Water Tanks
- Garden areas
- Cement Roofs

BENEFITS & KEY FEATURES

- ECO FRIENDLY
- UV RESISTANCE
- COMPATIBLE
- DURABILITY
- BREATHABLE
- HIGHLY ELASTOMERIC
- HIGH CRACKING BRIDGING
- EASY USE

TECHNICAL SPECIFICATION

Appearance	Emulsion Base (white)
Total Solids %	65 ± 5
Elongation (ASTM D 412)	>300 %
Tensile Strength (ASTM D 412)	>2N/mm^2
Crack Bridging	Up To 2 mm
Thickness	1-1.5 mm
Hardness Shore A (ASTM D 2240:2002)	>50
Algal And Fungal	No Growth
Coating Thickness@ 3 Coat DFT)	Approx 1500 Microns
Chloride Penetration	Low

PACKAGING	COVERAGE	SHELF LIFE
5 kg, 10 kg & 20 kg	35-40 Sq. ft / kg / per coat	24 months from date of packing. It must be seal pack & stored under proper condition. Store in a cool & dry place, keep away from direct sunlight.

PRECAUTIONS & LIMITATION

- Do not apply during rains; substrate must be in SSD condition to apply primer and coating.
- Movement of machinery or sharp objects is strictly prohibited.
- Do not apply PU SHIELD over expansion joints.
- The parapet walls should be covered with PU SHIELD for full proof waterproofing of terraces and roofs.
- Do not dilute PU SHIELD for ease of application.
- Do not try to cover a larger area during application for extra coverage.
- Do not apply when the ambient temperature is below 10°C or above 35°C.

DIRECTION FOR USE

SURFACE PREPARATION

- Prepare the surface thoroughly by cleaning, washing and removing dust, dirt, oil, grease and loose particles. In existing old terraces with brickbat Coba or screeds, the substrate must be checked for its soundness. Damaged or hollow portions, sharp edges, etc. Must be cut and removed till the mother slab. All surface cracks up to 5 mm width should be filled up using proper crack filling material like PU crack sealant or acrylic sealant. Any areas that need to be repaired should be treated by proper repair and patchwork work system using GLOBCON ULTRA SBR and SBR 500 for proper bonding.
- Ensure that the roof slope of a minimum of 1 in 100 is already provided.

PRIMING

Dilute 1 ltr. Of PU SHIELD with 300-500 ml water. This dilution will cover 5 to 6 sq. mt. Allow it to dry for 3 to 4 hrs. Or prime with GLOBCON PRIMER PLUS as per the standard procedure.

APPLICATION

- Apply 1st coat of PU SHIELD by using a roller or brush at the rate of 2 sq. mt. Per 0.5 litre. Use glass fibre mesh of 45 gsm of 2.5 x 2.5 mm as a sandwich layer between first and second coat. While the first coat is still wet, place the glass fibre mesh on it. Allow it dry for 6-8 hours. Allow it dry for 6-8 hours.
- Apply the second coat of the PU SHIELD in the opposite direction to the first coat. Check to see no void surface is left uncoated with a second coat. Allow the second coat to dry for 5-6 hours.
- Apply the third coat of PU SHIELD in the opposite direction to the second coat by maintaining the coverage rate. Check to see no void surface is left untreated/uncoated. All coats should be applied in a direction perpendicular to each other.
- Kindly do not try to cover more area for extra coverage. Maintain proper procedure for application. This would ensure the correct consumption of material that will deliver a total DFT of 1.5 mm.
- Drying time between coats will be 5 to 6 hrs. Allow the system to air cure for 7 days minimum. A total thickness of 1.5 mm must be achieved when PU SHIELD is dry.

TESTING OF COATING

7 days after application of PU SHIELD should be checked for its dry film thickness after air curing. For this, mark a square of 5 cm x 5 cm for every 200 sq. ft of the area. Cut the square with a knife diagonally across the square. Rip the coating and check the coating's thickness with vernier callipers to see if the dry film has an average thickness of 1 mm. Once these tests are done, reapply the material over these portions per the regular procedure.

FUTURE MAINTENANCE

In case of a deterioration of the coating. It is easy to recoat the surface over the existing treatment. If cracks any, open the cracks using proper tools and fill it with PU crack sealant. Apply one layer of PU SHIELD over it and place a fibre mesh while it is still wet. After drying, apply a second coat for better strength.