

ShaliUrethane® WB 30

Water Based UV Resistant PU Liquid Membrane



STP Limited

Description

ShaliUrethane® WB 30 is water based, environment friendly, single component, tough, elastomeric, UV resistant, polyurethane waterproofing membrane.

ShaliUrethane® WB 30 is fast drying and provides excellent water / chemical / weather resistance properties.

It conforms to ASTM D 6083.

Characteristics – Physical

Color **	White	Solid content, %	> 60 ± 1
UV stability	Excellent	VOC Content, gm / kg	Nil
pH	Alkaline	Specific gravity @ 30 °C	1.3 ± 0.03
Drying time		Theoretical Coverage *, 1 mm DFT, Kg / m ²	1.90 ± 0.15
• Touch dry#, minutes	20 – 30	Viscosity @ 30 °C, cps	5500 ± 500
• Full cure, days	7	Service Temperature, °C	- 20 to + 100
Application Temperature, °C	> 5	Elastic Recovery @ 150% elongation, %	70 – 75
Solar Reflective Index			
• Black	N/A		
• White	109		

* Depending upon surface condition # Depends up on weather condition.

**Pigmenting can be done at site by mixing tinting agents with mechanical stirrer.

Characteristics – Technical

Property	Test Method	Result
Elongation, %	ASTM D 412	450
Tensile strength, MPa	ASTM D 412	3 ± 0.4
Adhesion to primed concrete, Pull off strength, MPa	ASTM D 4541	> 1
Crack bridging at low temperature	ASTM C 836	No cracking
Water Absorption %	IS 13826 Part 3	< 2
Hardness Shore A	ASTM D 2240	70 - 75

Application

- Roof / Terraces / Balconies including corrugated roof.
- Facades.
- Terrace garden.
- Podium.
- Gypsum and cement boards.
- Over existing bituminous / EPDM waterproofing.
- Under thermal insulation boards and over polyurethane foam and metal surfaces.

Advantages

- Single component water based, environment friendly tough yet flexible product.
- Gives a strong breathable coating.
- Can be applied on moist surface also.
- Excellent water vapour barrier.
- High Crack Bridging.

- Monolithic / seamless in-situ Membrane.
- Excellent adhesion to concrete.
- Excellent elongation and very good low temperature flexibility.

Application Methodology

➤ Surface Preparation

- Remove all loose gravel, dirt, oil, grease and foreign matter by jet of dry air and clean the surface mechanically or by grinding to make it smooth before application.
- Repair all cracks by cutting "V" groove and fill with PMC mortar prepared in the ratio of ShaliCrete : Cement : Sand (1 : 2 : 5).
- Provide 75 mm x 75 mm coving made out of PMC mortar as above, using ShaliSBR Latex as bond coat.
- Do not apply **ShaliUrethane® WB 30** on standing water or heavily moist surface.

➤ Material Preparation

- Skin formation may happen on the top of material during humid condition. In that event, cut skin from the periphery of the container and remove it and then stir it as mentioned above.
- If pigmentation is desired, add entire quantity of tinting agent supplied along with the bucket.
- Stir **ShaliUrethane® WB 30** by a slow speed mixture fitted with a suitable mixing paddle to ensure a homogenous mix.
- After stirring, wait for the product to settle in order to let entrapped air escape.

➤ Waterproofing Application

- Slightly damp the surface. Avoid standing water / ponding.
- Prime the surface with ShaliUrethane WB 30 duly diluted with water in the ratio 1 : 1 @ 400 grm / m² of diluted material.
- Allow the primed surface to touch dry.
- Apply 1st coat of **ShaliUrethane® WB 30** @ 1 kg / m² by brush / roller / airless spray while the primed surface is tacky. For faster and smoother application, apply with airless gun.
- Spread non-woven geo-textile mesh of 40 / 50 gsm with overlaps of 50 mm in both directions when the surface is still tacky; this is optional, to be assessed as per site requirements to achieve higher mechanical properties.
- Allow 1st coat to dry for 10 – 12 hr.
- Apply 2nd coat of **ShaliUrethane® WB 30** @ 1 kg / m² by brush / roller / airless spray for final DFT of 1500 micron in two coats (theoretical coverage depending on surface conditions).
- Ensure final curing time of 36 hrs before allowing / carrying out any further work.
- Extend waterproofing treatment up to 200 mm and terminate into groove on the parapet wall. Fill the groove with PMC mortar. Apply 15 mm plaster admixed with ShaliPlast LW + @ 200 ml / bag of cement for vertical protection.
- Conduct ponding test after 7 days of curing at ambient temperature.
- **For Heavy duty area, apply third coat of ShaliUrethane® WB 30 @ 1 kg / m².**

➤ Protection of Waterproofing

- In case of horizontal **Trafficable** surface, protect the applied liquid membrane
 - Preferably with ShaliProtek PU HA, high abrasion resistance liquid coating which can take foot traffic, or
 - Spread separation layer of 200 gsm geo-textile, ShaliGeoText 200, with overlap of 50 mm in both directions on fully cured waterproofed surface before laying protection screed, and then lay 50 mm plaster admixed with ShaliPlast LW + @ 200 ml / bag of cement
- In case of vertical application, protect the applied liquid membrane
 - By sprinkling sand @ 200 grm / m² over the final coating when the surface is still tacky to facilitate plastering, and 25 mm plaster admixed with ShaliPlast LW + @ 200 ml / bag of cement

Health & Safety

- Avoid contact with skin / eyes, and avoid swallowing.
- Ensure adequate ventilation and avoid inhalation of vapour.
- Wear suitable protective clothing, gloves and eye protection.
- In case of skin contact, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent to clean the contacted area.
- In case of eye contact, wash with plenty of clean water and seek medical advice.
- If swallowed, seek medical attention immediately. Do not induce vomiting.

Packing

Available in 25 kg pack.

Storage

Store in a cool dry place, under shed, away from heat.

Shelf Life

12 months in original unopened sealed condition.



Product Range

- Waterproofing & Insulation
- Road Surfacing
- Sealants & Adhesives
- Pipeline Coatings
- Protective/Anti-Corrosion Coatings
- Epoxy and Flooring
- Grouts and Admixtures (GARA)
- RestoFix - Repair/Rehabilitation
- Other Construction Chemicals



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