

# Superior ShaliPlus

APP Modified Membrane With 100 Micron HMHDPE Core



STP Limited

## Description

**Superior ShaliPlus** is a heavy duty APP (Atactic Polypropylene) modified polymeric waterproofing membrane composed of 100 micron ( $\pm 10\%$ ) high-density polyethylene sheet (HMHDPE) as center core, which is sandwiched between high quality polymeric bituminous mixture having high softening point, high heat resistance and good cold flexibility and protected on both sides with a thin thermo fusible HMHDPE film.

**Superior ShaliPlus AL** (Aluminium foil on top finish) is also offered to provide higher protection to membrane from any deterioration from prolonged exposure to UV rays.

## Characteristics - Physical

Properties	Superior ShaliPlus	Superior ShaliPlus AL
Colour	Black	Silver
Softening Point, °C	$\geq 120$	$\geq 120$
Penetration at 25 °C, 100 gm, 5 sec.	20 $\pm$ 5	20 $\pm$ 5
Thickness of Polyethylene (centre Core)	0.100 mm $\pm$ 0.01 mm	0.100mm $\pm$ 0.01 mm
Heat resistance 100 °C for 2 hour	Does not drip	Does not drip
Cold resistance (Pliability) at (-) 5 °C	Does not crack	Does not crack

## Characteristics - Technical

Property	Standard	Superior ShaliPlus	Superior ShaliPlus AL
Elongation, % <ul style="list-style-type: none"><li>Lengthwise</li><li>Crosswise</li></ul>	ASTM D-5147	>300 >300	>40 >40
Tensile Strength, N / 5 Cn <ul style="list-style-type: none"><li>Lengthwise</li><li>Crosswise</li></ul>	ASTM D-5147	140 120	200 200

Product Code	1030	1035	1040	1045
Thickness, mm	2.0	2.3	2.7	3.0
Length, Mtrs	10	10	10	10

## Application

- **Superior ShaliPlus** is recommended for waterproofing of roof-tops, basements, terrace gardens, reservoirs, corrugated sheets and sunken slabs and Pre cast concrete roofs
- **Super ShaliPlus AL** provides aluminum finish on the top to provide UV resistance and hence may be used for waterproofing of non trafficable roof, where no protective layer is used over membrane

## Advantages

- Excellent elongation property to accommodate all kinds and unpredictable structural movement
- High softening point & high penetration.
- Dimensional stability with flexibility to adopt all contours.

- Pliability at very low temperature.
- Aluminium topping protects membrane against UV rays, in case of **Superior ShaliPlus AL**

## 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.
- Ensure that the moisture content in the prepared surface does not exceed 5%.
- Correct all construction joints by grouting with ShaliGrout IP at 1 m apart and opening of joints in “V” cut groove and fill with ShaliFix RM C, using ShaliSBR Latex as the bond coat.
- Build-up gradient minimum 1 in 100 with PCC admixed with ShaliPlast LW +.
- Ensure that level of all drain mouth is lower than deck slab level by at least 15 mm.
- Provide 75 mm x 75 mm coving made out of PCC admixed with ShaliPlast LW + and using ShaliSBR Latex as bond coat.

### ➤ Waterproofing Application

- Apply a coat of ShaliTex Primer @ 0.3 L / m<sup>2</sup> and allow it to dry. In areas of high humidity, the prime surface should be left over-night.
- On primed surface, use STP Bitumen Grade 85/25 as bonding material which is to be prepared by heating it to the correct working temperature and spreading over the roof properly and uniformly @ 1.2 kg / m<sup>2</sup> per coat for waterproofing application or as specified.
- Unroll and fix **ShaliPlus**<sup>®</sup> by applying uniform pressure with hand for removal of any entrapped air.
- Provide overlap joints of 75 mm in longitudinal direction and 100 mm in transverse direction of the **ShaliPlus**<sup>®</sup> roll and seal it properly with hot bitumen.
- For double layer treatment, stagger all overlap joints
- Terminate **ShaliPlus**<sup>®</sup> at the top of parapet if the height of parapet is upto 500 mm. In case the height of the parapet is above 500 mm, Membrane shall be terminated at parapet in a groove 50 x 40 mm at a height of 300 mm from the roof level and groove shall be filled up with cement-sand mortar (1:4) with addition of ShaliPlast LW+ @ 200 ml / bag of cement.
- Top coat shall be finished with a layer of stone grit or pea gravel (6 mm and down size) which shall be laid by spreading it over a hot bitumen coat @ 1.2 Kg / m<sup>2</sup> laid over the felt or apply a coat of SuperSilverShield, bituminous based aluminium paint, @ 0.125 L / m<sup>2</sup>.

### ➤ Protection of Waterproofing

- For a trafficable roof, protect membrane with PCC / Tiles. In case of PCC, ShaliPolyFibre @ 600 gm / m<sup>3</sup> and ShaliPlast LW+ / STP No 1 (Liquid) @ 200 ml / bag of cement to be added to improve the resistance to crack formation and as well as waterproofing properties of screed.
- Use ShaliBond BS/CS cold adhesive wherever hot application is difficult or not permitted.
- For **ShaliPlus**<sup>®</sup> **AL** no additional bitumen coating or any other finish is recommended on top and in general used for non trafficable roof.

## 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 1 m x 10 m Roll.

## Storage

Keep in cool dry place, under shed, away from heat and fire.

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