SuperThermoLay® 7

7 Layer Spun Bonded Non-Woven Polyester Reinforced APP Modified WP Membrane

STP Limited

Description

SuperThermoLay® 7 is an uniquely formulated pre-fabricated plastomeric waterproofing membrane with spun bonded polyester mat and 90 micron HMHDPE film at its core. **SuperThermoLay® 7** has an excellent resistance to weather and ageing. The polymer modification of bitumen with Atactic Polypropylene (APP) results in an excellent resistance to hot and cold temperatures.

SuperThermoLay® 7 forms an impervious, flexible waterproofing layer which can withstand normal movement of structure without showing any deterioration and serve for a prolonged period of time.

SuperThermoLay® 7 is a polymeric waterproofing membrane manufactured to high standards available in 3 mm thickness having following layers, sandwiched together:

1st layer of 15 micron thick HMHDPE plastic film (top surface)
2nd layer of Polymeric Asphalt Mix
3rd layer of Non-woven Polyester Mat
4th layer of Polymeric Asphalt Mix
5th layer of 90 micron HMHDPE Plastic Film
6th layer of Polymeric Asphalt Mix
7th layer of 10 micron HMHDPE Plastic Film

SuperThermoLay® 7 is normally used in protected roofing and waterproofing applications in a single layer system and is also recommended as base layer in multilayer system in various applications, including damp-proofing.

Characteristics

Property	Standard	Result
Softening Point, ^{O}C, Min	ASTM D 36	150
Penetration at 25 ^{O}C, 100 g, 5 sec, dmm	ASTM D 5	20 - 35
Tensile / Lap Joint Strength, N / 5 cm • Longitudinal • Transverse	DIN 52123	 650 ± 150 450 ± 100
Tearing Strength, N • Longitudinal • Transverse	ASTM D-5147	 300 ± 100 250 ± 100
Elongation, % • Longitudinal • Transverse	DIN 52123	 40 ± 10 35 ± 10
Pliability, 2 ^{O}C to 5 ^{O}C	ASTM D 228	Does not break
Heat Resistance @125 ^{O}C	ATM D146	Does not Drip
Water Absorption, %	ASTM D5147	< 0.15
Reinforcements	Solubility Test in Petrol	90 micron HMHDPE Polyethylene Film and non-woven Polyester Mat
Total Number of Layers (Ply)	Solubility Test in Petrol	Seven

Application

- Bridge deck.
- Roof / Terrace / Podium.
- Basement.
- Terrace Garden.

Advantages

- Good dimensional stability.
- Total impermeability.
- Excellent resistance to ageing and weathering.
- Outstanding bond-ability and seam integrity.
- Stability at high temperatures.
- High resistance to Impact and puncture,
- High tear
- Simple, single-layer installation reduces labour and error.
- Excellent cold 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.
- 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^2 and allow it to dry. In areas of high humidity, the prime surface should be left over-night.
- On the primed surface, start laying of membrane at lowest point of the slope roof and progress to the higher point. Unroll the membrane half-way, align the side laps and fix **SuperThermoLay® 7** membranes by using a LPG torch and applying uniform pressure with a roller / wet cloth to ensure to remove entrapped air, if any. Instead of propane torch, you may apply ShaliPrime APP, if so desired and wherever torching is not permitted or not advisable. If ShaliPrime APP is applied, ShaliTex Primer need not be applied.
- Flame should be moved in shape of "L" applying about 75 percent of the heat to the roll and 25 percent to the substrate including the lap area of previously installed membrane. The flame should be moved across the width and upto the lap edge while membrane is slowly unrolled and adhered to the under lying surface.
- Heat both layers of membrane at the overlap and use round tipped hot trowel to seal overlap. Excess compound should be smoothened and pressed into seam using hot trowel. Overlap joint shall be provided of 75 mm in longitudinal direction and 100 mm in transverse direction

➢ Protection of Waterproofing

- **For UV protection on non-trafficable roof, SuperThermoLay® 7** waterproofing membrane shall be finally coated with Super Silver Shield.
- For trafficable roof **SuperThermoLay® 7** Waterproofing system shall be protected with PCC dosed with ShaliPlast LW+ of 50 mm thick / tiles loosely laid or fixed, over a separation layer of spot bonded ShaliGeoText 120 / 150 gsm.

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 3 mm and 4 mm - 1 m x 10 m Roll.

Storage

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