

## OVERVIEW

RANSPOLY-FELT is a polymeric waterproofing membrane consisting of five layers. The Centre core consists of 20 micron High Molecular High Density Polyethylene Film. The Polyethylene Film is the reinforcement barrier against water and moisture. The Centre Core is provided on both sides with APP polymer modified bitumen with properties of high Softening point, Heat resistance and high Penetration making it ideal for waterproofing purposes. The polymer modified bitumen is protected on both sides with thermo-fusible High Molecular High Density Polyethylene Film. The polymeric membrane has elongation exceeding 300% to absorb all Structural movements. It has a very high tensile strength and cold resistivity to adapt to all contours.

## PROPERTIES

- Excellent resistance to positive water & vapor pressure.
- Good heat resistance.
- Good dimensional stability under tension.
- Can accommodate structural movements because of excellent flexibility.
- High puncture and fatigue resistance.
- High tensile and tear strengths.
- Resistant to water borne chemicals.

## AREAS OF USE

RANSPOLY-FELT is used as a waterproofing membrane on the following structures:

- Inverted Roofs & parapets
- Terraces, balconies & patios
- Sunken slabs
- Bridges & tunnels
- Airport aprons & ramp areas

RANSPOLY-FELT in tropical regions can also be used for waterproofing of below ground concrete structures like:

- Concrete foundations & footings
- Basements
- Pile heads
- Swimming pools & water retaining structures

## INSTRUCTIONS FOR USE

The application temperature should be between 5°C to 45°C. Application procedures may vary slightly depending upon site conditions. The general recommended guidelines for the application of the waterproofing system are as follows:

### SURFACE PREPARATION

The surface shall be cleaned thoroughly of all contaminants like dust, traces of curing compound, oil and grease. All surface imperfections and protrusions shall be removed and repaired. Structurally unsound and friable concrete must be removed and repaired with a suitable **RANSCRETE AP** concrete repair mortar.

### PRIMING

Apply Solvent based **RANSBITU-PRIMER** @ 0.3-0.4L /Sqmt as per ASTM D 41 & IS: 3384-1986 and BS 4147-1980 to a clean smooth and dry surface by brush, roller or spray. Allow the primer to dry prior to the application of the membrane. As the viscosity of the primer is low, it easily penetrates into the concrete pores which promote the adhesion between the membrane and the concrete surface. In addition to that the primer also acts as a binder for the dust

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which gets accumulated on the concrete surface even after cleaning.

**MOSTLY USES/FOLLOW FOR BOQ REQUIREMENT**

Providing and laying in situ seven course water proofing treatment with **RANSPOLY-FELT** (Atactic poly-propylene) modified Polymeric membrane over roof consisting of first coat of bitumen primer @ 0.40Kg per sqm, 2nd, 4th & 6th courses of bonding material @ 1.20 Kg/sqm, which shall consist of blown type bitumen of grade 85/25 conforming to IS : 702, 3rd and 5th layers of roofing membrane APP modified Polymeric membrane 1.5mm thick of 2.25 Kg/sqm weight consisting of five layers prefabricated with centre core as 20micron HMHDPE film sandwiched on both sides with polymeric mix and the polymeric mix is protected on both side with 20micron HMHDPE film. 7th, the top most layer shall be finished with brick tiles of class designation 10 grouted with cement mortar 1:3 (1 cement:3 fine sand) mixed with 2% integral water proofing compound by weight of cement over a 12mm layer of cement mortar 1:3 (1 cement: 3 fine sand) and finished neat (item of laying brick tiles shall be paid for separately).

**CAUTION**

Do not over torch the membrane as this will expose the reinforcement and cause damage to it.

**SEALING**

Heat both the overlaps and use round tipped trowel to seal the overlap. Adequate heat is confirmed when a uniform flow of melted bitumen compound flows evenly in a bead that oozes from the applied membrane's edges. Excess compound should be

smoothened and pressed into the seam using a heated trowel. Any un-bonded areas must be lifted and re-torched. Do not attempt to reseal by torching the top surface of the membrane. Up stand

Flashing details are accomplished using cut pieces of **RANSPOLY-FELT** in combination with appropriate prefabricated flashing components. The same side lap and end lap rules apply to flashing details as to field membrane.

All angles and abutments should be sealed with extra care to ensure full bonding.

Wash all the tools and tackles with industrial solvent immediately after the application is completed.

**HEALTH & SAFETY**

Avoid prolonged contact with eyes and skin. For detailed information refer to relevant material safety data sheet.

**PACKGING & STORAGE**

**RANSPOLY-FELT** is packaged in (20.00 Mtr L x 1.00 Mtr W) as per given details:-

GRADES	Felt-1	Felt-2	Felt-3
WEIGHT	1.5 kg/sqm	1.75 kg/sqm	2.25 kg/sqm
THICKNESS	0.8 mm	1.0 mm	1.5 mm
LENGTH	20 M	20 M	20 M
WIDTH	1.0 M	1.0 M	1.0 M

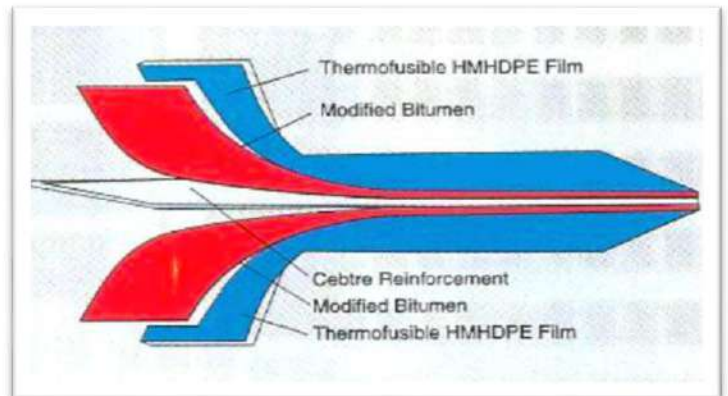
Store in a clean dry area protected from direct sunlight and extreme heat and cold.

Unopened condition rolls can be stored for 12 months. Use oldest material first.

**TECHNICAL  
DATA**

<b>Product</b>	APP Modified Membrane		
<b>Proper ties</b>	0.8mm/1.0mm/1.5mm		
Membrane thickness (+/- 5%)	(UEAtc. M.O.A.T.30)		
<b>Nominal weight</b>	1.5/1.75/2.25 kg/m <sup>2</sup> (UEAtc. M.O.A.T.30)		
<b>Reinforcement base</b>	(HMHDPE) 20Micron/ 0.020mm (UEAtc. M.O.A.T.30)		
<b>Tensile strength</b>			
Longitudinal (ASTM D 638)	150 N/5cm		
Transverse (ASTM D 638)	140 N/5cm		
<b>Elongation of membrane</b>			
Longitudinal (ASTM D 638)	300%		
Transverse (ASTM D 638)	300%		
<b>Heat Resistance at 120°C</b> (UEAtc. M.O.A.T.30)	No Flow	<b>Resistance to Water Pressure</b> (DIN 52123)	No Leakage
<b>Cold Flexibility (0°C to -5°C)</b> (ASTM D 836)	No Cracks Observed	<b>Penetration@25°C (ASTM D-5)</b>	25 mm+
<b>Softening point (ASTM D-36)</b>	150°C	<b>Service Temperature</b>	+5°C to +65°C
<b>Packaging</b>	(1Mx20M)	<b>Storage</b>	12 months in original condition.

**PICTURES/IMAGES AT GLANCE**



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