HYPERPLAS POLYESTER MEMBRANE®

Uses

- Hyperplas Polyester is normally used in protected roofing and waterproofing application in a single layer system and also recommended as a base layer in multilayer system in various application including damp-proofing.
- Roof slabs, Podium slab, basement and Raft slab, Roof Garden, Toilet Sunken Slab, Swimming Pool.

Advantages

- Excellent resistance to ageing and weathering.
- Stability at high temperatures and total impermeability.
- High resistance to impact and puncture.
- Fast application and easy.

Description

Hyperplas Polyester is a high softening point. APP modified polymeric waterproofing membrane manufactured to highest standards. It consists of a center core of Spun Bonded Polyester mat for extra mechanical strength. The center core is protected on both sides with Polymeric Asphaltic mix, which has high penetration, high heat resistance and high softening point. With high tensile strength, the membrane is still extremely flexible and pliable to adapt to contours. For this reason this membrane makes an ideal waterproofer. Hyperplas Polyester is also available with dual centre core of a High Molecular High Density Polyethylene Film. This additional polyethylene core provides additional security strength.

Surface preparation

Smooth surface is required to apply the membrane. The surface is first cleaned to eliminate all sharp projection.

Priming

IWL Primer / IWL CS / IWL Blown Bitumen is then coated on the surface (for more details refer relevant data sheets).

Application

Hyperplas Polyester is unrolled over the surface with torch application (with overlaps of 10cm) and bonded to the substrate. The overlaps are to be sealed by flame torch. Hyperplas Polyester can be topped with topping such as cement screed or tiles on accessible roofs with a chicken wire mesh reinforcement. Inaccessible roofs can be topped with a layer of IWL Bitumen & IWL Aluminium Paint.

Limitation

Application temperature ranges from 15^{0}C to 50^{0}C. It is better to warm the back of the membrane for application below 15^{0}C and should be stored at above 20^{0}C before application to enable easy application and immediate bond to the substrate.

Packing

Hyperplas Polyester Membrane: 10 m length X 1 m width
Coldstick: 20 Kg container

Coverage

Coldstick: 3-4 per sq.m/kg on a standard smooth surface

Storage

All products have a shelf life of 12 months if stored in a cool, dry store away from sources of heat, in the original unopened packing. It should be stored horizontally, not more than one pallet high.

Safety measures

No health hazards with the use of Hyperplas Membrane and Coldstick. If Coldstick Primer is swallowed, drink a glass of water and do not induce vomiting. When contacted with eyes occurs flood with copius amounts of clean water for at least 15 minutes and seek medical advice. If contacted with skin wash the skin thoroughly.

Fire

Hyerplas Membrane and Coldstick are flammable. Do not smoke near these products. Coldstick contains volatile flammable solvents. Use only in open areas, well away from sources of ignition.

Specification

Hyperplas Polyester is available in grades of 2mm, 3mm, 4mm, 3Kg, 3.5Kg or 4Kg/sqm.

Technical Support

S. No.	Test	Requirement for Plain Membrane	Requirement for Mineral Membrane (including Aluminium)	Requirement for Aluminium Membrane	Unit	Method of Test, Ref to
1	Thickness of membrane, (including mineral granules / aluminum foil) a) Below 3mm	±5% or maximum ±0.15mm	±5% or maximum ±0.15mm	±5% or maximum ±0.15mm	mm	B-2 of IS 7193
	b) 3mm and above	±5% or maximum ±0.2mm	±5% or maximum ±0.2mm	±5% or maximum ±0.2mm	mm	B-2 of IS 7193
2	Cold flexibility ^{0}C (All thicknesses)	Does not crack at -2^{0}C	Does not crack at -2^{0}C	Does not crack at -2^{0}C	^{0}C	IS 13826 (Part 2)
3	Softening point (All thicknesses)	≥150^{0}C	≥150^{0}C	≥150^{0}C	°C	IS 1205
4	Tensile strength: a) Below 3mm:Longitudinal :Transverse b)3mm&above:Longitudinal :Transverse	 300 ± 20% 200 ± 20% 650 ± 20% 400 ± 20%	 300 ± 20% 200 ± 20% 650 ± 20% 400 ± 20%	 300 ± 20% 200 ± 20% 650 ± 20% 400 ± 20%	 N/5cm @23^{0}C N/5cm @23^{0}C	 IS13826 (Part 1) IS13826 (Part 1)
5	Elongation: a) Below 3mm:Longitudinal :Transverse b)3mm&above:Longitudinal :Transverse	 30 ± 20% 30 ± 20% 40 ± 15% 35 ± 15%	 20 ± 20% 20 ± 20% 30±15% 25±15%	 15 ± 10% 15 ± 10% 20 ± 10% 20 ± 10%	 % 	 IS 13826 (Part 1) IS 13826 (Part 1)
6	Tear Strength: a) Below 3mm:Longitudinal :Transverse b)3mm&above:Longitudinal :Transverse	 Not applicable 500Min 300Min	 Not applicable 500Min 300 Min	 Not applicable 500Min 300 Min	 Not applicable N	 Not applicable B-4 of IS 7193
7	Heat resistance (All thickness)	No Flow	No Flow	No Flow	120^{0}C, 2 hours	IS 13826 (Part 5)
8	Penetration @ 25^{0}C, 100g,5s (All thickness)	25 ± 5	25 ± 5	25 ± 5	dmm (tenths of mm)	IS 1203
9	Water absorption (All thicknesses),	1, Max	Not applicable	1,Max	%	IS 13826 (Part 6)
10	Dimension stability longitudinal/transverse (All thickness)	± 0.5 / ± 0.5	±0.5/±0.5	±0.5/±0.5	%	Measurement
11	Pressure head test	No sign of leakage	No sign of leakage	No sign of leakage	-	IS 13826 (Part 4)
12	Puncture resistance test (Optional)	Shall show no sign of puncture	Shall show no sign of puncture	Shall show no sign of puncture	-	Annex C