

DESCRIPTION

Betoflex 4P & 5P are high quality torch applied membranes reinforced with a core of either fiberglass or non woven polyester with a nominal weight as indicated in the technical data on the reverse side, rot-proof and is malleable. Manufactured from premium grade heavily modified bitumen, the membrane excellent mechanical properties, allows for good elongation and affords high resistance to piercing. It combines the ability to withstand high ambient temperatures with the usual characteristics of an APP membrane.

The waterproofing compound of Betoflex membranes is made a High performance elastomeric which combines the ability to withstand high ambient temperature.

The coating mix is made up of bitumen, modified with Amorphous Poly-olefins, thermoplastic resins and stabilizers giving the membrane its excellent resistance to atmospheric agents and ageing, maintaining shape stability at high temperatures, improving adhesion strength and making the membrane easy to apply saving on time and labor.

USES

To provide waterproofing for:

- ▶ Foundations & Basements
- ▶ Roofs & Terraces
- ▶ Pile Capping & Footings
- ▶ Tanking
- ▶ Car park
- ▶ Abutments & Swimming Pools
- ▶ Airport Aprons & Ramp Areas
- ▶ Concrete retaining structures
- ▶ Tunnels and subways

ADVANTAGES

- ▶ Positive barrier to water and dampness.
- ▶ Excellent resistance to ageing and atmospheric agents.
- ▶ Highly flexible during application at sub-zero temperatures without physical strains.
- ▶ Maintains shape stability at high temperatures.
- ▶ Accommodates structural movements.
- ▶ Withstands thermal choc.
- ▶ Easily torch applied
- ▶ Bonds well to the substrate
- ▶ Readily formed to contours
- ▶ Resistant to chemical attack from soil or water.

FEATURES

The membrane comes in various types according to the surface top:

SAND : The top surface is covered with fine sand.

PBS: The top surface is covered with a thin easy torched Poly-ethylene film.

SL : The top surface is covered with reflective slates either in natural gray or pigmented in various colors.

The bottom surface is covered with a thin easy torched Poly-Ethylene film.

METHOD OF APPLICATION

SURFACE PREPARATION

Concrete surfaces should be free from cavities and projecting nibs. All surfaces shall be dry and free from contamination, frost & surface laitance

PRIMING

For applications on concrete, tiles or any other porous surface, coat the substrate with BETOPRIME SB (solvent based bituminous primer according to ASTM D41) at the rate of 4-5m²/litre. Allow this coating to dry thoroughly. In time of high humidity, we recommend it should be left overnight.

APPLICATION

The BETOFLEX membranes should first be unrolled and positioned correctly. Each roll should overlap the adjacent roll by 10cm. Once the roll has been positioned correctly, the membrane should be rolled up again, taking care not to change its orientation Using left to right movements, heat the lower surface of the membrane with a propane gas torch. This will cause slight surface melting and the molten bitumen will adhere to the surface. Then torch on the side overlap to the recommended size of 100mm. Continue the above method for consecutive rolls remembering end-laps must be minimum 150mm. Inspection of lap joints must be carried out to ensure total adhesion.

TOOLS AND EQUIPMENT

The application of the BETOFLEX membrane requires very limited tools like propane gas torches with related gas cylinder, a knife for cutting the membranes to size and a trowel with rounded end. Protective gloves and goggles are necessary when using the gas torch.

PACKING

Betoflex 4P & 5P : 10 m long x 1m wide roll
Betoprime : 20 litre and 200 litre drums

LIMITATION

Store in a shaded warehouse below 30°C, away from the sources of heat and direct sunlight

PROPERTIES

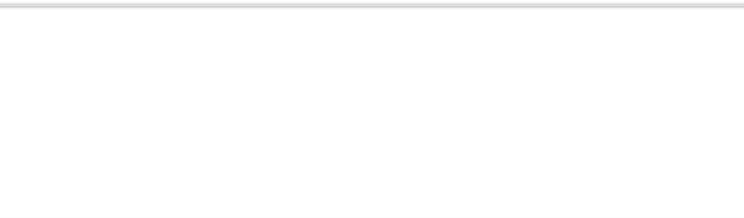
PROPERTIES	VALUES		VALUES	
	4mm	5mm	4mm	5mm
Membrane Thickness(+/- 5%) (ASTM D751)	4mm	5mm	4mm	5mm
Mass per unit area	4.7kg/m ²	5.7kg/m ²	4.7kg/m ²	5.7kg/m ²
Reinforcement	180 g/m ² polyester		200 g/m ² polyester	
Softening Point (ASTM D36)	> 150°C		> 150°C	
Penetration @ 25 Deg C Of Coating Mixture (ASTM D5)	20-25 dmm		20-25 dmm	
Flexibility at low temperature (ASTM D5147)	-5°C		-5°C	
Tensile strength (L/T) (ASTM D5147)	750/550 N/5cm		900/700 N/5cm	
Elongation Of Membrane (L/T) (ASTM D5147)	40 / 50 %		45 / 50 %	
Tear resistance (L/T) (UEAtc)	190 / 190 N		220 / 240 N	
Lap joint strength (L/T) (ASTM D5147)	750/550 N/5cm		900/700 N/5cm	
Puncture Resistance (UEAtc), Static Dynamic	L4 I4		L4 I4	
Water absorption (ASTM D570)	<0.15%		<0.15%	
Dimensional stability at +80C (L/T) (ASTM D5147)	-0.5 % -0.5 %		-0.5 % -0.5 %	
Water vapour transmission (ASTM E96)	< 0.50 g/m ² /24h		< 0.50 g/m ² /24h	
Resistance to ageing due to UV radiation (ASTM G53)	No signs of deterioration after the test		No signs of deterioration after the test	

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.

HEALTH AND SAFETY

If BETOPRIME is swallowed, do not induce vomiting - drink a glass of water. If contact with eyes occurs,flood with copious amounts of clean water for at least 15 minutes and seek medical advice. If on the skin,remove any contaminated clothing and wash skin thoroughly.



IMPORTANT NOTICE

Betoflex products are guaranteed against defective materials and manufacture and are sold subject to its standard Conditions for the Supply of Goods and Service.All reasonable care has been taken in preparing this technical information which, to the best of our knowledge, is accurate and true at the time of printing this leaflet. Due to our policy of continued development work and depending upon the availability of the raw material, clients requirement, climatic and environmental conditions the actual technical data may differ from those described herein as it may be changed, modified or improved by us without notice. All recommendations and suggestions are made in good faith and can only be considered for general guidance. No warranty is implied or given by us in relation to application, as conditions for use and any labor involved, are beyond our control.