

# APP MODIFIED BITUMEN BASED MEMBRANES FOR WATERPROOFING

### Description

**Dr. Fixit Torchshield P** range of polymer modified membranes are modified bitumen waterproofing membranes manufactured by saturating and coating a polyester carrier with a waterproofing compound made of a special grade of modified bitumen with APP polymers.

The upper and lower surfaces are laminated with polyethylene film.

### Areas of Application

Waterproofing and damp-proof membranes for:

- Concrete roof (Sloped/Flat roofs).
- Basements and swimming pools (Externally).
- Car park and irrigation canals lining.
- Concrete retaining structures.
- Tunnels and subways.

### Features & Benefits

High strength reinforcement gives excellent resistance to puncture and stress. **Dr. Fixit Torchshield P** is easily torch on applied and adheres well to the substrate. The modified bitumen membranes' coating adheres well to contours, and is dimensionally stable to normal structural movements in the building.

### Method of Application

This application procedure is a standard guideline for using the 3 & 4 mm membranes only, which may slightly vary upon the site conditions & different application areas. For details, consult the Dr. Fixit Technical Team.

#### **1 SURFACE PREPARATION**

• Clean & remove dust, dirt, loose particles and unsound substrate. Make the surface smooth, even & free from local depressions with polymer-modified mortar. Priming can be done over this the next day.

#### 2 PRIMING

• Apply one coat of a bitumen based primer Dr. Fixit Torchshield P Primer on cleaned & leveled surface @ 4-6 sq. m. / litre / coat.

#### 3 APPLICATION

- Unroll the Dr. Fixit Torchshield P Roll after application of primer.
- Align the roll correctly & re-roll it in alignment before torching.
- Use gas burner to heat substrate & underside to softening points. When the embossing disappears, roll forward & press firmly against substrate to bond from the lower end towards the higher end.
- Keep overlap margin for minimum 100 mm with end laps of a minimum of 150 mm.
- Ensure that a constant flow of bitumen is maintained across the whole width of the Roll and that a bead of bitumen is extruded from each edge which demonstrates that a good seal has obtained. DO NOT flatten the bead with trowel.
- All angles & abutments upstands should be sealed with extra care to ensure perfect bondage. Seal the edges well into grooves & protect to seal with a polysulphide / Polythane or a bitumastic sealant.
- Dr. Fixit Torchshield P applied all over the terrace, must be finished with a coating of aluminum paint for nonfoot traffic area. For foot trafficked area, overlay with concrete screed mortar.

### APPLICATION TOOLS AND EQUIPMENT

The tools and equipment required to apply Dr. Fixit Torchshield P membrane include a gas torch with the gas cylinder, a knife for cutting the membrane to size, and a trowel with a rounded tip. Protective gloves and goggles are necessary when using the gas torch.



## Precautions & Limitations

- Any naked flame should be kept well away from gas cylinders.
- When ignited the Dr. Fixit Torchshield P should be watched at all times.
- The torch should not be rested on finished roofing.
- Extreme care should be taken when working near combustible materials or items which might be scorched by the gas flame.
- Not to be applied in extreme cold climatic conditions (below 5°C).
- Not to be applied on damp/wet areas & areas subject to moisture restoration.
- Do not overheat the Dr. Fixit Torchshield P membrane i.e. avoid heating when it starts smoking.
- The moisture content on the surface should not exceed 6% to overlay the membrane.
- Use of a bitumen based primer is a must. For better results, use Dr. Fixit Torchshield P Primer.

## **Technical Information**

PROPERTIES	TYPICAL VALUES	TEST METHOD
Roll size	10 M X 1 M ± 1%	EN-1848
Thickness	3 mm ± 5% 4mm ± 5%	UEAtc M.O.A.T.30
Carrier (gms /m²)	160 gms /m² - Polyester	(Guided on the lines of IS:15337/2003 Annex C)
Unit weight kg/sq.m.	3.6-5.3 ±10%	(Guided on the lines of IS:719312013)
Elongation at break %	L-60±20 T-60±20	(Guided on lines of ASTM D5147)
Tensile Strength (N/5cm)	L - 700 ± 10% T - 450 ± 10%	EN-12311-1
Tear Strength	L - 350 ±10% T - 300 ±10%	ASTM D-5147
Cold Flexibility (Up to 2°C)	No Crack	(Guided on the lines of ASTM D5147)
Softening Point (°C)	≥150	(Guided on lines of as such IS:1205/1978)
Water absorption %	≤ 3.2	ASTM D-5147
LAP Joint Strength (N/5CM)	L - 700 ± 10% T - 450 ± 10%	(Guided on lines of ASTM D5147)
Resistance to Water pressure (5 bar/50M)	No leakage	UEAtc M. O. A. T. 30
Heat resistance at (120°C) for 2 hours	No flow	(Guided on lines of ASTM D5147)

## Packaging

Dr. Fixit Torchshield P Membranes are available in Roll sizes of 1 m X 10 m.



## Shelf Life

The shelf life is 36 months if stored as per the recommendations. Excessive exposure to sunlight.

### Storage

- Store rolls upright in dry area.
- Store indoors in a ventilated area.
- Keep rolls protected from exposure to heat, sun, cold and moisture.
- Do not double stack rolls.
- Do not store rolls on their sides.
- Use care in the handling of the rolls.
- Do not overload the roof. Stagger the rolls across the roof. Avoid excessive weight in a concentrated area.

## Technical support

Dr. Fixit offers comprehensive range of high performance, high quality waterproofing membrane systems. In addition Dr. Fixit also offers a technical support to specifiers and contractors, which include assistance with product selection and technical advice from staff, with unrivalled experience in the industry.

# Other Products Categories available

Dr. Fixit brings you the widest range of Construction Chemicals





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