

# CROSS LAMINATED SBS SELF ADHESIVE WATERPROOFING MEMBRANE

## Description

**Dr. Fixit Samshield XL is a SBS** modified self adhesive cold applied waterproofing membrane based on a tropical grade of polymer modified bitumen. The bitumen compound is laminated onto an impervious, non-perforated, Cross laminated HDPE film. The membrane is protected on the self adhesive side with a silicone coated release film.

## Areas of Application

**Dr. Fixit Samshield XL** used as waterproofing and damp proofing intended for concrete protection. It may be used for horizontal and vertical application and as a damp proofing course for tanking below ground structures, subways, retaining walls etc.

## Features & Benefits

- Specially formulated for tropical climate grade.
- Provides protection against water and vapour.
- Self adhesive, requires just peeling off the silicone film and sticking to the surface.
- Excellent adhesion to vertical and horizontal surfaces.
- Excellent resistance to chlorides, sulphates, alkalis and acids.
- Good tear and puncture resistance.
- Excellent tensile strength.
- No flame hazard/ heating required.

### Method of Application

Application procedure may vary slightly depending upon site conditions. The general recommended guidelines for the application of the self adhesive waterproofing system are as follows:

### 1 SURFACE PREPARATION

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

#### 2 PRIMING

Apply **Dr. Fixit Torchshield Primer** <sup>(a)</sup> 4-6 sq.mtrs./litre to a clean, smooth and dry surface by brush or roller. 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 which gets accumulated on the concrete surface even after cleaning.

#### 3 ALIGNMENT

Start the installation of all membrane plies from the low point, so that the flow of water is over or parallel to the plies, but never against the laps. Begin membrane application by unrolling the roll of **Dr. Fixit Samshield XL** membrane and aligning the side laps.

### Application

Peel off the release film from the self adhesive side and start unrolling the membrane and press it to the surface. Smoothen the membrane from the center to the edges with a wooden press in order to remove entrapped air. Furthermore, an iron roller shall be used for rolling on top of the applied membrane to ensure a proper and strong adhesion of the bitumen compound with the base surface. Side overlaps shall be a minimum of 75 mm on the selvedge and end overlaps 100 mm.



# Protection

The membrane shall be protected immediately after application from damage, due to ongoing site activities or from sharp aggregates during backfilling by a tough, weather, warp and rot proof asphaltic protection board. Alternatively, on horizontal areas the membrane can also be protected by laying a cement sand screed (50 mm).

# **Precautions & Limitations**

- Not to be applied on damp/wet areas & areas subject to moisture restoration.
- The moisture content on the surface should not exceed 5% to overlay the membrane.
- Use of a bitumen based primer is a must. For better results, use Dr. Fixit Torchshield Primer.
- Samshield membranes are not UV and weather resistant. The membranes must be protected immediately after completion to prevent mechanical damage. In any case don't let the membrane unprotected for more than 24hrs.
- Low temperatures reduce the adhesion/tack of the materials, while high temperatures soften the materials and make them more adhesive. For relatively lower temperatures and high humid conditions facilitate laying with hot air gun.
- Suspend laying by Samshield Membranes when the temperature falls below +10°C.

### Technical Information

PROPERTIES	VALUES		TEST STANDARDS
	XL 1500	XL 2100	
Thickness (mm) (XL 1500/2100)	1.6 ± 5%	2.1±5%	ASTM D 5147
Mass per unit area, (kg/m²) (XL 1500/2100)	1.9 ± 10%	2.3±10%	ASTM D 5147
Thickness of Rubberized Asphalt Compound	min.1400 microns	min.1900 microns	Internal Test method
Thickness of XL HDPE film	min. 100 microns	min. 100 microns	Internal Test method
Top Surfacing	Cross Laminated HDPE film		
Softening Point, (R & B) (°C)	111		ASTM D36
Tensile Strength (L/T), N/mm <sup>2</sup> (Compound membrane)	Min. 3.5 Min. 3.5	Min. 3.5 Min. 3.5	ASTM D 412 - 06
Elongation (L/T), (%) (Compound membrane)	L - Min. 300 T - Min. 300	L - Min. 300 T - Min. 300	ASTM D 412 - 06
Puncture Resistance, (N)	Min. 280	Min. 280	ASTM E 154
Hydrostatic pressure	> 60 m (6 BAR) No leakage	> 60 m (6BAR) No leakage	DIN 1048
Crack Bridging Ability, (mm)	Min. 1.5 (10 cycles passes)	Min. 1.5 (10 cycles passes)	ASTM C 836
Tensile Strength (L/T), N/mm² (Cross laminated HDPE Film)	Min. 42 Min. 48	Min. 42 Min. 48	ASTM D882:18
Elongation, (L/T), % (Cross laminated HDPE Film)	Min. 180 Min. 230	Min. 180 Min. 230	ASTM D882:18
Peel Adhesion	>1.5 N/mm	>1.5 N/mm	ASTM D 1000



SUPPLY	1.6 mm	2.1 mm
Dr. Fixit Samshield XL	1 m x 10 m, WT 19 kg*	1 m x 10 m, WT 23 kg*
Dr. Fixit Torchshield Primer	20 ltr	20 ltr
*Approximate Weight		

## Handling

Dr. Fixit Samshield XL membranes are supplied in rolls of 1 m x 10 mtrs. The rolls are packed in loose corrugated boxes to avoid damage during transit or during storage at sites. Care should be taken when storing the membranes on sites and should not be kept within close proximity of any sharp or protruding edges to avoid puncturing or damaging the membrane.

## Shelf Life & Storage

Dr. Fixit Samshield XL membranes must be stored in a shaded area on wooden pallets neatly covered by a thick fabric and tied securely in a manner that will minimize exposure to sunlight and UV rays. The membrane shall be protected from all source of heat and cold weather.

The shelf life is 18 months if stored as per the recommendations. Excessive exposure to sunlight, UV rays and other source of heat will result in considerable deterioration of the product and reduce its shelf life.

### Health & Safety Precautions

Dr. Fixit Samshield XL contains tacky bitumen compound and can adhere to human skin during application. Bitumen stains can be removed by using a cloth dipped in a solvent. In case the affected area is sensitive one, seek medical assistance immediately.

### Other Products Categories available

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