

PRODUCT CODE F0004

# SmartCare Waterproofing Membrane

SBS Modified Hybrid/Composite Reinforced Self Adhesive Bituminous Membrane (1.5mm)

## PRODUCT BENEFITS

SmartCare Waterproofing Membrane is a SBS modified Hybrid / Composite Reinforced bituminous membrane for superior waterproofing. This membrane exhibits excellent tensile strength, tear strength, puncture resistance and dimensional stability. Self Adhesive of the membrane is covered with silicone release film for protection of the membrane.

## USES

Waterproofing/ Damp-proofing membrane in horizontal and vertical applications for protection of various substrates like concrete, masonry, GI, aluminium, wood etc. in wide range of uses:

- > Accessible and non accessible medium to large roof slabs in domestic, commercial and industrial construction (Not to be left unprotected, need to be protected by cement screed)
- > Basements and raft slabs
- > Swimming Pools
- > Roof Gardens
- > Underground car parks
- > Bridges & Tunnels

## CHARACTERISTICS/ADVANTAGES

- > Excellent flexibility
- > Excellent water tightness if applied as per recommended system and application
- > High tensile strength, tear and puncture resistance
- > Cost effective and durable in comparison to conventional low end Waterproofing systems
- > Good temperature resistance to cold and warm temperatures
- > Good resistance to ageing if applied as per the recommended system
- > Excellent resistance to Chloride ion diffusion as per ASTM C 1556

## PRODUCT DATA

### FORM

### APPEARANCE/COLOURS

Black Colour, silicone release film for protection.  
Hybrid / Composite Reinforced.

### PACKAGING

1.0 x 20 m roll (1.5 mm) Tolerance  $\pm$  1%

### STORAGE CONDITIONS/ SHELF-LIFE

The membranes must be vertically stacked and stored in a shaded area covered by a thick fabric and tied securely in a manner that will minimize exposure to sunlight and UV. The membranes be protected from all sources of heat and extreme temperatures. The shelf life is 5 years

### HANDLING PRECAUTIONS

The membrane is non-hazardous, non-flammable and therefore can be disposed of in any regular disposal areas. All membranes however should be disposed off only after wrapping with paper, plastic or cloth. In case of contact with human skin wash with any soft solvents seek medical assistance immediately in case of any allergy.

## TECHNICAL DETAILS

### CHEMICAL PROPERTIES

Chemical Base: SBS modified bituminous, Hybrid / Composite Reinforced.

### PHYSICAL AND MECHANICAL PROPERTIES

Parameter	Unit	Method	SBS self-Adhesive Eco Grade
Roll Length	M(Metre)	EN 1848-1	20
Roll Width	M(Metre)	EN 1848-1	1
Unit Weight	Kg /sqm	ASTM D5147	2.2-2.3
HDPE Film Thickness	mm	ASTM D5147	0.1
Total Thickness	mm	ASTM D5147	1.55
Softening Point	°C	ASTM D 36	100
Penetration (at 25°C)	Dmm	ASTM D 5	62
Tensile Strength (L)	(N/5cm)	ASTM D5147	681
Tensile Strength (T)	(N/5cm)	ASTM D5147	488
Elongation at Break (L)	(In %)	ASTM D5147	23
Elongation at Break (T)	(In %)	ASTM D5147	19
Tear Strength (L)	N(Newton)	ASTM D4073	415
Tear Strength (T)	N(Newton)	ASTM 4073	310
Cold Flexibility	---	ASTM D5147	No Crack in Cold Flexibility (at -5°C to -10°C)
Substrate Temperature	--	-	+4°C Min/ +45°C Max
Pliability		ASTM D 146	No Crack
Joint Peel Resistance	N/50 mm	EN 12316-1	54
Puncture Resistance	N	ASTM E154-88	226 N
Resistance to Hydrostatic Head	m	ASTM D 5385	45 m
Water Vapor Transmission	g/m2	ASTM E96	0.095 g/m2
Water Absorption in 24 Hrs	%	ASTM D570	0.35 % (+/-10% tolerance)
Adhesion to primed concrete(peel test)	N/inch	ASTM D903	15.5
Heat Stability	+90°C	ASTM D5147	No Flow

## APPLICATION CONDITIONS

SUBSTRATE TEMPERATURE	+4°C min. / +45°C max
AMBIENT TEMPERATURE	+4°C min. / +45°C max

## APPLICATION DETAILS

### SUBSTRATE QUALITY AND PREPARATION

- > Inspect the surface conditions
- > The concrete surface should be levelled, rough and should not have hollow areas or pot holes
- > Check hollowness by hammering and repair such areas as well as pot holes using polymer modified cement sand mortar
- > Allow to cure for at least 72 hours before application of membrane
- > Clean the surface so that it is free from loose dust, particles, oil etc. by brooming or vacuum cleaner
- > Apply bitumen based primer as per recommended coverage and allow it to dry till tack free (about 8-6 hours)

## APPLICATION METHOD

- > Unroll the membrane and align with proper markings all over area. Re-roll the roll into its original form so that alignment is not disturbed
- > 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 the edges by pressing in order to remove entrapped air
- > Keep overlapping margin of minimum 100 mm between two adjoining membranes
- > Use an iron roller against the applied membrane to ensure a proper and strong bonding with the primed substrate
- > For side overlaps a minimum of 50 mm and for the end overlaps 100mm should be ensured
- > The applied membrane, must be finished with a coating of aluminum paint or non foot trafficable area. For foot trafficable area, overlay with concrete screed mortar

## VALUE BASE

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control and different test methods.

## HEALTH AND SAFETY INFORMATION

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Material Safety Data Sheet.

## PRECAUTIONS

- > Do not apply during rains or extreme temperatures.
- > Avoid abuses which may lead to puncturing of membrane.
- > Ensure that the product is applied at least 6 inches inside the drain pipe.
- > Apply parapet to parapet to envelope the entire building for long term performance.

## SAFETY FEATURES

- > Kindly refer to the MSDS for SmartCare Waterproofing Membrane which gives detailed information on safety measures while handling, which is available on request. Store in a cool, dry place.
- > Keep out of reach of children and away from eatables.
- > May be harmful if swallowed. In case of ingestion seek immediate medical attention. Eye protection during application is recommended.
- > In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of skin contact soap wash with plenty of water. Get medical attention if irritation develops or persists.
- > It is recommended to wear suitable nose pad during torching application and surface preparation.
- > Dispose as per recommendation mentioned above. No added Lead, Mercury or Chromium compounds.