

# Bitustick SR

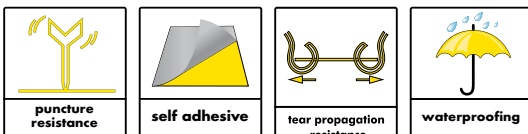
## Solar reflective cross laminated waterproofing membrane

Polymer modified bituminous self adhesive waterproofing membrane.



### CHARACTERISTICS

- ▶ Specially formulated for tropical climates
- ▶ Easy to handle in hot climates. Reduction of solar heat absorption by 30%
- ▶ Provides protection against water and vapor for grades 2, 3 & 4 (BS 8102)
- ▶ Self adhesive. Requires peeling off the silicone film and applying on the surface
- ▶ Excellent adhesion to vertical and horizontal surfaces
- ▶ Excellent resistance to chlorides, sulphates, alkalis and acids
- ▶ Good resistance to tear and puncture
- ▶ Puncture or damage of film easily detected by the oozing of the bitumen compound through the blue film



TDS\_Bitustick SR\_GCC\_0420

**1**

### DESCRIPTION

Bitustick SR is a self adhesive waterproofing membrane manufactured out of a tropical grade based on polymer modified bitumen. The bitumen compound is laminated onto an impervious, non-perforated, cross laminated solar reflective HDPE film. Bitustick SR conforms to the requirements of BS 8102.

### FIELDS OF APPLICATION

- ▶ Concrete foundations & footings
- ▶ Basements
- ▶ Pile heads
- ▶ Swimming pools & water retaining structures (externally)
- ▶ Subways and retaining walls
- ▶ Inverted roofs & parapets
- ▶ Terraces, balconies & patios
- ▶ Sunken slabs

### APPLICATION INSTRUCTIONS

The application temperature should be between 5°C to 55°C. Application procedures may vary slightly depending upon site conditions. The general recommended guidelines for the application of the self adhesive waterproofing system is as follows:

### 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 Polycrete\* concrete repair mortar.

### Priming

Apply Polyprime SB\* (Solvent based primer) @ 4-6 m<sup>2</sup>/L to a clean smooth and dry surface by brush, roller or spray. 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 promotes 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.

### Alignment

Start the installation of all membrane plies from the low point or drains, so the flow of water is over or parallel to the plies, but never against the laps. All overlaps at the membrane seams shall be installed so as to have "up" slope laps over "down" slope laps. Begin membrane application by unrolling the roll of Bitustick SR 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 in order to drive out entrapped air with a wooden press. 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 base surface. Side overlaps shall be a minimum of 50mm on the selvedge and end overlaps 100mm.

## Protection

The membrane shall be protected from damage due to ongoing site activities or from aggregates - during backfilling by a tough, weather, warp and rot proof asphaltic board (Bituboard / Bitustick R300/ Bitustick R400)\*. Alternatively, in horizontal areas the membrane can also be protected by laying a cement sand screed (50mm). Bituboard can be fixed with a double sided adhesive bitumen tape (Watertite TS 15)\*.

## HANDLING

Bitustick SR membranes are packed in loose corrugated boxes to avoid any damage during transit or during storage at sites. Care should be taken when storing the membranes in sites and should not be kept within close proximity of any sharp or protruding edges to avoid puncturing or damaging the membrane.

## STORAGE & SHELF LIFE

Bitustick SR 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. The membrane shall be protected from all sources of heat. The shelf life is 12 months if stored as per recommendations. Excessive exposure to sunlight, UV and other sources of heat will result in considerable deterioration of the product and reduce its shelf life.

## SUPPLY

Bitustick SR	1.6mm 2.0mm	1m x 10m, wt 16kg# 1m x 10m, wt 20kg#
Polyprime SB		20L pail & 200L drum
Bituboard	3.2mm 6.0 mm	2m x 1m, wt 7.7kg# 2m x 1m, wt 14.0kg#
Bitustick R300		1m x 10m 27kg#
Bitustick R400		1m x 8m 22kg#
Watertite TS 15		50mm x10m, wt 0.6kg#
Wooden press		140mm x 210mm
Iron poller head dia (recommended specification)	38mm, wt 1.5kg# Width 100mm Length 350mm	

\*Refer to website for TDS # Approximate weight

## HEALTH & SAFETY

BITUSTICK SR contains a tacky bitumen compound and during application can adhere to human skin. Bitumen stains can be removed by using a cloth dipped in a suitable cleaner.

## TECHNICAL SPECIFICATION

PROPERTIES	VALUES	TEST STANDARDS
Thickness, [mm]	1.6 2.0	DIN EN 1849-1
Mass per unit area, [kg/m <sup>2</sup> ]	1.6 2.0	DIN EN 1849-1
Top surfacing	cross laminated - blue HDPE film	
Softening point [°C]	>105	ASTM D 36
Tensile strength (Film), [N/mm <sup>2</sup> ]	long 49 trans 46	ASTM D 882
Elongation (Film), [%]	long 210 trans 160	ASTM D 882
Tear strength, [Film][N/mm]	long 280 Trans 280	ASTM D 1004
Puncture resistance, [N]	290	ASTM E 154
Hydrostatic pressure @ 7bar (70m)	no leakage	BS EN 12390 (Part 8)
Water vapor transmission, [g/m <sup>2</sup> /24 hrs]	<0.1	ASTM E 96
Adhesion strength, primed substrate [N/mm]		ASTM D 1000
self [N/mm]	1.8 2.2	
Chemical resistance [pH]	2.5 -11.5	ASTM D 543
Crack bridging ability, [mm]	>1	ASTM C 836
VOC [g/l]	<50	ASTM D3960/ D2369

All values given are subject to 5-10% variation

Apart from the information given here it is also important to observe the relevant guidelines and regulations of various organisations and trade associations as well as the respective standards. The aforementioned characteristics are based on practical experience and applied testing. Warranted properties and possible uses which go beyond those warranted in this information sheet require our written confirmation. All data given was obtained at an ambient and material temperature of +23°C and 50 % relative air humidity at laboratory conditions unless specified otherwise. Please note that under other climatic conditions hardening can be accelerated or delayed.

The information contained herein, particularly recommendations for the handling and use of our products, is based on our professional experience. As materials and conditions may vary with each intended application, and thus are beyond our sphere of influence, we strongly recommend that in each case sufficient tests are conducted to check the suitability of our products for their intended use. Legal liability cannot be accepted on the basis of the contents of this data sheet or any verbal advice given, unless there is a case of wilful misconduct or gross negligence on our part. This technical data sheet supersedes all previous editions relevant to this product.

