

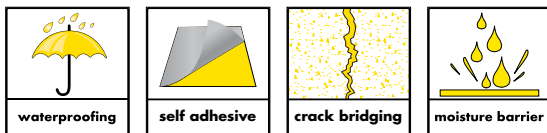
# Bitustick

## Self adhesive bituminous waterproofing membrane

HDPE surfaced polymer modified bituminous sheet membrane

### CHARACTERISTICS

- ▶ Cold applied, self adhesive and easy to apply
- ▶ Excellent adhesion to vertical and horizontal surfaces
- ▶ Excellent resistance to chlorides, sulphates, dilute alkalis and acids
- ▶ Good tear and puncture resistance
- ▶ Water and vapor proof



### DESCRIPTION

Bitustick is a self adhesive polymer modified bituminous, waterproofing sheet membrane, laminated onto a tough HDPE film on one side and a silicone release film on the other. Bitustick conforms to the requirements of BS 8102

### FIELDS OF APPLICATION

Bitustick is used as waterproofing or dampproofing membrane intended for concrete protection. It may be used for horizontal and vertical application for tanking below ground structures, subways and retaining walls.

### 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.



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In addition, the primer also acts as a binder for the dust which gets accumulated on the surface even after cleaning.

#### Alignment

Start the installation of all membrane plies from the low point or drains, so that 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 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 any 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 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

protection board (Bituboard / Bitustick R300/ Bitustick R400)\*. Alternatively, on 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 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 on 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 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.

## HEALTH & SAFETY

Bitustick contains a tacky bitumen compound which can stick to human skin during application. Bitumen stains can be removed by using a cloth dipped in a suitable cleaner.

## SUPPLY

Bitustick	1.5 mm	1 m x 10m, wt 16kg# 1 m x 20m, wt 32kg#
	2.0 mm	1 m x 10m, wt 21kg# 1 m x 15m, wt 31kg#
Polyprime SB		20L pail & 200L drum
Bituboard	3.2mm	2m x 1m, wt 7.7kg#
	3.5 mm	2m x 1m, wt 8.4kg#
	4.0 mm	2m x 1m, wt 9.6kg#
	6.0 mm	2m x 1m, wt 14.0kg#
Bitustick R300		1 m x 10m 27kg#
Bitustick R400		1 m x 8m 22kg#
Watertite TS 15		50mm x10m, wt 0.6kg#
Wooden press		140mm x 210mm
Iron roller		Head Dia 38mm, Wt 1.5kg#
(recommended specification)		Width 100mm Length 350mm

# Approximate weight

## TECHNICAL SPECIFICATION

PROPERTIES	VALUES	TEST STANDARDS
Thickness, [mm]	1.5 / 2.0	DIN EN 1849-1
Mass per unit area, [kg/m <sup>2</sup> ]	1.6 / 2.1	DIN EN 1849-1
Top surfacing	HDPE film	-
Softening point [R&B], [°C]	> 105	ASTM D 36
Tensile strength, [Film] [N/mm <sup>2</sup> ]	Long 20 Trans 20	ASTM D 882
Elongation@break, [Film], [%]	Long 300 Trans 300	ASTM D 882
Tear strength, [Film] [N/mm]	Long 120 Trans 110	ASTM D 1004
Adhesion strength, [N/mm]		ASTM D 1000
Primed substrate	1.8	
Self	2.2	
Puncture resistance, [N]	> 180	ASTM E 154
Hydrostatic pressure @5bar [50m]	No leakage	BS EN 12390 (Part 8)
Water absorption, [Film], [%]@24 hrs	0.14	ASTM D 570
Chemical resistance [pH]	2.5 -11.5	ASTM D 543
Low temperature flexibility, [°C]	< -15	ASTM D 1970
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.