

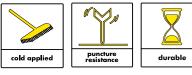


# Self adhesive waterproofing system

Long lasting waterproofing protection of concrete roofs from water leakages and vapor ingress

### **CHARACTERISTICS**

- Cold applied, self-adhesive and easy to apply.
- Resistance to puncture and impact.
- Tough and durable
- Self-healing capability against minor punctures
- High resistance against water and vapor
- Heat insulation achievable with built up system



### DESCRIPTION

Rooftite S20 system, based on self-adhesive membrane technology, is the optimum solution for a long-lasting waterproofing protection of concrete roofs from water leakages and vapor ingress. The system comprises of 1.6mm thick self-adhesive membrane and 2.7mm thick geotextile fleece surfaced bituminous membrane.

## **FIELDS OF APPLICATION**

- buildings and villas
- RCC/ inverted roofs
- accessible roofs

### **APPLICATION INSTRUCTIONS**

The application temperature should be between  $5^{\circ}$ C to  $45^{\circ}$ C. application procedures may vary slightly depending upon site conditions, the general recommended guidelines for the application of the waterproofing system is as follows:

### Surface preparation

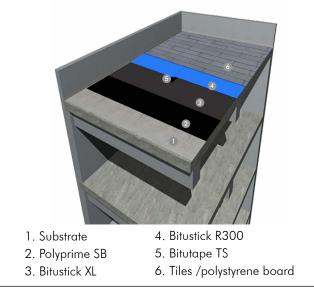
The surface shall be cleaned thoroughly of all contaminants like dust, traces of curing compound, oil and grease. all surface imperfections, protrusions, structurally unsound and friable concrete must be removed and repaired with a suitable concrete repair mortar. Provide a 45-degree cement sand angle fillet on all internal corners.

### Priming

Apply Polyprime SB solvent-based primer at a coverage of 4-6 m2/liter to the prepared clean smooth and dry surface by brush, roller or spray. allow the primer to dry prior to the application of the membrane.

### Installation

Provide a minimum 200 mm wide reinforcing strip of Bitustick XL over the cement sand angle fillet in all the corners. Pipe penetrations and drain areas shall be treated separately with additional layer of membranes. Peel off the release film from



the self-adhesive side and start unrolling the membrane and press it to the surface. Smoothen out 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.

2nd Layer / Protection Membrane – Bitustick XL membrane to be protected with a self-adhesive protection membrane Bitustick R300. Apply Bitutape TS on the end joints and cut joints (wherever selvedge is not available) of Bitustick R300 prior to laying of membrane. The second layer of Bitustick R 300 is to be placed at 50% staggered overlap over the first layer of the Bitustick XL. Unroll and align Bitustick R300 membrane on 1st layer to fit the orientation and roll it back. Now slowly peel off the release film at the back and simultaneously the release film from the top of Bitutape TS and carefully place the membrane without changing its orientation. Selvedge of 50mm width is available only on the sides of the membrane which allows continuous application of the subsequent rolls. The membranes shall be butt-jointed at the end laps using Bitutape TS as the joint sealer beneath the butt joints to provide a watertight sealing. The membranes to be terminated into the grooves and sealed with Polyseal PS sealant. After the application of membranes, cover the system with tiles /polystyrene board. The heat insulation of the building may be improved significantly, using suitable built up systems - e.g.: EPS boards and tiling of white color.

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### **STORAGE & SHELF LIFE**

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 sun light and UV. The membranes shall be protected from all sources of heat and extreme temperatures. 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

Rooftite S20 contains a tacky Bitumen compound which can stick to human skin during application. such stains can be removed by using a cloth dipped in a suitable cleaner

### DISPOSAL

Rooftite S20 is non-hazardous, non-flammable and therefore can be disposed into any regular disposal area. However, it should be disposed only after wrapping with paper, plastic or cloth as the modified Bitumen has a tendency to soften under heat and pressure which would make further handling very tough. All disposal practices must be in compliance with all local law and regulations.

### SUPPLY

	Packing	Unit
Bitustick XL	10m x 1m x 1.6mm	Roll
Bitustick R300	10m x 1m x 2.7mm	Roll
Bitutape TS	10m x 100mm x 1.5mm	Roll
Polyprime SB	20L	Pail
Polyseal PS GG	2.5L	Pail

#### **TECHNICAL SPECIFICATION - SYSTEM** PROPERTIES VALUES **TEST STANDARDS** Thickness, mm 4.3 EN 1849-1 Tensile strength, (L/T), N/5cm >900/750 ASTM D 5147 Peel adhesion to freshly poured concrete, N/mm >2.5 ASTM D 1000 Tear Resistance, (L/T), N >650/600 ASTM D 5147 >1300 Puncture resistance, N ASTM E 154 Resistance to hydrostatic No leakage pressure, 5 bar EN 12390-8 Low temperature flexibility @ -15 °C No cracks ASTM D 1970 Chemical resistance Excellent esistance to chlorides, sulphates, alkalis and ASTM D 543 acids

# **TECHNICAL SPECIFICATION - COMPONENTS**

PROPERTIES	VALUES		TEST STANDARDS
	Bitustick XL	Bitustick R300	-
Thickness, mm	1.6	2.7	DIN EN 1849-1
Softening Point (R&B), °C	>105	>105	ASTM D 36
Tensile Strength (film)	42 N/mm <sup>2</sup>	900/650 N/5cm	ASTM D 882 DIN EN 12311-1
Elongation at Break %	210 (film)	50/60	ASTM D 882 DIN EN 12311-1
Tear Resistance, N/mm	310 (film)	600/450 N	ASTM D 1004 ASTM D 5147
Hydrostatic pressure at @5bar	Pass	Pass	ASTM D 5835 BS EN 12390
Puncture resistance, [N]	>220	>1000	ASTM E 154

All values given are subject to 5-20% 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  $\pm 23^{\circ}$ 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.

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