

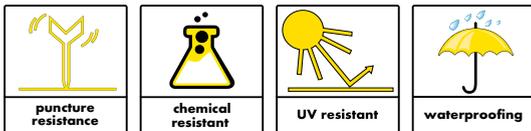
Bitustick R 270

Polyester fleece surfaced protection membrane

Polymer modified bituminous self adhesive waterproofing and protection membrane

CHARACTERISTICS

- ▶ Protection membrane for bitumen based membranes, tapes and coatings on pipes and complicated profiles.
- ▶ High puncture and tear resistance
- ▶ Enhanced UV resistance
- ▶ Good chemical resistance
- ▶ Easy to apply. Cold applied
- ▶ Completely non bio-degradable



DESCRIPTION

Bitustick R 270 is a SBS modified bituminous, self adhesive sheet membrane laminated onto a tough polyester fleece to provide a highly superior waterproofing and protection membrane for underground concrete structures. A selvedge is provided on one side of the membrane to give a bitumen to bitumen contact on the overlaps, thus restricting any water penetration through the laps. Bitustick R 270 conforms to the requirements of BS 8102.

FIELDS OF APPLICATION

Bitustick R 270 is designed to provide protection to bitumen based membranes, tapes and coatings applied on vertical surfaces, pipes and other complicated profiles from puncture and exposure to weather. Due to its flexibility and the presence of a tough and durable top surface, this membrane can be used in areas where anti-root properties are required. Bitustick R 270 has a layer of SBS modified bitumen, which helps it to adhere to any surface and at the same time provide an efficient waterproofing and damp proofing layer for underground structures. Bitustick R 270 can also be used as an anti-root membrane and can be used for waterproofing of roof gardens.

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 membrane is as follows:



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Waterproofing System:

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 m²/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 particles 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 R 270 membrane and aligning the side laps. Re-roll the roll halfway and stand on the unrolled portion to prevent shifting.

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 the base. A 50mm selvedge is provided on one side of the membrane to give a bitumen-to-bitumen contact on the overlaps. However, the end overlaps will be butt jointed as the bitumen will not adhere to the polyester fleece. To provide a water tight seal and restrict any water penetration through these butt joints, a 200mm strip of a double sided bitumenadhesive membrane (Watertite TS 15)* shall be laid on that area prior to the application of the membrane. Once the bitumen strip is put in place, remove the silicone release film from the top and expose the self adhesive bitumen. The Bitustick R 270 membrane shall then be applied on top of the exposed Watertite TS 15 overlapping by 100mm. The subsequent membrane will then be overlapped with the other 100mm of Watertite TS 15.

Protection System:

In applications involving Bitustick R 270 being used as a protection layer on bitumen based membranes, tapes and coatings, the base surface shall be cleaned thoroughly of all settled dust, solvents, water and other contaminants.

Application

Unroll only the required length and cut the piece to the desired shape. Place the membrane piece on the area to be covered and check whether they match with the profile of the marked substrate. Peel off the release film and carefully place the membrane with 50 mm overlap on the selvedges alone. The membrane shall be butt jointed at the ends using Watertite TS 15 as the under layment to provide a watertight seal.

HANDLING

Bitustick R 270 membranes are supplied in rolls of 1m x 10m. The rolls 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 R 270 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 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 shelf life.

HEALTH & SAFETY

Bitustick R 270 contains a tacky bitumen compound, which while applied can stick to human skin. Such stains of bitumen can be removed by using a cloth dipped in a suitable cleaner.

TECHNICAL SPECIFICATION

PROPERTIES	VALUES	TEST STANDARDS
Thickness, [mm]	2.1	DIN EN 1849-1
Top surfacing [g/m ²], (Polyester)	270	
Mass per unit area, [kg/m ²]	1.9	DIN EN 1849-1
Softening point [°C],	>105	ASTM D 36
Tensile strength (L/T), [N/5 cm]	850/600	DIN EN 12311-1
Elongation (L/T), [%]	30/40	DIN EN 12311-1
Puncture resistance, [N]	> 900	ASTM E 154
Tear resistance (L/T), [N]	450/400	ASTM D 5147
Adhesion strength, [N/mm] primed surface	1.8	ASTM D 1000
Hydrostatic pressure @ 5 bar (50m)	no leakage	BS EN 12390 (Part 8)
Chemical resistance [pH]	2.5 -11.5	ASTM D 543
UV resistance	excellent	ASTM G 154
VOC [g/l]	<50	ASTM D3960/D2369

All values given are subject to 5-10% variation

SUPPLY

Bitustick R 270	1m x 10m, wt19kg#
Polyprime SB	20L pail & 200L drum
Bitutape TS	200mm x10m, wt 2.4kg#
Wooden press	140mm x 210mm
Iron roller (recommended specification)	head dia 38mm, wt 1.5kg# width 100mm length 350mm

*Refer to website for TDS

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.

