

PROTEC VIADUCTS P 3 - SBS

Pre-fabricated waterproofing membrane made of distilled bitumen and elastomeric polymers (SBS), reinforced with a Spunbond woven non woven polyester, with very high mechanical characteristics and resistance to both static and dynamic puncture.

The particular structure of this product makes it suitable for the waterproofing of complex works where the stress on the waterproofing system require the use of products with proven reliability. Due to the characteristics, this particular version of the VIADUCT membrane series is used with success in road infrastructures, both as a waterproofing, stabilization and separation layer. The membrane is generally laid over the road sub-stratus and prevents water infiltration which may weaken the overall structure. Furthermore the material can also be used over road surfaces which have cracking or damaged areas prior to re-surfacing, further preventing the reappearance of the same.

PROTEC VIADUCTS – SBS, is also available in a self adhesive version.

Technical properties	Test Method	Measure units	Requirement
Finish: Upper face:			sand
Length	SI 1430/3	m	10
Width	SI 1430/3	m	1
Reinforcement			polyester
Polyester weight		g/m ²	250
Bitumen Mass : Softening point*	ASTM D36	°C	120 minimum
Bitumen Mass : Standard penetration*	ASTM D 5	1/10 mm	25- 45
Thickness	SI 1430/3	mm	2.5 - 4
Tensile strength Longitudinal / Transversal	SI 1430/3	N/5 cm	700 / 700
Ultimate elongation Longitudinal / Transversal		%	35 / 35
Tear strength	SI 1430/3	N	100 / 100 minimum
Cold flexibility	SI 1430/3	°C	-20**
Resistance to static puncture by a weight of 25 kg	SI 1430/3	Kg	Water shall not penetrate
Resistance to high temperature	SI 1430/3	°C	+ 110
Change in tear strength and elongation after exposure for 1000 hours of cycling in a UV moisture chamber	SI 1430/3 10 maximum	In %	10 maximum
Root Resistance	EN 13948		Yes
Water tightness	SI 1430/3	bar	≥ 2



Test methods and tolerances on nominal value are according IS 1430 part 3 (1995)

**Tests on compound are solely conducted from impregnation chamber on production line*

***Minimum norm requirement: -10°C complies.*

Methods of application

For the application of the membrane the use of heat is generally used by means of a gas torch.

- Coordinate the operations in a way to not cause damage to the construction elements and underground structure. Avoid to leave the structure for the night or for periods of prolonged work interruptions without having been properly sealed.

Application

- To have all overlaps with the slope, position the membrane always starting from the lowest point.
- Position the membrane sheets staggered, avoiding to create any overlaps against the slope and the drains.
- Cut the corners of membrane sheet which will be laid under the next sheet at a 45° angle (10 x 10 cm.)
- The joints, both side and head, must be respectively overlapped by 10 & 15 cm.
- The bituminous membrane will be applied with a propane gas torch to the substrate. It is necessary to heat the entire surface, except for the side & head laps, making sure that the compound forms a liquid mass in front of the roll to assure that it saturates any superficial porosity.
- The rolls are to be stored in an upright position, preferably indoors in a dry and ventilated area, away from heat sources and avoiding to stack them one on top of the other to avoid possible deformations which may compromise the application. When storing with original packaging, these should not be stacked more than two plts high using appropriate wooden spacers.
- The rolls shall be kept in a warm or heated storage area during application, should the workability of the material deteriorate or become stiff and difficult to install during application, these should be returned to the heated storage area and substituted with new rolls. The rolls that are temporarily stored on the roof before application, shall be kept elevated by being left on their own pallets and shall be covered and protected from the weather
- The application surface must be smooth dry & clean.
- The application surface must be previously treated with a suitable bituminous primer (PRIMERTEC or IDROPRIMER), to eliminate dust and enhance the adhesion of the membrane.
- The application must be done at temperature higher than + 5°C.
- The application must be interrupted in adverse weather conditions (high humidity, rain, etc.)
- The pallets on which the rolls are packaged are intended for normal warehouse use.
- The materials on stock should be rotated following a first in first out rotation.