

# TURBAL SBS

## SBS MODIFIED WATER PROOFING MEMBRANE

### DESCRIPTION

TURBAL SBS is a water proofing membrane, produced in highly controlled process conditions, out of a robust reinforcement of spun bonded polyester mat and straight run bitumen, modified with selected S.B.S (Styrene Butadiene Styrene) polymers and stabilizers.

### USES

TURBAL SBS is a general-purpose waterproofing membrane and is excellent in a single layer or a multi-layer roofing system. When surfaced with granular slate, TURBAL SBS is ideal as an exposed top layer. TURBAL SBS is also suitable for underground waterproofing. Suitable for moderately cold or hot climates.

### ADVANTAGES

- Good cold weather resistance
- High tensile strength and tear resistance
- Good elongation and recovery
- Very good puncture resistance
- Resistant to substrate movement

### STANDARDS/ APPLICABLE TEST METHODS

Turbal SBS complies with the requirements and tolerance levels of:

- 1.The American Society for Testing and Materials ASTM D 6164 Type I.
- 2.European Union of Technical Agreement (UEAtc) M OAT 31-1984 and MOAT 30-1984.

### GENERAL DATA

Roll length: 10 meter  
Roll width: 1 meter  
Thickness: 3, 4 & 5mm

**Reinforcement:** Spunbonded polyester mat.

- **Finish:** Black smooth finish with polyethylene surfaces for covered applications.
- Granule surfacing for exposed applications

### DIRECTIONS FOR USE

TURBAL SBS is installed by torch welding method, either loose laid or fully bonded to the substrate.

### Surface cleaning:

The surface to be waterproofed must be thoroughly cleaned and should be made free from dust, debris, oil, protruding elements etc.

### Priming:

Coat the prepared surface with a suitable primer. (recommended Ahlia's CAPSOLVENT or PRIME GUARD).

### Tools for application:

- Gas torch
- Trowel with rounded tip
- Marking aids
- Knife / Cutter
- Measuring tape
- Safety accessories

### Fixing instruction:

Roughly calculate the area of the surface that the TURBAL SBS has to be installed / fixed. Arrange the material nearby as per the calculated area. The installation should be started from one edge / end of the surface that the membrane to be installed. Unroll one piece of TURBAL SBS over the surface with minimum 10 cm side lap alignment, so as to get a clear profile. Fixing should be either loose laid or fully bonded as explained below.

### Loose Laid:

Re-roll the unrolled membrane approximately to half its total length or to a length suitable for application without changing the orientation. Melt the sides of the membrane, minimum 15 cm from the edges, by using the gas torch without damaging the polyester reinforcement. Fix the melt portion firmly to the pre-primed surface before solidification. Position the subsequent rolls, so as to give a length edge overlapping of minimum 10 cm. Continue the procedure until the desired area is fully fixed with TURBAL SBS.

Each finished overlap should be passed by the torch along the joint and the melted compound should be spread with a trowel or roller to ensure a smooth tight seal.

# TURBAL SBS

## SBS MODIFIED WATER PROOFING MEMBRANE

### Fully bonded:

Re-roll the membrane fully without changing the desired orientation. Melt the lower surface of the membrane with a gas torch by moving the flame across the entire width of the roll. Fix the melt portion firmly to the pre-primed surface before solidification. Positioning of subsequent rolls should be done in the same manner as of loose laid membrane. As the surface of the roll is heated, it will develop a sheen. The generation of smoke is an indication that the material is being overheated.

### STORAGE

The rolls of TURBAL SBS, whether loose or packed on pallets, must always be kept upright on a smooth flat support. A second layer may be stored on top of the first, provided that the first layer of rolls is suitably covered with a rigid covering to distribute the load. Material should be stored under shade.

### SHELF LIFE:

Minimum 24 months under recommended storage Conditions

### HEALTH AND SAFETY

Handling of TURBAL SBS requires no special health and safety precautions

### TYPICAL PHYSICAL PROPERTIES

The details given in the Technical Data is based on the average values of the tests conducted on several samples

Description	Unit	Average of test result	Test Method
Thickness	mm	4	
Softening point of coating compound	°C	110	ASTM D-36
Penetration @25°C dmm		35	ASTM D 5
Low temperature flexibility	°C	up to -10	ASTM D 5147
Water absorption	%	< 0.40	ASTM D-5147
Dimensional Stability	%		
Longitudinal		+ 0.5	ASTM D 5147
Transverse		+ 0.5	
Heat resistance	90 ± 2°C; 2 hrs	No deformation	ASTM D 5147
Water vapor transmission	gram/m <sup>2</sup> /24 hrs	< 0.35	ASTM E96, 25°C, 90% R. H
Tensile strength; N/5 cm @23 +2°C	Longitudinal Transverse	N/5 cm 1000 850	ASTM D 5147
Elongation % @ 23 +2°C	Longitudinal Transverse	% 45 50	ASTM D 5147
Tear resistance	Longitudinal Transverse	N 600 400	ASTM D 5147
Resistance to aging & U.V. (Weather-0 -me te r 2000, hrs)		No change greater than 20% of the original values	ASTM G53 UNI 8202
Puncture resistance, N		800	ASTM E 154

- Above figures may have a variance of  $\pm 10\%$

#### TECHNICAL SERVICE:

Our Technical Service Department is available at any time to advise you in the correct use of this product or any other Ahlia products.

**Note:** The information presented herein is based on the best of our knowledge and expertise for which every effort is made to ensure its reliability. Although all the products are subjected to rigid quality tests and are guaranteed against defective materials and manufacture, no specific guarantee can be extended because results depend not only on quality but also on other factors beyond our control.

As all Ahlia Technical Data Sheets are updated on a regular basis, it is the user responsibility to collect most recent issue.