

PRODUCT CODE: 919006

# WATERPROOFING – SB15

## SBS Modified Cross Laminated HDPE Liner Membrane – 1.5mm Thick

Birla Opus Prime SB15 is a self-adhesive cold applied waterproofing membrane with SBS (styrene-butadiene-styrene) polymer modification, utilizing a tropical-grade polymer-modified bitumen. This bitumen compound is laminated onto a non-perforated, impervious, cross-laminated HDPE Liner. Birla Opus Prime SB15 meets the standards outlined in BS- 8102.

### PRODUCT FEATURES

<b>Outstanding Tensile Strength</b>	<b>Excellent Adhesion to both Vertical and Horizontal Surfaces</b>	<b>High Lap Adhesion Strength</b>	<b>High Cold Flexibility</b>	<b>Resistant to Chlorides, Sulphates, Alkalis and Acids</b>
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### PRODUCT DETAILS

#### CHEMICAL BASE

SBS Membrane with self-adhesive HDPE Liner

#### REINFORCEMENT

Cross Laminated HDPE Liner

#### APPEARANCE / COLOUR

**Black**

#### PACKAGING

Roll Length	10m
Roll Width	1m

#### SHELF LIFE

**12 months\***

\*When stored in a vertical position within a covered area. Avoid exposure to direct sunlight, UV radiation, and other heat sources.

### AREAS OF APPLICATION

Birla Opus Prime SB15 is designed to protect concrete from water and dampness.

- Vertical and Horizontal Applications for Tanking Below Ground Structures
- Tunnels and other Underground Constructions
- Retaining Walls
- Subways

### TECHNICAL INFORMATION

Properties	Standard Values	Standard Test Method
Tensile Strength, N/mm <sup>2</sup> (Longitudinal)	4	ASTM D 5147
Tensile Strength, N/mm <sup>2</sup> (Transverse)	4	ASTM D 5147
Elongation, % (Longitudinal)	300	ASTM D 5147
Elongation, % (Transverse)	250	ASTM D 5147
Puncture resistance, N	>250	ASTM E-154
Adhesion to primed concrete, N/inch	50	ASTM D 903 : 1998
Lap Adhesion Strength, N/m	2100	ASTM D 1876
Tear resistance, N/mm (Longitudinal)	180	ASTM D 4073
Tear resistance, N/mm (Transverse)	180	ASTM D 4073
Dynamic Crack Bridging Ability	Pass	ASTM C 1305
Resistance to Hydrostatic Head @ 5 Bar	No leakage	ASTM D 5385
Cold Flexibility	No Crack seen @ -15 °C	ASTM D 5147

## APPLICATION INSTRUCTIONS

### Substrate Preparation:

1. Thoroughly clean the surface to remove all contaminants such as dust, traces of curing compound, oil, and grease.
2. Remove any surface imperfections, protrusions, structurally unsound, and friable concrete and repair with a suitable concrete repair mortar.

### Priming:

1. Apply Birla Opus Prime APS1 Solvent Based Bitumen Primer using a brush, roller or spray at a rate of 4-6 sq. m/L per coat on a clean, smooth, and dry surface.
2. Allow the primer to dry (about 6-8hrs) before applying the membrane. The low viscosity of the primer facilitates penetration into concrete pores, promoting adhesion between the membrane and the concrete surface. It also acts as a binder for dust accumulated on the concrete surface even after cleaning.

### Alignment :

1. Begin installing the membrane piles from low points or drains to ensure water flows over or parallel to the piles, but never against them.
2. Install all overlaps at membrane seams, ensuring "up" slope laps over "down" slope laps.

### Application :

1. Peel off the release film from the self-adhesive side of Birla Opus Prime SBI5 SBS Fully Bonded Membrane.
2. Unroll the membrane and press it firmly onto the surface.
3. Use a wooden press to remove entrapped air from the center to the edges, smoothing the membrane.
4. Further enhance adhesion by using an iron roller to roll over the applied membrane.
5. Maintain side overlaps of minimum 75 mm and end overlaps of at least 100 mm.

### Protection :

1. Immediately protect the membrane after application from damage caused by ongoing site activities or sharp aggregates during backfilling.
2. Use a tough, weather-resistant, warp-proof, and rot-proof protection board like 6-8 mm dimple board or 8mm polyethylene board. Alternatively, on horizontal areas, the membrane can be protected by laying a 50mm cement sand screed.

## APPLICATION INFORMATION

Ambient air temperature	+4 °C min. / +40 °C max
Substrate temperature	+4 °C min. / +40 °C max
Note: All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to site conditions.	

## SAFETY & PRECAUTIONS

1. Do not apply at extreme humid, wet and high temperature.
2. Prevent any actions that could cause punctures in the membrane.
3. Avoid coinciding joints: Lay the membranes parallel to each other in a staggered manner to prevent coinciding joints.
4. Proper care should be taken during the membrane application to avoid sagging.
5. Adhere closely to installation protocols outlined in method statements, application guides and operational directives, ensuring adaptation to always prevailing site conditions.
6. Kindly refer to the MSDS, which gives detailed information on safety measures while handling.