

# APCON SHIELD™



## Waterproofing Membrane - SBS

An ISO 9001:2015 Certified Company

### DESCRIPTION

*Apcon Shield - SBS is a bituminous waterproofing membrane manufactured by blending a mixture of bitumen and SBS (Styrene Butadiene Styrene) polymers to obtain excellent waterproofing and low temperature flexibility properties. The polymerized bitumen is coated onto a dimensionally stable reinforcement core of non-woven spun bond polyester rot-proof fabric. The membrane has excellent tensile & tear strengths and is highly resistant to puncture. It is flexible and is suitable for applications where high structural movement is expected.*

### CHARACTERISTICS

- » *Excellent resistance to positive water, vapour pressure & has good dimensional stability.*
- » *Excellent flexibility. Can accommodate high structural movements, high puncture and fatigue resistance*
- » *Excellent tensile and tear strengths*
- » *High resistance against water borne chemicals*
- » *Exhibits good low temperature flexibility with no physical strain.*

### FIELDS OF APPLICATION

*Apcon Shield - SBS membrane is typically used for waterproofing / damp proofing of the following areas.*

- » *Concrete foundations & footings*
- » *Basements*
- » *Pile heads*
- » *Swimming pools & water retaining structures*
- » *Tunnels*
- » *Wet areas (Kitchens & bathrooms)*

### APPLICATION

*The application temperature should be between 4°C to 45°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 concrete must be removed and repaired with a suitable Apex Concrete repair mortar.*

### PRIMING

*Apply Apcon Primer @ 4-6 m<sup>2</sup>/ltr. 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.*

### APPLICA TION

*Apcon Shield - SBS membranes are fixed by torch welding. SBS membranes are generally soft, and therefore care should be taken when applying heat to the underside or when making a lap joint, which should be heated from the top to produce a thin bead of molten bitumen at the seam, which should then be smoothed out with the trowel, ensuring a properly welded joint.*

### CORNERS AND TERMINATION

*Use strips at all internal corners and external corners before applying the membrane. Apply a 600mm wide reinforcing strip of **Apcon Shield - SBS** over the corners followed by the full membrane. Top edges of the membrane should be terminated in a chase on vertical surfaces, followed by a suitable bituminous mastic sealant.*

### STORAGE

*Rolls must be kept up right at all times, in a covered well ventilated storage area, away from sources of direct heat. It has a shelf life of 12 months from the date of production, if stored in a cool, dry store in original unopened packing.*

### HEALTH & SAFETY

*As with all bitumen products, caution should always be exercised. Protective clothing such as gloves and goggles should be used.*

## ***TECHNICAL DATA***

<b><i>Properties</i></b>	<b><i>Values</i></b>	<b><i>Test Standards</i></b>
<i>Product</i>	3000 - 4000	DIN EN 1849-1
<i>Thickness in mm</i>	3.0 - 3.3    4.0 - 4.3	DIN EN 1849-1
<i>Reinforcement (polyester) g/m<sup>2</sup></i>	180	EN 29073-1
<i>Coating asphalt softening point (R&amp;B) (°C)</i>	> 110	ASTM D 36
<i>Penetration @ 25°C, (0.1 mm)</i>	20-35	ASTM D 5
<i>Tensile Strength (L/T), [N/5 cm]</i>	800/600	DIN EN 12311-1
<i>Elongation at Break (L/T), [%]</i>	40/50	DIN EN 12311-1
<i>Shear Resistance at joints (L/T), [N/5 cm]</i>	>800/600	DIN EN 12311-1
<i>Tear Resistance (L/T), [N]</i>	180/200	DIN EN 12310-1
	>500/400	ASTM D 5147
<i>Puncture Resistance, [N]</i>	>550	ASTM D 154
<i>Water Absorption [%]</i>	<0.2	ASTM D 5147
<i>Heat Resistance @ 100°C</i>	No Flow	DIN EN 52123
<i>Low temperature flexibility</i>	-5°C to -10°C	ASTM D 5147
<i>Resistance to Ageing</i>	No Deterioration	ASTM D 154
<i>Dimensional Stability, [%]</i>	<1%	ASTM D 6164

*All values given are subject to 3 to 5% tolerance.*

This data is subject to change / modify time to time due to continuous improvement of the products. Test results are given as per the tests conducted in the lab. The test results may vary due to climatic conditions.

## **TROPICAL COATINGS INTERNATIONAL PVT. LTD.**

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**Total Solutions For Waterproofing With Bituminous Membranes**