# TECHNICAL DATA SHEET

Version: 2023



#### **SBS Modified Torch on Membrane**

#### Description

**HEATSEAL** is a superior grade bituminous waterproofing membrane manufactured by blending a mixture of bitumen and SBS (Styrene Butadiene Styrene) polymers are reinforced with non-woven polyester mat having thermo fusible polyethylene film on both sides. They have phenomenal waterproofing qualities alongside exquisite mechanical properties such as tensile strength, tear strength and puncture resistance. They provide good UV resistance and are quite durable.

Positive barrier to water and dampness.
Good dimensional stability under tension.
High Puncture and fatigue resistance.
Good flexibility. Can accommodate structural movements.
Resistance to water borne chemicals.
High tensile and tear strength.
Excellent adhesion and seam integrity.

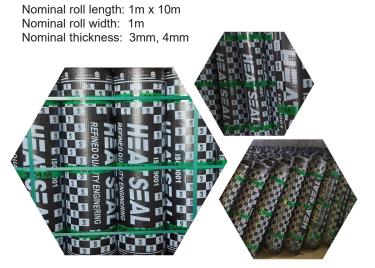
#### **Recommended Applications**

**HEATSEAL** SBS membrane designed for use in single or multi-layer waterproofing systems. This membrane is typically used in areas such as Concrete foundations & Footings, Basements, Pileheads, Swimming pools and water retaining exposed structures, tunnels and wet areas applications like (kichens and bathrooms).

- Inverted Roofs and parapets
- Bridges & tunnels
- Concrete foundations, Basements and isolated footings
- Sunken slabs
- Terraces, balconies and patios

**HEATSEAL** membranes comply with the performance requirements and achieve tolerance level of UEAtc (European Union Technical Agreement) and ASTM (American Society for Testing and Materials).

# Supply



### **Application**

The surface to be waterproofed should be clean, dry, firm without undulation. Any form of surface imperfection is undesirable.

Apply a coat of **Prime SBD41** solvent based primer on the prepared surface. Allow the primer to dry before membrane application.

Use propane/butane gas for binding the membranes to the surface. Start laying from the lowest point of the roof form an overlap so that the water can be shed. Excessive heating may damage the reinforcement. Stagger the overlaps of the adjacent rolls. The side laps should at least be 0.5cm and end laps should at least be min 0.10cm.

Carefully torch and fix the strips of **HEATSEAL** to prepare the details such as corners, edges and joints in advance. Use a hand towel to dress the overlap to ensure perfect bonding without any opening.

### Coverage (subject to surface condition:

**HEATSEAL**: Flat Areas: 1.1m<sup>2</sup>/m<sup>2</sup> (Approx.) per layer with 5cm Overlaps and 10 cm end laps. Average wastages: 2-3%.

**Prime SBD41:** Smooth Surface: 0.3-0.4 Ltr/m² (Approx.) will give a dry film thickness of 100 microns.

# Storage & Shelf Life

The rolls must be stored vertically in a covered area. Do not expose to direct sunlight, UV and other sources of heat. Use the membrane within shelf life from the date of production for the best use.

## **Health & Safety**

Due to the presence of sticky compounds the membranes can stick to human skin during the process of torching. Apply plenty of cold water if it is in hot condition. Use a soft cloth dipped in a suitable cleaner to remove it later. Seek immediate medical help in case of a deeper burn.

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Properties	Typical Values				Test Standard
Reinforcement Polyester g/m²	160 g/m²	180 g/m²	200 g/m²	250 g/m²	
Coating asphalt	SBS rubber modified asphalt	SBS rubber modified asphalt	SBS rubber modified asphalt	SBS rubber Modified asphalt	
Softening point °C	150±5	150±5	150±5	150±5	ASTM D-36
Penetration @25°C, (dmm)	20±5	20±5	20±5	20±5	ASTM D-5
Low temperature cold flexibility@ 0°C	-3 to -10	-3 to -10	-3 to -10	-3 to -10	ASTM D-5147
Heat resistance @ 135°C	No flow	No flow	No flow	No flow	ASTM D-5147
Tensile strength ( L/T) (N/5cmp)	760/560	820/650	1000/800	1200/1100	ASTM D-5147
Elongation at Break ( L/T) ( % )	>35/50	>40/50	>50/55	>50/55	ASTM D-5147
Tear resistance ( L/T) (N)	>300/200	>350/250	>400/350	>500/450	ASTM D-5147 / D4073
Puncture resistance (N)	>475	>475	>500	>500	ASTM E-154
Resistance to Static/Dynamic	Static- L <sub>4</sub> /Dynamic - I <sub>4</sub>	Static- L₄ /Dynamic - I₄	Static- L <sub>4</sub> /Dynamic - l <sub>4</sub>	Static- L <sub>4</sub> /Dynamic - l <sub>4</sub>	UEAtc 5.1.9/UEAtc 5.1.10
Lap Joint strength (N/5cm)	Same as membrane	Same as membrane	Same as membrane	Same as membrane	EN 12317
Water absorption %wt. @ 23°C, 24 hrs.	< 1	< 1	< 1	<1	ASTM D-5147
Impermeability to water	Pass	Pass	Pass	Pass	EN 1928
Dimensional stability (%)	< 1	< 1	< 1	< 1	ASTM D6222

All values given are subject to 8-15% tolerance COVERAGE

Coverage differs depending on the surface condition: **HEATSEAL** 

Flat : 1.1m<sup>2</sup>/m<sup>2</sup> (Approx.) per layer with 5cm Overlaps and 10 cm end laps. Average wastages:

Areas 2-3%.

PRIMER: Smooth Surface: 0.3-0.4 Ltr/m<sup>2</sup> (Approx.) will give a dry film thickness of 100 microns.

### **STANDARDS**

**Heatseal** membranes are designed in accordance with the performance requirements and tolerance level of UEAtc (European Union Technical Agreement) and ASTM (American Society for Testing and Materials) and strictly comply to them.

#### STORAGE & SHELF LIFE

The rolls must be stored vertically in a covered area. Exposure to direct sunlight, UV and other sources of heat should be avoided. The membrane is best used within 12 months from the date of production.







