# Aquaproof SBS Plus

# TECHNICAL DATA SHEET

# **CROSS LAMINATED FILM SURFACED SELF-ADHESIVE SBS MEMBRANE**

## Description

Self-Adhesive membrane Aquaproof SBS Plus is a self-adhesive bituminous waterproofing sheet with non-protected surface. Composed of self-adhesive SBS polymer bitumen with an upper surface finish of a high-density polyethylene film (HDPE) and a lower surface finish of siliconized release film. It conforms to the requirement of BS 8102.

#### Uses

Aquaproof SBS Plus is use for the waterproofing and damp proofing of underground walls, basement raft, tunnels, substructures and inverted roofs under tiles.

## **Advantages**

- Watertight resistance to hydrostatic head of water.
- Crack Bridging properties due to high compound elongation - allows membrane to accommodate movements in the building structure.
- Excellent mechanical properties in all directions (tear strength and tensile strength, puncture and impact resistance) due to the high density polyethylene film (HDPE) finish.
- Elastic behaviour (good memory and recovery).
- Elastomeric and self-healing, minor perforation will automatically heal.
- Cold applied, easy and fast application, no torch is necessary.
- Total flexibility of the material to apply at complex geometries & perfect accommodation to the support.
- Excellent adhesion to the primed support.
- Controlled thickness during factory production ensuring constant error-free site application.
- High durability of the waterproofing due to the SBS elastomer compound of the membrane.
- High chemical, oxidation & microbiological resistance.

# Technical Data

Thickness 1.5 mm & 2mm ± 0.10 mm  Softening Point of Compound  Tensile Strength (Membrane) ≥4 N/mm2 ASTM D5147 / ASTM D412  Transversal  Tensile Strength (Film) Longitudinal Transversal ≥48 N/mm2  Elongation at Break, (Membrane) Longitudinal Transversal ≥ 300 % ASTM D638  Elongation at Break (Film) Longitudinal Transversal ≥ 300 % ASTM D412  Elongation at Break (Film) Longitudinal Transversal ≥ 180 % ASTM D638  Puncture Resistance (Membrane) Longitudinal ≥220 N ASTM D638  Puncture Resistance (Membrane) Longitudinal Transversal ≥ 180 % ASTM D4073  Tear Resistance (Film) Longitudinal ≥210 N ASTM D4073  Tear Resistance (Film) Longitudinal ≥340 N/mm ASTM D1004  Transversal ≥ 15 degree c ASTM D1970	Properties
Softening Point of Compound  Tensile Strength (Membrane) Longitudinal Transversal  Tensile Strength (Film) Longitudinal Transversal  Elongation at Break, (Membrane) Longitudinal Transversal  Elongation at Break (Film) Longitudinal Elongitudinal Transversal  Elongation Elo	
of Compound  Tensile Strength (Membrane) Longitudinal Transversal  Tensile Strength (Film) Longitudinal Transversal  Elongation at Break, (Membrane) Longitudinal Transversal  Elongation at Break (Film) Longitudinal Elongation at Break (Film) ASTM D4073 ASTM D4074 ASTM D4073 ASTM D4074 AS	
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Strength (Membrane) Longitudinal Transversal  Tensile Strength (Film) Longitudinal Transversal  Elongation at Break, (Membrane) Longitudinal Transversal  Elongation at Break (Film) Longitudinal Transversal  ≥ 230 % ASTM D5147 / ASTM D412  ASTM D5147 / ASTM D412  Elongation at Break (Film) Longitudinal Transversal  ≥ 180 % ASTM D638  Puncture Resistance (Membrane) Longitudinal Transversal  ≥ 210 N ASTM D4073  Tear Resistance (Film) Longitudinal Transversal ≥ 340 N/mm ASTM D1004  Transversal ≥ 310 N/mm  Flexibility at ≤ -15 degree c ASTM D1970	of Compound
Membrane   ≥4 N/mm2   ASTM D5147 / ASTM D412     Transversal   Tensile     Strength (Film)   Longitudinal   Transversal   ≥42 N/mm2   ASTM D882 / ASTM D638     Elongation at Break, (Membrane)   Longitudinal   Transversal   ≥300 %   ASTM D412     Elongation at Break (Film)   Longitudinal   ≥230 %   ASTM D412     Elongation at Break (Film)   Longitudinal   ≥220 N   ASTM D638     Puncture   ≥220 N   ASTM D638     Puncture   ≥220 N   ASTM D638     Transversal   ≥180 %   ASTM D4073     Transversal   ≥180 N   ASTM D4073     Tear Resistance (Film)   Longitudinal   ≥340 N/mm   ASTM D1004     Transversal   ≥310 N/mm   ASTM D1004     Transversal   ≥310 N/mm   Flexibility at   ≤-15 degree c   ASTM D1970     ASTM D407   ASTM D1004   ASTM D1004     Transversal   ≥340 N/mm   ASTM D1004     Transversal   ≥310 N/mm   ASTM D1970     ASTM D1970   ASTM D1970     ASTM D407   ASTM D1970     ASTM D1004   ASTM D1004     ASTM D1004   ASTM D1970     ASTM D1004   ASTM D1004     ASTM D1006   ASTM D1006     ASTM D1007   ASTM D1006     ASTM D1007   ASTM D1007     ASTM D1007   ASTM D1007     ASTM D1007   ASTM D1007     ASTM D1007   ASTM D1007     ASTM D1008   ASTM D1008     ASTM D1008	Tensile
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Transversal ≥ 180 % ASTM D638  Puncture ≥220 N ASTM E154  Resistance  Tear Resistance (Membrane) Longitudinal ≥210 N ASTM D4073  Transversal ≥180 N  Tear Resistance (Film) Longitudinal ≥340 N/mm ASTM D1004  Transversal ≥310 N/mm  Flexibility at ≤ -15 degree c ASTM D1970	Break (Film)
Puncture Resistance Tear Resistance (Membrane) Longitudinal Transversal  Tear Resistance (Film) Longitudinal Transversal ≥340 N/mm  Flexibility at ≤ -15 degree c  ASTM D1074  ASTM D1004  ASTM D1004  ASTM D1004  ASTM D1004  ASTM D1004	Longitudinal
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$ \begin{array}{c cccc} Longitudinal & \geq 210 \text{ N} \\ \hline Transversal & \geq 180 \text{ N} \\ \hline Tear Resistance} & & & \\ \hline (Film) & & & \\ Longitudinal & \geq 340 \text{ N/mm} & \text{ASTM D1004} \\ \hline Transversal & \geq 310 \text{ N/mm} \\ \hline Flexibility at & \leq -15 \text{ degree c} & \text{ASTM D1970} \\ \hline \end{array} $	Tear Resistance
Transversal ≥180 N  Tear Resistance (Film) Longitudinal ≥340 N/mm ASTM D1004 Transversal ≥310 N/mm  Flexibility at ≤ -15 degree c ASTM D1970	(Membrane)
Tear Resistance (Film) Longitudinal ≥340 N/mm ASTM D1004 Transversal ≥310 N/mm Flexibility at ≤ -15 degree c ASTM D1970	Longitudinal
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Longitudinal Transversal $\geq 340 \text{ N/mm}$ ASTM D1004Sign 1 $\geq 310 \text{ N/mm}$ Flexibility at $\leq -15 \text{ degree c}$ ASTM D1970	Tear Resistance
Transversal ≥310 N/mm  Flexibility at ≤ -15 degree c ASTM D1970	
Flexibility at ≤ -15 degree c ASTM D1970	
	Transversal
Low	Flexibility at
	Low
Temperature	
Bond Strength ≥2 N/mm ASTM D1000	
(to Primed	
Concrete)	
Bond Strength ≥2.10 N/mm ASTM D1000	
(to Self) - Lap	
Adhesion	
Water Vapor ≤0.30 g/m2 ASTM E96	
Transmission /day	Transmission
Hydrostatic ≥6 bar (No BS EN 12390	Hydrostatic
Pressure Leakage) (Part 8)	Pressure
Resistance	Resistance
Crack Bridging ≥1.5 mm ASTM C836	
Ability	Ability



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# **Application Procedure**

#### **SURFACE PREPARATION:**

The surface receiving waterproofing treatment shall be dry with moisture content <4% and thoroughly cleaned to remove dirt, dust, grease, oil, foreign substances etc., using appropriate tools & methods. It is recommended to prime the surface using a bituminous primer **Bitucoat Primer** @ 4 to 6 m²/ltr., prior to installation of membrane.

Primer should be dry before the application of the membrane. Drying time depends on ambient temperature and humidity.

#### **APPLICATION:**

The membrane is bonded completely to the primed surface by peeling-off the release film from the membrane bottom and pressing it against the surface using suitable roller. Side overlap of at least 75mm and end overlap of at least 100 mm should be maintained properly at the time of application, the overlap sealed by pressing it against the surface using suitable roller.

### Limitation

Aquaproof SBS membrane should not be applied when temperature is below +10°C.

The membrane after application should not be left exposed to sun for extended period to prevent U.V. rays damage.

On vertical surface, the membrane after installation should be protected immediately after application, with HDPE dimple boards.

On horizontal surface, the membrane after installation should be protected immediately with 50mm cement-sand screed.

# Safety precautions

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

### **Packaging**

**Aquaproof SBS** is supplied in standard roll size of 1m x 20m.

# Storage & shelf life

Store in a dry place under the covered shed and protected from rain, sun, heat, U.V rays and low temperatures. It must be stored upright.

#### Note

All Technical Data Sheets of FIRSTCHOICE SPECIALITY CHEMICALS are updated on regular basis; it is the user's responsibility, to obtain the most recent issue. Field services where provided, does not constitute supervisory responsibility, for additional information contact our local representative.

#### Disclaimer

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