



SBS MODIFIED BITUMEN WATERPROOFING MEMBRANE

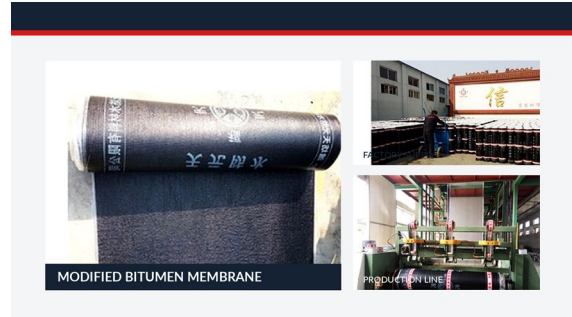
Torch-Applied Reinforced Waterproofing Sheet | Reference TDS based on supplied catalog data

PRODUCT OVERVIEW

SBS Modified Bitumen Waterproofing Membrane is manufactured with a reinforced carrier coated on both sides with Styrene-Butadiene-Styrene (SBS) elastomer-modified bitumen. The sheet is supplied with PE film, fine sand, mineral granules or aluminum foil surface finishes according to the intended waterproofing system.

Typical applications

- Roofs, basements and foundations
- Tunnels, subways and underground structures
- Retaining walls, podiums and civil infrastructure
- Selected water-conservancy and industrial projects



Factory and product images extracted from the supplied catalog material.

PRODUCT CONFIGURATION

Parameter	Available Configuration
Modifier	SBS
Reinforcement	PY polyester felt / G glass fiber felt / PYG composite carrier
Upper surface	PE film / fine sand / mineral granules / aluminum foil
Lower surface	Thermofusible PE film / fine sand
Nominal thickness	3 mm / 4 mm / 5 mm; selected custom thickness subject to confirmation
Standard width	1.0 m
Typical roll length	10 m or 7.5 m, depending on thickness and configuration
Application	Torch applied; selected cold-bonding systems subject to technical approval

SBS MEMBRANE STRUCTURE

Surface finish Upper surface: PE film / sand / mineral granules

Modified compound SBS elastomer-modified bitumen

Carrier Reinforcement: PY / G / PYG

Torch film SBS elastomer-modified bitumen

Lower surface: thermofusible PE film / sand

LOW-TEMP FLEXIBILITY

-25°C

Type II reference

HEAT RESISTANCE

105°C

Type II reference

TENSILE FORCE

≥800 N/50 mm

PY Type II reference

WATERTIGHTNESS

0.3 MPa / 30 min

Type II reference



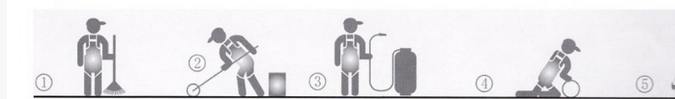
TECHNICAL PERFORMANCE

Reference classification values from the supplied Tianyuan catalog.

Property	Unit	I PY	I G	II PY	II G	II PYG
Soluble content - 3 mm	g/m ²	≥2100	≥2100	≥2100	≥2100	-
Soluble content - 4 mm	g/m ²	≥2900	≥2900	≥2900	≥2900	-
Soluble content - 5 mm	g/m ²	≥3500	≥3500	≥3500	≥3500	≥3500
Heat resistance	°C	90	90	105	105	105
Low-temperature flexibility	°C	-20	-20	-25	-25	-25
Heat-resistance slip	mm	≤2	≤2	≤2	≤2	≤2
Watertightness, 30 min	MPa	0.3	0.2	0.3	0.3	0.3
Peak tensile force	N/50 mm	≥500	≥350	≥800	≥500	≥900
Second peak tensile force	N/50 mm	-	-	-	-	≥800
Elongation at peak	%	≥30	-	≥40	-	-
Elongation at second peak	%	-	-	-	-	≥15
Mass gain after water immersion	%	PE/S ≤1.0	PE/S ≤1.0	PE/S ≤1.0	PE/S ≤1.0	M ≤2.0
Oil bleeding	sheets	≤2	≤2	≤2	≤2	≤2
Seam peel strength	N/mm	≥1.5	≥1.5	≥1.5	≥1.5	≥1.5
Lower coating thickness	mm	≥1.0	≥1.0	≥1.0	≥1.0	≥1.0

Visual acceptance reference: no cracking at low-temperature test; no flowing or dripping at heat-resistance test; membrane shall not crack or separate during tensile test.

INSTALLATION SEQUENCE



- Clean and repair the substrate.
- Apply compatible bitumen primer and allow it to dry.
- Align the membrane and torch the lower thermofusible film evenly.
- Roll forward while pressing the sheet firmly; maintain approved lap widths.
- Heat-weld and compact laps, then inspect for voids, folds and unbonded areas.

PACKAGING & STORAGE

- Typical roll size: 1 m × 10 m or 1 m × 7.5 m.
- Store rolls upright in a dry, shaded and ventilated area.
- Protect from sunlight, rain, heat sources, sharp objects and mechanical damage.
- Roll weight and pallet quantity depend on thickness, carrier and surface finish.
- Recommended shelf life: 12 months in unopened original packaging under suitable conditions.

STANDARD AND DATA STATUS

The supplied catalog data were originally presented under GB 18242-2008 for SBS and GB 18243-2008 for APP. The current Chinese reference standard is GB/T 18242-2025, effective 1 May 2026. Before external issue, replace or confirm the values above against Tianyuan's current product-specific test report and batch quality documentation.

Disclaimer: This reference TDS is prepared from the supplied catalog page and is intended for technical review. Product configuration, declared values, test methods, packaging and compliance shall be confirmed in the final approved specification.

KEY PRODUCT CHARACTERISTICS

- Elastic behavior and low-temperature flexibility for cold or changeable conditions.
- High tensile strength and elongation for reinforced waterproofing systems.
- Good ability to accommodate limited substrate movement and cracking.
- Reliable torch-welded adhesion and lap sealing when correctly installed.

APPLICATION GUIDANCE & SAFETY

- Confirm substrate condition, primer compatibility and approved system details before work.
- Torch application shall be carried out by trained personnel with fire-control equipment available.
- Avoid open-flame work near combustible substrates, insulation or concealed cavities unless approved controls are in place.
- Install protection layers, flashings and terminations in accordance with the project design.

Selection note: SBS membranes are generally selected where low-temperature flexibility and movement accommodation are important. Final selection depends on climate, substrate, exposure, layer position and the approved waterproofing design.



FACTORY SUPPLY



PRODUCTION CAPABILITY



MEMBRANE CONFIGURATION