



ELASTOMERIC WATERPROOFING SYSTEMS

PETROGRIP SBS MEMBRANE

3 mm | 60/70 BITUMEN BASED

Polyester-reinforced, torch-applied waterproofing membrane formulated with SBS elastomer and penetration-grade bitumen for flexible, fully bonded

3.0 mm

NOMINAL THICKNESS

1 m x 10 m

ROLL FORMAT

≤ -15 °C

REFERENCE FLEXIBILITY



ELASTIC RESPONSE

SBS-modified compound

MECHANICAL STRENGTH

Polyester reinforcement

FULL BOND

Torch-applied system

WATERTIGHT

Continuous barrier

PRODUCT OVERVIEW

Flexible protection, engineered in every layer.

PETROGRIP SBS is a prefabricated SBS-modified bituminous sheet membrane intended for roofing and structural waterproofing. The compound uses 60/70 penetration-grade bitumen as the base binder, modified with styrene-butadiene-styrene (SBS) elastomer and selected mineral fillers and process additives. A non-woven polyester carrier provides tensile strength, elongation and resistance to tearing.

The underside is finished with a heat-activated polyethylene film for torch application. The upper surface may be specified with polyethylene film, sand or mineral granules according to system position and exposure requirements.

MEMBRANE ARCHITECTURE

Illustrative cross-section • not to scale



Base binder: penetration-grade 60/70 bitumen, a grade defined by 60–70 units of penetration at 25 °C under specified test conditions. SBS modification is used to improve elasticity and low-temperature flexibility.

PERFORMANCE BENEFITS

Why SBS modification matters.



Elasticity

Improves recovery and movement accommodation compared with unmodified bitumen.



Cold flexibility

Reduces brittleness at low temperature and supports detailing around transitions.



Mechanical durability

Polyester reinforcement contributes tensile, tear and puncture resistance.



System versatility

Suitable as a protected base sheet or exposed cap sheet when correctly surfaced.

REFERENCE TECHNICAL PROFILE

3 mm polyester-reinforced grade

The values below are benchmark values for a comparable 3 mm SBS-modified bituminous membrane. They are included as a technical reference for product development and specification. Final Petroseal declarations must be verified through controlled laboratory results, approved quality records and the final product TDS/COA.

Property	Test / reference	Unit	Reference value
Composition	Product formulation	—	SBS-modified 60/70 bitumen
Effective thickness	EN 1849-1 / ASTM D5147	mm	3.0 ± 0.2
Roll width	EN 1848-1 / ASTM D5147	m	1.0
Roll length	Product format	m	10.0
Reinforcement	Product construction	—	Non-woven polyester
Mass per unit area	Manufacturer PDS reference	kg/m ²	≈ 4.05
Tensile strength — MD	EN 12311-1	N/50 mm	400 ± 80
Tensile strength — CMD	EN 12311-1	N/50 mm	300 ± 60
Elongation — MD	EN 12311-1	%	35 ± 15
Elongation — CMD	EN 12311-1	%	40 ± 15
Tear resistance — MD	EN 12310-1	N	140 ± 42
Tear resistance — CMD	EN 12310-1	N	140 ± 42
Joint shear — MD	EN 12317-1	N/50 mm	350 ± 70
Joint shear — CMD	EN 12317-1	N/50 mm	250 ± 50
Low-temperature flexibility	EN 1109	°C	≤ -15
Water tightness	EN 1928, Method B	—	Pass; 24 h at 60 kPa
Reaction to fire	EN 13501-1	Class	E

APPLICATIONS AND SYSTEM DESIGN

One membrane. Multiple protection zones.

PETROGRIP SBS is intended for fully bonded waterproofing systems where flexibility, mechanical reinforcement and continuity at laps are required. Final use must follow the project specification and approved method statement.

01

ROOFS

Protected flat roofs, inverted roofs and multi-layer roofing systems.

02

BELOW GRADE

Basements, retaining walls, pile caps and foundation slabs.

03

PODIUMS

Podium decks, terraces and balconies beneath protective screeds.

04

WET AREAS

Service areas and wet zones beneath screed or tile systems.

05

CIVIL WORKS

Culverts, underpasses and selected tunnel waterproofing details.

06

REFURBISHMENT

Overlay systems on compatible existing bituminous substrates.

ILLUSTRATIVE BUILD-UPS

Protected roof and basement systems

A. PROTECTED ROOF BUILD-UP

PROTECTION / SCREED

INSULATION / SEPARATION

PETROGRIP SBS MEMBRANE

BITUMEN PRIMER

CONCRETE SUBSTRATE

B. BASEMENT WALL BUILD-UP

RETAINED SOIL

PROTECTION BOARD

PETROGRIP SBS

PRIMER

CONCRETE WALL

System layers, protection requirements and drainage details must be engineered for the actual substrate, hydrostatic pressure, exposure and construction sequence.

INSTALLATION METHODOLOGY

Controlled heat. Continuous bond.

Torch-applied membranes must be installed by trained personnel under an approved hot-work procedure. Substrate condition, primer, lap formation and detailing determine the integrity of the completed system.

01

SUBSTRATE

Confirm sound, smooth, dry and clean substrate. Remove laitance, dust, oil and sharp protrusions.

02

PRIME

Apply compatible bitumen primer uniformly and allow it to dry as required by the approved system.

03

ALIGN

Unroll, align and re-roll the membrane. Avoid wrinkles and plan laps away from drainage flow.

04

TORCH

Heat the substrate and underside film evenly until the compound becomes adhesive. Do not overheat.

05

BOND

Roll forward under controlled heat and press firmly. A consistent bead at the lap indicates fusion.

06

DETAIL

Seal corners, outlets, penetrations and terminations using approved membrane detailing.

LAPS AND FIELD CONTROL

Typical field practice: 80-100 mm side laps and 120-150 mm end laps, unless the approved project method statement requires otherwise. Stagger end laps, avoid stacked cross-joints, and verify complete fusion along the full seam.

HOT-WORK SAFETY Fire watch, extinguishers, gas-cylinder control, ventilation and combustible-substrate assessment are mandatory.



QUALITY AND PROJECT SUBMITTALS

Specify the membrane. Verify the evidence.

A professional product approval package should combine the controlled TDS, batch traceability and laboratory evidence with the proposed installation and quality-assurance procedure.

MATERIAL CONTROL

- 60/70 bitumen certificate
- SBS modifier identification
- Polyester carrier mass
- Filler and additive controls
- Batch mixing records

FINISHED PRODUCT

- Thickness and roll dimensions
- Mass per unit area
- Tensile and elongation
- Tear and puncture
- Flexibility and watertightness

SITE QUALITY

- Approved primer and substrate
- Trial application and torch settings
- Lap inspection and detailing
- Protection after installation
- As-built records and warranties

TECHNICAL REFERENCE FRAMEWORK

- ASTM D6164/D6164M · SBS modified bituminous sheet materials using polyester reinforcement.
- ASTM D5147/D5147M · Sampling and testing of modified bituminous sheet materials.
- ASTM D946/D946M · Penetration-graded asphalt binder, including 60-70 grade.
- ASTM D5/D5M and ASTM D36/D36M · Penetration and softening-point test methods.
- EN 13707 / EN 13969 · Roofing and below-ground bituminous sheet application frameworks, where specified.

STORAGE AND HANDLING

Store rolls upright in original packaging, dry and protected from sunlight, rain and heat. Do not stack pallets. Recommended storage range: +5 °C to +35 °C. Refer to the final product label and TDS for shelf life.

PETROSEAL ENTERPRISES

32 Km Lahore-Sheikhupura Road, Sheikhupura, Pakistan
0321 8489737 | 0317 4058560 | info@petrosealenterprises.com

PETROGRIP SBS

3 mm SBS MODIFIED BITUMINOUS MEMBRANE