



Technical Data Sheet

BC Bitu-Gold Fiber

Torch-Applied SBS Modified Bituminous Membrane – Fiberglass Reinforced

1. Product Description

BC Bitu-Gold Fiber is a high-performance, prefabricated, torch-applied waterproofing membrane made from high-grade bitumen modified with Styrene-Butadiene-Styrene (SBS) polymers, offering exceptional elasticity and flexibility even at low temperatures.

The membrane is reinforced with a dimensionally stable fiberglass mat, which provides excellent mechanical strength, temperature stability, and long-term durability. The top surface is finished with polyethylene film, fine sand, mineral stone, or aluminum foil depending on the application.

2. Application Areas

BC Bitu-Gold Fiber is designed for a variety of waterproofing and damp-proofing applications, particularly where dimensional stability and chemical resistance are required:

- Foundations and retaining walls
- Basements, pile caps, and raft foundations
- Wet areas and water tanks
- Flat and sloped roofs, terraces, and podiums
- Exposed roofs (recommended in 2-layer system with mineral stone or aluminum foil top layer)

3. Product Features

- Torch-applied for rapid and reliable installation
- Excellent dimensional stability from fiberglass reinforcement
- Superior adhesion and waterproofing integrity
- Maintains flexibility in cold conditions (up to -10°C)
- Resistant to salts, alkalis, and aggressive soil conditions
- Strong mechanical and puncture resistance
- Long service life under severe climatic conditions



4. Technical Properties –

Property	Typical Values	Tolerance	Test Method
Reinforcement	Fiberglass Mat (50–90 g/m ²)	±10%	ASTM D5147
Cold Flexibility	–10 °C	—	ASTM D5147
Max. Tensile Force @ 23 ± 2 °C (Longitudinal)	400 – 550 N/5 cm	±20%	ASTM D5147 / UEAtc
Max. Tensile Force @ 23 ± 2 °C (Transversal)	300 – 450 N/5 cm	±20%	ASTM D5147 / UEAtc
Ultimate Elongation (Longitudinal)	3 – 5 %	±15%	ASTM D5147 / UEAtc
Ultimate Elongation (Transversal)	3 – 5 %	±15%	ASTM D5147 / UEAtc
Shear Resistance of Joints (Longitudinal)	500 – 600 N/5 cm	±20%	UEAtc
Tear Strength (Longitudinal)	250 – 350 N	±20%	ASTM D4073
Softening Point (Mixture)	130 – 140 °C	—	ASTM D36
Penetration @ 25 °C (Mixture)	20 – 30 dmm	—	ASTM D5
Flow Resistance	No flow @ 110 °C	—	ASTM D5147
Static Load Puncture Resistance	L10 – L15	—	UEAtc
Impact Resistance	110	—	UEAtc
Resistance to Puncture	600 – 800 N	±10%	ASTM E154
Water Absorption	< 3 %	—	ASTM D5147



5. Tools Required for Application

- Gas torch and propane cylinder
- Knife or cutter
- Measuring tape and marking string
- Trowel and roller for sealing laps

6. Installation Guidelines

Surface Preparation

- Ensure the substrate is clean, dry, and sound.
- Remove dust, grease, laitance, and any contaminants.
- Repair cracks and surface defects before priming.

Priming

- Apply bituminous primer conforming to ASTM D41 to enhance adhesion.

Membrane Application

1. Unroll the membrane, align accurately, and re-roll.
2. Torch the underside until the polyethylene film melts and bitumen softens.
3. Press the membrane firmly to the substrate for full bonding.
4. Overlap side laps by 10 cm and end laps by 15 cm.
5. Ensure melted bitumen visibly flows at the seams.
6. Detail corners, upstands, and pipe penetrations before full-area application.

7. Application Limitations

- Do not apply on wet or frozen surfaces.
- Avoid application during rain or high humidity.
- Do not overheat the membrane.
- Always use appropriate PPE and fire safety gear.

8. Packaging & Storage

- Supplied in roll form, palletized, and shrink-wrapped.
- Store in a cool, dry, well-ventilated area away from direct sunlight or flames.
- Shelf life: 12 months from manufacturing date.



9. Health & Safety

- Use heat-resistant PPE and gloves during torching.
- Provide adequate ventilation to prevent fume inhalation.
- Maintain clear, safe working zones.
- Store and handle rolls carefully to avoid deformation.

10. Available Sizes

Thickness	Roll Size
2 mm	1 m × 20 m
3 mm	1 m × 10 m
4 mm	1 m × 10 m

2 mm version is suitable for underlay or below-grade applications.

DISCLAIMER

The data presented in this sheet are based on laboratory testing and practical experience. Variations in substrate, application method, and environmental conditions may impact performance. Users are advised to carry out tests under their own conditions. Building Chemistry Industry's responsibility is limited to the product replacement in cases of proven manufacturing defect.

