

Technical Data Sheet

BC Shield

One-Component, Liquid Applied Modified Polyurethane Waterproofing Membrane

1). DESCRIPTION

BC Shield® is a one-component, cold-applied, moisture-triggered modified polyurethane membrane that cures to form a seamless, highly elastic, and durable waterproofing solution.

It is suitable for exposed roofing, podium decks, balconies, terraces, walkways, and below-ground structures.

2). USES

- Roof waterproofing (new construction and refurbishment)
- Balconies, terraces, podium decks, walkways
- Green roofs and landscaped podiums
- Below-ground basements, retaining walls, foundations
- Wind turbine plinth bases and infrastructure protection
- Waterproofing underneath tiles bonded with adhesives

3). CHARACTERISTICS / ADVANTAGES

- Single component – no mixing, ready to use
- Cold applied – no flame or heating required
- Seamless – eliminates weak joints
- Elastic & crack-bridging – withstands substrate movement
- Fast curing – rain resistant within minutes
- Durable – resistant to wear, root penetration, and ponding water



- Chemical resistant – withstands fuels, oils, dilute acids, alkalis
- Vapor permeable – prevents blistering
- Wide substrate compatibility – adheres to concrete, metal, tiles, bitumen, timber, stone

4). Technical Data:

Property	Test Method	Result
Density (23 °C)	-	~1.45 kg/L
Solid Content (by weight)	-	~79 %
Solid Content (by volume)	-	~68 %
Tensile Strength (unreinforced)	EN ISO 527-3	~4.5 N/mm ²
Tensile Strength (reinforced with glass fleece)	EN ISO 527-3	~14 N/mm ²
Elongation at Break (unreinforced)	EN ISO 527-3	~150 %
Elongation at Break (reinforced)	EN ISO 527-3	~20 %
Crack Bridging Capacity (2 mm film)	BS EN 1062-7	≥ 2.5 mm
Adhesion to Concrete	ASTM D4541	≥ 2.5 MPa
Service Temperature	-	-30 °C to +80 °C
Water Vapor Transmission (2 mm)	ASTM E96	≤ 0.1 g/m ² ·h
Chemical Resistance	-	Resistant to occasional spillage of diesel, petrol, kerosene, dilute acids/alkalis



5). APPLICATION INFORMATION

- Ambient / Substrate Temperature: +5 °C to +40 °C
- Substrate Moisture Content: ≤ 4 % (no rising damp)
- Relative Humidity: ≤ 85 %
- Pot Life in opened container: ~60 minutes at +20 °C
- Rain Resistant: ~15 minutes at +20 °C
- Touch Dry: 4–6 hours at +20 °C
- Full Cure: 5–7 days at +20 °C
- Overcoating Time: 6–24 hours depending on temperature

6). COVERAGE

- Primer: 0.2 – 0.3 kg/m²
- BC Shield® Base coat: 1.5 kg/m²
- BC Shield® Top coat: 1.0 – 1.2 kg/m²

(Consumption depends on surface porosity, profile, wastage.)

7). Packaging:

Available in 20 kg pail.

Shelf Life: 12 months (unopened, dry storage at +5 °C to +25 °C)

8). IMPORTANT CONSIDERATIONS

- Do not apply if rain is expected within curing time.
- Substrate temperature must be at least 3 °C above dew point.





- Not suitable for permanent negative hydrostatic pressure.

9). HEALTH & SAFETY

- Avoid skin and eye contact. Wear gloves, goggles, and protective clothing.
- Ensure adequate ventilation during application.
- In case of contact with eyes, rinse with plenty of water and seek medical advice.
- Refer to BC Shield® Safety Data Sheet (SDS) for details.

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.

