



Technical Data Sheet

BC SEAL 109

Multi-purpose Acrylic-Modified Flexible Cementitious Waterproofing

1. Product Description

BC Seal 109 is a two-component, acrylic-modified cementitious waterproof coating composed of a polymeric liquid (Part B) and a specially formulated cementitious powder (Part A).

When mixed, it forms a smooth, brush able, flexible waterproof membrane that adheres strongly to both porous and non-porous substrates.

BC Seal 109 provides excellent resistance against positive and negative water pressure, carbonation, chloride and sulphate attack, making it ideal for concrete protection in harsh environments.

2. Features & Benefits

- Polymer-modified system for superior adhesion and flexibility
- Crack-bridging capability up to 1.5 mm
- Excellent resistance to chloride and sulphate ion attack
- Breathable – allows water vapor transmission while blocking liquid water
- Non-toxic – suitable for potable water tanks
- Can be applied on old or new concrete (≥ 24 hours old)
- Durable and long-lasting coating for concrete protection

3. Recommended Uses

- Water tanks and potable water reservoirs
- Basements and retaining walls
- Roof slabs and podium decks
- Bathrooms, kitchens, and wet areas
- Swimming pools and water features





4. Technical Properties

Property	Test Method / Standard	Typical Value
Component A (Powder)		
Appearance	Visual	Grey powder
Density		1.44 kg/L
Component B (Liquid)		
Appearance	Visual	Milky white liquid
Density		1.0 kg/L
Mixture Properties		
Elongation	ASTM D412	180%
Tensile Adhesion Strength		2.0 kg/L
Density		< 26 g/m ² /24 hrs
Resistance to Chemicals		Wastewater, diesel, kerosene, hydraulic oil, alcohols
Pot Life (25°C)		45 minutes
Initial Curing		4–5 hours
Full Cure		96 hours
Crack Bridging Capacity	ASTM C836	≥ 0.5 mm
Bond Strength	ASTM D4541	7-8 N/mm ²



5. Application Guidelines

Surface Preparation

- Ensure the concrete surface is sound, clean, and free from dust, grease, laitance, or contaminants.
- Defective or weak concrete must be removed and repaired with BC Repair 100.
- Surfaces must be damp (SSD) but not wet prior to coating.

Crack & Joint Treatment

- Hairline cracks (<0.3 mm): Bridge directly with BC Seal coating.
- Static cracks (>0.3 mm): Cut into a “V” groove, clean, prime, and fill with BC Repair 100.
- Expansion joints: Seal with BC Tec 30 S polyurethane sealant before coating.

Mixing

- Pour Part B (liquid) into a clean container.
- Gradually add Part A (powder) while mixing using a slow-speed drill (300–400 rpm).
- Mix for 3–5 minutes until a uniform, lump-free slurry is achieved.
- Allow the mix to stand for 5 minutes, then remix briefly before application.
- Always add powder to liquid, not vice versa.

Application

- Apply using a brush or roller on damp surface.
- Apply at right angles between coats for even coverage.
- Two coats minimum are recommended.
- Recoat after 6–8 hours at 25°C.
- Total dry film thickness: 2.0–3.0 mm.



6). Coverage

Application	Recommended DFT	Consumption
General waterproofing	1.0 mm	2 kg/m ²

Actual consumption depends on surface roughness and porosity.

7. Packaging

Component	Description	Net Weight
Part A	Powder	20 kg
Part B	Liquid	5 L
Total	—	25 kg set

8. Storage & Shelf Life

- Store in a dry, cool area between 5°C – 35°C.
- Keep away from direct sunlight and moisture.
- Shelf life: 12 months in unopened original containers.

9. Health & Safety

- Avoid skin and eye contact — use gloves and goggles.
- Mix and apply in well-ventilated areas.
- Do not dispose of material into drains or watercourses.
- Refer to the Safety Data Sheet (SDS) for full safety and handling 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.

