

Technical Data Sheet

BC Anti Carbo Finish

Elastomeric Anti-Carbonation Protective Coating System

1. Product Description

BC Anti Carbo Finish System is a two-component protective coating system consisting of:

- BC Anti Carbo Primer: A silane-siloxane based primer that penetrates deeply into concrete, providing exceptional water repellency.
- BC Anti Carbo Finish: A single-component, acrylic polymer-based elastomeric coating that forms a highly durable and breathable barrier.

The cured system creates a seamless, weatherproof coating with high diffusion resistance to carbon dioxide and chloride ions, making it ideal for protecting reinforced concrete structures from carbonation, chloride attack, and atmospheric pollutants.

2. Recommended Uses

BC Anti Carbo Finish System is recommended as an anti-carbonation, weather-resistant, as

- Bridges and viaducts
- Marine and coastal structures
- Parking structures and ramps
- Retaining walls and exposed concrete surfaces
- Industrial buildings and facades

3. Features & Benefits

- Excellent carbon dioxide diffusion resistance
- Provides long-term UV and weather protection
- Highly breathable — allows moisture vapor transmission
- High elongation and recovery rate for crack bridging (up to 2 mm)
- Superior resistance to chloride and sulphate attack
- Durable elastomeric membrane with long service life
- Excellent adhesion to concrete and masonry substrates



4. Technical Data

Property	Typical Value	Test Method / Remarks
Solid Content by Volume	~50%	ASTM D2697
CO ₂ Diffusion Resistance (250 µm film)	High / Excellent	Taywood Method
Chloride Ion Diffusion Coefficient (60 days)	Nil	Taywood Method
Reduction in Water Absorption	92%	ASTM C642
Reduction in Chloride Ion Penetration	96%	ASTM C1202
Elongation	400%	ASTM D412
Tensile Strength	3 N/mm ²	ASTM D412
Adhesion to Concrete	1 N/mm ²	ASTM D4541
Overcoating Time	~4 hours	@25°C, 50% RH
Full Drying Time	~24 hours	@25°C, 50% RH
Crack Bridging Ability	Up to 2 mm	ASTM C836

5. Application Instructions

Surface Preparation

- Ensure the substrate is clean, dry, and free from oil, grease, dust, laitance, or loose particles.
- Remove unsound concrete and repair surface cracks using suitable repair mortar.

Primer Application

- Apply BC Anti Carbo Primer uniformly by brush, roller, or spray.
- Allow the primer to dry before applying the topcoat



Topcoat Application

- Stir BC Anti Carbo Finish thoroughly before use.
- Apply in two coats using brush, roller, or airless spray.
- Allow complete curing for 24 hours before exposure to weather.

6. Coverage

Component	Consumption	Application Method
BC Anti Carbo Primer	~0.25 L/m ²	Brush, roller, or spray
BC Anti Carbo Finish	~0.40 L/m ²	Roller or airless spray (in 2 coats applied perpendicular to each other)

Note: Coverage may vary depending on surface texture and porosity.

7. Color

Available in White, Grey, custom colors available upon request.

8. Packaging

- BC Anti Carbo Primer: 20 kg pail
- BC Anti Carbo Finish: 20 kg pail

9. Shelf Life & Storage

- Shelf Life: 12 months from the date of manufacture in original, unopened containers.
- Storage Conditions: Store in a cool, dry place away from direct sunlight and moisture. Protect from freezing.

10. Health & Safety

- Use protective gloves, eyewear, and clothing during handling and application.
- Ensure adequate ventilation during indoor application.
- Avoid inhalation of vapors or direct skin contact.
- Refer to the Material Safety Data Sheet (MSDS) for further 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.

