



# Technical Data Sheet

## BC Roof Guard

### Elastomeric Acrylic Waterproofing System

#### 1. Product Description

BC Roof Guard is a single-component, liquid-applied, highly resilient elastomeric waterproofing system based on advanced plasticized acrylic resin with UV-resistant pigments. It cures upon atmospheric exposure to form a seamless, flexible, durable membrane suitable for roofs, walls, and critical wet areas.

The product provides excellent crack-bridging, weather resistance, and long-term waterproofing performance on a variety of substrates.

#### 2. Features & Advantages

- Ready-to-use, single-component—no mixing required
- Excellent UV, weather, and aging resistance
- Forms a seamless, jointless membrane
- Superior flexibility and crack-bridging capability (up to 20 mils without cracking)
- Suitable for vertical and horizontal applications
- Water-based, non-flammable, non-toxic
- Excellent adhesion to concrete, asphalt, tiles, metal, wood, and polyurethane foam
- Easy application by brush, roller, squeegee, or spray
- Excellent resistance to temperature variation:  $-29^{\circ}\text{C}$  to  $+93^{\circ}\text{C}$

#### 3. Typical Applications

- Concrete roof decks and parapet walls
- Asbestos and asphalt roofing sheets
- Spray-applied polyurethane foam roofs
- Under-tile waterproofing (bathrooms, toilets, kitchens)
- Topcoat for polyurethane waterproofing membranes



#### 4. Technical Data

Property	Test Method / Condition	Value
Solids by Weight	ASTM (105°C to constant weight)	65%
Solids by Volume	Theoretical	54.50%
Specific Gravity	—	1.32 ± 0.10
Thickness per Coat	—	Approx. 1.0 mm WFT
Recoat Interval	—	Minimum 4 hours
Curing Time	—	4 hours
Tensile Strength	ASTM D-412	440 psi
Elongation	ASTM D-412	460%
Hardness (Shore A)	ASTM D-2240	60
Permeance	—	2.8 perms @ 20 mils DFT
Service Temperature	—	-29°C to +93°C
Crack Resistance	20 mils	No Cracking
Methods of Application	—	Brush, roller, spray, squeegee

#### 5. Surface Preparation

##### Concrete

- Surface must be clean, dry, sound, and free from oil, grease, curing compounds, dust, and laitance.



- Clean by sandblasting or acid etching (10–15% muriatic acid), followed by thorough water rinse.
- Patch holes >3 mm using repair mortar.

### **Plywood**

- Reinforce all plywood joints and flashing joints using 4-inch woven fiberglass tape embedded into wet BC Roof Guard.

### **Metal Surfaces**

- Prime with anti-corrosion zinc-rich primer before application.
- Reinforce metal-to-concrete transitions with fiberglass tape embedded in wet BC Roof Guard.

### **Cracks & Joints**

- Cracks >1.5 mm must be routed and sealed with polyurethane/polysulfide sealant.
- Reinforce all cracks and joints using 4-inch fiberglass cloth tape embedded in the first coat.

## **6. Application**

### **Primer Coat**

- Apply diluted BC Roof Guard (4 L water / 20 L product)
- Apply at 100–150 µm WFT.

### **Main Coats**

- Apply by brush, roller, spray, or squeegee.
- Standard rate: 0.5 L/m<sup>2</sup> per coat
- Apply two coats at 24-hour intervals to achieve 1.0 mm DFT total.

### **Quality Control**

- Check wet film thickness using a WFT gauge.
- Inspect for pinholes, blisters, or puddles and repair before next coat.

## **7. Coverage**

- 0.55 L/m<sup>2</sup> per 1.0 mm DFT  
(Actual coverage may vary depending on substrate porosity and surface profile.)

## **8. Packaging**

- 20 L Pail
- 210 L Drum



## 9. Storage & Shelf Life

- Store in cool, shaded, dry conditions.
- Protect from freezing.
- Keep containers tightly closed.
- Shelf Life: 12 months in unopened original packaging.

## 10. Safety Precautions

- Do not apply below +4°C or on wet surfaces.
- Avoid application over standing water.
- Use gloves and eye protection during application.
- Clean tools immediately with water.

### 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.

