



## Technical Data Sheet

### BC WH Cold POLYUREA

#### Two-Component Cold Applied Polyurea Waterproofing Coating

#### 1). Description

BC WH Cold Polyurea is a two-component, pure-grade, brush able polyurea waterproofing coating specially developed for concrete and metallic substrates requiring mechanical durability and superior waterproofing performance. The product cures to form a seamless, blister-free, non-moisture-permeable membrane providing zero water absorption, excellent UV resistance, and outstanding flexibility.

#### 2). Features & Advantages

- Forms a seamless, fully bonded, waterproof membrane.
- Prevents moisture penetration by complete sealing.
- Excellent flexibility and crack-bridging capability.
- High mechanical strength and abrasion resistance.
- Superior UV resistance and color stability.
- Excellent adhesion to various substrates including concrete, plaster, metal, masonry, and wood.
- Blister-free curing — no pinholes or surface defects.
- Quick drying and fast recoat intervals.
- Long pot life with easy workability.
- Wide temperature resistance:  $-35^{\circ}\text{C}$  to  $+80^{\circ}\text{C}$ .

#### 3). Typical Uses

- Concrete and masonry roofs.
- Rooftops exposed to stagnant water.
- Metal roofs and surfaces (with appropriate primer).
- Existing polyurethane waterproofing layers.
- Topcoat over aromatic spray polyurea systems.
- Waterproofing of polyurethane foam insulation.
- Walkable roofs, balconies, terraces, and podium decks.



#### 4). Technical Data

Property	Test Method / Standard	Typical Value
Density	EN ISO 2811-1:2011	1.40 – 1.50 kg/L
Mixing Ratio (by weight)	—	100 parts A : 100 parts B
Service Temperature Range	—	-35°C to +80°C
Hardness (Shore A)	EN ISO 868:2003 / ASTM D2240	78
Hardness (Shore D)	EN ISO 868:2003 / ASTM D2240	30
Elongation at Break	ASTM D412	470%
Tensile Strength at Break	ASTM D412	10.1 N/mm <sup>2</sup>
Adhesion to Concrete	ASTM D4541	>3 N/mm <sup>2</sup>
Absorption Coefficient	EN 1062-3:2008	0.00 kg/m <sup>2</sup>
Permissible Substrate Humidity	—	<4%
Application Temperature	—	+5°C to +35°C
Pot Life	—	5°C: 140 min / 23°C: 100 min /
Tack Free Time	—	5°C: 10 h / 23°C: 5 h / 35°C: 3 h
Recoat / Walkability	—	5°C: 24 h / 23°C: 18 h / 35°C: 12 h



**CHEMICAL RESISTANCE (Short-Term Exposure)**

Chemical	Resistance
Water	Excellent
Alkalis (10%)	Excellent
Mild Acids (5%)	Very Good
Saltwater	Excellent
Detergents	Excellent
Oils & Diesel	Good
UV Exposure	Excellent

**5). Surface Preparation**

Surfaces must be smooth, dry, clean, and free from dust, oil, grease, and loose materials. Defects such as cracks or voids should be repaired prior to coating.

To improve adhesion and surface sealing, apply BC Primer 349.

Metallic surfaces must be free of rust and corrosion; use a mesh reinforcement if surface damage is extensive.

**6). Application**

1. Stir Part A thoroughly before mixing.
2. Add Part B into Part A and mix at 400 rpm for 2–3 minutes until a homogeneous mixture is achieved.
3. Apply using brush, roller, or airless spray, in two uniform coats.
4. Allow minimum 24 hours after primer application before coating with BC WH Cold Polyurea.
5. Apply second coat after the first has cured tack-free.
6. Do not dilute the material.

Application Conditions:

- Surface moisture <4%
- Relative humidity <85%
- Temperature between +5°C and +35°C

**7). Coverage**

Approx. 1.0 kg/m<sup>2</sup> for two coats (depending on substrate porosity and profile).



## 8). Packaging

- 20 kg Kit (Pre-measured):
  - Part A: 10 kg
  - Part B: 10 kg
- Supplied in sealed tin pails.

## 9). Shelf Life & Storage

- Part A: 24 months at +5°C to +45°C in original sealed container.
- Part B: 12 months at +5°C to +35°C in original sealed container.
- Store in a dry, shaded area away from direct sunlight and moisture.

## 10). Health & Safety

- Use protective gloves, safety glasses, and suitable respiratory equipment during handling and application.
- Avoid inhalation of vapors and contact with skin or eyes. In case of contact, rinse immediately with water and seek medical attention.
- Ensure adequate ventilation during application.
- Refer to the Material Safety Data Sheet (MSDS) for full safety information.

### 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.

