

# CrownBond CCV

## Product Description Sheet No. 124

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### STRUCTURAL ADHESIVE FOR BONDING OVERHEAD AND VERTICAL NEWLY PLACED CONCRETE AND SHOTCRETE TO PREVIOUSLY PLACED CONCRETE

#### Description

**CrownBond CCV, Product No 124** is 100% solids, 100% reactive, moisture-insensitive, non-shrink, medium viscosity, 2 component modified epoxy adhesive.

#### Advantages

- Excellent Working Time
- Cures and Adheres on Dry or Damp Surfaces
- High Early Strength Cure
- Applicable / Curable to 32°F

#### Where to Use

Use as an Adhesive for Structural Bonding on Overhead and Vertical Surfaces:

- Fresh Plastic Concrete to Hardened Concrete & Steel.
- Concrete, ShotCrete, Wood, Gunitite, Masonry, and Metal
- Anchoring Veneer Masonry
- Pinning Loose & Broken Masonry
- Structural Strengthening Systems

#### Coverage

1 gallon covers approximately 80 ft<sup>2</sup> on smooth surfaces.

#### Compliance

ASTM C 881, AASHTO M-235  
Type 1, 2 & 5,  
Grade 2, Class A B & C

#### Packaging

4 - 1 Gallon Units / Case – 5 Gallon Pail

#### Typical Data for CrownBond CCV

(Material and Curing Conditions at 73°F unless noted, 50% R.H.)

**COLOR** Concrete Gray    **POTLIFE** Approx. 35 minutes

**CONSISTENCY** Paste    **NON-SAG** Neat 40 mils

#### TENSILE PROPERTIES (ASTM D 638) 7 Days

Tensile Strength                      5,200 psi  
Elongation at Break                    1.5 %

#### FLEXURAL PROPERTIES (ASTM D 790) 7 Days

Flexural Strength                      8,000 psi  
Tangent Modulus of Elasticity        4.9 X 10<sup>5</sup>

#### SLANT SHEAR STRENGTH (ASTM C 882) 7 Days

Test	Value	Mode of Failure
90°F plastic/hardened	5,200 psi	100% Concrete Failure
73°F plastic/hardened	4,800 psi	100% Concrete Failure

#### DAMP TO DAMP CONCRETE (AASHTO M-237)

Passes - 100% Concrete Failure

#### COMPRESSIVE STRENGTH (ASTM D 695)

	40°F *	73°F	90°F
8 hour	-	2,100 psi	3,300 psi
1 day	5,800 psi	7,100 psi	9,900 psi
7 days	12,200 psi	12,100 psi	12,200 psi

\* Pre-conditioned epoxy to 90°F before mixing.

#### WATER ABSORPTION (ASTM D 570)

24 hours                      0.47%

#### DEFLECTION TEMPERATURE (ASTM D 648) 5 DAYS

Fiber Stress Loading = 264 psi                      184°F

**SHELF LIFE**                      2 years in original unopened containers.

# CrownBond CCV, Product n. 124 COMPLIANCE

## AASHTO M-235 and ASTM C 881 SPECIFICATION Type 1, 2 & 5 - Grade 2 - Classes A, B&C

### Surface Preparation

Concrete, stone, wood, steel, and other substrates must be clean and sound. Remove dust, grease, waxes, oils, curing compounds, coatings, and all contaminants by mechanical means such as bush hammering and/or abrasive blasting. Abrasive blast all metal surfaces to white metal for best adhesion. Apply epoxy before flash rusting develops or the cleaned surface becomes contaminated.

### Test Substrate for Adhesion

Before placement of the Epoxy, check the concrete and steel substrates for soundness and cleanliness with a Tensile Pull Test (ACI 503 R) or Crown Polymers Adhesion Shear Test. 100% concrete must fail to pass either test.

### Preconditioning Epoxy

When temperatures drop, it becomes harder to mix and place CrownBond CCV because the epoxy thickens. To improve the mix ability and placement at temperatures below 65°F (18°C) preheat each epoxy component to 90°F before mixing. Caution the pot life will be reduced by about 50%.

### Mechanical Mixing

Pour Component "B" into "A" and mix with a slow speed drill (400-600 rpm) with a coating paddle attached. Mix until uniformly blended, about 2 minutes. Place CrownBond CCV immediately.

### Application

The CrownBond CC adhesive is self-priming. Place the mixed epoxy onto the clean surface and spread evenly. Flat, smooth surfaces are quickly and easily placed by pouring the epoxy on the surface and spreading with a squeegee and back rolled with a short nap roller to even out the adhesive. Apply the fresh concrete or shot Crete to the epoxy before the adhesive become tack-free.

### Limitations

- Minimum substrate and ambient temperature for placement is 32°F (0°C)
- DO NOT THIN - solvents will prevent proper cure.
- DO NOT PLACE EPOXY IF ICE IS PRESENT.

### Caution

**Before Using Read Material Safety Data Sheets.**

#### Component "A" - Irritant

Contains epoxy resins. Prolonged contact with skin may cause irritation. Avoid contact with eyes.

#### Component "B" - Corrosive

Contains amines. Contact with skin may cause severe burns. Avoid eye contact. Product is a strong sensitizer

### Important Information

Use of safety goggles, chemical-resistant gloves, adequate ventilation and NIOSH/OSHA approved respirator is recommended.

### Clean Up

In case of spills wear suitable protective equipment, contain spill, and collect with absorbent material, place in suitable container. Ventilate area. Avoid contact. Dispose according to applicable local, state, and federal regulations.

### First Aid

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water for at least 15 minutes. For respiratory problems, remove person to fresh air. Contact Physician Immediately. Wash clothing before re-use.

*Consult Material Safety Data Sheet for More Information*

**FOR INDUSTRIAL USE ONLY  
KEEP OUT OF REACH OF CHILDREN  
KEEP CONTAINERS TIGHTLY CLOSED**

LIMITED WARRANTY - "Crown Polymers, LLC warrants its products to be free of manufacturing defects, to be of good quality, and that they will meet Crown Polymers current published physical properties when applied in accordance with Crown Polymers written directions and tested in accordance with ACI, ASTM and Crown Polymers Standards. Product proved to be defective will be replaced. **There are no other warranties by Crown Polymers, LLC of any nature whatsoever, expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product.** Crown Polymers, LLC shall not be liable for damages of any sort, including remote or consequential damages, resulting from any claimed breach of any warranty, whether expressed or implied, from any other cause whatsoever. Crown Polymers will not be responsible for use of this product in a manner to infringe on any patent held by others."

For the Location of Your Nearest Crown Polymers Representative

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