

# CrownBond CCV

## Product Description Sheet No. 124



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

#### DESCRIPTION

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

#### WHERE TO USE

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

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

#### ADVANTAGES

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

#### 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 3, Class A B & C

#### TYPICAL DATA for CrownBond CCV, Product No. 124 (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.

**PACKAGING**                      4 - 1 Gallon Units / Case – 5 Gallon Pail

# COMPLIANCE for CrownBond CCV, Product No.124

AASHTO M - 235 AND ASTM C 881 SPECIFICATIONS Types 1, 2 & 5 - Grade 3 - Classes A, B & C

## SURFACE PREPARATION

Concrete and other substrates must be clean, sound, and free of standing water. Remove dust, grease, waxes, and coatings, curing compounds and all contaminants by mechanical means such as bush hammering, sand or shot blasting. Abrasive blast all metal surfaces to white metal for best adhesion. Apply CrownBond before flash rusting begins or the cleaned concrete 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 the CrownBond 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 potlife will be reduced by about 50%.

## 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 immediately.

## APPLICATION

The CrownBond adhesive is self-priming. Place the mixed epoxy onto the clean surface and spread evenly with a stiff brush on rough surfaces or roll on with a short nap roller on smooth surfaces. Apply the fresh concrete or shotcrete to the epoxy before the adhesive become tack-free.

## LIMITATIONS

- Minimum substrate and ambient temperature is 32°F (0°C).
- DO NOT THIN - Solvents will prevent proper cure.

## 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

**Component "C" -** Contains silica sand. Avoid breathing product.

## IMPORTANT INFORMATION

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

## 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.

## CLEAN-UP

**Components "A" & "B" -** Ventilate area. Control spills. Collect with absorbent material.

**Component "C" -** Ventilate area. Sweep or vacuum into appropriate containers.

### Disposal

Dispose in accordance with current, applicable local, state, and federal regulations.

**KEEP OUT OF REACH OF CHILDREN**

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."

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Page 2 of 2 124.2-2