

# Concrete Repair

**Section 03203 or 03 01 50.61  
Horizontal Resurfacing (1/2" or less)**

**CONPRO ONE SHOT 2C**

## **PART I: GENERAL**

### **1.01 DESCRIPTION**

Provide labor, materials, equipment and supervision necessary to complete the application of product to concrete.

### **1.02 QUALITY ASSURANCE**

Products shall be installed by a trained applicator with a minimum of five years experience and meet the requirements of the specifier.

### **1.03 SUBMITTALS**

- A. Manufacturer's current product data bulletin.
- B. The trained applicator shall prepare a test panel on site as a submittal for approval of proper application and adhesion.
- C. The trained applicator shall submit to the specifier a list of five projects that he has completed within the last five years, exhibiting the applicator's skills. The list shall include project name, location, and description of work and completion date.

### **1.04 PRODUCT DELIVERY, STORAGE & HANDLING**

- A. Deliver all products and all accessories in original labeled, sealed, and undamaged containers or bundles.
- B. Store all products in accordance with manufacturer's printed instructions.
- C. Handle products in accordance with manufacturer's printed instructions.

### **1.05 JOB CONDITIONS**

All products shall be applied at substrate and ambient temperatures of 45°F or above. A minimum temperature of 45°F shall be maintained 24 hours after completion of work. Protect products from weather and other damage for a period of 24 hours after installation. Do not apply products to frozen surfaces.

### **1.06 COORDINATION & SCHEDULING**

The work requires close coordination with related sections and trades.

## **PART II: PRODUCTS**

### **2.01 MANUFACTURERS**

The following manufacturers are approved for the project.

Conproco Corporation

## 2.02 MATERIALS

One Shot 2C: A high-density, two component, repair mortar designed for repairing, resurfacing and leveling concrete. Material can be applied up to 1/2" in both interior and exterior applications

## 2.03 PERFORMANCE CHARACTERISTICS

General Physical Properties: The products shall meet or exceed the following performance standards:

Physical state and appearance		Fine, gray powder and milky liquid			
Base		Portland cement			
Powder		Acrylic polymer			
Liquid		>12			
pH	Wet mix	Sharp quartz silica			
Aggregate type		0.45			
Water/cement ratio		120lbs./ft. <sup>3</sup>			
Density	Wet mix	Initial 150 minutes – Final 240 minutes			
Setting time by vicat needle	ASTM C191	5%			
Percent air by volumetric	ASTM C173	<1000 µstrains @ 28 days			
Length change	ASTM C157	1750 psi			
Slant shear bond strength	ASTM C882	<b>1 Day</b>	<b>7 Days</b>	<b>14 Days</b>	<b>28 Days</b>
Compressive strength – psi	ASTM C109	2500	6430	7275	7460
Tensile strength – psi	ASTM C307				600

## **PART III: EXECUTION**

### 3.01 GENERAL

- A. Installation shall be performed strictly in accordance with manufacturer's current product data bulletin.
- B. Examine substrates and conditions under which materials will be installed. Do not proceed with installation until unsatisfactory conditions are corrected.
- C. Coordinate installation with adjacent work to ensure proper sequence of construction. Protect adjacent areas and landscaping from contact due to mixing, handling and application of materials.

### 3.02 SURFACE PREPARATION

- A. Remove loose and deteriorated material, laitance, dirt, dust, oil and any surface contaminants that will inhibit proper bond.
- B. Remove a minimum 1/16-inch of surface by abrasive blasting, steel shotblasting, scarifying, needle-scaling or high-pressure water.
- C. Repair zone must be a minimum of 1/8 inch deep, of simple geometry, with no complex edge conditions.

### 3.03 PRIMING

- A. Use Conpro Primer as bonding primer.
- B. Alternatively, prime the prepared substrate including all edges with a slurry coat of the One Shot 2C. Work slurry into the substrate to ensure intimate contact and establish bond. One Shot 2C must be applied while slurry is wet. If slurry dries, remove and recoat.

### 3.04 MIXING

- A. Mix one 50 lb. bag of One Shot 2C into 1 gallon of K-88 Admix in a clean mixing vessel. Use a low speed drill (400 – 600 rpm) and mixing paddle or mortar mixer.
- B. Up to 1 quart of water may be added to obtain workable consistency. Excess water will weaken the material.

- C. Allow mixture to “breathe” for two to three minutes and then remix for one minute.

**3.05 APPLICATION**

- A. At time of application, surfaces should be saturated surface dry (SSD) but hold no standing water.
- B. Trowel in key coat.
- C. Double back applying material necessary to complete application.
- D. Finish with a magnesium float or trowel.

**3.05 CURING**

- A. Dampen area with a fine mist of water or 24 hours or moist cure with wet burlap and polyethylene.
- B. Alternatively apply Conpro C309 Cure & Seal.
- C. Protect area from direct sun light, wind, rain and frost during curing period.

**3.06 JOB SITE CLEANUP**

- A. Material left over at the job site by the approved applicator shall be removed.
- B. All adjacent surfaces and materials shall be cleaned.
- C. Any foreign material resulting from the work of the approved applicator shall be removed.

\*\*\*\*\*END OF SECTION\*\*\*\*\*



17 PRODUCTION DRIVE, DOVER, NEW HAMPSHIRE 03820  
TELEPHONE 800.258.3500 FAX 603.743.5744 WEB ADDRESS [www.conproco.com](http://www.conproco.com)