

# Foundation Coat

## Division 3: Concrete

Fiber-reinforced, cementitious coating for permanent positive-side, below-grade waterproofing.

### SECTION 030130 – MAINTENANCE OF CAST IN PLACE CONCRETE

#### PART 1 GENERAL

##### 1.1 SUMMARY

Provide labor, materials, equipment and supervision necessary to complete the application of positive side below-grade coating.

##### 1.2 SYSTEM DESCRIPTION

The products shall meet or exceed the following performance requirements:

Physical state and appearance		Gray or white powder with glass fibers		
Base		Portland cement		
PH	Wet mix	>12		
Water/cement ratio		0.55		
Setting time by vicat needle	ASTM C191	Initial 60 minutes – Final 270 minutes		
Durometer hardness	ASTM D2240	60 to 70		
Water penetration and leakage	ASTM E514	100 percent reduction		
Resistance to hydrostatic pressure	CRD-48-73	Passes at 46 feet (20 psi) maximum of test		
Carbon-arc weathering	ASTM G152	2000 hours – no effect		
Length change	ASTM C157	<500 $\mu$ strains at 28 days		
		7 Days	14 Days	28 Days
Compressive strength – psi	ASTM C109	3325	3500	4240
With 2 quarts of K-88 Admix		5550	6050	6490
Tensile strength – psi	ASTM C307	560	620	680
Allowable design stress based on gross area of the CMU (IBC)				
Compressive stress – psi				
Standard block		45		
Ground block		85		
Shear stress		10		
Tensile stress in flexure, vertical span – psi		18		

##### 1.3 SUBMITTALS

- A. Manufacturer's current product data bulletin.
- B. 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.

##### 1.4 QUALITY ASSURANCE

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

## 1.5 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.

## 1.6 PROJECT/SITE CONDITIONS

- A. All products shall be applied at substrate and ambient temperatures of 40 degrees F or above.
- B. A minimum temperature of 40 degrees F shall be maintained 24 hours after completion of work.
- C. Protect products from precipitation and high wind for a period of 8 hours after installation.
- D. Do not apply products to frozen surfaces.

## 1.7 SCHEDULING

The work requires close coordination with related sections and trades.

## PART 2 PRODUCTS

### 2.1 MANUFACTURERS

The following manufacturers are approved for the project.  
Conproco

### 2.2 MATERIALS

Foundation Coat: Fiber-reinforced, cementitious coating for positive-side, below-grade waterproofing.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- 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.

### 3.2 SURFACE PREPARATION

- A. Prior to application of the waterproofing membrane remove any dirt, debris, grease, oil or other contaminants on the substrate that will inhibit bond.

- B. Repair spalled areas, static cracks and voids with Conpro Set or Foundation Coat.
- C. Substrate should have open-pored and textured surface.
- D. Saturate substrate with clean water (saturated surface dry/SSD). Walls should be wet when Foundation Coat is applied.
- E. For best results on concrete grind or abrasive blast (Concrete Surface Profile 3). Refer to ICRI Surface Preparation Guide 03732 for information about Concrete Surface Profile.

### 3.3 APPLICATION

#### A. Mixing

1. Place 5 1/4 quarts of potable water in a clean mixer and slowly blend in one 50 pound bag of Foundation Coat.
2. Mix continuously for 3 minutes with a mortar mixer or low-speed drill with paddle.
3. Add up to 1 pint of additional water if needed.
4. Allow to breathe for 1 minute and remix for 1 minute. Do not overmix.
5. Do not retemper.
6. Replace 1 quart of water with 1 quart of K-88 Admix when applying additional coats.

#### B. Application

1. Concrete block:
  - a. Spray the exterior of the wall with water until it is damp, but holds no standing water. Apply Foundation Coat to the exterior of the dampened wall with a steel trowel to a minimum thickness of 1/8 inch.
  - b. Cove material at junction of wall and slab to prevent water entry.
  - c. Apply with a vertical motion and finish with a horizontal motion.
2. Cast concrete:
  - a. Mix Foundation Coat replacing 1 quart of mixing water with 1 quart of K-88 Admix.
  - b. Mist wall with water to a surface saturated dry condition.
  - c. Apply Foundation Coat with a steel trowel to a minimum thickness of 1/8 inch.
  - d. Cove material at junction of wall and slab to prevent water entry.
  - e. Apply with a vertical motion and finish with a horizontal motion.

#### C. Curing

1. Keep damp with a fine mist of water for 24 hours.
2. Protect from direct sunlight, wind, rain, and frost during the curing period.

3.4 CLEANING

- 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. Cured material must be removed mechanically.
- D. Clean tools and equipment with water immediately after use.

END OF SECTION 030130