

Plastermix

Division 3: Concrete

A Portland cement based finish coating to fill voids and provide a uniform finish to concrete.

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 finish coating to vertical or horizontal surfaces.

1.2 SYSTEM DESCRIPTION

The products shall meet or exceed the following performance requirements:

| | | | | |
|-------------------------------|-----------|---|---------|---------|
| Physical state and appearance | | Fine gray powder | | |
| Base | | Portland cement | | |
| pH | | >12 | | |
| Setting time by vicat needle | ASTM C191 | Initial 60 minutes to final 285 minutes | | |
| Percent air by volumetric | ASTM C173 | 6 percent | | |
| | | 7 Days | 14 Days | 28 Days |
| Compressive strength – psi | ASTM C109 | 2900 | 3000 | 3400 |
| Tensile strength – psi | ASTM C307 | 400 | 500 | 600 |

1.3 SUBMITTALS

- A. Manufacturer's current product data bulletin.
- B. The trained applicator shall prepare a test area on the structure 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.

1.4 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 in original labeled, sealed, and undamaged containers.
- 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

All products shall be applied at substrate and ambient temperatures of 40 degrees F or above. A minimum temperature of 40 degrees 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.

1.7 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

- A. Plastermix: A Portland cement based finish and dressing for concrete.
- B. K-88 Admix: An acrylic admixture designed to enhance the performance of cement based products.

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 products, inspect the substrate for proper cleaning and treatment of structural cracks, texture differences, damage, etc. Work shall not proceed until unsatisfactory conditions are corrected.
- B. Remove loose and deteriorated material, laitance, dirt, dust, oil and any surface contaminants that may inhibit proper bond.
- C. Repair spalled areas, static cracks and voids with Conproco's Conpro Set.
- D. Substrate must have open pored and textured surface (Concrete Surface Profile 3). For best results, grind or abrasive blast. Refer to ICRI Surface Preparation Guide 03732 for more details.

3.3 APPLICATION

A. Mixing

1. Mechanically mix using low speed drill (400-600 rpm) and mixing paddle or mortar mixer.
2. Add 2 and 3/4 quarts of potable water and one quart of K-88 Admix to a clean mixing container and slowly add entire bag of Plastermix.
3. Mix continuously for three minutes to a uniform, lump-free consistency. Add up to 1 pint of water if needed.
4. Allow to breathe for 1 minute and remix for 1 minute to improve workability and open time.
5. Do not overmix, as this will entrain excess air.

B. Application

1. Dampen surface to a surface saturated dry (SSD) condition before application.
2. Bagging – add additional water (3 parts of water to 1 part K-88 Admix), mix to a slurry consistency. Apply with a sponge float to fill all voids and bug holes.
3. Texture coat – apply with a trowel. Allow material to take up to thumbprint hard. Apply a second coat with a trowel and finish with a sponge float
4. For spray application, use 1 1/4 quarts of K-88 Admix to approximately 5 quarts of water per 50 pound bag. Mix to a consistency suitable for a plaster spray gun. Spray on as evenly as possible. Brush out the first coat to fill pores and voids. After the first coat has set, double back with a light spray to achieve final texture.
5. Do not exceed 1/16 inch total thickness.

C. Curing

1. Keep damp with a fine mist of water.
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, tools and materials shall be cleaned with water immediately after use.
- C. Cured material must be removed mechanically.

END OF SECTION 030130