

Terra-Color

Division 4: Masonry

Used to recreate colored glaze finishes and patterns (faux finish) for brick and terracotta repair.

SECTION 040321.21 – Terra Cotta Conservation Treatment

PART 1 GENERAL

1.1 SUMMARY

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

1.2 SYSTEM DESCRIPTION

The products shall meet or exceed the following performance requirements:

Physical state and appearance		Paint-like liquid
Base		Aqueous
Polymer		100 percent acrylic
pH		9.0 to 9.5
Percent solids by weight		54 percent
Viscosity	ASTM D562	90 KU – paint paddle
Density of liquid coatings	ASTM D1475	8.4 pounds per gallon
Water penetration and leakage	ASTM E514	100 percent reduction
Accelerated weathering – QUV	ASTM G154	10,000 hours – UV-B cycled with condensation - no effect
Hiding power of coating	ASTM D2805	Excellent – minimum thickness is 8 mils. wet film thickness

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 45 degrees F or above. A minimum temperature of 45 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. Terra-Color: A 100 percent acrylic color coating formulated to protect vertical and overhead terra cotta repair surfaces.
- B. Color: _____
- C. Texture: _____

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 product, 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. Surfaces must be clean, sound, free from any loose paint, chalk, rust, grease, dirt, laitance, efflorescence, mortar droppings, mold, mildew or other such foreign materials. Surface may be cleaned by mechanical or chemical methods that will not inhibit bond of coatings and sealants to substrate. Allow substrate to dry completely before proceeding.

- C. Prepare surface to be sandpaper-like texture (Concrete Surface Profile 3) by mechanical abrasion or medium water blasting. If coating over existing terra cotta glaze, verify adhesion by performing ASTM D 3359 – 02 Adhesion by Tape Test.
- D. Terra Cotta repairs should be made with Conproco Matrix or Matrix TR prior to coating. Allow masonry restoration repairs to cure before coating (3 – 5 days minimum).

3.3 APPLICATION

A. Mixing

- 1. Mix with low-speed mixer until homogeneous. Do not use high-speed mixer or over mix.

B. Application

- 1. Apply Terra-Color by brush, roller or spray (Graco 3500) at a rate of 8 mils wet per coat.
- 2. Areas such as fringes, edges and borders should first be cut in with a brush as needed. Apply a uniform coat over the entire surface to a minimum thickness of 8 mils wet.
- 3. Previous coats should be dry-to-touch before applying subsequent coats.
- 4. Temperature of the substrate and atmosphere must be 45 degrees F or above for full cure period. Do not apply to frozen surfaces.
- 5. Test the mockup to determine coverage rate and adhesion at 3 locations. Test adhesion after the coating has cured for at least 7 days by using a knife to cut full depth a crosshatch pattern (#) of 8 by 8 squares of 0.25 inches by 0.25 inches. Firmly adhere industry standard duct tape over the entire crosshatched mockup and let tape adhere to coating for at least 10 minutes. Pull duct tape off mockup in uniform motion over 1 to 2 seconds. If the coating comes off over 25 percent of the squares on 1 or more mockups, the adhesion is not adequate. If the adhesion is not adequate, modify coverage rates and preparations to pass adhesion test.

C. Curing

- 1. Protect from moisture for 24 hours.

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.

END OF SECTION 040321.21