



Cathedral Stone® Products, Inc.

The leader in scientific masonry restoration

## GUIDELINE FOR WRITING SPECIFICATIONS WHEN USING

# Terra Cotta Glaze Repair System

### Select Relevant Section

### Division 09800 or 099723 – Paints and Coatings

#### Part 1 – GENERAL

##### 1.1 DESCRIPTION

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

##### 1.2 SUMMARY OF WORK

- A. For repairing, recoating or replacing original glaze on Terra Cotta as well as Jahn repair mortars.

##### 1.3 QUALITY ASSURANCE

- A. Products shall be installed by a trained applicator with a minimum of five years experience and meet the requirements of the specifier.
- B. *Installer Qualifications:* Company specializing in commercial coatings and finishing.  
*Coating Samples:* Prepare a sample of each type of repair listed below. Prepare, install, and finish each sample according to the specifications. **All samples must be applied to masonry.** Prepare samples in an area where they will be exposed to the same conditions as will be present on the building during curing. **Allow samples to cure at least three days (or longer, if possible) before obtaining Owner's approval for color match. Samples should be viewed from a minimum distance of 18-22 feet.** Perform mock-ups to determine compatibility. **Do not use when excess moisture is present. Substrate must be dry prior to application (See Section 3.2 for more details).**

##### 1.4 SUBMITTAL

- A. Manufactures data sheets.
- B. Trained applicator/s shall prepare and install mock-up area on the structure for approval.
- 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.

## 1.5 DELIVERY, STORAGE AND HANDLING

- A. Materials are to be delivered, stored, and handled to protect them from damage, extreme temperature, and moisture in accordance with Manufacturer's written instructions.
- B. Deliver and store material in Manufacturer's original, unopened containers with the production date shown on the container or packaging. **Cathedral Stone®\_Products, Inc.**  
7266 Park Circle Drive, Hanover, Maryland 21076 (800) 684-0901 FAX: (410) 782-9155  
WEBSITE: www.cathedralstone.com
- C. Comply with the Manufacturer's written specifications and recommendations for mixing, application, and curing coatings.

## 1.6 PROTECTION/SITE CONDITIONS

- A. *Hot and Cold Weather Requirements:* The ideal temperature conditions for applying the Terra Cotta Glazing System is between 50° - 90° F. A minimum temperature of 40° shall be maintained for 24 hours after installation.
- B. *Foul weather requirements:* The coating needs adequate time to bond to the substrate. Moisture disrupts the curing process.
- C. Protect the installed products for 24 hours after installation.
- D. Do not apply product to frozen substrates.

## **Part 2 – PRODUCTS**

### **2.1 COATING MANUFACTURER**

The following manufactures have been used as basis of design for the project and are approved for use.

Cathedral Stone ® Products, Inc., 7266 Park Circle Drive, Hanover, MD 21076  
Tel. (410) 782-9150; fax. (410) 782-9155. Website:www,cathedralstone.com  
email: info@cathedralstone.com

### **2.2 MATERIALS**

- A. Color coating of the Terra Cotta shall be: Cathedral Stone Potassium Silicate Coating.
- B. Clear glaze repair coating shall be: Cathedral Stone Terra Coat Glaze Repair .
- C. *Substitutions:* If proposed equal is submitted, lab test to establish equivalent performance levels. Use an independent testing laboratory, as determined by the Specifier, and paid for by the submitting party.
- D. Do not use any additives not approved by Cathedral Stone. Do not thin coatings without prior approval from the manufacturer.

### **2.3 Color Matching**

- A. **Samples shall be submitted for color matching to the same address.**
- B. Apply coating samples on masonry—preferably on the building. Do not apply samples to plywood or other non-masonry surfaces.
- C. Written verification from the Contractor that all specified items will be used. Provide purchase orders, shipping tickets, receipts, etc. to prove that the specified materials were

ordered and received.

## **Part 3 – EXECUTION**

### **3.1 GENERAL**

- A. Installation shall be performed in accordance with manufactures written instructions.
- B. Ensure proper substrate conditions are in accordance with manufactures guidelines.
- C. Schedule installation so that adjacent work and surrounding surfaces will not effect or be affected during mixing, handling or installation.

### **3.2 PREPARATION FOR REPAIRS**

- A. Do not start work until surfaces to be coated are in proper condition to produce finished surfaces of uniform, satisfactory appearance.
- B. Mildew, algae and fungus should be removed.
- C. Remove dust and loose particulate matter from surfaces to receive coatings immediately prior to coating application.
- D. Protect all non-masonry surfaces such as: glass, wood, metal, etc.
- E. Cracks and spalls must be repaired and cured prior to coating application.
- F. To ensure even penetration of the coating, make sure any masonry repairs have been made with repair materials that are compatible with the substrate.
- G. Remove any previous or existing coatings before application of new coating.
- H. Priming is not necessary in most circumstances.
- I. **Note\*\*:** **Substrate must be completely dry before coating.** New masonry repairs should not be coated for at least 7 days depending on the weather to permit the mortar to cure and dry out unless otherwise directed by the manufacturer. Free water and soluble alkaline salts remaining in the mortar may contaminate coatings or eventually cause delamination, blistering peeling and/ or efflorescence staining. For this reason, repairs/substrate should be visually inspected and tested for moisture content before painting. Damp spots, efflorescence or white salts appearing on the surface are obvious indicators of moisture. **Hidden dampness can be checked by using a polyethylene cover test.** A heavy gauge plastic film, approximately 18 in. square and 4 mils thick, is securely taped to a small section of the repair or substrate. Pieces of test film should be placed at various locations that are likely to be slow drying, such as below grade, low spots in floors, inside corners and lower wall areas. The polyethylene sheet is checked after 24 hours for beads of moisture. If condensation appears on the backside of the film, or if the substrate under the film appears to be darker, damp or wet, this would indicate the presence of moisture in the substrate. Reference ASTM D 4263 for the complete procedure prior to proceeding. If you use a moisture meter to test the substrate do not apply any coatings unless the moisture in the substrate is less than 30%.
- J. Multiple moisture tests should be performed on several areas of the project. Some areas of the structure may accrue more moisture than others such as: parapets, window headers, sills, water tables, any projections, etc.

K. **Do not work when precipitation is expected within 48 hours of installation.** The coating needs adequate time to bond to the substrate. Moisture disrupts the curing process.

### **3.3 MIXING GLAZE REPAIR SYSTEM**

- A. A. It is recommended that proper eye protection be worn during mixing in case of accidental splashing.
- B. B. Drill mix CSP Potassium Silicate Coating prior to box mixing.
- C. C. Box mix CSP Potassium Silicate Coating in accordance to manufactures data sheet.
- D. D. Drill Mix CSP Terra Cotta Glaze prior to application.
- E. E. Re –Mix materials that appear to have settled or that have not been used within 1 hour of initial mixing.

### **3.4 APPLICATION OF Terra Cotta Glaze Repair System**

#### **COLOR COAT (CSP Potassium Silicate Coating)**

- A. Always apply a test area to ensure suitability of application and color.
- B. Apply the CSP Potassium Silicate Coating directly to the substrate using brush, roller or sprayer depending on the desired finish.
- C. Regardless of application method 2 coats are required for the CSP Potassium Silicate Coatings.
- D. Several coats may be required to achieve modeled or multicolor finishes.
- E. A wet film thickness of 6 – 8 mils (per coat) should be achieved.
- F. Allow manufacturer's specified drying time, and ensure correct coating adhesion, for each coat before applying the next coat.

#### **CLEAR COAT (CSP Terra Cotta Glaze) *Not required for flat finishes***

- G. When color coat is finished and has cured for >12 hours the CSP Terra Cotta Glaze can be applied.
- H. Apply the Terra Cotta Glaze directly to the Potassium Silicate Coating using a brush, roller or sprayer.
- I. A wet film thickness of 2-4 mils per coat should be achieved.
- J. Multiple layers of the Terra Cotta Glaze may be applied to achieve desired sheen.
- K. Where coating application abuts other materials or other coating color, terminate coating, making clean sharp termination line without coating overlap.
- L. Do not coat mortar joints with the Terra Cotta Glaze Repair System. This will affect vapor permeability of the mortar joint.

### **3.5 CURING**

Protect material from moisture and temperatures below 40° for a minimum of 24 hours after installation.

### **3.6 CLEAN UP**

Clean all equipment and adjacent surfaces immediately with clean water. The CSP Potassium Silicate Coating and Terra Cotta are water soluble while wet.

END OF SECTION 04/27/17

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