**Cathedral Stone Products, Inc.**

**GUIDELINE FOR WRITING SPECIFICATIONS**

# POTASSIUM SILICATE COATING & STAIN
# (Division 09900 – Paints and Coatings)

1. GENERAL

1.1. SUMMARY OF WORK

A. For coating masonry, stucco and plaster surfaces.

1.2. SUBMITTAL

A. Submit the following items in time to prevent delay of the work and to allow adequate time for review and resubmittals, if needed; do not order materials or start work before receiving the written approval: Cathedral Stone Products, Inc., 7266 Park Circle Drive, Hanover, MD 21076.

B. Samples shall be submitted for color matching to the same address.

C. Samples of all specified materials and Safety Data Sheets (SDS) as appropriate.

D. Apply coating samples on the masonry to be coated. Do not apply samples to plywood or other non-masonry surfaces.

E. 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.

1.3. QUALITY ASSURANCE/TEST REQUIREMENTS

A. Installer Qualifications: Company specializing in commercial painting and finishing with three years documented experience and approved by the coating manufacturer.

B. 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.**

1.4. 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.

C. Comply with the Manufacturer's written specifications and recommendations for mixing, application, and curing coatings.

1.5. PROTECTION/SITE CONDITIONS

A. Mock-ups: Cold Weather Requirements: Do not work in temperatures below 45° F, when the substrate is colder than 45° F, or when the temperature is expected to fall below 45° F for 48 hours after installation of the coating. Building an enclosure and heating areas to maintain this temperature

temperature may only be done with the written approval of the Specifier.

B. Hot Weather Requirements: Protect coating from direct sunlight and wind. Do not use or prepare coating when ambient air temperature is above 90° F.

C. Foul weather requirements: 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.

D. Ambient Conditions/Dew point: Do not install CSP Potassium Silicate Coatings when the temperature is expected to reach the dew point within 24 hours. The air temperature, relative humidity, dew point temperature and surface temperature of the substrate should be monitored to determine feasibility of application. For more information on calculating the dew point, resource Using Coatings Inspection Instruments by William D. Corbett © 2002 available at www.kta.com.

## 2. PRODUCTS

### 2.1. COATING MANUFACTURER

A.Manufactured by Cathedral Stone® Products, Inc., 7266 Park Circle Drive, Hanover, MD 27016; tel. (410) 782-9150; fax. (410) 782-9155; website: www.cathedralstone.com email: info@cathedralstone.com. Cathedral Stone Coatings are distributed in a two-component system. Mix component A (colored paint) with component B (Cathedral Stone Fixative) in the desired proportions before installation.

B. 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.

## 3. EXECUTION

### 3.1. WORKMANSHIP

A. Do not use any additives in the coating system.

### 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 by methods recommended by the coating manufacturer.

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. (CSP Potassium Silicate Coatings will permanently bond to glass if allowed to dry.)

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 to the substrate.

G. Remove any previous or existing coatings before application of new mineral coating.

H. CSP Potassium Silicate Coating & Stain is designed for vertical surfaces only. Horizontal surfaces, especially where water can pool, are not suitable for application.

I. Note**: Substrate must be completely dry before coating. 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.

J. Note**. Verify ambient conditions are conducive to application of coating (see section 1.5 Protection/Site Conditions).

3.3. MIXING COATING SYSTEM

A. It is recommended that proper eye protection be worn during mixing in case of accidental splashing. Mix component A (colored paint) with component B (Cathedral Stone Fixative) in the desired proportions before installation.

3.4. APPLICATION OF CSP POTASSIUM SILICATE COATING

A. Apply each coat of CSP Coating by brush, roller or spray making sure to work the material into the pores of the masonry. The coating is designed to be absorbed into the masonry so it should not be applied in thick layers. Brush application increases the absorption of the coating into the masonry. This feature results in a longer lasting, more durable coating.

B. Maintain a wet edge! “Cutting in” is not recommended, as the colors of the paint vary if a wet edge is not maintained. Be sure to work wet into wet and corner-to-corner.

C. "Box-mix" paint. "Boxing" is pouring the contents of one paint can into a large bucket and then pouring the contents of another paint can into the same bucket. This way, the paint is blended even though you may buy different "batches". Boxing is especially recommended for mixed colors.

D. Allow manufacturer’s specified drying time, and ensure correct coating adhesion, for each coat before applying the next coat.

E. Do not apply succeeding coat until Architect has approved previous coat; only Architect-approved coats will be considered in determining number of coats applied.

F. Where coating application abuts other materials or other coating color, terminate coating, making clean sharp termination line without coating overlap.

G. Where color changes occur between adjoining spaces, through framed openings that are of same color as adjoining surfaces, change color at outside stop corner nearest to face of closed door.

3.5. CLEAN UP

A. Place tools immediately in clean water when pausing work (15-30 minutes or more). Clean tools with clean water immediately after finishing work. Dried CSP Potassium Silicate Coatings are insoluble in water. CSP Coatings can be removed from non-porous surfaces with clean water while still wet.

END OF SECTION
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