

SECTION 09 93 00

STAINING AND TRANSPARENT FINISHING

Note to Specifier: This guide specification describes a method of preparing, and applying solid color sealer stain to interior concrete. These products are manufactured by Clemons Concrete Coatings of Nashville, Tennessee, www.ccc-usa.com.

Specification Section numbers are based on 2004 MasterFormat published by Construction Specifications Institute. Verify actual section numbers used for submittals and substitutions.

Remove all Notes to Specifier from the final document.

Inspect existing concrete floors to determine it is suitable for applying sealer stain concrete finish system. Concrete must be sound.

Require a segment of the floor to be sealer stained and sealed to the desired finish. Choose a location that will show the widest variation in surface conditions, including repairs. This mockup can be used to make everyone aware of what to expect.

Specify new concrete in Section 03 30 00 Cast-in-place Concrete. New concrete must be a minimum of 28 days old; and have reached the majority of its compressive strength. Longer curing time can improve success.

Concrete stain and seal installations can be enhanced with a variety of options, saw cuts, divider strips, engraving, stencils, and logos.

PART 1 GENERAL

1.1 SUMMARY

- A. This section includes degreaser neutralizer, etch and clean, stain sealers, and sealer used during the process coating interior concrete.

Note to Specifier: Verify section numbers shown below.

- B. Related Sections:
 - 1. Section 01 25 00 - Substitution Procedures
 - 2. Section 01 33 00 - Submittal Procedures
 - 3. Section 03 00 00 - Cast-in-place Concrete

1.2 SUBMITTALS

- A. Submit under provisions of Section 01 33 00.
 - 1. Product Data: Submit manufacturer's data sheets for each product specified; degreaser neutralizer, etch and clean, sealer stain, and sealer.
 - a. Submit color charts for initial color selection
 - 2. Samples: Submit samples of acid stain for color selection and for mockup.
- B. Operation and Maintenance Data – Submit manufacturer's recommendations for cleaning and maintaining sealer stained and sealed concrete floors.

- C. Submit list of project completed by the installer. Include name and location of projects within 100 mile radius of project, completed within the last three years. Identify Architect of record, and provide contact information for Architect and Owner.

1.3 QUALITY ASSURANCE

- A. Installers Qualifications: Provide personnel who have been trained by concrete coating manufacturers, and have three years documented experience.

Note to Specifier: An effective way to ensure satisfactory results is to create a mockup on the actual surface to be stained and sealed. Require a mockup of sufficient size, and select a portion of the floor that will demonstrate the widest variety of conditions. Make everyone aware of variations that could occur in color, surface spots, cracks and crazing.

- B. Mockup: Provide mockups to illustrate desired finish, relationship with other materials and aesthetic effects.

1. Locate mockup where directed by the Architect.
2. When approved, mockup will become the standard by which the remaining Work will be judged and may become part of the Work.
3. Do not proceed until approved by the Architect.
4. Mockup Size: [4 x 8 feet] [4 x 10 feet]

- C. Pre-Installation Conference: Conduct a pre-installation conference five weeks before scheduled date to begin installation. Discuss the following;

1. Access
2. Temporary power
3. Graphics
4. Protection of adjacent areas
5. Protection of finished floor upon completion

- D. Single Source: Provide coating products including degreaser neutralizer, etch and clean, acid stain, and sealers from a Clemons Concrete Coatings.

1.4 PROJECT CONDITIONS

- A. Maintain environmental conditions during storage and application that complies with manufacturer's recommendations.

- B. Environmental Requirements:

1. Apply only when surface and air temperatures are above 50 degrees F and below 90 degrees F

1.5 EXTRA MATERIALS

Note to Specifier: Wax can be used to diminish slipping and scuffing on interior surfaces. A maintained coat of wax will protect and extend the life of the sealer. Suggest the contractor provide sufficient quantity for one year maintenance.

- A. Extra Materials: Provide [one] [two] gallon(s) container of Super Wax Polish for owner's maintenance program.

PART 2 PRODUCTS

2.1 ACCEPTABLE MANUFACTURER

- A. Provide products manufactured by Clemons Concrete Coatings of Nashville, Tennessee;
Telephone: 615-872-9099
www.ccc-usa.com
 - 1. Substitutions: [Not Permitted] [Under provisions of Section 01 25 00].

2.2 MATERIALS

- A. Degreaser neutralizer: Degreaser Neutralizer, as manufactured by Clemons Concrete Coatings, with the following characteristics:
 - 1. Biodegradable cleaner concentrate used to clean concrete
 - 2. VOC: <250 g/L
 - 3. Flammability: 0
- B. Etch and clean: Provide Etch & Clean as manufactured by Clemons Concrete Coatings, with the following characteristics:
 - 1. Phosphoric acid cleaning agent designed to lightly etch concrete and create porosity on concrete surface
 - 2. Prime ingredient: Phosphoric acid
 - 3. VOC: 0 g/L
 - 4. Flammability: 0
- C. Sealer stain: Provide Super Sealer Stain, as manufactured by Clemons Concrete Coatings, with the following characteristics:
 - 1. Oil-based pure acrylic resin stain
- D. Sealer: Provide Top Coat as manufactured by Clemons Concrete Coatings, with the following characteristics:
 - 1. Oil based mineral spirit sealer
 - 2. 25% solids non-yellowing acrylic
 - 3. High gloss

Note to Specifier; Optional wax coat for additional slip resistance and scratch protection. Super Wax is available is Gloss or Matte.

- E. Wax: Provide two coats of Super Wax Polish as manufactured by Clemons Concrete Coatings, with the following characteristics:
 - 1. Water-based non-yellowing acrylic and wax co-polymer
 - 2. Resists scuffs and mars
 - 3. Reduces the need to re-seal surfaces

2.3 ACCESSORIES

- A. Supplemental Materials:

Note to Specifier: Super Grip can be added to Top Coat for additional slip resistance.

- 1. Non-Skid Coating Additive: Provide Super Grip as manufactured by Clemons Concrete Coatings.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify that substrate is ready to receive concrete coating. Do not begin until deficiencies have been corrected.
- B. Verify that necessary repairs have been completed prior to start of system installation.

- C. Test substrate to receive sealer stain by spotting concrete with water. If water beads up on the surface, the concrete must be profiled to achieve required porosity.

3.2 PREPARATION

- A. Allow concrete minimum of 28 days to cure before sealer staining.
- B. Protect adjacent surfaces to prevent damage during concrete surface preparation, sealer stain, and sealer application.
- C. Clean concrete with degreaser neutralizer to remove all surface contaminants.
- D. Preparation for etch and clean: ensure the surface is free of dirt, wax, grease or other contaminants.
- E. Preparation for sealer staining: Mask adjacent columns, walls, and floors with painter's tape and plastic sheeting.
- F. Preparation for sealing: Sealer stain must be completely dry, clean, and free of dust or dirt.

3.3 FIELD QUALITY CONTROL

- A. Inspection: Inspect sealer stained concrete floors prior to application of top coat. Compare to approved mockup.
- B. Verify coverage rates of products to ensure proper application.

3.4 PROTECT AND CLEAN

- A. Protect finished concrete floors from foot and wheeled traffic for the remainder of the construction period.
- B. Clean with water and reapply Super Polish Wax as needed.
- C. Contractor shall provide maintenance and cleaning instruction upon completion of work.

END OF SECTION