

## SECTION 03 35 23

### EXPOSED AGGREGATE CONCRETE FINISHING

Note to Specifier: This guide specification describes a method of applying sprayable surface retarder to create a variable etch exposed aggregate finish to exterior concrete. These products are manufactured by Clemons Concrete Coatings of Nashville, Tennessee, [www.ccc-usa.com](http://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.

Require an onsite mockup to be maintained throughout the project. The approved mock up will be the standard by which the finished product can be compared.

Specify new concrete in Section 03 30 00 Cast-in-place Concrete. Environmental conditions and mix design may affect the performance of Super Cast. There is no limit to how long Super Cast can dwell. If left on fresh concrete for 28 days, Super Cast meets ASTM C-309 Type II as a curing compound.

To expose vertical concrete surfaces, specify Super Cast-F.

#### PART 1 GENERAL

##### 1.1 SUMMARY

- A. This section includes surface finishing of exterior 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; variable exposure surface retarder.
  - 2. Samples: Submit cured samples to show various depths of exposure.
- B. Operation and Maintenance Data – Submit manufacturer's recommendations for cleaning and maintaining exposed aggregate concrete.
- C. Submit list of projects 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 retarder manufacturers, and have three years documented experience.

Note to Specifier: Require a mockup of sufficient size to illustrate the various etch depths.

- B. Mockup: Provide mockups to illustrate desired finish, relationship with other materials and aesthetic effects.
  - 1. Contractor shall supply and maintain on site a completed test section of each finish application. Each section must be inspected and approved prior to commencement of construction.
  - 2. Approved mockups shall remain protected onsite and will become the standard by which the remaining work will be judged.
  - 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. Protection of adjacent areas
  - 4. Protection of finished concrete upon completion
- D. Single Source: Provide etching products including Super Cast 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 32 degrees F.

### 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. Variable exposure surface retarder: Super Cast, as manufactured by Clemons Concrete Coatings, with the following characteristics:
  - 1. Cures per ASTM C-309
  - 2. Deactivates surface permanently
  - 3. Sprayable surface retarder
  - 4. No need to cover with polyurethane sheeting
- B. Variable exposure surface retarder options:
  - 1. Acid Etch - #03 Violet
  - 2. Sandblast Etch - #05 Sky Blue
  - 3. Up to 1/4" aggregate - #15 Yellow
  - 4. 1/8" to 3/8" aggregate - #50 Pea Green
  - 5. 3/8" to 1/2" aggregate - #100 Gray

- C. Super Cast left on fresh concrete for 28 days meets ASTM C-309 Type II as a curing compound.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Super cast is designed for a standard 6 sack mix.
- B. Verify that substrate is ready to receive surface retarder. Allow the bleed water to rise and evaporate before applying Super Cast.
- C. Apply immediately after bleed water has evaporated. Under normal conditions with a standard mix design the surface can be exposed after 14+ hours.

### 3.2 PREPARATION

- A. Finish concrete with a wood float for best results.
- B. Protect all curbs, stones, pavers, and adjacent surfaces prior to surface retarder application.

### 3.3 FIELD QUALITY CONTROL

- A. Inspection: Compare to approved mockup.

END OF SECTION