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Product Guide Specification

Specifier Notes: This product guide specification is written according to the Construction Specifications Institute (CSI) 3-Part Format, including *MasterFormat*, *SectionFormat*, and *PageFormat*, as described in *The Project Resource Manual—CSI Manual of Practice, Fifth Edition*.

This section must be carefully reviewed and edited by the Architect or Engineer to meet the requirements of the project and local building code. Coordinate this section with other specification sections and the Drawings. Delete all “Specifier Notes” after editing this section.

Section numbers are from *MasterFormat 2010 Update*.

SECTION 03 35 00

DECORATIVE CONCRETE SEALERS

Specifier Notes: This section covers the following Nox-Crete Products Group decorative concrete sealers for protecting and enhancing the color of horizontal, decorative, stamped, stained, or plain concrete surfaces:

“Sparkl-Seal E”: Water-based, acrylic type.

“Sparkl-Seal VOC”: Solvent-based, acrylic type.

Consult Nox-Crete Products Group for assistance in editing this section for the specific application.

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Decorative concrete sealers.

1.2 RELATED REQUIREMENTS

Specifier Notes: Edit the following list of related sections as required. Limit the list to sections with specific information that the reader might expect to find in this section, but is specified elsewhere.

- A. Section 03 30 00 – Cast-in-Place Concrete.

1.3 REFERENCE STANDARDS

Specifier Notes: List standards referenced in this section, complete with designations and titles. Delete standards not included in the edited section. Including a standard here does not require compliance with that standard.

- A. AASHTO M 148 – Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
- B. ASTM C 309 – Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.

1.4 SUBMITTALS

Specifier Notes: Edit submittal requirements as required. Delete submittals not required.

- A. Comply with Section 01 33 00 – Submittal Procedures.
- B. Product Data: Submit manufacturer's product data, including surface preparation and application instructions.
- C. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- D. Warranty Documentation: Submit manufacturer's standard warranty.

1.5 QUALITY ASSURANCE

- A. Manufacturer's Qualifications: Manufacturer regularly engaged, for past 5 years, in manufacture of decorative concrete sealers of similar type to that specified.

Specifier Notes: Edit site test application as required. Delete site test application if not required.

- B. Site Test Application: Construct site test application of decorative concrete sealers for evaluation of surface preparation techniques and application workmanship.
 1. Construct site test application using same materials for use in the Work.
 2. Construct site test application at locations determined by Architect.
 3. Do not proceed until workmanship of site test application is approved by Architect.
 4. Approved Site Test Application: Standard for workmanship of decorative concrete sealers.

Specifier Notes: Edit preinstallation meeting as required. Delete meeting if not required.

C. Preinstallation Meeting:

1. Convene preinstallation meeting 2 weeks before start of application of decorative concrete sealers.
2. Require attendance of parties directly affecting work of this section, including Contractor, Architect, applicator, and manufacturer's representative.
3. Review surface preparation, mixing, application, protection, and coordination with other work.

1.6 DELIVERY, STORAGE, AND HANDLING

A. Delivery and Acceptance Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.

B. Storage and Handling Requirements:

1. Store and handle materials in accordance with manufacturer's instructions.
2. Keep materials in manufacturer's original, unopened containers and packaging until application.
3. Store decorative concrete sealers between 40 and 100 degrees F (4 and 38 degrees C).
4. Store materials in clean, dry area indoors, out of direct sunlight.
5. Protect materials from freezing.
6. Protect materials during storage, handling, and application to prevent contamination or damage.

1.7 AMBIENT CONDITIONS

- A. Air and Substrate Temperatures: Do not apply decorative concrete sealers when air or substrate temperatures are at or below 40 degrees F (4 degrees C) during application or within 6 hours after application.
- B. Material Temperature: Do not apply decorative concrete sealers when material temperature is below 50 degrees F (10 degrees C).

PART 2 PRODUCTS

2.1 MANUFACTURER

- A. Nox-Crete Products Group, 1444 South 20th Street, PO Box 8102, Omaha, Nebraska 68108. Toll Free 800-669-2738. Phone 402-341-1976. Fax 800-329-6733. www.nox-crete.com. customerservice@nox-crete.com.

2.2 MATERIALS

Specifier Notes: Specify Nox-Crete Products Group “Sparkl-Seal E” or “Sparkl-Seal VOC”. Delete material not required. Consult Nox-Crete Products Group for assistance in determining appropriate decorative concrete sealer for the specific application.

- A. Decorative Concrete Sealers: “Sparkl-Seal E”.
 - 1. Description:
 - a. Water-based, transparent, medium-gloss, acrylic, decorative concrete sealer for interior or exterior, vertical or horizontal applications.
 - b. Seals, hardens, and dustproofs decorative concrete.
 - 2. Compliance:
 - a. AASHTO M 148, Type 1, Class B.
 - b. ASTM C 309, Type 1, Class A and B.
 - c. USDA compliant for incidental food contact.
 - 3. Odor: Mild, organic.
 - 4. VOC: Less than 350 g/L.
 - 5. Vapor Pressure: 14 mm Hg at 20 degrees C.
 - 6. Flash Point: Greater than 200 degrees F (93 degrees C).
 - 7. Dry:
 - a. Dust/Tack Free: 20 minutes.
 - b. Hard: 2 to 4 hours.

- B. Decorative Concrete Sealers: “Sparkl-Seal VOC”.
 - 1. Description:
 - a. Solvent-based, transparent, acrylic, decorative concrete sealer for interior or exterior, horizontal or vertical applications.
 - b. Seals, hardens, and dustproofs decorative concrete.
 - 2. Compliance:
 - a. AASHTO M 148, Type 1, Class B.
 - b. ASTM C 309, Type 1, Class A and B.
 - c. USDA compliant for incidental food contact.
 - 3. Odor: Solvent.
 - 4. VOC: Less than 700 g/L.
 - 5. VOC, Low VOC Version: Less than 400 g/L.
 - 6. Vapor Pressure: Less than 7.0 mm Hg at 20 degrees C.
 - 7. Vapor Pressure, Low VOC Version: Less than 30.0 mm Hg at 20 degrees C.
 - 8. Flash Point: Greater than 100 degrees F (38 degrees C).
 - 9. Flash Point, Low VOC Version: Greater than 40 degrees F (4 degrees C).
 - 10. Dry:
 - a. Dust/Tack Free: 2 hours.
 - b. Light Traffic: 12 hours.
 - c. Normal Traffic: 24 hours.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine substrates to receive decorative concrete sealers.
- B. Notify Architect of conditions that would adversely affect application.

- C. Do not begin surface preparation or application until unacceptable conditions are corrected.

3.2 PREPARATION

- A. Protection of In-Place Conditions: Protect adjacent surfaces, painted surfaces, and vegetation from contact with decorative concrete sealers.
- B. Surface Preparation:
 - 1. Prepare surfaces in accordance with manufacturer's instructions.
 - 2. Clean surfaces of dirt, dust, debris, oil, grease, bond breaker residue, curing compounds, laitance, paint, and other contaminants which could adversely affect decorative concrete sealer adhesion.
- C. Ensure substrates are a minimum of 28 days old before application of decorative concrete sealers.
- D. Acid-Stained Floors:
 - 1. Neutralize acid-stained floors in accordance with manufacturer's instructions before application of decorative concrete sealers.
 - 2. Verify floor has pH greater than 7.
- E. Etch Substrates: Acid etch the following substrates in accordance with manufacturer's instructions to provide adequate bonding surface.
 - 1. Excessively smooth or dense finishes.
 - 2. Hard-steel-troweled concrete.
 - 3. Substrates with laitance.
- F. Allow cleaned surfaces to completely dry before application.

3.3 MIXING

- A. Mix materials in accordance with manufacturer's instructions.

3.4 APPLICATION

- A. Apply decorative concrete sealers in accordance with manufacturer's instructions at locations indicated on the Drawings.
- B. Apply decorative concrete sealers to clean and dry substrates.
- C. Uniformly apply decorative concrete sealers at application rate in accordance with manufacturer's instructions.
- D. Apply subsequent coats at right angles to achieve desired gloss.
- E. Do not apply decorative concrete sealers:
 - 1. Where treated surfaces will be covered with concrete or plaster.
 - 2. On concrete slabs with inadequately drained subgrade.
 - 3. On surfaces subject to hydrostatic water pressure.

4. With other floor sealers, treatments, bond breakers, or adhesives without prior site test to determine compatibility and adhesion.

3.5 PROTECTION

- A. Protect applied decorative concrete sealers from damage during construction.

END OF SECTION