

**SECTION 099723
CONCRETE SEALERS**

PART 1 GENERAL

1.1 SUMMARY

- A. This Section specifies an applied sealer for horizontal cast-in-place concrete surfaces.
- B. Related Sections: Refer to the following specification sections for coordination.
 - 1. Section 03 30 53 - Cast-In-Place Concrete.
 - 2. Section 32 05 23 – Cement and Concrete for Exterior Improvements

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions.
- B. Mock-Up: Prepare a test area minimum 2 by 2 feet in size to verify suitability of the sealer and final appearance.

1.3 QUALITY ASSURANCE

- A. Manufacturer: Minimum 10 years experience producing concrete coatings.
- B. Installer: Licensed installers experienced and trained in the use of specified products.
- C. Suitability of Substrate: Concrete surface must be clean and dry with all stains, oil, grease, dust and dirt removed prior to application. A thorough pressure washing is highly recommended.
- D. Regulatory Requirements: Comply with requirements of authorities having jurisdiction and applicable codes at the location of the project.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials and products in unopened factory labeled packages. Protect from damage.
- B. Store in a safe place, out of direct sunlight. Keep containers tightly sealed. Do not allow product to freeze. Use within manufacturer's recommended shelf life, approximately 12 months.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Concrete Sealer: High-performance, non-yellowing, clear acrylic-based sealer. Provide the following:
 - 1. Sealer with Matte Finish: maximum 100 g/L VOC.
 - 9. Performance: Concrete sealers shall meet or exceed the following:
 - a. Coverage: As recommended by manufacturer.
 - b. Moisture Retention, Test ASTM C 309: 0.21 kg/m² at 200 ft² per gallon and 0.32 kg/m² at 300 ft² per gallon.
 - c. Gasoline Resistance: Slight dulling after 15-minute exposure (ponding).
 - d. Tg: 50°C.

- e. Tukon Hardness: 30 minutes at 180°F, 9.3; 30 minutes at 300°F, 13.7.
- f. Pencil Hardness: 30 minutes at 180°F, F; 30 minutes at 300°F, H.
- g. Spray Conditions, Viscosity: 19 seconds, No. 2 Zhan cup.
- h. Abrasion Resistance: 160 mg lost, CS-17 wheel, 1000 g load, 1000 cycles

PART 3 - EXECUTION

3.1 PREPARATION

- A. Inspection: Prior to start of application, inspect existing conditions to ensure surfaces are suitable for installation including the following:
 - 1. Concrete has cured for a minimum of 28 days prior to application of sealer.
 - 2. Surface is completely free of sealers, oils, dirt, paint, alkali, penetrating sealers and foreign materials that would prevent the sealer from penetrating the concrete surface.
 - 3. Concrete has been swept clean.
 - 4. Test area has been approved.

3.2 APPLICATION

- A. Concrete Sealer: Strictly comply with manufacturer's installation recommendations including, but limited to, the following.
 - 1. Apply after stain has dried at rate recommended by manufacturer.
 - 2. Clean surface as recommended by manufacturer.
 - 3. All concrete flatwork designated as being sealed in the plans and specifications shall be sealed with 2-3 even coats of sealer.

3.3 CLEANING AND PROTECTION

- A. Protection: Do not cover, but protect area from paint and other contaminants that could inhibit the sealer.

END OF SECTION