

SECTION 099400  
DECORATIVE FINISHING

SEMI-TRANSPARENT DECORATIVE CONCRETE STAIN

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Bio-Based Penetrating Concrete Stain for Vertical and Horizontal Surfaces

1.2 RELATED SECTIONS

- A. Section 03300 Cast-in-Place Concrete
- B. Section 09600 Flooring
- C. Section 09900 Paints & Coatings
- D. Section 03360 Concrete Finishes

1.3 SUBMITTALS

- A. Submit under provisions of Section 01300.
- B. Product Data: Manufacturer's data sheets including;
  - 1. Installation Guide
  - 2. Product Data Sheet
  - 3. MSDS
- C. Selection Samples: Provide (2) sets of applicable color charts or chips representing all standard colors available from the manufacturer.
- D. Verification Samples: Provide verification samples of each product specified on a minimum size of 6" square showing actual products, colors, and texture.
- E. Installer Qualifications: Submit list of successfully completed projects with references of same or similar scope of work.

1.4 QUALITY ASSURANCE

- A. Qualifications: Successful experience with other projects of the scope and scale of the work described in this section.
- B. Training: Confirmation by manufacturer that the installer has successfully completed an authorized training workshop of the flooring system(s).
- C. Mock-up: Provide a mock-up demonstrating actual surface preparation methods to be used, then produce actual finishes to confirm acceptable appearance and workmanship.
- D. Area to be determined by architect.
- E. Approvals of each completed phase must be accepted prior to proceeding.
- F. Refinish, if applicable to receive final approvals.

1.5 DELIVERY, STORAGE & HANDLING

- A. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.

- B. Storage & Protection: Store materials protected from exposure to harmful environmental conditions and at a minimum temperature of 40 degrees F and at a maximum temperature of 90 degrees F. Do not freeze!
- C. Handling: All containers must be tightly closed when not in use to prevent accidental contamination by foreign elements.

## 1.6 PROJECT/SITE CONDITIONS

Maintain environmental conditions (temperature, humidity, ventilation) according to the manufacturer's instructions. Do not install an exterior project when rain is imminent within the first 24 hours.

## 1.7 WARRANTY

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. Manufacturer's Warranty: Submit for Owners acceptance, manufacturer's standard limited warranty against manufacturer defects executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.

## PART 2 PRODUCTS

### 2.1 MANUFACTURER

Acceptable Manufacturers:

Eco Safety, Inc. d/b/a Eco Safety Products  
2921 W Culver Street, #4B, Phoenix, AZ. 85009  
Telephone: 602.305.9397 Fax: 602.305.6431  
Email: [info@buildwithesp.com](mailto:info@buildwithesp.com) Website: [www.buildwithesp.com](http://www.buildwithesp.com)

### 2.2 PRODUCT SUBSTITUTIONS

Substitutions: No substitutions permitted.

### 2.3 LEED CONSIDERATIONS

Products to conform to one or more of the following categories which may assist with USGBC LEED submittals:

- A. MR Credit 1.1 Building Reuse-Walls, Floors, Roof
- B. MR Credit 1.2 Building Reuse- Interior Nonstructural
- C. MR Credit 4 Recycled Content
- D. MR Credit 5 Regional Materials
- E. MR Credit 6 Rapidly Renewable Material
- F. IEQ Credit 4.1 Low Emitting Materials-Sealants
- G. IEQ Credit 4.2 Low Emitting Materials-Paints & Coatings
- H. ID Credit 1 Innovation in Design

## 2.4 BIO-BASED PENETRATING CONCRETE STAIN

- A. Product: SoyCrete Architectural Concrete Stain (S1-1000)
- B. Description: A high performance semi-transparent interior/exterior bio-based architectural concrete stain. The soy dispersion technology replicates the permanent absorption characteristics similar to motor oil, but with an unlimited array of natural variegated color effects. Intended to be non film forming to eliminate peeling, chipping or flaking. Available in 16 standard colors with custom colors available.
- C. Surface Preparation: Remove all bond breakers and prepare substrate for optimum penetration and integral bonding by mechanical grinding and/or chemical etching and cleaning. Use Eco-Etch Pro Etch & Clean Concentrate (EE3-8000)

## 2.5 BIO-BASED PENETRATING CLEAR SEALER

- A. Product: Acri-Soy Penetrating Clear Sealer (A1-3000)
- B. Description: A high performance interior/exterior clear penetrating sealer. A non film forming natural satin protective finish to provide outstanding moisture and stain resistance.
- C. Surface Preparation: Remove all bond breakers including but limited to stain residue, oils, dirt, etc.

## 2.6 BIO-BASED PENETRATING CLEAR TOPCOAT FINISH

- A. Product: Poly-Soy TopCoat Clear Finish
- B. Description: A high performance interior/exterior clear satin or gloss topcoat. A penetrating protective finish to provide a light topical film barrier for a selective sheen level with outstanding moisture and stain resistance.
- C. Surface Preparation: Remove all bond breakers including but limited to stain residue, oils, dirt, etc.
- D. Finish Material: P1-3004 Poly-Soy TopCoat Satin Finish
- E. Finish Material: P1-3005 Poly-Soy TopCoat Gloss Finish

## 2.7 W.B. ACRYLIC-URETHANE HIGH TRAFFIC CLEAR COAT

- A. Product: Eco-Tuff High Traffic Clear Coat
- B. Formulation Options: Standard (concrete) and AQ (submersible)
- C. Description: A high performance interior/exterior 0 VOC water-based acrylic-urethane clear coat for concrete and masonry surfaces engineered for high traffic and extreme weather environments.
- D. Surface Preparation: Remove all bond breakers including but limited to stain residue, oils, dirt, etc.
- E. Primer/Sealer: Required for optimum moisture protection and bonding of topcoats for all high traffic, weathering, and submersible applications.
  - A. ET2-6500-10 Eco-Tuff W.B. 2-Part Epoxy Primer/Sealer
- F. Finish Material: ET2-6030-25CC Eco-Tuff High Traffic Clear Coat, Standard
- G. Finish Material: ET2-6032-25AQCC Eco-Tuff High Traffic Clear Coat, AQ

## PART 3 EXECUTION

### 3.1 MANUFACTURER'S INSTRUCTIONS

- A. Comply with the instructions and recommendations of the flooring surface manufacturer.

### 3.2 EXAMINATION

- A. Site Verification of Conditions: Verify that substrate conditions are suitable for installation of the flooring surface system.
- B. Do not proceed with installation until unsuitable conditions are corrected.

### 3.3 SURFACE PREPARATION

- A. Protect adjacent surfaces to prevent accidental application to surfaces not indicated to receive stain; remove accidental applications from surfaces immediately, following manufacturer's instructions.
- B. Preparation of existing surfaces:
  - 1. Remove loose or deteriorated materials, including, but not limited to, scale, spalling, paint, sealers, curing compounds or other coatings.
  - 2. Clean and etch concrete with Eco Etch Pro to achieve optimum porosity and deep cleaning for a properly prepared substrate suitable for decorative staining.
  - 3. If preparing concrete by mechanical abrasion be sure to test for porosity when complete as some very dense concrete may remain less porous than desirable.

### 3.4 INSTALLATION

- A. Apply stain in accordance with manufacturer's instructions for indicated project conditions; for multi-coat applications, allow specified curing time between subsequent coats.
- B. Apply SoyCrete Stain on the following properly prepared compatible vertical or horizontal surfaces:
  - 1. Cast-in-place concrete surfaces.
  - 2. Tilt-up concrete panel surfaces.
  - 3. Brick masonry surfaces.
  - 4. Painted surfaces.
  - 5. Stucco surfaces.
  - 6. Plaster surfaces.
  - 7. Adobe surfaces.
  - 8. Drywall surfaces.
  - 9. Natural stone surfaces.
  - 10. Tile and mortar grout.
  - 11. Low density block.
  - 12. Split-face block.
  - 13. Fluted block.
  - 14. and most porous surfaces.

C. Application of finish sealer is required as recommended by manufacturer.

### 3.5 PROTECTION

Protect the installed surface from damage resulting from subsequent construction activity on the site.

### 3.6 STORAGE AND REPAIR

- A. To store partially used cans, seal can well (airtight) and place in cool, dry place. The contents should be useable for at least 12 months.
- B. The evaporation of the water within the product will cause the product to cure. If some water content has evaporated, reconstitution with clean water may restore product viability if the curing process within the can is not too advanced.

### 3.7 MAINTENANCE

- A. Most general neutral pH floor cleaners have been tested and will work well. We recommend Soy-It Degreaser Concentrate.
- B. Use a wet/dry microfiber mop for daily maintenance cleaning.
- C. Surfaces can also be cleaned with the use of automatic scrubbers. These are machines which, in one pass, put down the washing solution, scrub the floor with a light pad, and vacuum up the dirty water. It should be pointed out that the pad pressure used in the scrubber must be light and need only be sufficient for the pad to make light contact with the floor.
- D. Heavy scrubbing will negatively affect the coated surface over time.

END OF SECTION