SECTION 030130.61 FORMATTED SPECIFICATION SUNDEK[®] SUNSTONE™

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Installation of the SUNDEK[®] SUNSTONE System including, substrate preparation, substrate repairs, materials, and installation process.
- B. Repair of vertical and horizontal surfaces.

1.2 RELATED SECTIONS

- A. Section 03300 Cast-In-Place Concrete:
- B. Section 02751 Portland Cements Concrete Paving.
- c. Section 03925 Concrete Resurfacing and Rehabilitation.
- D. Section 039000- Exterior Overlay Maintenance.

1.3 REFERENCES

- A. ANSI A118.4 Specifications for Latex Portland Cement Mortar.
- B. ASTM D1242 Standard Test Methods for Abrasion Resistance.
- c. ASTM D570 Standard Test Methods for Water Absorption.
- D. ASTM D-2047-11 Standard Specification for Coefficient of Friction.
- E. ANSI A 326.3 Dynamic Coefficient of Friction.
- F. ASTM D229 Standard Test Methods for Chemical Resistance by 12 Reagents.
- G. ICRI 310.2R-2013 Selecting & specifying concrete surface preparation for sealers, coatings, polymer overlays, and concrete repair.

1.4 SUBMITALS

- A. Product Data: Manufacturer's data sheets on each product to be used, including:
- B. Shop Drawings.
- c. Selection Samples: For each finish product specified, a complete set of color cards representing manufacturer's full range of available colors and patterns.
- D. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, represent actual product, color, and patterns.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications.

- B. Installer Qualifications. Installer must be a licensed SUNDEK[®] installation contractor with 5 years' experience in similar projects.
- D. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by Architect.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by Architect.
 - 3. Completed mock up if acceptable may become part of the finished work.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Properly label and identify all containers as Sundek materials.
- B. Deliver and store all materials to prevent damage to product and containers.
- c. Store all material in a clean, dry location where temperatures are maintained between 40 and 90 degrees Fahrenheit.
- D. Comply with manufacture's Safety Data Sheets (SDS) for delivery, storage and handling of products.

1.7 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
- B. Exterior Surfaces: Do not apply materials in wet weather.

PART 2 – PRODUCTS

2.1 MANUFACTURER

Acceptable Manufacturer: Sundeck Products USA, Inc., which is located at: 616 E. AVENUE J, GRAND PRAIRIE, TX 75050

USA. Toll Free Tel: 877-478-6335; Email: <u>request info: product@sundek.com;</u> Web: <u>www.sundek.com;</u>

2.2 SUNDEK[®] PRODUCTS INC. SUNSTONE.

Copolymer Modified Cementitious Texture Finish: Sundek SUNSTONE as manufactured by SUNDEK[®] Products Inc.

2.3 ACCEPTABLE MATERIALS

- A. Sundek 106 Blending Mix
- B. Sundek SUNSTONE modified limestone cement coating.
- F. Sundek 210 Concentrated Additive: Vinyl acetate emulsion with 53% solids content.
- G. Sundek H2O water borne staining system.
- H. Sundek Finish Coat Clear: Optional material based on project requirements.
- I. Sundek A-25 solvent borne sealer: Optional material based on project requirements.

2.4 SYSTEM INTEGRITY

A. Sundek SUNSTONE is an engineered system and requires all components to perform as specified. No substitutions are permitted. Any substitution of products or components will void any warranty expressed or otherwise implied.

PART 3 – EXECUTION

3.1 EXAMINATION

- A. Concrete shall be structurally sound, with required reinforcements and footings. Place and finish concrete in a skilled and workmanlike manner.
- B. Install control joints throughout concrete as required to prevent cracking.
- c. All joints in the substrate must be honored with the SUNSTONE installation.
- D. Provide surface drainage at all points no less than 1/4 inch per linear foot. Drainage correction is not guaranteed in the Sundek SUNSTONE installation.
- E. Refer to section 033000, cast in place concrete specification.

3.2 PREPARATION

- A. Clean concrete surface with high-pressure power washer. Surface shall be a CSP-1-2 according to ICRI 310.2R-2013. A floor grinder may be used if a dry preparation method is preferred.
- B. Remove dirt, grease, oil, curing compounds or other foreign substances, which may prevent proper bonding. Any demolition of existing coatings may require mechanical removal to insure surface bonding.
- c. Provide protective masking at all adjacent areas not to be coated.
- D. Repair cracks, surface damage and any corrective measures on concrete.
- E. Some cracking may be incorporated into the joint pattern of the application.

3.3 PROJECT DETAILS

- A. Specific project details will be as follows.
- B. Finished texture shall be SUNDEK SUNSTONE.
- c. Primary color shall be "INSERT COLOR HERE".
- D. Secondary color shall be "INSERT COLOR HERE"
- E. Finished pattern shall be "INSERT PATTERN HERE"

INTENTIONALLY LEFT BLANK

3.4 APPLICATION

- A. Spray or roll Sundek Primer/Additive on area to be coated. Allow to dry and become transparent. Surface should be tacky when applying 1st coat of material.
- B. SUNDEK 106 Blending Mix / Sundek 112-113 Premix. For exposed aggregate use Sundek 106 blending mix. For smooth or weathered surfaces use Sundek 112-113 Premix.
 - 1. Mix Sundek Blending Mix or Premix for bonding base coat application using mechanical agitation for 3-6 minutes as per manufacturers technical guidelines.:
 - 2. Pre-dilute 210 concentrated additive at a 2:1 ratio before use.
 - 3. Mix the appropriate Sundek powder, according to the manufacturers technical data sheet.
 - 4. Apply Sundek blending mix following the manufacturers technical guidelines at a minimum thickness of 1/8" and allow drying. Scrape away edges or ridges when dry.

c. SUNDEK TEXTURE COAT(S)

- 1. Mix Sundek SUNSTONE for the texture application using mechanical agitation for 3-6 minutes as per manufacturers technical guidelines.
- 2. SUNSTONE mixes with 6 quarts of clean water only.
- 3. Caulking for joints or repairs should be installed at this time.
- 4. Apply the SUNSTONE material using a gauged rake for application. $\frac{1}{4}$ " $\frac{1}{2}$ " depth.
- 5. Float by hand using a steel pool trowel to create the surface texture. The depth of the texture should be determined by the sample or mock-up.
- 6. After 45-60 minutes the surface may be hand carved to create the pattern.
- D. SUNDEK COLOR APPLICATION
 - 1. Allow the application to dry for 24 hours before staining with Sundek H2O water borne stain. See the product TDS for complete details.
 - 2. After the final staining has been completed the joints may be grouted using the SUNSTONE material or a commercial polymer grout product.
 - 3. The application may be sealed with the appropriate sealer after the grout has dried completely.

3.5 PROTECTION

- A. Protect all phases of Sundek SUNSTONE from moisture, freezing and foot traffic for 24 hours. Prevent vehicular traffic for 72 hours from finish of application.
- B. Owner or General Contractor will provide protection for finished Sundek SUNSTONE Finish from damage by others until acceptance by responsible party.

3.6 MAINTENANCE

- A. Power wash or rinse thoroughly on a regular basis as needed.
- B. A mild solution using a neutral pH cleaner may be used as needed for tougher stains.
- c. Touch up or minor repairs can be done by an approved Sundek installer only.
- D. Refer to the SUNDEK Maintenance specification for exterior overlays for more detailed instructions. Section 03 90 00.
- E. Contact your Sundek dealer for further assistance.

END OF SECTION

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