

#### SECTION 03360

#### CONCRETE FINISHES

#### **SUNCANVAS - MICROTOPPING**

## PART 1 GENERAL

## **1.1 SECTION INCLUDES**

- A. Resurfacing of exterior concrete pavements.
- B. Resurfacing of interior concrete floors.
- C. Repair of damaged structural members.
- D. Decorative coating systems for concrete floors.
- E. Moisture reduction barrier.

## 1.2 RELATED SECTIONS

- A Section 03300 Cast-In-Place Concrete: New concrete.
- B Section 03330 Architectural Concrete.
- C Section 02751 Portland Cements Concrete Paving.
- D Section 09980 Coatings for Concrete and Masonry.
- E Section 09325 Concrete Resurfacing and Rehabilitation.

## **1.3 REFERENCES**

- A ANSI A118.4 Specifications for Latex Portland Cement Mortar.
- B ASTM C67 Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile.
- C ASTM A756 D & E Standard Test Methods for Aging Test by Acceleration.
- D ASTM C1028 Standard Test Methods for Coefficient of Friction.
- E ASTM D1242 Standard Test Methods for Abrasion Resistance.
- F ASTM D570 Standard Test Methods for Water Absorption.
- G ASTM D229 Standard Test Methods for Chemical Resistance by 12 Reagents.

## 1.4 SUBMITALS

- A Submit under provisions of Section 01300.
- B Product Data: Manufacturer's data sheets on each product to be used, including:
  - 1. Preparation instructions and recommendations.
  - 2. Storage and handling requirements and recommendations.
  - 3. Installation methods.
- C Shop Drawings.
- D Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- E 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.
- C 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. Refinish mock-up area as required to produce acceptable 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 Material Safety Data Sheets (MSDS) 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

A Acceptable Manufacturer: SUNDECK Products Inc, U.S.A., which is located at: 805 Ave H Suite 508; Arlington TX, 76011; ASD. Toll Free Tel: 877-478-6335; Email: <u>request</u> <u>info: products@sundek.com</u>; Web: <u>www.sundek.com</u>;

## 2.2 SUNCANVAS MICROTOPPING SYSTEM

A Copolymer Modified Cementitious Micro coat Finish: Sundek SunCanvas as manufactured by Sundek Design Products.

## 2.3 ACCEPTABLE MATERIALS

- A Sundek Premix:
  - 1. Copolymer modified thin set cement coating to be used in conjunction with Sundek Additive, available in Tan, Grey, Red and White colors.
- B Sundek Canvas Coat:
  - 1. Copolymer modified thin set cement coating to be used in conjunction with Sundek Additive, available in Grey and White colors.
- C Sundek Additive:
  - 1. Vinyl acetate emulsion with 53% solids content.
- D SunEpoxy 54/Undercoat:
  - 1. Resinous low solids primer.
- E SunStain:
  - 1. SunH20:
    - 1..E.1.1. Water base acrylic color effect available in 18 standard colors or any customer color choice as special order.
  - 2. SunDye:
    - 1..E.2.1. Colorant solution that can be mixed with water or acetone.
  - 3. SunAcid:
    - 1..E.3.1. Reactive acid based stain.
- F SunEpoxy 100:
  - 1. Water based resinous clear coat VOC compliant at 100% solids.
- G EcoClear:
  - 1. Water based high solids urethane, VOC compliant.
- H No materials can be substituted other than those specified by Sundeck Products, Inc.

#### 2.4 PERFORMANCE

- A Absorption (ASTM D570).....12.7%.
- B Percolation (ASTM D1242) 48"/48hr.....<1%.
- C Chemical Resistance (ASTM D229) 12 Reagents.....Unaffected.

# PART 3 – EXECUTION

## 3.1 EXAMINATION

- A Concrete shall be structural 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 Provide surface drainage at all points no less than 1/4 inch per linear foot where applicable. Drainage correction is not guaranteed in the Sundek SunCanvas Effect installation.

### 3.2 PREPARATION

- A. Clean concrete surface with high-pressure power washer or profile by grinding.
- B. Remove dirt, grease, oil, curing compounds or other foreign substances, which may prevent proper bonding.
- C. Provide protective masking at all adjacent areas not to be coated.
- D. Repair cracks, surface damage and any corrective measures on concrete.

#### 3.3 APPLICATION

- A. Spray or roll Sundek SunEpoxy 54/Undercoat Primer on area to be coated. Allow to dry and become transparent.
- B. SUNDEK BASE COAT (Required for blending repairs and profiling rough concrete surfaces).
  - 1. Apply Sundek Base Coat using squeegee or trowel uniformly on area to be coated to a minimum thickness of 1/16" and allow drying.
- C. Mix Sundek Premix for Base Coat Application using mechanical agitation for 3-6 minutes as per mix design:
  - 1. Sundek Additive......0.5 gal......4.5 lbs
  - 2. Sundek Premix......45 lbs
  - 3. \*Clean Water.....1 gal
  - 4. \*Water/Additive ratio will vary with temperature and humidity.
- D. Mix Sundek Canvas Coat using mechanical agitation for 3-6 minutes as per mix design:
  - 1. Sundek Additive ......4.5 lbs
  - 2. Sundek Premix...... 45 lbs
  - 3. \*Clean Water.....1 gal
  - 4. \*Water/Additive ratio will vary with temperature and humidity.
- E. Apply Sundek Canvas Coat by trowel or specialty applicator Magic Trowel.
- F. OPTIONAL SCORING EFFECTS Score desired pattern into Sundek SunCanvas Effect using masonry cutting wheel and grinder.
- G. Spray selected Stain option by pump up sprayer consistently throughout surface to achieve desired color.
- H. If SunAcid was selected stain of choice, proceed to remove stain residue and neutralize surface after application is completely dry.
- I. Apply SunEpoxy 100 clear by squeegee and back roll to achieve a consistent coverage.
- J. Top coat with EcoClear after SunEpoxy 100 has been drying for at least 6 hours.
- K. Remove all protective masking upon drying of Sundek EcoClear Finish Coat.

## 3.4 PROTECTION

- A. Protect all phases of Sundek SunCanvas System 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 SunCanvas Effect from damage by others until acceptance by responsible party.

## 3.5 MAINTENANCE

- A Power wash, mop or rinse thoroughly on a regular basis as needed.
- B A mild solution of muriatic acid can be use for tougher stains.
- C Touch up and perform all minor repairs as needed with touch up kits provided by Sundek during installation.
- D Re-clear of coating can be done to refresh the appearance and promote longevity.
- E Contact your Sundek dealer for further assistance.

# END OF SECTION