

SECTION 03360

CONCRETE FINISHES

SUNRESTORE BROOM FINISH

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Resurfacing of exterior concrete pavements.
- B. Resurfacing of interior concrete floors.
- C. Repair of vertical and overhead horizontal surfaces.
- D. Repair of damaged structural members.
- E. Elimination of water bearing cracks.

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 03925 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.
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.
- 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:
- 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.
- 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. 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 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: 805 Ave H Suite 508; Arlington TX, 76011; USA. Toll Free Tel: 877-478-6335; Email: request info: product@sundek.com; Web: www.sundek.com;

2.2 SUNRESTORE BROOM FINISH SYSTEM

Copolymer Modified Cementitious Texture Finish: Sundek SunRestore Broom Finish as manufactured by Sundek Design Products.

2.3 ACCEPTABLE MATERIALS

- A. Sundek Blending Mix
- B. Factory blend of portland cement and graded aggregates, polymerized with Sundek's diluted (2:1) Additive.
- C. Sundek Premix:
- D. Copolymer modified thin set cement coating to be used in conjunction with Sundek Additive, available in Grey and White colors.
- E. Sundek Primer/Additive:
- F. Vinyl acetate emulsion with 53% solids content.
- G. Sundek Finish Coat: High solids, water-based acrylic protective top coat available in clear, 16 standard colors, or any customer color choice as special order.
- H. No materials can be substituted other than those specified by Sundeck Products, Inc.

2.4 PERFORMANCE

A.	Weighs lbs./ft @ (3/16")1.3 lbs.
B.	Thickness (Typical)3/16".
C.	Bond Strength (ASTM C297)469 psi.
D.	Accelerated Aging (ASTM A756 D&E)Unaffected.
E.	Freeze-Thaw (ASTM C67)No Breakage <1% weight loss.
F.	Slip Resistance (S.C.O.F., ASTM C1028)81 Wet-1.03 dry.
G.	Abrasion (ASTM D1242)0328 in. = 3000 psi Concrete.
Н.	Absorption (ASTM D570)12.7%.
l.	Percolation (ASTM D1242) 48"/48hr<1%.
J.	Chemical Resistance (ASTM D229) 12 ReagentsUnaffected.
K.	Impact Resistance (Mil D3134 FNo Breakage / < .62 in.
L.	Concentrated Load Test (500 lb)No Breakage / < .001 in.

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. Provide surface drainage at all points no less than 1/4 inch per linear foot. Drainage correction is not guaranteed in the SunRestore Broom Finish installation.

3.2 PREPARATION

- A. Clean concrete surface with high-pressure power washer.
- 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 Primer/Additive on area to be coated. Allow to dry and become transparent.
- B. SUNDEK Blending Mix (required as bonding base coat)
 - Mix Sundek Blending Mix for Bonding Base Coat Application using mechanical agitation for 3-6 minutes as per mix design:
 - a. Sundek Concentrated Additive/Primer...... 0.5 gal
 - b. Sundek Blending Mix1 bag (50 lbs)
 - c. Clean Water......1 gal
 - d. Water ratio may vary with temperature and humidity.
 - Apply Sundek blending mix using an asphalt or concrete squeegee uniformly in a ribbon on area to be coated to a minimum thickness of 1/8" and allow drying. Scrape away edges when dry.
- C. SUNDEK Broom Coat (required for creating broom finish layer).
 - Mix Sundek Premix for Broom Coat Application using mechanical agitation for 3-6 minutes as per mix design:
 - a. Sundek Concentrated Additive/Primer..... 0.4 gal
 - b. Sundek Premix 1 bag (45 lbs)
 - c. *Clean Water...... 0.9 gal
 - d. *Water ratio may vary with temperature and humidity.
 - 2. Apply Sundek Broom Coat over base when walkable, using an asphalt or concrete squeegee to a minimum thickness of 1/16". Lightly broom the layer immediately after application to create the desired broom finish. Scrape any rough edges once the layer is completely dry and walkable.
- D. Apply two coats of Sundek Finish Coat or Sundek Clear Finish Coat to surface once it is completely dry by roller or airless type sprayer and allow drying completely between coats.
- E. Remove all protective masking upon drying of Sundek Clear Finish Coat.

3.4 PROTECTION

- A. Protect all phases of Sundek SunRestore Broom Finish 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 SunRestore Broom Finish from damage by others until acceptance by responsible party.

3.5 MAINTENANCE

- A. Power wash 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 upon request during installation.
- D. Re-coloring of coating can be done to refresh the appearance and promote longevity.
- E. Contact your Sundek dealer for further assistance.

END OF SECTION