



SECTION 03360

CONCRETE FINISHES

SUNACID

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Moisture vapor emission testing.
- B. Surface preparation.
- C. Joint treatment.
- D. Furnishing and installation of acid based stain

1.2 RELATED SECTIONS

- A Section 03300 - Cast-In-Place Concrete: New concrete.
- B Concrete slabs on or below grade shall be installed over an effective moisture vapor barrier.
- C Concrete slabs shall be cured 30 days, be structurally sound and have a steel trowel finish.
- D Surface shall be well sloped to drains, straight and level with the permissible degree of tolerance of 1/4" in 10'-0" in any direction.
- E No curing compounds or surface contaminants shall be used in placing new concrete.

1.3 REFERENCES

- A ASTM C1028 – Standard Test Methods for Coefficient of Friction.
- B ASTM D1242 – Standard Test Methods for Abrasion Resistance.
- C ASTM D570 – Standard Test Methods for Water Absorption.
- D 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 Sundeck 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 U.S.A. Inc, which is located at: 805 Ave H Suite 508; Arlington TX, 76011; ASD. Toll Free Tel: 877-478-6335; Email: [request info: products@sundek.com](mailto:products@sundek.com); Web: www.sundek.com;

2.2 SUNACID SYSTEM

- A Acid Based Reactive Finish: SunAcid as manufactured by Sundeck Products USA Inc,

2.3 ACCEPTABLE MATERIALS

- A Sundeck SunAcid:
 - 1. Reactive colorant available in 10 standard colors.
- B Sundeck Crystal Clear:
 - 1. 30% Single component solvent base Urethane.
- C No materials can be substituted other than those specified by Sundeck Products, Inc.

2.4 PERFORMANCE

- A Gloss (60 degrees): 90-95
- B Hardness (sward): 30
- C Tabor Abrasion: (1000 gm load, 1000 cycles, CS-17 wheel): 40 mg loss.
- D Flexibility (ASTM D-222): Passes 1/8 inch.
- E Impact Resistance (ASTM D-2794): Passes 160 inch-pounds direct and reverse.
- F Chemical Resistance (ASTM D-1308 7-day exposure) Unaffected by the following:
 - 1 Brake Fluid
 - 2 Skydrol B-4
 - 3 Gasoline
 - 4 Hydraulic Fluid #83282
 - 5 Mineral Spirits
 - 6 Xylene
 - 7. 50% Sodium Hydroxide
 - 8. 25% Hydrochloric Acid
 - 9. 25% Sulphuric Acid

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 Inspect surfaces to receive floor system.
- C Conduct calcium chloride moisture vapor emission testing according to ASTM 1869-04. If test reading is above three pounds, consult Sundeck Products Inc, U.S.A. before proceeding.
- D Before starting work, report in writing to the architect any unsatisfactory conditions.
- E Application of any material shall signify that surfaces have been inspected and are satisfactory.

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 Allow sufficient time for the installation of the flooring system. At no time shall the speed of project completion be allowed to detrimentally affect the application.
- B Provide sufficient light, power, heat and working conditions to permit proper application of the materials. Substrate temperature shall be at a minimum of 50°F during application and for 48 hours thereafter.
- C Apply SunAcid Stain at a rate of 200-250 sq. sf. per gallon.
- D Rinse and neutralize stain residue. Allow the concrete to dry for a minimum of 24 hours
- E Remove all protective masking upon drying of Sundeck Crystal Clear Coat.

3.4 PROTECTION

- A. Protect all phases of Sundeck SunAcid 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 SunAcid 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 Sundeck during installation.
- D Floor should be cleaned with ammonia and water or a mild, non-filming detergent. For difficult stains, paint thinner may be used without harming the finish.
- E Re-coloring of coating can be done to refresh the appearance and promote longevity.
- F Contact your Sundeck dealer for further assistance.

END OF SECTION