

**SECTION 096716**  
FORMATTED SPECIFICATION  
SUNDEK® SUNONE EPOXY CHIP™

**PART 1 GENERAL**

**1.1 SECTION INCLUDES**

- A. Installation of the SUNDEK® SUNCHIP Epoxy Flooring System including, substrate preparation, substrate repairs, materials, and installation process.
- B. Repair of vertical and horizontal surfaces.

**1.2 RELATED SECTIONS**

- A. Section 096000 – Flooring.
- B. Section 096700 – Fluid Applied Flooring.
- C. Section 02751 - Portland Cements Concrete Paving.
- D. Section 03925 - Concrete Resurfacing and Rehabilitation.
- E. Section 039000- Exterior Overlay Maintenance.

**1.3 REFERENCES**

- A. ASTM C722-18 - Specifications for Chemical Resistant Monolithic Flooring.
- B. ASTM D1242 – Standard Test Methods for Abrasion Resistance.
- C. ASTM D570 – Standard Test Methods for Water Absorption.
- D. ASTM 1869-11- Standard Test Method for Measuring Moisture Vapor Emission Rate.
- E. ASTM 2170-19 - Standard Test Method for Determining Relative Humidity.
- F. ASTM D-2047-11 Standard Specification for Coefficient of Friction.
- G. ANSI A 326.3 Dynamic Coefficient of Friction.
- H. ASTM D229 – Standard Test Methods for Chemical Resistance by 12 Reagents.
- I. 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.

## PART 2 – PRODUCTS

### 2.1 MANUFACTURER

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

USA. Toll Free Tel: 877-478-6335; Email: [request info: product@sundek.com](mailto:product@sundek.com);

Web: [www.sundek.com](http://www.sundek.com);

### 2.2 SUNDEK® PRODUCTS INC. SUNCHIP ACCEPTABLE MATERIALS

- A. Sundek SUNONE 80, 80% Solids Polyaspartic / Polyurea Coating.
- B. Sundek SUNONE 90, 90% Solids Polyaspartic / Polyurea Coating.
- C. Sundek SUNEPOXY 400, Water based epoxy coating.
- D. Sundek ECO-CLEAR, Water based polyurethane sealer.
- E. Sundek MCU-8, 85% solids moisture cured urethane.
- F. Sundek CRACK REPAIR 100, hybrid urethane crack repair material.
- G. Sundek SUNCHIP MULTI COLOR, Multi-colored acrylic chips.
- H. Sundek SUNCHIP SOLID COLOR, Solid-colored acrylic chips.

## 2.3 SYSTEM INTEGRITY

- A. SUNDEK SUNCHIP 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. Verify that the floor moisture levels meet the material standard limitations.
- D. All joints in the substrate must be honored with the SUNCHIP installation.
- E. Refer to section 033000, cast in place concrete specification.

### 3.2 PREPARATION

- A. Surface shall be a CSP-3-5 according to ICRI 310.2R-2013. A shot blaster or floor grinder is the preferred method for mechanical preparation.
- B. Remove dirt, grease, oil, curing compounds or other foreign substances, which may prevent proper bonding. Any demolition of existing coatings may require a mechanical floor grinder prior to shot blasting the surface.
- C. Provide protective masking at all adjacent areas not to be coated.
- D. Repair cracks, surface damage and any corrective measures on concrete using Sundeck Crack repair 100.

### 3.3 PROJECT DETAILS

- A. Specific project details will be as follows.
- B. Finished texture shall be SUNDEK SUNCHIP TEXTURE.
- C. Primary color shall be "INSERT COLOR HERE".
- D. Specified sealer shall be "INSERT SEALER HERE".

INTENTIONALLY LEFT BLANK

### 3.4 APPLICATION

- A. Patch any spalls or damage to provide a smooth continuous surface.
- B. Perform a solvent wipe of the surface to remove any residual dust or debris.
- C. SUNDEK SUNONE 80/90
  - 1. Mix Sundek SUNONE 80/90 per manufactures directions. Color may be added at this time if required.
- D. SUNDEK SUNCHIP FINISH
  - 1. Apply the SUNONE material per manufactures direction. Application should be 4-5 mils for a receiver coat.
  - 2. Broadcast the chips into the wet material to the point of refusal. There should be no wet or bare spots visible on the surface.
  - 3. Allow the area to dry for a minimum of 2-4 hours.
  - 4. Remove any excess chips by sweeping, scraping and vacuum.
- E. ALTERNATE (optional)
  - 1. Depending on the floor conditions a breathable surface may be required. For this application Sundek recommends using the SUNEPOXY 400 for a receiver coat.
  - 2. Mix the SUNEPOXY 400 per manufactures directions.
  - 3. Apply the SUNEPOXY 400 using a squeegee and back roll. The application should be 8-10 mils for a receiver coat.
  - 4. Broadcast the chips into the wet material to the point of refusal. There should be no wet or bare spots visible on the surface.
  - 5. Allow the area to dry for a minimum of 12-16 hours.
  - 6. Remove any excess chips by sweeping, scraping and vacuum.
- F. SUNDEK SEALER APPLICATION
  - 1. After removing the excess chips, the application of Sundek sealer should be done. Be sure to select the appropriate sealer for the system used.
  - 2. Mix the material according to the manufacturer's instructions. The MCU-8 is a single component sealer and does not require mixing.
  - 3. For breathable applications the Sundek Eco-Clear is the proper sealer for this application.
  - 4. Apply the appropriate sealer according to the manufacturer's instructions.
  - 5. Allow the seal coat to dry for the recommended curing period for light traffic. Allow the surface to reach full cure before allowing any heavy traffic.

### 3.5 PROTECTION

- A. Protect all phases of Sundek SUNCHIP 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 SUNCHIP application from damage by others until acceptance by responsible party.

### 3.6 MAINTENANCE

- A. Wash or rinse thoroughly on a regular basis or 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. Contact your Sundek dealer for further assistance.

END OF SECTION

*Products manufactured and marketed by SUNDEK® are protected by Patents issued and pending in the United States and other countries. SUNDEK® reserves the right to change, update or modify these specifications in this document at any time without prior notice. SUNDEK® SUNCHIP™ are trademarked and owned by SUNDEK®. All rights Reserved.*