

## SECTION 1 - GENERAL

### 1.1 SUBMITTALS

- A. Product Data: Submit manufacturer’s technical data, installation instructions and general recommendation for each resinous flooring material required. Include certification indicating compliance of materials with requirements.
- B. Samples: Submit, for verification purposes, 4-inch square samples of each type of resinous flooring required, applied to a rigid backing, in color and finish indicated.

### 1.2 QUALITY ASSURANCE

- A. Single Source Responsibility: Obtain primary resinous flooring materials including primers, resins, hardening agents, finish or sealing coats from a single manufacturer/installer (no subcontractors) with not less than ten years of successful experience in manufacturing and installing principal materials described in this section. Manufacturer/Installer shall have completed at least five projects of similar size and complexity.
- B. Pre-Installation Conference
  - 1. General contractor shall arrange a meeting not less than thirty days prior to starting work.
  - 2. Attendance
    - a. General Contractor
    - b. Architect/Owner’s Representative
    - c. Manufacturer/Installer

### 1.3 MATERIAL DELIVERY, STORAGE AND HANDLING

- A. Material shall be delivered to job site and be checked by flooring installer for completeness and shipping damage prior to job start.
- B. Material shall be stored in a dry enclosed area, protected from exposure to moisture. Temperature of storage area shall be maintained between 60 and 85°F/16 and 30°C.

### 1.4 PROJECT CONDITIONS

- A. Concrete substrate shall be properly cured for a minimum of 30 days. A vapor barrier should be present for concrete subfloors on or below grade. Otherwise, contact the CornerStone Technical Department prior to the installation of the resinous flooring.
- B. Utilities, including electric, water, heat (air temperature between 60 and 85°F/16 and 30°C) and finished lighting to be supplied by General Contractor.
- C. Job area to be free of other trades during, and for a period of 24 hours, after floor installation.
- D. Protection of finished floor from damage by subsequent trades shall be the responsibility of the General Contractor.

## **SECTION 2 - PRODUCTS**

### **2.1 MANUFACTURERS**

- A. The products of CornerStone Industries, Corp., (800) 659-7699, are identified below as the basis of design.

### **2.2 RESINOUS FLOORING SYSTEM**

- A. Heavy-duty slurry-matrix polyurethane flooring system
- B. Basis of Design Product: “CS 5000SB at a nominal ¼” thickness” by CornerStone Industries, Corp.

### **2.3 SYSTEM CHARACTERISTICS**

- A. Color and Pattern: As selected by Engineer/Architect from manufacturer’s standard colors.
- B. Wearing Surface: Textured for slip resistance per Engineer/architect selection from manufacturer’s full range.
- C. Integral Cove Base: 4 inches high with 1-1/2 inch radius

### **2.4 SYSTEM COMPONENTS**

- A. Primer: Type recommended by manufacturer for substrate and body coat(s) indicated.
- B. Body Coat(s): “CS 5000”
  - 1. Resin: Polyurethane Polymer Cement/Matrix
  - 2. Application Method: Troweled/Slurry-Applied
- C. Aggregates: Sand
- D. Topcoat: “CS 5000 Topcoat”
  - 1. Resin: Polyurethane
  - 2. Application Method: Squeegee Roller-Applied

### **2.5 ACCESSORY MATERIALS**

- A. Patching and Fill Material: Resinous product of resinous flooring manufacturer.
- B. Joint Sealant: Type produced by manufacturer or resinous flooring system for type of service and joint condition indicated.

## **SECTION 3 - EXECUTION**

### **3.1 INSPECTION**

- A. Ensure area is clean and dry with adequate heat, light and ventilation. The surface must be clean and dry, physically sound, and free of contamination. Surfaces must be free of holes, voids or defects. Cracks and abrupt changes in the surface profile must be corrected. Area shall be free of other trades to allow smooth flow of installation process to ensure optimum installation.

### **3.2 SURFACE PREPARATION**

- A. Prepare surface utilizing mechanical means where possible (i.e. self-contained Blastrac, scarifiers, scabblers, etc.)
- B. Saw cut and chase perimeter edges to provide a “key-in” of material.
- C. Ensure all static (non-moving) cracks are filled as recommended by manufacturer/installer.
- D. Identify and mark all active (moving) joints.

### **3.3 INSTALLATION**

- A. General: Apply components of flooring system according to manufacturer’s written instructions to produce a uniform monolithic wearing surface of thickness indicated.
  - 1. Coordinate application of components to provide optimum adhesion of resinous flooring system to substrate and optimum intercoat adhesion.
  - 2. Cure resinous flooring components according to manufacturer’s written instructions. Prevent contamination during application and curing process.
  - 3. At substrate expansion and isolation joints, provide joint in flooring to comply with flooring manufacturer’s written recommendations.
- B. Installation
  - 1. Saw cut and chase perimeter edges to provide a “key-in” of material
  - 2. Prepare surface utilizing mechanical means where possible, (i.e. self-contained Blastrac, scarifiers, scabblers, etc.)
  - 3. Slurry apply CS 5000 primer coat
  - 4. Spread material with CornerStone recommended notch squeegee
  - 5. Broadcast aggregate to rejection
  - 6. Repeat steps 4 and 5 as required to achieve desired thickness
  - 7. Broadcast aggregate mixture
  - 8. Apply CS 5000 CornerCrete™ topcoat.

### **3.5 FIELD QUALITY CONTROL**

- A. The right is reserved to invoke the following material testing procedure at any time, and any number of times during period of floor application.
- B. If test results show material being used do not comply with specified requirements, Contractor may be directed by Owner to stop work; remove non-complying materials; pay for testing; reapply flooring materials to properly prepared surfaces which had previously been coated with unacceptable materials,

**3.6 CURING, PROTECTION AND CLEANING**

- A. Cure resinous flooring materials in compliance with manufacturer’s directions, taking care to prevent contamination during stages of application and prior to completion of curing process. Close area of application for a minimum of 24 hours.
- B. Protect resinous flooring materials from damage and wear during construction operation. Where temporary covering is required for this purpose, comply with manufacturer’s recommendations for protective materials and method of application. General Contractor is responsible for protection and cleaning of surfaces after final coats.
- C. Cleaning: Remove temporary covering and clean resinous flooring just prior to final inspection. Use cleaning materials and procedures recommended by resinous flooring manufacturer.

**SECTION 4 - WARRANTY****4.0 WARRANTY**

- A. Guarantee and Warranty: Warranty shall be from a single source manufacturer/polymer systems applicator. The polymer system shall be against defects in materials and workmanship for a period of one year. Repair or replace any or all portions of the work that fail under normal conditions or use during the warranty period, promptly and at no cost to customer and by using methods and materials specified for the initial construction.
- B. The CS 5000SB system is warranted up to 15 lbs of vapor transmission as measured by the Calcium Chloride test.