

## Section 09 67 50

### Decofloor Seamless Shower Coating System (DFL-950)

#### PART 1- General

##### 1.01 SECTION INCLUDES

- A. Furnish necessary material, labor and equipment for substrate preparation and subsequent installation of the Decofloor Seamless Shower Coating System (DFL-950)
- B. Submit typical shop drawings including thickness of material, and typical requirements
- C. Submit two (2) corner samples, no smaller than 6" width, 6" length and 6" of height, which demonstrate color selections, desired finish texture and any transition and cove pieces required.
- D. Submit two (2) copies of the manufacturer's maintenance instructions

##### 1.02 REFERENCE STANDARDS

- A. ASTM E 1907 Standard Guide to Methods of Evaluating Moisture Conditions of Concrete Floors to Receive Resilient Floor Coverings
- B. ASTM D4263 Standard Test Method for Indicating Moisture in Concrete by Plastic Sheet Method
- C. ASTM F 2170 Standard Test Method for Determining Relative Humidity in Concrete Slabs in situ Probes

##### 1.03 RELATED WORK

- A. Coordinate work with contractors from the following sections:
  - a. 03000 – Concrete
  - b. 03370 – Concrete Curing
  - c. 03500 – Cementitious Decks and Toppings

##### 1.04 QUALITY ASSURANCE

- A. Contractor's Qualifications: Contractor should be certified by product manufacturer and have no fewer than ten (10) successful completed projects of the same type system as specified.
- B. Submittal shall include a letter of training certification from the manufacturer stating that the installer is approved to apply the products specified in this section.
- C. Submit written description of installer's experience with specified material over the last 5 years, including job sizes and complexity. List a minimum of 5 projects including Owner's names and phone numbers.
- D. Manufacturers Responsibility
  1. Supervision: A representative of the materials manufacturer must be present on site for the duration of the preparation and for all phases of the installation of the specified resinous flooring system.
  2. Manufacturer Field Services: Continuous manufacturer's field representation shall be included as described under 1.04.D3.
  3. Material Manufacturer shall be responsible for the review of the project conditions that may impact product performance before product installation,

including but not limited to project climate, acceptable temperature of substrate and air, acceptable humidity levels of air, acceptable moisture content of substrates to be coated and all other conditions that are necessary for optimum product performance. The manufacturer's field representative shall document and verify that all conditions are acceptable prior to commencement of work. Work shall not proceed until manufacturer's representative provides a letter accepting field conditions.

4. The manufacturer's field representative shall submit through the Contractor written approvals of the proposed coating system including manufacturer's recommended applicator, manufacturer's recommended application procedures, and manufacturer's recommended surface preparation.

#### **1.05 WARRANTY**

- A. The manufacturer/contractor shall furnish a standard guarantee of for a period of one year from the substantial date of completion. The labor and material guarantee shall include loss of bond and wear-through to the concrete substrate from normal use.
- B. The following items will not be included within the warranty: damage due to structural design deficiencies including, but not limited to, slab cracking from lateral, vertical or rotational movement, gouging from forklifts, heavy tools or other equipment, delamination caused by vapor transmission due to plumbing or external water issues effecting the moisture content of the substrate.
- C. In cases of a warranty claim, the owner will notify the manufacturer/contractor in writing within 30 days of the first appearance of problem. The owner will provide free and unencumbered access to the area during normal working hours for warranty rework. Property protection is also the owner's responsibility. Remedy is limited to direct repair of the Decofloor Seamless Shower system.

#### **1.06 PROJECT CONDITIONS**

- A. The contractor shall visit the jobsite prior to the installation of the Decofloor Shower System to evaluate substrate condition, including substrate moisture transmission, quality and severity of cracking, and the extent of repairs needed. Substrate imperfections should be repaired only after mechanical preparation of the substrate. Surface preparations reveals most imperfections requiring repair. Concrete substrates shall be tested to verify that the moisture vapor transmission of the substrate does not exceed the Decofloor Shower System manufacturer's recommendations. Cost associated with repair, leveling and remediation of the substrate are the responsibility of the provider of the substrate.
- B. Floor slabs: Concrete must be sound and meet all requirements as outlined in Section 3.01
- C. Walls
  1. Concrete Masonry Unit(CMU):
    - a. Mortar joints are struck clean and filled tightly to avoid gaps or holds providing a neat, uniform appearance in accordance with procedures as outlined under Division 4 – "Masonry"
    - b. All mortar spatter shall be removed, including protruding mortar edges, and other excessive mortar

- c. All rough edges shall be ground smooth.
- d. All masonry joints are to be struck flush. Concave mortar tooling shall not be permitted.

d. All surfaces shall be clean, dry and free of contaminants prior to installing coatings.

## 2. Gypsum board and Cement board:

a. Level 3 finish minimum. Cement board shall have the rough side facing out to promote optimum adhesion of the coating system.

b. All surfaces shall be clean and dry and free of contaminants.

## 3. Concrete Walls and Ceilings:

a. All surfaces shall be clean, dry and free of contaminants.

b. Areas containing imperfections such as pinholes, recesses, holes, etc. shall be pre-patched or filled in accordance with manufacturer's recommendations prior to installing the specified system.

c. All surfaces shall be clean, dry and free of contaminants prior to installing coating.

- D. Lighting: Provide permanent lighting or, if permanent lighting is not in place, simulate permanent lighting conditions during resinous floor/wall application.
- E. Close spaces to traffic during resinous coating application and for not less than 24 hours after application, unless manufacturer recommends a longer period.
- F. Coating Contractor should exercise care during surface preparation and system installation to protect surrounding substrates and surfaces, as well as in-place equipment. The contractor shall prepare the substrate to remove laitance and open the surface. This shall be achieved by light brush grit blasting, surface grinding or acid etching. Surface profile achieved shall be similar to medium grit sandpaper and free from bond-inhibiting contaminants. Costs incurred that are associated with damage from negligence or inadequate protection should be the sole responsibility of the contractor.
- G. Sub floor tolerances should be specified by project architect/engineer (in accordance with ACI 302). Each drain in the installation area must be working and raised or lowered to the actual finished of the Decofloor Shower System.
- H. Area of installation must be protected by the General Contractor or, as a separate bid item, by the installing contractor until it is inspected and turned over to the owner. The minimum slab temperature must be conditioned to 60 degrees F before commencing installation, during installing and for at least 72 hours after installation is complete. The substrate temperature must be at least 5 degrees G above the dew point during installation.
- I. Leaks from pipes and other sources must be corrected prior to the installation of the Decofloor Seamless Shower Coating System.

## **PART 2 - Products**

### **2.01 MATERIALS**

- A. The Decofloor Seamless Shower Coating System (DFL-950) as manufactured by Gold Medal Construction Corporation, 5615 2<sup>nd</sup> Street West, Suite 2, Lehigh Acres, FL 33971. Phone 239.303.7380. Web: [www.thedecofloor.com](http://www.thedecofloor.com)
- B. Basis of Design System: The Decofloor Seamless Shower Coating System as formulated consisting of: Decofloor Moisture Mitigation Primer (DFL-1050), Decofloor 100% Solids Urethane Color Base Coat (DFL-200), Color Quartz Aggregate, Decofloor Urethane Clear Gloss Sealer (DFL-200CGF). Overall System minimum thickness is 1/16".
- C. Preapproval is required by architect for any and all substitutions. Bidders are encouraged to submit materials that meet the Basis of Design as per system properties as listed under 2.02A, 1 thru 7. In order to have a material accepted as a Pre-Approved Material for the work outlined herein the items listed in section 1.04 and 1.05 and must be received by the architect for evaluation and approval not less than 21 days prior to the original published bid date. Submittals circumventing this process will not be approved and will not be acceptable for inclusion in this project.

### **2.02 PROPERTIES**

Color as chosen by the architect from the manufacturer's color offerings

- A. Typical physical properties of Decofloor Shower System
  1. Hardness (ASTM D-2240) – 70 Shore D
  2. Tensile Strength (ASTM D-638) – 2,500 psi
  3. Elongation (ASTM D-638) – 65%
  4. Bond Strength (ASTM D-7234) - >400 psi (100% Concrete Failure)
  5. Coefficient of Friction (Dry) (ASTM-F-1679) – 0.77
  6. Coefficient of Friction (Wet) (ASTM-F-1679) – 0.66
  7. Abrasion Resistance (ASTM-D-4060, CS17) - <0.20mg

## **PART 3 - EXECUTION**

### **3.01 SURFACE PREPARATION**

A. Prepare and clean substrates in accordance with manufacturer's written instructions for substrate indicated. Provide clean, dry and neutral pH substrate for resinous floor/wall application. Obtain the substrate letter of acceptance as referenced in Section 1.04.

B. Concrete Substrates: Provide sound concrete surfaces free of laitance, glaze, effervescence, curing compounds, form-release agents, dust, dirt, grease, oil, and other contaminants incompatible with resinous floor/wall applications

C. Concrete Masonry Units: Masonry contractor is responsible to provide an acceptable surface for specified coating system. A visual inspection by the onsite manufacturer's representative is required to insure that the substrate is acceptable to receive the specified coating. Any deficiencies shall be corrected by the masonry contractor. Requirements for an acceptable surface are as follows:

1. Mortar shall have a minimum of 28 days cure prior to coating.
2. Mortar joints are struck flush and filled tightly to avoid gaps or holes and to provide a neat, uniform appearance in accordance with procedures as outlined under Division 4 – Masonry.
3. Removal of all mortar spatter, protruding mortar edges or any excessive mortar.
4. All rough edges are to be ground smooth.
5. Concrete masonry units are to be cleaned as specified under requirements as outlined under Division 4 Masonry.
6. All surfaces shall be clean, dry, free of efflorescence, or other contaminants

### **3.02 INSTALLATION**

A. Apply each component of the Decofloor Seamless Shower Coating System in compliance with manufacturer's written installation instructions and strictly adhere to mixing and installation methods, recoat windows, cure times and environment restrictions. The Decofloor Shower System is to be installed directly over non-moving control joints and cracks with have been treated with Decofloor Fill and the Decofloor Shower System will terminate at the edge of isolation and expansion joints as designated by the Architect, Engineer or Design Professional. Integral cove base shall be installed where specified in drawings.

#### **B. Control Joints**

Original bid assumes repair and treatment of control joints not to exceed standard practice. Additional treatment is considered excessive and must be bid on a per linear foot basis.

#### **C. Isolation/Expansion and Other Joints Subject to Movement**

All expansion joints must be honored through the flooring system.

D. System Primer- Apply moisture mitigation primer (DFL-1050) according to manufacturer's instructions

E. Base Coat – Apply DecoFloor™ 100% Solids Polyurethane Color Base Coat (DFL-100) per manufacturer's instructions. Broadcast quartz aggregate with the use of a spray hopper. After curing, repeat second aggregate broadcast after applying Decofloor Urethane Clear Gloss Sealer (DFL-200CGF).

F. Seal Coat – Apply Decofloor Urethane Clear Gloss Sealer (DFL-200CGF) as per manufacturer's instructions. Apply additional coats to achieve desired texture.

### **3.03 CURING, CLEANING AND PROTECTION**

A. Cure the Decofloor Seamless Shower Coating System materials in compliance with manufacturer's directions, taking care to prevent contamination during stages of the installation and prior to completion of the curing process.

- B. Protect the Decofloor Seamless Shower Coating System from damage and wear during other phases of the construction operation, using temporary coverings as recommended by the manufacturer, if required. Remove temporary covering just prior to final inspection.
- C. Clean the Decofloor Seamless Shower Coating System just prior to final inspection, using materials and procedures suitable to the system manufacturer.
- D. Some cleaners will affect the color, gloss or texture of your polymer floor surfaces. To determine how your cleaner will perform, first test each cleaner, in a small area, utilizing your cleaning technique. This precaution will demonstrate the effect of your cleaner and technique. If no deleterious effects are observed, continue with the procedure. If deleterious effects do occur, modify the cleaning material and/or procedure. For recommendations regarding types of cleaners, contact the Decofloor Seamless Shower Coating System manufacturer.

**END OF SECTION 096750**

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