

# Florock Seamless Flooring Systems

Architectural Specification FloroCrete HD  
1/4 System Flooring Mortar Urethane

## Part 1: General

### 1.01 System Description

A. Self priming, Self sealing Trowel applied, aggregate-rich polyurethane and aggregate-cement based matrix coat designed to achieve a total floor thickness of 1/4 (6 mm).

B. This system shall be applied to the prepared substrate(s) as defined by the plans strictly recommendations.manufacturers t he with accordancein

### 1.02 Submittals

#### A. Product Data

1. Current literature productmanufacturers ofedition including physical data, chemical resistance, surface preparation, and application instructions.

#### B. Samples

1. A hard sample of the proposed system shall be submitted to represent the finished floor.

#### C. Warranty

warranty standard 1. Manufacturers  
warranty standard 2. Applicators

### 1.03 Quality Assurance

#### A. Qualifications

1. The manufacturer shall have a minimum of ten (10) years experience in the production, sales, and technical support of polymer-based floor coatings.

2. The applicator shall have a minimum of three (3) years documented experience in the application of polymer floor coatings to concrete floors and be approved by Florock.

3. Proposed suppliers products shall provide certification that they have ten (10) years experience in the production of polymer floor coatings and be required to meet all provisions of this specification as well as provide evidence for compatibility between components to the satisfaction of the Architect.

#### B. Pre-Bid Conference

1. A pre-bid conference should be held between prospective applicators and the Architect to review surface preparation, application, clean-up procedures, and design

issues.

### C. Packing and Shipping

1. All materials are to be delivered to the job site in the manufacturer's original packaging. The product code and other identification marks should be clearly marked and visible.

### D. Storage and Protection

1. All material is to be stored in a cool, dry place out of the direct sunlight and away from any ignition sources. and literature manufacturers ttohe r efer should applicatorThe material safety data sheets for more information.

2. Material Safety Data Sheets are to be kept on site and made readily available for all personnel.

3. Keep containers sealed and ready for use.

## 1.04 Project Conditions

### A. Environmental Requirements

1. . Optimum air and substrate temperature for product application is between 45° F (7° C) and 95° F (35° C). For temperatures outside of this range, consult the manufacturer for product application suggestions.

2. Verify the work environment is properly equipped with vapor barriers and perimeter drains.

3. Maintain proper lighting throughout the work environment; the lighting should be comparable to the final lighting level of the space.

4. Store and dispose of any waste in accordance with regulations of local authorities.

### B. Safety Requirements

1. Only work-related personnel shall be allowed within the work area

## 1.05 Warranty

### A. Coordination

1. The manufacturer offers a full, one-year warranty against defects in materials. Warranties concerning the installation of the material are solely the responsibility of the applicator.

## Part 2: Products

### 2.01 Manufacturers

A. Crawford Laboratories, Inc.  
4165 South Emerald Avenue  
Chicago, IL 60609  
Phone: (773) 376-7132

Fax: (773) 376-0945  
<http://www.florock.net>

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## 2.02 Materials

### A. Matrix Coat

1. The matrix coat shall be Florock FloroCrete HD Polyurethane and aggregate-cement based, three-component floor coating designed to provide impact, abrasion, and corrosion.

## 2.03 Properties

A. The coating system should meet the following physical properties:

### Cured System Properties

Chemical Properties Florocrete HD

Compressive Strength, ASTM C579, psi 8,590 PSI

Tensile Strength, ASTM C307, psi 980

Flexural Strength, ASTM C580, psi 3,380

Hardness, Shore D, ASTM D2240 85

Bond Strength, ASTM D4541, psi >400

Abrasion Resistance, ASTM D4060 5 mg loss

Water Absorption, ASTM C413, % < 0.1%

Resistance to Fungi Growth, ASTM G21 Passes

## Part 3: Execution

### 3.01 Inspection

#### A. General

1. Examine the areas and conditions where FloroCrete HD is to be installed and notify the Architect of any conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected by the contractor in a manner acceptable to the Architect.

### 3.02 Preparation

#### A. General

preparationsubstrate concretefor recommendations manufacturersthe 1. Consult before proceeding.

## B. Patching and Joint Preparation

1. Before application, the floor shall be examined for spalls, pits, holes, cracks, non-functional joints, etc. These must be treated after preparation and before application with the suitable Florock products. For functional or expansion joints,

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these shall be treated with 100% solids elastomeric resin having a minimum elongation of 150%, Florock System 6500.

#### C. Concrete Surfaces

1. Shot-blast, diamond grind or power scarify as required to obtain clean, open, porous concrete. Remove sufficient material to provide a sound surface, free of laitance, glaze, efflorescence, and any bond-inhibiting curing compounds or form release agents. Remove grease, oil, and other penetrating contaminants. Repair damaged and deteriorated concrete to acceptable condition; leave surface free of dust, dirt, laitance, and efflorescence.

#### D. Materials

1. Mix components when required, and prepare materials according to flooring system instructions.manufacturers

### 3.03 Application

#### A. General

1. The system shall be installed in the order described below:

- a. Substrate Preparation
- b. Matrix Coat of FloroCrete HD

2. Concrete surfaces on grade shall have been constructed with a vapor barrier to help protect against the effects of vapor transmission and possible delamination of the for additionalstructions in preparation concrete manufacturers to Refersystem. recommendations.

3. The surface should be dry prior to application of any of the aforementioned steps. Furthermore, the substrate shall always be kept clean, dry, and free of any contaminants.

4. The handling and mixture of any material associated with the installation of the and recommendations manufacturers t he withrdance acco in be shallsystem approved by the Architect.

5. The system shall follow the contours of the substrate unless otherwise specified by the Architect.

6. A neat finish with well-defined boundaries and straight edges shall be provided by the applicator.

#### B. Matrix Coat

1. The matrix recommendedmanufacturers the with beconsistentshall coat polyurethane and cement-based matrix coating.

### 3.04 Field Quality Control

#### A. Tests & Inspection

1. The following tests shall be performed by the applicator and recorded during

application to submit to the Architect:

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a. Temperature During Installation

1. Air
2. Substrate
3. Dew Point

3.05 Cleaning

A. Disposal

1. Properly remove and dispose of any excess materials.

