

# **FLOORGUARD™**

## **QUARTZ FLOORING SYSTEM**

### **Specification**

**REFER TO ARCOR CD-ROM SET FOR SUPPORT DOCUMENTS AND FOR APPLICATION VIDEOS**

#### **PART 1 GENERAL**

##### **1.01 SECTION INCLUDES**

- A. Provide labor and materials for a seamless, decorative, slip resistant, epoxy & quartz flooring system, including surface preparation, primers, and finish coats.

##### **1.02 RELATED SECTIONS**

- A. Concrete - Division 3
- B. Thermal & Moisture Protection - Division 7

##### **1.03 ACCEPTABLE INSTALLERS**

- A. AEC Corp. 1-800-878-9593
- B. Manufacturer approved Installer, who has technical qualifications, currently certified in writing, and facilities to install specified systems.

##### **1.04 DELIVERY, STORAGE AND HANDLING**

- A. Deliver material to job site in clean, clearly labeled containers and inspect prior to start of job.
- B. Store material in a dry, enclosed area protected from the elements. Keep temperature of storage area between 65<sup>0</sup> and 90<sup>0</sup> F.

##### **1.05 ENVIRONMENTAL REQUIREMENTS**

- A. Cure new concrete no less than 28 days under good conditions.
- B. Verify that substrate is properly equipped with vapor barriers and perimeter drains.
- C. Verify supply of adequate utilities, including electric, water, heat (between 65<sup>0</sup> and 90<sup>0</sup> F.) and lighting of no less than 80 ft candles measured at floor surface.
- D. Free work area of other trades during, and for a period of 24 hours, after floor installation.
- E. Protect finished floor from damage by subsequent trades.

##### **1.06 WARRANTY**

- A. Provide a two (2) year warranty against defects in material and workmanship upon completion of installation.

**PART 2 PRODUCTS**

**2.01 PRODUCT DESCRIPTION**

- A. 1/8" FLOORGUARD™ two-component, seamless, decorative, slip resistant, epoxy & quartz flooring system as manufactured by AEC Corp.. **1-800-878-9593.**
- B. Primer Coat with EE-80;
- C. Wet Coat with EE-75;
- D. Top Coat with EE-75;
- E. Color Quartz from 3M Corporation

**2.02 PHYSICAL PROPERTIES**

Physical Property	Test Method	Result
Hardness (Shore D)	ASTM D-2240	75-80
Compressive Strength	ASTM D-695 ASTM C-579	17,500 psi 12,500 psi
Tensile Strength	ASTM D-638 ASTM C-307	4,000 psi 2,600 psi
Tensile Elongation	ASTM D-638	7.50%
Flexural Strength	ASTM D-790 ASTM C-580	6,250 psi 4,500 psi
Flexural Modulus of Elasticity	ASTM D-790	$6.2 \times 10^5$
Linear Shrinkage	ASTM D-2566	0.02%
Coefficient of Linear Expansion	ASTM D-696	$2 \times 10^{-5}$
Bond Strength to Concrete	ASTM D-4541	400 psi substrate fails
Indentation	ML D-3134	.025 MAX
Impact Resistance	ML D-3134	Pass
Water Absorption	ASTM D-570	0.04%
Heat Resistance Limitation		140°F - 200°F
Flammability	ASTM D-570	Self Extinguishing
Flame Spread/NFPA 101	ASTM E-84	Class B
Abrasion Resistance CS17 Wheel 2000 GM Load 1000 Cycles	ASTM C-501	24 mg loss
Coefficient of Friction Standard Slip-Resistant Orange Peel	ASTM D-2047	0.9 0.8

**2.03 PRODUCT MIXING**

- A. Consult Product MSDS prior to use.
- B. Mix on site in pre-measured kits as supplied by ARCOR®. Mix as per Application Procedure provided with Product Data Sheet to ensure a timely, accurate mix ratio and minimize waste.
- C. Use drill with mix attachment for most complete mix. Hand mixing should not be attempted for Kit sizes larger than 1-Gallon.

## **PART 3 APPLICATION**

### **3.01 SURFACE PREPARATION**

- A. Sweep entire area thoroughly;
- B. Degrease and/or neutralize areas as needed;
- C. Thoroughly route all moving cracks and joints;
- D. Create a surface profile with a steel shot blast machine and dust-free diamond grinders for edges;
- E. Sweep and vacuum profiled area until completely clean. Verify that profiled surface is dry and free of all oil, grease, detergent film, sealers and/or curing compounds. Degrease and/or decontaminate areas as need. Thoroughly wipe freshly cleaned areas with Acetone;

### **3.02 CRACK & DRAIN REPAIR**

- A. Adhere strictly to manufacturer's current written instructions. Refer to Product Data Sheet & Product Manufacturer Safety Data Sheet **before** using materials;
- B. Fill moving cracks and joints with **ARCTHANE™**;
- C. Fill holes, static cracks and other damaged areas with **EE-95**;
- D. "Key in" all drains, edges and transition points with **EE-95**;
- E. Allow filled areas to cure a minimum of 2 hours @ 75°F;
- F. Optional; Install a 4" integral cove base at perimeter walls.

### **3.03 FLOOR APPLICATION**

- A. Apply prime coat of **EE-80** @ 1-3 mils by 1/4" nap roller. Allow to cure a minimum of 4 hours @ 75°F or until tack-free.
- B. Apply wet coat of **EE-75** @ 15 mils with notched squeegee.
- C. Broadcast Color Quartz aggregate to excess (i.e. until all wet spots disappear, typically 1# of quartz per square foot). Allow curing a minimum of 8 hours @ 75°F.
- D. Sweep up excess aggregate with clean, sturdy bristle floor broom.
- F. Apply a second wet coat of **EE-75** with 1/4" roller sufficient to wet out quartz. This is a tight roll and should leave no puddling of product.
- G. Broadcast Color Quartz aggregate to excess (i.e. until all wet spots disappear, typically 1/2# of quartz per square foot). Allow curing a minimum of 8 hours @ 75°F.
- H. Sweep up excess aggregate with clean, sturdy bristle floor broom.
- I. Top Coat with **EE-75** using a 1/4" nap roller. Apply sufficient material to provide the level of non-slip desired by the client. A tight roll with a 1/4" nap roller will provide a very aggressive non-slip. A light pressure roll with a 3/8" nap will give a smoother finish.
- J. Allow finished floor to cure a minimum of 8 hours @ 75°F before subjecting to light use i.e. foot traffic. Allow curing for 24 hours before subjecting to medium duty i.e hand truck; allow curing for 48 hours before subjecting to heavy use i.e. fork truck.

**END**