



## **FREDA FC-5000 EPOXY OVERLAYMENT SYSTEM**

### **DESCRIPTION:**

FC-5000 is a three component 100% solids epoxy/engineered aggregate blend mortar flooring system, that is power trowel or hand trowel applied at a 1/4" thickness or greater. FC-5000 provides outstanding impact, abrasion and chemical resistance for areas that are continually exposed to abuse and wear.

### **MATERIAL SPECIFICATION: ( nominal 1/4")**

- Preparation: Surface to be coated must be clean, dry and mechanically shot blasted.
- Primer: FC-5000 resin @ 100 square feet per gallon.
- Binder: FC-5000 resin @ 33 square feet per gallon.
- Aggregate Blend: TC-98 Blend @ 2 lb. per square foot.
- Topcoats:
  - Option 1 Texture OP Finish FC-7100 @ 90 square feet per gallon.
  - Option 2 Smooth Finish FredaFill @ 130 square feet per gallon.
  - FC-2100 @ 100 square feet per gallon.
- High performance urethane finishes may be applied to cured epoxy coatings.

### **USES:**

- Economically resurface worn and spalled concrete
- Use on new or existing concrete that will be exposed to heavy wear and abuse

### **GENERAL PRODUCT INFORMATION:**

- Packaging: 3 Gallon Kits, 5 Gallon Pails, and 50 Gallon Drums  
Aggregate supplied in 50 lb. bags
- Colors: Topcoats available in all standard Freda colors  
Aggregate is of a natural tone
- Application: Refer to the FC-5000 Application Bulletin

### **TECHNICAL SPECIFICATIONS:**

<u>Type Test</u>	<u>Method</u>	<u>Result</u>
Compressive Strength	ASTM C-579	12,500 psi
Tensile Strength	ASTM D-638	4,000 psi
Tensile Elongation %		4-5%
Bond Strength to Concrete	D-4541	400 psi, concrete failure
Abrasion Resistance	ASTM C-501	24 mg loss
CS 17 wheel 2000 gm. Load 1000 cycles		
V.O.C.		0 lbs. Per gallon
Cure Schedule		Light traffic: 12 hours Heavy traffic: 24 hours

Please read and understand Freda Inc. statement of warranty and Material Safety Data Sheets before using this product.

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### *SURFACE PREPARATION:*

Surface must be clean, sound, dry and perfectly free of curing compounds, oil, grease and any other contaminants. A surface profile of 10-15 mils should be achieved using a mechanical shot blaster or scarification. The FC-5000 system must be applied to bare concrete, do not apply to existing coatings or any type of tile.

### *PRIMING:*

Entire surface that is to be coated must receive a coat of FC-5000 epoxy binder.

- Mix Ratio: 2A:1 B ( mechanically mix for 2 minutes )
- Application Method: Flat edged Squeegee apply at a spread rate of 200 sq.ft per gallon
- lightly broadcast aggregate into primer coating
- Cure Schedule: Minimum: Wet on Wet method is acceptable.  
Maximum: 20 hours

### *BINDER/AGGREGATE OVERLAYMENT:*

The following recommendation will achieve a nominal 3/16" -1/4" finish using the FC-5000 epoxy binder and TS-98 aggregate.

- Mix Ratio: -2A:1B ( mechanically mix for 2 minutes )  
Charge 200 lbs. TC-98 aggregate to mortar mixer  
Turn mortar mixer for approximately 1 minute
- Application Method: -Evenly spread mixed material on floor with a screed box or screed rake.  
-Power trowel or hand trowel to a compacted smooth finish.

### *TOPCOAT:*

- Heavy non slip: Apply grout coat of FredaFill with a flat squeegee at 100 square feet per gallon, do not backroll.  
Apply one coat Freda FC-2100 with a notched squeegee at 100 square feet per gallon, backroll to achieve uniform finish then broadcast #24 aluminum oxide and backroll again.
- Textured OP: Apply one coat of Freda FC-7100 with a notched squeegee at a spread rate of 90 square feet per gallon, and backroll to achieve an orange peel finish.
- Smooth Finish: Apply grout coat of FredaFill with a flat squeegee at 100 square feet per gallon, do not backroll.  
Apply one coat Freda FC-2100 with a notched squeegee at 100 square feet per gallon, backroll to achieve uniform finish.