

FREDA QS-3140 EPOXY QUARTZ BROADCAST SYSTEM

DESCRIPTION:

QS-3140 combines the toughness of epoxy and quartz aggregate to provide a monolithic 1/16" or 1/8" epoxy overlayment. The QS-3140 system can be applied to existing concrete substrates that require heavy-duty, decorative protection against wear, impact, and abrasion in industrial environments. With a variety of topcoats to choose from, QS-3140 can be tailored to the customers non-slip needs.

MATERIAL SPECIFICATION:

- Preparation: Surface to be coated must be clean, dry and mechanically shot blasted.
- Primer: CQ-1000 resin @ 200 square feet per gallon.
- Binder: CQ-1000 resin @ 80 square feet per gallon.
- Broadcast Aggregate: Freda Quartz Aggregate @ .66 lb. per square foot.
- Allow coating to cure, then sweep or vacuum.
- Repeat above steps with the exception of the primer coat to achieve 1/8" system.
- Topcoats:
FC-3100 @ 150 square feet per gallon.
- High performance urethane finishes may be applied to cured epoxy coatings.

USES:

QS-3140 is ideally suited for heavy duty industrial or commercial use on either new concrete that needs to be protected, or concrete that has been deteriorated by years of abuse and needs to be

GENERAL PRODUCT INFORMATION:

Packaging: 3 Gallon Kits, 5 Gallon Pails, and 50 Gallon Drums
Aggregate supplied in 50 lb. bags

Colors: Large variety of color blends to choose from.

Application: Refer to the QS-3140 Application Bulletin

TECHNICAL SPECIFICATIONS:

<u>Type Test</u>	<u>Method</u>	<u>Result</u>
Compressive Strength	ASTM C-579	15,000 psi
Tensile Strength	ASTM D-638	4,500 psi
Bond Strength to Concrete	D-4541	400 psi, concrete failure
Hardness (Shore D)	ASTM D-2240	80-85
Abrasion Resistance	ASTM C-501	40 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

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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 QS-3140 can be applied to an epoxy coating that is adhering properly, but it must be abraded and degreased before applying the coating system.

PRIMING:

Entire surface that is to be coated must receive a coat of CQ-1000 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
- Cure Schedule: Minimum: Wet on Wet method is acceptable.
Maximum: 16 hours

Note: If a double broadcast is required, Quartz Aggregate may be broadcast into primer coat.

BINDER/AGGREGATE BROADCAST:

The following recommendation will achieve a nominal 1/16" finish using FC-3100 epoxy binder and Freda Color Quartz.

- Mix Ratio: 2A:1B (mechanically mix for 2 minutes)
- Application Method: -3/16" notched squeegee at a spread rate 80-90 sq.ft. per gallon.
-Backroll using a high quality non shed roller.
-Slowly begin to broadcast Quartz Aggregate into binder assuring that it falls vertical into coating. Allow silica to become saturated before proceeding to broadcast to excess. Silica spread rate should be approximately .5-.75 lb. per sq. ft. NOTE: If an 1/8" system is desired, repeat above application method.
-Allow system to cure, approximately 8-10 hours, then sweep and vacuum all excess sand.

TOPCOAT:

- Heavy non slip: Apply one coat Freda FC-3100 with a flat squeegee or spring trowel at a spread rate of 160 square feet per gallon.
- Smooth Finish: Apply one coat Freda FC-3100 with a notched squeegee at 100 square feet per gallon, backroll to achieve uniform finish.