



MiraFlor Glazetop FC Broadcast System

System Technical Data Sheet

MiraFlor Glazetop FC Broadcast System is a decorative color quartz broadcast flooring system designed to produce a seamless and attractive floor with integral cove base offering excellent durability, chemical resistance and rapid return to service. Easy to install and maintain, MiraFlor Glazetop FC Broadcast System consists of color quartz granules embedded in MiraFlor Glazetop FC Clear, a 100% solids

polyurea resin by either single broadcast or double broadcast methods. MiraFlor Glazetop FC Broadcast System is typically applied directly to mechanically prepared concrete substrates from 1/16" (1.6mm) for a single broadcast floor to 1/8" (3.2mm) for a double broadcast floor. In addition to concrete, it can be applied over metal, wood and other substrates. Consult Crossfield Products Corp. for technical assistance when installing over substrates other than concrete.

Depending on specific service and exposure conditions, other MiraFlor resinous clear topcoats are available to enhance chemical resistance, abrasion resistance and anti-microbial protection when demanded. Contact a local Miracote representative for the most appropriate MiraFlor topcoat among which includes novolac epoxy, polyurethane, and polyaspartic technologies.

WHERE TO USE

- Pharmaceutical plants and warehouses
- Hospitals and healthcare facilities
- Laboratories
- Prisons and correctional institutions
- Stadiums and arena's
- Shower and locker rooms
- Cafeteria's and food service facilities

ADVANTAGES

- Rapidly installed decorative seamless floor.
- Wide array of skid resistant textures and colors.
- Lower maintenance and life cycle costs vs. other flooring types.
- LEED-compliant, low odor and fast cure time.
- Meets USDA, FDA, OSHA standards.
- Excellent chemical and abrasion resistance.
- Displays superior UV resistance and stability.

SYSTEM COMPONENTS

MiraPrime WB – Primer Coat

MiraFlor Glazetop FC – Broadcast Coat & Lock/Seal Coat

MiraFlor CQ (Color Quartz) Aggregate - Broadcast Medium

THEORETICAL COVERAGE RATES

Single Broadcast System:

Primer Coat.....300-350 sq. ft. per gal

Broadcast Coat.....160 sq. ft. per gal

Broadcast Aggregate...1 lb. per sq. ft. to excess*

Lock/Seal Coat.....65-125 sq. ft. per gal

Double Broadcast System: use single broadcast rates plus

Dbl. Broadcast Coat....65 sq. ft. per gal

Broadcast Aggregate...1 lb. per sq. ft. to excess*

*(Recovery of excess aggregate will typically range from 60-70%)

PACKAGING and COLORS

Kit Sizes: 1.5 gallon, 3 gallon, 15 gallon, 150 gallon

Component A: 1-gal, 2-gal, 5-gal, 50-gal units

Component B: .5-gal, 1-gal, 5-gal, 50-gal units

Color Quartz Aggregate: 50-pound bags

Solid: Gray, Blue, White, Black, Brown, Buff, Tan, Green, Red

Blends: Eighteen standard blends. Custom blends available.

MIX RATIO

Component 'A' : Component 'B' = 2 : 1 by volume.

CQ Aggregate: Approximately 40 lbs. per 100 sq. ft.*

*(Factored recovery rate of 60%)

SHELF LIFE AND STORAGE

One year from the date of manufacture as long as containers remain unopened and material is stored in a protected environment free from moisture, excessive heat, freezing temperatures, and direct sunlight.

TYPICAL PHYSICAL PROPERTIES @ 75°F (24°C)

Viscosity (mixed resin)	650 cps	
Solids Content	100%	
Pot Life (100 gram mass)	Approximately 20 minutes	
Tack-Free Time:		
50°F (10°C): 2-3 hrs.	75°F (24°C): 1.5 hrs.....	90°F (32°C): < 1 hr.
Open to Traffic	2.0 hrs.	
Compressive Strength ASTM C579	8,700 psi (Resin, Hardener & Aggregate)	
Compressive Strength ASTM D695	9,200 psi (Resin & Hardener)	
Tensile Strength ASTM D412	4,700 psi (Resin & Hardener)	
Tensile Elongation ASTM D412	10% (Resin & Hardener)	
Flexural Strength ASTM D1737	Passes (Resin & Hardener)	
Surface Hardness ASTM D2240 Shore D	85-90	
Indentation Characteristics	0.005" (Steadily Applied Load) MIL-D-3134.....	0.127mm 2000 lbs. on 1" steel ram imposed for 30 minutes over concrete substrates, indented
Indentation Characteristics	0.011" (Impact Load) MIL-D-3134,	0.28 mm (2 lb. 908 kg) Indent from steel ball Dropped twice from 8 ft height
Adhesion ASTM D4541	>400 psi (100% failure in concrete)	28.1 kg/cm ²
Water Absorption MIL-D-3134	<1.0%	
Abrasion Resistance ASTM D4060	0.09 gr (CS17, 1000gr load, 1000 cycles)	
Flammability ASTM D635	Self-Extinguishing Bonded to Concrete	
VOC	3 g/L	
Skid Resistance	Varies depending upon surface texture selected	
Microbial Resistant ASTM G21	Passes Rating 1	
Chemical Resistance	(see Chemical Resistance Chart)	

MiraFlor Glazetop FC Broadcast System

System Technical Data Sheet

FOR BEST RESULTS

- Always install a minimum 4' by 4' test area site mock up for approval of acceptable color, texture, finish, adhesion, and any other critical requirement acceptable to the owner prior to proceeding with the installation.
 - Verify and download current versions of product technical data sheets (PTDS), material safety data sheets (MSDS), and installation guides (IG) at www.miracote.com.
 - Protect materials at all times from excessive heat and cold, and pre-condition to room temperature as necessary.
 - Regularly check wet film thickness with mil gauge and monitor consumption to ensure correct application rates are obtained.
- The proper application of this product is the sole responsibility of the end user. Job site visits by Miracote representatives are only for the purpose of making recommendations, and do not assume any liability for supervision or quality control.
- Measure surface and ambient temperatures to ensure the material is only applied when temperatures are 50°F (10°C), and rising during placement and cure time.

OVERVIEW OF INSTALLATION STEPS

- **Surface Preparation** – All surfaces must be clean, sound, dry and free from any bond inhibiting substances including, but not limited to, grease, oil and any other contaminants or loosely adhered materials. For concrete substrates, a minimum surface profile of a CSP-3 or higher is required depending on overall substrate conditions and coating requirements.
- **Mixing** – MiraFlor Glazetop FC Broadcast System clear polyurea resin components must be mixed mechanically using a low-speed drill (300-450 rpm) until blended with a “Jiffy-type” or similar Miracote-approved mixing paddle. Empty entire contents of component A and component B into a clean mixing vessel. Mix for approximately 3 minutes keeping the mixing head fully immersed at all times. At least once when mixing, stop to scrape down the sides and bottom of the pail to ensure thorough blending of both components. If not mixing full units, each component must be pre-mixed individually ensuring uniformity prior to use. Once completely mixed and in observance of pot life, dispense material immediately from the pail to the substrate.

- **Application** –

Primer: When mixed pour out MiraPrime WB or other suitable primer in a ribbon across the concrete surface to receive broadcast. Using a flat squeegee, spread the material evenly left to right, and back-roll using only a 3/16” or 1/4” maximum nap roller. Allow primer to dry until it is completely tack free.

Broadcast Coat: Pour out mixed polyurea broadcast coat in a large ribbon across the primed concrete surface. Spread evenly with a notched squeegee, and back-roll epoxy with a high quality 1/4” nap roller to achieve millage consistency of the wet film. Repeat in the same manner when installing a double broadcast system.

OVERVIEW OF INSTALLATION STEPS (Continued)

Broadcast Aggregate: Immediately broadcast quartz aggregate in a rainfall pattern over the polyurea base coat to ensure a smooth and even quartz surface. Continue to broadcast color quartz to excess until there are no visible areas of glistening resin. Allow broadcasted polyurea base coat to cure then sweep and vacuum excess quartz aggregate. Repeat in the same manner when installing a double broadcast system.

Lock/Seal Coat: When mixed, pour out polyurea or other resinous lock/seal coat of choice in a ribbon across the broadcast quartz surface, and spread the material evenly with a flat squeegee to ensure consistent millage uniformity. Finish with a back-roll using a 1/4” maximum nap roller.

LIMITATIONS

- Installed product forms a vapor barrier after cure.
- Not intended for use on exterior concrete slabs-on-grade.
- Minimum ambient/substrate temperature of 40F (4C).
- Concrete must be minimum age of 21-28 days, depending on curing and drying conditions.
- Maximum allowable moisture vapor transmission (MVT) of 3.0 lbs./1000 sf./per 24 hr. period per ASTM F1869 (CaCl Testing).
- Maximum allowable moisture vapor transmission (MVT) of 75% RH as per ASTM F2170 (RH-Relative Humidity Testing).
- Use MiraPrime MVERS epoxy moisture mitigation primer over concrete substrates that have MVT emissions that exceed these limits.

LIMITED WARRANTY

NO WARRANTY SHALL BE EFFECTIVE UNTIL THE TERMS AND CONDITIONS OF SALE SET FORTH IN CROSSFIELD PRODUCTS CORP. INVOICES ARE MET.

Crossfield Products Corp. warrants to the purchaser of its products that such products are free from manufacturing defect. Crossfield does not warrant or guarantee the workmanship performed by any person or firm installing its products. Crossfield's obligation under this warranty is limited solely to the original purchaser and solely to the remedy of replacement in kind of any product which Crossfield sold which may prove defective in manufacture within one year from date of installation, provided said product was stored correctly and installed within the product's shelf life, by the original purchaser and which Crossfield's examination shall disclose to Crossfield's satisfaction to be thus defective.

IN NO EVENT SHALL CROSSFIELD PRODUCTS CORP. BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. THIS WARRANTY IS EXPRESSLY GIVEN IN LIEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR USE AND ALL OTHER OBLIGATIONS OR LIABILITIES ON CROSSFIELD'S PART, AND WE NEITHER ASSUME NOR AUTHORIZE ANY PERSON OR PERSONS TO ASSUME FOR US ANY OTHER LIABILITY IN CONNECTION WITH SALE OF A CROSSFIELD PRODUCT. THIS WARRANTY SHALL NOT APPLY TO ANY OF CROSSFIELD'S PRODUCTS, WHICH HAVE BEEN SUBJECT TO ADULTERATION, ALTERATION ABUSE OR MISUSE. CROSSFIELD PRODUCTS CORP. MAKES NO WARRANTY WHATSOEVER IN RESPECT TO ACCESSORIES, PARTS OR MATERIAL NOT SUPPLIED BY CROSSFIELD PRODUCTS CORP., WHICH ARE USED IN CONNECTION WITH ITS PRODUCTS. THE TERM "ORIGINAL PURCHASER" IN THIS WARRANTY MEANS THAT PERSON, CORPORATION OR ENTITY TO WHOM CROSSFIELD PRODUCTS CORP. SOLD ITS PRODUCTS. ANY ACTION TO ENFORCE ANY WARRANTY OR FOR BREACH OF CONTRACT OR ARISING OUT OF ANY CLAIM AGAINST CROSSFIELD PRODUCTS CORP. SHALL BE COMMENCED AND MAINTAINED ONLY IN A COURT OF COMPETENT JURISDICTION IN THE CONTINENTAL UNITED STATES OF AMERICA. THE PURCHASER ACCEPTS THESE TERMS AND CONDITIONS, AND HEREBY EXPRESSLY WAIVES ANY CLAIM TO ADDITIONAL DAMAGES.

CAUTION: ALWAYS KEEP OUT OF THE REACH OF CHILDREN.



Miracote Product Line
Crossfield Products Corp

www.miracote.com

East Coast Office
140 Valley Road
Roselle Park, NJ 07204
P: (908) 245-2808
F: (908) 245-0659

West Coast Office
3000 E. Harcourt Street
Rancho Dominguez, CA 90221
P: (310) 631-6594
F: (310) 886-9119



MIR.016
MIRAFLOR GLAZETOP FC
BROADCAST SYSTEM
04-15-2013