



MiraFlor CQ Troweled

Product Technical Data Sheet

Miracote MiraFlor CQ Troweled Flooring System is a decorative trowel applied flooring system designed to produce a seamless floor with integral coved base. The completed floor has a nominal thickness of 3/16" (4.75 mm) to 1/4" (6.35mm). The colored quartz granules are in a clear epoxy mortar binder, that is groutcoated and topcoated. The system is resistant to a wide range of chemicals (see Chemical Resistance Chart).

MiraFlor CQ Troweled Flooring System can be applied over concrete, metal or wood sub-surfaces (Consult Crossfield for a detailed specification for placement on metal or wood substrates).

It can be finished with optional topcoats of clear (gloss) or matte finish, Miracote MiraFlor Glazetop a highly chemical and abrasion resistant polyurea topcoat.

Colored quartz aggregate granules are available in standard color blends. See Crossfield's Colored Quartz Trowelable Epoxy Flooring System Color Card for standard patterns or an infinite number of custom patterns can be blended.

Miracote MiraFlor CQ Troweled is available with an EPA Listed Antimicrobial Biocide, which protects against growth of algae, bacteria, fungi, mold, mildew, yeast, etc.

ADVANTAGES

- Virtually free of VOC.
- Monolithic, including integral coved base can possess the same appearance or it can be color contrasted.
- Resistant to many chemicals (See Chemical Resistance Chart.
- Rapidly installed decorative seamless floor at moderate cost.
- Aesthetically pleasing with high physical and mechanical properties.
- Available through Miracote distributors.

COVERAGE RATES

28 sq. ft. per gallon of mixture.

PACKAGING

Kit Sizes: 1.5 gal, 3 gal, 15 gal and 150 gal
Troweled Aggregates: 50-pound bag

MIX RATIO

Two parts A Comp. : one part B Comp : 0.25 parts ColorPax E (60-66 lbs of blended aggregate).

SHELF LIFE AND STORAGE

Shelf life will be one year from the date of manufacture as long as containers remain unopened and when material is store in a protected environment that is free from moisture, excessive heat and freezing temperatures, and direct sunlight.

WHERE TO USE

Facilities where aesthetics and functionality are both required, such as pharmaceutical plants, research and development, biotech, clean rooms, medical facilities, laboratories, commercial kitchens, food processing, institutional facilities, food and beverage processing, wine and spirits and other facilities requiring an aesthetic functional floor.

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

Compressive Strength ASTM C579	10,500 psi
(Resin, Hardener & Aggregate)	738 kg/cm ²
Compressive Strength ASTM D695	12,900psi
(Resin & Hardener).....	907 kg/cm ²
Tensile Strength ASTM C307.....	1,800 psi
(Resin, Hardener & Aggregate)	127 kg/cm ²
Tensile Strength ASTM D638	5,000 psi
(Resin & Hardener).....	352 kg/cm ²
Flexural Strength ASTM C580	4,000 psi
	281 kg/cm ²
Surface Hardness ASTM D2240 Shore D	80-85
Indentation Characteristics	
(Steadily Applied Load) MIL-D-3134	0.005"
Para 4.7.4.2.1, 2000 lbs on.....	0.127 sq. m
1" steel ram imposed for 30 minutes over	
A concrete substrate, indented.	
Indentation Characteristics MIL-D-3134	
Para.4.7.3. (Impact Load)	0.011"
(2 lb.908 kg) Indent from steel ball.....	0.28 sq. m
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	
(CS17, 1000gr load, 1000 cycles)	0.04 gr
Flammability ASTM D635	Self-Extinguishing
	Bonded to Concrete
VOC	3 g/L
Skid Resistance	
Varies depending upon surface texture selected	
(See Crossfield Skid Resistance Characteristic)	
Microbial Resistant ASTM G21	Passes Rating 1
Chemical Resistance	See Chemical Resistant Chart

FOR BEST RESULTS

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 current versions of product technical data sheets (PTDS), material safety data sheets (MSDS), and installation guides (IG) at www.miracote.com. Protect materials from excessive heat and cold and regularly check wet film thickness with mil gauge and monitor consumption to ensure correct application thicknesses and rate are obtained.

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OVERVIEW OF INSTALLATION

- Prepare surface by careful and thorough removal of all laitance, grease, concrete curing agents and foreign matter.
- Apply MiraPrime Bondcoat Primer by squeegee, roller or brush.
- Trowel apply MiraFlor CQ Clear Epoxy and colored quartz aggregate to a thickness of 3/16" (4.75mm) to 1/4" (6.35mm).
- Groutcoat with MiraFlor CQ Clear Epoxy by squeegee or trowel, and by backrolling. Apply second groutcoat if required.
- Optional finish coat, with matte finish or optional high performance clear sealer.

LIMITATIONS

- If dynamic cracks in the substrate move, the flooring systems may reflect the cracks. To minimize the potential of reflecting cracks telegraphing from the substrate, use:
 - MiraFlor MC-5 Membrane or another Miracote crack isolation systems.
 - A waterproofing and crack isolation membrane can be installed prior to system application.

Moisture vapor transmission (MVE) in excess of 3.0 lbs./1000 sq ft per 24 hr. period per ASTM F1869, may result in delamination, discoloration or improper curing. Use Miracote MiraPrime MVERS vapor control membrane over substrates, which have MVE emissions that exceed these limits. Consult with Crossfield prior to using MiraPrime MVERS if moisture vapor transmission exceeds 15 lbs/1000 sq/ft/per 24 hr period per ASTM F1869.

PRODUCT AVAILABILITY

Crossfield Products Corp. Miracote maintains offices and factories at addresses listed below. Miracote products are available for purchase through reputable distribution in the building trades.

MAINTENANCE

For maximum sheen and cleanability, floor should be routinely treated with conventional maintenance finish followed by ordinary buffing.

SPECIFICATION ASSISTANCE

Consult Crossfield Products Corp. for specification assistance, detailing, etc. This consultation is highly recommended prior to specification.

SLIP RESISTANCE and CLEANABILITY

In general, the more aggressive the finished surface the greater the coefficient of friction and corresponding slip resistance, the more difficult to clean. The smoother the finished texture the easier the surface is to clean, but there is a loss of skid resistant properties.

CHEMICAL RESISTANCE

See Crossfield Products Corp. Chemical Resistance Guidelines for chemical resistance of a product or system, as well as the types of test performed:

- ASTM C868 Standard Test Method for Chemical Resistance of Protective Lining.
- ASTM C267 Standard Test Method for Chemical Resistance of Mortars, Grouts, and Monolithic Surfacing and Polymer Concretes.
- ASTM D1308 Standard Test Method for Effect of Household Chemicals on Clear and Pigmented Organic Finishes
- Crossfield Products Corp. Proprietary Testing.

Note: Chemical resistance is a functional test, usually limited to changes in weight or thickness measured in loss or gain and does not evaluate subject aesthetic issues. To determine aesthetic issues, Crossfield recommends testing the products or system in accordance with intended end use.

CLEANING

Cleaning and disinfecting compounds and cleaning techniques can affect the color, gloss, texture and performance of the system. As a precautionary step, Crossfield recommends that the end-user test their cleaning and disinfecting compounds on a sample or on a small, out of the way finished area, utilizing the intended cleaning technique prior to cleaning the entire surface area. If no deleterious effects are observed, the procedure can be continued. If the cleaning and disinfecting compounds or cleaning techniques damage the system, modification of the cleaning material or techniques will be required. Contact your Representative for additional information.

TESTING

The technical data contained herein is the result of tests made in Crossfield's laboratories or in independent laboratories using small scale equipment, following generally accepted trade practices. Although this information is believed to be true and accurate, the use of different equipment for testing under dissimilar conditions or the testing of samples produced under dissimilar conditions may develop substantially different results.

LIMITED WARRANTY

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

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CAUTION: ALWAYS KEEP OUT OF THE REACH OF CHILDREN.



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