



Product Technical Data Sheet

CQ CLEAR EPOXY PIGMENTED BROADCAST FLOOR 1/20" to 1/8" Monochromatic Floor with Integral Covebase

1. PRODUCT DESCRIPTION

A. COMPOSITION

CQ Clear Epoxy Pigmented Broadcast Flooring Systems are Scientifically Superior™ monochromatic (solid color) three-component polymer system consisting of CQ Clear Epoxy and hardener, and ColorPax™-E (epoxy pigment pack), plus select Miracote aggregates. The floors (single and double broadcast) range in thickness from 1/20" (1.27mm) to 1/8" (3.17mm). The special aggregate is added to provide thickness, plus impact and skid resistance. CQ Clear Epoxy Pigmented systems are available in standard colors.

It can be finished with optional topcoats of clear (gloss) or matte finish, Miracote APU 100 aliphatic polyester urethane, which are chemical, abrasion and UV stable or topcoated with CR-N Topcoat when subjected to extremely harsh chemical exposure or Glazetop a highly chemical and abrasion resistant polyurea topcoat.

CQ Clear Epoxy Pigmented Systems are available in the Dexcide series incorporating an anti-microbial in the epoxy system, which protects against growth of algae, bacteria, fungi, mold, mildew, yeast, etc.

B. TYPICAL USES

The intended use ranges from dry to wet environments in commercial, industrial and institutional areas, such as manufacturing, processing, warehousing, stairs, ramps, walkways, corridors and commons-areas. The material can be applied over new or existing concrete or Miracote composition floors or metal or wood sub-surfaces (Consult Crossfield for detailed specification for metal or wood surfaces).

In addition, CQ Clear Epoxy Pigmented Scientifically Superior Systems include: Smooth Coat; Smooth Coat with Synthetic Aggregate; Slurrycoat; and Slurrycoat Broadcast.

C. ADVANTAGES AND LIMITATIONS

ADVANTAGES:

1. Resistant to many chemicals (See Chemical Resistance Chart).
2. Produces a rapidly-installed, decorative seamless floor at moderate cost.
3. Crossfield offers a Limited Supplemental Warranty of ten years against moisture vapor suppression disbondment of CQ Clear Epoxy Pigmented Systems when used over MVERS II Primer. Contact Crossfield for additional information.

LIMITATIONS:

1. If sub-surface cracks, CQ Clear Epoxy Pigmented systems may reflect cracks to some degree.

2. A waterproofing and crack isolation membrane can be installed prior to system application.
3. Moisture vapor transmission (MVE) in excess of 3.0 lbs./1000 sq/ft/per 24 hr. period per ASTM F1869-04, may result in delamination, discoloration or improper curing. Use Miracote MVERS™ II Primer vapor control membrane over substrates, which have MVE emission rate that exceed these limits. Consult with Crossfield prior to using MVERS II Primer if moisture vapor transmission exceeds 15 lbs/1000 sq/ft/per 24 hr period per ASTM F1869-04.

2. TYPICAL PHYSICAL PROPERTIES at 75°F (24°C)

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| A. Compressive Strength ASTM C579
(Resin, Hardener & Aggregate) | 10,000 psi
(738 kg/cm ²) |
| B. Compressive Strength ASTM D695
(Resin & Hardener) | 12,000 psi
(907 kg/cm ²) |
| C. Tensile Strength ASTM C307
(Resin, Hardener & Aggregate) | 1,800 psi
(127 kg/cm ²) |
| D. Tensile Strength ASTM D638
(Resin & Hardener) | 4,400 psi
(310 kg/cm ²) |
| E. Flexural Strength ASTM C580
(Resin, Hardener & Aggregate) | 4,000 psi
(281 kg/cm ²) |
| F. Surface Hardness ASTM D2240 Shore D | 80-85 |
| G. Indentation Characteristics
(Steadily Applied Load) MIL-PRF-3134,
Para. 4.7.4.2.1, 2000 lbs on
1" steel ram imposed for 30 minutes over
a concrete substrate, indented | 0.005"
(0.127 mm) |
| H. Indentation Characteristics
(Impact Load) MIL-PRF-3134, Para.4.7.3
(2 lb. .908 kg.) Indent from steel ball
dropped twice from 8 ft. height | 0.011"
(0.28 mm) |
| I. Adhesion ASTM D4541
(100% failure in concrete) | > 400 psi
(28.1 kg/cm ²) |
| J. Water Absorption
MIL-D-3134 | < 1.0% |
| K. Abrasion Resistance
ASTM D4060 (CS17, 1000gr load, 1000 cycles) | 0.09 gr |
| L. Flammability ASTM D635 | Self-Extinguishing
Bonded to Concrete |
| M. Skid Resistance
Varies depending upon surface texture selected.
(See Crossfield Skid Resistance Characteristic) | |
| N. Microbial Resistant ASTM G21 | Passes |
| O. Chemical Resistant (see Chemical Resistance Chart) | |

3. OVERVIEW OF INSTALLATION STEPS

- A. Prepare surface by careful and thorough removal of all laitance, grease, concrete curing agents and foreign matter.
- B. Apply epoxy primer.

- C. Apply receiving coat of mixed epoxy and broadcast colored quartz aggregate into wet epoxy, groutcoat/lockcoat (repeat for double broadcast).
- D. Apply topcoat, thick for smooth and thinner for an aggressive skid resistance texture.
- E. Apply optional clear or pigmented finishcoat using aliphatic polyester urethane (APU 100 Clear Gloss or Clear Matte).

4. PRODUCT AVAILABILITY

Miracote Products/Systems are available from Authorized Miracote Distributors or from Crossfield Products Corp.

5. SKID RESISTANCE and CLEANABILITY

In general, the more aggressive the finished surface the greater the coefficient of friction and corresponding skid 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.

6. 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 Crossfield for additional information.

7. SPECIFICATION ASSISTANCE

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

8. CHEMICAL RESISTANCE

See Crossfield Products Corp.'s. 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.

9. 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.

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 MIRASTAIN I OUT OF THE REACH OF CHILDREN.



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