



Product Technical Data Sheet

MIRACOTE® Miraflex II Decking System

1. PRODUCT DESCRIPTION

A. COMPOSITION

Miracote Miraflex II Decking System is a multi-layered promenade deck coating consisting of formulated resins, cementitious underlayment and waterproof membrane. Designed to provide a decorative finished waterproof deck surfacing, Miraflex II is ideally suited for either new construction or deck renovation. Miraflex II is also available as an under tile roof deck membrane system for application over approved wood or concrete substrates. Miraflex II finished promenade roof deck, with proper preparation, can be applied over concrete, magnesite, elastomeric decking or plywood. For application over plywood, a metal lath reinforced underlayment (Miracote Repair Mortar Series) is applied prior to the application of Miraflex II Decking System.

DECORATIVE DIVERSITY:

Miraflex II can be finished with Miracote Protective Coating, Mirastamp to afford a textured, impression, stencil patterned, knocked down, splatter or broom finished profile. The finished surface can be stained much in the same way as decorative concrete prior to application of protective clear sealers.

B. TYPICAL USES

Miracote Miraflex II Decking System is designed to provide a waterproof promenade traffic roof deck surface coating for use on exterior or interior walking decks, balconies, ramps, stairs, patios, sun decks, play roof, observation decks, platforms, etc.

C. ADVANTAGES

ADVANTAGES:

1. Provides positive waterproofing.
2. Acceptable for use over occupied space.
3. Meets Class A when installed with Repair Mortar
4. Environmentally safe (solvent free).
5. Ease of installation in accordance with manufacturer's application specifications.
6. Excellent adhesion to a variety of existing surfaces.
7. Available in popular colors; easy to maintain.

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

- A. **Weight** 2.5 lbs p.s.f.
- B. **Accelerated Weathering** ASTM G23 (Atlas Twin – Arc Weatherometer: 120 min. cycle/120 mins. Dry at 145°F, - 18 mins. Wet at 60°F – 2,000 hours)
- C. **Accelerated Aging** ASTM D756 Procedure D & E, 6 cycles No chalking, crazing, cracking, blistering, delimitation, etc.
- D. **Freeze – Thaw** ASTM C67 (50 cycles)
No breakage, weight loss > 1%

- E. **Abrasion** ASTM D1242 Method A Thickness reduction 4.3% (1,000 revolutions, 100g. load, No.80TP aluminum oxide grit)

- F. **Chemical Resistance** ASTM D2299

Industrial Detergent (20% solution) – No change in color or texture

Salt (20% solution) – No change in color or texture

Ammonia Solution (5%) - No change in color or texture

Muriatic Acid (10% vol.) - No change in color or texture

Chlorine (10% vol.) - No change in color or texture

Kerosene - No change in color or texture

Turpentine – Slight softening of surface

Paint Thinner – Slight softening of surface

- G. **Percolation** ICC updated Test No moisture on underside, max drop in water column .10" Complies ICBO Standard for this test

- H. **Water Absorption** ASTM D570 Parag. 5,6,1,6.3,7,8 6.09%, No warping, cracking, crazing under 5x magnification

- I. **Wind Uplift** Factory Mutual 1-52 Qualifying Wind Velocity with a 3 safety Factor – 131 mph. Complies ICC requirement

- J. **Fire Safety** ASTM E108, UL 790, NFPA 256

Intermittent Flame Exposure

Class A

Spread of Flame

Class A

Burning Brand

Class A

ICC ES 1714

3. INSTALLATION

Miracote Installation Guideline (IG) ICH 171 and Application Specification No. 120 describe installation procedure, substrate preparation, tools, equipment and materials required or recommended in detail.

Summary of Installation Scope:

A. Substrate and Preparation:

- a. Plywood of exterior grade; minimum 5/8" inch, or better, tightly screwed and glued, with all edges blocked, plugged and filled. For best results, ICC ES 1714 compliant plywood to be 1/4 inch per foot slope minimum, tongue and groove (T&G) is recommended and no deflection beyond the Miraflex II material capacity is allowable. Refer to Application specification for Miraflex II and Miracote IG 171 series. Over Plywood use Miracote RM III underlayment. Keep RM III to the minimum thickness required to displace and cover the lath. Although 5/8" plywood is allowable per the ICC ES-1714, use of 1 inch or 1 and a quarter inch for plywood is a good way to further ensure against undesirable deflection.

- b. For application over concrete surfaces, consult Crossfield Products Corp. and refer to MIR.10 and IG ICH 171 for Miracote Protective Coating primer coat, which is recommended to be installed under Miraflex II Decking primer (1) over acceptable light weight concrete surfaces.
- c. Pitch for drainage to be a minimum of 1/4 inch per foot.
- d. Flashing, scuppers, drains, threshold transitions, nosing and substrate surfaces to be installed or treated in accordance with Miracote Miraflex II decking System No. 120 Application Specification and IG 171 requirements.

B. Installation: Acquire and follow Miracote Miraflex II Application Specification No. 120 II and IG ICH 171 series, and related Miracote Application Guide Specifications. All Miracote materials to be supplied to the job site in fresh unopened manufacturer's containers.

BASIC INSTALLATION:

1. Prepare Substrate.
2. Over approved T&G, fully blocked exterior grade plywood install lath and staples.
3. Offset lath seems and corners to center of underlying plywood and fasten with specified staples, minimum per IG 171.
4. Fill and profile surface with Miracote Repair Mortar.
5. Apply two coats of Miracote Membrane A. Include Miracote Reinforcing fabric in the second coat for high pedestrian or heavier load applications.
6. Apply one protection coat of Miracote Protective Coating.
7. Follow the specific finish instructions for the selected finish system: Trowel, Textured, Splattered, Micro-Stamped (MPC), Tiled, Stenciled and Stippled.
8. Apply stains are required.
9. Apply sealers.

CAUTIONS AND LIMITATIONS:

1. Waterproofing may depend upon existing flashing and substrate conditions.
2. Not intended for vehicular traffic.
3. Limited ability to bridge working cracks in substrate.
4. Must terminate at seismic or expansion joints.
5. Working substrate, settlement, defection, and movement of any kind can develop cracking in the surface and underlying membrane and underlayment.

4. PRODUCT AVAILABILITY

Crossfield Products Corp. maintains offices and/or factories at all addresses listed below. Factory Trained Contractors are established in all major trading areas in the United States, Canada and various European, Latin American and Far East nations.

5. 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.

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 your Representative for additional information.

7. MAINTENANCE

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

8. SPECIFICATION ASSISTANCE

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

9. 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.

10. 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.

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CAUTION: ALWAYS KEEP OUT OF THE REACH OF CHILDREN.



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