



# MiraFlex II

## Product Technical Data Sheet

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 MiraPatch RM Series) is applied prior to the application of MiraFlex II Decking System.

### DECORATIVE DIVERSITY

Miracote MiraFlex II can be finished with Miracote MPC, 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.

### ADVANTAGES

- Provides positive waterproofing.
- Acceptable for use over occupied space.
- Meets Class A when installed with MiraPatch RM.
- Environmentally safe (solvent free).
- Ease of installation in accordance with manufacturer's Installation Guide.
- Excellent adhesion to a variety of existing surfaces.
- Available in popular colors; easy to maintain.
- Available through Miracote distributors.

### COVERAGE RATES

Refer to the PTDS and IG for each individual component of this system.

### PACKAGING and COLORS

Refer to PTDS and IG for each individual component of the system.

### MIX RATIO

Refer to PTDS and IG for each individual component of the system.

### 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 stored in a protected environment that is free from moisture, excessive heat and freezing temperatures, and direct sunlight.

### WHERE TO USE

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.

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

<b>Weight</b> .....	2.5 lbs p.s.f.
<b>Accelerated Weathering</b> ASTM G23 (Atlas Twin – Arc Weatherometer: 120 min. cycle/120 mins. Dry at 145°F, 18 mins. Wet at 60°F –2,000 hrs.	
<b>Accelerated Aging</b> ASTM D756 Procedure D & E, 6 cycles. No chalking, crazing, cracking, blistering, delimitations, etc.	
<b>Freeze-Thaw</b> ASTM C67 (50 cycles) .....	No breakage, weight loss >1%
<b>Abrasion</b> ASTM D1242 Method A Thickness Reduction 4.3% (1,000 revolutions, 100g. load, No. 80TP aluminum oxide grit)	
<b>Chemical Resistance</b> 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
<b>Percolation</b> ICC updated Test No moisture on underside, max drop in Water column .10" .....	Complies ICBO Standard for this test
<b>Water Absorption</b> ASTM D570 Para. 5.6.1, 6.3, 7, 8.....	6.09%
No warping, cracking, crazing under 5x magnification	
Wind Uplift Factory Mutual 1-52 Qualifying Wind Velocity with a 3 safety Factor – 131 mph. Complies ICC requirement	
<b>Fire Safety</b> ASTM E108, UL 790, NFPA 256	
Intermittent Flame Exposure .....	Class A
Spread of Flame.....	Class A
Burning Brand .....	Class A
.....	ICC ES 1714

### 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](http://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 STEPS

#### SUBSTRATE and PREPARATION

- 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 ¼ 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. Over Plywood use MiraPatch LM. Keep MiraPatch LM to the minimum thickness required to displace and cover the 1.75# (minimum) 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.

### OVERVIEW OF INSTALLATION STEPS

#### SUBSTRATE and PREPARATION (Continued)

- For application over concrete surfaces, consult Crossfield Products Corp. and refer to MIR.10 and IG MIR.10 for Miracote Protective Coating primer coat, which is recommended to be installed under MiraFlex II Decking primer (1) over acceptable light weight concrete surfaces.
- Pitch for drainage to be a minimum of 1/4 inch per foot.
- Flashing, scuppers, drains, threshold transitions, nosing and substrate surfaces to be installed or treated in accordance with Miracote MiraFlex II Decking System Application Specification and Installation Guide requirements.

#### INSTALLATION

- Acquire and follow Miracote MiraFlex II Application Specification and Installation Guide series, and related Miracote Application Specifications and Installation Guides. Miracote materials to be supplied to the job site in fresh unopened manufacturer's containers.

#### BASIC INSTALLATION

- Prepare Substrate.
- Over approved T&G, fully blocked exterior grade plywood install lath and staples.
- Offset lath seems and corners to center of underlying plywood and fasten with specified staples, minimum per Installation Guide.
- Fill and profile surface with Miracote MiraPatch LM.
- Apply two coats of MiraFlex Membrane A. Include Miracote Reinforcing fabric in the second coat for heavy pedestrian or heavier load applications. (Miracote Poly-Fabric is not required by ICC-ES)
- Apply one protection coat of Miracote Protective Coating.
- Follow the specific finish instructions for the selected finish system: Trowel, Textured, Splattered, Micro-Stamped (MPC), Tiled, Stenciled and Stippled.
- Apply stains are required.
- Apply sealers.

### LIMITATIONS

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

### 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.

### 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.



**Miracote Product Line**  
**Crossfield Products Corp**

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**MIR.120a**  
**MIRAFLEX II (MLM added) RD**  
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