



Product Information Sheet

MIRACOTE[®] RM I (Repair Mortar and Underlayment)

1. PRODUCT DESCRIPTION

A. COMPOSITION

RM I Repair Mortar and Underlayment is a polymer-modified two-component smoothing and resurfacing compound for concrete floors and decks. Applied to any thickness from 3" to featheredge with superior adhesion to prepared substrates. RM I has very high compression strength and it can be left exposed to industrial-type traffic or covered with almost any type of floor covering – carpet, resilient tile, even the very hard troweled resin floor systems.

Compared to conventional concrete toppings, RM I has greatly improved adhesion, greater abrasion resistance, less shrinkage, greater resistance to water and salt penetration, and better tensile strength.

RM I is Zero-VOC, virtually odorless, and environmentally safe. It requires no special training for installation and is easily handled by a handyman mason. It sets rapidly, can be applied over damp (not wet) surfaces, and can be installed at temperatures as low as 50°F (10°C).

B. TYPICAL USES

Use RM I for interior or exterior structural repair applications on spalled, deteriorated or scaling concrete decks and industrial floors. RM I is specially designed to prepare concrete for Miracote polymeric floor finishes.

C. ADVANTAGES AND LIMITATIONS

ADVANTAGES:

1. High-Build: can be applied from featheredge to 3" thickness.
2. Non-Shrinking: no cracks or fissures, same co-efficient of expansion as concrete.
3. Freeze-Thaw Resistant: water retardancy prevents cold weather scaling.
4. Simple to use: pre-portioned mixing.
5. Polymer-Fortified: self-curing and superior adhesion.
6. High Compressive Strength.

LIMITATIONS:

1. Drying time is about 8 hours per 1/4" thickness. Keep temperatures above 55°F (12°C) for fastest cure.
2. RM I will cure to a slightly darker color than concrete.
3. Moisture vapor transmission (MVT) in excess of 6.0 lbs./1000 sq/ft/per 24 hr. period per ASTM F1869, may result in delamination, discoloration or improper curing. Use Miracote MVERS[™] Primer vapor control membrane over substrates, which have MVT emissions that exceed

these limits. Consult with Crossfield prior to using MVERS Primer if moisture vapor transmission exceeds 15 lbs/1000 sq/ft/per 24 hr period per ASTM F1869.

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

- | | |
|--|--|
| A. Compression Strength
ASTM C109
(2" x 2" cubes) | 5,140 psi |
| B. Indentation Characteristics
(Steadily Applied Load)
MIL-D-3134, Para. 4.7.2.1
(2,000 lbs. on 1" steel ram imposed for 30 mins.) | 2.26% |
| C. Adhesion MIL-D-3134, Para. 4.7.14
(Shear from steel plate after 96 hours) | 305 psi |
| D. Water Absorption MIL-D-3134 | 3.41% |
| E. Tensile Strength ASTM C190 | 925 psi |
| F. Flexural Strength ASTM C78 | 1,260 psi |
| G. Impact Resistance (Gardner Impact Tester) | No chipping, cracking or delamination and not more than 0.014" |

3. INSTALLATION

- A.** Miracote Installation Guideline IEH 365 describes installation procedure, substrate preparation, tools, equipment and materials required or recommended.
- B.** Mixing/Volume: Miracote RM I is two components and packaged in five-gallon cans of Miracote RM I Liquid and 75 lb. bags of Miracote RM I Powder. Standard mix is one gallon to one bag. This quantity covers approximated 30 sq. ft. (2.78m²) in a 1/4" (6,335mm) thickness. In a "skim coating", a one gallon-one bag mix will cover about 80 sq. ft. (7.43m²). Mix with drill mixer, or by mortar box and hoe, or in a plaster mixer.
- C.** Surface Preparation: Concrete, new or old; clean and remove all grease, paint, curing agents and loose concrete patches and droppings.
- D.** Priming: Prime surfaces with the Miracote Universal Primer. Use a mix of one part Miracote Liquid Catalyst and one part clean potable water or pre-packaged Universal Primer. Apply two coats if the first coat absorbs into concrete rapidly.
- E.** Application: Trowel RM I over the primed surface to thickness desired. This material can either be floated by straightedge or placed with a flat trowel. A very smooth finish can be attained with a flat trowel. Trowel or broom finish RM I as desired. For applications deeper than 1/2", the material may be extended by the addition of crushed, dry, stone aggregate.

4. PRODUCT AVAILABILITY

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

5. 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.

6. MAINTENANCE

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

7. SPECIFICATION ASSISTANCE

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

8. 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 OUT OF THE REACH OF CHILDREN.



**MIRACOTE PRODUCT LINE
Crossfield Products Corp.**

**Western Division
3000 E. Harcourt Street
Rancho Dominguez, CA 90221
310-886-9100
310-886-9119 fax**

**Eastern Division
140 Valley Road
Roselle Park, NJ 07204
908-245-2800
908-245-0659 fax**

www.miracote.com