



# Product Technical Data Sheet

## MIRACOTE<sup>®</sup> REPAIR MORTAR I (RM I)

### 1. PRODUCT DESCRIPTION

#### A. COMPOSITION

Miracote Repair Mortar I 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. Miracote Repair Mortar 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, Miracote Repair Mortar I has greatly improved adhesion, greater abrasion resistance, less shrinkage, greater resistance to water and salt penetration, and better tensile strength.

Miracote Repair Mortar 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 Miracote Repair Mortar I for interior or exterior structural repair applications on spalled, deteriorated or scaling concrete decks and industrial floors. Miracote Repair Mortar 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. Miracote Repair Mortar I will cure to a slightly darker color than concrete.

### 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) 2.26%  
MIL-D-3134, Para. 4.7.2.1  
(2,000 lbs. on 1" steel ram imposed for 30 mins.)

C. Adhesion MIL-D-3134, Para. 4.7.14 305 psi  
(Shear from steel plate after 96 hours)

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. Mixing/Volume

Miracote Repair Mortar I is two components and packaged in five-gallon cans of Miracote Repair Mortar I Liquid and 75 lb. bags of Miracote Repair Mortar I Powder. Standard mix is one gallon to one bag. This quantity covers approximated 30 sq. ft. (2.78m<sup>2</sup>) in a 1/4" (6,335mm) thickness. In a "skim coating", a one gallon-one bag mix will cover about 80 sq. ft. (7.43m<sup>2</sup>). Mix with drill mixer, or by mortar box and hoe, or in a plaster mixer.

#### B. Surface Preparation

Concrete, new or old: clean and remove all grease, paint, curing agents and loose concrete patches and droppings.

#### C. 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.

#### D. Application

Trowel Miracote Repair Mortar 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 Miracote Repair Mortar 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

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. 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.

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CAUTION: ALWAYS KEEP OUT OF THE REACH OF CHILDREN.



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