

# MiraPatch LM

## Product Technical Data Sheet

MiraPatch LM is a two-component, polymer-modified, cementitious underlayment and embedment mortar specifically designed for the encapsulation of expanded metal lath reinforcement when installing Miracote's \*\*MiraFlex II Decking System over plywood substrates. MiraPatch LM is also suitable for use as an underlayment for tile, carpet and other flooring finishes, or when repairing, leveling and re-sloping concrete and other types of surfaces. \*\* ICC-ES, ESR-1714 Listed having UBC, Class A, One-hour Fire-resistance-rated Construction.

## **ADVANTAGES**

- High flexural and tensile properties to resist cracking
- Excellent resilience and impact resistance
- Exhibits high bond strength characteristics
- Outstanding workability and working time
- Suitable for interior and exterior applications
- Decreases transmission of sound
- Excellent adhesion over plywood, concrete, masonry and many other substrates
- Compatible with most adhesives and other construction

#### **COVERAGE RATES**

(For estimating purposes only, coverage rates may vary depending on methods of application, substrate types and conditions and typical allowances for waste.)

#### Theoretical coverage per unit

**Expanded Metal Lath Embedment:** 

1.75 Lath 43.0 sq. ft. @ 3/16" 2.25 Lath 33.5 sq. ft @ 3/16" Concrete Surface Repairs: 44.5 sq. ft. @ 1/8"

Approximate Yield/Bag = .47 CF

## **PACKAGING**

MiraPatch LM Liquid Component (5 gallon pail) MiraPatch LM Powder Component (50 lb bag)

#### **MIX RATIO**

1 ¼ gallon MiraPatch LM Liquid To (1) 50 lb bag of MiraPatch LM powder or 5 gallon pail MiraPatch LM Liquid To (4) bags of MiraPatch LM powder.

## SHELF LIFE AND STORAGE

One year from the date of manufacture as long as containers remain unopened and material is stored in a protected environment free from moisture, excessive heat, freezing temperatures, and direct sunlight.

## **INTENDED USES**

- Embedment and encapsulation of expanded metal lath
- Embedment for radiant heating elements
- Flooring underlayment over plywood and concrete
- Leveling and sloping of horizontal concrete surfaces
- Repair of concrete surface defects
- Underlayment for tile, carpet and other flooring finishes

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

Compressive ASTM C109	2100 psi
4 day	3950 psi
Tensile Strength ASTM C307	925 psi
Flexural Strength ASTM C580	2,400 psi
Flow at Elevated Temp. (300°F for 4 hrs.)	None
Corrosive Effect on Aluminum or Steel	None
Adhesion @ up to 1/8" thick(Shear from steel plate)	192 psi
Adhesion @ up to 1/4" thick (Shear from steel plate)	) 122 psi
Compression Strength Loss after Three Days	
Immersion in 140°F	4% max.
Impact Resistance	loss of adhesion
Indentation @ up to 1/8"	
Indentation @ up to 1/4"	

### FOR BEST RESULTS

- Always install a minimum 4' by 4' test area or job site mock up for owner approval of acceptable color, texture, finish adhesion and any other critical requirements prior to proceeding with the installation.
- Verify that the most current versions of product technical data sheets (PTDS), color charts, material safety data sheets (MSDS), and installation guidelines (IG) are being utilized for project submittals and application reference.
- Refer to all Miracote published documentation pertaining to MiraFlex II Decking System where MiraPatch LM is most typically and primarily used.
- Protect materials at all times from excessive heat and cold before and during application.
- The proper application of this product is the sole responsibility of the end user. Job site visits by Miracote representatives are only for the purpose of making recommendations. Supervision and quality control are the sole responsibility of the installer.
- Measure surface and ambient temperatures to ensure that material is only applied when temperatures are 40 F (4.5 C) and rising during placement and cure time.

## OVERVIEW OF INSTALLATION STEPS

 $(Obtain\ Miracote\ Installation\ Guideline\ for\ full\ instructions.)$ 

Surface Preparation - All surfaces to receive MiraPatch LM
must be clean, sound and free from any bond inhibiting
substances including, but not limited to, grease, oil and any other
contaminants or loosely adhered materials. For applications on
expanded metal lath reinforced plywood, inspect and verify
the substrate is structurally sound and free of unacceptable
movement. Ensure that both plywood decking is adequately
flashed, sloped, supported and expanded metal lath is fastened as
per industry standards.



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#### **OVERVIEW OF INSTALLATION STEPS (Continued)**

For concrete substrates, a minimum surface profile of a CSP-3 or higher is required depending on overall substrate conditions and resurfacing requirements. Concrete and other porous or absorptive substrates should be (SSD) saturated surface dry with no standing water at the time of the application to the substrate.

- Mixing MiraPatch LM must be mixed mechanically with a low-speed drill and "Jiffy-type" or similar Miracote-approved mixing paddle in a clean mixing container. Pre-mix MiraPatch LM liquid component first to re-disperse any polymer solids that may have settled on the bottom of the pail.
  - When mixing MiraPatch LM always pour the liquid component into the mixing pail first and slowly add the powder component. Thoroughly mix the MiraPatch LM until a homogeneous and smooth consistency is achieved that is free of lumps and pockets of dry powder. Mix for a maximum of 3 minutes, as over-mixing will entrap excessive air which can negatively impact design strengths and shorten workable time.
- Application MiraPatch LM can be applied using conventional tools and equipment. Trowel or screed MiraPatch LM over properly primed plywood and expanded metal lath to uniformly and completely encapsulate metal lath surface.

#### **LIMITATIONS**

- May reflect moving cracks and control joints. Implement detail as per current published installation guidelines (IG's).
- Staining, streaking and efflorescence may occur when fresh coating is exposed to excessive ponding or running water.
- Prevent any contact with aluminum which can cause an adverse reaction in the presence of moisture due to MiraPatch LM's cementitious content.

### 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.

#### **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.

#### **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.

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CAUTION: ALWAYS KEEP OUT OF THE REACH OF CHILDREN.



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