



MIRACOTE[®] SL Self Leveling Underlayment

1. PRODUCT DESCRIPTION

A. COMPOSITION

Miracote SL is a rapidly installed quick setting polymer-modified cementitious self-leveling re-surfacing underlayment designed for application over concrete. Miracote SL is available in natural gray cement color. Miracote SL is designed to generally smooth and flatten uneven floor surfaces before application of carpet, resilient tile, sheet goods or other finished composition-flooring systems. Miracote SL can be applied to increase floor elevation during new or refurbishment construction. Miracote SL comes as a dry powder, which is mixed with water to produce a fluid material that is either pumped or poured onto the surface and then spread into place. The material seeks its own level without hand troweling, and then rapidly sets in hardness.

B. TYPICAL USES

Miracote SL will self-level from 3/16" up to 2" in a single pour. Thicker applications can be achieved with the addition of washed stone aggregate or in multiple lifts. Normal application thickness is between 3/16" and 1 inch and Miracote SL can be spread out to near featheredge. Miracote SL can be lightly walked on in ideal conditions between 2 to 3 hours after placement. Floor coverings can usually be applied the next day or after 6 to 8 hours of placement. Miracote SL is designed for application over structural concrete or over stable structural concrete substrates that are covered with sound tightly adhered rigid materials such as ceramic tiles, terrazzo or quarry tile. Miracote SL is compatible with adhesives generally used in the subsequent installation of floor finishes. Although not recommended for exterior use, Miracote SL is resistant to water. When MVT-sensitive systems are to be installed over Miracote SL, always monitor and record MVT conditions on grade and on below-grade surfaces, which can be subject to moisture vapor transmission to assure MVT is within the overlaid system's specified tolerance. When MVT is high, Miracote Vapor-Guard system is recommended.

C. ADVANTAGES AND LIMITATIONS

ADVANTAGES:

1. Self-leveling from featheredge to 3/16 inch
2. High Compressive Strength
3. Rapid setting
4. Non-shrinking
5. Polymer-fortified
6. Superior adhesion
7. Simplified clean-up; clean tools with water
8. Can be auto-mixed and pumped
9. Suitable as a finished floor surface when sealed with Miracote Miraseal or HD II Sealer on interior surfaces only

LIMITATIONS:

1. Unsealed Miracote SL must be covered by other floor materials.
2. Not for exterior use.
3. Do not apply in conditions of direct sunlight or strong drafts, as this will cause material to set too quickly or can cause shrinking and cracking to the freshly laid material.
4. Do not attempt to cover moving joints or cracks in concrete.
5. Hairline cracks may occur from excessive water mix, excessive MVT in the substrate or movement in the substrate.
6. Over certain specified wood substrate conditions, Miracote SL can be installed only as an underlayment when applied into mechanically attached galvanized metal lath. Over time, Miracote SL may crack in such applications. Consult Crossfield Products Corp. in each case prior to application.
7. On grade and below-grade applications can require record of MVT prior to application and subsequent to application of Miracote SL to assure successful installation of certain vinyl sheet or vinyl tile applications or sealer systems.
8. Physical Properties are based on a 5-quart water mix. Altering the water mix will adversely affect this product's Physical Properties.
9. Surface should be maintained at >60°F (15°C) before placing underlayment to avoid de-bonding.
10. Moisture vapor transmission (MVT) in excess of 4.5 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

4 hours – 2,350 psi	1 day – 3,350 psi
7 days – 3,850 psi	28 days – 4,600 psi

B. Tensile Strength ASTM C307

28 days – 390 psi

C. Water Demand

5 quarts per 50 lb. bag

D. Shrinkage after 28 days

0.075%

3. INSTALLATION

- A. Miracote Installation Guideline ICH 341 describes installation procedure, substrate preparation, tools, equipment and materials required or recommended.
- B. Surface Preparation: Remove existing floor coverings, paint, tiles, adhesive, grout, etc. on existing concrete surfaces. Totally remove foreign substances such as wax, grease, oil or dirt, which will prevent bond. Generally it is required to remove old existing mastic flooring adhesive

down to concrete. When existing mastic is difficult to remove, consult Crossfield Products Corp. for further instructions. Block off holes or static non-working cracks through the floor, which would permit the Miracote SL to flow through.

- C. Priming: Miracote Liquid Catalyst is used to prime the surface. Dilute Miracote liquid Catalyst by 50% with potable water and apply liberally by brush, spray apparatus or long-nap roller. Coverage of Miracote Liquid Catalyst Primer will average between 300 sq ft (27.9 sq meter) and 350 sq ft (32.5 sq meters) per mixed gallon. Allow primer to dry – usually 2 hours. **On porous surfaces or when the first primer coat is totally absorbed into the substrate, a second primer coat is required.**
- D. Mixing Miracote SL Dry Powder: Specified mix is 5 quarts water to one 50 lb. bag of Miracote SL Powder. Mix by fast double insulated 1/2” drill minimum 650 rpm. Miracote SL will remain in a flowing state for 10-15 minutes after mixing. Material may be applied in thickness from 3/16”(7.46mm) up to 2” (50.8mm). One 50 lb. bag of Miracote SL will cover approximately 25 sqft (2.3 sq meters) in a thickness of 1/4” (6.25mm). Consult Crossfield Products Corp. for recommendations greater than two inches.
- E. Application: Begin application at the far corner of the area to receive the materials. Pour the Miracote SL material onto surface and spread with gage rake set at the desired minimum thickness. Maintain a continuous wet edge. Wear platform spikes set higher than the material’s application depth to avoid reflective imprints in the surface because laborers are required to walk through the wet material to smooth the surface of the applied materials with a smoothie trowel. Consult Crossfield Products Corp. for a trowel-grade underlayment recommendation when an elevation transition is required, or for application greater than 2 inches.

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.

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CAUTION: ALWAYS KEEP OUT OF THE REACH OF CHILDREN.



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