



MapelasticTM CI

Professional Crack-Isolation Membrane



DESCRIPTION

Mapelastic CI is a premixed, liquid-rubber, quick-drying crack-isolation membrane for installation under ceramic tile or stone in residential and commercial interior and exterior environments. *Mapelastic CI* meets ANSI A118.12 requirements, provides up to 1/8" (3 mm) of in-plane crack isolation, and dries after about 30 to 50 minutes. It is then ready to receive most MAPEI polymer-modified or epoxy mortars.

FEATURES AND BENEFITS

- Quick-drying: Allows tile/stone installation after 30 to 50 minutes
- Easily applied with roller or brush
- Convenient and versatile: Bonds to a wide range of floor surfaces
- No odor: Great for confined spaces
- Prevents in-plane floor cracks from transmitting through tile or stone

INDUSTRY STANDARDS AND APPROVAL

ANSI: Meets A118.12 standard (Crack-Isolation Membranes for Thin-Set Ceramic Tile)

ASTM: C627 (Robinson): Extra heavy service rating

LEED Points Contribution

LEED Points

MR Credit 5, Regional Materials* Up to 2 points

IEQ Credit 4.2, Low-Emitting

Materials – Paints & Coatings 1 point

* Using this product may help contribute to LEED certification of projects in the categories shown above. Points are awarded based on contributions of all project materials.

WHERE TO USE

- Residential and commercial interior and exterior floors
- In-plane crack isolation up to 1/8" (3 mm) over nonstructural cracks

LIMITATIONS

- Do not use over structural cracks, in-plane cracks greater than 1/8" (3 mm) or where vertical out-of-plane movement occurs.
- Do not use over substrates containing asbestos, dimensionally unstable substrates such as hardwood flooring, particleboard, oriented strand board (OSB), Masonite or metal. See "Suitable Substrates" section below.
- Do not use over plank flooring, treated plywood, Lauan, vinyl, glazed tile, laminate, fiberglass or epoxy floors.
- Do not use where excessive substrate moisture and/or where negative hydrostatic pressure exists. Maximum allowable moisture is 5 lbs. per 1,000 sq. ft. (2,27 kg per 92,9 m²) per 24 hours per ASTM F1869 or up to 75% relative humidity as measured with moisture probes.
- Do not use with premixed setting materials.
- Do not allow direct contact with solvent-based materials.
- Do not use in extreme freeze/thaw conditions.
- Do not apply when the substrate temperature is at or below the dew point.

Consult MAPEI's Technical Services Department for installation recommendations regarding substrates and conditions not listed.

SUITABLE SUBSTRATES

- Fully cured concrete at least 28 days old (see "Limitations")
- Cured cement mortar beds or leveling coats
- Cement backer units (CBUs)
- Properly prepared radiant-heated substrates (interior only)
- Properly prepared unglazed ceramic tile, cement terrazzo floors and gypsum underlayments (interior only and greater than 2500 psi [17,2 MPa])

Note: Existing unglazed ceramic tile must be abraded, and existing cement terrazzo must be mechanically profiled. Both must be skimcoated with an appropriate MAPEI latex- or polymer-modified mortar.

- Exterior-grade plywood (for interior residential floors and countertops in dry areas only)

SURFACE PREPARATION

Before beginning, consult the "Surface Preparation Requirements" document for tile and stone installation systems at www.mapei.com.

- All recommended substrates must be structurally sound, stable, clean and free of any substance preventing adhesion or reducing performance.
- Do not use chemicals (acid etching or stripping) to prepare approved substrates.
- Concrete substrates should have a Concrete Surface Profile #2 per ICRI (International Concrete Repair Institute). Mechanically clean and profile by diamond cup grinding or other engineer-approved method when necessary.
- Substrate and room temperatures must be between 45°F and 95°F (7°C and 35°C) during and at least 24 hours after application.
- Fill all cracks, control joints and gaps in floor that are greater than 1/32" (1 mm) with an appropriate filler material. Force material into crack and finish smooth with a trowel. Let dry.

MIXING

Note: Choose all appropriate safety equipment before use. Refer to Material Safety Data Sheet (MSDS) for more information.

- Ready to use; stir by hand before application.
- Do not dilute with any other material.

PRODUCT APPLICATION

1. Apply *Mapelastic CI* at a wet film thickness of 20 mils (0,5 mm) – about the thickness of a credit card. Apply to the entire area using a 3/8" (10 mm) nap roller. Let dry to a dark brown color. Final dry thickness should be a minimum of 15 mils or 0,38 mm (about the thickness of a business card).
2. Inspect and, if any areas are not properly covered, apply a second coat perpendicular to the first coat. Let dry.
3. Promptly wash tools with water after use.

EXPANSION AND CONTROL JOINTS

- Do not cover any substrate expansion or control joints with mortar or tile. Provide where specified per the most current TCA handbook for ceramic tile installation, Detail EJ-171, or TTMAC Tile Installation Manual, Detail 09 30 00 301MJ.
- Protect tilework with metal strips (edge metal) along both edges of structural building expansion joints.

Contact MAPEI's Technical Services Department for more information.

CLEANUP

Remove excess *Mapelastic CI* (while fresh) with damp sponge, soap and warm water. Any completely dried material may be mechanically removed.

PROTECTION

- Protect from traffic, rain and freezing for 24 hours.
- Protect installed *Mapelastic CI* from contamination, excessive heat and extended sun exposure until finish flooring is installed.

INSTALLING TILE OR NATURAL STONE

- *Mapelastic CI* is ready to receive mortars for tile or stone when dry to touch (about 30 to 50 minutes after application) or when dark brown in color.
- Medium-bed mortars (for large tile or stone) and screeds (for leveling floors) may require extended setting times when set over *Mapelastic CI*.
- For tile and stone installations, use a MAPEI polymer-modified mortar meeting ISO 13007 C2, ANSI A118.4 and ANSI A118.11, or an epoxy mortar meeting ISO 13007 R1 or R2 and ANSI A118.3.

Product Performance Properties at 73°F (23°C) and 50% relative humidity

Elongation (ASTM D412)	> 400%
Tensile strength (ASTM D412)	> 350 psi (2,41 MPa)

Final Performance Per ANSI A118.12 – Crack-Isolation Membranes for Thin-Set Ceramic Tile

4.1, Fungus and microorganism resistance	Complies
5.1.3, Shear strength at 7 days	Exceeds
5.1.4, Water immersion shear strength at 7 days	Exceeds
5.1.5, Shear strength at 4 weeks	Exceeds
5.1.6, Shear strength after accelerated aging	Exceeds
5.2.3, Point load resistance after 28 days' cure	Exceeds
Seam strength	Exceeds
Breaking strength	Exceeds
Dimensional stability	Exceeds

Shelf Life and Application Properties

Shelf life	2 years when stored in original unopened container
Flash point (Seta flash)	Nonflammable
Color	Purple when wet (dark brown when dry)
Drying time (before installing ceramic tile or stone)	About 30 to 50 minutes (1 coat)
Final dry thickness	At least 15 mils (0,38 mm)
Freeze/thaw stability	Up to 5 cycles at 0°F (-18°C)
Storage	Store in cool, dry place. Protect from freezing.

Packaging

Product Code	Size
32163	Pail: 3.5 U.S. gals (13,2 L)
32110	Pail (4-pack): 1 U.S. gal. (3,79 L)

Approximate Product Coverage* at a thickness of 15 mils (0,38 mm)

Per 1 U.S. gal. (3,79 L) 71 sq. ft. (6,60 m²)
 Per 3.5 U.S. gals. (13,2 L) 250 sq. ft. (23,2 m²)

** Coverage shown is for estimating only. Actual jobsite coverage may vary according to substrate conditions, concrete profile and porosity, type of equipment used, thickness applied, handling and application procedures.*

Mapelastic[™] CI



Refer to MAPEI's Material Safety Data Sheet (MSDS) for specific data related to VOCs, health and safety, and handling of product.

STATEMENT OF RESPONSIBILITY

Before using, user shall determine the suitability of the product for its intended use and user alone assumes all risks and liability whatsoever in connection therewith. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

We proudly support the following industry organizations:



MAPEI Headquarters of the Americas
1144 East Newport Center Drive
Deerfield Beach, Florida 33442
Phone: 1-888-US-MAPEI
(1-888-876-2734)

Technical Services
1-800-992-6273 (U.S. and Puerto Rico)
1-800-361-9309 (Canada)

Customer Service
1-800-42-MAPEI (1-800-426-2734)

Services in Mexico
0-1-800-MX-MAPEI (0-1-800-696-2734)

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