

# Mapeflex EMC-1

Smooth, Brush-Grade, Elastomeric Patching Compound



## DESCRIPTION

*Mapeflex*® *EMC-1* is a white, premium-grade, water-based elastomeric patching material that can be easily used for brush application to fill and seal cracks and/or static joints in masonry and stucco surfaces. *Mapeflex EMC-1* is highly flexible, offers excellent filling and adhesion on prepared substrates, and is designed for compatibility with MAPEI's *Elastocolor*® coating systems.

## FEATURES AND BENEFITS

- Will expand and contract with changes in temperature and movement within the substrate
- Provides a permanent waterproof seal over cracks, joints and around wall penetrations
- Suitable for use on all cementitious substrates and a variety of other building materials
- No migration of plasticizers or oils that can inhibit adhesion or performance of finish coatings

## INDUSTRY STANDARDS AND APPROVALS

### Green certifications

- Living Building Challenge (LBC) Red List Free: This product has been verified per the most current Red List on the LBC's Website.

## WHERE TO USE

- Concrete, brick, masonry, stucco and synthetic textured finishes
- Above-grade vertical exterior and interior surfaces
- For aesthetic enhancement, waterproofing and general protection
- For use with new or previously coated substrates

## SUITABLE SUBSTRATES

- Clean, sound, stable, frost-free and fully cured concrete, masonry and stucco, as well as brick-mortar and synthetic textured finishes

## SURFACE PREPARATION

- Substrates should be clean, dry and free of dirt, residue, oils, grease, curing compounds, laitance and any contaminant that may interfere with the adhesion of *Mapeflex EMC-1*.
- Dirt and loose contaminants are best removed using pressure washing.
- Remove unsound masonry by wire brushing or mechanically chipping away material to provide a firm surface.
- Any chalk or porous coating that remains after the surface preparation should first be sealed using *Elastocolor Primer WB*.

## MIXING

Choose all appropriate safety equipment before use. Refer to the Safety Data Sheet for details.

- Slowly stir *Mapeflex EMC-1* to ensure uniformity and minimize air entrapment.
- *Mapeflex EMC-1* is ready to use. Do not dilute.

## PRODUCT APPLICATION

Read all installation instructions thoroughly before installation. Contact MAPEI's Technical Services Department for more detailed recommendations.

1. Air, material and substrate temperatures during application must be between 40°F and 95°F (4°C and 35°C).
2. *Mapeflex EMC-1* may be applied directly to hairline cracks less than 1/64" (0,5 mm). Cracks up to 1/16" (1,5 mm) should be raked out to form a clean "V"-shaped profile prior to filling.
3. Liberally apply *Mapeflex EMC-1* by brush or putty knife to the surface, overfilling the crack to about 1/16" (1,5 mm) in a 2" (5-cm) wide stripe.
4. Strike off excess material to feather the edge of the repair onto the adjacent surface and allow the repair to dry.
5. Depending on application, surface texture and the geometry of the area to be repaired, a second application may be necessary to accommodate for shrinkage.
6. Allow *Mapeflex EMC-1* to dry for at least 4 hours before re-application or top coating with MAPEI's *Elastocolor* coatings. Drying times may vary as a result of prevailing weather conditions and the thickness of material applied.

## CLEANUP

- Clean brushes, tools and equipment immediately after use with water. Dried material may require mechanical means for removal.

## LIMITATIONS

- Do not apply *Mapeflex EMC-1* when ambient or substrate temperatures are below 40°F (4°C) or expected to fall below 40°F (4°C) within 24 hours, or when these temperatures are higher than 95°F (35°C).
- Do not apply *Mapeflex EMC-1* if the relative humidity is higher than 90%.
- Do not apply *Mapeflex EMC-1* on horizontal traffic-bearing surfaces.
- Do not apply *Mapeflex EMC-1* during inclement weather or when rain is expected within 24 hours following application.
- Do not use *Mapeflex EMC-1* where hydrostatic pressure from the blindside of the substrate may be present.
- Protect *Mapeflex EMC-1* from freezing and discard it if it freezes.
- Do not use *Mapeflex EMC-1* in total immersion or when it is subject to migrating moisture or rising dampness.
- Substrates must be dry before application of *Mapeflex EMC-1*. Allow substrates sufficient time to dry after rain; at least 24 hours of drying time is recommended.
- Do not apply to cementitious substrates with alkalinity above pH 11.
- New stucco or mortar should be allowed to cure for 7 days before application of *Mapeflex EMC-1*. Apply *Mapeflex EMC-1* after 10 days of curing for poured-in-place concrete.

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

### Product Performance Properties

Laboratory Tests	Results
Weight per gal. (3,79 L) – ASTM D2939	12 ± 0.5 lbs. (5,4 ± 0,25 kg)
Solids weight – ASTM D1644	> 60%
Solids volume – ASTM D2697	> 50%
Viscosity – Brookfield 4d/5 RPM/77°F (25°C)	> 150,000 cps
Fungal resistance – ASTM G21	Pass
Elongation – ASTM D2370	150%
Tensile strength – ASTM D2370	200 ± 50 psi (1,38 ± 0,3 MPa)
Mandrel bend test @ 15°F (-10°C) – ASTM D522B	Pass
pH, Std method	> 9
Flash point (PMCC)	> 212°F (100°C)

## Shelf Life and Properties

Shelf life	1 year when stored in original, unopened container at 73°F (23°C)
Consistency	Heavy, viscous liquid
Color	White
VOCs (Rule 1168 of California SCAQMD)	< 50 g per L
Storage temperature	40°F to 95°F (4°C to 35°C)

## Application Properties

Drying time at 70°F (21°C) and 50% relative humidity

Dry to the touch	2 hours
Before recoating or applying topcoat	4 hours
Until full cure	24 hours

## Approximate Coverage\*

25 to 50 sq. ft. per U.S. gal. (0,61 to 1,2 m<sup>2</sup> per L)

*\* Coverage varies depending on depth of crack/joint, surface porosity and substrate texture.*

## Packaging

## Size

Plastic pail: 1.8 U.S. gals. (6,81 L)

## ADDITIONAL INFORMATION

Refer to the SDS for specific data related to health and safety as well as product handling.

For information on MAPEI's commitment to sustainability and transparency, as well as how MAPEI products may contribute to green building standards and certification systems, contact [sustainability\\_USA@mapei.com](mailto:sustainability_USA@mapei.com) (USA) or [sustainability-durabilite@mapei.com](mailto:sustainability-durabilite@mapei.com) (Canada).

#### LEGAL NOTICE

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Before using, the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability. **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.**

## CONTACT INFORMATION

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### Customer Service

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Edition Date: October 9, 2023 MK 3000105 (23-2232)

For the most current product data and BEST-BACKED<sup>SM</sup> warranty information,  
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