

Mapecem Quickpatch

High-Performance Concrete Patch



DESCRIPTION

Mapecem[®] *Quickpatch* is a high-performance, fast-setting, cementitious material used for the patching of concrete surfaces. This product features a very low emission of volatile organic compounds and includes an offset of greenhouse gas emissions.

CO₂ FULLY OFFSET PRODUCTS

Mapecem Quickpatch is part of the “CO₂ Fully Offset in the Entire Life Cycle” line of products. CO₂ emissions measured throughout the life cycle of products from the ZERO line in 2024, using Life Cycle Assessment (LCA) methodology, verified and certified with EPDs, have been offset through the acquisition of third-party-certified carbon credits in support of forestry protection projects: A commitment to the planet, to people and to biodiversity. For more details on how emissions are calculated and on climate-mitigation projects that are financed through certified carbon credits, visit the Webpage www.mapei.com/ca/en-ca/sustainable-products.

FEATURES AND BENEFITS

- Natural gray to blend with existing concrete
- Ease of placement, with variable water ratios
- *Mapecem Quickpatch* can be applied from 1/16" to 1-1/2" (1.5 mm to 3.8 cm) neat and from 1-1/2" to 3" (3.8 to 7.5 cm) neat in areas no larger than 24 sq. ft. (2.23 m²). Larger areas will require *Mapecem Quickpatch* to be extended.

- *Mapecem Quickpatch* can be primed and covered with a leveler, a cement-based overlay or a tile-setting mortar in as little as 90 minutes, depending on temperatures.
- Moisture-controlling adhesives or moisture mitigation systems can be used over *Mapecem Quickpatch* in as little as 16 hours.
- Floor coverings can be installed in as little as 16 hours after application, as long as the existing subfloor meets the requirements of the mortars or adhesives used for installation.

WHERE TO USE

- For patching of interior/exterior concrete surfaces
- For smoothing, including elevation changes by ramping

SUITABLE SUBSTRATES

- Concrete at least 28 days old

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

SURFACE PREPARATION

- Thoroughly clean the surface of any substance that could interfere with the bond of the installation material including dirt, paint, tar, asphalt, wax, oil, grease, latex compounds, sealers, curing compounds, form-release agents, laitance, loose toppings, foreign substances and adhesive residues.
- Concrete substrates and ambient temperatures must be between 45°F and 85°F (7°C and 29°C) before application. Temperatures must be maintained within this range for at least 4 hours after the installation of *Mapecem Quickpatch*.
- If necessary, mechanically remove weak concrete surface down to solid concrete, meeting at least 175 psi (1.21 MPa) in tensile bond strength.
- Concrete substrates should be mechanically prepared to an International Concrete Repair Institute (ICRI) concrete surface profile (CSP) of #1 to #3.
- If *Mapecem Quickpatch* is being used for a final finished surface, repair all cracks in the substrate using conventional repair techniques before applying *Mapecem Quickpatch*. Use an appropriate MAPEI product for crack repair; see the Technical Data Sheet (TDS) for instructions.
- Concrete substrates should be SSD (saturated surface-dry).

MIXING

Before product use, take appropriate safety precautions. Refer to the Safety Data Sheet for details.

1. Depending on the application and desired consistency, use the following mixing ratios for *Mapecem Quickpatch*:
 - 10-lb. (4.54-kg) bag: 0.91 to 1 U.S. qt. (0.86 to 0.95 L) of water
 - 25-lb. (11.3-kg) bag: 2.28 to 2.5 U.S. qts. (2.16 to 2.37 L) of water
 - 50-lb. (22.7-kg) bag: 4.56 to 5 U.S. qts. (4.32 to 4.73 L) of water
2. Into a clean mixing container, pour the required amount of cool, clean, potable water and mix while slowly adding powder. The mixing ratio must remain consistent. Do not overwater material.

3. To increase product performance and durability, use *Planicrete*[®] *UA* diluted at 3 parts water to 1 part *Planicrete UA* (refer to the TDS for *Planicrete UA*).
4. Mix with a medium-speed drill (at 550 to 800 rpm), with a box paddle or other appropriate paddle for at least 2 to 3 minutes, ensuring a lump-free consistency.
5. For uses greater in depth than 1.5" (3.8 cm) and more than 24 sq. ft. (2.23 m²), *Mapecem Quickpatch* should be extended 30% by weight with clean, 3/8" (10 mm) pea gravel.
6. Do not mix more material than can be applied in 15 to 20 minutes, and do not add additional water over the maximum limit.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

1. Immediately after mixing, apply a scrubcoat or slurry coat of *Mapecem Quickpatch* onto the surface and bring it to elevation by the desired application techniques.
2. When *Mapecem Quickpatch* is being used as a final wear surface, apply an appropriate finish (such as a broom finish) shortly after *Mapecem Quickpatch* has been placed.

CLEANUP

- Wash hands and tools with water promptly before material hardens. Cured material must be mechanically removed.

CURING

- *Mapecem Quickpatch* is self-curing; do not use a damp-curing method.

LIMITATIONS

- Do not install over substrates containing asbestos.
- Do not apply over standing water.
- Do not use *Mapecem Quickpatch* as a crack filler.
- Do not add cement or chemical admixtures other than diluted *Planicrete UA*.
- *Mapecem Quickpatch* can be applied from 45°F to 85°F (7°C to 29°C). Allow for extra curing time for temperatures below 70°F (21°C).
- Honor all joints through *Mapecem Quickpatch*.
- Do not apply if rain or freezing temperatures are expected within 24 hours.
- Do not expose to rolling loads for at least 24 hours after installation.

Product Performance Properties

Laboratory Tests	Results
Compressive strength – ASTM C109 (modified)	
4 hours	> 1,650 psi (11.4 MPa)
24 hours	> 2,700 psi (18.6 MPa)
7 days	> 3,700 psi (25.5 MPa)
28 days	> 4,000 psi (27.6 MPa)
Flexural strength – ASTM C348 (modified)	
28 days	> 1,200 psi (8.28 MPa)
VOCs (Rule #1168 of California's SCAQMD)	0 g per L

Shelf Life and Product Characteristics

(before mixing)

Shelf life	1 year when stored in original, unopened packaging at 73°F (23°C) in a dry area
Physical state	Powder
Color	Natural gray

Protect containers from freezing in transit and storage. Provide for heated storage on site and deliver all materials at least 24 hours before work begins.

Application Properties

Mixing ratio	
For 10 lbs. (4.54 kg) of Mapecem Quickpatch	0.91 to 1 U.S. qt. (0.86 to 0.95 L) of water
For 25 lbs. (11.3 kg) of Mapecem Quickpatch	2.28 to 2.5 U.S. qts. (2.16 to 2.37 L) of water
For 50 lbs. (22.7 kg) of Mapecem Quickpatch	4.56 to 5 U.S. qts. (4.32 to 4.73 L) of water
Application temperature range	45°F to 85°F (7°C to 29°C)
Pot life at 73°F (23°C)	20 minutes
Initial set at 73°F (23°C)	< 40 minutes
Final set at 73°F (23°C)	< 1 hour
Curing time*	16 to 24 hours

*Cooler conditions require longer curing times for the installation before exposure to significant traffic can be permitted. Test all surface treatments on a small sample area, before application, to ensure the desired results.

Packaging

Size
Bag: 10 lbs. (4.54 kg)
Bag: 25 lbs. (11.3 kg)
Bag: 50 lbs. (22.7 kg)

Approximate Coverage**

Amount of Product at 1/4" (6 mm)	Coverage
10 lbs. (4.54 kg)	4 to 5 sq. ft. (0.37 to 0.46 m ²)
25 lbs. (11.3 kg)	10 to 12 sq. ft. (0.93 to 1.11 m ²)
50 lbs. (22.7 kg)	20 to 24 sq. ft. (1.86 to 2.23 m ²)

** Coverage shown at maximum water is for estimating purposes only. Actual jobsite coverage may vary according to substrate conditions and application.

ADDITIONAL INFORMATION

Refer to the Safety Data Sheet (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-durabilite@mapei.com.



LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement nor replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at www.mapei.com. **ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.**

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

MAPEI Headquarters of North America

1144 East Newport Center Drive
Deerfield Beach, Florida 33442
1-888-US-MAPEI (1-888-876-2734) / (954) 246-8888

Technical Services

U.S. and Puerto Rico:
Flooring: 1-800-992-6273
Concrete and heavy construction: 1-888-365-0614
Canada:
1-800-361-9309

Customer Service

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

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For the most current product data and BEST-BACKEDSM warranty information,
visit www.mapei.com.

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