

MapeWrap Primer 1

Low-Viscosity, 100%-Solids, Epoxy Resin Primer for the *MapeWrap*® Composite System



DESCRIPTION

MapeWrap Primer 1 is a 100%-solids, moisture-tolerant, low-viscosity, two-component, epoxy resin that is used as a seal coat for consolidating and priming concrete substrates. As the first component of the *MapeWrap* composite system, *MapeWrap Primer 1* penetrates cementitious pore structures and provides a high bond for the other system components.

FEATURES AND BENEFITS

- 100%-solids epoxy
- Solvent-free and VOC-compliant
- Moisture-tolerant
- Low viscosity allows for excellent penetration of cementitious pore structures

WHERE TO USE

- Use on interior, exterior, horizontal, vertical and overhead surfaces.
- Use on concrete, masonry, wood and steel.
- Use as the first component in the *MapeWrap* composite system installation.
- Use to promote excellent adhesion for the *MapeWrap* composite system.

SUITABLE SUBSTRATES

- Use on properly prepared, structurally sound, fully cured concrete substrates (at least 28 days old), as well as masonry, steel and wood.

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

SURFACE PREPARATION

1. Prior to completing surface preparation, ensure that all concrete repairs have been properly applied and cured per ICRI guidelines.
2. Ensure that all substrates are fully cured, structurally sound, stable, clean and free of dust, oil, grease, paint, tar, wax, sealers, curing compounds, form release agents, primers, laitance, loose particles, and any foreign substance or debris that could reduce or impair adhesion.
3. All sharp edges that may be found on rectangular beams and columns must be ground smooth and flush, with a bending radius (bullnose) of not less than 3/4" (19 mm) on all corners.
4. For concrete and masonry substrates, mechanically prepare the substrate to provide a proper surface profile, as determined by the engineer. The surface profile typically should be a minimum of International Concrete Repair Institute (ICRI) concrete surface profile (CSP) #3 to #5. In all cases, it is the responsibility of the engineer to assess and specify the surface profile required to ensure system performance.
5. For steel substrates, achieve a minimum 3-mil profile by abrasively blasting to white metal per The Society for Protective Coatings (SSPC) Spec. SP-5.89 or NACE No. 1.
6. Seal any surface cracks with MAPEI's epoxy injection products, such as *Planibond*® AE and/or *Epojet*™ or *Epojet* LV.

MIXING

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

1. Combine the two components together that make up *MapeWrap Primer 1* by pouring Part B into Part A.
2. Mix with a low-speed mixer (at 400 to 600 rpm) and a standard Jiffy paint-mixing paddle for about 3 minutes, until the mixture has a smooth, homogenous consistency. Part A and Part B components are preproportioned (mix ratio: 3 parts by weight of Part A and 1 part by weight of Part B) and should be mixed as full units. Partial mixing of Part A and Part B is prohibited.

PRODUCT APPLICATION

1. Prime the surface that needs to be reinforced with a brush or 3/8" (10-mm) nap roller and an even coat of *MapeWrap Primer 1* at a rate of 150 to 190 sq. ft. per U.S. gal. (3.67 to 4.65 m² per L). Very porous substrates may require a second coat after the first coat has been completely absorbed.
2. When applying the products in a closed environment, provide good ventilation. For further information, carefully read the SDS of each product.

CLEANUP

- Due to the high bond strength of *MapeWrap Primer 1* on metal, clean tools with approved solvents (ethyl alcohol, toluene, etc.) before the product dries. Cured material can only be removed mechanically. Dispose of cured material in accordance with local disposal regulations.

LIMITATIONS

- Apply *MapeWrap Primer 1* when the ambient temperature is between 50°F and 90°F (10°C and 32°C).
- Contact MAPEI's Technical Services Department regarding applications below 50°F (10°C) and above 90°F (32°C).
- Do not thin *MapeWrap Primer 1* with solvents.
- Do not mix partial units of *MapeWrap Primer 1*.

Product Performance Properties

Laboratory Tests	Results
Specific gravity (lb/in ³)	0.036
VOCs	< 0.42 lb. per U.S. gal. (< 50 g per L)
Complete curing	7 days
Adhesion to concrete at 7 days and 73°F (23°C)	> 435 psi (> 3 MPa)
Tensile strength at 7 days – ASTM D638	4,394 psi (30.3 MPa)
Tensile elongation at 7 days – ASTM D638	2.28%
Compressive strength at 7 days – ASTM C579	12,015 psi (82.9 MPa)

Shelf Life and Application Properties

Shelf life	2 years in original, unopened container in a covered area
Storage conditions	50°F to 90°F (10°C to 32°C). Protect from freezing in shipment and storage.
Consistency (mixed)	Liquid
Color (mixed)	Transparent yellow
Mix ratio (by weight)	Part A : Part B = 3 : 1
Working time At 50°F (10°C) At 73°F (23°C) At 90°F (32°C)	120 minutes 90 minutes 60 minutes
Set times At 50°F (10°C) At 73°F (23°C) At 90°F (32°C)	5 to 6 hours 3 to 4 hours 2 to 3 hours

Approximate Coverage

Per 1 U.S. gal. (3.79 L)	150 to 190 sq. ft. per U.S. gal. (3.67 to 4.65 m ² per L)
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Packaging

Size

Kit: 1 U.S. gal. (3.79 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 (USA) or sustainability-durabilite@mapei.com (Canada).

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,
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