

Primer E

High-Performance, 100%-Solids, Epoxy Primer



DESCRIPTION

*Primer E*TM is a two-component, 100%-solids, epoxy primer and bonding agent designed for use with MAPEI self-leveling underlayments using MAPEI's sand broadcast method. *Primer E* is the most effective method for bonding to nonporous, dense substrates before installing self-leveling underlayments subject to high stress. *Primer E*'s low viscosity makes installation fast and easy, and provides excellent penetration into the substrate and therefore a tenacious bond.

FEATURES AND BENEFITS

- Low viscosity penetrates into the substrate for a tenacious bond.
- Low viscosity makes for fast, easy spreading of *Primer E*.
- Low odor and VOC compliance enhance use in interior, occupied environments.
- The unique formulation ensures optimal performance for self-leveling underlayments that are subject to the stresses generated by dynamic loading, vibration and slight deflection.

WHERE TO USE

- *Primer E* improves adhesion over smooth, nonabsorbent and difficult-to-bond-to substrates such as metal, ceramic tile, vinyl composition tile (VCT), cement- or epoxy-based terrazzo, and epoxy moisture barriers.

LIMITATIONS

- Do not use over any substrates containing asbestos.
- Do not install over standing water.

- Use only when the ambient and substrate temperatures are between 50°F and 90°F (10°C and 32°C). For temperatures above 85°F (29°C), follow ACI hot-weather application guidelines. Allow at least 3 hours of curing before applying an underlayment (ACI 305-R10 and ACI 305-R90).

SUITABLE SUBSTRATES

- Epoxy coatings, tile, stone and metal substrates
- Properly bonded tile, stone and VCT
- Properly installed, 100%-solids, epoxy moisture barriers
- Sound and stable concrete substrates, whether smooth and nonabsorbent or profiled and absorbent

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

SURFACE PREPARATION

- All substrates must be structurally sound, dry, solid and stable.
- Clean the surface to ensure the removal of any contaminant or bond-breaking material including, but not limited to, sealers, cures, waxes, dirt and oils.
- Mechanically prepare the surface to an International Concrete Repair Institute (ICRI) concrete surface profile (CSP) of #3 by shotblasting or to a CSP of #2 by diamond-grinding.
- Well-bonded, existing epoxy coatings should always be mechanically roughened before application of *Primer E*. Do not abrade epoxy moisture barriers.
- Metal surfaces must be prepared by light abrasive sandblasting to a white/oxide-free metal finish. Wipe clean with a residue-free solvent.
- Do not acid-etch concrete surfaces before applying *Primer E*.
- When the substrate requires mechanical preparation, wait at least 12 hours before application of *Primer E* to avoid substrate outgassing.

MIXING

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

1. Acclimate *Primer E* to 70°F (21°C) for 24 hours before mixing and installation.
2. Pour Part B into the Part A container and mix thoroughly for 3 minutes using a low-speed mixer and a Jiffy mixing paddle to a smooth, homogenous consistency. Do not mix at high speeds, which can trap air within the mixed material.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

1. Empty the entire contents of the mixed unit onto a properly prepared substrate, spreading it carefully in order to achieve a uniform wet film thickness (WFT) of 8 to 10 mils. *Primer E* will build excessive heat if left to react in the mixing pail.
2. Spread the mixed *Primer E* over the substrate utilizing a 1/8" (3 mm) squeegee and back-roll with a caged roller with a 1/4" (6 mm) nap roller cover. Use a quality paintbrush for detailing contours and hard-to-reach areas.

3. Make sure that all voids and pinholes are filled/sealed to eliminate substrate outgassing. In some cases on rough surfaces, a longer-nap roller may be required to ensure complete surface coverage.
4. Immediately after spreading *Primer E*, broadcast sand over the surface of the still-wet primer. Broadcast to rejection, maintaining an even dispersion of sand to avoid “clumps” of sand on the floor with no epoxy penetration. Ensure that no “bald spots” or unsanded areas remain.
5. The sand used must be oven-dried sand, graded, with a mesh size of 16 to 30, and free of fines. The amount of sand needed is about 1 lb. per sq. ft. (4.88 kg per m²). Follow NIOSH safety guidelines when broadcasting with sand.
6. Once the sand is properly broadcast, allow the epoxy to cure for at least 6 hours before exposing it to foot traffic.
7. Remove excess sand on the following day (after at least 16 hours) by sweeping and vacuuming off the excess. Apply underlayments according to their respective Technical Data Sheets.
8. After the sand is removed, if cured epoxy is exposed in some areas, or if sand has sunken into the epoxy and is coated with epoxy, re-priming and re-sanding are required. Unsanded epoxy will be a bond breaker with the underlayment. Ensure that all dust from sand and any other surface contamination are removed. Then, recoat the substrate within 24 hours of the original application of *Primer E* and re-broadcast the sand.

CLEANUP

- Clean equipment with mineral spirits before the material cures. Cured material can only be removed mechanically.

Product Characteristics

Chemistry	2-part 100%-solids epoxy
Solids content	100%
Density	66.2 lbs. per cu. ft. (1.06 g per mL)
Flash point (Tag)	> 200°F (93°C)
Consistency	Pourable liquid
Color	Part A: Gray Part B: Transparent amber
VOC content (SCAQMD Rule 1113)	< 50 g per L
Typical VOC content per SCAQMD Rule 1113 testing methods	4 g per L

Shelf Life and Application Properties

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

Shelf life	2 years when stored in original, unopened packaging in a dry, covered location. Protect from freezing during transport and storage.
Open time*	90 minutes

Drying time*	6 to 7 hours
Window for recoating*	24 hours

* *Dependent on jobsite conditions*

CSI Division Classification

CSI Division Classification	
Cast Underlayment	03 54 00

Packaging

Size	
Part A, 2.06 U.S. gals. (7.80 L)	
Part B, 0.94 U.S. gal. (3.56 L)	

Approximate Coverage**

per 3 U.S. gals. or 11.4 L (Part A and B mixed)

Typical Application Tool	Coverage
1/8" (3 mm) squeegee followed by 1/4" (6 mm) nap roller	450 to 600 sq. ft. (41.8 to 55.7 m ²)

** *Coverage depends on the profile and porosity of the substrate.*

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_USA@mapei.com (USA) or sustainability-durabilite@mapei.com (Canada).

WARNING

The test results shown in the TECHNICAL DATA table were obtained in compliance with test methods and curing cycles, if applicable, defined in the industry standards referenced on the Technical Data Sheet. Please note that the use of test procedures or methods other than those indicated in the table could lead to different values and that, in such cases, any liability of our company is excluded.

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.**

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