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MAPEI®

Primer E™

High-Performance, 100%-Solids Epoxy Primer

GREEN INNOVATION

DESCRIPTION

Primer E 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.

INDUSTRY STANDARDS AND APPROVALS

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 helps contribute to LEED certification of projects in the categories shown above. Points are awarded based on contributions of all project materials.*

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.
- Interior residential (apartments, condominiums and homes)
- Interior commercial (office buildings, hotel rooms and hallways, restaurants and cafeterias)
- Interior heavy commercial (hotel lobbies, convention centers, airports, shopping malls, grocery stores and department stores)
- Interior institutional (hospitals, schools, universities, libraries and government buildings)

LIMITATIONS

- Do not use over any substrates containing asbestos.
- For moisture limits on this primer, refer to the moisture limits of the product to be applied over it.
- 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

- Properly prepared epoxy coatings, tile, stone and metal substrates
- Properly prepared and bonded tile, stone and VCT
- Properly prepared and installed 100%-solids epoxy moisture barriers

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- Properly prepared 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

Note: Choose all appropriate safety equipment before use. Refer to the Safety Data Sheet for more information.

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

Note: 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 m^2). 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.

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

Laboratory Tests	Results
Chemistry	2-part 100%-solids epoxy
Percent solids	100%
VOCs	13 g per L
Density	66.2 lbs. per cu. ft. (1,06 g per mL)
Consistency	Pourable liquid
Color	Part A – Gray Part B – Transparent amber

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
Recoating window*	24 hours
Flash point (Tag)	> 200°F (93°C)

** Dependent on jobsite conditions*

CSI Division Classification

Cast Underlayment	03 54 00

Packaging (combined parts equal 3 U.S. gals. [11,4 L])

Size
Part A, 2.06 U.S. gals. (7,80 L)
Part B, 0.94 U.S. gal. (3,56 L)

Approximate Coverage**

Typical Application Tool	Coverage
1/8" (3 mm) squeegee followed by 1/4" (6 mm) nap roller	150 to 200 sq. ft. (13,9 to 18,6 m^2)

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

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Refer to the SDS 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:

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