

PlaniLevel 560

High-Compressive-Strength, Open-Environment-Rated, Self-Leveling Underlayment



DESCRIPTION

PlaniLevel™ 560 is an advanced hydraulic-cement-based, self-leveling compound designed for fast-track underlayment applications. It is especially formulated for leveling interior, horizontal concrete surfaces where environmental controls are not operational or the building is not enclosed. When combined with an epoxy moisture barrier and an epoxy primer with sand broadcast, *PlaniLevel 560* creates a leveling system that improves construction efficiency and eliminates the wait times before floor coverings can be installed.

FEATURES AND BENEFITS

- Does not require functioning HVAC systems in place before installation
- Offers high compressive strength for limited exposure to heavy traffic during normal construction practices
- Has no moisture vapor emission limits and can be installed without testing on properly prepared concrete substrates

WHERE TO USE

- For fast-track leveling, smoothing and repairing of interior floors before installation of HVAC or interior finishes
- For use under moisture-controlling adhesive systems and epoxy moisture-control barriers
- Interior residential (rental apartments, condominiums and homes)
- Interior commercial (office buildings, hotel rooms/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)

SUITABLE SUBSTRATES

- Properly prepared concrete at least 7 days old
- Properly installed, primed and intact epoxy moisture barriers over concrete substrates

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

SURFACE PREPARATION

- All substrates must be structurally sound, dry, solid and stable.
- Substrate should be clean and free of dust, dirt, oil, grease, paint, curing agents, concrete sealers, loosely bonded toppings, loose particles, old adhesive residues, and any other substance or condition that may prevent or reduce adhesion.
- Concrete surfaces must either have a broom finish or be mechanically profiled and prepared by shotblasting, sandblasting, water-jetting, scarifying, diamond grinding or other engineered-approved methods to an International Concrete Repair Institute (ICRI) concrete surface profile (CSP) of #3. Prime the properly profiled surface with any MAPEI primer used according to its respective Technical Data Sheet.
- For concrete surfaces that are smooth or cannot be mechanically profiled, as well as for intact epoxy moisture barriers, prime the surface with an appropriate 100%-solids MAPEI epoxy primer with a sand broadcast.

MIXING

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

General mixing

1. Pour 4.4 to 4.6 U.S. qts. (4,16 to 4,35 L) of clean, potable water into a clean pail. The water-to-powder mixing ratio must remain consistent. For best results, the water temperature should be about 73°F (23°C). Do not overwater.
2. Begin mixing while adding 50 lbs. (22,7 kg) of *PlaniLevel 560* powder into the premeasured water. Use a high-speed drill (at about 600 to 900 rpm) and an oval paddle mixer to mix for 1 to 2 minutes, until achieving a homogenous, lump-free consistency.
3. Do not overmix. Overmixing or moving the mixer up and down during the mixing process could trap air, shorten the pot life or cause pinholing during the application and curing process.

Pump mixing

1. *PlaniLevel 560* can be mechanically mixed at a ratio of 4.4 to 4.6 U.S. qts. (4,16 to 4,35 L) of water per 50 lbs. (22,7 kg) of powder. Use a continuous mixer and pump (with at least 140 ft. [42,7 m] of hose) or a batch mixer and pump (with at least 110 ft. [33,5 m] of hose). Adhere to the pump manufacturer's specifications. Mixer and pump must be in good working condition, and periodic cleaning of pumping equipment is required per the manufacturer's instructions. Be sure to pressure-test the rotor and stator pump before mixing.
2. To ensure a suitable mix and flow, test the mixed material from the pump hose's end in a small test area before general application.

Note: Cool-weather conditions may require a longer mixing time or additional hose length to ensure the best product performance.

PRODUCT APPLICATION

Read all instructions thoroughly before installation.

1. Use plastic sheeting to temporarily cover window and door openings, thereby helping to prevent drafts and protecting areas from direct sunlight.
2. Make sure that concrete substrate and ambient room temperatures are between 40°F and 90°F (4°C and 32°C) before application. In large applications, allow for indirect air circulation to dissipate humidity created by leveler application. Temperatures must be maintained within this range for at least 72 hours after the installation of *PlaniLevel 560*. In cooler conditions, use indirect auxiliary heaters that are properly ventilated to maintain ambient and substrate temperatures within the required range for at least 24 hours before installation.
3. Set the width of the pour at a distance that is ideal for maintaining a wet edge throughout placement, and in consideration of expansion joints. Quickly pour or pump *PlaniLevel 560* onto the properly prepared and primed surface in a ribbon pattern. If a wet edge cannot be maintained, reduce the width of the pour.
4. Spread the material with a gauge rake to assist in gauging out *PlaniLevel 560* to the desired depth. Then smooth the surface with a smoother to obtain an even surface.

CURING AND PROTECTION

- *PlaniLevel 560* is self-curing; do not use a damp-curing method, or curing or sealing compounds.
- Avoid walking on the installed surface for at least 3 hours after installation, depending upon temperature and humidity conditions.
- Do not expose *PlaniLevel 560* to rolling dynamic loads, such as forklifts or scissor lifts, for at least 72 hours after installation.
- Protect *PlaniLevel 560* from direct rain for at least 6 hours after installation, and from freezing temperatures for at least 3 days after installation.

CLEANUP

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

LIMITATIONS

- Do not install over substrates containing asbestos.
- Use when the substrate temperature is between 40°F and 90°F (4°C and 32°C). For temperatures above 85°F (29°C), follow American Concrete Institute (ACI) hot-weather application guidelines to ensure a successful installation.
- Do not apply over self-stick tile, strip wood, particleboard, flakeboard, plank or other dimensionally unstable substrates.
- Do not use in areas prone to hydrostatic pressure.
- Do not mix with any other self-leveling underlayment.

Product Performance Properties

Laboratory Tests	Results
Compressive strength – ASTM C109 (CAN/CSA-A5)	
4 hours	> 1,740 psi (12 MPa)
28 days	> 5,600 psi (38,6 MPa)
Flexural strength – ASTM C348 (CAN/CSA-A23.2-8C)	
28 days	≥ 1,160 psi (8 MPa)
Pullout strength (rupture of concrete) – EN1348	
28 days	> 550 psi (3,79 MPa)
VOCs (Section 01350 of California's CDPH)	0 g per L (calculated)
Cured density	128 lbs. per cu. ft. (2,06 kg per L)
pH	11 to 13

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	Light 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	4.4 to 4.6 U.S. qts. (4,16 to 4,35 L) of water per 50 lbs. (22,7 kg) of powder
Application temperature range	40°F to 90°F (4°C to 32°C)
Application thickness	1/8" to 1" (3 mm to 2,5 cm)
Working time*	< 15 minutes
Final set	60 to 75 minutes
Drying time before installation of tile or stone at 70°F (21°C) and 1/2" (12 mm) thickness	3 hours
Drying time before installation of moisture-sensitive floor coverings at 70°F (21°C) and 1/2" (12 mm) thickness	24 to 36 hours
Time required before exposure to freezing temperatures	3 days

* Working time varies based on jobsite conditions.

Packaging

Size
Bag: 50 lbs. (22,7 kg)
Super sack: 1,000 lbs. (454 kg)
Super sack: 2,000 lbs. (907 kg)

Approximate Coverage**

per 50 lbs. (22.7 kg)

Thickness	Coverage
1/8" (3 mm)	48 sq. ft. (4,46 m ²)
1/4" (6 mm)	24 sq. ft. (2,23 m ²)
1/2" (12 mm)	12 sq. ft. (1,11 m ²)
1" (2,5 cm)	6 sq. ft. (0,56 m ²)

** Coverage shown is for estimating purposes only. Actual jobsite coverage may vary according to substrate conditions, type of equipment, thickness applied and application methods used.

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.**

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For the most current product data and BEST-BACKEDSM warranty information,
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