



MAPEI Ultralite Mortar Pro

**Professional,
Lightweight
Tile Mortar
with Polymer**



DESCRIPTION

MAPEI Ultralite Mortar Pro is a professional-grade, lightweight, single-component thin-set mortar that can also be used for medium-bed and nonsag applications. This polymer-modified mortar is formulated with Easy Glide Technology™ for ease of application. MAPEI Ultralite Mortar Pro's unique Ultralite Technology™ provides twice the coverage of a standard thin-set mortar per pound/kg and may contribute to LEED points with more than 20% recycled content.

FEATURES AND BENEFITS

- Polymer-enriched for enhanced bond performance
- Nonsag and medium-bed formula for large and heavy tile/stone
- 25-lb. (11,3-kg) bag of MAPEI Ultralite Mortar Pro provides the same coverage as a 50-lb. (22,7-kg) bag of a standard polymer-modified mortar
- Smooth and creamy consistency

INDUSTRY STANDARDS AND APPROVALS

- ISO 13007: Classification C1TES1
- ANSI: Exceeds ANSI A118.4TE, ANSI A118.11 and ANSI A138.1 bond strength requirements

<u>LEED v3 Points Contribution</u>	<u>LEED Points</u>
MR Credit 4, Recycled Content*	Up to 2 points
MR Credit 5, Regional Materials*	Up to 2 points
IEQ Credit 4.1, Low-Emitting Materials – Adhesives & Sealants.....	1 point

IEQ Credit 4.3, Low-Emitting Materials – Flooring Systems..... 1 point

* Using this product may help contribute to LEED certification of projects in the categories shown above. Points are awarded based on contributions of all project materials.

WHERE TO USE

- Most interior/exterior residential installations on floors and walls
- Most interior/exterior commercial installations on floors
- Most interior commercial installations on walls
- Installation of ceramic and porcelain tile, quarry tile, pavers, Saltillo tile, large-format tile and most types of marble, granite and natural stone

LIMITATIONS

- Install only at temperatures between 40°F and 95°F (4°C and 35°C).
- Do not use for moisture-sensitive stone (green marble; some limestone and granite), agglomerate tiles or resin-backed tiles. Instead, use suitable epoxy or urethane adhesives. See the respective Technical Data Sheet for more information.
- Do not use over dimensionally unstable substrates such as hardwood flooring, oriented strand board (OSB), substrates containing asbestos, or metal. See the "Suitable Substrates" section.
- To use MAPEI Ultralite Mortar Pro directly over gypsum-based patching or leveling substrates, apply a suitable primer before use. See MAPEI's Technical Bulletin 010313-TB, "Gypsum-Based Floors and Walls: Which MAPEI Products Can Be Applied?"



- Installations of tile over nonporous surfaces (waterproofing membranes, sheet membranes, existing tile, etc.) may require extended setting/curing times.
- Do not use for installations subject to prolonged water immersion.
- MAPEI Ultralite Mortar Pro is not recommended for areas subject to severe freeze/thaw conditions. Instead, use a liquid latex additive mortar system.
- For light-colored and translucent natural stone, a white mortar is recommended.

SUITABLE SUBSTRATES

- Concrete (cured at least 28 days)
- Masonry cement block, brick, cement mortar beds and leveling coats
- Cement backer units (CBUs) – see manufacturer's installation guidelines
- Gypsum wallboard – interior walls in dry areas only (priming may be required)
- APA and CANPLY Group 1 exterior-grade plywood (interior, residential and light commercial in dry conditions only)
- Properly prepared vinyl composition tile (VCT) and cutback residue (interior only)
- Properly prepared existing ceramic and porcelain tile, quarry tile and pavers (interior only)
- MAPEI waterproofing, crack-isolation and sound-reduction membranes (limited to thin-set installations only when using weak stone)

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

SURFACE PREPARATION

- All substrates should be structurally sound, stable, dry, clean, and free of any substance or condition that may reduce or prevent proper adhesion.
- See MAPEI's "Surface Preparation Requirements" document in the Reference & Installation Guides section of the Tile & Stone Installation Systems page on MAPEI's Website.

MIXING

Choose all appropriate safety equipment before use. Refer to the Safety Data Sheet for details.

For thin-set applications:

- 1a. Into a clean mixing container, pour about 5.5 U.S. qts. (5,20 L) of clean potable water. Gradually add 25 lbs. (11,3 kg) of powder while slowly mixing for at least 1 minute. Adjust the consistency with water, adding up to 1 additional U.S. qt. (0,95 L) as needed. Do not overwater. Mix again for 2 minutes.

For medium-bed and nonsag wall applications:

- 1b. Into a clean mixing container, pour about 5 U.S. qts. (4,73 L) of clean potable water. Gradually add 25 lbs. (11,3 kg) of powder while slowly mixing for at least 1 minute. Adjust the consistency with water, adding up to 1 additional U.S. qt. (0,95 L) as needed. Do not overwater. Mix again for 2 minutes.
2. Use a low-speed mixing drill (at about 300 rpm), with an angled cross-blade mixer or double-box mixer. Mix thoroughly until the mixture becomes a smooth, homogenous, lump-free paste. Avoid prolonged mixing.
3. Let the mixture stand ("slake") for 5 to 10 minutes.
4. Remix.
5. If the mixture becomes thick or stiff, remix it without adding more liquid or powder.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

1. Choose a typical notched trowel (see the "Approximate Coverage" chart) with sufficient depth to achieve more than 80% mortar contact to both the tile and substrate for all interior applications, and more than 95% for exterior installations, commercial floor and wet applications. It may be necessary to back-butter the tile to meet these requirements. (Refer to ANSI A108.5 specifications and TCNA handbook guidelines.)
2. With pressure, apply a coat by using the trowel's flat side to key mortar into the substrate.
3. Apply additional mortar, combing it in a single direction parallel to the tile's shortest dimension with the trowel's notched side.
4. Spread only as much mortar as can be tiled before the product skins over. Open time can vary with jobsite conditions.
5. Place the tiles firmly into the wet mortar. Push the tiles back and forth in a direction perpendicular to trowel lines, to collapse the mortar ridges and to help achieve maximum coverage. Ensure proper contact between the mortar, tile and substrate by periodically lifting a few tiles to check for acceptable coverage.
6. Remove any excess mortar from the joint areas so that at least 2/3 of the tile depth is available for grouting (see ANSI A108.10 guidelines).

EXPANSION AND CONTROL JOINTS

- Provide for expansion and control joints as specified per TCNA Detail EJ171 or TTMAC Specification Guide 09 30 00 Detail MJ301. Do not cover expansion joints with mortar or tile.

CLEANUP

- Clean tools and tile while the mortar is fresh using only water.

ISO 13007 Classification

Classification Code	Classification Requirement
C1 (cementitious, standard adhesion)	≥ 72.5 psi (0,5 MPa) after standard aging, heat aging, water immersion and freeze/thaw cycles
T (slip resistance)	≤ 0.019" (0,5 mm)
E (extended open time)	≥ 72.5 psi (0,5 MPa) after 30 minutes
S1 (normal deformation of mortar)	≥ 0.1" (2,5 mm)

ANSI Specification

Test Method	Specification Standard	Test Results
ANSI A118.4E – extended open time	≥ 75 psi (0,52 MPa) at 30 minutes	Pass
ANSI A118.4 – shear strength, impervious ceramic (porcelain) mosaics	> 200 psi (1,38 MPa) at 28 days	240 to 310 psi (1,66 to 2,14 MPa)
ANSI A118.4 – shear strength, glazed wall tile	> 300 psi (2,07 MPa) at 7 days	300 to 420 psi (2,07 to 2,90 MPa)
ANSI A118.4 – shear strength, quarry tile to quarry tile	> 150 psi (1,03 MPa) at 28 days	300 to 370 psi (2,07 to 2,55 MPa)
ANSI A118.4T – sag on vertical surfaces	≤ 0.02" (0,5 mm) at 20 minutes	Pass
ANSI A118.11 – shear strength, quarry tile to plywood	> 150 psi (1,03 MPa) at 28 days	150 to 200 psi (1,03 to 1,38 MPa)

Shelf Life and Application Properties*

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

Shelf life.....	1 year in original, unopened packaging
Open time*.....	30 minutes
Pot life*.....	> 2 hours
Time before grouting*.....	24 hours
VOCs (Rule #1168 of California's SCAQMD).....	0 g per L





* Actual open time, pot life and time before grouting will vary based on jobsite conditions.

Packaging

Size and Color

Bag: 25 lbs. (11,3 kg), gray
Bag: 25 lbs. (11,3 kg), white

Approximate Coverage**

Typical Trowel	Coverage
For thin-set applications	
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) 	75 to 90 sq. ft. (6,97 to 8,36 m²)
1/4" x 3/8" x 1/4" (6 x 10 x 6 mm) 	55 to 65 sq. ft. (5,11 to 6,04 m²)
For medium-bed applications	
1/2" x 1/2" x 1/2" (12 x 12 x 12 mm) 	38 to 45 sq. ft. (3,53 to 4,18 m²)
3/4" x 9/16" x 3/8" (19 x 14 x 10 mm) 	25 to 30 sq. ft. (2,32 to 2,79 m²)

** Trowel dimensions are width/depth/space. Actual coverages will vary according to substrate profile and tile type.

MAPEI Ultralite™ Mortar Pro



PROTECTION

- Protect from traffic for 24 hours. Protect from heavy traffic for 7 days.
- Protect from frost and rain for 7 days.
- Large-format tile may require a longer time to fully set before tiles are grouted.

RELATED DOCUMENTS

Reference Guide: Surface Preparation Requirements for tile and stone installation systems	RG0309*
Technical Bulletin: "Gypsum-Based Floors and Walls: Which MAPEI Products Can Be Applied?"	010313-TB*

* At www.mapei.com

Refer to the SDS for specific data related to health and safety as well as product handling.

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 or 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.**

We proudly support the following industry organizations:



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

1-800-992-6273 (U.S. and Puerto Rico)
1-800-361-9309 (Canada)

Customer Service

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

Services in Mexico

0-1-800-MX-MAPEI (0-1-800-696-2734)

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

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