



# MAPEI Ultralite™ Mortar

Premium, Lightweight Tile Mortar with Polymer



## DESCRIPTION

MAPEI Ultralite Mortar is a premium-grade, lightweight, single-component thin-set mortar that can also be used for medium-bed and nonsag applications. This high-performance, polymer-modified mortar is formulated with Easy Glide Technology™ for ease of application, and with BioBlock® technology for mold and mildew resistance. MAPEI Ultralite Mortar's unique Ultralite Technology™ provides twice the coverage of a standard thin-set mortar per pound (0,46 kg) and may contribute to LEED points with more than 20% recycled content.

## FEATURES AND BENEFITS

- Polymer-enriched for high performance and deformability
- Nonsag and medium-bed formula for large-format tile and stone
- 25-lb. (11,3-kg) bag provides the same coverage as a 50-lb. (22,7-kg) bag of a standard polymer-modified mortar
- Designed with Universal Color Formula™ for installations with light-colored stones and translucent marble
- Smooth and creamy consistency

## INDUSTRY STANDARDS AND APPROVALS

- ISO 13007: Classification C2TES1P1
- ANSI: Exceeds ANSI A118.4 and ANSI A118.11 bond strength requirements

<u>LEED 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, 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 limestones and granites), 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 below.
- To use directly over gypsum-based patching or leveling substrates, apply suitable primer before use. See MAPEI Technical Bulletin 010313-TB, "Gypsum-Based Floors and Walls: Which MAPEI Products Can Be Applied?"



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- 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.
- This product is not recommended for areas subject to severe freeze/thaw conditions. Instead, use a liquid latex additive mortar system.

## 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 (prime with *ECO Prim Grip™*)
- 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)

## 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 Product Information section of the Tile & Stone Installation Systems page on MAPEI's Website.

## MIXING

1. Before starting, take appropriate safety precautions. See (Material) Safety Data Sheet for details.

### Thin-set applications:

- 2a. 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. (946 mL) as needed, without overwatering. Mix again for 2 minutes.

### Medium-bed and nonsag wall applications:

- 2b. 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. (946 mL) as needed, without overwatering. Mix again for 2 minutes.

3. Use a low-speed mixing drill (at about 300 rpm), with an angled cross-blade mixer or double-box mixer. Mix thoroughly until mixture becomes a smooth, homogenous, lump-free paste. Avoid prolonged mixing.
4. Let mixture stand ("slake") for 5 to 10 minutes.
5. Remix.
6. If mixture becomes heavy or stiff, remix without adding more liquid or powder.

## PRODUCT APPLICATION

1. Choose a typical notched trowel (see "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, parallel to the tile's shortest dimension, with the trowel's notched side.
4. Spread only as much mortar as can be tiled before 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 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.

## CLEANUP

Clean tools and tile while the mortar is fresh.

## 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 they can be grouted.

## ISO 13007 Classification

Classification Code	Classification Requirement
C2 (cementitious, improved adhesion)	≥ 145 psi (1 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)
P1 (normal adhesion to plywood)	≥ 72.5 psi (0,5 MPa)

## ANSI Specification

Test Method	Specification Standard	Test Results
ANSI A118.4 – shear strength, impervious ceramic (porcelain) mosaics	> 200 psi (1,38 MPa) at 28 days	250 to 450 psi (1,72 to 3,10 MPa)
ANSI A118.4 – shear strength, glazed wall tile	> 300 psi (2,07 MPa) at 28 days	450 to 650 psi (3,10 to 4,48 MPa)
ANSI A118.4 – shear strength, quarry tile to quarry tile	> 150 psi (1,03 MPa) at 28 days	400 to 600 psi (2,76 to 4,14 MPa)
ANSI A118.11 – shear strength, quarry tile to plywood	> 150 psi (1,03 MPa) at 28 days	150 to 250 psi (1,03 to 1,72 MPa)

## Shelf Life and Application Properties\*

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





Shelf life.....	1 year
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

Product Code	Size and Color
U.S. 14625000	Bag: 25 lbs. (11,3 kg), universal color
Canada 1462500021	Bag: 25 lbs. (11,3 kg), universal color

## Approximate Coverage\*\*

Typical Trowel	Coverage
<b>For thin-set applications</b>	
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)
<b>For medium-bed applications</b>	
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 coverage will vary according to substrate profile and tile type.

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Refer to the (M)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:*



#### **MAPEI Headquarters of the Americas**

1144 East Newport Center Drive  
Deerfield Beach, Florida 33442  
Phone: 1-888-US-MAPEI  
(1-888-876-2734)

#### **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](http://www.mapei.com).**

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