

# 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<sup>™</sup> for ease of application. *MAPEI Ultralite Mortar Pro*'s unique Ultralite Technology<sup>™</sup> 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

LEED v3 Points Contribution	LEED Points
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 soundreduction 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:

 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:

- 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.
- 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.

- 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.



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)



Test Method	Specification Standard	Test Results
ANSI A118.4E – extended open time	$\ge$ 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	$\leq 0.02"$ (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

at 73°F (23°C) and 50% relative numidity		
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)	. O g per L	

# Packaging

	Size and Color
	Bag: 25 lbs. (11,3 kg), gray
	Bag: 25 lbs. (11,3 kg), white
1.7	

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

# 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 m <sup>2</sup> )
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 m <sup>2</sup> )









## 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**

RGT0309*
010313-TB*

\* At www.mapei.com

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. <u>ANY CLAIM SHALL BE DEEMED WAIVED UNLESS</u> <u>MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS</u> 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 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)

Edition Date: May 19, 2015 PR: 6749 MKT: 15-1358

For the most current BEST-BACKED<sup>™</sup> product data and warranty information, visit www.mapei.com. All Rights Reserved. Printed in the USA. © 2015 MAPEI Corporation.