



Large Floor Tile Mortar

Polymer-Enriched Thin-Set or Medium-Bed Mortar



DESCRIPTION

Large Floor Tile Mortar is a regular-setting, polymer-enriched ("modified") mortar ideal for installing large-format tile on floors. This medium-bed mortar is designed to bond and support large tile over a diverse range of floor substrates.

FEATURES AND BENEFITS

- Multipurpose: Ideal for floor tile 15" x 15" (38 x 38 cm) and larger, and can also be used to install small-format tile
- Nonslump formula for large-format tile and stone installation on floors, and can be used as a medium bed up to 3/4" (19 mm) thick
- Unique formulation allows easier installation of large floor tile.
- Mix with water only.

INDUSTRY STANDARDS AND APPROVALS

- ANSI: Exceeds ANSI A118.4 and ANSI A118.11 requirements

SUITABLE TILE OR STONE

- For porcelain and ceramic tile, quarry tile, Saltillo tile, pavers and most marble, granite and natural stone

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)
- APA and CANPLY Group 1 exterior-grade plywood (interior, residential and light commercial in dry conditions only)
- MAPEI waterproofing, crack-isolation and sound-reduction membranes

Contact MAPEI's Technical Services Department for installation recommendations concerning substrates or conditions not listed.

WHERE TO USE

- Most interior and exterior residential and commercial installations on floors

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 respective Technical Data Sheets for more information.
- Do not use over dimensionally unstable substrates such as hardwood flooring, oriented strand board (OSB), substrates containing asbestos, or metal.

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- To use directly over gypsum-based patching or leveling substrates, apply suitable primer before use.
 - Installations of tile over nonporous surfaces, such as waterproofing membranes and sheet membranes, may require extended setting/curing times.
 - For light-colored and translucent natural stone, a white mortar is recommended.
 - Do not use for installations subject to prolonged water immersion.
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 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).

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 for tile and stone installation at www.mapei.com.

MIXING

Before starting, take appropriate safety precautions and choose all appropriate safety equipment. See Material Safety Data Sheet (MSDS) for product details at www.mapei.com.

1. Into a clean mixing container, pour about 6 to 6.5 U.S. qts. (5,68 to 6,15 L) of clean water. Note: For mixing smaller quantities, mix 3.5 to 4 parts powder to 1 part water by volume as desired.
2. Gradually add powder while slowly mixing using an electric drill with an angled cross-blade mixer or double box mixer.
3. Continue low-speed mixing (at about 300 rpm) for about 3 minutes until mixture becomes a smooth, lump-free paste. Avoid prolonged mixing.
4. Let mixture stand for 5 minutes.
5. Remix for 2 minutes.
6. If mixture becomes heavy or stiff within 2 hours, remix without adding more liquid.

APPLYING

1. Choose a typical notched trowel (see chart) with sufficient depth to achieve > 80% mortar contact to both the tile and substrate for all interior applications, and > 95% for exterior installations, commercial floor and wet applications. It may be necessary to back-butter the tile in order 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 with the trowel's notched side.

EXPANSION AND CONTROL JOINTS

Provide for expansion and control joints as specified per TCNA Detail EJ171. Do not cover any expansion joints with mortar.

CLEANUP

While mortar is fresh, clean tools and tile with water.

PROTECTION

- Protect from foot traffic 24 hours before grouting.
- Protect from heavy traffic, frost and rain for 7 days.

Product Performance Properties

ANSI Specification

Test Method	ANSI Specification	Test Results
ANSI A118.4 – shear strength, impervious ceramic (porcelain) mosaics	> 200 psi (1,38 MPa) at 28 days	225 to 350 psi (1,55 to 2,41 MPa)
ANSI A118.4 – shear strength, glazed wall tile	> 300 psi (2,07 MPa) at 28 days	400 to 550 psi (2,76 to 3,79 MPa)
ANSI A118.4 – shear strength, quarry tile to quarry tile	> 150 psi (1,03 MPa) at 28 days	300 to 425 psi (2,07 to 2,93 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	16 to 24 hours
VOCs (Rule #168 of California's SCAQMD)	0 g per L

* Open time and pot life vary based on jobsite conditions.

Packaging

Product Code	Size and Color
14050136	Bag: 50 lbs. (22,7 kg), white

Approximate Product Coverage** per 50 lbs. (22,7 kg)

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 ²)
1/4" x 3/8" x 1/4" (6 x 10 x 6 mm)		55 to 65 sq. ft. (5,11 to 6,04 m ²)
1/2" x 1/2" x 1/2" (12 x 12 x 12 mm)		38 to 45 sq. ft. (3,53 to 4,18 m ²)
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 ²)

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

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Refer to the MSDS 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.**

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