

Rapid Setting Tile Mortar

Polymer-Enriched Thin-Set Mortar



DESCRIPTION

Rapid Setting Tile Mortar is a rapid-setting, polymer-enriched ("modified") mortar for installing a wide range of tile and stone over a diverse range of substrates in thin-set applications.

FEATURES AND BENEFITS

- Rapid-setting: Ideal for projects that must be completed quickly, allowing grouting after 2 to 3 hours
- Higher polymer content for a stronger bond with a wider range of tile and stone to a wider range of substrates
- Allows tile to be installed over existing tile and other substrates to save time
- Smooth and creamy consistency for easy application
- Mix with water only.

INDUSTRY STANDARDS AND APPROVALS

- ANSI: Exceeds ANSI A118.4F, ANSI A118.11 and ANSI A118.15F bond-strength requirements for fast-setting mortars when mixed with water

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

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 some granite), agglomerate tiles or resin-backed tiles. Instead, use a suitable epoxy or urethane adhesive. See the 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. See the "Suitable Substrates" section below.
- To use directly over gypsum-based patching or leveling substrates, apply a suitable sealer/primer before use. See the "Tiling over gypsum" technical bulletin in the Tile & Stone Installation Systems section of MAPEI's Website.
- For installations of light-colored and translucent natural stone, a white mortar is recommended.
- Installations of tile over nonporous surfaces, such as waterproofing membranes and existing tile, may require extended setting/curing times.
- Do not use for installations subject to water immersion, such as pools and spas.
- *Rapid Setting Tile Mortar* is not recommended for areas subject to severe freeze/thaw conditions. For the best performance, use a MAPEI liquid latex additive (or *Polymer Additive*) mortar system.

SUITABLE TILE OR STONE

- For porcelain, ceramic, quarry and Saltillo tile, pavers, slate and most types of marble, granite and natural stone
- Best for small tile or stone up to 15" x 15" (38 x 38 cm)

SUITABLE SUBSTRATES

- Concrete (cured for 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 and plaster – interior walls in dry areas only (priming may be required). See the "Surface preparation requirements" reference guide in the Tile & Stone Installation Systems section of MAPEI's Website.
- Plywood underlayments must be a Group 1 exterior-grade plywood CC-plugged or better, conforming to APA classification and U.S. Product Standard PS 1-95 or a "SELECT" or (SEL-TF) CANPLY classified exterior-grade plywood conforming to CSA-0121 standard for Douglas fir for direct-bond applications (interior, residential and light commercial floors and countertops in dry conditions only).
- Vinyl composition tile (VCT), plastic laminate countertops, noncushioned sheet vinyl and cutback residue (interior only)
- Existing ceramic and porcelain tile, cement terrazzo, quarry tile and pavers (interior only)
- MAPEI waterproofing, crack-isolation and sound-reduction membranes

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 the “Surface preparation requirements” reference guide in the Tile & Stone Installation section of MAPEI’s Website.

MIXING

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

1. Into a clean mixing container, pour the following amounts of clean water according to the bag sizes indicated:
 - For a 25-lb. (11.3-kg) bag: About 2.5 to 3 U.S. qts. (2.37 to 2.84 L) of water
 - For a 50-lb. (22.7-kg) bag: About 5 to 6 U.S. qts. (4.73 to 5.68 L) of water
2. Gradually add the appropriate amount of powder while slowly mixing, using an electric drill with an angled cross-blade mixer or double-box mixer.
3. Mix at a low speed (about 300 rpm) for about 3 minutes, until the mixture becomes a smooth, lump-free paste. Avoid prolonged mixing.
4. Do not let the mixture sit (“slake”). Spread it immediately.
5. If the mixture becomes heavy or stiff within 30 minutes, remix it without adding more water.

PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

1. Choose a notched trowel (see the “Approximate Coverage” chart below) 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 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.
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 the 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 Method EJ171 or TTMAC Specification Guide 09 30 00, Detail 301MJ. Do not cover expansion joints with mortar.

CLEANUP

- Use water only to clean tools and tile while the mortar is fresh.

PROTECTION

- Protect the floor for 2 to 3 hours before grouting.
- Protect the installation from foot traffic for 6 hours.
- Protect the installation from heavy traffic for 24 hours.
- Protect the installation from frost and rain for 7 days.

ANSI Specifications*

Test Method	Specification Standard	Test Results
ANSI A118.11 – shear strength, quarry tile to plywood	> 150 psi (1.03 MPa) at 28 days	200 to 325 psi (1.38 to 2.24 MPa)
ANSI A118.15F – shear strength, impervious ceramic (porcelain) mosaics	> 50 psi (0.34 MPa) at 4 hours	Pass
ANSI A118.15 – shear strength, impervious ceramic (porcelain) mosaics	> 400 psi (2.76 MPa) at 28 days	485 to 625 psi (3.34 to 4.31 MPa)
ANSI A118.15 – shear strength, glazed wall tile	> 450 psi (3.10 MPa) at 7 days	485 to 600 psi (3.34 to 4.14 MPa)
ANSI A118.15 – shear strength, quarry tile to quarry tile	> 150 psi (1.03 MPa) at 28 days	550 to 750 psi (3.79 to 5.17 MPa)

* Anything that meets A118.15 by definition meets or exceeds A118.4.

Shelf Life and Product Characteristics

before mixing

Shelf life	1 year when stored in original, unopened packaging at 73°F (23°C)
Physical state	Powder
Color	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

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

Mixing ratio	For a 25-lb. (11.3-kg) bag: About 2.5 to 3 U.S. qts. (2.37 to 2.84 L) of water For a 50-lb. (22.7-kg) bag: About 5 to 6 U.S. qts. (4.73 to 5.68 L) of water
Open time**	10 to 20 minutes
Pot life**	30 minutes
Time before grouting**	2 to 3 hours
VOC content	0 g per L
Application temperature range	40°F to 95°F (4°C to 35°C)

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

Packaging

Size and Color
Bag: 25 lbs. (11.3 kg), gray
Bag: 50 lbs. (22.7 kg), gray

Approximate Coverage***

Typical Trowel	Coverage per 25 lbs. (11.3 kg)	Coverage per 50 lbs. (22.7 kg)
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm), square-notch	38 to 45 sq. ft. (3.53 to 4.18 m ²)	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), square-notch	28 to 33 sq. ft. (2.60 to 3.07 m ²)	55 to 65 sq. ft. (5.11 to 6.04 m ²)

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

RELATED DOCUMENTS

- Reference guide: "Surface preparation requirements" for tile and stone installation systems[†]
- Technical bulletin: "Tiling over gypsum" [†]

[†] At www.mapei.com

ADDITIONAL INFORMATION

Refer to the Safety Data Sheet (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).

WARNING

The test results shown in the TECHNICAL DATA table were obtained in compliance with test methods and curing cycles, if applicable, defined in the industry standards referenced on the Technical Data Sheet. Please note that the use of test procedures or methods other than those indicated in the table could lead to different values and that, in such cases, any liability of our company is excluded.

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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