



# Type 1™

## Premium Tile Adhesive



### DESCRIPTION

*Type 1* is a premium-grade, traditional, nonflammable, organic adhesive for setting most types of glazed and unglazed ceramic and porcelain floor and wall tiles over gypsum drywall (walls only), cement board, exterior-grade plywood, concrete and masonry block.

### FEATURES AND BENEFITS

- Nonslip for heavier tile
- Low-odor formula for use in occupied buildings
- Creamy, easy to trowel
- Extended open and working time

### INDUSTRY STANDARDS AND APPROVALS

**ANSI:** Meets or exceeds A136.1, Type 1 standards

**CGSB:** Meets or exceeds 71-GP-22M, Type 1 standards

**ISO 13007:** Classification D1TE

### WHERE TO USE

- For use with most types of glazed and unglazed ceramic and porcelain tiles, for floors and walls
- For the installation of tiles up to 6" x 6" (15 x 15 cm) on floors, and up to 10" x 10" (25 x 25 cm) on walls
- For tub and bath surrounds where service requirements do not exceed ANSI A136.1, Type 1, or CGSB 71-GP-22M (Canada), Type 1, standards

- For the installation of wall tile in intermittent wet conditions such as tub and shower surrounds with precast bases

### LIMITATIONS

- Do not install over substrates containing asbestos.
- Do not use for exterior applications, steam rooms, shower floors or areas subject to water submersion.
- Do not apply over waterproofing membranes, particleboard, Masonite, chipboard, Luaun, gypsum floor-patching compounds, metal or similar dimensionally unstable substrates.
- Use only at temperatures between 40°F and 95°F (4°C and 35°C).
- Do not use for setting bathroom fixtures or grab bars.
- Do not use to set natural stone. For this installation, contact MAPEI's Technical Services for product recommendations.

### SUITABLE SUBSTRATES

- Fully cured concrete
- Masonry block
- Cement mortars and leveling coats
- Cement backer units (CBUs) (see manufacturer's instructions for approval)
- Gypsum wallboard – interior dry walls only (to improve adhesion, prime with *Primer L™* or *Planicrete® AC*)
- APA or CANPLY Group 1 exterior-glue plywood for interior residential floors and countertops in dry areas (see TCA handbook for additional information)

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

## **SURFACE PREPARATION**

- See MAPEI's Surface Preparation Requirements document for tile and stone installation systems at [www.mapei.com](http://www.mapei.com).

## **MIXING**

Note: Choose all appropriate safety equipment before use. Refer to Material Safety Data Sheet (MSDS) for more information.

- *Type 1* is ready to use. No mixing is required.

## **PRODUCT APPLICATION**

1. Read all installation instructions thoroughly before installation.
2. Use a typical notched trowel (see chart below) with sufficient depth to ensure proper transfer, covering at least 80% of the tile back.
3. Using the trowel's flat edge, spread the adhesive on the substrate. Apply additional material and comb the surface with the trowel's notched side to achieve an even-setting bed. Do not spread more adhesive than can be covered with tiles within 30 to 45 minutes. If skinning occurs, scrape off skin and replace with fresh adhesive.
4. Place the tiles firmly into the wet mortar. Push the tiles back and forth in a direction perpendicular to trowel lines, in order to collapse the mortar ridges and achieve maximum coverage. Ensure proper contact between mortar, tile and substrate by periodically lifting a few tiles to check for acceptable coverage.
5. Make all alignments and adjustments immediately (do not exceed 45 minutes).
6. Promptly use water to clean smudges from the face of the tiles while the adhesive is still fresh. Once adhesive has dried, clean with mineral spirits.
7. Provide for expansion and control joints as specified per TCA handbook, Detail EJ171, or TTMAC handbook 09.30.00, Detail 301MJ.
8. Wash hands and tools with water while the adhesive is still fresh.
9. Allow tiles to reach a firm set, and then grout with an appropriate MAPEI grout.

Note: Using mastics with porcelain tiles or in cool, moist conditions will extend the time required for firm set.

## **PROTECTION**

- Protect containers from freezing in transit and storage. This product is freeze/thaw-stable at temperatures down to 0°F (-18°C). However, protect all water-based products from freezing. If this material is frozen, do not stir it until it has completely thawed.
- Provide for heated storage on site and deliver materials at least 24 hours before tilework begins.
- Protect from water until the adhesive has reached its final set.
- Floors: Keep free from traffic for at least 72 hours after installation. Plywood or stepping boards may be used after 24 hours when occasional stepping on the floor is unavoidable.
- Walls: Protect from impact, vibration and hammering on adjacent and opposite walls for at least 14 days after installation.

**Type 1™****Product Performance Properties****ISO 13007 Classification**

Classification Code	Classification Requirement	Test Results
D1 (normal mastic)	Shear adhesion strength; Shear adhesion strength after aging; Open time: tensile adhesion strength	Pass
T (vertical slip resistance)	Slip $\leq 0,5$ mm	Pass
E (extended open time)	$\geq 0,5$ N/mm <sup>2</sup> (after not less than 30 minutes)	Pass

**ANSI Specification**

Test Method	ANSI Specification	Test Results
ANSI 136.1 – shear strength (7 days)	Dry $\geq 50$ psi (0,34 MPa)	Pass
	Wet immersion $\geq 50$ psi (0,34 MPa)	Pass
ANSI 136.1 – shear strength (28 days)	$\geq 50$ psi (0,34 MPa)	Pass




**Shelf Life and Application Properties**

Shelf life	2 years
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**Packaging**

Product Code	Size
1040010	Pail: 1 U.S. qt. (946 mL)
1040011	Pail: 1 U.S. gal (3,79 L)
1040016	Pail: 3.5 U.S. gals. (13,2 L)

**Approximate Product Coverages\***

Typical Trowel	1 U.S. qt. (946 mL) Coverage	1 U.S. gal. (3,79 L) Coverage	3.5 U.S. gals. (13,2 L) Coverage
1/8" x 1/8" x 1/8" (3 x 3 x 3 mm) 	12.5 to 17.5 sq. ft. (1,16 to 1,63 m <sup>2</sup> )	50 to 70 sq. ft. (4,65 to 6,50 m <sup>2</sup> )	175 to 245 sq. ft. (16,3 to 22,8 m <sup>2</sup> )
3/16" x 5/32" (4,5 x 4 mm) 	10 to 12.5 sq. ft. (0,93 to 1,16 m <sup>2</sup> )	40 to 50 sq. ft. (3,72 to 4,65 m <sup>2</sup> )	140 to 175 sq. ft. (13,0 to 16,3 m <sup>2</sup> )
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) 	6.3 to 8.8 sq. ft. (0,59 to 0,82 m <sup>2</sup> )	25 to 35 sq. ft. (2,32 to 3,25 m <sup>2</sup> )	87.5 to 123 sq. ft. (8,13 to 11,4 m <sup>2</sup> )

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

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## RELATED DOCUMENTS

Reference Guide: Surface Preparation Requirements for tile and stone installation systems	RGTO309*
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\* At [www.mapei.com](http://www.mapei.com).

Refer to MAPEI's 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.**

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)

For the most current **BEST-BACKED™** product data and warranty information, visit [www.mapei.com](http://www.mapei.com).

**Edition Date:** June 9, 2010  
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