



Type 1™

Professional Tile Adhesive



DESCRIPTION

Type 1 is a professional-grade, traditional, nonflammable, acrylic adhesive for setting glazed and unglazed ceramic and porcelain tiles on walls, floors and countertops. This adhesive is used for interior applications only.

FEATURES AND BENEFITS

- Excellent grab: up to 12" x 12" (30 x 30 cm) tile
- Helps contribute to LEED points
- Low in odor and VOCs
- Smooth and easy to spread
- Extended open time

INDUSTRY STANDARDS AND APPROVALS

- ANSI: Meets or exceeds A136.1, Type 1 standards
- ISO 13007: Classification D1TE

<u>LEED Points Contribution</u>	<u>LEED Points</u>
MR Credit 5, Regional Materials*	Up to 2 points
IEQ Credit 4.1, Low-Emitting Materials – Adhesives and 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

- For use with most types of glazed and unglazed ceramics and porcelain tile, and ceramic and porcelain mosaics for walls and floors
- Use to install tiles up to 6" x 6" (15 x 15 cm) on floors, and up to 12" x 12" (30 x 30 cm) on walls.
- For tub and bath surrounds where service requirements do not exceed ANSI A136.1 Type 1
- For the installation of tile on walls in intermittent wet conditions such as tub and shower surrounds

LIMITATIONS

- Do not install over substrates containing asbestos.
- Do not use for exterior applications, steam rooms, shower floors or areas subject to water immersion.
- Do not apply over waterproofing, crack isolation or uncoupling membranes; or over particleboard, Masonite, oriented strand board (OSB), Luan, 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 these installations, contact MAPEI's Technical Services Department 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 ECO Prim Grip™)
- APA or CANPLY Group 1 exterior plywood (interior residential floors and countertops in dry areas)

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

SURFACE PREPARATION

See MAPEI's "Surface Preparation Requirements" document in the Product Information section of the Tile & Stone Installation Systems page on MAPEI's Website.

MIXING

- Ready to use; no mixing is required.

Note: Choose all appropriate safety equipment before use. Refer to the Safety Data Sheet for more information.

PRODUCT APPLICATION

1. Read all installation instructions thoroughly before application.
2. Use a typical notched trowel (see "Approximate Coverages" chart) 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 onto the substrate. Apply additional material and comb the adhesive in one direction using 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 tiles firmly in position on the fresh adhesive. Push the tiles back and forth in a direction perpendicular to trowel ridges, in order to collapse the adhesive ridges and achieve maximum coverage. Ensure proper contact between the fresh adhesive, 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 adhesive is still fresh. Once adhesive has dried, clean with mineral spirits.
7. Provide for expansion and control joints as specified per TCNA Detail EJ171 or TTMAC Specification Guide 09300 Detail 301EJ.

8. Wash hands, surfaces and tools with water while adhesive is still fresh. If adhesive has dried, use mineral spirits.
9. Allow tiles to reach a firm set, typically within 24 hours, 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 a firm set.

ISO 13007 Classification

Classification Code	Classification Requirement	Test Result
D1 (normal mastic)	Tensile adhesion strength; tensile adhesion strength after aging	Pass
T (vertical slip resistance)	Slip ≤ 0,5 mm	Pass
E (extended open time)	≥ 0,5 N/mm ² (after not less than 30 minutes)	Pass

ANSI Specification

Test Method	Specification Standard	Test Result
ANSI A136.1 – shear strength (7 days)	Dry ≥ 50 psi (0,34 MPa)	Pass
	Wet immersion ≥ 50 psi (0,34 MPa)	Pass
ANSI A136.1 – shear strength (28 days)	≥ 50 psi (0,34 MPa)	Pass
ANSI A136.1 – resistance to mold growth	Will not support mold growth when tested in accordance to Section 6.4	Pass




Shelf Life and Application Properties

Shelf life	2 years
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Packaging

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

Approximate 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) for penny round mosaic tile, and mosaic tile measuring 3/4" (19 mm) long x 1/8" (3 mm) thick 	12.5 to 17.5 sq. ft. (1,16 to 1,63 m ²)	50 to 70 sq. ft. (4,65 to 6,50 m ²)	175 to 245 sq. ft. (16,3 to 22,8 m ²)
3/16" x 5/32" (4,5 x 4 mm) for flat-backed tiles up to 4" x 4" (10 x 10 cm) 	10 to 12.5 sq. ft. (0,93 to 1,16 m ²)	40 to 50 sq. ft. (3,72 to 4,65 m ²)	140 to 175 sq. ft. (13,0 to 16,3 m ²)
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) for tiles between 4" x 4" (10 x 10 cm) and 12" x 12" (30 x 30 cm) 	6.3 to 8.8 sq. ft. (0,59 to 0,82 m ²)	25 to 35 sq. ft. (2,32 to 3,25 m ²)	87.5 to 123 sq. ft. (8,13 to 11,4 m ²)

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

Type 1™



PROTECTION

1. 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.
2. Provide for heated storage on site and deliver materials at least 24 hours before tilework begins.
3. Protect from water until the adhesive has reached its final set, typically from 24 to 48 hours. For shower walls, wait at least 72 hours.
4. Floors: Keep free from general 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.
5. Walls: Protect from impact, vibration and hammering on adjacent and opposite walls for at least 14 days after installation.

RELATED DOCUMENTS

Reference Guide: Surface Preparation Requirements for tile and stone installation systems	RGT0309*
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*At www.mapei.com

Refer to the SDS for specific data related to health and safety as well as product handling.

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 or 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 **BEST-BACKED™** product data and warranty information, visit www.mapei.com.

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