



Kerabond[®] T / Keralastic[®] System

**Premium, Flexible
Large-and-Heavy-
Tile and Thin-Set
Mortar**



DESCRIPTION

Kerabond T / Keralastic System is a high-performance, two-part system: *Keralastic*, a second-generation “flexible” acrylic latex additive, is used to enhance the performance of *Kerabond T*, which is a premium-grade, large-and-heavy-tile mortar (formerly known as “medium-bed mortar”) and thin-set mortar. This system has exceptional bond strength, flexural strength, elongation and freeze/thaw durability.

FEATURES AND BENEFITS

- High-performance bond
- Best for most difficult tiles, substrates and conditions

INDUSTRY STANDARDS AND APPROVALS

- ISO 13007: Classification C2ES2P2
- ANSI: Meets or exceeds ANSI A118.4HE, A118.11 and A118.15HE requirements

WHERE TO USE

- Most interior/exterior residential and commercial installations on floors, walls and ceilings
- Installation of ceramic and porcelain tile, glass tile, quarry tile, pavers, Saltillo 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 respective Technical Data Sheets for more information).

- Some glass tile backings may not be suitable for use with *Kerabond T / Keralastic*. Consult the recommendations of the Tile Council of North America (TCNA) and the glass tile manufacturer. All tiles should conform to ANSI 137.1 or ANSI 137.2 Glass Tile Standard; otherwise, see tile manufacturers for additional information and recommendation.
- For translucent or transparent glass tile, use white *Granirapid[®]* or *Adesilex[™] P10*.
- Use a white mortar when installing light-colored stones and translucent marble.
- Do not use over dimensionally unstable substrates such as hardwood flooring, oriented strand board (OSB), substrates containing asbestos, or metal. See “Suitable Substrates” section below.
- To use directly over gypsum-based patching or leveling substrates, apply suitable sealer before use. See the technical bulletin “Tiling over gypsum” in the Related Documents section of the Tile & Stone Installation Systems page on MAPEI's Website.
- Consult local building code requirements for use on exterior commercial facades.
- Installations of tile over nonporous surfaces, such as waterproofing membranes and existing tile, may require extended setting/curing times.

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 and primed plaster – interior walls in dry areas only. Priming may be required; see the "Surface preparation requirements" reference guide in the Related Documents section of the Tile & Stone Installation Systems page on MAPEI's Website.
- APA and CANPLY Group 1 exterior-grade plywood (interior, residential and light commercial floors and countertops in dry conditions only)
- Vinyl composition tile (VCT), plastic laminate countertops, non-cushioned sheet vinyl and cutback residue (interior installations)
- Existing ceramic and porcelain tile, cement terrazzo, quarry tile and pavers (interior and dry conditions only)
- MAPEI waterproofing, crack-isolation, sound-reduction and uncoupling 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 Related Documents section of the Tile & Stone Installation Systems page on MAPEI's Website.

MIXING

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

1. Into a clean mixing container, pour about 2 U.S. gals. (7,57 L) of *Keralastic*.
2. Gradually add 50 lbs. (22,7 kg) of *Kerabond T* powder while slowly mixing.
3. Use a low-speed mixing drill (at about 300 rpm), with an angled cross-blade mixer or auger mixer. Mix thoroughly until mixture becomes a smooth, homogenous, lump-free paste. Avoid prolonged mixing.
4. Let mixture stand ("slake") for 5 minutes.
5. Remix.
6. If mixture becomes heavy or stiff, remix for up to 2 hours without adding more liquid or powder.

PRODUCT APPLICATION

1. Choose a typical notched trowel (see "Approximate Coverage") with sufficient depth to achieve greater than 80% mortar contact with both the tile and substrate for all interior applications, and greater than 95% for exterior installations, commercial floor and wet

applications. It may be necessary to back-butter tiles in order to achieve 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 the 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 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 recommended per TCNA Method EJ171, or TTMAC Specification Guide 09 30 00 Detail 301MJ.
- Do not cover expansion joints with mortars.

CLEANUP

- Clean tools and tile with water while the mortar is fresh.

PROTECTION

- Protect from traffic for 24 to 48 hours, so that the mortar is sufficiently set. Protect from heavy traffic for 7 days.
- Protect from rain or frost for 7 days.
- Protect from water immersion for 21 days.

ISO 13007 Classification

Classification Code	Classification Requirement
C2 (cementitious, improved adhesive)	≥ 145 psi (1 MPa) after standard aging, heat aging, water immersion and freeze/thaw cycles
E (extended open time)	≥ 72.5 psi (0.5 MPa) after 20 to 30 minutes
S2 (improved deformation of mortar)	≥ 0.2" (5 mm)
P2 (improved adhesion to plywood)	≥ 145 psi (1 MPa)

ANSI Specification*

Test Method	Specification Standard	Test Results
ANSI A118.11 – shear strength, quarry tile to plywood	> 150 psi (1.03 MPa) at 28 days	250 to 400 psi (1.72 to 2.76 MPa)
ANSI A118.15 – shear strength, impervious ceramic (porcelain) mosaics	> 400 psi (2.76 MPa) at 28 days	400 to 600 psi (2.76 to 4.14 MPa)
ANSI A118.15 – shear strength, impervious ceramic (porcelain) mosaics, heat aging	> 400 psi (2.76 MPa) at 28 days	400 to 600 psi (2.76 to 4.14 MPa)
ANSI A118.15 – shear strength, glazed wall tile	> 450 psi (3.10 MPa) at 7 days	450 to 600 psi (3.10 to 4.14 MPa)
ANSI A118.15 – shear strength, quarry tile to quarry tile	> 150 psi (1.03 MPa) at 28 days	500 to 700 psi (3.45 to 4.83 MPa)
ANSI A118.15H – mortar for large and heavy tile	ASTM C627 Robinson Floor Test Lippage change < 1/64" (0.4 mm)	Pass
ANSI A118.15E – extended open time	> 75 psi (0.52 MPa) at 30 minutes	Pass





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

Shelf Life and Application Properties at 73°F (23°C) and 50% relative humidity

Shelf life	1 year (<i>Kerabond T</i>); 2 years (<i>Keralastic</i>)
Open time**	20 to 30 minutes
Pot life**	> 2 hours
Time before grouting**	24 to 48 hours
VOCs (Rule #1168 of California's SCAQMD)	0 g per L

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

Approximate Coverage*** per 50 lbs. (22.7 kg)

Typical Trowel	Coverage
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm) 	85 to 95 sq. ft. (7.90 to 8.83 m ²)
1/4" x 3/8" x 1/4" (6 x 10 x 6 mm) 	65 to 75 sq. ft. (6.04 to 6.97 m ²)
1/2" x 1/2" x 1/2" (12 x 12 x 12 mm) 	40 to 50 sq. ft. (3.72 to 4.65 m ²)
3/4" x 9/16" x 3/8" (19 x 14 x 10 mm) 	35 to 40 sq. ft. (3.25 to 3.72 m ²)

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

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Packaging

Size and Color
Kerabond T bag, powder: 50 lbs. (22.7 kg), gray
Kerabond T bag, powder: 50 lbs. (22.7 kg), white
Keralastic jug, liquid: 2 U.S. gals. (7.57 L)
Keralastic pail, liquid: 5 U.S. gals. (18.9 L)
Keralastic drum, liquid: 55 U.S. gals. (208 L)

RELATED DOCUMENTS

Reference guide: "Surface preparation requirements" for tile and stone installation systems*

Technical bulletin: "Tiling over gypsum"*

* At www.mapei.com

Refer to the 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 meets the health and well-being requirements of product certification programs, contact the MAPEI Sustainability Team at 1-800-992-6273.

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.**

We proudly support the following industry organizations:



MAPEI Headquarters of North America
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)

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