# MAPEI®

# Keraply™

## Professional Latex Additive for Tile Mortar

GREEN INNOVATION

## DESCRIPTION

*Keraply* is a professional-grade, acrylic latex admixture used to enhance the performance of MAPEI's non-modified, dry-set mortars as well as *Adesilex™ P10* glass tile mortar. As a highly recommended admixture, *Keraply* enhances bond strength, flexural strength, elongation and freeze/thaw durability.

## FEATURES AND BENEFITS

- Improves the bond strength of mortar

- Enhances mortar performance and allows installation of a wider range of tile and stone types over additional substrates

- Good for most difficult-to-bond tiles and interior/exterior surfaces

- When a dry-set mortar is mixed with *Keraply* rather than water, the mixture is ideal for setting tile in areas subject to severe climate swings (ranging from high to below-freezing temperatures, and from dry to wet conditions).

## INDUSTRY STANDARDS AND APPROVALS

- ANSI: When mixed, exceeds ANSI A118.4 and ANSI A118.11 bond strength requirements

- ISO 13007: See the Technical Data Sheet (TDS) of the mortar that *Keraply* is mixed with.

LEED v3 Points Contribution — LEED Points

MR Credit 5, Regional Materials* ......................................Up to 2 points

IEQ Credit 4.1, Low-Emitting Materials –
Adhesives & 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

- Interior/exterior, residential/commercial wet and dry installations

- Installation of ceramic and porcelain 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 apply over presswood, laminate surfaces, particleboard, chipboard, Masonite, Lauan, metal or similar dimensionally unstable material, or oriented strand board (OSB).

- Do not use for moisture-sensitive stone such as green marble, Rosso Levanto, Negro Marquina, some limestone, green granite, agglomerate tiles, cultured marble and resin-backed tiles. Instead, use suitable epoxy or urethane adhesives (see respective TDSs for more information).

- 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.

- To use directly over gypsum-based patching or leveling substrates, apply a suitable sealer before use. See MAPEI's Technical Bulletin 010313-TB, "Gypsum-Based Floors and Walls: Which MAPEI Products Can Be Applied?"
- Do not dilute with other liquids.

## SUITABLE SUBSTRATES

- Fully cured concrete (at least 28 days)
- Masonry cement block, brick, cement mortar beds and leveling coats
- Properly prepared, interior-only existing ceramic and porcelain tile, cement terrazzo, quarry tile and pavers
- Properly prepared, interior-only vinyl composition tile (VCT) and cutback adhesive residue
- Cement backer units (CBUs) – see the manufacturer's installation guidelines
- APA and CANPLY Group 1 exterior-grade plywood (interior, residential and light commercial applications in dry conditions only)
- Gypsum wallboard and primed plaster
- MAPEI's waterproofing, crack-isolation and sound-reduction membranes

See the TDS of the mortar being used for a complete listing of suitable substrates.

## 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.

Consult MAPEI's "Surface Preparation Requirements" document in the Reference & Installation Guides section of the Tile & Stone Installation Systems page on MAPEI's Website.

## MIXING

Choose all appropriate safety equipment before use. See the Safety Data Sheet (SDS) for details.

1. Into a clean mixing container, pour about 2 U.S. gals. (7,57 L) of *Keraply* for the desired consistency.
2. Gradually add 50 lbs. (22,7 kg) of the dry-set mortar or *Adesilex P10* mortar powder while slowly mixing.
3. Use a low-speed mixing drill (at about 300 rpm) with an angled cross-blade mixer or double-box mixer. Mix thoroughly until the mixture becomes a smooth, homogenous, lump-free paste. Avoid prolonged mixing.
4. Let mixture stand ("slake") for 10 minutes.
5. Remix.
6. If the mixture becomes heavy or stiff, remix without adding more liquid or powder.

## PRODUCT APPLICATION

Read all installation instructions thoroughly before installation.

1. Choose a typical notched trowel (see the respective mortar's TDS) with sufficient depth to achieve more than 80% mortar contact with both the tile and substrate for all interior applications, and more than 95% for all exterior, commercial floor and wet applications. It may be necessary to back-butter tiles in order to reach these requirements. (Refer to ANSI A108.5 specifications and TCNA Handbook guidelines.)
2. With pressure, apply a mortar 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 trowel lines, to collapse the mortar ridges and to help achieve maximum contact. Ensure proper contact between the mortar, tile and substrate by periodically lifting a few tiles to check for an acceptable percentage of contact.
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 Detail EJ171, or TTMAC Specification Guide 09 30 00, Detail 301MJ. Do not cover expansion joints with mortars.

## CLEANUP

Clean tools and tile with warm, soapy water while the mortar is fresh.

## PROTECTION

- Protect from traffic for 24 to 48 hours, so that the mortar is sufficiently set. See the TDS of the mortar being used for additional instructions.

## Product Performance Properties

See the TDS of the mortar being used.

## Shelf Life and Product Characteristics (before mixing)

| | |
|---|---|
| Shelf life | 2 years when stored in original, unopened packaging at 73°F (23°C) and 50% relative humidity |
| Physical state | Liquid latex |
| VOCs (Rule #1168 of California's SCAQMD) | 0 g per L |

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.

## Packaging

| Size |
|---|
| Jug: 2 U.S. gals. (7,57 L) |
| Pail: 5 U.S. gals. (18,9 L) |
| Drum: 55 U.S. gals. (208 L) |

## Approximate Coverage

See the TDS of the mortar being used.

# Keraply™

## RELATED DOCUMENTS

| | |
|---|---|
| Reference Guide: Surface Preparation Requirements for tile and stone installation systems | RGT0309* |
| Technical Bulletin: "Gypsum-Based Floors and Walls: Which MAPEI Products Can Be Applied?" | 010313-TB* |

*At www.mapei.com*

Refer to the SDS 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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