



## **Premium Glass Tile Mortar** with Polymer



# DESCRIPTION

Adesilex P10 is a premium-grade, bright white, multipurpose thin-set mortar formulated with nonsag properties. Adesilex P10 is designed for glass tile, glass mosaic and marble mosaic, and is ideal for light translucent natural stone. Mix with MAPEI's Keraply<sup>™</sup> for increased performance and submerged installations.

## FEATURES AND BENEFITS

- Nonsag performance
- Great for sheet-mounted mosaics
- Quality-controlled color matching for consistent bright white color
- Mix with Keraply for increased performance and submerged installations.

## **INDUSTRY STANDARDS AND APPROVALS**

**ISO 13007**: When mixed with water, classification C2TE; when mixed with *Keraply*, classification C2TES1P1

**ANSI**: Exceeds ANSI A118.4 bond strength requirements when mixed with water; exceeds ANSI A118.4 and ANSI A118.11 bond strength requirements when mixed with *Keraply* 

LEED (Version 3.0) 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 MAPEI 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

When mixed with water

 Most interior/exterior residential installations on floors and walls. Most interior/ exterior commercial installations on floors. Most interior commercial installations on walls.

When mixed with Keraply

**S1** 

**P1** 

 Installation of ceramic and porcelain tile, glass tile, quarry tile, pavers, Saltillo tile, and most types of marble, granite and natural stone

When mixed with Keraply

- The uses listed above
- Installations subject to water immersion
- Most exterior commercial installations on walls

### LIMITATIONS

Install at temperatures between 40°F and 95°F (4°C and 35°C).

C2T

- Do not use for moisture-sensitive stone (green marble, some limestones and granites), agglomerate tiles or resin-backed tiles. Instead, use suitable epoxy or urethane adhesives. See respective Technical Data Sheet for more information.
- 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 MAPEI Technical Bulletin 010506-TB, "Installing MAPEI Products Over Gypsum."
- Installations of tile over nonporous surfaces, such as waterproofing membranes and existing tile may require extended setting/curing times.
- Do not use for glass tile with a decorative coating on the tile backing.
- Do not use for setting glass tile larger than 6" x 6" (15 x 15 cm).



When mixed with water

- Do not use for installations subject to prolonged water immersion.
- Not recommended for areas subject to severe freeze/thaw conditions. Instead, use a liquid latex additive mortar system.
- When mixed with Keraply
  - Consult local building code requirements for use on exterior commercial facades.

## SUITABLE SUBSTRATES

When mixed with water

- 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 plaster- interior walls in dry areas only (See Technical Bulletin 010506-TB for priming instructions)

### When mixed with Keraply

- The substrates listed above
- APA and CANPLY Group 1 exterior-grade plywood (interior, residential and light commercial in dry conditions only)
- Properly prepared existing ceramic and porcelain tile, cement terrazzo, quarry tile and pavers (interior and dry conditions only)
- MAPEI waterproofing, crack-isolation and sound-reduction membranes

Note: Glass tile may not be suitable over some of the above substrates (such as plywood). Consult the recommendations of the TCNA and the glass tile manufacturer regarding glass tile installations over these substrates or membranes.

## 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 MAPEI "Surface Preparation Requirements" document for tile and stone installation systems.

## MIXING

 Before starting, take appropriate safety precautions. See Material Safety Data Sheet (MSDS) for details.

#### For 10 lbs. (4,54 kg) of Adesilex P10

1.1 Into a clean mixing container, pour about 1.5 to 1.7 U.S. qts. (1,42 to 1,61 L) of clean potable water or *Keraply*. Gradually add 10 lbs. (4,54 kg) of powder while slowly mixing.

#### For 43 lbs. (19,5 kg) of Adesilex P10

- 1.2 Into a clean mixing container, pour about 1.8 U.S. gals. (6,81 L) of clean potable water or *Keraply*. Gradually add 43 lbs. (19,5 kg) of powder while slowly mixing.
- Use a low-speed mixing drill (at about 300 rpm), with an angled cross blade mixer or double box mixer. Mix thoroughly until mixture becomes a smooth, homogenous, lump-free paste. Avoid prolonged mixing.
- 3. Let mixture stand ("slake") for 10 minutes.
- 4. Remix.
- 5. If mixture becomes heavy or stiff, remix without adding more liquid or powder.

## **PRODUCT APPLICATION**

- 1. Consult the glass tile manufacturer's specifications to verify product suitability for specific installations and installation procedures.
- Choose a typical notched trowel (see chart) with sufficient depth to achieve > 80% mortar contact to both the tile and substrate for all interior applications; and > 95% for exterior installations, commercial floor and wet applications. It may be necessary to back-butter tile/stone in order to reach these requirements. Glass-tile installations require 100% continuous coverage. (Refer to ANSI A108.5 specifications and TCA Handbook guidelines.)
- 3. With pressure, apply a coat by using the trowel's flat side to key mortar into substrate.
- Apply additional mortar, combing it in a single direction with the trowel's notched side. For glass tile and mosaics, knock down the trowel ridges to ensure they do not show through translucent tiles.
- Spread only as much mortar as can be tiled before product skins over. Open time can vary with jobsite conditions.
- 6. 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 coverage. Ensure proper contact between mortar, tile and substrate by periodically lifting a few tiles to check for acceptable coverage.
- 7. Follow immediately with a proper beating-in of the tile to flatten ridges or notches. For the installation of sheet-mounted glass and marble mosaics, after using light pressure to establish contact with the fresh mortar, lightly tap the tile with a rubber-faced beating block and mallet.
- 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). Remove all mortar for glass tile.

## 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 while mortar is fresh.

## PROTECTION

- Protect from traffic for 24 hours. Protect from heavy traffic for 7 days.
- All glass installations benefit from extended cure times before grouting or permitting foot traffic.
- Protect from frost and rain for 7 days.
- Glass tile requires at least 21 days of curing time after grouting before water submersion.



### **Product Performance Properties** ISO 13007 Classification – when mixed with water

Classification Code	Classification Requirement
C2 (cementitious, improved adhesion)	≥ 145 psi (1 MPa) after standard aging, heat aging, water immersion and freeze/thaw cycles
T (vertical slip resistance)	≤ 0.019" (0,5 mm)
E (extended open time)	$\geq$ 72.5 psi (0,5 MPa) after 20 to 30 minutes

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T (vertical slip resistance)	≤ 0.019" (0,5 mm)
E (extended open time)	$\geq$ 72.5 psi (0,5 MPa) after 20 to 30 minutes
S1 (normal deformation of mortar)	≥ 0.1" (2,5 mm)
P1 (normal adhesion to plywood)	≥ 72.5 psi (0,5 MPa)

### ANSI Specification – when mixed with water

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Test Method	ANSI Specification	Test Results
ANSI A118.4 – shear strength impervious ceramic (porcelain) mosaics	> 200 psi (1,38 MPa) at 28 days	200 to 280 psi (1,38 to 1,93 MPa)
ANSI A118.4 – shear strength glazed wall tile	> 300 psi (2,07 MPa) at 28 days	425 to 640 psi (2,93 to 4,41 MPa)
ANSI A118.4 – shear strength quarry tile to quarry tile	> 150 psi (1,03 MPa) at 28 days	255 to 425 psi (1,76 to 2,93 MPa)

### ANSI Specification – when mixed with Keraply

Test Method	ANSI Specification	Test Results	
ANSI A118.4 – shear strength, impervious ceramic (porcelain) mosaics	> 200 psi (1,38 MPa) at 28 days	200 to 400 psi (1,38 to 2,76 MPa)	
ANSI A118.4 – shear strength, glazed wall tile	> 300 psi (2,07 MPa) at 28 days	490 to 780 psi (3,38 to 5,38 MPa)	
ANSI A118.4 – shear strength, quarry tile to quarry tile	> 150 psi (1,03 MPa) at 28 days	420 to 640 psi (2,90 to 4,41 MPa)	
ANSI A118.11 – shear strength, quarry tile to plywood	>150 psi (1,03 MPa) at 28 days	150 to 250 psi (1,03 to 1,72 MPa)	

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

Shelf life	1 year
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/L

\* Open time and pot life vary based on jobsite conditions.

### Packaging

Product Code	Size and Color
15411	10 lbs. (4,54 kg), bright white
11343000	43 lbs. (19,5 kg), bright white











proximate Product Coverages*	per 10 lbs. (4,54 kg)
Typical Trowel	Coverage
1/8" x 3/16" x 1/8" (3 x 4,5 x 3 mm)	18 to 24 sq. ft (1,67 to 2,23 m <sup>2</sup> )
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm)	16 to 20 sq. ft. (1,49 to 1,86 m²)
1/4" x 3/8" x 1/4" (6 x 10 x 6 mm)	11 to 14 sq. ft. (1,02 to 1,30 m²)
proximate Product Coverages*	per 43 lbs. (19,5 kg)
Typical Trowel	Coverage

Typical Trowel	Coverage
1/8" x 3/16" x 1/8" (3 x 4,5 x 3 mm)	80 to 105 sq. ft. (7,43 to 9,75 m <sup>2</sup> )
1/4" x 1/4" x 1/4" (6 x 6 x 6 mm)	70 to 85 sq. ft. (6,50 to 7,90 m <sup>2</sup> )
1/4" x 3/8" x 1/4" (6 x 10 x 6 mm)	50 to 60 sq. ft. (4,65 to 5,57 m <sup>2</sup> )

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

### **RELATED DOCUMENTS**

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

Refer to MAPEI's Material Safety Data Sheet (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.

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