



AdesilexTM P10

Premium glass and 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.

- Nonsag performance
- Great for sheet-mounted mosaics

CLASSIFICATION STANDARDS

ISO 13007: When mixed with water, *Adesilex P10* is C2TE = a cementitious (C) improved (2) adhesive with slip resistance (T) and extended open time (E).

When mixed with *Keraply*TM, *Adesilex P10* is C2TES1P1 = a cementitious (C) improved (2) adhesive with slip resistance (T) and extended open time (E), that is deformable (S1) and has normal adhesion to exterior-grade plywood (P1).

ANSI: Meets or exceeds ANSI A118.4 industry standards when mixed with water; meets or exceeds ANSI A118.11 industry standards when mixed with *Keraply*

USES

When mixed with water

- For interior/exterior residential and commercial floor and wall installations, and for countertops (interior only)
- For installing glass tile, glass and marble mosaics, porcelain and ceramic tile, and most types of marble, granite and natural stone
- For vertical application of tile where nonslip performance is required

When mixed with *Keraply*

- For installations subject to continuous water immersion or extreme moisture conditions (swimming pools, spas, fountains, hot tubs and water features)

RECOMMENDED SUBSTRATES

When mixed with water

- Fully cured concrete (at least 28 days)
- Masonry block and brick
- Cement mortars and leveling coats
- Cement backer units (CBUs) – see manufacturer's instructions for approval
- Gypsum wallboard (properly prepared and primed)

When mixed with *Keraply*

All the substrates listed above plus:

- For installations over properly prepared existing unglazed ceramic, porcelain, quarry tile and pavers (interior residential and light commercial use only)
- Cement terrazzo (properly prepared)
- For installations over MAPEI's waterproofing and crack-isolation membranes applied over recommended substrates
- Exterior-grade plywood for interior residential floors and countertops in dry areas only. Plywood must be Group 1, CC-type, conforming to APA classification and U.S. Product Standard PS 1-95 or COFI exterior plywood "Select" or "Select Tight Face" conforming to CSA-0121 standard for Douglas fir. (See TCNA [Tile Council of North America] Handbook for additional information and statement below regarding deflection.)
- 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.

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

Tile Council of North America (TCNA) Statement on Deflection Criteria

Floor systems, including the framing system and subfloor panels, over which tile will be installed should be in conformance with the IRC [International Residential Code] for residential applications, the IBC [International Building Code] for commercial applications, or applicable building codes.

Note: The owner should communicate in writing to the project design professional and general contractor the "intended use" of the tile installation, in order to enable the project design professional and general contractor to make necessary allowances for the expected live load, concentrated loads, impact loads, and dead loads including the weight of the tile and setting bed. The tile installer shall not be responsible for any floor framing or subfloor installation not compliant with applicable building codes, unless the tile installer or tile contractor designs and installs the floor framing or subfloor.

TECHNICAL NOTES

- Consult the glass tile manufacturer's specifications to verify product suitability for specific installations and installation procedures.
- Do not apply over wood planking, presswood, particleboard, chipboard, oriented strand board (OSB), pressure-treated or oil-treated plywood, Masonite, Luan, gypsum floor-patching, gypsum leveling compounds, laminate surfaces, fiberglass surfaces, poured epoxy floors, vinyl composition tile (VCT), vinyl asbestos tile (VAT), cutback adhesive residue, self-stick tile, noncushioned sheet vinyl, metal or similar dimensionally unstable substrates.
- Do not use as a thick-bed mortar, concrete repair mortar, concrete patching material or skim-coating compound, or to level subfloors.
- Do not use for setting moisture-sensitive stone, cultured marble, agglomerate tiles or resin-backed tiles. Instead, use an appropriate MAPEI epoxy or urethane mortars.
- For limestone, use one of MAPEI's white fast-setting mortars.
- Do not use for glass tile with a decorative coating on the tile backing. Instead, use white *Kerapoxy* for interior installations only.
- Do not use for setting glass tile larger than 6" x 6" (15 x 15 cm).
- Installations of large-format tile over nonporous surfaces, such as waterproofing, crack-isolation membranes and existing tile, may require extended setting times.
- Nonsag properties of *Adesilex P10* allow for setting glass or marble mosaic tiles and heavy tiles vertically from the top toward the bottom without using spacers.
- Consult MAPEI's Technical Services Department regarding applications of exterior building facades.
- The Uniform Building Code requires mechanical fasteners for individual tiles larger than 720 sq. in. (0,46 m²) or weighing more than 15 lbs. (6,80 kg) per square foot (0,09 m²).
- Apply only at temperatures between 50°F and 100°F (10°C and 38°C).

INSTRUCTIONS

1. Surface Preparation

- 1.1 All substrates should be structurally sound, solid, well-fastened, dry, clean and free of dust, oil, grease, paint, wax, curing agents, sealers, adhesive residue, and any substance or condition that may reduce or prevent adhesion.
- 1.2 See MAPEI's "Surface Preparation Requirements" for Tile & Stone Installation Systems document for details.

2. Mixing

- 2.1 To achieve nonsag performance for *Adesilex P10*, use the recommended water/mix ratios shown below:
For one 24-lb. (10,9 kg) bag of *Adesilex P10* = about 1 U.S. gal. (3,79 L) of cool, clean potable water or *Keraply*
For one 43-lb. (19,5 kg) bag of *Adesilex P10* = about 1.8 U.S. gals. (6,81 L) of cool, clean potable water or *Keraply*
- 2.2 Into a clean mixing container, pour the amount of water or *Keraply* specified above. Gradually add the appropriately sized bag of *Adesilex P10* powder while slowly mixing.
- 2.3 Use a low-speed mixing drill (at about 300 to 400 rpm) with an angled cross blade mixer or double box mixer. Mix thoroughly until mixture becomes a smooth, homogenous, lump-free paste. Avoid air entrapment by prolonged mixing, as this will shorten the pot life.
- 2.4 Let mixture sit ("slake") for 5 to 10 minutes.
- 2.5 Re-mix without adding any more liquid or powder.
- 2.6 Some stiffening may occur before all material is used. If so, simply re-mix by hand or machine, but do not add any liquid.
- 2.7 Wash hands and tools with water immediately after mixing.

3. Application

- 3.1 Pick a typical notched trowel (see "Technical Data" section) with enough depth for a continuous mortar thickness of 3/16" (4,5 mm) between the tile and the substrate. Glass-tile installations require 100% continuous coverage. Ensure at least 85% mortar contact to the back of the tiles for all interior applications, 95% for exterior installations as well as commercial floor and shower applications, and 100% when installing marble, granite and agglomerate tile floors. It may be necessary to use the trowel's flat edge to back-butter each tile before laying, to achieve 100% mortar contact and a void-free installation.
Note: When back-buttering is required, do so at the same time you are applying the mortar to the substrate. (Refer to ANSI A108.5 specifications and TCNA or TTMAC guidelines.)
- 3.2 In hot or dry conditions, take precautions to ensure that the mortar does not flash-set. Cooling a concrete slab with water before the installation may be beneficial. Remove all excess water before applying the mortar. Also, using cold water or cooling the latex additive will aid in the installation.
- 3.3 Using the flat or straight edge of the trowel, spread a thin pressure-applied coat on the substrate. Then using the trowel's notched side, follow immediately with additional material, combing in a single direction to achieve an even-setting bed. For glass mosaics, knock down the trowel ridges to ensure they will not show through translucent tiles. Do not spread more adhesive than can be covered before the adhesive begins to skin over ("set up").
- 3.4 To test for skinning, simply place your finger into the ridges of the applied adhesive. If there is no transfer of adhesive to your finger, skinning has occurred, and the skinned material should be scraped off and replaced with fresh adhesive.

TECHNICAL DATA for Adesilex P10 mixed with water – at 73°F (23°C) and 50% relative humidity

ISO 13007: Adesilex P10 is C2TE.

ANSI: Adesilex P10 meets or exceeds ANSI A118.4 industry standards.

(For technical data on Adesilex P10 mixed with Keraply, see Keraply Technical Data Sheet.)

Pot life.....	3 to 4 hours
Open time†	30 minutes
Final cure	28 days
Adjustability for absorptive tile.....	60 minutes
Shear strength per ANSI 118.4 tests	
Impervious ceramic mosaics	
7 days (ANSI requirement: > 200 psi [1,38 MPa])	200 to 240 psi (1,38 to 1,66 MPa)
28 days (ANSI requirement: > 200 psi [1,38 MPa])	200 to 280 psi (1,38 to 1,93 MPa)
Quarry tile	
7 days (ANSI requirement: > 100 psi [0,69 MPa])	210 to 355 psi (1,45 to 2,45 MPa)
28 days (ANSI requirement: > 150 psi [1,03 MPa])	255 to 425 psi (1,76 to 2,93 MPa)
Glazed wall tile	
7 days (ANSI requirement: > 300 psi [2,07 MPa])	325 to 490 psi (2,24 to 3,38 MPa)
28 days (ANSI requirement: > 300 psi [2,07 MPa])	425 to 640 psi (2,93 to 4,41 MPa)
pH.....	13
Cleanability.....	With water while fresh
Colors.....	Bright white
Shelf life.....	1 year in a dry place in original, unopened packaging
Health and safety.....	Consult the Material Safety Data Sheet (MSDS) for safe-handling instructions.

† Open times vary based on temperature, humidity, substrate, trowel size and jobsite conditions.

PACKAGING

Bags: 24 lbs. (10,9 kg); 43 lbs. (19,5 kg)

TYPICAL TROWELS AND APPROXIMATE COVERAGES*

Per 24-lb. (10,9-kg) bag

For glass and marble mosaics

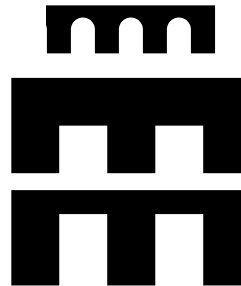
1/8" x 3/16" x 1/8" (3 x 4,5 x 3 mm)..... 45 to 60 sq. ft. (4,18 to 5,57 m²)

For glass tile up to 6" x 6" (15 x 15 cm), wall tile, modular tile

1/4" x 1/4" x 1/4" (6 x 6 x 6 mm)..... 39 to 47 sq. ft. (3,62 to 4,37 m²)

For large modular ceramic tiles 8" x 8" (20 x 20 cm) up to 16" x 16" (41 x 41 cm)

1/4" x 3/8" x 1/4" (6 x 10 x 6 mm)..... 28 to 34 sq. ft. (2,60 to 3,16 m²)



Per 43-lb. (19,5-kg) bag

For glass and marble mosaics

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 m²)

For glass tile up to 6" x 6" (15 x 15 cm), wall tile, modular tile

1/4" x 1/4" x 1/4" (6 x 6 x 6 mm)..... 70 to 85 sq. ft. (6,50 to 7,90 m²)

For large modular ceramic tiles 8" x 8" (20 x 20 cm) up to 16" x 16" (41 x 41 cm)

1/4" x 3/8" x 1/4" (6 x 10 x 6 mm)..... 50 to 60 sq. ft. (4,65 to 5,57 m²)

*Trowel dimensions are width/depth/space. Coverages shown are for estimating purposes only. Actual jobsite coverages may vary according to substrate conditions, type of equipment used, thickness applied, handling and application procedures. To obtain stated coverage and nonsag performance, use the recommended water/mix ratios.

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| <p>3.5 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.</p> <p>3.6 Follow immediately with a proper and thorough beating-in of the tile to flatten ridges or notches into a continuous bed, allowing at least 25% of the thickness of each tile to be</p> | <p>embedded in the mortar. For the installation of sheet-mounted glass and marble mosaics, after using light pressure to establish contact with the fresh mortar, tap lightly using a rubber-faced beating block and mallet.</p> <p>3.7 Make all alignments and adjustments immediately following the beating-in of the tile.</p> |
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Adesilex™ P10



- 3.8 Remove excess mortar from the joint areas so that at least 2/3 of the tile depth is available for grouting. Wipe smudges from the tile face with a damp sponge or towel before the material hardens.
- 3.9 Wash hands and tools with water while material is still fresh.

4. Expansion and Control Joints

- 4.1 Provide for expansion and control joints where specified. Refer to Detail EJ-171 in the most current TCNA handbook for ceramic tile installation, or Detail 301MJ in the TTMAC Specification Guide 09300.
- 4.2 Do not cover any substrate expansion joint or control joints with mortar or tiles.
- 4.3 When necessary, cut tiles along both edges of the expansion joints. Do not allow tile and mortar to overlap the joints.
- 4.4 Protect tilework with metal strips (edge metal) along both edges of structural building expansion joints.
- 4.5 Install the specified compressible bead and sealant into all expansion and control joints.

5. Grouting

- 5.1 Before grouting, allow 24 hours on floors and 8 hours on walls for tiles to reach a firm set at room temperature (73°F [23°C]).
- 5.2 All glass-tile installations benefit from extended cure times (48 hours or longer) before grouting or permitting foot traffic.
- 5.3 The setting time may be extended by cold temperatures or high humidity.

6. Protection

- 6.1 Provide for dry, heated storage on site and deliver materials at least 24 hours before tilework begins.
- 6.2 Floors: Protect from light foot traffic for at least 24 to 48 hours and from heavy traffic for at least 7 days.
- 6.3 Protect tilework from rain for at least 72 hours.
- 6.4 Protect finished tilework from freezing for at least 5 to 7 days.
- 6.5 Glass tile installed in pool, spa and submerged applications requires at least 21 days of curing time after grouting before the installation can be submerged or exposed to heavy water use.
- 6.6 Walls: Protect from impact, vibrations and heavy hammering on adjacent and opposite walls for at least 14 days after installation.
- 6.7 Because temperature and humidity (during and after the installation of tile) affect the final curing time, allow for extended periods of cure and protection when temperatures drop below 60°F (16°C) and/or when the relative humidity is higher than 70%.

NOTICE

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.**



For the most current product and warranty data, visit www.mapei.com.

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Caracas, Ref. J-30312350-3



PR4955 P10D_I08Evp
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Printed in the USA