



**High performance white cementitious adhesive, with no vertical slip and extended open time for glass, ceramic, vitrified and marble mosaic**

**CLASSIFICATION IN COMPLIANCE WITH ISO 13007-1**

**Adesilex P10** is an improved (2) slip resistant (T) cementitious adhesive (C) with extended open time (E) of class C2TE.

Conformity of **Adesilex P10** is declared in **ITT** certificate n° **25080061/Gi (TUM)** issued by the Technische Universität München laboratory (Germany) and in **ITT** certificates n° **2008-B-2749/13** and **2008-B-2749/16** issued by the Istitute MPA Dresden (Germany).

**WHERE TO USE**

Interior and exterior floor and wall bonding of:

- installation of normal or heavy weight mesh-backed or paper-faced glass, ceramic, vitrified and marble mosaic.

**Some application examples**

**Adesilex P10:**

- Bonding of ceramic, vitrified, glass and marble mosaic on cementitious renders, from the top towards the bottom.
- Bonding mosaic on not planar substrates, without tiles slipping.
- Bonding mosaic on gypsum board panels.

**Adesilex P10 mixed with Isolastic diluted 1:1 with water:**

- Bonding mosaic in swimming pools on renders or on substrates waterproofed with **Mapelastic**.

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Glass mosaic 2x2 cm installation in a swimming pool with Adesilex P10 mixed with Isolastic diluted 1:1



Glass mosaic 1x1 cm wall installation



Marble mosaic 2x2 cm wall installation

- Internal bonding of mosaic on existing ceramic and vitrified tiles.
- Bonding small sized ceramic and vitrified tiles on renders in swimming pools.

## TECHNICAL CHARACTERISTICS

**Adesilex P10** is a particularly fine white powder composed of cement, graded aggregates, synthetic resins and special additives according to a formulation developed in MAPEI's research laboratories.

**Adesilex P10** mixed with the correct amount of water or **Isolastic** becomes a mortar with the following features:

- white in colour. It enhances the colours of glass mosaic tiles;
- a creamy paste which is easily workable;
- excellent adhesion to all conventional materials used in building;
- highly thixotropic: **Adesilex P10** can be applied on a vertical surface without sagging or slipping even when heavy tiles are used. Mosaic tiles can be installed from the top towards the bottom without using spacer pegs;
- particularly extended open and adjustability time, making installation easier.

**N.B.** *Mixing Adesilex P10 with Isolastic diluted 1:1 with water will further improve its characteristics up to the requirement of class C2ES1 (highly-deformable, improved cementitious adhesive with extended open time) according to EN 12004.*

## RECOMMENDATIONS

Use **Adesilex P10** mixed with **Isolastic** diluted 1:1 with water in the following cases:

- for installing glass mosaics or ceramic and vitrified tiles on non absorbent surfaces (**Mapelastic**, **Mapelastic Smart**, **Mapegum WPS**, tiles, etc.);
- for installing glass mosaics or ceramic and vitrified tiles in swimming pools, basins or similar structures even on absorbent substrates.

Do not use **Adesilex P10** in the following cases:

- on wood or wooden conglomerates;
- on metal, rubber, PVC or linoleum surfaces;
- for ceramic and vitrified tile installations when an adhesive layer thicker than 10 mm is required;
- on concrete subject to strong delayed movement, that is, with less than 6 months curing time.

A particularly moist substrate could slow down the setting of **Adesilex P10**.

## APPLICATION PROCEDURE

### Preparing the substrate

The substrates must be cured, sound, free of loose parts, grease, oils, paint, wax and sufficiently dry.

Cementitious substrates must not be subject

to shrinkage after the installation of the tiles. During warm weather, renders must be cured at least one week per centimetre of thickness and cementitious screeds must be cured for at least 28 days, unless special MAPEI binders for screeds such as **Mapecem** or **Topcem**, **Topcem Pronto** or **Mapecem Pronto** have been used.

Dampen the surfaces with water to cool down if they should be too warm or exposed to direct sunlight.

Gypsum substrates and anhydrite screeds must be perfectly dry, sufficiently hard and free of dust. They must be treated with **Primer G** or **Eco Prim T**, while areas subject to high humidity must be treated with **Primer S**.

In general, refer to the relative MAPEI technical documentation regarding substrate preparation before repairing cracks in substrates, consolidating rapid-drying screeds and levelling off installation surfaces.

### Preparing the mix

While stirring, pour **Adesilex P10** into a container with approximately 36% by weight of clean water (9 l of water per 25 kg of powder).

Mix, possibly with a low speed mixer, to obtain a homogeneous, creamy and lump free mix.

Let the mix stand for 5-10 minutes and briefly re-mix before use.

Mixed in this way, **Adesilex P10** has a pot life of approximately 8 hours.

### Applying the mix

To ensure good adhesion, it is recommended to spread a first thin layer of **Adesilex P10** on the substrate using the straight edge of the trowel. This allows for making the best use of the open time and adjustability time of the adhesive.

Then apply the mixture with the suitable notched trowel.

The basic principle to be followed when choosing a suitable trowel is to wet, with the adhesive, 100% of the back of the tiles. For tiles with high, profiled ribs **Adesilex P10** must be applied also on the back of the tiles (back buttering).

### Installing the tiles

There is no need to wet the tiles before installing them. Only with very dusty backs it is recommended to dip the tiles in clean water.

The mosaic and tiles should be installed starting from the top towards the bottom under a firm pressure to ensure a good coverage of the adhesive.

In normal temperature and humidity conditions, the open time of **Adesilex P10** is approximately 30 minutes. Unfavourable weather conditions (strong sun, drying wind, high temperatures, etc.) or a highly absorbent substrate can reduce the open time, sometimes quite drastically, to just a few minutes. Keep checking that a skin does not form on the surface of the spread adhesive and that it is still fresh.

Wetting the substrate before spreading the adhesive could help extend the open time. If a superficial skin has formed re-freshen the adhesive again by re-spreading it with a notched trowel. It is not recommended to wet the adhesive with water once a skin has formed because, instead of dissolving the

## TECHNICAL DATA (typical values)

In compliance with:

- European EN 12004 such as C2TE (C2ES1 if mixed with Isolastic diluted 1:1 with water)
- ISO 13007-1 such as C2TE (C2ES1 if mixed with Isolastic diluted 1:1 with water)
- American ANSI A 118.4

### PRODUCT IDENTITY

Type:	powder
Colour:	white
Bulk density (kg/m <sup>3</sup> ):	1350
Dry solid content (%):	100
EMICODE:	EC1 R Plus - very low emission

### APPLICATION DATA (at +23°C and 50% R.H.)

Mixing ratio:	35-37 parts water for 100 parts of <b>Adesilex P10</b> or 18 parts water + 18 parts of <b>Isolastic</b> for 100 parts of <b>Adesilex P10</b>
Consistency of mix:	very creamy
Density of the mix (kg/m <sup>3</sup> ):	1500
pH of mix:	13
Pot life:	approx. 8 hours
Application temperature:	from +5°C to +40°C
Open time (acc. EN1346):	> 30 minutes
Adjustability time:	approx. 30 minutes
Ready for grouting on walls:	after 4-8 hours
Ready for grouting on floors:	after 24 hours
Set to light foot traffic:	24 hours
Ready for use:	14 days

### FINAL PERFORMANCES

Bonding strength in compliance with EN 1348 (N/mm <sup>2</sup> ):	
– initial bonding (after 28 days):	1.5
– bonding after heat exposure:	1.4
– bonding after immersion in water:	1.3
– bonding after freeze/thaw cycles:	1.4
Resistance to alkali:	excellent
Resistance to oils:	excellent (poor to vegetable oils)
Resistance to solvents:	excellent
Temperature when in use:	excellent
Deformability according to EN 12002 (Adesilex P10 + Isolastic diluted 1:1 with water):	S1 - deformable

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skin, the water will form an anti-adhesive film. If necessary, tiles should be adjusted within 30 minutes of installation, after which time adjustment becomes difficult. Floor and wall coverings installed with **Adesilex P10** must not be washed down or exposed to rain for at least 24 hours and must be protected from direct sunlight and frost for at least 5-7 days after the installation.

## GROUTING AND SEALING

Wall joints can be grouted after 4-8 hours and floor joints can be grouted after 24 hours with the specific MAPEI cementitious or epoxy grouts, available in different colours. Expansion joints must be sealed with the specific MAPEI sealants.

## SET TO LIGHT FOOT TRAFFIC

Floors are set to light foot traffic after 24 hours.

## READY FOR USE

Surfaces are ready for use after approximately 14 days. Basins and swimming pools can be filled after 21 days.

## Cleaning

Tools and containers should be cleaned with plenty of water while **Adesilex P10** is still fresh. Surfaces should be cleaned with a damp cloth, before the adhesive dries.

## CONSUMPTION

Bonding mosaics (trowel n. 4): 2 kg/m<sup>2</sup>

Bonding ceramic and vitrified tiles (trowel n. 5 or 6): 4-5 kg/m<sup>2</sup>

## PACKAGING

**Adesilex P10** is available in 25 kg plastic bags.

## STORAGE

**Adesilex P10** can be stored for least 12 months in a dry place in original packaging.

## SAFETY INSTRUCTIONS FOR THE PREPARATION AND APPLICATION

**Adesilex P10** contains cement that when

in contact with sweat or other body fluids produces an irritant alkaline reaction. Use protective gloves and goggles. Avoid contact with the eyes and skin. For further and complete information about the safe use of our product please refer to our latest version of the Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.

## WARNING

*Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.*

Please refer to the current version of the **Technical Data Sheet**, available from our website [www.mapei.com](http://www.mapei.com)



This symbol is used to identify Mapei products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gesellschaft Emissionskontrollierte Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.), an international organisation for controlling the level of emissions from products used for floors.



**Our Commitment To The Environment**  
MAPEI products assist Project Designers and Contractors create innovative LEED (The Leadership in Energy and Environmental Design) certified projects, in compliance with the U.S. Green Building Council.

**All relevant references for the product are available upon request and from [www.mapei.com](http://www.mapei.com)**



An example of a decoration in mosaic made with various materials



BUILDING THE FUTURE