CLASSIFICATION IN COMPLIANCE WITH
EN 12004

Adesilex P10 is an improved (2) slip resistant (T) cementitious adhesive (C) with extended open time (E) classified as 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 MPA Dresden Institute (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 and marble mosaic.

Some application examples Adesilex P10:
- Bonding of ceramic, glass and marble mosaic on cementitious renders, from the top towards the bottom.
- Bonding mosaic on non 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.
- Internal bonding of mosaic on existing ceramic tiles.
Adesilex P10

**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 slumping 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 G2E S1 (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 mosaic or ceramic tiles on non absorbent surfaces (Mapelastic, Mapelastic Smart, Mapegum WPS, tiles, etc.);
- for installing glass mosaic or ceramic 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 adhesive layer thicker than 5 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 34% by weight of clean water (8.5 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.

Use a trowel with a notch size that guarantees complete buttering of the back of the tile. For good adhesion of tiles with an uneven back surface or with particularly deep ribs (such as dovetail ribs), Adesilex P10 must also be spread on the back of the tile (back-buttering technique).

**Installing the tiles**

There is no need to wet the tiles before installing them. Only with very dusty backs is it recommended to dip the tiles in clean water. The mosaic and tiles should be installed starting from the top towards the bottom under firm pressure to ensure a good coverage of the adhesive.

In normal temperature and humidity conditions, the open time of Adesilex P10 is approximately 20-30 minutes. Unfavourable weather conditions (strong sun, 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-spreadign 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 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.
### TECHNICAL DATA (typical values)

In compliance with:
- European EN 12004 such as C2TE
- European EN 12002 such as C2E S1 (if mixed with Isolastic diluted 1:1 with water)
- ISO 13007-1 such as C2TE (C2E S1 if mixed with Isolastic diluted 1:1 with water)

### PRODUCT IDENTITY

<table>
<thead>
<tr>
<th>Type</th>
<th>powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>white</td>
</tr>
<tr>
<td>Bulk density (kg/m³):</td>
<td>1,350</td>
</tr>
<tr>
<td>Dry solids content (%):</td>
<td>100</td>
</tr>
<tr>
<td>EMICODE</td>
<td>EC1 R Plus - very low emission</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Mixing ratio:</th>
<th>32-34 parts water for 100 parts of Adesilex P10 or 17 parts water + 17 parts of Isolastic for 100 parts of Adesilex P10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistency of mix:</td>
<td>very creamy</td>
</tr>
<tr>
<td>Density of the mix (kg/m³):</td>
<td>1,500</td>
</tr>
<tr>
<td>pH of mix:</td>
<td>13</td>
</tr>
<tr>
<td>Pot life:</td>
<td>approx. 8 hours</td>
</tr>
<tr>
<td>Application temperature:</td>
<td>from +5°C to +40°C</td>
</tr>
<tr>
<td>Open time (according to EN 1346):</td>
<td>&gt; 30 minutes</td>
</tr>
<tr>
<td>Adjustability time:</td>
<td>approx. 30 minutes</td>
</tr>
<tr>
<td>Ready for grouting on walls:</td>
<td>after 4-8 hours</td>
</tr>
<tr>
<td>Ready for grouting on floors:</td>
<td>after 24 hours</td>
</tr>
<tr>
<td>Set to light foot traffic:</td>
<td>24 hours</td>
</tr>
<tr>
<td>Ready for use:</td>
<td>14 days</td>
</tr>
</tbody>
</table>

### FINAL PERFORMANCES

<table>
<thead>
<tr>
<th>Bonding strength in compliance with EN 1348 (N/mm²):</th>
<th>1.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>- initial bonding (after 28 days):</td>
<td>1.5</td>
</tr>
<tr>
<td>- bonding after heat exposure:</td>
<td>1.4</td>
</tr>
<tr>
<td>- bonding after immersion in water:</td>
<td>1.3</td>
</tr>
<tr>
<td>- bonding after freeze/thaw cycles:</td>
<td>1.4</td>
</tr>
<tr>
<td>Resistance to alkali:</td>
<td>excellent</td>
</tr>
<tr>
<td>Resistance to oils:</td>
<td>excellent (poor to vegetable oils)</td>
</tr>
<tr>
<td>Resistance to solvents:</td>
<td>excellent</td>
</tr>
<tr>
<td>Temperature when in use:</td>
<td>excellent</td>
</tr>
<tr>
<td>Deformability according to EN 12004</td>
<td>S1 - deformable</td>
</tr>
<tr>
<td>(Adesilex P10 + Isolastic diluted 1:1 with water):</td>
<td></td>
</tr>
</tbody>
</table>
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/m²

Bonding ceramic tiles (trowel n. 5 or 6): 4-5 kg/m²

**PACKAGING**

Adesilex P10 is available in 25 kg paper bags.

**STORAGE**

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

The product complies with the conditions of Annex XVII to Regulation (EC) No 1907/2006 (REACH), item 47.

**SAFETY INSTRUCTIONS FOR THE PREPARATION AND APPLICATION**

Adesilex P10 is irritant, it contains cement that when in contact with sweat or other body fluids causes irritant alkaline reaction and allergic reactions to those predisposed. It can cause damage to eyes. In case of contact with eyes or skin wash immediately with plenty of water and seek medical attention. It is recommended to use protective gloves and goggles.

For further and complete information about the safe use of our product please refer to the latest version of our 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