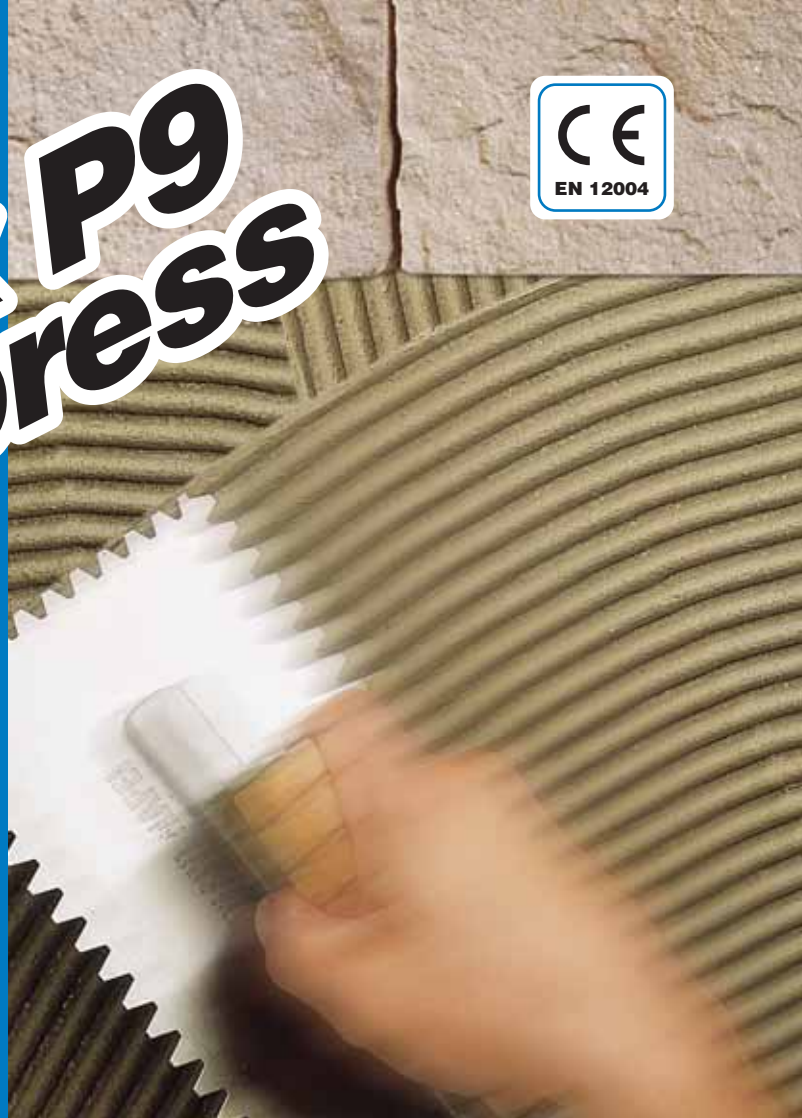




Adesilex P9 Express



High performance, fast setting cementitious adhesive with no vertical slip for ceramic tiles and stone materials



CLASSIFICATION IN COMPLIANCE WITH EN 12004

Adesilex P9 Express is an improved (2), fast setting (F) cementitious adhesive (C) slip resistant (T) of class C2FT.

*Adesilex P9 Express is CE marked, on the basis of Test Report **No LT-463/05** and Opinion **No NT-615/P/05** issued by **ITB - Building Research Institute** (notified body No 1488), Poland.*

WHERE TO USE

Laying of ceramic tiles, mosaic and natural stone on external and internal surfaces of buildings, on a variety of substrate type (floors or walls). It is also suitable for bonding of insulating materials, like foamed polystyrene, mineral wool and glass wool boards, sound absorbing panels, etc.

Some application examples

- Laying of ceramic tiles and mosaic on following substrates:
 - walls with cement render;
 - internal walls made of cellular concrete;
 - gypsum and calcium sulfate substrates treated with **Primer G** or **Mapegrunt**;
 - gypsum plasterboard;
 - floor heating systems;
 - terraces and balconies;
 - properly cured cement jointless floor.

- Laying of ceramic tiles up to 900 cm² on existing ceramic tiles.

TECHNICAL CHARACTERISTICS

Adesilex P9 Express is a grey powder adhesive, consisting of cement, appropriately selected aggregates, synthetic resins and special additives developed by R&D Laboratories of MAPEI.

Adesilex P9 Express mixed with water gives an adhesive characterized by:

- easy processing;
- excellent adhesion to background materials commonly used in building industry;
- shrinkage-free drying;
- quick-setting;
- highly thixotropic; **Adesilex P9 Express** can be applied on a vertical surface without sagging or slipping even when heavy tiles are used.

RECOMMENDATIONS

Adesilex P9 Express should not be used for:

- precast concrete units;
- walls exposed to strong transverse movements and vibration (wood, fiber reinforced concrete);



- metal surfaces;
- for laying of ceramic tiles on mortar layers over 10 mm thick;
- for laying natural stone that isn't stable in humid conditions and for stone that is sensitive to discolouration and efflorescence.

APPLICATION PROCEDURE

Preparing the substrate

All the substrates for **Adesilex P9 Express** should be even, strong, stable, dry, degreased, cleansed of paints, waxes, etc. Fresh cement substrates should be suitably cured (i.e. dried at least for 8 days per every centimetre of thickness). Cement floors should be dried at least for 28 days, unless they are made of special fast-setting binders like: **Mapecem**, **Mapecem Pronto**, **Topcem**, **Topcem Pronto**. Surfaces exposed to strong sunlight should be moistened with water. Gypsum and calcium sulfate substrates should be dry (moisture content, 0.5%, maximum), sufficiently strong and dust free. They should be treated with emulsion **Primer G** or **Mapegrunt**, whereas areas exposed to moisture should be treated with waterproof products **Mapegum WPS** or **Mapelastic**.

Preparing the mix

Adesilex P9 Express should be thoroughly mixed with clean water, until lump-free. After 5 minutes standing mix again. The recommended proportion: from 21 to 23 parts of water per 100 parts of the adhesive by weight, i.e. from 5.25 to 5.75 liters water per 25 kg (1 bag) of **Adesilex P9 Express**. The mixture may be used for 60 minutes.

Applying the mix

Adesilex P9 Express should be applied with a notched trowel. The trowel should be properly selected dependant on application, for a floor or for a wall. In case of light loads, it is recommended to cover the tile rear with 65-70% of adhesive. In case of large loads, large-size tiles or tiles laid on external walls of the building, the mortar should be spread on 100% of the tile surface. To ensure the 100% coverage, the tile should be laid for a test, then removed from the substrate to determine the optimum thickness of adhesive to be applied.

For good adhesion, first apply a thin layer of **Adesilex P9 Express** to the substrate with the smooth side of the trowel. Next, with the toothed side of the trowel, of the type dependent on the tile size, apply suitable amount of the adhesive (see "Consumption").

In case of floors and external ceramic surfaces, terraces and balconies, make sure that mortar is spread over the whole surface of the tiles.

Laying the tiles

For laying the tiles with **Adesilex P9 Express** they can not be wetted with water. Only those covered with dust should be rinsed. The tiles should be laid on the wall and pressed against the adhesive to provide adequate contact.

Moreover, attention should be paid to the adhesive open time. It is the maximum time, which elapses from the moment of spreading the adhesive to the moment of formation of skin, making laying of the tile impossible (time, in which the adhesive retains the adhesive properties). In standard temperature and humidity conditions (+23°C and 50% R.H., respectively) the open drying time of **Adesilex P9 Express** approximates to 20 minutes. In unfavorable conditions, like strong sunlight, strong wind or high temperatures, the time may be reduced to a few minutes, only.

Attention should be paid to freshness of the adhesive mix, particularly formation of skin should be avoided. The skin should be removed by means of the trowel. It should not be wetted, because water forms so called anti-adhesive layer. Positions of the already laid tiles may be adjusted within the first 15 minutes. The tiles freshly laid on **Adesilex P9 Express** should not be exposed to rain for 8 hours, minimum. Moreover, they should be protected against direct sunlight and frost for the first 5-7 days, minimum.

GROUTING AND SEALING

The joints between the tiles may be filled with grout (cement based - **Ultracolor Plus** and **Keracolor** or epoxide type - **Kerapoxy**) offered by MAPEI in a wide palette of colours. The joints between the tiles laid on walls or floors may be grouted after the first 4 hours.

Expansion joints should be filled with silicone-based sealant **Mapesil AC**, available in the same colors as those of the grouts.

Spot-bonding insulating materials

In case of laying of sound absorbing or insulating materials, **Adesilex P9 Express** should be applied with a putty knife or a trowel around the edges and pointwise on the panels.

SET TO LIGHT FOOT TRAFFIC

The floors covered with tiles on **Adesilex P9 Express** may be walked on after approx. 4 hours.

TECHNICAL DATA (typical values)

In compliance with:

- Polish PN-EN 12004, as C2FE
- ISO 13007-1 as C2FE
- American ANSI A 118.4 - 1999
- Canadian 71 GP 30 M type 2

PROPERTIES OF THE PRODUCT

Consistency:	powder
Colour:	grey
Bulk density (kg/m³):	1300
Solid contents (%):	100
Storage:	12 months, in the original closed bags and in a dry place
Hazard classification according to EC 1999/45:	irritant. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packing and Safety Data Sheet
Customs class:	3824 50 90

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

Mixing ratio:	21-23 parts of water per 100 parts of Adesilex P9 Express
Consistency of the mix:	paste
Density of the mix (kg/m³):	1500
pH reaction of the mix:	13
Processability of the mix:	60 minutes
Application temperature:	from +5°C to +40°C
Open drying time (according to EN 1346):	approx. 20 minutes
Tile adjustment possible within:	approx. 15 minutes
Grouting on walls:	after 4 hours
Grouting on floors:	after 4 hours
Set to light foot traffic:	after 4 hours
Full load operation:	after 3 days

FINAL PERFORMANCES

Adhesion (according to EN 1348) (N/mm²): - initial (after 28 days at temp. +23°C, H.R. 50%): - after heat ageing: - after water immersion: - after freeze/thaw cycles:	1.4 1.5 1.1 1.3
Resistance to alkalis:	excellent
Resistance to oils:	excellent (poor for vegetable oils)
Resistance to solvents:	excellent
Resistance to temperature:	from -30°C to +90°C

Adesilex P9 Express



READY FOR USE

The floors may be used under full load after approx. 3 days.

Cleaning

Tools and hands should be washed with running water. Surface of dirty tiles should be cleaned with a dampened sponge. Remember, that removal of dried adhesive may be difficult.

CONSUMPTION

Bonding ceramic tiles:

- mosaic and small tiles - trowel No. 4
- approx. 2 kg/m²;
- common size tiles - trowel No. 5
- 2.5-3 kg/m²;
- large-size and outdoor tiles - trowel No. 6
- 4 kg/m².

Spot-bonding insulating materials:

- wool, foamed polystyrene, foams, etc. - approx.
0.5-0.8 kg/m²;
- gypsum boards and aerated concrete - approx.
1.5 kg/m².

PACKAGING

12 months when stored under dry conditions in the original unopened packaging.

STORAGE

Adesilex P9 Express in original closed packages may be kept in a dry store for 12 months.

Manufactured in compliance with the regulations of the 2003/53/EC Directive.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Adesilex P9 Express contains cement that, when in contact with sweat or other bodily fluids, produces an irritant alkaline reaction.

Wear protective clothing, gloves and eye/face protection.

For more information see the Safety Data Sheet.

FOR PROFESSIONALS.

WARNING

While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product, must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.

All relevant references for the product are available upon request and from www.mapei.com