MAPEI

Keraquick

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

CLASSIFICATION IN COMPLIANCE WITH EN 12004

Keraquick is an improved (2) fast setting (F) cementitious (C) adhesive and slip resistant (T) and deformable classified as C2FT S1.

*Conformity of **Keraquick** is declared in **ITT** certificates **no. 25070276/Gi (TUM)**, **no. 25080059/Gi (TUM)** and **no. 25080063/Gi (TUM)** issued by the Technische Universität München laboratory (Germany).*

WHERE TO USE

Bonding to cement screeds, cement-based renders, cured concrete, existing floors in interiors and exteriors. For the installation of:

- ceramic and mosaic tiles of every type and stone materials that are not extremely sensitive to moisture;
- insulating materials such as expanded polystyrene and polyurethane, gypsum board, glass and rock wool, Eraclit®, foamed-concrete blocks, sound-deadening panels, etc.

Some application examples

- Repairs in heavily trafficked areas and when surfaces need to be put into service rapidly, such as public premises, motorway services, pedestrian passages, supermarkets, showrooms.
- Rapid installation or repairs in swimming pools, industrial plants (breweries, wine-cellars, dairies, etc.), refrigeration units.
- Rapid repair work in bathrooms, showers, kitchens, balconies, terraces.
- Installing non-absorbent flooring over existing flooring, where the setting time of other cement-based adhesives would be too slow.
- Installing marble and other stone material, even light coloured stone (for the latter, use **Keraquick** white).
- Installing heated screeds.

TECHNICAL CHARACTERISTICS

Keraquick is a grey or white powder composed of a blend of special cements, selectively-graded aggregates, synthetic resins and setting accelerators that develop high bonding strength only 2-3 hours after installing.
For this reason floors and walls can be used very quickly. Floors are ready for use in 24 hours and can be walked on after only 2 hours.
By mixing **Keraquick** with **Latex Plus** the deformability improves, to meet the requirements of class C2F S2 (highly deformable, fast setting, improved cementitious adhesive) according to EN 12004.

RECOMMENDATIONS

Do not use **Keraquick** in the following cases:

- on metal, rubber, PVC and linoleum surfaces;
- on walls and floors subject to extreme flexing or vibration (wood, fibre-cement boards, etc.);
- for bonding insulating panels of expanded polystyrene with protective film.

APPLICATION PROCEDURE

Preparing the substrates

Substrates must be flat, mechanically strong, free from loose parts, grease, oil, paint, wax, etc. and sufficiently dry. Damp substrates could slow down **Keraquick**'s setting process.

Cementitious substrates must not be subject to shrinkage once the tiles have been installed, therefore in warm weather renders should be cured at least one week per centimetre of thickness. Cementitious screeds must have an overall cure of at least 28 days unless they have

Keraquick

Setting white Carrara marble with Keraquick white

An example of an installation with Keraquick in an Auchan supermarket - Sosnowiec (Poland)

An example of the installation of marble to walls with Keraquick - Feuchtwangen casinò bathroom (Germany)

been made with the special MAPEI binders for screeds such as **Mapecem**, **Mapecem Pronto, Topcem** or **Topcem Pronto**, ready-mixed mortars.
Surfaces that are too hot due to exposure to direct sunlight should be cooled by dampening them with water.
Gypsum substrates and anhydrite screeds must be perfectly dry (max. residual moisture 0.5%), 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 installation surfaces.

Preparing the mix
A 25 kg bag of grey **Keraquick** should be mixed with about 5.5-6 litres of water, while a 23 kg bag of white **Keraquick** should be mixed with about 5.5-6 litres of water.
While stirring, pour **Keraquick** into a bucket containing clean water and mix with a mechanical stirrer until a homogeneous lump-free paste is obtained.
Let the mix stand a few minutes then stir again briefly before applying. The mixture must be used within 30 minutes of preparation.

Applying the mix
Keraquick is applied to the substrate with a notched trowel to a max of 10 mm thick.
To achieve good adhesion, first apply a skim coat of **Keraquick** onto the substrate using the straight edge of the trowel followed immediately by the correct thickness. When selecting the trowel, choose one that transfers the adhesive to at least 65 to 70% of the back of the tiles for interior walls and floors and 100% coverage for heavy traffic areas and exteriors.

- for mosaics up to 5x5 cm, the MAPEI square-notched trowel No. 4 is recommended;
- for normal ceramic wall tiles, the MAPEI V-notched trowel No. 5 is recommended;
- for floors, very irregular surfaces and tiles with high ribs or lugs, the MAPEI V-notched trowel No. 6 is recommended;
- for very demanding applications such as exteriors subject to freezing, installations in swimming pools and bath tubs, floors subject to heavy loads, floors to be polished in situ, dove-tailed tiles, tiles with deep ribs or lugs, or large-size tiles, the adhesive should also be applied to the backs of the tiles (back-buttering).

This method is prescribed for sizes exceeding 900 cm^2 (30x30 cm).
If the substrates are very absorbent and in high temperatures, it is recommended to dampen the substrate in order to extend the adhesive's open time before applying **Keraquick**.

Installing the tiles
It is not necessary to wet the tiles before installation; if, however, the backs are very dusty, they should be dipped in clean water.
Keraquick's open time in normal temperature and humidity is about 15-20 minutes; unfavourable weather conditions (strong sunlight, drying wind, high temperature), or a highly absorbent substrate may shorten this open time, sometimes quite drastically, to just a few minutes.
For these reasons, there must be constant checks to see whether the adhesive has formed a surface skin or is still fresh to the touch. Should a surface skin have formed, the adhesive should be re-trowelled.
It is not recommended to wet the adhesive when it has formed a skin because, instead of dissolving the skin, a non-adhesive film will be formed.
Tiling installed with **Keraquick** must not be subjected to washout or rain for at least 3 hours and must be protected from frost and strong sunlight for at least 24 hours after installation.

Spot-bonding insulating materials
Spot bonding to sound-deadening or insulating panels should be applied using a float or trowel, the trowel type and size to be determined by the flatness of the surface and the weight of the panels. In these cases too, the open time must be observed, bearing in mind that a few spots of adhesive on heavy panels may require temporary shoring which should then only be removed after **Keraquick** has begun to set.

GROUTING AND SEALING
Joints can be grouted after 3 hours with the special MAPEI cementitious or epoxy grouts, available in different colours.
Expansion joints must be sealed with the special MAPEI sealants.

SET TO LIGHT FOOT TRAFFIC
Floors are set to light foot traffic after 2-3 hours.

READY FOR USE
Surfaces are ready for use after approximately 24 hours. Basins and swimming pools can be filled after 3 days.

Cleaning
Tools can be cleaned with water before the adhesive sets. Floors and walls can be cleaned with a damp cloth. Water should be used only in moderate quantities and after a few hours.

An example of the installation of a marble floor - Feuchtwangen casinò hall (Germany)

TECHNICAL DATA (typical values)

In compliance with:	**– European EN 12004 as C2FT S1** **– European EN 12004 as C2F S2 (if mixed with Latex Plus)** **– ISO 13007-1 as C2FT S1** **– ISO 13007-1 as C2F S2 (if mixed with Latex Plus)** **– American ANSI A 118.4 - 1999**
PRODUCT IDENTITY	
Type:	powder
Colour:	dark grey or white
Bulk density (kg/m^3):	1,400 (grey); 1,200 (white)
Dry solids content (%):	100
EMICODE:	EC1 R Plus - very low emission
APPLICATION DATA (at +23°C - 50% R.H.)	
Mixing ratio:	100 parts of **Keraquick** grey with 22-24 parts by weight of water 100 parts of **Keraquick** white with 24-26 parts by weight of water
Consistency of mix:	pasty
Colour:	grey, white
Density of the mix (kg/m^3):	1,500
pH of mix:	approx. 11
Pot life:	30 minutes
Application temperature range:	from +5°C to +30°C
Open time (according to EN 1346):	15-20 minutes
Grouting joints:	2-3 hours
Set to light foot traffic:	2-3 hours
Ready for use:	24 hours (3 days for basins and swimming pools)
FINAL PERFORMANCE	
Tensile adhesion strength according to EN 1348 (N/mm^2): **– initial (after 28 days):** **– after heat ageing:** **– after water immersion:** **– after freeze-thaw cycles:**	 2.0 1.8 1.0 1.0
Adhesion after 6 hours (N/mm^2):	0.8
Resistance to acids:	fair
Resistance to alkali:	excellent
Resistance to oils:	excellent
Resistance to solvents:	excellent
Temperature when in use:	from –30°C to +90°C
Deformability according to EN 12004:	S1 - deformable

Laying heavy insulation panels

Rapid overlaying on asphalt industrial floor

Repair work in a refrigerator unit

Keraquick

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

Rapid overlaying of steps

CONSUMPTION
1.2 kg/m² per mm of thickness.

Bonding floors and walls

mosaics and small size tiles:	2-3 kg/m² (trowel No. 4/5)
medium size tiles:	4-5 kg/m² (trowel No. 5/6)
large sizes, floors, exteriors:	> 6 kg/m² (trowel No. 6 or 10 or larger)

Bonding insulating material, etc.

foamed materials etc.:	0.5-0.8 kg/m²
gypsum wallboard, foamed concrete:	1.5 kg/m²
full-bonding on rough surfaces:	2.5 kg/m²

PACKAGING
Grey **Keraquick** available in 25 kg bags and 4x5 kg boxes.

White **Keraquick** available in 23 kg bags and 4x5 kg boxes.

STORAGE
12 months in a dry place in the original packaging. Longer storage could extend the setting time without altering the final performance.
The product complies with the conditions of Annex XVII to Regulation (EC) N° 1907/2006 (REACH), item 47.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION
Keraquick is irritant; contains cement, that in contact with sweat or other body fluids produces an irritant alkaline reaction. Use protective gloves and goggles. Avoid contact to 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

GEV-EMICODE EC 1 PLUS very low emission

This symbol is used to identify Mapei products which give off a low level of volatile organic compounds (VOC) as certified by GEV (Gemeinschaft 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.
GREEN INNOVATION

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MAPEI®
BUILDING THE FUTURE