Image: A constraint of the setting commentitious adhesine with no vertical slip, for

#### CLASSIFICATION IN COMPLIANCE WITH EN 12004

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

Keraquick is CE marked, as declared in ITT certificate N° 25040475/Gi (TUM) issued by the Technische Universität München laboratory (Germany).

# CLASSIFICATION IN COMPLIANCE WITH EN 12002

Keraquick is a deformable adhesive classified as S1.

#### WHERE TO USE

Bonding to cement screeds, cement-based renders, cured concrete, existing floors in interiors and exteriors:

- ceramic and mosaic tiles and natural stone that are not sensitive to moisture;
- insulating materials such as expanded polystyrene and polyurethane, gypsum board, glass and rock wool, Eraclit<sup>®</sup>, foamed-concrete blocks, sounddeadening panels etc.

#### Some application examples

- Renovation in heavy trafficked areas and when surfaces need to be in service rapidly, such as public premises, motorway bars, pedestrian passages, supermarkets, showrooms;
- rapid installation or renovation in swimming pools, industrial plants (breweries, wine-cellars, dairies etc.), refrigeration units;
- rapid repair work in bathrooms, showers, kitchens, 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).

# **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 bond strength only 2-3 hours after installation.

For this reason floors and walls can therefore be used very quickly. Floors are set to light traffic in 24 hours and can be grouted after only 2 hours.

By mixing **Keraquick** with **Latex Plus** the deformability improves, to meet the requirements of class S2 (highly deformable adhesive) according to EN 12002.

# RECOMMENDATIONS

Use **Keraquick** mixed with **Latex Plus** in the following cases:

- on deformable substrates (gypsum boards, asbestos cement, etc);
- for exterior installations of large-size tiles;
- for fixing to timber bases.

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, asbestos cement, etc.);
- for bonding insulating panels of expanded polystyrene with protective film.

#### APPLICATION PROCEDURE Preparing the substrates

Substrates must be flat, mechanically strong, free of loose parts, grease, oil, paint, wax, etc. and sufficiently dry. Moist substrates could reduce **Keraquick**'s setting time.

Cementitious substrates must not continue to shrink once the tiles have been installed, therefore renders





Setting white Carrara with Keraquick white



An example of an installation with Keraquick in an Auchan supermarket -Sosnowiec (Pola<u>nd)</u>



An example of an installation of marble walls with Keraquick -Feuchtwangen casinò bathroom (Germ<u>any)</u>

should be cured at least 2 weeks. Cementitious screeds must have an overall cure of at least 3÷4 weeks unless they have been made with the special MAPEI binders for screeds such as **Mapecem** or **Topcem** or a ready-mixed mortar such as **Topcem Pronto** or **Mapecem Pronto**.

Dampen surfaces that have become hot due to exposure to direct sunlight with water. Gypsum substrates and anhydrite screeds must be perfectly dry (maximum residual moisture 0.5%), sufficiently hard and free from laitance. They must be treated with **Primer G** or **Mapeprim SP**. Areas subject to extreme damp must be primed with **Primer S**.

#### Preparing the mix

A 20 kg bag of **Keraquick** grey should be mixed with about 4.8-5.2 litres of water, while a 20 kg bag of **Keraquick** white should be mixed with about 5.2-5.6 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.

#### **Applying the mix**

Apply **Keraquick** 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 floor 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, Jacuzzis, floors subject to heavy loads, floors to be polished in situ, dove-tailed tiles, tiles with high ribs or lugs, or large-format tiles, the adhesive should also be applied to the backs of the tiles (back-buttering).

This method is prescribed for sizes exceeding 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** Do not wet the tiles before installation; if, however, the backs are

An example of an installation of a marble floor -Feuchtwangen casinò hall (Germany) very dusty, they should be dipped in clean water. Allow to dry before fixing.

Keraquick's open time in normal temperature and humidity is about 15-20 minutes; unfavourable weather conditions (strong sun, drying wind, high temperature), or a highly absorbent substrate may shorten this open time, sometimes quite drastically, to just a few minutes.

Constantly check to see whether the adhesive has formed a surface skin. 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 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 sun 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 will be determined by the flatness of the surface and the weight of the panels.

In these cases, check the open time and bear in mind that a few spots of adhesive on heavy panels may require temporary shoring which should only be removed once the **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.

#### **LIGHT FOOT TRAFFIC**

Floors are able to take 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 should 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.



# TECHNICAL DATA (typical values) In compliance with:

- European EN 12004 as C2FT European EN 12002 as S1
- DIN 18156 Part 2 American ANSI A 118.4 1999 Canadian 71 GP 30 M type 2

PRODUCT IDENTITY		
Туре:	powder	
Colour:	dark grey or white	
Bulk density (kg/m³):	1400 (grey); 1200 (white)	
Dry solids content (%):	100	
Storage:	12 months in a cool dry place in the original packing	
Hazard classification according to 99/45/CE:	none Before using refer to the "Safety instructions for the preparation and application" paragraph and the information on the packing and Safety Data Sheet	
Customs class:	3824 50 90	
APPLICATION DATA at +23°C - 50% R.H.		
Mixing ratio:		Keraquick White 100 parts of powder with 26-28 parts by weight of water
Consistency of mix:	creamy paste	creamy paste
Colour:	grey	white
Density of mix (kg/m³):	1500	
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 PERFORMANCES		
Tensile adhesion strength according to EN 1348 (N/mm <sup>2</sup> ): - initial (after 28 days): - after heat ageing: - after water immersion: - after freeze-thaw cycles:	2.0 1.8 1.0 1.0	2.0 1.8 1.0 1.0
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	



Laying heavy insulation panels



Rapid overlaying on asphalt industrial floor



Repair work in a refrigerator unit



# All relevant references of the product are available upon request



Rapid overlaying of steps



JACAN

CONSUMPTION Bonding floors and walls Mosaics and small size tiles: 2 kg/m<sup>2</sup>

(trowel no. 4); normal size tiles: large sizes, floors, exteriors:

2.5-3 kg/m<sup>2</sup> (trowel no. 5); 4 kg/m<sup>2</sup> (trowel no. 6 or 10 or larger).

Bonding insulating material, etc. Foamed materials etc.: 0.5-0.8 kg/m<sup>2</sup>; gypsum wallboard, foamed concrete:

1.5 kg/m<sup>2</sup>;

full-bonding on rough surfaces:

2.5 kg/m<sup>2</sup>;

## PACKAGING

Keraquick Grey is supplied in 20 kg, 10 kg paper bags and in 5 kg Alupack bags and 4x5 kg boxes.

Keraquick White is supplied in 20 kg, 10 kg paper bags and in 5 kg Alupack bags and 4x5 kg boxes.

#### STORAGE

12 months in a dry place in the original packing. Longer storage could extend the setting time

without altering the final performances.

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

#### SAFETY INSTRUCTIONS FOR THE PREPARATION AND APPLICATION

Contains cement, that in contact with sweat or other body fluids produces an irritant alkaline reaction. Use protective gloves and goggles. For further information consult 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.



# **BUILDING THE FUTURE MAPEI GROUP CERTIFIED MANAGEMENT SYSTEMS**

(Quality, Environment and Safety)



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