KERASTILE G2

High-performance cementicious adhesive with no vertical slip and extended open time for ceramic tiles (thickness of adhesive up to 15 mm)





CLASSIFICATION IN COMPLIANCE WITH EN 12004

Kerastile G2 is an improved (2) slip resistant (T) cementitious adhesive (C) with extended open time (E) classified as C2TE.
*Conformity of **Kerastile G2** is declared in ITT certificate no. 25100059/AG (TUM) issued by the Technische Universität München (Germany).*

WHERE TO USE

Interior and exterior bonding of ceramic tiles and mosaics of all types on floors, walls and ceilings.
Also, suitable for spot bonding of insulating materials, such as expanded polystyrene, rock and glass wool, Eraclit® (wood-cement panels), sound-deadening panels, etc.

Some application examples

· Bonding of ceramic tiles and mosaics on the following substrates:
  · conventional renders or ready-to-use cementitious mortar walls;
  · interior aerated concrete block walls;
  · gypsum or anhydrite after having applied Primer G;
  · gypsum board;
  · underfloor heating installations;
  · cementitious screeds, as long as they are sufficiently cured and dry;
  · interior painted walls, as long as the paint is firmly anchored.
· Tiles on existing tile flooring with tiles up to 900 cm^2;
· Bonding of small sized tiles in swimming pools and basins.

TECHNICAL CHARACTERISTICS

Kerastile G2 is a white powder composed of cement, fine graded aggregates, synthetic resins and special admixtures, according to a formula developed in the MAPEI Research and Development Laboratories.
When mixed with water is obtained a mortar with the following properties:
· easily workable;
· highly thixotropic: Kerastile G2 can be applied on a vertical surface without sagging or slipping, even when heavy tiles are used;
· perfect adherence to all materials normally used in construction;
· hardens without significant shrinkage;
· extended open time.

RECOMMENDATIONS

Do not use **Kerastile G2** on:

· precast or poured concrete walls;
· walls and floors subjected to strong movements or vibrations (wood, fibre-cement, etc.);
· metal surfaces.

APPLICATION PROCEDURE

Preparing the substrate

All substrates that receive **Kerastile G2** must be flat, with good mechanical strength, free of loose particles, grease, oils, paints, wax, etc.
Cementitious substrates must not be subjected to shrinkage after the installation of ceramic tiles. Therefore, during spring and summer, renders must cure for at least 1 week per cm of thickness and cementitious screeds must cure for at least 28 days, unless special MAPEI binders for screeds are used, such as **Mapecem, Mapecem Pronto, Topcem** or **Topcem Pronto**.
Dampen surfaces to cool down, if they have been heated by exposure to direct sunlight.
Gypsum substrates and anhydrite screeds must be perfectly dry (max. residual moisture 0.5%), sufficiently hardened and free from dust and, in this case, it is absolutely essential to be treated with **Primer G** or **Mapeprim SP**. In areas subjected to high humidity **Primer S** must be used.

Preparing the mix

Mix **Kerastile G2** with clean water until a smooth, lump-free paste is obtained. Leave the mix to rest for approximately 5 minutes and re-stir. Use 28-30 parts of water for every 100 parts of **Kerastile G2**, which is equal to 7-7.5 liters of water for every 25 kg bag of **Kerastile G2**. Mixing in this way, **Kerastile G2** has a pot life of approximately 4 hours.

Applying the mix

Kerastile G2 is applied on the substrate using a notched trowel. Choose a trowel in order to cover with adhesive the 65-70% of the back of the tiles for interior walls and light traffic floors and the 100% of the back of the tiles for exterior substrates and heavy-traffic floors.
To obtain good adhesion, apply first a thin layer of **Kerastile G2** on the substrate using the straight edge of the trowel. Immediately after, apply the necessary thickness of **Kerastile G2** using a suitable notched trowel, depending on the type and size of the tiles (see “Consumption”).
For external ceramic tiles of floors and walls and application in swimming pools and basins to be filled with water, spread the adhesive on the back of the tile (back-buttering) in order to ensure complete contact.

Installing the tiles

There is no need to wet the tiles before installing them. Only tiles with very dusty backs is recommended to be dipped in clean water. Tiles should be installed with a firm pressure to ensure good contact with the adhesive.
In normal temperature and humidity conditions, the open time of **Kerastile G2** is approximately 30 minutes. Unfavorable weather conditions (strong sun, drying wind, high temperatures) or highly absorbent substrates can reduce the open time even to just a few minutes.
Therefore, it is necessary to carry out careful checks in order to ensure that a skin is not formed on the surface of the spread adhesive, which should remain fresh. If not, remove the adhesive and apply again fresh material with a notched trowel. It is not recommended to wet the adhesive with water once a skin has been formed because, instead of dissolving the skin, the water will form an anti-adhesive film.
If necessary, tiles should be adjusted within 30 minutes after installation. Tiles installed with **Kerastile G2** must not be washed or exposed to rain for at least 24 hours and must be protected from frost and strong sun for at least 5-7 days after installation.

GROUTING AND SEALING

Wall joints can be grouted after 4-6 hours and floor joints can be grouted after 24 hours with the relevant MAPEI cementitious or epoxy grouts, available in different colours.
Expansion joints must be sealed with the relevant MAPEI sealants.

Spot-bonding insulating materials

For spot-bonding of sound-deadening or insulating materials, apply **Kerastile G2** with a trowel or a float.

SET TO LIGHT FOOR TRAFFIC

Floors are set to light foot traffic after approximately 24 hours.

READY FOR USE

Surfaces are ready for use after approximately 14 days.
Swimming pools and basins can be filled with water after 21 days.

CLEANING

Tools and containers must be cleaned with plenty of water while **Kerastile G2** is still fresh. Surfaces must be cleaned with a damp cloth, before the adhesive dries.

CONSUMPTION

Bonding ceramic tiles

· Mosaics and small sizes in general (trowel n. 4): 3 kg/m².
· Normal sizes (trowel n. 5): 4 kg/m².

Large sizes, exterior floors (trowel n. 6): 5 kg/m².

Spot-bonding insulating material

· Foam, etc.: approximately 0.5-0.8 kg/m².
· Gypsum board panels, foamed concrete: approximately 1.5 kg/m².

PACKAGING

Kerastile G2 is available in 25 kg bag.

STORAGE

Kerastile G2 can be stored 12 months in normal environment in its original packaging.
The product complies with the conditions of Annex XVII to Regulation (EC) N° 1907/2006 (REACH), item 47.

TECHNICAL DATA (typical values) In compliance with: • – European EN 12004 as C2TE – ISO 13007-1 as C2TE	
PRODUCT IDENTITY	
Consistency:	powder
Colour:	white
Bulk density (kg/m³):	1,300
Dry solids content (%):	100
EMICODE:	EC1 Plus - very low emission
APPLICATION DATA (at +23°C and 50% R.H.)	
Mixing ratio:	100 parts **Kerastile G2** with 26-28 parts water by weight
Consistency of mix:	creamy paste
Density of the mix (kg/m³):	1,500
pH of mix:	13
Pot life of mix:	over 4 hours
Application temperature:	from +5°C to +35°C
Open time:	> 30 minutes

Adjustment time:	45 minutes
Ready for grouting on walls:	after 4-6 hours depending on absorbency
Ready for grouting on floors:	after 24 hours
Set to light foot traffic:	24 hours
Ready for use:	14 days
FINAL PERFORMANCE	
Bond strength (N/mm^2): **– initial bonding after 28 days:** **– bonding after heat exposure:** **– bonding after immersion in water:** **– bonding after freeze/thaw cycles:**	 >1.5 >1.4 >1.1 >1.5
Resistance to alkalis:	excellent
Resistance to oils:	excellent (poor for vegetable oils)
Resistance to solvents:	excellent
Temperature when in use:	from –30°C to +90°C

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Kerastile G2 is irritant; contains cement that when in contact with sweat or other body fluids produces an irritant alkaline reaction and allergic reactions to those predisposed. Use protective gloves and goggles. It can cause eyes damages.
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

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at www.mapei.com. ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.

Any reproduction of texts, photos and illustrations published here is prohibited and subject to prosecution