

KERAQUICK EASY S1

Rapid setting, high performance, S1 flexible cementitious adhesive for the installation of ceramic, porcelain and stone tiles and mosaics to floors



CLASSIFICATION IN COMPLIANCE WITH UKCA & EN 12004

Keraquick Easy S1 is a Cementitious (C) Improved (2), Fast Setting (F) Deformable (S1) tile adhesive classified as C2F S1.

WHERE TO USE

For interior and exterior installations of ceramic, porcelain and moisture stable natural stone tiles and mosaics to cement-based and suitably prepared calcium sulphate based screeds, concrete, plywood overlaid floors, existing unglazed ceramic floor tiles, tilebacker boards.

Some application examples

- Renovation in heavily trafficked areas and where surfaces need to be quickly back in service, such as public buildings, motorway services, pedestrian walkways, supermarkets, showrooms, airports etc.
- Rapid installation or renovation in swimming pools, industrial plants (breweries, wine cellars, dairies etc.), refrigeration units.
- Rapid installation in bathrooms, showers, kitchens, conservatories and on balconies and terraces.
- The installation of tiled finishes to underfloor and undertile heating systems.
- The installation of non-absorbent floor tiles over existing floors, where a standard setting adhesive would be too slow.
- The installation of large format tiles due to the products excellent wetting out capabilities.
- The installation of ceramic and porcelain tiles directly over undertile heating cables.
- The installation of tiles externally in autumn/winter where night time temperatures drop below +5°C. See note below.

Note:

When fixing tiles at lower temperatures the pot life and setting time may be extended beyond 2 hours. In autumn / winter temperatures only fix tiles when the substrate and ambient temperature is above +5°C. When fixing externally ensure that the adhesive is applied during the warmest part of the day and that it will have cured sufficiently before temperatures drop below +5°C. Protect from frost by covering with appropriate materials.

TECHNICAL CHARACTERISTICS

Keraquick Easy S1 is a grey and white powder composed of a blend of special cements, selectively graded aggregates, synthetic resins and accelerators, which develop high bond strength 2-3 hours after mixing. These properties allow floor tiles using **Keraquick Easy S1** to be grouted after only 2 hours. Floors can be subjected to light foot traffic after 2 hours and full service conditions after 24 hours. Where floors are to be subjected to heavy duty use, such as cherry pickers, the floor tiling should have been allowed to cure for a minimum of 7 days.

RECOMMENDATIONS

Do not use **Keraquick Easy S1** in the following cases:

- On metals, rubber, cork, PVC sheet and linoleum.
- For bonding expanded polystyrene insulation panels with a protective film / vapour barrier.
- For bonding glass or agglomerated tiles and mosaics.

APPLICATION PROCEDURE

Preparation of the substrate

Substrates must be dry, flat, mechanically strong, sound, free from loose areas, grease, oil, paint, wax, old flooring adhesive and bitumen residues and any other contamination (e.g. plaster droppings), which may affect the adhesion. Damp substrates may lengthen **Keraquick Easy S1**'s setting time. Cementitious substrates must be cured and any shrinkage process must be at an end before tiles are installed, concrete should be at least 6 weeks old, cement based screeds at least 3 weeks unless they have been produced using the special MAPEI binders **Mapecem** or **Topcem** or with a preblended screed mix such as **Mapecem Pronto** or **Topcem Pronto**. The substrate surface should ideally be open textured. Power floated concrete should be mechanically abraded (scabbled or shot-blasted) to open up the surface and to remove any curing agents. Heated screeds must be commissioned in accordance with recognised technical regulations and the guidelines given in BS 5385 parts 3, 4 and 5. The commissioning process must be carried out before the installation of tiles or stone finishes. Calcium sulphate screeds must be dry to a moisture content of 0.5% w/w when measured using the carbide method. All surface laitance must be removed by mechanical abrasion and all dust thoroughly removed by vacuum. Prime the surface with **Eco Prim T Plus** (diluted 1:2 with water) or alternatively **Primer G** (neat). Plywood floors must be a minimum of 15 mm thick exterior grade plywood, of class 3 in accordance with EN 314 and EN 636 and screw fixed at maximum 300 mm centres.

Mixing

Pour 4.2- 4.6 litres of clean water into a clean mixing bucket. Slowly add the 20kg bag of **Keraquick Easy S1** powder and mechanically stir until a homogenous, lump-free paste is achieved. Allow the mix to stand for 2 minutes before briefly stirring again. Use the mix within 30 minutes of preparation.

Applying the product

Apply the prepared **Keraquick Easy S1** to the substrate with a notched trowel to a maximum of 10 mm thick. To achieve good adhesion to the substrate, first apply a skim coat of adhesive over the substrate using the flat edge of the trowel followed by combing through with the notched edge of the trowel to the required thickness, ensuring that 100% coverage, as far as possible is achieved. Ensure that a trowel with a notch size and profile appropriate to the size of tile is used.

For demanding applications such as exterior tiling subject to freezing, swimming pools or water feature installations, heavy duty areas, floor tiling to be ground in situ, when installing tiles with deep recesses or lugs on the rear and for fixing large format tiles the adhesive should also be applied to the rear of the tile (back buttering). On highly absorbent internal it is recommended to prime with e.g. **Primer G** and **Eco Prim T Plus** before commencing tiling.

Installing the tiles

Do not wet the tiles before installation; if, however, the backs are very dusty, they should be dipped in clean water. Allow to dry before fixing. **Keraquick Easy S1**'s open time in normal temperature and humidity is approximately 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 removed and fresh material applied. 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 Easy S1** 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.

GROUTING AND MOVEMENT JOINTS

Joints between the tiles can be grouted after a minimum of 2 hours with a suitable MAPEI cementitious or epoxy resin grout, available in a wide range of colours.

Movement joints must be sealed with an appropriate elastic sealant such as **Mapesil AC** or **Mapesil LM**.

SET TO LIGHT FOOT TRAFFIC

Floors are able to take light foot traffic after 2-3 hours. Lower temperatures may extend the setting time.

READY FOR USE

Tiled finishes are ready for use after a minimum of 24 hours. Where floors are to be subjected to heavy loads such as cherry pickers, then the adhesive should be allowed to cure for a minimum of 7 days.

Swimming pools, basins and water features can be filled after a minimum of 3 days.

CLEANING

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

CONSUMPTION

Dependent on the size of the tile and the flatness of the substrate, between 2-5kg m².

PACKAGING

Keraquick Easy S1 is available in 20 kg paper bags.

STORAGE

12 months when stored off the ground in the original unopened packaging protected from high humidity.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instructions for the safe use of our products can be found on the latest version of the Safety Data Sheet, available from our website www.mapei.co.uk.

PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA

TECHNICAL DATA

In compliance with:	– EN 12004 as C2F S1 – UKCA 12004
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PRODUCT IDENTITY

Type:	powder
Colour:	grey and white
Bulk density (kg/m ³):	1400
Dry solids content (%):	100
EMICODE:	EC1 Plus - very low emission

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

Mixing ratio:	100 parts of powder with 22-26 parts by weight of water
Consistency of mix:	creamy paste
Colour:	grey and white
Density of mix (kg/m ³):	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 water features and swimming pools)

FINAL PERFORMANCES

Tensile adhesion strength according to EN 1348 (N/mm.):	
– initial (after 28 days):	2.3
– after heat ageing:	3.1
– after water immersion:	1.0
– after freeze-thaw cycles:	1.1
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

N.B.

Whilst we try to ensure that any advice, recommendations, or information given in our literature is accurate and correct, we have no control over the circumstances in which our product is used. It is therefore important that the end users satisfy themselves that the product and conditions are suitable for the envisaged application. No warranty can be given, or responsibility accepted other than, that the product supplied by us will meet our written specification. End users should ensure that our latest product data and safety information sheets have been consulted prior to use.

Please refer to the current version of the Technical Data Sheet, available from our website

www.mapei.co.uk


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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 force at the time of the MAPEI product installation. The most up-to-date TDS can be downloaded from our website www.mapei.co.uk.

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