

# RAPID SET

Fast setting cement based adhesive for the installation of ceramic, porcelain and natural stone tiles.



## CLASSIFICATION IN COMPLIANCE WITH EN 12004:2007

**Rapid Set** is a Cement-based (C), unmodified (I), Fast-setting (F) adhesive

Conformity of **Rapid Set** is declared in **TT certificate no. 25050213/Gi** issued by the **TUM München** laboratory (Germany).

## WHERE TO USE

For the installation of most types of ceramic tiles in interior and sheltered exterior locations. Suitable for fixing porcelain tiles and natural stone in interior locations to solid stable substrates such as concrete or sand:cement screed in small to medium sized installations. Maximum tile size 300 x 300 mm.

### Some application examples

- For the rapid fixing of tiles or repairing areas where only limited down time is available.
- For use in kitchens, bathrooms, sheltered balconies.
- Light to medium duty applications such as domestic dwellings, small retail outlets and small hotels.
- Suitable for fixing to concrete, sand:cement screed, render, gypsum plaster.
- Suitable for fixing ceramic tiles in domestic showers but not commercial wet rooms.

## RECOMMENDATIONS

- Not suitable for tiles larger than 300 x 300 mm.
- Ensure that natural stone is not sensitive to staining or curling.
- Not suitable for timber floors; use e.g. **Mapeker Rapid Flex** or **Keraquick**.
- Not suitable for areas with underfloor or undertile heating.
- Prime absorbent substrates with **Primer G**.
- Not suitable for fixing natural stone or porcelain tiles in wet duty areas such as showers or in external locations.
- When fixing externally ensure that the area will be sheltered in service and not subjected to heavy rainfall.
- Maximum adhesive bed thickness 5mm.

## TECHNICAL CHARACTERISTICS

**Rapid Set** is a grey cement-based powder composed of a mixture of special binders, synthetic resins, selected aggregate grades and accelerators that develop good bond strength after only 3 hours thus permitting light foot traffic for grouting purposes and limited access. Floors are ready for their intended service conditions after minimum 24 hours. When fully cured **Rapid Set** is water resistant and frost proof.

## APPLICATION PROCEDURE

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### Preparation of the substrate

**Rapid Set** must be applied to stable, dry substrates that are free from oils, grease, wax, laitance, curing agents, dust, loose areas, cracks and any other contamination that may affect adhesion. Cement-based screeds must be a minimum of 3 weeks old; concrete a minimum of 6 weeks old.

Gypsum plaster must be a minimum of 4 weeks old and primed with Primer G. Sand:cement render must be a minimum of 2 weeks old.

When using to fix tiles to vertical surfaces it may be necessary to tile from a batten.

### Mixing

**Rapid Set** should be mixed with clean water and stirred continuously until it becomes a smooth paste, free of lumps. It is preferable to use a mechanical stirrer. The mix must be used within 15-20 minutes, after which it begins to set. A 20 kg bag of **Rapid Set** should be mixed with 3.8-4.2 litres of water. Allow the mix to stand for a few minutes, then mix again briefly before applying.

### Applying the product

**Rapid Set** is applied to the substrate with a notched trowel to a maximum of 5 mm thick. When selecting the trowel, choose one that transfers the adhesive to at least 65-70% of the back of the tiles for interior walls in dry areas and 100% coverage for floors, exteriors and interior walls in wet areas.

For very absorbent substrates, or during hot weather, the substrate should be dampened to extend the open time of the adhesive. Alternatively prime with **Primer G**.

Do not wet the tiles before fixing; if, however, the backs are very dusty, they should be wiped over with a damp sponge.

**Rapid Set**'s open time in normal temperature and humidity is approximately 10 minutes; unfavourable weather conditions (strong sun, drying wind, high temperatures), or a highly absorbent substrate may shorten this open time, sometimes quite drastically, to just a few minutes. For this reason, 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 removed and fresh applied. Do not add water when adhesive has started to set, instead of dissolving the skin, a separating layer will be formed. Adjustment of the tiles, if necessary should be carried out within 5-10 minutes of laying.

Tiling laid with **Rapid Set** must not be subjected to light rain for at least 3 hours, and must be protected from frost and strong sun for at least 24 hours.

## GROUTING

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Tile joints can be grouted 2-3 hours after application, with MAPEI products (**Ultracolor Plus**, **Keracolor**). If the joints need to have good chemical resistance, use **Kerapoxy** 2-component acid-resistant epoxy grout. Expansion joints to be filled with **Mapesil AC** or **Mapesil LM** or **Mapeflex PU20**.

## SET TO LIGHT FOOT TRAFFIC

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Tiled finishes are ready for light foot traffic after a minimum of 3 hours.

## READY TO USE

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Floors are ready for their intended service conditions after minimum of 24 hours.

## CLEANING

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Tools and hands should be cleaned with plenty of clean water, while tiled surfaces should be cleaned with a damp cloth; water should be used only in moderate quantities, and after a few hours.

## CONSUMPTION

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Ceramic Tiling and small size tiles (trowel No. 4): 2 kg/m<sup>2</sup>

Large sizes, floors, exteriors (trowel No. 6 or No. 10 +): 4 kg/m<sup>2</sup>

## PACKAGING

Rapid Set is supplied in 20 kg paper bags.

## STORAGE

Rapid Set should be stored in a dry place, where it will have a maximum shelf life of 12 months.

## 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](http://www.mapei.co.uk).

PRODUCT FOR PROFESSIONAL USE.

<b>TECHNICAL DATA (typical values)</b> In compliance with: – European EN 12004 as C1F	
<b>PRODUCT IDENTITY</b>	
Consistency:	powder
Colour:	dark grey
Bulk density (kg/m <sup>3</sup> ):	1,300
Dry solids content (%):	100
<b>APPLICATION DATA (at +23°C - 50% R.H.)</b>	
Mixing ratio:	100 parts of powder with 19-21%
Consistency of mix:	creamy paste
Density of the mix (kg/m <sup>3</sup> ):	1,600
pH of mix:	12
Pot life:	20 minutes
Application temperature range:	from +5°C to +30°C
Open time (according to EN 1346):	10-15 minutes
Grouting joints:	2-3 hours
Set to light foot traffic:	2-3 hours
Ready for use:	24 hours
<b>FINAL PERFORMANCE</b>	

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 cycling:	1.3 0.8 1.1 1.2
Resistance to acids:	poor
Resistance to alkalis:	excellent
Resistance to oils:	excellent
Resistance to solvents:	excellent
Temperature when in use:	from -30°C to +90°C

## 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](http://www.mapei.co.uk)**

## 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 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](http://www.mapei.co.uk).*

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76-02-2022 (UK)

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