

Mapeker Rapid-Set



Cement-based rapid-setting adhesive for interior and exterior floor and wall installations of ceramic tiles and natural stone

CLASSIFICATION IN COMPLIANCE WITH EN 12004

Mapeker Rapid-Set is an improved (2), fast setting (F) cementitious (C) adhesive classified as C2F.

WHERE TO USE

Interior and exterior bonding of ceramic tiles, mosaics and natural stone materials that are not sensitive to moisture.

Spot bonding of insulating materials such as expanded polystyrene and polyurethane, gypsum board, glass and rock wool, wood-cement panels, formed-concrete blocks, sound-deadening panels etc.

Some application examples

- Rapid laying or renovation in area subjected to pedestrian traffic.
- Rapid repair work in bathrooms, showers, kitchens and terraces.
- Setting marble and other natural stone not sensitive to moisture.

TECHNICAL CHARACTERISTICS

Mapeker Rapid-Set is a grey powder composed of a mixture of special cements, selectively-graded aggregates, synthetic resins and setting accelerators that develop high bonding strength only 3 hours after setting.

For this reason floor and wall installations can be

completed very quickly. Floors are ready for traffic in 24 hours and can be walked on after only 3 hours.

Mapeker Rapid-Set when hardened is frost-proof and water resistant.

RECOMMENDATIONS

- On walls or floors subject to flexing or vibration (wooden or asbestos boards, gypsum boards, cement boards etc.) use flexible adhesive, **Keraquick** mixed with **Latex Plus**.
- On anhydrite screeds primed with **Mapeprim SP** or **Primer S**.
- On gypsum board use flexible adhesives (for example **Mapegrip D2**).
- On gypsum walls or gypsum based mortars, apply a coat of **Primer G** beforehand.
- On metal surfaces use **Keralastic**.
- For bonding expanded polystyrene insulating panels with protective film use **Mapegrip D2**.

APPLICATION PROCEDURE

Preparing the substrate

Mapeker Rapid-Set can be applied to all stable substrates that are free of oils, grease, waxes and that are sound and free of loose plaster, laitance and crazing. Damp cement screeds can noticeably prolong the setting time of **Mapeker Rapid-Set**.

Gypsum plasters must be perfectly dry, sufficiently hard and free of dust.

It is absolutely essential that they are treated with **Primer G** before laying with **Mapeker Rapid-Set**. In areas subject to extreme damp (showers etc.) **Mapegum WPS** should be used to waterproof the substrate.

Preparing the mix

Mapeker 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 grey **Mapeker Rapid-Set** should be mixed with about 4.6-5 litres of water, and a 10-kg bag with about 2.3-2.5 litres of water. Allow the mix to stand for a few minutes, then mix again briefly before applying.

Applying the mix

Mapeker Rapid-Set is applied to the substrate with a notched trowel to a max of 5 mm thick.

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 100% coverage for floor areas, and exterior wet areas:

- 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, floors subject to loads, large-size tiles, **Mapeker Rapid-Set** should also be applied to the backs of the tiles (back-buttering). Large format includes tiles over 30x30 cm;
- for very absorbent substrates or during hot weather, the substrate should be dampened to extend the open time of the adhesive.

Laying the tiles

It is not necessary to wet the tiles before setting; if, however, the backs are very dusty, they should be wiped over with a wet sponge.

Mapeker Rapid-Set's open time in normal temperature and humidity is about 10 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.

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 re-trowelled. Do not wet

the adhesive when it has formed a skin because, a non-adhesive film will be formed. Adjustment of the tiles, if necessary, should be carried out within 5-10 minutes after laying the tiles.

Tiling laid with **Mapeker Rapid-Set** 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 laying.

Grouting

Tile joints can be grouted 2-3 hours after application with MAPEI products (**Keracolor** and **Ultracolor Plus**).

If the joints need to have good chemical resistance, use **Kerapoxy**, a two-component acid-resistant epoxy grouting compound.

Expansion joints to be filled with **Mapesil AC**, **Mapesil LM** or **Mapeflex PU21**.

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, the open time must also 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 the **Mapeker Rapid-Set** has begun to set.

Cleaning

Tools and hands can be cleaned with 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

Ceramic-tiling mosaics and small size tiles (trowel no. 4): 2 kg/m²;

normal size tiles (trowel no. 5): 2.5-3 kg/m²;

large sizes, floors, exteriors (trowel no. 6 or 10 or larger): 4 kg/m²;

Spot-bonding 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

Mapeker Rapid-Set grey is supplied in 20 and 10 kg paper bags.

STORAGE

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

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

SAFETY INSTRUCTIONS FOR THE PREPARATION AND APPLICATION

Mapeker Rapid-Set contains cement which, when in contact with sweat or other bodily fluids, produces an alkaline reaction and

TECHNICAL DATA (typical values)

In compliance with:

- EN 12004 C2F
- European UEAtc directive
- DIN 18156 - Part 2
- American ANSI A 118.4 - 1992
- Canadian 71 GP 30 M type 2

PRODUCT IDENTITY

Type:	powder
Colour:	dark grey
Bulk density (kg/m³):	1400 (grey)
Dry solids content (%):	100
Storage life:	12 months in a cool dry place in the original packing
Hazard classification according to EC 99/45:	irritant. Before using refer to the "Safety instructions for the preparation and application" paragraph and the information on the packing and Safety Data Sheet
Inflammability:	no
Customs class:	3824 50 90

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

Mixing ratio:	Mapeker Rapid-Set Grey 100 parts of powder with 23-25 parts by weight of water
Consistency of mix:	very viscous paste
Density of the mix (kg/m³):	1500
pH of mix:	over 12
Setting time:	45 minutes
Application temperature range:	from +5°C to +35°C
Duration of mix:	20 minutes
Open time:	15 minutes
Adjustability time:	about 10 minutes
Ready for traffic on dry support:	3 hours
Cure time on dry support:	24 hours
Grouting on dry support:	2-3 hours

FINAL PERFORMANCES

Damp resistance:	excellent
Ageing resistance:	excellent
Resistance to solvents and oils:	excellent
Resistance to acids and alkalis:	poor
Resistance to temperature:	from -30°C to +90°C
Flexibility:	moderate
Bonding strength EN 1348 (N/mm²):	
- after 28 days +23°C - 50% R.H.:	1.5
- after heat ageing:	1.3
- after water immersion:	1.0
- after freeze-thaw cycles:	1.2

