



Megafix R

High-performance, deformable, fast setting cementitious adhesive with no vertical slip, for ceramic tiles and stone material



CLASSIFICATION ACCORDING TO EN 12004

Megafix R is an improved (2) fast setting (F) cementitious (C) adhesive and slip resistance (T) and deformable classified as C2FT S1.

Conformity of **Megafix R** is declared in ITT certificates no. 25070276/Gi (TUM), no. 25080059/Gi(TUM), and no. 25080063/Gi (TUM) issued by the technische universität München laboratory (Germany).

WHERE TO USE

Bonding cement screeds, cement-based renders, cured concrete, existing floors internally and externally. For the installation of:

- Ceramic and mosaic tiles of every type and stone materials that are not extremely sensitive to moisture;
- Insulating materials such as expanded polystyrene and polyurethane, gypsum board, glass and rock wool, Eraclit®, foamed-concrete blocks, sound-deadening panels etc.

Some application examples

- Repairs in heavily trafficked areas and when surfaces need to be put into service rapidly, such as public premises, motorway services, pedestrian passages, supermarkets, showrooms.
- Rapid installations or repairs in swimming pool, industrial plants (breweries, wine-cellars, dairies, etc.), refrigeration units.
- Rapid repair work in bathrooms, showers, kitchens,

balconies, terraces.

- Installing non-absorbent flooring over existing flooring, where the setting time of other cement-based adhesive would be too slow.
- Installing marble and other stone material, even light colored stone.
- Installing tiles onto heated screeds.

TECHNICAL CHARACTERISTICS

Megafix R is a grey powder composed of a blend of special cements, selectively-graded aggregates, synthetic resins and setting accelerators that develop high bonding strength after only 2-3 hours after installing. For the reason floors and walls can be used very quickly. Floors are ready for use in 24 hours and can be walked on after 2 hours.

By mixing **Megafix R** with **Latex Plus** the deformability improves, to meet the requirement of class C2F S2 (highly deformable, fast setting, improved cementitious adhesive) according to EN 12004.

RECOMMENDATIONS

Do not use **Megafix R** in the following cases:

- On metal, rubber, PVC and linoleum surfaces;
- On walls and floors subject to extreme flexing or vibration (Wood, fiber-cemented boards, etc.);
- For bonding insulating panels or expanded polystyrene with protective film.

APPLICATION PROCEDURE

Preparing the substrate

Substrates must be flat, mechanically strong, free from loose particles, grease, oil, paint, wax, etc. and sufficiently dry. Damp substrates could slow down **Megafix R**'s setting process.

Cementitious substrates must not be subject to shrinkage once the tiles have been installed, therefore in warm weather renders should be cured at least one week per centimeter of thickness. Cementitious screed must have an overall cure of at least 28 days unless they have been made with the special MAPEI binders for screeds such as **Mapcem, Mapcem Pronto, Topcem or Topcem Pronto** and **VR-Støp**.

Surfaces that are too hot due to exposure to direct sunlight should be cooled by dampening them with water.

Gypsum substrates and anhydrite screeds must be perfectly dry (max. residual moisture 0.5%), sufficiently hard and free of dust. They must be treated with **Primer G** or **Eco Primer T**, while areas subject to high humidity must be treated with **Primer S**.

In general, refer to the relative MAPEI technical documentation regarding substrate preparation before repairing cracks in substrates, consolidating rapid-drying screeds and leveling installation surfaces.

Preparing of the mix

A 20 kg bag of **Megafix R** should be mixed with approx. 4.8-5.2 liters of water. While stirring, pour **Megafix R** 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 before applying. The mixture must be used within 30 minutes of preparation.

Applying the mix

Megafix R is applied to the substrate with a notched trowel to a max of 10 mm thick. To achieve good adhesion, first apply a skim coat of **Megafix R** onto the substrate using the straight edge of the trowel, choose one that transfers the adhesive to the least 65 and 70% of the back of the tiles for the interior walls and floors and 100% coverage for heavy traffic areas and exteriors.

- For mosaics up to 5x5 cm, the MAPEI square notched trowel no. 4 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 subjects to freezing, installing in swimming pools and bath tubs, floors subject to heavy loads, floors to be polished in situ, dove-tailed tiles, tiles with deep ribs or lugs, or large-size tiles, the adhesive should also be applied to the back of the tiles (back-buttering).

This method is prescribed for sizes exceeding 900 cm² (30x30 cm). If the substrates are very absorbent and in high temperature, it is recommended to dampen the substrates in order to extend the adhesive's open time before applying **Megafix R**.

Laying the tiles

It is not necessary to wet the tiles before installation; If however, the backs are very dusty, they should be dipped in clean water. **Megafix R**'s open time in normal temperature is about 15-20 minutes; unfavorable weather conditions (Strong sunlight, drying winds, high temperatures) or a highly absorbent substrate may shorten this open time, sometimes drastically to just a few minutes.

For these reasons, 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. It's not recommended the wet the adhesive when it has formed a skin because, instead of dissolving the skin, a non-adhesive film will be formed. Tiling installed with **Megafix R** must not be subjected to washout or rain for at least 3 hours and must be protected from frost and strong sunlight 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 to be determined by the flatness of the surface and the weight of the panels. In these cases too, the open time must 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 **Megafix R** 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 colors. Expansion joints must be sealed with the special MAPEI sealants.

SET TO LIGHT FOOT TRAFFIC

Floors are set to light foot traffic after 2 - 3 hours.

READY FOR USE

Surfaces 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.

CONSUMPTION

1.2 kg/m² per mm of thickness

Bonding floors and walls

- mosaics and small-sized tiles (trowel No. 4/5): 2 - 3 kg/m²;
- medium-sized tiles (trowel No. 5/6): 4 - 5 kg/m²;
- large tiles and external floors (trowel No. 6, 10 or larger): > 6 kg/m².

Bonding insulating materials etc.

- foamed materials etc.: 0.5 - 0.8 kg/m²;
- gypsum wallboard, foamed concrete: 1.5 kg/m²;
- full bonding on rough surface: 2.5 kg/m².

PACKAGING

Megafix R is available in 20 kg bags.

STORAGE

12 months in a dry place in the original packaging. Prolonged storage could extend the setting time without altering the final performance.

The product complies with the conditions of Annex XVII to Regulation (EC) N° 1907/2006 (REACH), item 47.

SAFETY INSTRUCTIONS FOR PREPARATION AND INSTALLATION

Instructions for the safe use of our products can be found on the latest version of the SDS available from our website www.mapei.no

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.no

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.no

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.

**All relevant references
for the product are available
upon request and from
www.mapei.no**

TECHNICAL DATA (typical values)	
In compliance with the norms:	
	-European EN 12004 as C2TF -European EN 12002 as S1 -European EN 12002 as S2 (if mixed with Latex Plus) -ISO 13007-1 as C2FTS1
PRODUCT IDENTITY	
Consistency:	powder
Color:	dark grey
Bulk density (kg/m ³):	1.400
Dry solids content (%):	100
APPLICATION DATA (at +23°C and 50 % R.H.)	
Mixing ratio:	100 parts powder with 24-26 parts water
Consistency of mix:	pasty
Color:	grey
Density of mix (kg/m ³):	1.500
pH of mix:	approx. 11
Application temperature range:	from +5°C to +30°C
Pot life:	30 minutes
Open time (according to EN 1346):	15-20 minutes
Time to grouting:	after 2-3 hours
Set to light foot traffic:	after 2-3 hours
Ready for use:	after 24 hours (3 days for swimming pools and basins)
FINAL PERFORMANCES	
Bonding strength according to EN 1348 (N/mm ²):	
- initial (after 28 days):	2.0
- after heat ageing:	1.8
- after immersion in water:	1.0
- after freeze/thaw cycles:	1.0
Resistance to acids:	good
Resistance to alkalis:	excellent
Resistance to oil:	excellent
Resistance to solvents:	excellent
Service temperature range:	from -30°C to +90°C
Deformability according to EN 12004:	S1 - deformable