



# Ready-for-use water resistant paste adhesive for ceramic tiles

# CLASSIFICATION IN COMPLIANCE WITH BS EN 12004

**Mapegrip D2** is a water resistant improved (2) dispersion (D) adhesive, slip resistant (T) of class D2T.

#### WHERE TO USE

- Indoor bonding of ceramic tiles and ceramic mosaics of every type on walls and also on slightly deformable substrates.
- Spot-bonding insulating materials such as expanded polystyrene and polyurethane, rock and glass wool, wood-cement panels, foamed-concrete elements, sound deadening panels, etc.

#### Some application examples

- Absorbent tiles on cast concrete walls.
- Tiles on gypsum-plasters, sprayed gypsum and prefabricated panels.
- Tiles on gypsum-board walls.
- Absorbent tiles on painted walls.
- Absorbent tiles on old tiles.
- Large size tiles on walls.
- Installation of insulating panels on plaster.
- Installation of expanded polystyrene ceilings.

## **TECHNICAL CHARACTERISTICS**

**Mapegrip D2** is a water-dispersion adhesive based on acrylic resins, fine-graded mineral fillers and additives.

**Mapegrip D2** is ready-to-use: it is a viscous paste but easily trowellable on vertical surfaces. Once fixed, the tiles adhere immediately, thanks to the excellent initial grab.

**Mapegrip D2** sets by means of the evaporation of the water it contains, until it forms an extremely strong bond that resists all the normal vibrations to which building materials are subject.

**Mapegrip D2** is water resistant for application on walls in showers and bathrooms.

# **RECOMMENDATIONS**

- Use only for internal application.
- Dispersion adhesives are not suitable for applications in continuous immersion in water (swimming pools, fountains, etc.).
- Do not use on metal surfaces and to lay nonabsorbent tiles onto non-absorbent substrates.
- Do not use for the installation of natural stones, especially light coloured calcareous stone (e.g. Carrara marble).
- Contact MAPEI Technical Department for recommendations for fixing to other substrates.



TECHNICAL DATA (typical values) In compliance with:	– European EN 12004 as D2T
PRODUCT IDENTITY	
Consistence:	thick paste
Colour:	off white
Density (g/cm³):	1.60
Dry solid content (%):	78
Brookfield viscosity (mPa·s):	approx. 900000 ± 50000
COMPOSITION AND PROPERTIES OF THE MIXTURE (at +23°C-50 % R.H.)	
Application temperature range:	from +5°C to +35°C
Open time (according to EN 1346):	20-35 minutes
Adjustability time:	40 minutes
Grouting:	after 12 hours
Ready for use:	after 7-14 days depending on the absorption of the surface
FINAL PERFORMANCES	
Shear adhesion strength according to EN 1324 (N/mm²):  - initial shear adhesion strength:  - shear adhesion strength after heat ageing: exceeds minimum requirements of BS EN 12004 type D2T	>1 >1
Shear adhesion after water immersion:	> 0.5
Resistance to moisture:	good
Resistance to ageing:	excellent
Resistance to solvents and oils:	poor
Resistance to acids and alkalis:	poor
Temperature when in use:	from -30°C to +90°C
Deformability:	deformable

# **APPLICATION PROCEDURE Preparing the substrate**

Substrates must be consistent, free of oil, grease, wax, crazing, loose particles, laitance and also free from residual or permanent moisture.

Cementitious substrates must be dry (as an indication allow 1 week of drying time for each centimetre of thickness). If this is not observed, **Mapegrip D2** will not have a correct setting time. **Mapegrip D2** can be used on gypsum supports and similar materials without priming as long as the surface is dry and solid.

Mapegrip D2 is also ideal for bonding

absorbent ceramic tiles on painted or enamelled walls and walls painted with water or oil paint, as long as the paint is firmly anchored to the surface.

Application to walls whitewashed with lime is not advisable.

# Applying the adhesive

Apply **Mapegrip D2** on the substrate with a notched trowel.

To choose the right trowel, follow the general rule of selecting one that gives a coverage to at least 65% of the back of the tile:

- for mosaics up to 5x5 cm, MAPEI squarenotched trowel no. 4 is recommended (consumption about 1.5 kg/m²);
- for normal ceramic wall tiles, the MAPEI V-notched trowel no. 5 is recommended (consumption about 2.5 kg/m²);
- for very irregular surfaces and tiles with high ribs or lugs, the MAPEI V-notched trowel no. 6 is recommended (consumption about 4 kg/m²).

The open time of **Mapegrip D2** in normal temperature and humidity conditions, is approximately 20-35 minutes. The tiles must be laid within this time and particular attention must be paid as regards to the amount of adhesive used (1-2 m² in one go).

Should the adhesive form a skin, the surface must be re-trowelled.

Do not work at temperatures below +5°C.

## Installing the tiles

Press firmly using a twist and slide motion when positioning tiles to ensure transfer of the adhesive. Any adjustment of the tiles must be done within 40 minutes depending on temperature.

### **Bonding insulating materials**

Insulating panels, decorative ceiling tiles etc, can all be applied by either spot-bonding or full-bonding.

Apply enough **Mapegrip D2** with a notched trowel, an ordinary trowel or other suitable tool to ensure good bonding. The various materials have to be applied under a firm pressure to ensure good contact with **Mapegrip D2**.

### **Grouting and sealing**

Joints can be grouted after 12 hours with MAPEI cement or epoxy grout, available in different colours. Large formats or non-absorbent tiles will take longer.

Expansion joints must be sealed with the special MAPEI sealants.

#### Ready for use

Surfaces are ready for use after 7-14 days, depending on the absorption of the substrate and tiles.

# Cleaning

While it is still fresh, **Mapegrip D2** can be cleaned off the tiles with a damp sponge.

Tools, hands and materials coated with **Mapegrip D2** can be cleaned easily with water as long as the adhesive is fresh.

#### CONSUMPTION

Bonding ceramic mosaics (trowel no. 4): 1.5 kg/m²

15x15 cm tiles on normal rendering (trowel no. 5): 2.5 kg/m²

15x15 cm tiles on gypsum or very smooth surfaces (trowel no. 4):

## **Bonding insulating materials**

Spot-bonding foam materials: 0.5-0.8 kg/m<sup>2</sup>

1.8 kg/m<sup>2</sup>

Bonding foamed concrete

elements: 1.5 kg/m² Full bonding on rough surfaces: 2.5 kg/m²

#### **PACKAGING**

**Mapegrip D2** is supplied in 2.5, 7.5 and 15 kg plastic buckets.

#### **STORAGE**

**Mapegrip D2** can be stored 12 months in the original packaging.

# SAFETY INSTRUCTIONS FOR THE PREPARATION AND APPLICATION

Mapegrip D2 is not considered as dangerous according to the current regulation regarding the classification of mixtures. We recommend to wear protective gloves and goggles and to take the usual precautions for handling chemical products.

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

All relevant references for the product are available upon request and from www.mapei.com



