

# 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 non-absorbent tiles onto nonabsorbent 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.

# **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 square-notched 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 35-40 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 45-60 minutes.

### 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 24 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. When dry, it can be cleaned off with petrol, acetone or turpentine.

#### **CONSUMPTION**

Bonding ceramic mosaics:

1.5 kg/m<sup>2</sup> (trowel no. 4)

TECHNICAL DATA (typical values) In compliance with:	- European EN 12004 as D2T
PRODUCT IDENTITY	
Consistence:	thick paste
Colour:	off white
Density (g/cm³):	1.8
Dry solid content (%):	84
Brookfield viscosity (mPa·s):	approx. 8000000 ± 50
Storage:	24 months in original sealed container. Avoid prolonged storage in frost
Hazard classification according to EC 99/45:	none. Before using refer to the "Safety instructions for the preparation and application" paragraph and the information on the packing and Safety Data Sheet
Customs class:	3506 91 00
COMPOSITION AND PROPERTIES OF THE MIXTUR	E 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:	50 minutes
Grouting:	after 24 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	2.7± 0.3 2.8
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

# Mapegrip D2



15x15 cm tiles on

normal rendering: 2.5 kg/m<sup>2</sup>

(trowel no. 5)

15x15 cm tiles on gypsum or very

smooth surfaces: 1.8 kg/m<sup>2</sup>

(trowel no. 4)

#### **Bonding insulating materials**

Spot-bonding foam

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

Bonding foamed

concrete elements: 1.5 kg/m<sup>2</sup>

Full bonding on

rough surfaces: 2.5 kg/m<sup>2</sup>

#### **PACKAGING**

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

#### **STORAGE**

Mapegrip D2 can be stored 24 months in the original packaging.

#### **SAFETY INSTRUCTIONS** FOR THE PREPARATION AND APPLICATION

Mapegrip D2 is not considered as hazardous according to ruling norms on the classification of these mixtures. It is however recommended to take the usual necessary precautions for handling chemical products. The Safety Data Sheet is available upon request for professional users.

FOR PROFESSIONALS.

#### WARNING

While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product, must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.

All relevant references of the product are available upon request



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