

Mapegrout Patch 218

**General purpose,
shrinkage-controlled,
fibre-reinforced,
patch repair mortar**

WHERE TO USE

Mortar for crack-resistant patching and resurfacing of concrete substrates including overhead surfaces in repair, fixing and general construction works.

Some application examples

- Repair of concrete surfaces damaged by rusting reinforcement bars or by impact loads.
- Securing foundation and anchor bolts, pipe-clips, sanitary ware, hinges.
- Repair of concrete conduits, drains, tanks, etc.
- Filling concrete cavities in electrical, piping and air-conditioning works.
- Repair of surface irregularities including exposed aggregates, joints between new and old concrete, tie-rod holes in formwork concrete, protruding steel, etc
- Reprofilling damaged corners of pre-cast panels.

TECHNICAL CHARACTERISTICS

Mapegrout Patch 218 is composed of cement, graded aggregates, special additives and synthetic fibres in a formula developed in the MAPEI research laboratories.

When mixed with water to the recommended ratio **Mapegrout Patch 218** forms an easy-to-apply, thixotropic mortar that can be applied in thicknesses up to 30 mm on overhead and vertical surfaces without formwork support.

When fully cured, **Mapegrout Patch 218** has:

- high flexural and compressive strengths;

- modulus of elasticity, thermal expansion coefficient and permeability coefficient similar to that of high quality concrete;
- excellent adhesion to prepared concrete surfaces.

RECOMMENDATIONS

- Do not use **Mapegrout Patch 218** to repair surfaces subject to high abrasion. Use **Mapegrout Thixotropic**.
- Do not use **Mapegrout Patch 218** on smooth concrete surfaces. Roughen the surface thoroughly.
- Do not use **Mapegrout Patch 218** for pouring or pumping into formwork. Use **Mapefill 318**.
- Do not add cement or admixtures to **Mapegrout Patch 218**.
- Do not add water once the mix has begun to set.
- Do not use **Mapegrout Patch 218** at temperatures lower than +5°C.
- Do not use **Mapegrout Patch 218** if the bag has been damaged or opened.

APPLICATION PROCEDURE

Preparing the substrate

The surface must be solid, strong and free from dust, degraded or loose materials, coatings, grease, oils and any contaminant which may affect adhesion.

Surfaces must be roughened and thoroughly soaked with water to saturated-surface-dry condition (no standing water). Check carefully that highly absorbent substrates are properly saturated e.g. porous plaster, masonry.

Mapegrout Patch 218

TECHNICAL DATA (typical values)	
PRODUCT IDENTITY	
Appearance:	powder
Colour:	grey
Maximum diameter of aggregate (mm):	1.2
Dry solids content (%):	100
Chlorides:	absent
APPLICATION DATA (at +23°C and 50% RH)	
Mixing ratio:	14-16% water (3.5-4.0 litres per 25 kg bag)
Consistency of mix:	thixotropic
Initial flow, EN 1015-3 (mm):	145
Density of mix (kg/m ³):	2,100
pH of the mix:	>12
Application temperature range (°C):	from +5 to +40
Pot-life of mix (mins):	60
Maximum thickness per layer (mm):	30
FINAL PERFORMANCES (15% mixing water)	
Compressive strength (N/mm ²): 1 day 7 days 28 days	>20 >40 >50
Flexural strength (N/mm ²): 1 day 7 days 28 days	>4 >6 >10
Adhesion strength on concrete (N/mm ²) 7 days	>2

Preparing the mix

- To mix one 25 kg bag of **Mapegrout Patch 218**, pour 3.5 to 4.0 kg of water into a clean container (depending on consistency required).
- Gradually add the **Mapegrout Patch 218** to the water while mixing continuously at low speed. Continue for 1 to 2 minutes, making sure the mix is well blended. Scrape free any unblended powder sticking to the bottom

and sides of the container. Mix again for another 2 to 3 minutes until homogeneous.

Applying the mix

- For patching applications, the mix can be applied with a flat or gauging trowel with no need for formwork even on vertical and overhead surfaces. The recommended maximum thickness is 30 mm per layer. When a further layer of **Mapegrout Patch 218** is necessary, it must be applied before the previous one has completely set.

- For fixing and anchoring applications, fill the prepared cavity progressively with the freshly-mixed mortar, tamping down to make sure it is completely filled with no voids before inserting the object to be secured, e.g. bolt, plate, hinge, etc. Finish the surface with a trowel.

Cleaning

Mortar that is not hardened can be removed from tools with water. After setting, cleaning can only be done mechanically.

Consumption

Approximately 18.3 kg/m² of **Mapegrout Patch 218** powder per 10 mm of thickness (based on 15% water ratio).

PACKAGING

25 kg bags

STORAGE

Stored unopened in dry conditions at 25°C, the shelf-life would be 9 months minimum.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Contains cement that in contact with sweat or other body fluids produces an irritant alkaline reaction and allergic reactions to those predisposed. It is highly recommended to use gloves and eye protection.

For further information, refer to the 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

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

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