



# Pianocem M

**Thixotropic  
cementitious smoothing  
compound for  
thicknesses from 1 to  
5 mm, including  
on vertical surfaces**



## WHERE TO USE

For levelling and smoothing new and existing substrates prior to installing floor and wall coverings.

Not suitable for heavy traffic.

### Some application examples

- Smoothing poured concrete floors and cement screeds.
- Smoothing existing bush-hammered concrete and terrazzo floors.
- Smoothing walls of concrete, cement renders, foamed concrete, ceramic tiles and existing renders.

## TECHNICAL CHARACTERISTICS

**Pianocem M** is a grey powder composed of special cements, selectively graded silica sands, synthetic resins and blended admixtures manufactured according to a formula developed in the MAPEI research laboratories.

**Pianocem M** mixed with water forms a thixotropic paste that is easy to spread on floors or walls. It can be applied in thicknesses up to 5 mm per coat. When hardened it has good resistance to compression, flexion, imprintability and abrasion.

For greater thicknesses, add 30% clean, suitably graded sand.

To improve the mechanical characteristics of **Pianocem M**, for more critical applications (skimming

old ceramic, terrazzo, glass mosaic, etc.) we recommend partially replacing the mixing water by adding 1.5-2 kg of **Livigum** or **Planicrete** for every 25 kg bag of powder.

## RECOMMENDATIONS

- Do not add more water to the mix once it has begun to set.
- Do not add lime, cement or gypsum to the mix.
- Do not use for levelling exterior floors or for substrates or walls subject to rising damp.
- Before using on anhydrite or gypsum substrates, apply a coat of **Primer G**.
- Do not use at temperatures below +5°C or above +35°C.
- Do not apply another coat of **Pianocem M** when the previous one is completely dry. First apply a **Livigum** primer (1 part **Livigum** diluted with 3-5 parts water), **Primer G** (1 part **Primer G** with 3 parts water) or **Eco Prim T** (1 part **Eco Prim T** with 1 part water).

## HOW TO USE

### Preparation of the substrate

Substrates must be solid, free of dust, loose particles, paint, wax, oil, rust, traces of gypsum or other substances that might interfere with bonding. Insufficiently solid absorbent surfaces must be removed or, where possible, repaired properly with MAPEI products.

# Pianocem M



Installation of textile flooring on a substrate levelled off with Pianocem M mixed with water and Livigum. Olio Carli SpA - Oneglia (Imola) - Italy



Installation of resilient flooring on a substrate smoothed over with Pianocem M mixed with water and Livigum. Pirelli Tower - Milan - Italy

## TECHNICAL DATA (typical values)

### PRODUCT IDENTITY

**Appearance:** fine powder

**Colour:** cement grey

**Dry solids content (%):** 100

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

**Mix ratio with water:** 7-7.5 litres per bag

**Maximum thickness per coat:** from 1 to 5 mm

**Density of mix with water (kg/m<sup>3</sup>):** 1,750

**pH of mix:** 13

**Application temperature range:** from +5°C to +35°C

**Workability time:** minimum 4 hours

**Set to foot traffic:** from 4 to 24 hours

**Waiting time before installing resilient coverings:** 3 days

### FINAL PERFORMANCE

**Resistance to ageing:** excellent

**Resistance to radiant heating floors:** excellent

**Compatibility with adhesives:** excellent

**Flexural strength after 28 days (N/mm<sup>2</sup>):** 6

**Compressive strength after 28 days (N/mm<sup>2</sup>):** 25

### PIANOCEM M PERFORMANCE TABLE

	Flexural strength at 28 days (N/mm <sup>2</sup> )	Compressive strength at 28 days (N/mm <sup>2</sup> )
Mixed with water:	6	25
Mixed with <b>Livigum</b> (5 : 1 with water):	7	27
Mixed with <b>Livigum</b> (3 : 1 with water):	8.5	29

Cracks or crazing in cementitious substrates should be repaired with **Eporip**.

Dusty or particularly absorbent concrete surfaces must be treated with **Livigum** diluted with water (1 part **Livigum** with 3-5 parts water, depending on the absorbency of the surface) or with **Primer G** (1 part **Primer G** with 3 parts water) to prevent possible debonding and render the substrate uniformly absorbent.

Existing floors, e.g. in ceramic tiles or natural stone, must be thoroughly cleaned and any oil or grease removed. Then apply a coat of **Eco Prim T** (diluted 1 to 1 with water).

#### Preparing the mix

Using an agitator, pour a 25-kg bag of **Pianocem M** into a receptacle containing 7-7.5 litres of water, mixing continuously at low speed until a homogeneous lump-free paste is obtained. Larger amounts can be prepared in a mortar mixer. Let the paste sit for a few minutes and then mix again briefly. The paste is then ready to apply. The mix is workable for at least 4 hours.

#### Applying the mix

Use a metal trowel, keeping it slightly slanted to obtain the desired thickness.

Additional layers can be applied when **Pianocem M** can be walked on but is still damp.

Drying time can vary considerably, depending on the thickness, temperature, ventilation, humidity and the absorbency of the substrate.

For best results, protect **Pianocem M** while hardening from draughts, high temperatures and direct sunlight to prevent it from drying too quickly.

#### Cleaning

When still wet, **Pianocem M** can be cleaned from hands and tools with water.

#### CONSUMPTION

Approx. 1.4 kg/m<sup>2</sup> per mm of thickness.

#### PACKAGING

**Pianocem M** is available in 25 kg bags.

#### STORAGE

When stored in a dry place **Pianocem M** is stable for at least 12 months.

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

#### SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Pianocem M** is irritant, it contains cement that when in contact with sweat or other body fluids causes irritant alkaline reaction and allergic reactions to those predisposed. It can cause damage to eyes.

It is recommended to use protective gloves and goggles and to take the usual precautions for handling chemical products. In case of contact with eyes or skin wash immediately with plenty of water and seek medical attention.

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](http://www.mapei.com)**

**All relevant references for the product are available upon request and from [www.mapei.com](http://www.mapei.com)**



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