



Pianodur R

**Ultra-fast setting
(12-24 hours) fine grained
self-levelling smoothing
compound for thicknesses
up to 3 mm, suitable
for flooring subjected
to heavy traffic**



WHERE TO USE

For smoothing or sealing surface porosities in new and existing substrates in interiors, making them ready to receive all types of resilient and textile floor covering, even those subject to heavy loads, very heavy traffic and wheeled chair traffic.

Some application examples

- Smoothing concrete substrates, **Mapecem**, **Mapecem Pronto**, **Topcem**, **Topcem Pronto** or anhydrite screeds, heating screeds, liquid asphalt and chipboard.
- Smoothing existing bushhammered cement, terrazzo and ceramic tile, natural stone and magnesium floors.

TECHNICAL CHARACTERISTICS

Pianodur R is a grey powder based on special fast-setting cements, select graded silica sands, resins and special blended additives prepared according to a formula developed in the MAPEI research laboratories.

Pianodur R mixed with water forms a self-levelling easily trowellable paste with high adhesion to the substrate and rapid drying characteristics.

Pianodur R's especially fine grain can be used for extremely small thicknesses, even down to zero, but optimal mechanical characteristics can be obtained at thicknesses greater than 1 mm.

Pianodur R hardens in thicknesses of up to 3 mm each coat, without appreciable shrinkage and without forming surface cracks or crazing. It develops high compressive strength, and is highly resistant to marks and abrasion.

Pianodur R is recommended for floors subject to heavy traffic and heavy loads, such as in hospitals, offices, gymnasiums, supermarkets, etc.

RECOMMENDATIONS

- Do not mix with more water than prescribed in order to obtain greater self-levelling, and do not add more water to a mix that has already begun to set.
- Do not add lime, cement or gypsum to the mix.
- Do not use for smoothing in exterior applications.
- Do not use on substrates subject to rising damp.
- Do not use in thicknesses greater than 3 mm per coat.
- Do not apply another coat of **Pianodur R** after the previous one has completely dried. In this case, before further smoothing, apply **Primer G** diluted with water (1 part **Primer G** with 3 parts water).
- Do not use for smoothing metallic surfaces.

Pianodur R



Preparation of the substrate: application of Primer G on a terrazzo tile floor before the application of Pianodur R



Application Pianodur R on a terrazzo tile floor

- Do not use at temperatures lower than +5°C or higher than +30°C.
- Be especially careful on very hot or very windy days.
- Do not leave bags of **Pianodur R** exposed to sunlight for long periods before using.

APPLICATION PROCEDURE

Preparing of the substrate

The substrates must be dry, sound, free of dust, loose parts, paint, wax, oil, rust and traces of gypsum.

Not sufficiently solid cement based surfaces must be removed or where possible consolidated with **Prosfas**, **Primer EP** or **Primer MF**.

Cracks in concrete substrates must be repaired with **Eporip**.

Dusty or very porous concrete surfaces must be treated with a coat of **Primer G** (1 part **Primer G** with 3 parts water) or with **Livigum** (1 part **Livigum** with 5 parts water), in order to fix the dust and to provide uniform absorption of the substrates.

Anhydrite screeds can only be levelled with **Pianodur R** after a coat of **Primer G**, **Primer EP** or **Mapeprim SP** has been applied.

On ceramic tiles or natural stones apply **Mapeprim SP** after the surfaces have been cleaned with detergents and mechanically abraded. Level with **Pianodur R** before **Mapeprim SP** has dried completely (**Mapeprim SP** must still be sticky).

Preparing the mix

Pour a bag of **Pianodur R** into a container with 6.6 l to 6.8 l of clean water, stirring thoroughly, preferably with an electric mixer. Let slake 2 to 3 minutes, then stir again briefly. The mix is then ready to use.

Mix enough **Pianodur R** that can be used to work 20 to 30 minutes at +23°C.

Applying the mix

Apply **Pianodur R** with a large metal trowel or float, tilting the trowel slightly to obtain the desired thickness in one single coat from 0 mm to 3 mm thick.

Because of its remarkable self-levelling characteristics, **Pianodur R** quickly loses small trowelling marks that are unavoidable on the job. When another coat of **Pianodur R** is needed, applying it as soon as the preceeding coat is ready for traffic is recommended (approx. 30 to 60 minutes).

Pianodur R smoothing compound is ready to receive floor coverings when dry (in 12-24 hours, depending on temperature). Applying **Pianodur R** at temperatures of less than +5°C is not recommended, whereas at temperatures of approx. +30°C and above, protecting surfaces against rapid water evaporation is necessary. On heating screeds, turn off heating elements during application and setting of **Pianodur R** to prevent incorrect hydration.

Cleaning

Fresh **Pianodur R** can be cleaned from tools with water.

CONSUMPTION

1.5 kg **Pianodur R** per m² and for each mm of thickness.

PACKAGING

Pianodur R is available in 22 kg bags.

STORAGE

Under normal conditions and in its original unopened packaging **Pianodur R** is stable for at least 12 months.

Manufactured in compliance with the regulations of the 2003/53/EC Directive.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Contains cement that when in contact with sweat or other body fluids produces an irritant alkaline reaction. For further and complete information about a safety use of our product please refer to our latest version of the Material Safety Data Sheet.

FOR PROFESSIONALS.

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 web site www.mapei.com

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

TECHNICAL DATA (typical values)

PRODUCT IDENTIFICATION

Consistency:	fine powder
Colour:	grey
Bulk density (g/cm³):	1.4
Dry solids content (%):	100
Storage:	12 months in original unopened packaging in a dry place
Hazard classification according to EC 1999/45:	irritant. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet
Customs class:	3824 50 90

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

Mixing ratio:	30 to 31 parts water per 100 parts Pianodur R by weight
Thickness per coat:	from 0 to 3 mm
Self-levelling:	yes
Density of mix (g/cm³):	1.9
pH of mix:	approx. 12.5
Application temperature range:	from +5°C to +35°C
Open time:	20 to 30 minutes
Setting time:	50 to 60 minutes
Set to light foot traffic:	3 hours
Waiting time before receiving floor covering:	12 to 24 hours

FINAL PERFORMANCE DATA

Compressive strength (N/mm²):	
– after 1 day:	18
– after 3 days:	24
– after 7 days:	28
– after 28 days:	38
Flexural strength (N/mm²):	
– after 1 day:	4.0
– after 3 days:	5.1
– after 7 days:	6.4
– after 28 days:	9.0
Resistance to abrasion Taber Abrasimeter (H22 disc, 550 g, 200 rpm) expressed in weight loss (g):	
– after 7 days:	2.8
– after 28 days:	2.0



An example of the installation of rubber on a substrate smoothed with Pianodur R - New subway station Punta Raisi airport - Palermo (Italy)



An example of a substrate smoothed with Pianodur R - New subway station Punta Raisi airport - Palermo (Italy)



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