

PLANISEAL 223 PLUS

Two-component, fiber-reinforced, cementitious mortar for waterproofing

WHERE TO USE

- Internal wet areas.
- Waterproofing basins, reservoirs, concrete or masonry tanks.
- As smoothing and waterproofing compound for underground walls before laying bituminous membrane.

Some application examples

Rigid waterproofing of:

- bathrooms & toilets, kitchens, pantries;
- drying yards;
- balconies and terraces;
- potable water tanks;
- concrete gutters and small planter boxes;
- retaining walls

TECHNICAL CHARACTERISTICS

Planiseal 223 Plus is a two-component mortar, composed of a fiber-reinforced, cement-based compound, selected graded aggregates, special additives and synthetic polymers in water dispersion, blended according to a formula developed in the MAPEI research laboratories. When the two components are mixed together, **Planiseal 223 Plus** becomes a fluid and trowelable mortar that can be applied by trowel or hard-bristled brush/broom with excellent adhesion to the substrate for effective waterproofing. **Planiseal 223 Plus** is not recommended for use as counter-pressure (negative-side) waterproofing.

RECOMMENDATIONS

- Do not use **Planiseal 223 Plus** for solving internal condensation problems (use dehumidifying renders, improve ventilation to the area or provide adequate insulation).
- Do not use on surfaces of gypsum, plasterboard, painted walls, plywood, chipboard, asbestos cement.
- Do not mix **Planiseal 223 Plus** with additives, cement or aggregates.
- Do not use on flexible or unstable surfaces.
- In no case should **Planiseal 223 Plus** be applied to a surface which has standing water.
- Do not dilute **Planiseal 223 Plus** with more Component B or water than is specified.

APPLICATION PROCEDURE

TECHNICAL INFORMATION FOR THE APPLICATION

Composition of the mix:	100 kg of Planiseal 223 Plus Component A 25 kg of Planiseal 223 Plus Component B
Application temperature range:	surrounding and substrate temperature from +5°C to +35°C
Pot life:	approximately 60 min. (at +20°C)
Application of following coats at 20°C:	between 5 and 24 hours
Ready to use:	7 days

Preparing the substrate

The surface to be waterproofed must be perfectly clean and sound. Remove crumbly or loose parts, dust, cement laitance, form release agents, varnishes and paint by mechanical brushing, sanding or high water pressure. Renders must be perfectly anchored to the substrate. Seal cracks in the substrate and repair damaged parts with products from the **Mapegrout** range. All corners must be filled with 25 mm angle fillets prepared with a mortar mix of sand, cement and **Planicrete** additive and allowed to cure. Alternatively, corners may be treated with **Mapeband Easy** tape during application of **Planiseal 223 Plus**. Completely prewet the substrate to saturated surface dry condition (no standing water).

Preparing the mortar

Pour Component B (liquid) into a suitable, clean container. Then slowly add Component A (powder) while stirring with a low speed mechanical mixer. Carefully mix **Planiseal 223 Plus** thoroughly for a few minutes, taking care to blend in all the unmixed powder deposited on the sides and bottom of the bucket until a perfectly homogeneous mix is obtained (free from lumps). Do not prepare the mix by hand. Leave the mortar to stand for approximately 5 minutes, remix and apply.

Instructions for the preparation of the mortar to create samples for Lab testing are contained in the TECHNICAL DATA table.

Applying the mortar

- Apply **Planiseal 223 Plus** with a trowel or hard-bristled brush/broom.
- Always apply a minimum of 2 coats. Make sure the previous coat is sufficiently dry before applying the next, in a direction perpendicular to the first (generally 5 - 6 hours later depending on the temperature and the absorption of the substrate). In order to have good adhesion, it is recommended not to exceed 24 hours between coats. Pay particular care to corners and coves.
- When application is by trowel, it is recommended to treat the substrate with **Planiseal 223 Plus** using a brush for the first coat. The properties of the hardened layer of **Planiseal 223 Plus** are such that it shall not be used where live cracks are anticipated. **Planiseal 223 Plus** cannot be exposed to any type of traffic and must be protected by a screed.

Precautions to be observed

In areas exposed to wind or direct sun, protect from rapid drying by covering with plastic sheets immediately after application, properly secured.

Cleaning

Planiseal 223 Plus can be removed from tools with water before it hardens. Once hardened, cleaning becomes difficult and can be carried out only mechanically.

CONSUMPTION

Apply a minimum of two coats:

- For internal wet areas: 1 kg/m² per coat
- For areas subject to more than 1 m water-head: 1.5 kg/m² per coat*

(* - Up to a maximum of 10 m water-head. For applications exceeding this, please contact MAPEI Technical Service)

For applications directly beneath ceramic tiling in floor and wall installations and in swimming pools, use a crack-bridging membrane such as **Mapelastic**, **Mapelastic Smart** or **Planiseal 388**, in compliance with the requirements of EN 14891. For wall installations in high-rise buildings*, use a crack-bridging membrane only, whether it is positioned directly or indirectly beneath ceramic tiling.

**If necessary, contact MAPEI Technical Service for further advice.*

Planiseal 223 Plus is especially suited for:

- Floor installations where the waterproofing layer is protected by a levelling screed before tiling;
- Installations on brick & plaster walls in low-rise buildings, where the waterproofing layer is overlaid by a levelling render before tiling.

If in doubt, consult MAPEI Technical Service for advice.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

	Component A	Component B
Consistency:	powder	liquid
Colour:	grey	white
Maximum size of aggregate:	0.4 mm	-

TECHNICAL INFORMATION FOR THE PREPARATION OF THE PRODUCT

Composition of mix:	100 parts by weight of Planiseal 223 Plus Component A with 25 parts by weight of Planiseal 223 Plus Component B
Preparation of mix:	mixing of product according to EN 196-1

CHARACTERISTICS OF FRESH MIX (at +20°C – 50% R.H.)

Colour of mix:	grey
Consistency of mix:	brushable
Density of mix:	2000 kg/m ³

FINAL PERFORMANCE

Performance characteristic	Test method	Product performance
Compressive strength:		
▪ 28 days	EN 12190	18 MPa
Flexural strength:		
▪ 28 days	EN 196-1	8.0 MPa
Adhesion to concrete by pull-off:	EN 1542	> 1.0 MPa

PACKAGING

Units of 25 kg:

- Component A: 20 kg bag;
- Component B: 5 kg drum.

STORAGE

Store the product in its original unopened packaging in a cool dry place.

- Component A: 12 months;
- Component B: 12 months.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instructions for the safe use of our products can be found on the latest version of the SDS available from our website www.mapei.com.my

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

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation. The most up-to-date TDS can be downloaded from our website www.mapei.com.

ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.

7566-05-2023-GBxMAL

Any reproduction of texts, photos and illustrations published here is prohibited and subject to prosecution

