

Planiseal 388

Two-component, polymer-modified, highly flexible, cementitious waterproofing membrane

WHERE TO USE

Applied in slurry form to waterproof concrete and cement mortar surfaces. Also used as a smoothing and waterproofing compound for underground walls before laying pre-formed membranes.

Some application examples

Waterproofing:

- internal wet areas, examples – bathrooms, showers, kitchens, laundry areas;
- balconies and terraces before tiling;
- basins, reservoirs, concrete or masonry tanks;
- swimming pools and water features;
- foundation walls.

ADVANTAGES

- Vapour-permeable; can be applied on damp substrates
- Easy application by brush, roller or trowel
- Highly flexible with good crack-bridging properties
- Compatible with ceramic, mosaic and natural stone coverings
- Can be combined with **Mapetex 50** for excellent mechanical properties
- Reduces carbon dioxide penetration
- Non-toxic

TECHNICAL CHARACTERISTICS

Planiseal 388 is a two-component mortar, composed of

a 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 mixed, **Planiseal 388** becomes a fluid mortar that can be applied by hard-bristled brush, roller, trowel or by spray machine on horizontal and vertical surfaces. **Planiseal 388** cures to form a waterproofing membrane with excellent adhesion to the substrate.

RECOMMENDATIONS

- Do not use **Planiseal 388** for solving internal condensation problems (use dehumidifying renders, improve ventilation to the area or provide adequate insulation).
- Do not mix **Planiseal 388** with additives, cement or aggregates.
- Do not apply **Planiseal 388** to surfaces with standing water.
- Do not use the product if the packaging is damaged.

INSTALLATION INSTRUCTIONS

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 means or by high pressure water jetting. Renders must be perfectly anchored to the

TECHNICAL DATA (typical values)		
PRODUCT IDENTITY		
	Component A	Component B
Consistency:	powder	liquid
Colour:	grey	white
Specific gravity (kg/m³):	1.30	1.04
APPLICATION DATA (at 23°C at 50% R.H.)		
Colour of mix:	grey	
Mixing ratio:	component A : component B = 2:1	
Consistency:	fluid	
Viscosity of mix (Pa.s):	2.2	
Density of mix (kg/m³):	approx. 1560	
pH of mix:	approx. 12	
Minimum and maximum temperature for application (°C):	from +5 to +35	
Pot life at +20°C (mins):	60	
Application of following coats at 20°C (hrs):	after 5 but not more than 24	
Ready for over-lay (days):	5	
FINAL PERFORMANCES		
Adhesion to concrete 28 days, EN 1542 (MPa)	0.8	
Crack-bridging ability, MGE 49 (mm):	> 1	
SIRIM TEST RESULTS		
Tensile strength, ASTM D412:2013 (MPa)	1.5	
Elongation at break, ASTM D412:2013 (%)	102	

substrate. Seal cracks in the substrate and repair damaged parts with products from the **Mapegrout** range.

Fill all corners 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** tape (see section below on treatment of details).

Completely prewet absorbent substrates to saturated surface dry condition (no standing water) before application.

Treat plasterboards and cement boards with **Primer G** and allow to dry before applying **Planiseal 388**.

Treatment of details

In all waterproofing works, it is essential that particular attention is paid to details.

Mapeband TPE is used to seal structural joints and joints subject to high dynamic stresses. **Mapeband** or **Mapeband SA** tapes are used to waterproof joints between horizontal and vertical elements.

Special kits from the **Drain** range are used to seal drain outlet holes.

It is absolutely imperative that special care is taken in these critical areas after levelling out and cleaning the substrate before applying the cementitious waterproofing mortar.

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 388** 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.

Applying the mortar

Apply **Planiseal 388** with a hard-bristled brush/broom, roller or trowel.

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. In general, the waiting time is 5-6 hours 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 388** using a brush for the first coat.

The crack-bridging properties of the waterproofing membrane can be further improved by inserting a layer of **Mapetex 50** in

between coats. Apply the first coat to the recommended thickness. While it is still wet, lay **Mapetex 50** and press it down with a flat trowel or a spiked roller ensuring no wrinkles or bubbles are formed. Wait until the membrane is dry before applying the second coat.

Planiseal 388 cannot be exposed to any type of traffic; wait at least 5 days for curing before over-laying with a protection screed or with floor tiles.

PRECAUTIONS TO BE OBSERVED DURING AND AFTER APPLICATION

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

Cleaning

Planiseal 388 can be removed from tools with water before it hardens. Once hardened, cleaning becomes difficult and can be carried out only mechanically.

CONSUMPTION

- For wet areas not subject to hydrostatic pressure: 1.0 kg/m² per coat x 2 coats
- For areas subject to hydrostatic pressure: 1.0 kg/m² per coat x 3 coats
- For areas requiring insertion of **Mapetex 50**: apply 1.0 kg/m² for the first coat and 1.5 kg/m² for the second coat

PACKAGING

Units of 30 kg -
Component A: 20 kg bag, Component B: 10 kg drum.

STORAGE

Store the product components in their original unopened packaging in a cool dry place.
Component A: 12 months; Component B: 12 months.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Planiseal 388 Component A contains cement that when in contact with sweat or other body fluids causes irritant alkaline reactions and allergic reactions to those predisposed. It can cause damage to eyes.

Planiseal 388 Component B may cause sensitisation if it comes into contact with the skin of those predisposed.

During use wear protective gloves and goggles and take the usual precautions for handling chemicals.

If the product comes in contact with the eyes or skin, wash immediately with plenty of water and seek medical attention.

Planiseal 388

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

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.

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



MAPEI Malaysia Sdn. Bhd. (231780-K)

Head Office : Tel +(60) 3 7842 9098 - Fax +(60) 3 7842 6197

Johor Bahru Office : Tel +(60) 7 595 3032 - Fax +(60) 7 595 3098

Penang Office : Tel +(60) 4 642 9098 - Fax +(60) 4 642 9097

Kuching Office : Tel +(60) 82 246 660 - Fax +(60) 82 246 661

Sales Admin : Tel +(60) 3 7842 9989 - Fax +(60) 3 7842 9880

Nilai Plant : Tel +(60) 6 799 8028 - Fax +(60) 6 799 8191

Email: mapei@mapei.com.my **Website:** www.mapei.com.my