TRIBLOCK P

Three-component, epoxy-cementitious primer for damp substrates

WHERE TO USE

Triblock P is used as a waterproofing treatment for damp substrates, and especially:
· old ceramic or terrazzo floor dressings on substrates with excessive residual humidity;
· highly-compact cementitious substrates with a residual humidity content higher than the level recommended for laying wooden, resilient and resin floors;
· treating damp concrete surfaces before applying protective and anti-corrosion epoxy products, or polyurethane dressing systems which are impermeable to water vapour;
· dressing concrete channels, drains and pipe-work;
and by adding **0.25 Quartz** o **0.5 Quartz** sand at a ratio of 1 : 0.5 for smoothing over uneven surfaces.

TECHNICAL CHARACTERISTICS

Triblock P is a three-component epoxy-cementitious system which has the capacity of reticulating on damp surfaces, even if they are very smooth (ceramic tiles, porcelain, marble, etc.), and of forming a compact layer suitable for laying parquet, PVC, linoleum, ceramic, epoxy and polyurethane dressing coats and cementitious smoothing layers. It is manufactured according to a formula developed in MAPEI's own research laboratories.
The product may be used as it is, by diluting it accordingly with water, or by adding **0.25 Quartz** or **0.5 Quartz** sand, to obtain a smoothing mortar for use on uneven concrete surfaces when a high mechanical strength of the dressing material is required.

RECOMMENDATIONS

· Do not apply **Triblock P** directly on:
  · surfaces with free-standing water;
  · dusty, flaky, irregular surfaces with bleeding;
  · anhydrite or gypsum-based substrates;
  · old, cementitious or gypsum-based smoothing layers.
· Do not apply **Triblock P** on cracks which are subject to movement, as the product is rigid and may also crack.

APPLICATION PROCEDURE

Preparation of the substrate

The cementitious substrate must be solid, mechanically strong, perfectly clean, free of crumbling parts and standing water. It must be sufficiently cured and have completed most of the shrinkage phase.
Preparation may be carried out by sand-blasting, hydro sand-blasting, sanding, shot-blasting or grinding, according to the condition of the substrate and the successive applications.
Old ceramic and terrazzo floors must be well-bonded to the substrate and not have residual materials on the surface, such as wax, oil, grease, etc.
If the surface to be treated is particularly uneven, it must be repaired and levelled off prior to treatment with a suitable damp-resistant product, or with **Triblock P** mixed with **0.25 Quartz** or **0.5 Quartz** sand.

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Preparation of the product

Triblock P is made up of three components, of which two are liquids and one is a powder. To prepare the product, mix component A with component B until a homogenous, uniform-coloured, mix is obtained. Then slowly add component C (powder) while mixing until a smooth, lump-free paste is obtained. The mixing ratio between the three components is 12 : 38 : 50 in weight. If the entire contents are not required, make sure that the mixing ratios are strictly adhered to in order to avoid poor catalysing of the product.
For mixing, we recommend using a low-speed drill to avoid overheating the mix, which may reduce the workability times and provoke air entrapment.
After mixing the three components together, and according to the application method used, add water as follows:
· by brush: 5-10%;
· by roller: 10-15%;
· by spraying: maximum of 20%.

For grouting, smoothing off, repairing surface defects or filling cracks not subject to movement, **Triblock P** may be mixed with a maximum of 5% water and with a ratio of 1 : 0.5 of dry **0.25 Quartz** or **0.5 Quartz**, in order to obtain a mortar which may be applied by trowel.
Once prepared, **Triblock P** is workable for 30-40 minutes at +23°C, therefore the product must be applied within the times indicated.

Application of the product

Spread **Triblock P**, diluted according to requirements, on the surface to be treated in two coats with a brush, a roller or with the airless spray system. If the product is applied on particularly hot substrates, the said substrate may be dampened before application.
Apply the product in two criss-cross coats, making sure that each coat is even. The second coat may be applied after approximately 4-6 hours.
For grouting, smoothing, repairing surface defects and filling cracks not subject to movements, apply **Triblock P** with a trowel mixed with **0.25 Quartz** or **0.5 Quartz**. After smoothing over, if there is a high level of humidity in the substrate, it will be necessary to apply a further coat of **Triblock P** diluted with 5-10% of water.
Small cracks must be opened to form a “V” shape, and all dust and loose material must be removed. Then they must be treated with a coat of **Triblock P** diluted with 5-10% of water, and filled with **Triblock P** mixed at a ratio of 1 : 0.5 in weight of **0.25 Quartz** or **0.5 Quartz**.
Do not use the product if the surrounding temperature or the temperature of the substrate is lower than +5°C. Floors or smoothing compound must be applied within 7 days.

Laying wooden or resilient floors

After approx. 24 hours (at +23°C and 50% R.H.), the floor may be laid using either two-component, epoxy-polyurethane adhesive or single component, polyurethane adhesive (such as **Ultrabond P902 2K**, **Lignobond**, **Ultrabond P990 1K or Adesilex G19**) or silylated polymer-based adhesive (such as **Ultrabond Eco S940 1K)**or the smoothing compound may be applied.

Laying protective epoxy and polyurethane dressing materials

The product may be painted over after approximately 24 hours. The hardened layer of **Triblock P** may be covered with any type of epoxy or polyurethane dressing product, either with or without solvents. Where necessary, apply the specific primer beforehand as indicated in the relative Technical Data Sheets.

CLEANING

Clean all work tools with water before **Triblock P** sets.
Once it has set, cleaning may only be carried out by mechanical means.

CONSUMPTION

· 250-300 g/m² per coat on non-absorbent surfaces.
· 400-500 g/m² per coat on absorbent surfaces.
· 1.5 kg/m² per mm of thickness for smoothing applications.

PACKAGING

5 kg kits (A + B + C):
component A: 0.6 kg;
component B: 1.9 kg;
component C: 2.5 kg.

STORAGE

12 months in its original, closed containers.
Protect against frost and store at a temperature of at least 5°C.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instructions for the safe use of our products can be found on the latest version of the Safety Data Sheet, available from our website www.mapei.com.
PRODUCT FOR PROFESSIONAL USE.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY			
	comp. A	**comp. B**	**comp. C**
Colour:	white	white	white
Consistency:	liquid	liquid	powder
Density:	1.1 g/cm³	1.3 g/cm³	–
Brookfield viscosity:	9,000 mPa·s (rotor 5 - 10 revs)	15,000 mPa·s	–
Dry solids content:	63 %	48.5 %	100 %

APPLICATION DATA (at +23°C and 50% R.H.)	
Mixing ratio:	comp. A : comp. B : comp. C = 12 : 38 : 50
Consistency of the mix:	paste
Colour:	white
Density of mix:	1,800 kg/m³
Brookfield viscosity:	120,000 mPa·s (rotor 7 - 10 revs)
Recommended application temperature range:	from +5°C to +35°C
Pot life:	from 30 to 40 minutes
Dry to the touch:	after approx. 4-6 hours
Waiting time between first and second coat:	4-6 hours
Set to light foot traffic:	24 hours
Waiting time before further applications:	from a minimum of 24 hours up to a maximum of 7 days
Final setting time:	7 days

FINAL PERFORMANCES (+23°C - 50% R.H.)	
Bonding to ceramic:	> 3.5 MPa (failure of the ceramic)

Bonding to concrete:	> 3 MPa (failure of concrete)
In service temperature range:	from -35°C to +100°C

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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