

Triblock Finish

Three-component epoxy-cementitious thixotropic mortar for smoothing off damp substrates

WHERE TO USE

For protecting and smoothing out vertical and horizontal concrete surfaces subject to damp, and for which good chemical resistance and high resistance to abrasion is required.

Some application examples

- Dressing concrete channels, drains and pipe-work.
- Dressing damp concrete surfaces before applying protective and anti-corrosion epoxy products, or polyurethane dressing systems which are impermeable to water vapour.

TECHNICAL CHARACTERISTICS

Triblock Finish is a three-component, epoxy-cementitious system made up of cementitious binders and epoxy resin in water dispersion. It has the capacity of curing on damp indoor and outdoor surfaces, and of forming a compact, waterproof, abrasion-resistant layer which, if required, is suitable for dressing with epoxy and polyurethane products. It is produced according to a formula developed in MAPEI's Research Laboratories.

RECOMMENDATIONS

- Do not apply **Triblock Finish** directly on:
 - surfaces with a surface film of water;
 - dusty, flaky or flimsy surfaces;
 - anhydrite or gypsum-based substrates;
 - old, gypsum-based smoothing layers.
- Do not apply **Triblock Finish** on cracks which are subject to movement, the product is rigid and may also crack.

APPLICATION PROCEDURE

Preparation of the substrate

The cementitious substrate must be solid, mechanically strong, perfectly clean and free of crumbly parts, materials which could impede bonding, such as wax, oil and grease, and free-standing water.

The surface may be prepared by either sand-blasting or hydro-sand-blasting, according to the condition of the substrate.

Saturate the substrate with water, and wait until the excess water has evaporated off. If necessary, compressed air may be used to remove free-standing water.

Preparation of the product

Triblock Finish is made up of three components, of which two are liquid 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 4.8 : 15.2 : 80 by 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.

Once prepared, **Triblock Finish** is workable for 40 minutes at +23°C, and so the product must be applied within the times indicated.

For mixing, we recommend using a low-speed drill to avoid overheating the mix, which may reduce the workability times and provoke air entrapment.

TECHNICAL DATA (typical values)			
PRODUCT IDENTITY			
	comp. A	comp. B	comp. C
Colour:	white	pale yellow	grey
Consistency:	liquid	liquid	powder
Density (g/cm³):	1.1	1.01	–
Hazard classification according to EC 1999/45:	irritant, hazardous to the environment Before using refer to the “Safety instructions for preparation and application” paragraph and the information on the packaging and Safety Data Sheet		
Brookfield viscosity (mPa·s):	9,500 (rotor 4 - 10 revs)	30 (rotor 1 - 50 revs)	– –
Dry solids content (%):	63	15	100
Storage:	12 months	12 months	12 months
Customs class:	3824 90 95		
APPLICATION DATA (at +23°C - 50% R.H.)			
Mixing ratio:	comp. A : comp. B : comp. C = 4.8 : 15.2 : 80		
Consistency of the mix:	paste		
Colour:	grey		
Density of mix (kg/m³):	2,000		
Brookfield Viscosity (mPa·s):	20,000 (rotor 5 - 10 revs.)		
Recommended application temperature range:	from +5°C to +30°C		
Pot life:	40 minutes		
Thickness per layer (mm):	max 3		
Waiting time before further applications:	from a minimum of 24 hours up to a maximum of 7 days		
FINAL PERFORMANCES (at +23°C - 50% R.H.)			
Bonding to concrete (N/mm²):	> 3 (failure of support)		
Compressive strength (N/mm²): – after 28 days:	≥ 35		
Flexural strength (N/mm²): – after 28 days:	≥ 9		
Vapour permeability (μ):	800		
Water absorption coefficient (kg/m² x h ^{0.5}):	0.03		

Application of the product

Spread **Triblock Finish** uniformly on the surface to be treated using a metal trowel. If the substrate is highly absorbent, we recommend applying an initial thin layer of **Triblock Finish** with a trowel to close all the pores, or a layer of a mixture of components A + B with a brush. Once hardened, apply a second layer of **Triblock Finish** at a thickness of up to 3 mm. If, however, the surface of the substrate is particularly uneven, a thickness of up to 5 mm may be applied over limited areas and finished off with a sponge tamper after approximately 30 minutes.

The tamping operation is not recommended if a successive protective epoxy or polyurethane dressing layer is to be applied. In this case, the surface must be sanded down.

Triblock Finish must be protected from driving rain for at least 24 hours after application.

Laying protective epoxy and polyurethane coatings

The product may be painted over after approximately 24 hours. The hardened layer of **Triblock Finish** may be covered with any type of epoxy or polyurethane coating, 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 Finish** sets. Once it has set, cleaning may only be carried out by mechanical means.

CONSUMPTION

2 kg/m² per mm of thickness, according to the type of substrate.

PACKAGING

31.25kg kits (A + B + C):

component A: 1.5 kg;
component B: 4.75 kg;
component C: 25 kg.

STORAGE

12 months in its original, closed containers. Component C contains cement, which conforms to Directive 2003/53. Protect against frost and store at a temperature of at least 5°C.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Components A and C of **Triblock Finish** are irritant and may cause allergic reactions. During the preparation and use the wearing of protective gloves and goggles is recommended.

Component A is dangerous to aquatic organisms - do not dispose of the product to the environment.

PRODUCT FOR PROFESSIONAL USE.

WARNING

While the indications and guidelines contained in this data sheet correspond to the company's knowledge and wide experience, they must be considered, under all circumstances, merely as an indication and subject to confirmation only after long-term, practical applications. Therefore, anybody who undertakes to use this product, must ensure beforehand that it is suitable for the intended application and, in all cases, the user is to be held responsible for any consequences deriving from its use.

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

**Triblock
Finish**



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