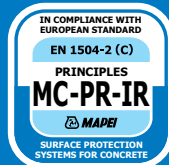




# Triblock TMB



## Three-component, self-levelling epoxy-cementitious coating product for layers from 1.5 to 3 mm thick

### WHERE TO USE

**Triblock TMB** is used to form a temporary moisture barrier for smoothing and levelling damp substrates, which are either not cured or subject to capillary rising damp, to allow the installation of epoxy or polyurethane coatings.

### Some application examples

- Levelling layer on damp concrete flooring (not completely cured) or subject to capillary rising damp from the substrate.
- Levelling layer on rough concrete flooring or concrete flooring roughened by grinding.
- Smoothing over damp concrete surfaces before applying epoxy or polyurethane coatings.
- Thin repair layers on the surface of damp substrates which do not require a particularly attractive finish.
- Repair and maintenance work on monolithic or steam-cured concrete floors.

### TECHNICAL CHARACTERISTICS

**Triblock TMB** is a three-component, self-levelling, cement and epoxy resin coating for internal use, according to a formula developed in the MAPEI R&D laboratories. Thanks to its excellent fluidity, **Triblock TMB** is easy and quick to apply and forms an ideal substrate for the application of self-levelling coatings.

**Triblock TMB** may be coated after just 24 hours (at +20°C and 75% R.H.) with epoxy or polyurethane systems (**Mapefloor System**), even if applied on concrete which is not fully cured, damp or subject to rising capillary damp.

Thanks to its special formulation, **Triblock TMB** impedes and prevents the formation of blisters and the detachment of successive resin coatings.

**Triblock TMB** is a solvent-free product supplied in pre-dosed packaging, and is easy to apply to form a flat, smooth finish.

The final performance characteristics of **Triblock TMB** guarantee an excellent bond with hardened concrete, even when not fully cured and still damp.

The product is also particularly strong and has good resistance to chemicals in general.

**Triblock TMB** offers excellent resistance to water and oil and also resists attack from de-icing salts.

### ADVANTAGES

- Rapid, easy application to form a smooth finish, for internal use.
- Protective action against attack from de-icing salts.
- May be coated after just 24 hours (at +20°C and 75% R.H.) with epoxy or polyurethane resin formulates.
- Excellent adhesion to concrete.
- Promotes good adhesion with successive resin coatings.
- Reduces the risk of blisters and/or detachment of successive waterproof coatings, even if applied on damp substrates.
- Excellent mechanical strength.
- Solvent-free.
- Compatible with the environment.

### RECOMMENDATIONS

- If **Triblock TMB** is used as a temporary moisture barrier, apply a layer at least 2 mm thick.
- Make sure the area is well ventilated to eliminate excess damp.
- Protect the fresh surface of **Triblock TMB** from vapour, condensation and water for at least 24 hours after application.

TECHNICAL DATA (typical values)				
<b>PRODUCT IDENTITY</b>				
	<b>Comp. A</b>	<b>Comp. B</b>	<b>Comp. C</b>	
<b>Colour:</b>	white	straw yellow	grey	
<b>Appearance:</b>	liquid	liquid	powder	
<b>Density (g/cm<sup>3</sup>):</b>	1.1	1.01	1.2	
<b>Brookfield Viscosity (mPa·s):</b>	9,500 (# 4 - 10 rpm)	30 (# 1 - 50 rpm)	-	
<b>APPLICATION DATA (at +23°C and 50% R.H.)</b>				
<b>Mixing ratio:</b>	comp. A : comp. B : comp. C = 1 : 3 : 20			
<b>Colour of mix:</b>	light grey			
<b>Consistency of mix:</b>	thick fluid			
<b>Density of mix (kg/m<sup>3</sup>):</b>	2,050			
<b>Pot life of mix at +20°C:</b>	20 min.			
<b>Substrate temperature:</b>	from +8°C to +30°C			
<b>FINAL PERFORMANCE (3 mm thickness)</b>				
<b>Dust dry (at +23°C and 50% R.H.):</b>	2-4 hours			
<b>Light pedestrian traffic (at +23°C and 50% R.H.):</b>	24 hours			
<b>Final hardening time (at +23°C):</b>	7 days			
Performance characteristic	Test method	Requirements according to EN 13813 for cementitious synthetic resin screeds modified with reactive resins of CT type	Performance of product	
<b>Compressive strength (N/mm<sup>2</sup>):</b>	EN 13892-2	C 5 ÷ C 80 (28 days)	24 h	25
			7 d	55
			28 d	68
<b>Flexural strength (N/mm<sup>2</sup>):</b>	EN 13892-2	F 1 ÷ F 50 (28 days)	24 h	7
			7 d	10
			28 d	12
<b>Adhesion to concrete (N/mm<sup>2</sup>):</b>	EN 13892-8	> 1.5	28 d	> 3
<b>Böhme wear resistance (cm<sup>3</sup>/50 cm<sup>2</sup>):</b>	EN 13892-3	1.5 ÷ 2.2	28 d	7.5
<b>Reaction to fire:</b>	EN 13501-1	value declared by manufacturer	A2 <sub>fl</sub> -s1	

FINAL PERFORMANCE (thickness 3 mm)			
Performance characteristic	Test method	Requirements according to EN 1504-2 (principles MC, PR and IR - coating)	Performance of product
Abrasion resistance after 28 days (mg)	EN ISO 5470-1	< 3000	450
Resistance to thermal shock (MPa):	EN 13687-5	> 2.0	2.2 (160°C)
Adhesion to concrete (substrate type MC 0.40) according to EN 1766 (MPa):	EN 1542	For rigid systems with no traffic: $\geq 1.0$ with traffic: $\geq 2.0$	> 3 (after 28 days)
Impact resistance (N·m):	EN 6272-1	class declared by manufacturer	Class III: > 20
Impermeability expressed as coefficient of permeability to free water ( $\text{kg/m}^2 \cdot \text{h}^{0.5}$ ):	EN 1062-3	$W < 0.1$	$W < 0.1$ Class III: (low permeability to water) according to EN 1062-1
Permeability to water vapour – equivalent thickness of air $S_D$ (m):	EN ISO 7783-1	Class I $S_D < 5$ m Class II $5 \text{ m} \leq S_D \leq 50$ m Class III $S_D > 50$ m	$S_D < 5$ Class I (permeable to water vapour)
Reaction to fire:	Euroclass	value declared by manufacturer	A2 <sub>fl</sub> -s1

- Avoid applying **Triblock TMB** at high temperatures (more than +30°C and low R.H.in the air), the product would dry too quickly.
- If **Triblock TMB** is exposed to direct sunlight before coating the surface discolouring may occur, without affecting the mechanical properties of the product.
- Do not dilute **Triblock TMB** with water.
- Prevent the formation of condensation. During the application and hardening phases of the product, the temperature of the substrate must be at least +3°C higher than the dew-point temperature.

## APPLICATION PROCEDURE

### Preparation of the substrate

Concrete substrates must be sound, clean and free of dust, crumbly and detached parts, paint, wax, oil, rust and any other type of pollutant. Before applying **Triblock TMB**, mechanically abrade the substrate by shot-blasting or milling, then remove all dust with a vacuum cleaner. Check also that the compressive strength of the substrate is at least 25 N/mm<sup>2</sup> and the tear strength is higher than 1.5 N/mm<sup>2</sup>.

### Priming the substrate

Apply a coat of **Mapecoat I 600 W** diluted with water at a ratio of 1:1 with a roller. Apply **Triblock TMB** while the primer is still fresh.

### Preparation of the product

Mix each component thoroughly by mixing component A (resin) with component B (hardener) in a suitable container. Add component C (powder) and mix for at least 6 minutes with a low-speed electric mixer to form a smooth, well-blended mix.

## Application of the product

Apply **Triblock TMB** with a notched trowel and then pass over the surface with a spiked roller.

## Cleaning

Clean tools used to prepare and apply **Triblock TMB** with water immediately after use. Once hardened, the product may only be removed using mechanical means.

## CONSUMPTION

*Primer:*

**Mapecoat I 600 W:** 200 g/m<sup>2</sup>.

*Self-levelling coating:*

**Triblock TMB:** approx. 2.25 kg/m<sup>2</sup> per mm.

## PACKAGING

Component A: 1 kg.  
Component B: 3 kg.  
Component C: 20 kg.

## STORAGE

**Triblock TMB** may be stored for up to 12 months in its original packaging in a dry area at a temperature of between +5°C and +30°C.

**Triblock TMB** componente C complies with the conditions of Annex XVII to Regulation (EC) N° 1907/2006 (REACH), item 47.

## SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Triblock TMB** components A, B and C may irritate the skin and eyes, and may cause sensitisation in those subjects sensitive to such substances.

**Triblock TMB** component C contains cement which, in contact with perspiration or other body fluids, provokes an irritating alkaline

reaction and, in those subjects sensitive to such products, an allergic rash. When applying the product, we recommend the use of protective gloves and goggles and to take the usual precautions for handling chemical products.

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

**Triblock TMB** components A and B are also hazardous for aquatic life. Do not dispose of these products in the environment.

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 ONLY 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](http://www.mapei.com)**

**All relevant references  
for the product are available  
upon request and from  
[www.mapei.com](http://www.mapei.com)**



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