EN 1504-2 EN 1504-2 (C) PI-MC-IR

HIGH ELASTICITY

MAPE

Fibre-reinforced elastomeric coating

Elas

ocolor

EVENS OUT SUBSTRATE DEFECTS

WHERE TO USE

Intermediate filling coat for the Elastocolor cycle. Elastocolor Rasante can be applied as it is with a trowel or diluted 5÷10% with water and applied with a brush, fur or honeycomb-pattern sponge roller or by spray. The product improves the homogeneity of the substrate and the flexibility of the Elastocolor finishing. Suitable for new or repaired renders, concrete and old plastic coats, even if cracked, as long as they are well bonded.

Some application examples

- Intermediate elastomeric filling smoothing compound which levels the roughness of the substrate before painting with Elastocolor Paint.
- Intermediate plastoelastic coat in which reinforcing mesh Elastocolor Net can be embedded.
- · Intermediate elastomeric coat that increases the total thickness of the Elastocolor cycle, increasing its overall elasticity.
- Apply Elastocolor Rasante in an orange peel textured finish after diluting it with 5÷10% of water to form a finishing and filler coat in the Elastocolor cycle.

TECHNICAL CHARACTERISTICS

Elastocolor Rasante is a hydrodispersed fibrous intermediate undercoat, based on elastomeric acrylic emulsions, free of cements with permanent elasticity which creates a minimum thickness of 0.2-0.4 mm. While drying, Elastocolor Rasante creates a non-woven type reinforcement that follows the expansions of the substrate.

Elastocolor Rasante can be reinforced with a special







Example of an application of Elastocolor Rasante with a porous sponge roller

TECHNICAL DATA (typical values) Conforms to the following standards:

- products certified according to EN 1504-2 (Surface protection systems for concrete), 2+ and 3 system
- classes according to EN 1504-2: products for protecting surfaces - coating - protection against the risk of penetration (1.3) (ZA.1d) + control of humidity (2.2) and increase in resistivity (8.2) (ZA.1e) (C, PI-MC-IR principles)

PRODUCT IDENTITY				
Consistency:	pasty liquid			
Colour:	white, in colours from the MAPEI colour chart range or in various colours obtained using the ColorMap [®] automatic colouring system			
Density (EN ISO 2811-1) (g/m³):	approx. 1.35			
Dry solids content (EN ISO 32511) (%):	approx. 67			
APPLICATION DATA				
Dilution rate:	by trowel: ready-to use; by brush, by roll or by spray: +5-10% of water			
Waiting time between each coat:	at least 24 hours under normal humidity and temperature conditions, and in all cases, when the previous layer is completely dry			
Application temperature range:	from +5°C to +35°C			
Consumption (kg/m ²):	 by trowel: 0.3-0.4 (per coat) by brush or roller: approx. 0.4 (per coat) by spray: 0.4-0.7 (per coat) 			
FINAL PERFORMANCE				
VOC content of ready-mixed product (white) (European Directive 2004/42/EC) (g/l):	≤ 20			
VOC content of ready-mixed product (coloured)	< 30			

net in the presence of widespread cracks less than 1.0 mm thick.

Elastocolor Rasante meets the main requirements of EN 1504-9 ("*Products and systems for protecting and repairing concrete structures: definitions, requirements, quality control and conformity assessment. General principles for the use and application of systems*"), and the requirements of EN 1504-2 ("*Protection systems for concrete surfaces*") for class: products for protecting surfaces - coating (C) - protection against the risk of penetration (1.3) (protection against ingress, PI) (ZA.1d) + control of humidity (2.2) (moisture control, MC) and increase in resistivity (8.2) (increasing resistivity, IR) (ZA.1e).

RECOMMENDATIONS

- Do not use Elastocolor Rasante to waterproof horizontal surfaces such as terraces (use Aquaflex or Mapelastic).
- Do not use **Elastocolor Rasante** to waterproof surfaces that will to be permanently immersed in water such as water tanks, purification tanks, canals.
- Do not apply **Elastocolor Rasante** in the case of a rain forecast, or windy days.
- Do not apply Elastocolor Rasante on damp substrates, or on substrates which are not fully cured.

- Do not apply Elastocolor Rasante if the humidity level is higher than 85% (in any case on dry substrates and not with direct sunlight).
- Do not dilute **Elastocolor Rasante** with solvents.
- Do not apply **Elastocolor Rasante** on surfaces subject to light foot traffic.
- Do not apply Elastocolor Rasante on dehumidifying renders, rich in lime or very porous and crumbly.
- Do not apply **Elastocolor Rasante** on cracks wider than 1.0 mm.
- Do not pre-treat the substrate with **Elastocolor Primer** or **Malech** if the surface is not porous.
- Please refer to the "Safety instructions for preparation and application" section.

APPLICATION PROCEDURE Preparing the substrate

The surface to be protected with Elastocolor Rasante must be perfectly clean and solid and previously treated with Malech. On crumbling substrates or substrates with low absorbency, use Elastocolor Primer for the preliminary treatment cycle instead. Before priming with Elastocolor Primer, level the substrate and repair any damaged concrete areas with the special shrinkage controlled mortars from the MAPEI line.

Remove all dirt, dust, grease, oils, efflorescence, moss and weeds that prevent **Elastocolor Rasante** from anchoring to the substrate.

The choice of cleaning method for old surfaces depends on the type of dirt. Manually cleaning with cold water is enough. Cleaning with hot water or steam is especially suitable when in presence of oil or grease. Sandblasting can also be used. If the surface is not dirty, a good cleaning with a broomcorn brush and dusting with compressed air is sufficient.

Deep cracks with widths greater than 1.0 mm must be enlarged with a suitable mechanical tool, cleaned, treated with **Elastocolor Primer** and sealed with a sealant that can be painted over with water based products before applying two coats of **Elastocolor Rasante** reinforced with a special net (**Elastocolor Net**).

We recommend applying the second coat of **Elastocolor Rasante** by spray to get better cover of the mesh.

Preparing the product

The product is ready-to-use as a smoothing compound if applied with a metal float. To increase the filling capability of the product, up to 30% sand, diameter size 0.1-0.3 mm, can be added. On continuous surfaces, it is possible to apply **Elastocolor Rasante** by brush, roller or spray. The product must be diluted beforehand with 5-10% water. When diluting the product make sure it is thoroughly blended. Use a drill at low speed for mixing if necessary. When preparing only partial quantities, we recommend mixing **Elastocolor Rasante** as is in its original container before taking out the quantity required.

Application of the product

Apply **Elastocolor Rasante** with a metal trowel, roller or by spray (either airless or air-spraying) over a dry coat of specific primer.

Usually a single coat of **Elastocolor Rasante** is enough. If more coats are needed, wait at least 24 hours between each coat, and in all cases, only when the previous coat is completely dry.

Examples of the final effect and finishes obtained using **Elastocolor Rasante** are illustrated in the "MAPEI colours in Design" catalogue.

Cleaning

Brushes, rollers, trowels and tools for spray application must be cleaned with water before **Elastocolor Rasante** dries.

CONSUMPTION

- by trowel: 0.3-0.4 kg/m² per coat;
 by brush
- or roller:
 - : approx. 0.4 kg/m² per coat;

- by spray: $0.4-0.7 \text{ kg/m}^2$ per coat. The above consumption rates are purely for indication purposes, and largely depend on the roughness of the substrate and the type of application technique used.

• Theoretical yield:

1.35 kg/m² in two coats per 0.5 mm of dry thickness.

PACKAGING

Elastocolor Rasante is supplied in 20 kg plastic drums.

STORAGE

24 months in original packaging in a dry place at a temperature between $+5^{\circ}C$ and $+30^{\circ}C$. Protect from frost.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Elastocolor Rasante is not considered hazardous according to current norms and guidelines regarding the classification of mixtures. However, we recommend the use of protective gloves and goggles, and to take the usual precautions for handling chemicals. In close areas, ensure good ventilation during and after application and drying. 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 TOS EXCLUDES THE RESPONSIBILITY OF MAPEI.



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





TARNA

PERFORMANCE CHARACTERISTICS FOR CE CERTIFICATION ACCORDING TO EN 1504-2, 2+ AND 3 SYSTEM, CLASSES ZA.1d + ZA.1e (C, PI - MC - IR principles)

CTANDADD	TEST			
STANDARD	TEST	RESULTS AND CONFORMITY TO REQUIREMENTS		
EN ISO 1770	coefficient of thermal expansion	result/class:	in conformity (coeff \leq 0.0000 3 K ⁻¹)	
EN ISO 2409	oblique cut	result/class:	GT1, in conformity (\leq GT2)	
EN 1062-6	permeability to CO2	μ:	611,487	
		s _D (m):	245	
		dry thickness according to $s_{\scriptscriptstyle D}$ (m):	0.00040	
		result/class:	in conformity ($s_D > 50 \text{ m}$)	
EN ISO 7783	permeability to water vapour	μ:	1417	
		s _D (m):	0.6	
		dry thickness according to s_D (m):	0.00040	
		result/class:	l (s _D < 5 m)	
EN 1062-3	capillary absorption and permeability to water	w [kg/(m ² h ^{0,5})]:	0.02	
		result/class:	in conformity (w < 0.1)	
EN 1062-11 4.1	thermal compatibility: ageing: 7 days at +70°C	result/class:	in conformity (adherence ≥ 0.8 N/mm ²)	
EN 13687-1	thermal compatibility: freeze-thaw cycles with immersion in de-icing salts	result/class:	in conformity (adherence ≥ 0.8 N/mm ²)	
EN 13687-2	thermal compatibility: thunder-shower	result/class:	in conformity (adherence \geq 0.8 N/mm ²)	
EN 13687-3	thermal compatibility: thermal cycles without immersion in de-icing salts	result/class:	in conformity (adherence ≥ 0.8 N/mm ²)	
static EN 1062-7	crack resistance	crack-bridging ability at +23°C (μ m):	1427	
		result/class at +23°C:	A4 (> 1.25 mm)	
		crack-bridging ability at -15°C (µm):	1070	
		result/class at -15°C (µm):	A3 (> 0.5 mm)	
dynamic EN 1062-7	crack resistance	result/class:	B3,1	
EN 1542	direct traction adherence test	result/class:	in conformity (adherence \geq 0.8 N/mm ²)	
EN 13501-1	reaction to fire	euroclass:	B s1 d0	
EN 13036-4	skid resistance	result/class:	II (dry internal surface) (> 40 dry units)	
EN 1062-11:2002 4.2	artificial exposure to atmospheric agents	result/class:	in conformity	
EN 1081	anti-static behaviour	result/class:	I (electrical resistance $>10^4$ and $<10^6\Omega)$	
	hazardous substances	result/class:	in conformity	

FURTHER PERFORMANCE CHARACTERISTICS ACCORDING TO EN 1504-2 REGARDING REQUIREMENTS FOR CLASSES ZA.1d + ZA.1e

STANDARD	TEST	RESULTS AND CONFORMITY TO REQUIREMENTS	
EN ISO 5470-1	abrasion resistance	result/class:	in conformity (Δ weight < 3000 mg)
EN ISO 6272-1	impact resistance	result/class:	class I (≥ 4 Nm)
UNI 7928	diffusion of chloride ions	penetration (mm):	0.0
EN 14629	chloride penetration after freeze-thaw cycles according to EN 13687-1	chloride % on the wheight of the cement in the depth from 5-10 mm within the concrete:	0.12 (< 0.0% in conformity with ÖBV Guideline "Conservation and Maintenance of Buildings of Concrete and Reinforced Concrete")
EN ISO 2812-1 - NH4+	chemical resistance	result/class:	in conformity

