



# Elastocolor Rasante SF

**Trowelable ready-to-use, one-component, fibre-reinforced elastomeric undercoat with high filling properties**



## WHERE TO USE

Ready-to-use, intermediate smoothing and filling compound, particularly suitable for application by trowel for embedding reinforcement mesh (**Elastocolor Net**) and to improve the homogeneity of the substrate and provide flexibility for the **Elastocolor** finish.

### Some application examples

- Intermediate elastomeric high-filling and smoothing compound with a rustic finish, to even out irregularities in the substrate before coating with elastomeric paint.
- Intermediate plasto-elastic coat ideal for embedding **Elastocolor Net** reinforcing mesh.
- Intermediate elastomeric coat to increase the total thickness and overall flexibility of the **Elastocolor** system.
- **Elastocolor Rasante SF**, applied with a brush, honeycomb-pattern sponge roller or short-haired roller as is or diluted with 5-10% of water, may also be used as a flexible filling and finishing coat similar to quartz paint.

## TECHNICAL CHARACTERISTICS

**Elastocolor Rasante SF** is a cement-free, elastomeric acrylic emulsion-based fibrous, intermediate material admixed with graded sand, blended to a formula developed in MAPEI's own Research and Development Laboratories.

If the substrate has widespread cracking less than

1 mm thick, reinforce **Elastocolor Rasante SF** with **Elastocolor Net** mesh which, after drying, forms a permanent, flexible reinforcement which mimics the expansion of the substrate.

**Elastocolor Rasante SF** 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 SF** to waterproof horizontal surfaces, such as terraces (use **Aquaflex System** or **Mapelastic**).
- **Elastocolor Rasante SF** is not suitable to waterproof surfaces which are permanently immersed in water, such as water tanks, purification tanks or canals.
- Protect **Elastocolor Rasante SF** from rain or wind.
- Use only flexible paint for coating over **Elastocolor Rasante SF**.
- Do not apply **Elastocolor Rasante SF** on damp substrates, or on substrates which are not fully cured.

## TECHNICAL DATA (typical values)

Conforms to the following standards:

- products certified according to EN 1504-2 (Surface protection systems for concrete), 2+ and 3 compliance certification 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

<b>Consistency:</b>	thick liquid
<b>Colour:</b>	white, from the MAPEI colour chart range or in various colours obtained using the <b>ColorMap®</b> automatic colouring system
<b>Density (EN ISO 2811-1) (g/m³):</b>	approx. 1.47
<b>Brookfield Viscosity (mPa-s):</b>	approx. 177,500 (rotor 6 - 5 rpm)
<b>Dry solids content (EN ISO 3251) (%):</b>	approx. 77
<b>Storage:</b>	24 months in original packing
<b>Hazard classification according to EC 1999/45:</b>	none. Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet
<b>Customs class:</b>	3209 1000 00

## APPLICATION DATA

<b>Dilution rate:</b>	by trowel: ready-to use; by brush or by roll: +5-10% of water
<b>Waiting time between each coat:</b>	at least 24 hours under normal humidity and temperature conditions, and in all cases, when the previous layer is completely dry
<b>Application temperature range:</b>	from +5°C to +35°C
<b>Consumption (kg/m²):</b>	by trowel: 0.4-0.7 (per coat) by brush or roller: 0.3- 0.5 (per coat) by spray: 0.8-1.0 (per coat)

- Do not apply **Elastocolor Rasante SF** if the humidity level is higher than 85% (in any case on dry substrates and not with direct sunlight).
- **Elastocolor Rasante SF** may be diluted with water (not solvents).
- **Elastocolor Rasante SF** is not suitable for use as a wearing surface.
- Do not apply **Elastocolor Rasante SF** on cracks wider than 1 mm.
- Do not apply **Elastocolor Rasante SF** on de-humidifying render, lime-rich render or particularly, crumbly render.
- Do not pre-treat substrates with **Elastocolor Primer** or **Malech** if the surface has old paintwork or if it is not absorbent.
- Please refer to the "Safety instructions for preparation and application" section.

## APPLICATION PROCEDURE

### Preparation of the substrate

Surfaces to be treated with **Elastocolor Rasante SF** must be perfectly clean, sound and treated beforehand with **Elastocolor Primer** or **Malech**.

Before applying **Elastocolor Primer** or **Malech**, level the substrate and repair damaged areas of the concrete with special shrinkage-controlled mortars from the **Mapegrout** or **Planitop** range.

Remove all traces of dirt, oil, grease, saline efflorescence, moss algae, which prevent **Elastocolor Rasante SF** from bonding to the substrate.

The choice of cleaning system for old surfaces depends on the type of contamination to be removed, but washing with cold water is usually sufficient. Cleaning with hot water or steam is particularly suitable if oil or grease needs to be removed.

If deemed necessary, sand-blasting may also be carried out. If the surface is not dirty,

a thorough brushing with a stiff brush is sufficient.

Deep cracks wider than 1 mm must first be opened up with a grinder, cleaned and then treated with **Elastocolor Primer** and sealed with a sealant which may be painted over (such as **Mapectex AC4**).

### Preparation of the product

The product is ready-to-use and may be applied with a metal trowel.

If an "orange peel" finish is required, **Elastocolor Rasante SF** may be applied with a honeycomb roller, and the product may be diluted with 5-10% of water according to the finish required. If more than one coat of **Elastocolor Rasante SF** is required, wait at least 24 hours between each coat, and in all cases, only when the previous coat is completely dry.

### Application of the product

- *With a trowel to embed the reinforcing mesh*

The most suitable mesh is made from fibreglass and weighs approximately 50-60 grams, with a mesh pitch which is approximately 2.7x2.7 mm (refer to MAPEI **Elastocolor Net** data sheet). Apply a first coat of **Elastocolor Rasante SF** on the surface to be treated with a 2-3 mm notched trowel, lay on the mesh and then pass over with a metal float to smooth out the product. After 24 hours, apply a second coat of **Elastocolor Rasante SF**. If the substrate is smooth and regular, a consumption of approximately 700-800 grams/m<sup>2</sup> per coat of **Elastocolor Rasante SF** is sufficient to cover the mesh uniformly in two coats. After the above operation, the surface will have a smooth, regular rustic-effect finish and may be left as a finished surface. If not, the surface may be painted over with the same product (for an "orange peel" or smooth finish) or with **Elastocolor**.

According to the type of application carried out and the level of finish required, **Elastocolor Rasante SF** may be applied with a trowel in one or two coats without inserting the mesh. As a general rule, only one coat is applied if it is used as an undercoat to even out the substrate, and in two coats if it is finished off with **Elastocolor**. Two coats of **Elastocolor Rasante SF** are recommended, however, if it is used both as an undercoat and as a finishing material.

- *"Orange peel" finish*

The product is extremely versatile. Various finishes can be achieved depending on the application system, tools used and dilution ratio (max 10% water). The product may be applied with a short, medium or long-haired roller, a fine-mesh honeycomb roller or a medium or large brush. When applied with a trowel **Elastocolor Rasante SF** will dry to an orange peel finish, which may be further enhanced according to the type of roller used (honeycomb pattern or long-haired). The effect is reduced by increasing the dilution percentage of 5-10% and by changing the tool used to apply the product.

It is not possible to obtain a permanent smooth finish by applying the product with a

roller and with 10% dilution. Higher dilution rates could preclude the flexible protection of the surface and/or the covering of the substrate.

The best finish is obtained by applying a first coat of **Elastocolor Rasante SF** with a metal trowel as a smoothing undercoat, followed by a successive finishing coat.

Brush applications are best carried out by applying two coats diluted by 10%. The finish will be a fine-grained rustic type, similar to quartz paint.

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

### Cleaning

Trowels, brushes, rollers and equipment used to apply the product may be cleaned with water before the **Elastocolor Rasante SF** has dried.

### CONSUMPTION

- Trowel: 0.7-0.8 kg/m<sup>2</sup> per coat.
- Brush or roller: 0.3-0.5 kg/m<sup>2</sup> 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.

### PACKAGING

**Elastocolor Rasante SF** is supplied in 20 kg plastic drums.

### STORAGE

24 months in its original packaging in a dry place and at a temperature of between +5°C and +30°C.

### SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Elastocolor Rasante SF** is not considered hazardous according to current standards. However, if the product is left to dry on the skin, it may cause temporary irritation. The use of protective gloves is recommended. The Safety Data Sheet is available on Request for professional use.

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

Elastocolor  
Rasante SF



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

STANDARD	TEST	RESULTS AND CONFORMITY TO REQUIREMENTS	
UNI EN ISO 1770	coefficient of thermal expansion	result/class:	in conformity (coeff $\leq 0.00003 \text{ K}^{-1}$ )
UNI EN ISO 2409	oblique cut	result/class:	GT1, in conformity (GT2)
UNI EN 1062-6	permeability to CO <sub>2</sub>	$\mu$ :	130,569
		$s_0$ (m):	78
		dry thickness according to $s_0$ (m):	0.00060
		result/class:	in conformity ( $s_0 > 50 \text{ m}$ )
UNI EN ISO 7783-1.2	permeability to water vapour	$\mu$ :	1242
		$s_0$ (m):	0.7
		dry thickness according to $s_0$ (m):	0.00060
		result/class:	I ( $s_0 < 5 \text{ m}$ )
UNI EN 1062-3	capillary absorption and permeability to water	$w$ [ $\text{kg}/(\text{m}^2\text{h}^{0.5})$ ]:	0.04
		result/class:	in conformity ( $w < 0.1$ )
UNI EN 1062-11 4.1	thermal compatibility: ageing: 7 days at +70°C	result/class:	in conformity (adherence $\geq 0.8 \text{ N/mm}^2$ )
UNI EN 13687-1	thermal compatibility: freeze-thaw cycles with immersion in de-icing salts	result/class:	in conformity (adherence $\geq 0.8 \text{ N/mm}^2$ )
UNI EN 13687-2	thermal compatibility: thunder-shower cycles	result/class:	in conformity (adherence $\geq 0.8 \text{ N/mm}^2$ )
UNI EN 13687-3	thermal compatibility: thermal cycles without immersion in de-icing salts	result/class:	in conformity (adherence $\geq 0.8 \text{ N/mm}^2$ )
static UNI EN 1062-7	crack resistance	crack-bridging ability ( $\mu\text{m}$ ):	1000
		result/class:	A3 ( $> 0.5 \text{ mm}$ )
dynamic UNI EN 1062-7	crack resistance	result/class:	B2
UNI EN 1542	direct traction adherence test	result/class:	in conformity (adherence $\geq 0.8 \text{ N/mm}^2$ )
EN 13501-1	reaction to fire	euroclass:	B s1 d0
UNI EN 13036-4	resistance to skid marks	result/class:	II (dry internal surface) ( $> 40$ dry units)
UNI EN 1062-11:2002 4.2	artificial exposure to atmospheric agents	result/class:	in conformity
UNI EN 1081	anti-static behaviour	result/class:	II (explosives) (electrical resistance $> 10^4 \text{ e} < 10^9 \Omega$ )
	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	
UNI EN ISO 5470-1	abrasion resistance	result/class:	in conformity ( $\Delta$ weight $< 3000 \text{ mg}$ )
UNI EN ISO 6272-1	impact resistance	result/class:	class II ( $\geq 20 \text{ Nm}$ )
UNI 7928	diffusion of chloride ions	penetration (mm):	0.0
UNI EN ISO 2812-1 - NH <sub>4</sub> <sup>+</sup>	chemical resistance	result/class:	in conformity