



Elastocolor Tonachino Plus

Elastomeric plaster for the
hygiene of walls, in internal
and external applications

FLEXIBLE AND WATER-REPELLENT

MOULD AND ALGAE RESISTANT

WHERE TO USE

Fibre-reinforced, rustic effect coating for all new, old or painted surfaces, surfaces with hairline cracks, or surfaces in areas where particular local climatic conditions facilitate the growth of algae and mould.

Some application examples

- Decorating and protecting all types of cementitious and lime-based render.
- Decorating façades with hairline cracks, including façades with old paintwork (check suitability beforehand).
- Decorating façades damaged by mould and algae, including façades with old paintwork (check beforehand).
- Protective coating for north-facing façades or at risk of being damaged by mould and algae.
- Finishing coat for façades with external thermal insulation such as **Mapetherm System**.

TECHNICAL CHARACTERISTICS

Elastocolor Tonachino Plus is a fibre-reinforced elastomeric coating which, thanks to its high elasticity, including at low temperatures, has the capacity to follow and absorb small deformations in substrates. Also, the fibres contained in the product form an interwoven strengthening matrix, similar to “non-woven” fabric, with the capacity to withstand deformations in the coating and to hide any hairline cracks in the finishing layer.

Elastocolor Tonachino Plus also contains silicone resins, which give substrates high water repellence combined with good vapour permeability. The combined action of the silicone and elastomeric



TECHNICAL DATA (typical values)

Conformity with:

- product certified according to EN 1504-2 (Surface protection systems for concrete), 2+ and 3 systems
- classes according to EN 1504-2: products for protecting surfaces - coating - control of humidity (2.2) and increase in resistivity (8.2) (ZA. 1e) (C, MC-IR principles)
- product certified according to EN 15824 (Specifications for external renders and internal plasters based on organic binders), system 3 (also for applications subject to reaction to fire regulations)
- type according to EN 15824: water-based product for internal and external applications

PRODUCT IDENTITY

Consistency:	paste
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/cm³):	approx. 1.70
Dry solids content by weight (EN ISO 3251) (%):	approx. 83
Grain size:	1.2 mm

APPLICATION DATA

Dilution rate:	ready-to-use
Recoat time:	12-24 hours according to humidity and temperature conditions, and in any case, only when the previous layer is completely dry
Application temperature range:	from +5°C to +35°C
Consumption (kg/m²):	1.9-2.3

FINAL PERFORMANCE

VOC content of ready-mixed product (white) (European Directive 2004/42/EC) (g/l):	≤ 10
VOC content of ready-mixed product (coloured) (European Directive 2004/42/EC) (g/l):	≤ 30

RESISTANCE TO BIOLOGICAL ATTACK (P.R.A. test report)

Applicable standard	Test	Results
EN 15457	resistance to mould and fungi	no growth
EN 15458	resistance to algae	no growth

acrylic polymers form a film with exceptional adhesion, strength, protection, durability and colour stability and very low dirt pick-up.

Elastocolor Tonachino Plus is resistant to the growth of mould and algae, and may be used for decorating buildings located in particularly damp climates favourable to the growth of such micro-organisms.

A typical example is when painting a north-facing façades.

Elastocolor Tonachino Plus contains a specific additive for the control of mould and algae growth.

Thanks to the combined action of the main components used to formulate **Elastocolor Tonachino Plus**, it eliminates all the causes which provoke deterioration of façades, and forms a long-lasting, protective coating which remains stable over the years.

Elastocolor Tonachino Plus adheres perfectly to all types of traditional render and to old, well-adhered paintwork. The water repellence of the product protects substrates

from chemical attack, makes them much less susceptible to dirt retention and provides them with excellent resistance to UV rays and ageing, characteristics which remain stable for a very long time.

Apart from protecting substrates, **Elastocolor Tonachino Plus** forms an attractive, rustic finish. It is available in a wide range of colours obtained using the **ColorMap®** automatic tinting system.

Elastocolor Tonachino Plus 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 system for concrete surfaces"*) for class: products for protecting surfaces - coating (coating, C) - control of humidity (2.2) (moisture control, MC), and increase in resistivity (8.2) (increasing resistivity, IR) (ZA. 1e).

Elastocolor Tonachino Plus complies with the requirements of EN 15824 (*"Specifications for external renders and internal plasters based on organic binders"*) for internal and external applications.

RECOMMENDATIONS

- Do not apply **Elastocolor Tonachino Plus** directly on surfaces where mould or algae are present. Such micro-organisms must always be removed from surfaces beforehand with **Silancolor Cleaner Plus** followed by the application of a coat of **Silancolor Primer Plus** or **Silancolor Base Coat Plus**.
- Do not apply **Elastocolor Tonachino Plus** on damp substrates or on substrates which are not completely cured.
- Do not apply **Elastocolor Tonachino Plus** if the temperature is lower than +5°C or higher than +35°C.
- Do not apply **Elastocolor Tonachino Plus** if the level of humidity is higher than 85%.
- Do not apply **Elastocolor Tonachino Plus** if it is about to rain, in windy weather or if there is direct sunlight.
- Do not apply **Elastocolor Tonachino Plus** on de-humidifying render.
- Refer to the "Safety instructions for preparation and application" section.

APPLICATION PROCEDURE

Preparation of the substrate

New surfaces to be painted and areas patched up with repair mortar must be well-cured, perfectly clean, cohesive and dry. Remove all traces of oil and grease from the surface and any parts which are not well attached. Seal all cracks and repair deteriorated areas. Seal surface pores and level off uneven areas on the substrate with mortar and smoothing compound from the MAPEI Building Products line.

Surfaces to be finished off with **Elastocolor Tonachino Plus** must be treated prior to application, depending on the type of protection required. Treat with **Silancolor Primer Plus** or **Silancolor Base Coat Plus** to protect against the formation of mould and algae; use **Malech** or **Quarzolite Base Coat** for all other cases. On substrates where the curing is uncertain, on chalking substrates and on substrates with low absorbency, use **Elastocolor Primer**.

Remove all traces of existing algae, mould and fungi. Remove such microorganisms from surfaces while they are still damp, that is after cleaning with **Silancolor Cleaner Plus**. Apply **Silancolor Cleaner Plus** over the surface of the substrate with a low-pressure manual sprayer or by brush, making sure it penetrates deep down into the substrate, and wait a few minutes while it reacts. Remove the algae, mould and fungi with a stiff brush. Repeat this operation several times if necessary one after the other, making sure the **Silancolor Cleaner Plus** penetrates deep down into the substrate.

Elastocolor Tonachino Plus may be applied on concrete, skim coats over thermal insulation systems and on render if they have cracks less than 0.5 mm wide without having to seal the substrate beforehand.

Preparation of the product

Elastocolor Tonachino Plus is supplied ready-mixed and just needs to be blended with a drill at low-speed. If the product is too thick, add 1-2% of water.

Application of the product

Apply **Elastocolor Tonachino Plus** with a stainless steel or plastic spreader over the dry primer. It may also be applied by spray if suitable equipment is available. The protection cycle comprises the application of one coat of **Elastocolor Tonachino Plus**: spread an even coat of product on the surface, then go over the product with a plastic float to create an even finish or with a damp sponge float to create the effect required. Depending on the particle size of the product and the roughness of the substrate, two coats may be required to form a perfectly even aesthetic effect.

Cleaning

Clean tools used to apply **Elastocolor Tonachino Plus** with water before the product dries.

CONSUMPTION

Consumption is heavily influenced by the roughness of the substrate and the application method used. Consumption is around 1.9-2.3 kg/m² on even substrates.

PACKAGING

Elastocolor Tonachino Plus is supplied in 20 kg plastic tubs.

STORAGE

24 months if stored in a dry place away from sources of heat at a temperature of between +5°C and +30°C.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Elastocolor Tonachino Plus is dangerous for aquatic life, do not dispose of it in the environment. During use wear protective gloves and goggles and take the usual precautions for handling chemicals. If the product comes in contact with the eyes or skin wash immediately with plenty of water and seek medical attention. If the products are applied in closed environments, make sure they are well ventilated to guarantee a continuous circulation of fresh air. For further and complete information about the safe use of our product please refer to the latest version of our 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 TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.

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



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

STANDARD	TEST	RESULTS AND COMPLIANCE WITH THE REQUIREMENTS	
EN ISO 7783	permeability to water vapour	S_D (m):	0.35
		consumption related to S_D (kg/m ²):	2.3
		result/class:	I ($S_D < 5$ m)
EN 1062-3	capillary absorption and permeability to water	w [kg/(m ² ·h ^{0.5})]:	0.01
		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 13687-2	thermal compatibility: thunder-shower	result/class:	in conformity (adherence ≥ 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 (μm):	855
		result/class (μm):	A3 (> 0.5 mm)
dynamic EN 1062-7	crack resistance	result/class:	B2
EN 1542	direct traction adherence test	result/class:	in conformity (adherence ≥ 0.8 N/mm ²)
EN 13501-1	reaction to fire	euroclass:	A2 s1 d0
EN 1062-11:2002 4.2	artificial exposure to atmospheric agents	result/class:	in conformity

PERFORMANCE CHARACTERISTICS FOR CE CERTIFICATION ACCORDING TO EN 15824 TEXTURED COATINGS FOR INTERNAL AND EXTERNAL USE BASED ON ORGANIC BINDERS

STANDARD	TEST	RESULTS AND COMPLIANCE WITH THE REQUIREMENTS	
		Grain sizes	1.2 mm
EN ISO 7783	water vapour permeability	S_D (m):	0.35
		consumption related to S_D (kg/m ²):	2.3
		result/class:	V2 ($0.14 \leq S_D < 1.4$ m)
EN 1062-3	water absorption	w [kg/(m ² ·h ^{0.5})]:	0.01
		result/class:	W3 ($w \leq 0.1$ kg/(m ² ·h ^{0.5}))
EN 1542	adhesion	adhesion (N/mm ²):	1.46
		type of breaking:	B
		result/class:	in conformity (≥ 0.3 MPa)
EN 13687-3	durability	number of cycles:	20
		final adhesion (N/mm ²):	1.82
		type of breaking:	B
		alterations:	no
		result/class:	in conformity (≥ 0.3 MPa)
EN 1745	thermal conductivity	result/class:	0.89 W/mK (tab value, $P = 90\%$, related to the reference dry density of 1800 kg/m ³)
EN 13501-1	reaction to fire	result/class:	A2 s1 d0



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