



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 all types of cementitious or lime-based render.
- Decorating façades with hairline cracks, including façades with old paintwork (check suitability beforehand).
- Decorating façades deteriorated by algae and mould, including façades with old paintwork (check suitability beforehand).
- Decorating north-facing façades.
- Coating façades with thermal insulation systems.
- Repairing the top layer of old textured coatings, including those with hairline cracks, applied over external thermal insulation composite systems (ETICS).

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 acrylic polymers form a film with exceptional adhesion,



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 (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 after 28 days
EN 15458	resistance to algae	no growth after 35 days

strength, protection, durability and colour stability and very low dirt pick-up.

Elastocolor Tonachino Plus is particularly 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 an anti-mould and anti-algae agent.

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 the various colours from MAPEI colour charts, and also in a wide range of colours obtained using the **ColorMap®** automatic colouring system. When applied on ETICS, as with all types of finish, colours with a reflectance index lower than 20% should not be used. **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**.
- 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

Before applying **Elastocolor Tonachino Plus**, always make sure that new surfaces and areas patched up with repair mortar are well cured, perfectly cohesive and dry.

Remove all traces of oil and grease from the surface and any parts which are not well adhered.

Seal all cracks and repair any deteriorated areas.

Seal porosity and even out the surface of the substrate with mortar and skimming compound from the Building Products range. The application cycle for façades may vary according to the following:

- **Façades with mould and algae:**
Before carrying out the operations described above, thoroughly clean all surfaces with **Silancolor Cleaner Plus**. Apply **Silancolor Cleaner Plus** over the entire surface of the substrate with a low-pressure manual sprayer or by brush, making sure it penetrates deep down into the substrate. After application, wait a few minutes while it reacts.
- Then remove all mildew, mould and algae with a brush while the surface is still damp.
- Apply **Silancolor Cleaner Plus** several times to help it penetrate deeper into the substrate. Once the substrate is perfectly dry, apply **Silancolor Primer Plus** and leave it to dry for approximately 12-24 hours.
- **Façades requiring resistance to the growth of mould and algae:** apply **Silancolor Primer Plus** and leave it to dry for approximately 12-24 hours.
- **Façades exposed to climatic/ environmental conditions where maximum water-repellence is required:** apply **Silancolor Primer** or **Silancolor Base Coat** and leave it to dry for approximately 12-24 hours.
- **Surfaces already painted or new with no algae and mould:** apply **Malech** or **Quarzolite Base Coat** and leave it to dry for approximately 12-24 hours.

Preparation of the product

Elastocolor Tonachino Plus is supplied ready to use and just needs to be thoroughly mixed with a drill at low speed.

Application of the product

Apply **Elastocolor Tonachino Plus** with a stainless steel or plastic float over a specific primer (refer to the "Preparation of the substrate" section). It can be also applied by spray with suitable tools.

The protection cycle comprises the application of one coat of **Elastocolor Tonachino Plus**.

Cleaning

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

PACKAGING

Elastocolor Tonachino Plus is supplied in 20 kg drums and is available in grain size 1.2 mm.

CONSUMPTION

Elastocolor Tonachino Plus 1.2 mm:

1.9-2.3 kg/m² for a complete cycle. Consumption is heavily influenced by the roughness of the substrate.

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 not considered hazardous according to the current regulations regarding the classification of mixtures. We recommend the use of protective gloves and goggles, and to take the usual precautions for handling chemicals.

If the product is applied in a closed environment, make sure the room is well ventilated.

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 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 ≤ S _D < 1.4m)
EN 1062-3	water absorption	w [kg/(m ² ·h ^{0.5}):	0.01
		result/class:	W3 (w ≤ 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:	0.93 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