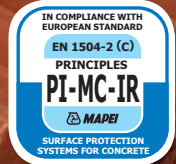




**MAPEI**

# Elastocolor Waterproof

Acrylic paint  
for permanent contact  
with water



**WATERPROOF**

**EASY TO CLEAN**

## WHERE TO USE

Painting indoor and outdoor structures where the substrate needs to be covered with a flexible protective coating suitable for direct contact with water.

Protecting horizontal concrete surfaces not used for foot traffic against contact with rainwater, such as flat roofs waterproofed with **Mapelast** or **Mapelast Smart**. **Elastocolor Waterproof** improves resistance to chemicals and acid rain and, if suitably coloured, reduces the absorption of sun rays and, therefore, over-heating of the surface.

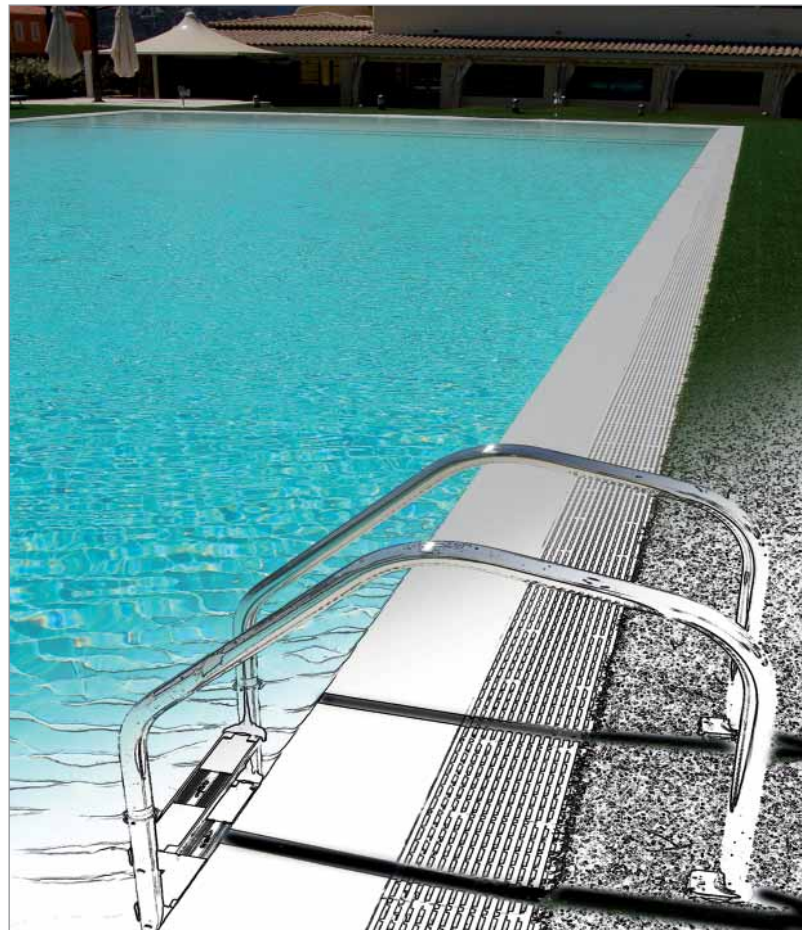
Painting architectural elements waterproofed with **Mapelast** or **Mapelast Smart** to provide sufficient protection against the sun, acid rain and atmospheric agents in general.

Finishing off the internal surfaces of water tanks and swimming pools waterproofed with **Triblock Finish** and **Mapecoat I 600 W** where the skimming layer needs to be covered with a compatible, flexible finishing coating in permanent contact with water.

If the external faces of swimming pools are also waterproofed and there is no sign of infiltration, **Elastocolor Waterproof** may also be applied on surfaces waterproofed with **Mapelast** or **Mapelast Smart**.

## Some application examples

- Painting general cementitious substrates to form a protective coat resistant to contact with water.
- Painting vertical surfaces or special architectural elements (such as domed roofs, elements particularly exposed, covering for parapets on balconies, terraces, etc.) after applying **Mapelast** or **Mapelast Smart** to waterproof and protect them from rainwater.





Application of  
Elastocolor Waterproof  
with a roller

- Painting horizontal concrete surfaces not used for foot traffic, such as flat roofs or guttering, after applying **Mapelastic** or **Mapelastic Smart**.
- Painting swimming pools after applying **Triblock Finish** and **Mapecoat I 600 W** when the internal surfaces are not to be tiled.

## TECHNICAL CHARACTERISTICS

**Elastocolor Waterproof** is a flexible, protective paint for outdoor applications made from acrylic resin in water dispersion and is perfectly compatible as a coloured finishing coat with **Mapelastic**, **Mapelastic Smart** and **Triblock Finish**.

**Elastocolor Waterproof** may be used as the final finishing coat wherever a highly water-resistant paint is required after waterproofing surfaces with cementitious waterproofing products.

**Elastocolor Waterproof** offers excellent resistance to all types of climatic conditions, aggression from smog and sunlight and forms a hard-wearing, protective layer on substrates which resists the rigours of time.

**Elastocolor Waterproof** protects the substrate and gives it a highly attractive, even smooth finish.

The product is available in 6 standard colours. Further colours may also be created according to individual samples by using the **ColorMap®** automatic colouring system.

**Elastocolor Waterproof** responds to the principles defined in 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 surface surfaces - (coating, C) - 1.3 (protection against ingress, PI) (ZA.1d) + 2.2 (moisture control, MC), and 8.2 (increasing resistivity, IR) (ZA.1e).

## RECOMMENDATIONS

**Elastocolor Waterproof** is not a sheathing product and is not a substitute for cementitious waterproofing products, conventional bitumen sheathing or elastomeric cementitious sheathing in general used for waterproofing horizontal and vertical surfaces.

When used in swimming pools or water tanks, before applying the **Triblock Finish**, **Mapecoat I 600 W** and **Elastocolor Waterproof** preparation and finishing system, structures must be tested to make sure they are watertight, in that the use of these products on their own is not a remedy for structural defects.

**Elastocolor Waterproof** must not be used directly on substrates subject to the counter-pressure of water. After correctly preparing surfaces subject to such conditions, assess whether painting them with **Elastocolor Waterproof** is suitable and/or possible.

**Elastocolor Waterproof** is not suitable for coating storage tanks for drinking water. The use of this product over other types of

finishes, such as chlorinated rubber, must be assessed according to each individual case. The condition of the old coating and compatibility of the various layers must be considered, and most importantly, the surface must be prepared correctly. The preparation cycle must include at least a thorough de-greasing wash, sanding to roughen up the surface as much as possible and, if necessary, the application of **Mapelastic**, **Mapelastic Smart** or **Triblock Finish** (see also the section regarding "Maintenance operations").

**Elastocolor Waterproof** resists well when in contact with the most commonly used chemical products for disinfecting water in swimming pools (chlorine and quaternary ammonium based salts). However, in certain cases, constant, permanent contact with water may bleach the **Elastocolor Waterproof** surface film. Therefore, if a medium or dark colour is used, **seasonal maintenance** must be scheduled to bring the film back to its original colour. If special systems are used to disinfect the water (e.g. ozone, bromine salts, etc.), preliminary testing must be carried out to check if it is possible to use **Elastocolor Waterproof**.

Please note that **Elastocolor Waterproof** is a finishing product applied in relatively thin coats (200-300 µm). If it is used in water tanks or swimming pools, therefore, bear in mind that it is not particularly resistant to high mechanical abrasion and may be damaged by equipment normally used for cleaning surfaces (robotic equipment, cleaning brushes, etc.).

We recommend checking the condition of the layer of **Elastocolor Waterproof** periodically and that **seasonal or annual maintenance of the treated surfaces is considered**.

## APPLICATION PROCEDURE

### Preparation of the substrate

It is very important that the substrate is prepared correctly to ensure good results and to guarantee durability.

New surfaces requiring treatment or 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 areas which are deteriorated.

Seal the porosity and smooth over uneven areas on the substrate.

To complete the preparation of cementitious substrates, apply a suitable waterproofing layer of **Mapelastic** or **Mapelastic Smart** according to instructions on their relative Technical data Sheet.

At least 15 days after applying **Mapelastic** or **Mapelastic Smart** apply at least 2 coats of **Elastocolor Waterproof**.

Prepare substrates in swimming pools, on the other hand, by evening out the bottom and perimeter walls and by forming fillets in all sharp corners and around sharp edges. Once the structure has been correctly prepared and the materials have cured sufficiently, apply **Mapecoat I 600 W** diluted 1 to 1 with water, and after 4-6 hours apply

## TECHNICAL DATA (typical values)

In compliance with norms:

- product certified according to EN 1504-2 (Surface protection systems for concrete), 2+ and 3 compliance certification system
- class according to EN 1504-2: products for protecting surfaces – coating - protection against ingress (1.3) (ZA.1d) + moisture control (2.2) and increasing resistivity (8.2) (ZA.1e) (C, principles PI - MC - IR)

### PRODUCT IDENTITY

**Consistency:**

thick liquid

**Colour:**

white, from the Mapei colour chart range or in various colours obtained using the **ColorMap®** automatic colouring system

**Density (EN ISO 2811-1) (g/cm<sup>3</sup>):**

approx. 1.18

**Brookfield Viscosity (mPa·s):**

approx. 2,950  
(rotor 4 - 20 rpm)

**Dry solids content (EN ISO 3251) (%):**

approx. 59

**Storage:**

24 months in original packaging

**Hazard classification according to Directive 1999/45/CE:**

none.  
Before using refer to the "Safety instructions for preparation and application" paragraph and the information on the packaging and Safety Data Sheet.

**Customs class:**

3209 1000 00

### APPLICATION DATA

**Dilution rate:**

5-10% of water

**Waiting time between each coat:**

at least 24 hours under normal humidity and temperature conditions, and in all cases, only when the previous layer is completely dry

**Application temperature range:**

from +10°C to +35°C

**Consumption (kg/m<sup>2</sup>):**

0.5-0.7 (in 2/3 coats)

### FINAL PERFORMANCE

**Change in colour after 1,000 hours exposure to a Weather-Ometer (according to ASTM G 155 cycle 1), white colour:**

$\Delta E < 1$

a skimming and waterproofing layer with **Triblock Finish**. 24 hours after applying the **Triblock Finish**, apply another layer of **Mapecoat I600W** diluted 1 to 1 with water, and after 4-6 hours apply the first coat of **Elastocolor Waterproof**. Complete the cycle the following day with a second coat of **Elastocolor Waterproof**. A third coat of **Elastocolor Waterproof** (after a further 24 hours) is only required if a colour with poor covering properties is used or if a particularly thick finishing coat is required.

#### Preparation of the product

Dilute **Elastocolor Waterproof** with approximately 5-10% of water. Mix the product well before use. Where possible, use a low-speed drill but take care to avoid the entrapment of air in the product.

#### Application of the product

Apply **Elastocolor Waterproof** using traditional techniques, such as by brush or with a roller.

The protection cycle comprises the application of at least two/three coats of **Elastocolor Waterproof** at a distance of 24 hours between each coat under normal temperature and humidity conditions, and in all cases only when the lower layer is completely dry.

Protect surfaces freshly-painted with **Elastocolor Waterproof** from rain until they are completely dry, to avoid contact with water during the first phase after application, otherwise it may not form a good bond.

#### Filling swimming pools and water tanks

They may be filled after at least 20 days from when the cycle has been applied if it has dried under normal conditions.

#### Routine maintenance interventions (seasonal or annual) for water storage tanks and swimming pools

After a certain period, which generally means a complete cycle of the seasons for swimming pools and at least one year for storage tanks, it may be necessary to apply another coat of **Elastocolor Waterproof** over the entire surface or **only in certain points**. Proceed as follows:

- Roughen the surface with sandpaper to eliminate any uneven areas and to help the new coat bond to the lower one.
- Thoroughly clean the surfaces to remove all traces of dust and material removed during the sanding operation. The use of hydro-cleaning systems or other high pressure cleaning systems must be very carefully considered, they may cause detachment of the **Elastocolor Waterproof** in areas where it is still well bonded.
- apply a coat of **Mapecoat I 600 W** diluted 1 to 1 with water.
- after 4-6 hours, apply one or more coats of **Elastocolor Waterproof** where required on the surface of the structure.

#### Precautions to be taken during preparation and application

- Do not apply **Elastocolor Waterproof** if it is about to rain or in windy weather.

- Do not apply **Elastocolor Waterproof** on wet, damp or poorly-cured surfaces, otherwise it may not form a good bond.
- Do not apply **Elastocolor Waterproof** if the temperature is lower than +10°C or on surfaces with a temperature of more than +35°C (the surface must be dry and must not be in direct sunlight).
- Do not apply if the level of humidity is higher than 85%.
- Do not apply **Elastocolor Waterproof** on crumbly or dusty substrates.
- Do not apply **Elastocolor Waterproof** on bitumen sheaths, PVC or other synthetic, non-cementitious materials used as a waterproofing layer.
- Refer to the "Safety instructions for preparation and application" section.
- When finishing off the surface of swimming pools with **Elastocolor Waterproof**, the pools must be completely protected (but not sealed) with suitable protective sheets to avoid direct contact with rainwater while allowing the air to circulate freely, to guarantee that **Elastocolor Waterproof** dries completely.

#### Cleaning

Brushes, rollers and other tools used to apply **Elastocolor Waterproof** may be cleaned with water before it dries.

#### CONSUMPTION

- 0.3-0.5 kg/m<sup>2</sup> (for two coats of product) **for structures not immersed in water.**
- 0.6-0.8 kg/m<sup>2</sup> (for two/three coats of product) **for structures immersed in water.**

**Important:** when painting water tanks or swimming pools, and whatever the number of coats applied, the consumption of **Elastocolor Waterproof** must be at least 0.8 kg/m<sup>2</sup> to ensure that it forms a sufficiently thick layer to guarantee long-lasting protection of the tank or pool.

#### PACKAGING

**Elastocolor Waterproof** is supplied in 20 kg plastic drums.

#### STORAGE

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

#### SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

**Elastocolor Waterproof** 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 chemical products. If the product is applied in closed environments, make sure the area is well ventilated.

For further and complete information about a safety use of our product please refer to our latest version of the Material Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE.



Example of a gutter waterproofed with **Mapelastec Smart** and coated with **Elastocolor Waterproof**

## 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 web site [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)**

## PRODUCT SPECIFICATIONS

Painting indoor and outdoor vertical structures, horizontal concrete surfaces not used for foot traffic (such as flat roofs, guttering, etc.) and special architectural elements (such as domed roofs, particularly exposed objects, window sills and/or parapets on balconies and terraces, etc.) after waterproofing with **Mapelastic** or **Mapelastic Smart** and finishing coats inside water storage tanks and swimming pools waterproofed with **Triblock Finish** and **Mapecoat I 600 W**, using a flexible acrylic resin paint in water dispersion for protecting surfaces from permanent, direct contact with water (such as **Elastocolor Waterproof** produced by MAPEI S.p.A.).

The product must be applied in at least two/three coats using a brush, roller or by spray.

The finishing product must have the following characteristics:

Consistency:	thick liquid
Density (EN ISO 2811-1) (g/cm <sup>3</sup> ):	approx. 1.18
Dry solids content (EN ISO 3251) (%):	approx. 59
Consumption (kg/m <sup>2</sup> ):	0.5-0.7 (in 2/3 coats)
Change in colour after 1,000 hours exposure to a Weather-Ometer (according to ASTM G 155 cycle 1), white colour:	$\Delta E < 1$

### PERFORMANCE CHARACTERISTICS FOR EN 1504-2 CE CERTIFICATION, compliance certification system 2+ E3, CLASS ZA.1d + ZA.1e (C, principles PI - MC - IR)

STANDARD	TEST	RESULTS AND CONFORMITY TO REQUIREMENTS	
UNI EN 1062-6	permeability to CO <sub>2</sub>	$\mu$ :	852.042
		$s_D$ (m):	213
		dry thickness according to $s_D$ (m):	0.00025
		result/class:	in conformity ( $s_D > 50$ m)
UNI EN ISO 7783-1,2	permeability to water vapour	$\mu$ :	3432
		$s_D$ (m):	0.9
		dry thickness according to $s_D$ (m):	0.00025
		result/class:	I ( $s_D < 5$ m)
UNI EN 1062-3	capillary absorption	$w$ [kg/(m <sup>2</sup> h <sup>0.5</sup> )]:	0.01
	e permeabilità all'acqua	result/class:	in conformity ( $w < 0.1$ )
UNI EN 1062-11 4.1	thermal compatibility: ageing: 7gg a +70°C	result/class:	in conformity (adherence $\geq 0.8$ N/mm <sup>2</sup> )
UNI EN 13687-1	thermal compatibility: freeze-thaw cycles with immersion in de-icing salts	result/class:	in conformity (adherence $\geq 0.8$ N/mm <sup>2</sup> )
UNI EN 13687-2	thermal compatibility: storm cycles	result/class:	in conformity (adherence $\geq 0.8$ N/mm <sup>2</sup> )
UNI EN 13687-3	thermal cycles without immersion in de-icing salts	result/class:	in conformity (adherence $\geq 0.8$ N/mm <sup>2</sup> )
static UNI EN 1062-7	crack resistance	crack bridging ability ( $\mu$ m):	1467
		result/class:	A4 (> 1.25 mm)
dynamic UNI EN 1062-7	crack resistance	result/class:	B2
UNI EN 1542	direct traction adherence test	result/class:	in conformity (adherence $\geq 0.8$ N/mm <sup>2</sup> )
EN 13501-1	reaction to fire	euroclass:	B s1 d0
UNI EN 1062-11:2002 4.2	exposure to artificial atmospheric agents	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 7928	diffusion of chloride ions	penetration (mm):	0.0

# Elastocolor Waterproof



## PERFORMANCE CHARACTERISTICS FOR EN 1504-2 CE CERTIFICATION, compliance certification system 2+ E3, CLASS ZA.1d + ZA.1e (C, principles PI - MC - IR

STANDARD	TEST	RESULTS AND CONFORMITY TO REQUIREMENTS	
UNI EN ISO 2409	oblique cut	result/class:	GT1, in conformity ( $\leq$ GT2)
UNI EN 1062-6	permeability to CO <sub>2</sub>	$\mu$ :	852.042
		S <sub>0</sub> (m):	213
		dry thickness according to S <sub>0</sub> (m):	0.00025
		result/class:	in conformity (S <sub>0</sub> > 50 m)
UNI EN ISO 7783-1,2	permeability to water vapour	$\mu$ :	3432
		S <sub>0</sub> (m):	0.9
		dry thickness according to S <sub>0</sub> (m):	0.00025
		result/class:	I (S <sub>0</sub> < 5 m)
UNI EN 1062-3	capillary absorption	w [kg/(m <sup>2</sup> h <sup>0.5</sup> )]:	0.01
	and permeability to water	result/class:	in conformity (w < 0.1)
UNI EN 1062-11 4.1	thermal compatibility: ageing: 7gg a +70°C	result/class:	in conformity (adherence $\geq$ 0.8 N/mm <sup>2</sup> )
UNI EN 13687-1	thermal compatibility: freeze-thaw cycles with immersion in de-icing salts	result/class:	in conformity (adherence $\geq$ 0.8 N/mm <sup>2</sup> )
UNI EN 13687-2	thermal compatibility: storm cycles	result/class:	in conformity (adherence $\geq$ 0.8 N/mm <sup>2</sup> )
UNI EN 13687-3	thermal compatibility: thermal cycles	result/class:	in conformity (adherence $\geq$ 0.8 N/mm <sup>2</sup> )
UNI EN 1062-7 statico	crack resistance	crack bridging ability ( $\mu$ m):	1467
		result/class:	A4 (> 1,25 mm)
UNI EN 1062-7 dinamico	crack resistance	result/class:	B2
UNI EN 1542	direct traction adherence test	result/class:	in conformity (adherence $\geq$ 0.8 N/mm <sup>2</sup> )
EN 13501-1	reaction to fire	euroclasse:	B s1 d0
UNI EN 13036-4	resistance to skid marks	result/class:	II (superfici interne asciutte) (> 40 unità a secco)
UNI EN 1062-11:2002 4.2	artificial exposure to atmospheric agents	result/class:	in conformity
UNI EN 1081	anti-static behaviour	result/class:	I (esplos. sostanze pericolose) (resistenza elettrica > 10 <sup>6</sup> e < 10 <sup>9</sup> )
	hazardous substance	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 mg)
UNI EN ISO 6272-1	impact resistance	result/class:	class I ( $\geq$ 4 Nm)
UNI 7928	diffusion of chloride ions	penetrazione (mm):	0.0
UNI EN ISO 2812-1 - NH <sub>4</sub> <sup>+</sup>	chemical resistance	result/class:	in conformity
UNI EN 13529 - H <sub>2</sub> SO <sub>4</sub> 20%	resistance to severe chemical attack	result/class:	II ( $\Delta$ shore D < 50% after 28 days without pressure)
UNI EN 13529 - NaOH 20%	resistance to severe chemical attack	result/class:	II ( $\Delta$ shore D < 50% after 28 days without pressure)
UNI EN 13529 - NaCl 20%	resistance to severe chemical attack	result/class:	II ( $\Delta$ shore D < 50% after 28 days without pressure)
UNI EN 13529 - tensioatt org	resistance to severe chemical attack	result/class:	II ( $\Delta$ shore D < 50% after 28 days without pressure)



Detail view of a swimming pool dressed with Elastocolor Waterproof



BUILDING THE FUTURE