# Mapelastic Mapelastic Smart

**PRODUCTS FOR WATERPROOFING** 



## **Mapelastic**

The most popular elastic cementitious waterproofing product for more than 20 years







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The most popular elastic cementitious waterproofing product for more than 20 years

The system that has been waterproofing and protecting balconies, terraces and swimming pools for more than 20 years, offering high flexibility even at low temperatures.

## The advantages of choosing Mapelastic: no demolition work required

- applied in thin layers
  - resistant to freezing weather
  - resistant to UV rays
  - compatible with adhesives
  - used to bond wall and floor coverings

















Two-component cementitious mortar for waterproofing balconies, terraces, bathrooms and swimming pools that remains elastic down to -20°C

#### SOME APPLICATION EXAMPLES

- Waterproofing concrete water storage tanks.
- Waterproofing bathrooms, showers, balconies, terraces, swimming pools, etc. prior to installing ceramic wall and floor coverings.
- Waterproofing the surface of gypsum, render and cement, lightweight cement blocks and marine plywood.
- Elastic skim coats on concrete structures with thin sections, including those subjected to small deformations when under load (e.g. prefabricated panels).
- Protection against the penetration of water and aggressive atmospheric agents for render and concrete with shrinkage cracks.
- Protection against the penetration of carbon dioxide for concrete piles and beams on road and railway viaducts after repair work with products from the **Mapegrout** range and structures with an insufficient concrete cover to the steel reinforcement.
- Protection for concrete surfaces in contact with seawater, de-icing salts such as sodium chloride and calcium and sulphate salts.

#### **ADVANTAGES**

- Remains flexible at very low temperatures (-20°C).
- More than 20 years experience and more than 300 million m<sup>2</sup> successfully waterproofed.
- CE-certified product in compliance with EN 1504-2 and EN 14891 standards.
- Protects concrete surfaces against CO, penetration (carbonation) for more than 50 years.
- Resistant to UV rays.
- 2.5 mm of Mapelastic represents the equivalent of 30 mm of concrete (water/cement ratio 0.45) against the aggressive action of chlorides.
- May also be applied on existing wall and floor coverings.
- Compatible with ceramic, mosaic and natural stone wall and floor coverings.



Two-component, high-flexibility cementitious mortar (with crack-bridging capacity > 2 mm) applied by trowel or roller for waterproofing balconies, terraces, bathrooms and swimming pools

#### SOME APPLICATION EXAMPLES

- Waterproofing water channels and facing walls in dams and storage tanks.
- Waterproofing bathrooms, showers, balconies, terraces, swimming pools, etc. prior to installing ceramic wall and floor coverings.
- Waterproofing the surface of gypsum, render and cement, lightweight cement blocks and marine plywood.
- Protective elastic coats on new and repaired concrete structures subjected to small deformations when under load.
- Protection against the penetration of water and aggressive atmospheric agents for cementitious render and concrete with shrinkage cracks or subjected to small movements due to temperature variations or dynamic stresses from vehicles.
- Protection against the penetration of carbon dioxide for concrete piles and beams on road and railway viaducts after repair work with products from the **Mapegrout** or **Planitop** ranges.
- Protection against the penetration of aggressive agents for structures with an insufficient concrete cover to steel reinforcement.
- Protection for concrete surfaces in contact with seawater, de-icing salts such as sodium chloride and calcium and sulphate salts.

#### **ADVANTAGES**

- High performance: a 2 mm thick film can cover cracks up to 2 mm wide.
- CE-certified product in compliance with EN 1504-2 and EN 14891 standards.
- Excellent elongation at failure (120%).
- Excellent mechanical characteristics thanks to the use of Mapetex Sel reinforcement.
- Fluid consistency for easy application.
- Resistant to UV rays.
- May also be applied on existing wall and floor coverings.
- Compatible with ceramic, mosaic and natural stone wall and floor coverings.



The efficiency of Mapei waterproofing products is also guaranteed by the complementary products which complete the system

### Mapenet 150

- Alkali-resistant fibreglass mesh (in compliance with ETAG 004 guidelines).
- Used to reinforce protective waterproofing systems, anti-fracture membranes and thermal insulation.

#### 2 Mapetex Sel

- Macro-perforated non-woven polypropylene fabric.
- Fully permeable to water.
- Used to reinforce waterproofing membranes.

## 3 Mapeband

- Felt-backed alkali-resistant tape for cementitious waterproofing systems and liquid sheaths.
- Suitable for use on floors and walls.
- Suitable for any type of substrate.
- For bathrooms, showers, terraces, balconies, etc. prior to installing ceramic, marble, natural stone, etc. wall and floor coverings.

### 4 Mapeband TPE

- TPE tape for elastic sealing and waterproofing of structural joints with movements up to 5 or 10 mm.
- Expansion joints in roads, hydraulic tunnels and flat roofs.

#### 5 Drain Front

TPE angular pipe union for terraces and balconies.

#### 6 Drain Vertical/Drain Lateral

 Kit for installing floor drains, ideal for draining off water from terraces, balconies, bathrooms, boiler rooms, wash-rooms, etc.

## **Mapelastic**









Technical data			
Application data of product (at 20°C – 50% R.H.)			
Colour of mix:	grey		
Mixing ratio:	component A : component B = 3 : 1		
Final performance (thickness 2.0 mm)			
	Acceptable limits according to EN 1504-2, coating (C) principles PI, MC and IR	Performance figures Mapelastic	
Adhesion to concrete according to EN 1542: - after 28 days at 20°C and 50% R.H. (mm):	for flexible systems: with no traffic: ≥ 0.8 with traffic: ≥ 1.5	1.0	
Elasticity according to DIN 53504 mod. (elongation): - after 28 days at 20°C and 50% R.H.: (%):	not required	30	
Static crack-bridging at -20°C according to EN 1062-7 (maximum crack width) (mm):	from class A1 (0.1 mm) to class A5 (2.5 mm)	class A3 (-20°C) (> 0.5 mm)	
	Acceptable limits according to EN 14891	Performance figures Mapelastic	
Initial adhesion according to EN 14891-A.6.2 (N/mm²):	> 0.5	0.8	
Adhesion after immersion in water according to EN 14891-A.6.3 (N/mm²):	> 0.5	0.55	
Adhesion after application of heat source according to EN 14891-A.6.5 (N/mm²):	> 0.5	1.2	

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Adhesion after freeze-thaw cycles according to EN 14891-A6.6 (N/mm²):



Application data of product (at 20°C - 50% R.H.)



> 0.5



0.6



Colour of mix:	grey		
Mixing ratio:	component A : component B = 2 : 1		
Final performance (thickness 2.0 mm)			
	Acceptable limits according to EN 1504-2 coverings (C) principles PI, MC and IR	Performance figures Mapelastic Smart	
Adhesion to concrete according to EN 1542: - after 28 days at 20°C and 50% R.H. (mm):	for flexible systems: with no traffic: ≥ 0.8 with traffic: ≥ 1.5	1.3	
Elasticity according to DIN 53504 mod. (elongation): - after 28 days at 20°C and 50% R.H.: (%):	not required	120	
Static crack-bridging at -20°C according to EN 1062-7 (maximum crack width): - after 28 days at 20°C and 50% R.H. (mm):	from class A1 (0.1 mm) to class A5 (2.5 mm)	class A5 (-20°C) (> 2.5 mm)	
	Acceptable limits according to EN 14891	Performance figures Mapelastic Smart	
Initial adhesion according to EN 14891-A.6.2 (N/mm²):	> 0.5	1.2	
Adhesion after immersion in water according to EN 14891-A.6.3 (N/mm²):	> 0.5	0.7	
Adhesion after application of heat source according to EN 14891-A.6.5 (N/mm²):	> 0.5	1.5	
Adhesion after freeze-thaw cycles according to EN 14891-A6.6 (N/mm²):	> 0.5	0.8	





#### Technical documentation

From the technical area menu you can view the technical documentation divided per product lines and type of document.

#### HEADQUARTERS MAPEI SpA

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