



ZERO REPAIR MORTARS

Building a sustainable future together



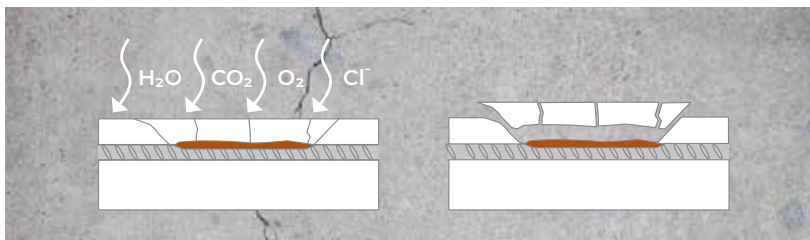


ZERO

repair mortars

Crack resistance for higher durability

Every day, buildings are subjected to dynamic stresses that lead, in the long term, to the opening of cracks into concrete elements. These cracks not only cause structural damage but also represent a way for aggressive agents to enter such as **carbon dioxide** and **chlorides** which, combined with water and oxygen action, generate the beginning of **corrosion** phenomena.



CO₂ emissions measured throughout the life cycle of products from the **ZERO** line in 2025 using Life Cycle Assessment (LCA) methodology, verified and certified with EPDs, have been offset through the acquisition of certified carbon credits in support of forestry protection projects. A commitment to the planet, to people, and to biodiversity. For more details on how emissions are calculated and on climate mitigation projects financed through certified carbon credits, visit [ZERO.mapei.com](https://www.ZERO.mapei.com).

Thanks to their special formulation, **ZERO repair mortars** have excellent fatigue resistance, which has been proven by tests in external laboratories.



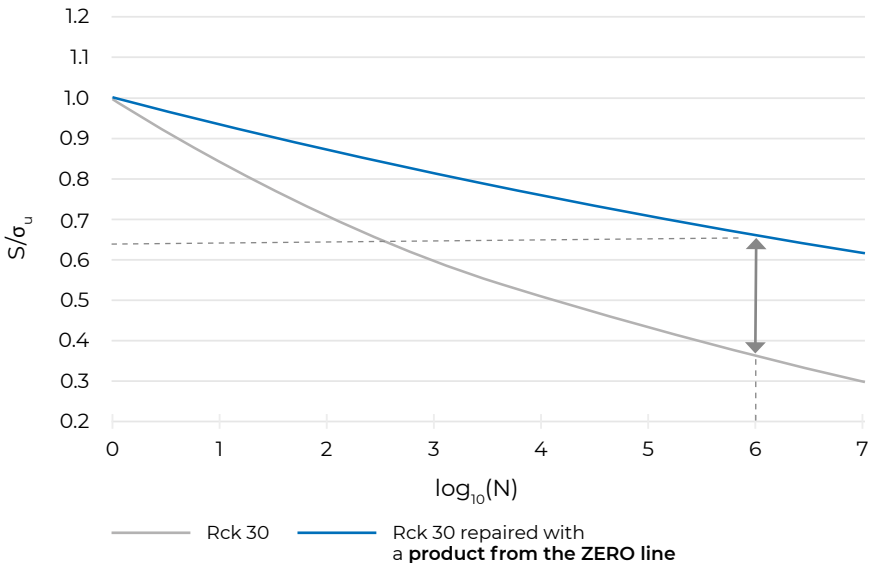
Objectives

- Increase in dynamic flexural strength of repaired concrete elements.
- Increased resistance to cracking.

Test results

- High cracking resistance.
- High fatigue strength.

The graph shows how a mortar from the **ZERO Line**, used to repair concrete, is able to increase its dynamic flexural strength characteristics. Specifically, it can be seen that with the same number of load cycles, the dynamic flexural strength is significantly higher.



Mapefer 1K ZERO

DESCRIPTION

One-component anti-corrosion cementitious mortar

Applied to steel reinforcement to prevent the formation of rust.

USE

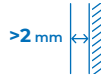


Application procedure

approx. **60 Min**



Pot life



Thickness



CHARACTERISTICS



Protection of reinforcing bars



Very low emission of VOC



One-component

CERTIFICATIONS



Planitop Smooth & Repair ZERO

NEW FORMULA

DESCRIPTION

Quick-setting, R2-class, thixotropic, fine-grained cementitious mortar

Ideal for non-structural repairs and skimming internal and external, horizontal and vertical concrete surfaces. It is suitable for repairing structures exposed to the air and in permanent contact with water.

USE

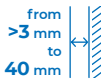


Application procedure

approx. **10 Min**



Pot life



Thickness



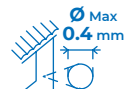
CHARACTERISTICS



2 products in 1



Applicable at low thickness



Natural fine-grained finish

CERTIFICATIONS



Planitop Smooth & Repair R4 ZERO



DESCRIPTION

Structural R4-class, quick-setting, thixotropic, fine-grained cementitious mortar

Suitable for structural repairs and skimming internal and external horizontal and vertical concrete surfaces. Suitable for repairing structures exposed to the air and in permanent contact with water.

USE



Application procedure

approx. 10 Min



Pot life



Thickness



CHARACTERISTICS



2 products in 1



Applicable at low thickness



Structural restoration

CERTIFICATIONS



Mapegrout 430 ZERO

DESCRIPTION

Fibre-reinforced, fine-grained, thixotropic compensated-shrinkage mortar

It is used to repair the protective concrete layer on deteriorated concrete structures and may be applied with a continuous-feed rendering machine.

USE



Application procedure

approx. 60 Min



Pot life



Thickness



CHARACTERISTICS



Easy to apply



Also continuous mixing



Natural fine-grained finish

CERTIFICATIONS



Mapegrout Easy Repair ZERO

DESCRIPTION	Thixotropic, resistant to aggressive sulphates, fibre-reinforced, shrinkage-compensated mortar		
It is used to repair deteriorated concrete structures, even subject to attack from aggressive sulphates. It may also be applied with a continuous-feed rendering machine.			
USE	 Application procedure	approx. 60 Min  +20°C Pot life	from 5 mm to 50 mm  Thickness
CHARACTERISTICS	 Also continuous mixing	 Resistant to sulphate aggression	 Natural fine-grained finish
CERTIFICATIONS	 		












Mapegrout Thixotropic ZERO

DESCRIPTION	Thixotropic, fibre-reinforced, shrinkage-compensated mortar		
Ideal for repairing horizontal and vertical surfaces on deteriorated concrete structures; may be applied even in heavy thicknesses, without the need for formwork.			
USE	 Application procedure	approx. 60 Min  +20°C Pot life	from 10 mm to 50 mm  Thickness
CHARACTERISTICS	 Easy to apply	 Excellent workability	 Structural restoration
CERTIFICATIONS	 		


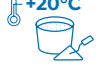









Mapegrout Hi-Flow ZERO

DESCRIPTION	Hi-flow, fibre-reinforced, shrinkage-compensated mortar for concrete repair		
Suitable for repairing structures where particular thicknesses and the state of deterioration require the use of high flow mortars. Certified for repairing and anchoring work.			
USE	 Application procedure	approx. 60 Min  Pot life	from 10 mm to 40 mm  Thickness
CHARACTERISTICS	 High fluidity	 No need of vibration	 High mechanical performance
CERTIFICATIONS			



Mapefill ZERO

DESCRIPTION	Fluid mortar with positive internal tension		
Suitable for precision anchoring of machinery or metallic structures and repairing damaged structures that require the use of free-flowing mortars.			
USE	 Application procedure	approx. 90 Min  Pot life	from 10 mm to 100 mm  Thickness
CHARACTERISTICS	 High fluidity	 Excellent adhesion	 Resistance to dynamic/mechanical stress
CERTIFICATIONS			



EVERYTHING'S OK WITH MAPEI



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