MasterCrete PRI 5000

Single-component, polymer-modified cementitious passivator for the protective treatment of concrete reinforcement.

Material description

MasterCrete PRI 5000 is a single-component cementitious passivating mortar with excellent adhesion properties and which protects reinforcing steel from corrosion.

Fields of application

MasterCrete PRI 5000 is suitable for treating and protecting the reinforcing bars in deteriorated concrete elements where bulging or spalling of the concrete cover caused by corrosion of the reinforcement is visible, prior to carrying out repair work using a mortar from the **MasterCrete** range.

Features

- **Ease of application: MasterCrete PRI 5000** is a single-component product to which only water needs to be added.
- **Speed of execution:** short recoating times.
- **Excellent adhesion** on properly prepared substrates.

In compliance with the European Regulations (EU No. 305/2011 and EU No. 574/2014), the product has the CE marking in accordance with UNI EN 1504-7 and the relevant DoP (Declaration of Performance).

CE

EN 1504-7

Corrosion protection product for reinforcement

Consumption

For a thickness of 2 mm, the consumption is as follows:

- 0.08 kg/m for a bar with a diameter of 8 mm
- 0.15 kg/m for a bar with a diameter of 14 mm

As an adhesion promoter: approximately 2.0 kg/m^2.

Packaging and storage

MasterCrete PRI 5000 is available in 5 kg bucket.
Keep the product in its original packaging in a dry, protected location at a temperature between +5°C and +35°C.

Preparation and method of application

Preparing the substrates

Check that the surfaces are clean and free from loose particles. The ironwork to be treated must be brushed or sandblasted until all traces of rust have been removed. Rinse thoroughly with clean water.

Preparation of mortar

Mix **MasterCrete PRI 5000** with water (see dosage in the table) at low speed and continuously, using a whisk fitted to a drill, until a smooth, lump-free mixture is obtained. Allow the mix to stand for 5 minutes, then stir it one final time.

Laying and trowelling

Apply **MasterCrete PRI 5000** in two coats using a brush; the second coat can be applied approximately 2 hours after the first coat, and within 24 hours. It is recommended that you cover the surface of the iron completely and evenly.
The total thickness of the two coats must be 2 mm.

Application temperatures

Application environment temperature needs to be between +5°C and +35°C.

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Warnings

- Do not apply directly to plaster, crumbly, mixed or painted surfaces. For further information, please contact Master Builders technical support.
- Do not add additional water or fresh mortar to the mixture that has already begun to set.
- Do not add water beyond the dosage recommended in the technical data sheet.
- Do not apply at temperatures other than those specified below.

Technical data

Product identification data	
Packaging	5 kg buckets
Mixing ratio	1 litre of water per pack (approx. 20%)
Consumption	• 0.08 kg/m for a bar with a diameter of 8 mm • 0.15 kg/m for a bar with a diameter of 14 mm
Mixture consistency	Plastic
Workability time (+20°C)	90-120 minutes
Application environment temperature	+5°C to +35°C

Performance

(The performance values shown below are obtained in accordance with UNI EN 1504-7)

Feature	Test method	Regulatory requirement	Product performance
Adhesion to concrete	UNI EN 1542	≥ 2.0 MPa	> 3.0 MPa
Pull-out resistance of steel bars	EN 15184	more than 80% of the load determined for uncoated bars	Requirement achieved
Corrosion resistance	EN 15183	no corrosion	Requirement achieved
Adhesion to steel	EN 12188	-	1 day ≥ 1.0 MPa 7 days ≥ 2.0 MPa 28 days ≥ 3.5 MPa

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Safety instructions

For guidance on the correct and safe use, transport, storage and disposal of the product, please see the latest Safety Data Sheet (SDS).

Other services

For additional technical information, brochures, references, technical reports and technical assistance please visit www.master-builders-solutions.com/it-it or alternatively contact infomac@masterbuilders.com.

Scan QR code to visit the product page and download the latest version of this technical sheet and any additional documentation.

Disclaimer

Since 16/12/1992, Master Builders Solutions Italia Spa has been operating under a Certified Quality System compliant with the UNI EN ISO 9001 Standard. Furthermore, the Environmental Management System is certified according to the UNI EN ISO 14001 Standard and the Safety Management System is certified according to the UNI ISO 45001 Standard.
For further information, please consult the local Technician of Master Builders Solutions. The technical advice on how to use our products, either written or verbally given, is based on the current state of our scientific and practical expertise, and does not imply the assumption of any guarantee and/or responsibility for the final results of works executed using our products.
Therefore, the customer is not exempted from the exclusive task and responsibility of verifying the suitability of our products for the intended use and purposes. This version supersedes all the previous ones.

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