

## MORCEMREST® C5 R3

Single-component repair mortar and surface levelling up to 5 mm.



### DESCRIPTION

Single-component R3 cosmetic repair and surface levelling mortar.

### TECHNICAL CHARACTERISTICS

Product based on special cements, synthetic resins, and silica fume.

### ADVANTAGES AND USES

- R3 class repair mortar according to EN-1504-3.
- Excellent adhesion.
- Excellent reshaping properties.
- Particularly good compatibility with concrete.
- It is water and weather resistant.
- Repair and levelling of damaged surfaces of concrete on structures, pillars, or façades.
- Surface and cosmetic repair of prefabricated pieces of all kinds.
- Sealing of pores for concrete or mortar substrates.
- Levelling of concrete surfaces.
- Fine renders on concrete, masonry walls, mortars.

### SUITABLE SUBSTRATES

- Substrates must be resistant enough, stable, sound, and clean. Free of dust, release agents, organic products, etc.
- Absorbent substrates will be previously moistened until saturation, avoiding puddles.

### APPLICATION PROCEDURE

#### Mixing the mortar:

- Add 2/3 of water and progressively add the powder while stirring. Then add the rest of the water and mix for two more minutes. Do not prepare more material than the one to be used in 30 minutes (at +2°C).

#### Application:

- Apply 2 to 5 mm thick coats of MORCEMREST C 5 with a trowel or spatula. Let it rest partially, before applying the finish coat.

#### Curing:

- Protect against wind, sun, and sun during hardening. To prevent excessive drying, it is advisable to cover the surface with damp sackcloth or plastic during the curing process.

### RECOMMENDATIONS

- Do not add more water than recommended to the mortar and do not remix.
- Do not apply the product under 5°C nor above 30°C temperature.
- Do not add cement, sand, or other substances that may affect the properties of the material.
- The tools and equipment should be cleaned with solvent immediately after use to prevent the material from hardening, which will need to be removed by mechanical means.
- Do not apply more than 5 mm thickness.

# CONCRETE REPAIR

## MORCEMREST® C5 R3

### PACKAGING AND STORAGE

### TECHNICAL DATA

- In manual applications, compact strongly between coats; in areas where compacting is difficult, we recommend application using mechanical processes.
- For further information regarding the preparation of concrete or steel reinforcements, please refer to the recommendations provided by standard UNE – EN – 1504 – 10.

MORCEMREST C 5 is supplied in 25 Kg laminated paper sacks.

Store up to 1 year in its original closed container, away from extreme weather conditions and humidity.


	R3 REQUIREMENTS	DATA PRODUCT
Aspect		GREY powder
Granulometry		Dmax 0.2 mm
Coat's thickness		2 mm min. 5 mm max.
Compressive strength 28 days (EN 12190)	$\geq 25 \text{ N/mm}^2$	$\geq 25 \text{ N/mm}^2$
Chloride content (EN 1015)	$\leq 0,05\%$	$\leq 0,01\%$
Adhesion (EN 1542)	$\geq 1,5 \text{ N/mm}^2$	$\geq 1,5 \text{ N/mm}^2$
Carbonation strength type concrete (EN 13295)	dk $\leq$ Control Concrete Type MC (0,45)	Approved
Elasticity module (EN 13412)	$\geq 15 \text{ GPa}$	$\geq 15 \text{ GPa}$
Absorption by capillarity	$\leq 0,5 \text{ kg / m}^2 \times \text{h}^{1/2}$	$\leq 0,3 \text{ kg / m}^2 \times \text{h}^{1/2}$
Rapid cooling cycles from elevated temperature (EN 13687-2)	$\geq 1,5 \text{ N/mm}^2$	$\geq 1,5 \text{ N/mm}^2$
Thermal compatibility part 4: Thermal cycles while dry (EN 13687-4)	$\geq 1,5 \text{ N/mm}^2$	$\geq 1,5 \text{ N/mm}^2$
RESISTANCE CURVE:		
Compression: (EN 12190)		
1 day		$\geq 6 \text{ N/mm}^2$
7 days		$\geq 15 \text{ N/mm}^2$
28 days		$\geq 25 \text{ N/mm}^2$

Flexotraction (EN 12190)	
28 days	$\geq 7 \text{ N/mm}^2$
Kneading water	22±1%
Performance	2 kg/m <sup>2</sup> /mm thickness
Classification according to EN 1504-3:2006	R3
Type	CC

# CONCRETE REPAIR

## MORCEMREST® C5 R3

### CE MARK

	
GRUPO PUMA ESPAÑA Avda. Agrupación Córdoba nº 17 ,14014 Córdoba 23 Nº: 210030	
EN 1504-3 MORCEMREST C-5	
Concrete structures repair mortar, PCC type for surface levelling, for 2 to 5 mm thickness (based on polymerized hydraulic cement)	
Compression strength	Type R3
Chloride content	≤ 0.05%
Adhesion	≥ 1.5 MPa
Carbonation strength	Approved
Elasticity module	≥ 15 Gpa
Thermal compatibility part 2 and 4	≥ 1.5 MPa
Absorption by capillarity	≤ 0.5 Kg/m <sup>2</sup> h <sup>0.5</sup>
Reaction to fire	A1

### ENVIRONMENTAL PRODUCT DECLARATION (EPD)

Cement based mortar prepared with aggregates that are supplied close to the production center, which reduces the greenhouse gas emissions that would otherwise arise from their transport. Manufactured in production centers with an Environmental management certified system following ISO 14001 regulation, offering a firm promise of sustainability and respect for the environment.

Cement based mortar with type III ecological label (the most strict) Environmental Product Declaration verified externally by AENOR.

### LEGAL DISCLAIMER

The instructions for use are given according to our tests and knowledge and do not imply any commitment by GRUPO PUMA nor free the consumer from the examination and verification of the products for their correct use. Claims must be accompanied by the original packaging to allow a proper traceability.

GRUPO PUMA is not responsible, in any case, for the application of its products or constructive solutions carried out by the application company or other parties involved in the process and / or execution of the work, limiting the responsibility of GRUPO PUMA exclusively to the damages directly attributable to the supplied products, individually or integrated in systems, due to failures in their manufacturing process.

In any case, the drafter of the work project, the technical management or the person responsible for the work, or collaterally the application company or other parties involved in the process and / or execution of the work, must ensure the suitability of the products addressing the characteristics of them, as well as the conditions, support and possible pathologies of the work in question.

The values obtained by GRUPO PUMAS's products or its constructive solutions that, as the case may be, are determined by the EN standards or any other regulation that applies to it in each case refers exclusively to the conditions specifically stipulated in said regulation and that are referred to, among others, to certain characteristics of the support, humidity and temperature conditions, etc. without being them required in the tests obtained under different conditions, all in accordance with the relevant regulation.