



## MORCEMREST® FAST 40 R2

Fibre-reinforced, medium-strength, one-component repair mortar. Between 4- and 40-mm thickness.



### DESCRIPTION

Medium resistance thixotropic mortar, fibrous, fast setting for concrete repair and plastering. R2 Classification.

### TECHNICAL CHARACTERISTICS

Product based on special cements, selected aggregates and additives, reinforced with fibres.

### ADVANTAGES AND USES

- R2 Type repair mortar according to EN-1504-3
- Great adherence to concrete.
- Available for painting after 4 hours.
- Thixotropic, without falling, in ceiling applications.
- Permeable to water vapour.
- Compensated shrinkage to minimize the risk of cracking.
- Good resistance to chlorides.
- Resistant to freeze-thaw cycles.
- Great workability.
- High carbonation resistance.
- Resistant to open air.
- Repairs of structural elements such as: balcony edges, beams / pillars of business and residential buildings, pre-cast concrete panels.
- Concrete surfaces levelling up.

### SUITABLE SUBSTRATES

- Substrate should be healthy, clean and free of greases, oils, dust and poorly adhered parts (minimum tensile strength of 1.5 MPa)
- If necessary, carry out the preparation of the substrate using mechanical means and letting the healthy part of the concrete to be seen.
- Very absorbent substrates should be previously water until saturation, avoiding puddles. Apply the product once the surface turns matte.
- If there are any type of reinforcements, they must be clean of rust, grease, oil and other poorly adhered particles. If they are rusty, they will be cleaned by sandblasting or by brushing with metal spikes. Protect from corrosion with IMPLAREST C.

# CONCRETE REPAIR

## MORCEMREST® FAST 40 R2

### APPLICATION PROCEDURE

Mortar mixing:

- Add 2/3 parts of the advised water and progressively mix all the powder while stirring. Subsequently, add the rest of the water and mix for two minutes more.
- Do not prepare more material than the amount that is going to be used in 20 minutes (at +20°C).

Application:

- Apply MORCEMREST FAST 40 with a trowel, pressing on top to ensure the correct adherence and compact the material firmly.
- MORCEMREST FAST 40 can be applied in several layers, being 4mm thickness the minimum per layer.
- On vertical surfaces, a thickness of 4-40 mm may be applied without formwork.

Curing:

- Protect the area against wind, frost and direct sun light during its hardening process. To avoid excessive drying out, it is advisable to cover the surface with wet sackcloth or plastic during curing.
- Curing processes should be carried out in any of the cases.

### RECOMMENDATIONS

- Do not add more water than the amount suggested.
- Do not apply the product under 5°C nor above 30°C temperature.
- Do not add any cement, sand or any other substance that may affect the properties of the material.
- Clean the tools immediately after being used with water in order to avoid the hardening of the material, which will then be removed by mechanical means.
- Please consult our Technical Department in case of any specific application which may not be specified in this Technical Data Sheet.
- For all information required regarding safety in handling, transportation, storage and use of the product, consult the label and the updated version of the Product Safety Sheet.
- If the roughness of the substrate is adequate, no primer / bonding bridge will be needed; in this case it will be necessary to previously wet the substrate. Make sure there are no puddles on the surface. In the event that a primer / bonding bridge is required, apply IMPLAREST C.
- "In manual applications, compact strongly between layers; in areas where it is difficult to compact it is advisable to apply mechanical processes"
- "For any further information regarding concrete or steel frameworks' preparation; please consult the UNE-EN-1504-10 Norm"
- When applying the repair mortar without a bonding bridge, the foundation of concrete must be rough, clean and well moistened before, but the surface must be free of water at the time of application, that is, the foundation must not be waterlogged. The repair mortar must be applied making it penetrate into the foundation previously prepared and must be compacted avoiding the inclusion of air in order to obtain the required strength, and to protect the reinforcement from corrosion.

### PACKAGING AND STORAGE

- 25 Kg bags.
- Store up to 6 years in its original closed container, away from extreme weather conditions and humidity.

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### TECHNICAL DATA

|                                                                               | R2 REQUIREMENTS                                | PRODUCT DATA                                   |
|-------------------------------------------------------------------------------|------------------------------------------------|------------------------------------------------|
| Aspect                                                                        |                                                | Grey powder                                    |
| Granularity                                                                   |                                                | Dmáx 0.5 mm                                    |
| Layer thickness                                                               |                                                | 4 mm min - 40 mm máx                           |
| Compression resistance 28 days (EN 12190)                                     | $\geq 15 \text{ N/mm}^2$                       | $\geq 15 \text{ N/mm}^2$                       |
| Chloride content (EN 1015)                                                    | $\leq 0,05\%$                                  | $\leq 0,01\%$                                  |
| Adhesion (EN 1542)                                                            | $\geq 0,8 \text{ N/mm}^2$                      | $\geq 0,8 \text{ N/mm}^2$                      |
| Carbonation resistance (EN 13295)                                             | dk $\leq$ MC type control Concrete (0,45)      | Passing                                        |
| Capillary absorption (EN 13057)                                               | $\leq 0,5 \text{ kg/m}^2 \cdot \text{h}^{1/2}$ | $\leq 0,5 \text{ kg/m}^2 \cdot \text{h}^{1/2}$ |
| Thermal compatibility part 1 (EN 13687-1)                                     | $\geq 0,8 \text{ N/mm}^2$                      | $\geq 0,8 \text{ N/mm}^2$                      |
| Quick cooling from High Temperature (50 ciclos) (EN 13687-2)                  | $\geq 0,8 \text{ N/mm}^2$                      | $\geq 0,8 \text{ N/mm}^2$                      |
| Thermal compatibility part 4: Ciclos Térmicos a seco (50 ciclos) (EN 13687-4) | $\geq 0,8 \text{ N/mm}^2$                      | $\geq 0,8 \text{ N/mm}^2$                      |
| Compression resistance 28 days (EN 12190)                                     |                                                | $\geq 15 \text{ N/mm}^2$                       |
| Compression resistance 28 days (EN 12190)                                     |                                                | $\geq 5 \text{ N/mm}^2$                        |
| Beginning and end of setting (EN 13294)                                       |                                                | 10 - 15 minutos                                |
| Kneading water                                                                |                                                | 20 $\pm$ 1 %                                   |
| Performance                                                                   |                                                | 1.7 Kg/m <sup>2</sup> /mm thickness            |
| EN 1504-3 -2006 classification                                                |                                                | R2                                             |
| Type                                                                          |                                                | CC                                             |

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### CE MARK

|                                                                                                                                      |                                          |
|--------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
|                                                    |                                          |
| GRUPO PUMA SL<br>Avd. Agrupación Córdoba, Núm.17 14014 (Córdoba)<br>21<br>Nº: 215201                                                 |                                          |
| EN-1504-3<br><b>MORCEMREST FAST 40</b><br>Medium resistance thixotropic mortar, fibrou, fast setting for concrete repair and Type CC |                                          |
| Compression resistance                                                                                                               | R2 Tyope                                 |
| Chloride ion content                                                                                                                 | ≤ 0.05%                                  |
| Adhesion                                                                                                                             | ≥ 0,8 MPa                                |
| Carbonation resistance                                                                                                               | Passing                                  |
| Thermal compatibilty part 1                                                                                                          | ≥ 0,8 GPa                                |
| Capirally absortion                                                                                                                  | ≤ 0.5 Kg/m <sup>2</sup> h <sup>0.5</sup> |
| Thermal compatibilty part 1                                                                                                          | A1                                       |

### 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.

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