

# REPACRETE

## Fiber reinforced thixotropic cement mortar for concrete repair

### DESCRIPTION

REPACRETE is a fiber-reinforced polymer modified, thixotropic, non-shrinking cement mortar enriched with quartz aggregates, with excellent adhesion to concrete. It does not contain corrosive components and is suitable for medium thickness structural repairs, in exterior or interior spaces.

Classified as CC R3 type concrete repair mortar, according to EN 1504-3 standard.

### FIELDS OF APPLICATION

Suitable for:

- Repair and restoration of worn and disorganized concrete elements on vertical and horizontal surfaces.
- Ideal for repairing failures on concrete surfaces (nests, pores, small imperfections in corners and edges).
- Restoration of damages resulting from bad defects, damage, etc.

- Covering restored reinforcing bars (in cases of oxidized and corroded reinforcement, cleaning and anti-corrosion coating with MSTEEL 44 should be previously done).

### CHARACTERISTICS/ADVANTAGES

- Class R3 according to EN 1504-3
- Strong adhesion to the substrate
- Fiber-reinforced
- Non-shrinking
- High resistances
- Excellent workability
- Easy to handle and apply
- Provides abrasion resistance

### PRODUCT INFORMATION

|                           |  |
|---------------------------|--|
| <b>Composition</b>        | Portland cement, selected granulometry aggregates, special additives   |
| <b>Appearance/Colour</b>  | Powder, grey   |
| <b>Packaging</b>          | 25kg bag   |
| <b>Storage conditions</b> | In the original, closed, sealed packaging, protected from direct sunlight and frost, temperatures between +5°C / +30°C |

|                                 |   |
|---------------------------------|---|
| <b>Storage conditions</b>       | 12 months from the date of production in unopened package, in a dry place |
| <b>Density</b>                  | Density of fresh mortar: ~ 2.2 kg/l                                       |
| <b>Soluble chloride content</b> | ≤ 0.05 %  |

## TECHNICAL CHARACTERISTICS

|  |   |
|--|---|
| <b>Compressive strength</b>            | ≥ 30 MPa (after 28 days)                    |
| <b>Flexural strength</b>               | > 7,00 N/mm <sup>2</sup>                    |
| <b>Modulus of elasticity</b>           | ≥ 15 GPa                                    |
| <b>Carbonation resistance</b>          | Yes   |
| <b>Chloride content</b>                | ≤ 0.05 %                                    |
| <b>Adhesion after 50 cycles</b>        | ≥1.5 N/mm <sup>2</sup>                      |
| <b>cooling-defrosting:</b>             |   |
| <b>Adhesion:</b>                       | ≥1.5 N/mm <sup>2</sup>                      |
| <b>Water requirement</b>               | 13-15%                                      |
| <b>Apparent weight of fresh mortar</b> | 2.2 kg/l                                    |
| <b>Fire behavior</b>                   | Euroclass A1                                |
| <b>Capillary absorption</b>            | ≤ 0,5 kg·m <sup>-2</sup> ·h <sup>-0.5</sup> |

## APPLICATION INFORMATION

|                                  |   |
|----------------------------------|---|
| <b>Environmental temperature</b> | - Temperature from +5°C / +30°C<br>- Relative humidity less than 75%      |
| <b>Mixing ratio</b>              | 3.25 – 3.75lt of water per 25kg bag, depending on the desired workability |
| <b>Application thickness</b>     | 10mm to 20mm/layer  |
| <b>Safety and Health</b>         | May cause an allergic reaction. Safety data sheet provided upon request.  |

## DIRECTIONS OF USE

### SUBSTRATE PREPARATION

The substrate must be firm, compact, dry and free from dust, loosely attached particles and all kinds of dirt. The surface must be dry, clean, free of dust, friable materials, salts or oils. Before applying REPACRETE, wet the substrate without excess water.

### APPLICATION

REPACRETE can be mixed with a low speed electric mixer-drill. Add the 25kg package while stirring to the water, in a suitable mixing container. Mix well for at least 3 minutes to obtain a homogeneous mass of mortar without lumps.

The material can be applied with a trowel or by hand to the desired thickness and up to 2 cm in each layer. For larger application thicknesses, recommended to use the material in overlapping layers when the previous layer has started to set.

### CONSUMPTION

About 20 kg/m<sup>2</sup> /cm layer thickness.

### TOOLS CLEANING

The tools are cleaned with hot water and soap

### IMPORTANT NOTICES

- Avoid applying the product when there is a forecast for frost/ rain/ heat in the next 24 hours from its application.

- On substrates exposed directly to strong solar radiation.


- Do not add water above the recommended dosage.

### HEALTH, SAFETY & ENVIROMENTAL PROTECTION

Detailed information and instructions regarding the safe management of the product and in matters of Health & Safety, are provided in the most recent Safety Data Sheet (SDS), copies of which are available on the company's website [www.marmoline.gr](http://www.marmoline.gr) or upon request.

### LEGAL NOTICE

We guarantee the quality of all our products, on the basis of their technical specifications, as described in the Declaration of Performance (CE) and this technical data sheet. Such guarantee refers only to the products that we deliver for use and never to its application or final result, which largely depend on the experience and quality of work of each user and on the application conditions. The user is advised to test the product on a small scale, and if he is satisfied with the result, then to use the product on large scale in his project. This edition of technical data sheet automatically cancels any previous version.

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|---|---|
| <br>22<br>DoP: 259 MARMO-CPR |   |
| NORDIA S.A.<br>364 Kifissias Av., 15233 Chalandri, Athens, Greece   |   |
| EN 1504-3:2005<br>MARMOLINE REPACRETE R3<br>Repair mortar (CC mortar) for structural concrete repairs<br>0906 |   |
| Compressive strength:   | Class R3<br>( $\geq 25$ MPa)                    |
| Chloride ion content:   | $\leq 0.05\%$                                   |
| Adhesive bond:  | $\geq 1.5$ MPa                                  |
| Restrained shrinkage /expansion   | $\geq 1.5$ MPa                                  |
| Elastic modulus:  | $\geq 15$ GPa                                   |
| Carbonation resistance  | Pass  |
| Capillary absorption  | $\leq 0.5$ kg m <sup>-2</sup> h <sup>-0.5</sup> |
| Reaction to fire:   | Class A1  |
| See detailed DoP in <a href="https://marmoline.gr">https://marmoline.gr</a>                                   |   |