# Technical Leaflet



# **DUROCRET-PLUS**

# Polymer-modified, fiber-reinforced, repairing cement mortar

## Description

DUROCRET-PLUS is a pre-mixed, polymer-modified, fiber-reinforced cement mortar, without corrosive substances, thus suitable for exterior and interior use.

It offers:

- Abrasion resistance.
- Very good bonding to the substrate.
- · Water impermeability.
- Simplification of works.

It is classified as a PCC R3 mortar type for concrete repairs, according to EN 1504-3. Certificate Nr: 2032-CPR-10.11.

# **Application Fields**

DUROCRET-PLUS is used for concrete or brickwork repairs, as well as patching, forming fillets etc.

DUROCRET-PLUS is applied in layers of up to 3 cm in case of large surfaces, and in layers of up to 5 cm for localized repairs.

## **Technical Data**

Form: cementitious mortar

Colors: Grey

Pot Life: 4 h at +20°C

Water demand: 4.60 l/25 kg bag

Bulk density

of dry mortar:  $1.45 \pm 0.10 \text{ kg/l}$ 

Bulk density

of fresh mortar:  $1.90 \pm 0.10 \text{ kg/l}$ Compressive strength:  $\geq 25.0 \text{ N/mm}^2$ Flexural strength:  $\geq 7.0 \text{ N/mm}^2$ Elastic modulus:  $\geq 15 \text{ GPa}$ 

Resistance to

carbonation: Pass
Chloride ion content: 0.00 %Adhesion:  $\geq 1.7 \text{ N/mm}^2$ 

Thermal compatibility Part 1

(50 freeze-thaw cycles): ≥ 1.5 N/mm<sup>2</sup>

Capillary absorption

of water:  $0.34 \text{ kg} \cdot \text{m}^{-2} \cdot \text{h}^{-0.5}$ Reaction to fire: Euroclass A1

## **Directions for use**

### 1. Substrate Preparation

The substrate should be clean, free of dust, oily or loose materials etc. Before applying DUROCRET-PLUS, the substrate should be dampened.

# 2. Application

DUROCRET-PLUS is added into the water under continuous stirring, until the mixture formed has the desired workability. The product is applied with a trowel, as usual.

# Consumption

Approx. 16 kg/m<sup>2</sup>/cm of layer thickness. For forming fillets (5-6 cm side): 1.9-2.7 kg/m.

#### Packaging

Bags of 5 kg, 25 kg.

# Shelf-life/Storage

- Paper bags of 25 kg:
- 12 months from production date.
- Plastic bags of 5 kg:
- 18 months from production date.

The numbers mentioned above are valid, provided that the product remains stored in its original, unopened packaging, in places protected from moisture and frost.



#### Remarks

- Temperature during the application should be at least +5°C.
- During the summer, DUROCRET-PLUS should be dampened after being applied, to avoid water loss, due to high temperatures.
- The product contains cement, which reacts with water forming alkaline solutions and is thus classified as irritant.
- Consult the directions for safe use and precautions written on the package.



#### 2032

#### ISOMAT S.A.

17<sup>th</sup> km Thessaloniki – Ag. Athanasios P.O. BOX 1043, 570 03 Ag. Athanasios, Greece

14

2032-CPR-10.11

EN 1504-3

DoP No.: DUROCRET-PLUS/1255-01

Concrete repair product for structural repair PCC mortar (based on hydraulic cement, polymer modified).

Compressive strength: class R3

Chloride ion content: ≤ 0.05%

Adhesion: ≥ 1.5 MPa

Carbonation resistance: Pass

Elastic modulus: ≥ 15 GPa

Thermal compatibility part 1: ≥ 1.5 MPa

Capillary absorption: ≤ 0.5 kg·m<sup>-2</sup>·h<sup>-0.5</sup>

Dangerous substances: comply with 5.4

Reaction to fire: Euroclass A1

