

Technical Datasheet

DUROCRET

Polymer-modified cementitious repair mortar

Description

DUROCRET is a pre-mixed, polymer-modified, cement-based mortar, without corrosive ingredients, suitable for indoor and outdoor applications, offering:

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

Certified according to EN 1504-3 and classified as a PCC R2 mortar for concrete repairs. CE marked. DUROCRET has received an Environmental Product Declaration (EPD) following an assessment of its life-cycle environmental impacts. Registration No: S-P-09183, The International EPD® System.

Fields of application

DUROCRET is used for concrete or brickwork repair and patching, forming fillets at wall to floor junctions, etc. In the redbrown color, DUROCRET is ideal for fixing ridge tiles on roofs. DUROCRET is applied in layers up to 2 cm thick for large-scale applications, and up to 5 cm thick for localized repairs.

Technical data

Form:	cementitious powder
Colors:	grey, white, redbrown
Grain size:	up to 1.3 mm
Pot Life:	4 h at +20°C

DUROCRET Grey

Water demand:	4.60 l/25 kg bag
Bulk density of dry mortar:	1.55 ± 0.10 kg/l
Bulk density of fresh mortar:	1.85 ± 0.10 kg/l
Compressive strength:	≥ 17.00 N/mm ²
Flexural strength:	≥ 6.00 N/mm ²
Elastic modulus:	15.60 GPa
Carbonation resistance:	Pass
Chloride ion content:	0.00%
Adhesion:	≥ 1.7 N/mm ²

Thermal compatibility Part 1 (50 freeze-thaw cycles):	≥ 1.6 N/mm ²
Capillary absorption:	0.45 kg·m ⁻² ·h ^{-0.5}
Reaction to fire:	Euroclass A1

DUROCRET White

Water demand:	4.60 l/25 kg bag
Bulk density of dry mortar:	1.55 ± 0.10 kg/l
Bulk density of fresh mortar:	1.85 ± 0.10 kg/l
Compressive strength:	≥ 16.00 N/mm ²
Flexural strength:	≥ 6.00 N/mm ²
Elastic modulus:	15.60 GPa
Carbonation resistance:	Pass
Chloride ion content:	0.00%
Adhesion:	≥ 1.7 N/mm ²

Thermal compatibility Part 1 (50 freeze-thaw cycles):	≥ 1.6 N/mm ²
Capillary absorption:	0.47 kg·m ⁻² ·h ^{-0.5}
Reaction to fire:	Euroclass A1

DUROCRET Redbrown

Water demand:	4.60 l/25 kg bag
Bulk density of dry mortar:	1.55 ± 0.05 kg/l
Bulk density of fresh mortar:	1.95 ± 0.05 kg/l
Compressive strength:	≥ 15.00 N/mm ²
Flexural strength:	≥ 5.00 N/mm ²
Chloride ion content:	0.00%
Adhesion:	≥ 1.10 N/mm ²

Thermal compatibility Part 1 (50 freeze-thaw cycles):	≥ 1.00 N/mm ²
Capillary absorption:	≤ 0.5 kg·m ⁻² ·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 material, etc. The surface should be dampened, before the application of DUROCRET.



DUROCRET

2. Application

DUROCRET is added to water under continuous stirring, until a mixture of the desired workability is formed. The material is applied with a trowel.

Consumption

Approx. 15 kg/m²/cm of layer thickness.
For forming fillets (5-6 cm wide): 1.9-2.7 kg/m.

Packaging

DUROCRET is supplied in 25 kg paper bags and 5 kg plastic bags.

Shelf life – Storage

- 25 kg paper bags:
12 months from production date.
- 5 kg plastic bags:
18 months from production date.

The above information is valid as long as the product is stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Temperature during application should be at least +5°C.
- In hot weather, DUROCRET should be watered after application, to be protected from water loss.
- DUROCRET contains cement that reacts with water forming alkaline solutions, thus is classified as irritant.
- Consult the safety instructions written on the packaging before use.



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10

EN 1504-3

Concrete repair product for non structural repair
PCC mortar (based on hydraulic cement,
polymer modified)
DoP No.: DUROCRET-GREY/1203-03

Compressive strength: class R2

Chloride ion content: ≤ 0.05%

Adhesion: ≥ 0.8 MPa


Thermal compatibility part 1: ≥ 0.8 MPa


Capillary absorption: ≤ 0.5 kg·m⁻²·h^{-0.5}

Reaction to fire: Euroclass A1

Dangerous substances comply with 5.4

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EN 1504-3 Concrete repair product for non structural repair PCC mortar (based on hydraulic cement, polymer modified) DoP No.: DUROCRET-WHITE/1204-03 Compressive strength: class R2 Chloride ion content: ≤ 0.05% Adhesion: ≥ 0.8 MPa Thermal compatibility part 1: ≥ 0.8 MPa Capillary absorption: ≤ 0.5 kg·m ⁻² ·h ^{-0.5} Reaction to fire: Euroclass A1 Dangerous substances comply with 5.4


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EN 1504-3 Concrete repair product for non-structural repair PCC mortar (based on hydraulic cement, polymer modified) DoP No.: DUROCRET-REDBROWN/1298-01 Compressive strength: class R2 Chloride ion content: ≤ 0.05% Adhesion: ≥ 0.8 MPa Thermal compatibility part 1: ≥ 0.8 MPa Capillary absorption: ≤ 0.5 kg·m ⁻² ·h ^{-0.5} Reaction to fire: Euroclass A1 Dangerous substances comply with 5.4

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