Technical Datasheet



DUROCRET-DECO FINISH

Extra fine-grained decorative microcement coating for floors and walls

Description

DUROCRET-DECO FINISH is a premixed, polymer-modified, decorative microcement coating, without corrosive ingredients, suitable for indoor and outdoor applications, on floors and walls, offering:

- A smooth final surface.
- Abrasion resistance.
- Very good bonding to the substrate.
- A special aesthetic result.

Certified according to EN 1504-3 and EN 13813, classified as a PCC R3 mortar for concrete repair and as a screed material CT-C25-F6-AR2, respectively. CE marked.

Fields of application

DUROCRET-DECO FINISH is used as a microcement coating in numerous applications, such as stairwells, floors, walls and special constructions, such as built-in beds, built-in sanitary ware (washbasins, showers, etc.). It can be applied both internally and externally, in houses, hotels or wherever a special aesthetic result is desired (e.g. Cycladic architecture).

Applicable in thin layers (1-3mm), in most cases as a final coating over DUROCRET-DECO and DUROCRET-DECO FLEX, in order to achieve a smooth surface.

Technical data

Form: cementitious powder

Colors: Ready-mixed color:

white, grey, light grey & many more with ISOMAT DECO COLOR pigments

Pot life: 2 h at +20°C

Water demand: 6.25-6.50 I/25 kg bag

Bulk density of dry mortar: 1.30 ± 0.05 kg/l Bulk density of fresh mortar: 1.80 ± 0.10 kg/l Compressive strength: ≥ 25 N/mm² Flexural strength: ≥ 6.0 N/mm² Chloride ion content: 0.00 %Adhesion: $\geq 1.8 \text{ N/mm}^2$

Thermal compatibility Part 1

(50 freeze-thaw cycles): ≥ 1.8 N/mm² Elastic modulus: ≥15 GPa

Resistance to

carbonation: Pass Abrasion resistance: AR 2

Capillary water

absorption: $\leq 0.3 \text{ kg} \cdot \text{m}^{-2} \cdot \text{h}^{-0.5}$ Reaction to fire: Euroclass F

Application thickness: 1-3 mm per layer

Directions for use

1. Substrate preparation

The substrate should be clean, free of dust, oil or grease, loose material, etc. Before applying DUROCRET-DECO FINISH on absorbent substrates, such as masonry, concrete or plaster, they should be first primed with the acrylic primer UNI-PRIMER in 1-2 layers, depending on the absorbency of the substrate. DUROCRET-DECO FINISH is applied after 2-3 hours, depending on the weather conditions, provided that the primer has sufficiently dried.

On gypsum boards, the surface should be first primed with UNI-PRIMER; then, DUROCRET-DECO FLEX should be applied as a base coat, reinforced with 160g/m² fiberglass mesh. 24 hours later, the hardened surface of DUROCRET-DECO FLEX is primed with UNI-PRIMER and while the resin is still fresh (fresh on fresh), DUROCRET-DECO FINISH may be applied.

Non-absorbent substrates, such as old tile layers or terrazzo should be primed with ISOMAT SUPERGRUND primer.

DUROCRET-DECO FINISH may be applied after 24 hours, as long as the primer has completely dried.

2. Application

DUROCRET-DECO FINISH is gradually added to water under continuous stirring, until a mixture of the desired workability is formed. The product is applied with a smooth trowel at a thickness of 1-3mm in 1 or 2 layers.







DUROGRET-DEGO FINISK

After it hardens, it can be optionally sanded, depending on the required smoothness of the final surface.

Two or three days after the application - provided that the surface is dry - the protective varnish may be applied.

Coloring of DUROCRET-DECO FINISH

DUROCRET-DECO FINISH is available in three ready-mixed colors (white, grey, light grey). It can also be colored with ISOMAT DECO COLOR high-quality inorganic pigments.

ISOMAT DECO COLOR pigments are available in 11 colors and can be combined giving an unlimited number of colors.

In order to achieve better mixing, the pigment should be dissolved into the mixing water before the mortar is added.

It is also possible to add the pigment after the mortar has been mixed with the water, though in that case it should be thoroughly mixed in order to avoid uneven coloring of the mortar.

In large-scale applications, it is preferred to first dissolve the pigment into the water.

In addition, it is recommended that the mortar to be colored should be white, so that the final shade is more easily obtained, especially if a light color has been selected.

In case more than 10 dosages of 50g are required, you are advised to contact ISOMAT's Technical Support Department.

Application of the varnish:

The microcement coating is protected with the application of the polyurethane, solvent-based varnish VARNISH-PU 2K (gloss or satin) or the polyurethane, water-based varnish VARNISH-PU 2KW (satin-matt).

The water-based varnish is ideal for interior, poorly ventilated spaces, as it is almost odorless.

VARNISH-PU 2K and VARNISH-PU 2KW are applied with a roller in two layers. The second layer is applied 4-24 hours after the first one, as long as it has sufficiently dried. Consumption: 70-120g/m² per layer.

For better distribution of the varnish, it is recommended to dunk the roller in the varnish until is soaked, then drain it in the paint tray and apply it on the surface.

VARNISH-PU 2K (gloss or satin) generally darkens the surface. In case this is not desired, it is recommended to apply two varnishes in the following way:

First, apply the acrylic, water-based varnish VS-W (diluted with water 1:1) in one layer, with a consumption of 150-200ml/m².

After 24 hours, apply the polyurethane varnish VARNISH-PU 2K (gloss or satin) in two layers. The second layer is applied 4-24 hours after the first one, as long as it has sufficiently dried.

The use of VS-W prevents the intense darkening of the surface of the microcement, which can be caused by VARNISH-PU 2K. Also, the use of VS-W can significantly improve the final surface appearance of the microcement when used diluted with water at a ratio of 1:1, in one layer, prior to the application of VARNISH PU-2KW water-based varnish.

Consumption

Approx. 1.4kg/m²/mm of layer thickness.

Packaging

25kg bags.

Shelf life - Storage

12 months from production date if stored in original, unopened packaging, in places protected from moisture and frost.

Remarks

- Instead of UNI-PRIMER, we may use FLEX-PRIMER.
- Temperature during the application should be between +5°C and +30°C.
- During the summer months, proper measures should be taken to protect DUROCRET-DECO FINISH from water loss caused due to high temperatures.
- The product contains cement, which reacts with water, forming alkaline solutions, thus is classified as irritant.
- Please consult the safety instructions written on the packaging before use.

The technical information and instructions supplied in this datasheet are based on the knowledge and experience of the Research and Development Department of our company and on results from long-term applications of the product in practice. The recommendations and suggestions referring to the use of the product are provided without guarantee, since site conditions during the applications are beyond the control of our company. Therefore, the user is responsible for confirming that the chosen product is suitable for the envisaged application. The present edition of this technical datasheet automatically cancels any previous one concerning the same product. | Edition: 25.5.20



DUROGRET-DEGO FINISK



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EN 13813 CT-C25-F6-AR2.

DoP No.: DUROCRET-DECO FINISH/

1218.13813-04

Cementitious screed material for use internally

in buildings

Reaction to fire: Euroclass F

Release of corrosive substances: CT

Water permeability: NPD

Water vapor permeability: NPD

Compressive strength: C25

Flexural strength: F6
Wear resistance: AR 2
Sound insulation: NPD
Sound absorption: NPD
Thermal resistance: NPD

Chemical resistance: NPD

CE

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EN 1504-3

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

DoP No.: DUROCRET-DECO FINISH/ 1218.1504-04

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⁻²·h^{-0.5}

Dangerous substances: comply with 5.4

Reaction to fire: Euroclass F

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