

DUROCRET-DECO FLEX

Flexible decorative microcement coating for floors and walls

Description

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

- Great abrasion and mechanical resistance.
- Very good bonding to the substrate.
- Flexibility and resistance to expansion/contraction and vibration.
- A special aesthetic result.
- No need to be reinforced with enhancing resins.

Certified according to EN 1504-3 and EN 13813, classified as a PCC R3 mortar for concrete repair and as a CT-C30-F7-AR2 cementitious screed material, respectively. CE marked.

Fields of application

DUROCRET-DECO FLEX is used in plenty of indoor or outdoor applications, on floors, walls and stairwells for aesthetic reasons (e.g. Cycladic architecture), in houses, stores, hotels, etc., and special constructions, such as built-in sanitary ware (washbasins, showers, etc.) and built-in furniture (beds, counters, tables, etc.).

Suitable for applications requiring resistance to vibration, such as substrates made of gypsum or cement boards, heated floors, metal surfaces, heavy traffic floors, old tile layers, balconies, flat roofs, etc.

Technical data

Form:	cementitious powder
Color:	ready-mixed colors: white, grey, light grey & many more with ISOMAT DECO COLOR pigments

Pot life:	2 h at +20°C
Water demand:	5.0-5.2 l/25 kg bag
Bulk density of dry mortar:	1.35 ± 0.10 kg/l
Bulk density of fresh mortar:	1.90 ± 0.10 kg/l
Compressive strength:	≥ 30.0 N/mm ²
Flexural strength:	≥ 7.0 N/mm ²
Chloride ion content:	0.00 %
Adhesion:	≥ 1.9 N/mm ²
Thermal compatibility Part 1 (50 freeze-thaw cycles):	≥ 1.9 N/mm ²
Elastic modulus:	≥ 15 GPa
Resistance to carbonation:	Pass
Abrasion resistance:	AR 2
Application thickness:	2-5 mm per layer
Capillary water absorption:	0.30 kg·m ⁻² ·h ^{-0.5}
Reaction to fire:	Euroclass F

Directions for use

1. Substrate preparation

The substrate should be clean, free of dust, oily or loose material, etc. Any cavities such as cracks or holes in the substrate should be properly filled.

Before applying DUROCRET-DECO FLEX on absorbent substrates, such as masonry, concrete, plaster or gypsum board, they should be first primed with the acrylic primer UNI-PRIMER or FLEX-PRIMER in 1-2 layers, depending on the absorbency of the substrate. DUROCRET-DECO FLEX is applied after 2-3 hours, depending on the weather conditions (provided that the primer has sufficiently dried).

Non absorbent substrates, such as old tile layers or terrazzo, should be primed with ISOMAT SUPERGRUND primer. DUROCRET-DECO FLEX may be applied after 24 hours, as long as the primer has completely dried.

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2. Application

DUROCRET-DECO FLEX is gradually added to water under continuous stirring, until a mixture of the desired workability is formed. The product is applied with a 10 mm notched trowel. A 160 g/m² reinforcing fiberglass mesh is installed on the “combed” surface of DUROCRET-DECO FLEX, which is then embedded with the smooth side of the trowel, forming a relatively even surface.

Twenty-four hours later, the hardened surface of DUROCRET-DECO FLEX is primed with the acrylic primer UNI-PRIMER or FLEX-PRIMER, and while the primer is still fresh (fresh on fresh), DUROCRET-DECO FLEX or DUROCRET-DECO FINISH is applied in a thin layer (1.5 mm) in any desired color, in order to form the desired style of the microcement coating.

Two-three days after the application is complete, the protective varnish may be applied, provided that the substrate is dry.

Coloring of DUROCRET-DECO FLEX

DUROCRET-DECO FLEX 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, but in that case it should be thoroughly mixed, in order to achieve even 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 50 g are required, you are advised to contact ISOMAT's Technical Support Department.

Application of varnishes:

The microcement coating is protected with the application of VARNISH-PU 2K polyurethane, solvent-based varnish (gloss or satin) or VARNISH-PU 2KW water-based, polyurethane varnish (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 by brush in two layers. The second layer is applied 4-24 hours after the first one, as long as it has sufficiently dried. Consumption: 70-120 g/m² per layer.

For better distribution of the varnish, it is recommended to dunk the roller in the varnish until it 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 that is not desired, it is recommended to apply two varnishes in the following way:

First, the acrylic, water-based varnish VS-W is applied in one layer at a consumption of 150-200 ml/m².

After 24 hours, the two-component, polyurethane varnish VARNISH PU-2K (gloss or satin) is applied in 2 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 intense darkening of the surface of the microcement coating, 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. 1.5 kg/m²/mm of layer thickness.

Packaging

25 kg bags.

DUROCRET-DECO FLEX

Shelf life – Storage

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

Remarks

- Temperature during application should be between +5°C and +30°C.
- In the summer, it is recommended to take the proper measures in order to protect DUROCRET-DECO FLEX from water loss, 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.



2032

ISOMAT S.A.

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

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2032-CPR-10.11

EN 1504-3

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

DoP No.: DUROCRET-DECO FLEX
/1266.1504-01

Compressive strength: class R2

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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ISOMAT S.A.

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

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EN 13813 CT-C30-F7-AR2

DoP No.: DUROCRET-DECO

FLEX/1266.13813-01

Cementitious screed material for use internally
in buildings

Reaction to fire: F

Release of corrosive substances: CT

Water permeability: NPD

Water vapor permeability: NPD

Compressive strength: C30

Flexural strength: F7

Wear resistance: AR 2

Sound insulation: NPD

Sound absorption: NPD

Thermal resistance: NPD

Chemical resistance: NPD

ISOMAT S.A.

BUILDING CHEMICALS AND MORTARS

MAIN OFFICES - FACTORY:

17th km Thessaloniki - Ag. Athanasios
P.O. BOX 1043, 570 03 Ag. Athanasios
Tel.: 2310 576 000 Fax: 2310 722 475

www.isomat.eu e-mail: info@isomat.eu