

FLOWCRET 1-10 EXPRESS

Fast-setting, self-leveling, polymer modified cementitious screed

Description

Fast-setting, self-leveling cementitious mortar for leveling floor substrates, enriched with polymer components (resins). It features high mechanical strength, superb adhesion to the substrate, excellent workability, fast-hardening and drying and low shrinkage. It provides a smooth, flat and durable final surface, ready to be covered in a very short time with any further finishing layer. Suitable for layers 1-10 mm thick.

It is classified as a screed material CT-C40-F7-AR0.5 (grey) and CT-C30-F7-AR6 (white) according to EN 13813.

Fields of application

Ideal for fast smoothing and leveling of concrete floors, cement screeds, mosaic floors etc. that are going to be covered with all kinds of tiles, carpet, parquet, vinyl tiles etc. It is suitable only for interior use. It may be left as a final topping layer in basements, attics, home storerooms etc. Suitable for leveling floors with underfloor heating systems.

FLOWCRET 1-10 EXPRESS may be used as a final layer in residential areas, provided that ISOMAT BI-100 will be applied on its surface to increase the wear resistance, the resistance to detergents and to reduce water absorption.

Furthermore, FLOWCRET 1-10 EXPRESS (White) can be mixed with pigments based on iron oxides, in order to have a colored final surface.

Technical data

FLOWCRET 1-10 EXPRESS Grey

Form:	cementitious powder
Color:	grey
Water demand:	5.0-5.5 l/25 kg bag
Application thickness:	from 1mm to 10mm

Bulk density of dry mortar: 1.55 ± 0.10 kg/l

Bulk density of fresh mortar: 2.1 ± 0.10 kg/l

Compressive strength acc. to EN 13892-2:

- 4 hours: ≥ 15.0 N/mm²
- 24 hours: ≥ 20.0 N/mm²
- 7 days: ≥ 30.0 N/mm²
- 28 days: ≥ 40.0 N/mm²

Flexural strength acc. to EN 13892-2:

- 4 hours: ≥ 5.0 N/mm²
- 24 hours: ≥ 6.0 N/mm²
- 7 days: ≥ 6.5 N/mm²
- 28 days: ≥ 7.0 N/mm²

Bond strength acc. to EN 13892-8:

- 28 days: ≥ 2.5 N/mm²

Wear resistance acc. to EN 13892-4 (BCA):

- 28 days: AR0.5

Wear resistance acc. to EN 13892-3 (Böhme):

- 28 days: A6

Setting shrinkage acc. to EN 13872:

- 28 days: max 0.45 mm/m

Reaction to fire: Euroclass A1_{fl} (EN 13501-1)

Walkability: after 2 h

Successive layer (tiles): after 24 h

Pot life: 25-30 min at +20°C

FLOWCRET 1-10 EXPRESS White

Form: cementitious powder

Color: white

Water demand: 6.0-6.5 l/25 kg bag

Application thickness: from 1mm to 10mm

Bulk density of dry mortar: 1.40 ± 0.15 kg/l

Bulk density of fresh mortar: 2 ± 0.10 kg/l

FLOWCRET 1-10 EXPRESS

Compressive strength acc. to EN 13892-2:

- 24 hours: $13.50 \pm 1.00 \text{ N/mm}^2$
- 7 days: $17.50 \pm 2.00 \text{ N/mm}^2$
- 28 days: $34.50 \pm 3.00 \text{ N/mm}^2$

Flexural strength acc. to EN 13892-2:

- 24 hours: $4.00 \pm 0.50 \text{ N/mm}^2$
- 7 days: $4.50 \pm 1.00 \text{ N/mm}^2$
- 28 days: $9.00 \pm 2.00 \text{ N/mm}^2$

Bond strength acc. to EN 13892-8:

- 28 days: $1.30 \pm 0.30 \text{ N/mm}^2$

Wear resistance acc. to EN 13892-4 (BCA):

- 28 days: AR6

Setting shrinkage acc. to EN 13872:

- 28 days: $0.40 \pm 0.20 \text{ mm/m}$

Reaction to fire: Euroclass A1_{fl}
(EN 13501-1)

Walkability: after 4 h

Successive layer (tiles): after 24 h

Pot life: 30-40 min at +20°C

Directions for use

1. Substrate

The substrate must be dry, statically sufficient and also free of dust, grease, loose particles etc. Primarily, the surface is primed with the acrylic primer UNI-PRIMER. Product application follows once the primer has completely dried out (approx. after 2 hours).

Primer consumption: 200-300 g/m².

2. Application

FLOWCRET 1-10 EXPRESS is gradually added into water under continuous stirring, until a homogeneous, lump free, fluid mass is formed. The mixture is left about 2-3 minutes to settle and is then stirred again for 1 more minute. A low speed electric mixer (approx. 300 rpm) is recommended for mixing. The mortar is poured onto the primed substrate in one layer and is spread to the desired thickness with a large metal trowel, squeegee etc.

As soon as the product has self levelled it must be rolled immediately with a suitable spiked roller to release all the air retained within its mass. For greater layer thickness, up to 30 mm, it is recommended to use FLOWCRET 3-30 EXPRESS.

Consumption

Approx. 1.65 kg /m² /mm of layer thickness.

Packaging

FLOWCRET 1-10 EXPRESS is supplied in 25 kg paper bags.

Shelf-life - Storage


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

Remarks


- During application and initial setting/hardening of FLOWCRET 1-10 EXPRESS the surface must be protected from quick water loss due to the high temperature, U.V. radiation or wind.
- Do not add cement, gypsum, lime or other binders to the FLOWCRET 1-10 EXPRESS mix.
- Before the installation of parquet or vinyl tiles is necessary to measure the moisture content with a moisture meter.
- Temperature during application should be at least +5°C.
- Mixture that has started to harden should not be used.
- FLOWCRET 1-10 EXPRESS contains cement and reacts as alkaline with water, so it is classified as irritant.
- Consult the usage risks and safety advice written on the bag.

FLOWCRET 1-10 EXPRESS

FLOWCRET 1-10 EXPRESS GREY


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<p style="text-align: center;">EN 13813 CT-C40-F7-AR0,5</p> <p style="text-align: center;">Cementitious screed material for use internally in buildings</p> <p>DoP: FLOWCRET 1-10 EXPRESS GREY/1638-04</p> <p>Reaction to fire: A1_{fi}</p> <p>Release of corrosive substances: CT</p> <p>Water permeability: NPD</p> <p>Water vapour permeability: NPD</p> <p>Compressive strength: C40</p> <p>Flexural strength: F7</p> <p>Wear resistance: AR0.5</p> <p>Sound insulation: NPD</p> <p>Sound absorption: NPD</p> <p>Thermal resistance: NPD</p> <p>Chemical resistance: NPD</p>

FLOWCRET 1-10 EXPRESS WHITE


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<p style="text-align: center;">EN 13813 CT-C30-F7-AR6</p> <p style="text-align: center;">Cementitious screed material for use internally in buildings</p> <p>DoP: FLOWCRET 1-10 EXPRESS WHITE/1639-03</p> <p>Reaction to fire: A1_{fi}</p> <p>Release of corrosive substances: CT</p> <p>Water permeability : NPD</p> <p>Water vapour permeability: NPD</p> <p>Compressive strength: C30</p> <p>Flexural strength: F7</p> <p>Wear resistance: AR6</p> <p>Sound insulation: NPD</p> <p>Sound absorption: NPD</p> <p>Thermal resistance: NPD</p> <p>Chemical resistance: NPD</p>

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