**Technical Datasheet** 



## **FLOWCRET 1-10 EXPRESS**

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

### Description

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

Certified according to EN 13813 and classified as a screed material CT-C40-F7-AR0,5. CE marked.

FLOWCRET 1-10 EXPRESS has received an Environmental Product Declaration (EPD) following an assessment of its life-cycle environmental impacts. Registration No: S-P-06174, The International EPD<sup>®</sup> System.

### **Fields of application**

Ideal for fast smoothening and leveling of concrete floors, cement screeds, terrazzo floors, etc. to be covered with all kinds of tiles, carpet, parquet, plastic or wooden floors, vinyl tiles, etc. Suitable only for interior use. Suitable for leveling floors with underfloor heating systems.

### **Technical data**

Form:	cementitious powder
Color:	grey
Water demand:	5.00-5.50 l/25 kg bag
Application thickness:	from 1mm to 10mm
Bulk density of dry mortar:	$1.55\pm0.10$ kg/l
Bulk density of fresh mortar:	$2.10 \pm 0.10$ kg/l
Compressive strength acc. • 4 hours: • 24 hours: • 7 days: • 28 days:	to EN 13892-2: ≥ 15.00 N/mm <sup>2</sup> ≥ 20.00 N/mm <sup>2</sup> ≥ 30.00 N/mm <sup>2</sup> ≥ 40.00 N/mm <sup>2</sup>
Flexural strength acc. to E • 4 hours: • 24 hours: • 7 days: • 28 days:	N 13892-2: ≥ 5.00 N/mm <sup>2</sup> ≥ 6.00 N/mm <sup>2</sup> ≥ 6.50 N/mm <sup>2</sup> ≥ 7.00 N/mm <sup>2</sup>

Bond strength acc. to EN <sup>•</sup> • 28 days:	13892-8: ≥ 2.00 N/mm²
Wear resistance acc. to El • 28 days:	N 13892-4 (BCA): AR0,5
Setting shrinkage acc. to EN 13872: • 28 days: max. 0.45 mm/m	
Reaction to fire: (EN 13501-1)	Euroclass A1 <sub>fl</sub>
Walkability:	after 2 h
Overcoat time (tiles):	after 24 h
Pot life:	25-30 min at +20°C

### **Directions for use**

### 1. Substrate

The substrate must be dry, stable and also free of dust, grease, loose particles, etc.

### 2. Priming

2.1. Absorbent surfaces e.g. concrete and cement screeds are primed with the acrylic primer UNI-PRIMER. Product application follows once the primer has completely dried (after approx. 2 h). Primer consumption: 200-300 g/m<sup>2</sup>.

2.2. Smooth or non-absorbent surfaces should be primed with SUPERGRUND adhesion promoter. Product application follows once the primer has completely dried, approx. 1-2 h later). Primer consumption: 100-200 g/m<sup>2</sup>.

### 3. Application

FLOWCRET 1-10 EXPRESS is gradually added to water under continuous stirring, until a homogeneous, lump-free, low-viscosity mass is formed. The mixture is left for 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 entrapped within its mass. Following the completion of its application and after the required drying time has elapsed, FLOWCRET 1-10 EXPRESS should be covered or adequetely





### FLOWCRET 1-10 EXPRESS

protected with a floor overlay (tiles, plastic flooring, resin coating, varnish, etc.).

For greater layer thickness, up to 30 mm, it is recommended to use FLOWCRET 3-30 EXPRESS.

### Consumption

Approx. 1.65 kg/m<sup>2</sup>/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 a frost-free and dry place.

#### Remarks

- During the application and initial setting/ hardening of FLOWCRET 1-10 EXPRESS, the surface must be protected from quick water loss due to the high temperature, UV radiation or wind.
- Expansion joints should be placed at every 25 m<sup>2</sup>, in a maximum of 5x5 m grid layout.
- Do not add cement, gypsum, lime or other binders to the FLOWCRET 1-10 EXPRESS mix.
- Prior to installation of parquet or vinyl tiles, it 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.
- Due to cement content, FLOWCRET 1-10 EXPRESS reacts with water forming alkaline solutions, thus is classified as irritant.
- Please consult the directions for safe use and precautions written on the packaging before use.

# CE

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### EN 13813 CT-C40-F7-AR0,5

Cementitious screed material for use internally in buildings

DoP: FLOWCRET 1-10 EXPRESS GREY/ 1638-04

Reaction to fire: A1fl

- Release of corrosive substances: CT
- Water permeability: NPD
- Water vapour permeability: NPD
- Compressive strength: C40
- Flexural strength: F7
- Wear resistance: AR0,5
- Sound insulation: NPD
- Sound absorption: NPD
- Thermal resistance: NPD
- Chemical resistance: NPD

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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: 30.06.2023

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