

PUMPABLE CASTING SCREED, FOR DOMESTIC BUILDINGS AND INDUSTRY

PRODUCT DESCRIPTION

CEMDURE 123 is a pumpable self-levelling cement-bound levelling material made of high-quality aluminium cement. It is a pre-mixed dry powder and is suitable as an industrial and private screed.

APPLICATIONS

CEMDURE 123 is suitable for casting extra-strong cement screeds, for casting non-adhesive or floating cement screeds in combination with reinforcement mesh and for casting floors with underfloor heating.

USER GUIDE

CEMDURE 123 can be installed with an automatic continuous mixing pump. It is recommended to apply CEMDURE 123 in one operation over a thickness of 10 to 100 mm. The semi-hardened material can be easily formed or cut so that the necessary adjustments can be made without problems. Under normal conditions, it is possible to walk on the floor after 1-2 hours. Heavy loads are possible after 3 days to 1 week, depending on local conditions.

Thicknesses to be applied

- as an adhesive screed : 10 to 100 mm
- as a non-adhesive screed : 35 to 100 mm (in combination with reinforcement mesh)
- as a floating screed : 40 to 100 mm (in combination with reinforcement mesh)

If in combination with underfloor heating / floor cooling

- adhesive : pipe thickness \varnothing + minimum 10 mm coverage
- non-adhesive on foil : 30 mm + tube thickness \varnothing
- floating on insulation : total layer thickness = 35 mm + pipe thickness \varnothing

CEMDURE 123 is not intended to remain uncoated

Permitted floor coverings

- tiles, glued or floating parquet flooring
- solid carpet, linoleum, PVC, cork
- Cement-bound (look at the Cemart range), polyurethane and epoxy cast floors

Compatible adhesives

- CEMDURE 123 is compatible with the adhesives of the floor coverings mentioned above.
- Flexible or high-performance tile adhesive (C2 or C2S)
- Always follow the guidelines given by the manufacturer of the floor covering and/or adhesives regarding residual moisture values.

RECOMMENDATIONS AND PRECAUTIONS

Do not use CEMDURE 123 on floors that are constantly wet, floors subject to rising damp, crumbly and unstable substrates, floors in direct contact with earth and exterior floors.

CEMDURE 123 must not remain uncoated. Do not apply CEMDURE 123 on warm, frozen or thawing surfaces, in full sun or dry wind and in case of frost within 24 hours after application. Do not apply CEMDURE 123 to underfloor heating (switch it off 48 hours beforehand and switch it on again according to the start-up procedure). Close windows and openings during processing to prevent draughts and too fast curing of the screed.

When applying the mortar, the substrate must be dry, protect the applied mortar from draughts, direct and bright sunrays. Door thresholds, stairs, drains and gutters must be insulated with foam rubber strips. Larger surfaces must be divided into strips. The normal width of each strip is 8 - 12 metres, depending on the pump capacity. Respect the expansion or distribution joints in the screed or concrete slabs. Use profiles adapted to the thickness of the mortar.

PREPARATION SUBSTRATE

Work is always carried out on a clean, dry, stable substrate. The surface must be free of oil, grease, dust, etc. Any loose parts must be removed. Descending can be maintained by pumping from the upper to the lower part. A subfloor that is well prepared must be primed with CEMPRIME AC. Provide a decoupling of at least 5mm (8mm in case of underfloor heating).

MIXING, PROCESSING AND FINISHING

CEMDURE 123 is suitable for mixing in an automatic continuous mixing pump (without waiting buffer). Use only pure potable water with a maximum temperature of 20°C: 4 litres per 25 kg bag. The mixed material must be used within 15 minutes, processing the mortar up to 30 minutes. Pour CEMDURE 123 onto the substrate, start at the furthest corner and work towards the exit, checking regularly that the desired layer thickness of the floor has been reached. Finish the applied floor by means of a floating row, this both in the length and in the width of the floor (crosswise). Finish the cement screed in one go.

Protect the cement screed against draughts, dehydration and freezing. During the first 4 hours we do not recommend treading on the cement floor.

CLEANING

All tools must be cleaned immediately with water. Hardened material can only be removed mechanically.

TECHNICAL DATA

Water content 16%. 50% RH and temperature of 20°C during processing

Flexural Strength	> 6 N/mm ² after 28 days.
Compressive Strength	> 32 N/mm ² after 28 days. Ultimate strength > 40 N/mm ²
Adhesion to subfloor	> 2 N/mm ²
VOC-value	free from ammonia and formaldehyde
Particle size	max. 2 mm
Free shrinkage	< 0,4‰ (measured at 50% RH)
pH-value	approx. 11,5
Flowability (Flow ring test SS 923519 (diam.50x23mm))	135 - 140 mm
Water stability	water stable (expansion under water < free shrinkage)
Material consumption	approx. 1,75 kg per mm thickness/m ²

PROCESSING DATA

Water admixture	16% (4 litres/25 kg bag)
Min. floor temperature	+6 °C
Dry powder density	approx. 1,7 g/cm ³
Wet density	> 2 g/cm ³
Open time	approx. 15 minutes depending on temperature
Curing time	4 hours for foot traffic 24 hours for light traffic 1 week for full loading
Storage	10 months in dry conditions, max. 20°C and 50% RH

HEALTH AND SAFETY



Contains cement and quartz. Moist cement is corrosive. Protect your eyes and avoid prolonged contact with the skin. Keep out of reach of children. CEMDURE 123 does not contain casein or other protein additives that may develop ammonia during the curing process.

For further information, refer to the safety data sheet of CEMDURE 123.

Transportation: Not a classified product.

GENERAL

The general information provided in this technical description, application advice and other recommendations are based on research and experience. However, the customer determines for himself whether the products are suitable for his specific application. The indicated properties are average values, obtained at 20°C and 50% RH and drawn up according to the current state of the art. With the appearance of these technical descriptions, all previous ones expire.

Please take into account local conditions such as ventilation, floor temperature, humidity,....

Do not process at temperatures below +5°C! High humidity and low temperatures slow down the decomposition and curing, high temperatures accelerate it.

Do not add any other products!



Cemart NV, Maatheide 76E, B-3920 Lommel



EN 13813 CT-C30-F6 - Cementitious screed

Reaction to fire	A2 _{FL} -s1	Wear resistance	AR2
Release of corrosive substances	CT	Sound insulation	NPD
Water permeability	NPD	Sound absorption	NPD
Water vapour permeability	NPD	Thermal resistance	NPD
Compressive strength	C30	Chemical resistance	NPD
Flexural strength	F6		

NPD = No Performance determined