Product Datasheet

Cement flowscreed

CODEX EX 80 FLOW

Rapid flowable cementitious screed for compound screeds, on separating layer or insulation layers

APPLICATIONS

Quick-setting cementitious screed for the production of bonded screeds, screeds on separating layers, screeds on impact or heat insulation, screeds with underfloor heating and top coats with subsequent coating. codex EX 80 Flow has a long pot life, followed by fast hardening and very rapid drying time. Suitable for installation for the top coverings such as tiles and natural stone, parquet, linoleum or textile floor coverings.

Because of the fast readiness for foot traffic and early readiness for covering, steady construction progress without significant interruptions is possible. Problem solver for work under time pressure such as renovations or work in used buildings.

codex EX 80 Flow can be mixed manually with the agitator or can be mixed and pumped with mixing pumps for flowable cementitious screeds for the carrying to the installation areas.

For interior and exterior use.

LEED: Meets the LEED requirements in IEQ Credit (4.1) Low Emitting Materials (LEED v4)

PRODUCT BENEFITS/FEATURES

- Quick-setting and quickly ready for covering
- Low shrinkage and dimensionally stable
- Can be pumped
- For interior and exterior use

SUITABLE FOR

- Compound screeds
- Screeds on separating layer
- Screeds on impact sound and heat insulation
- Screeds with underfloor heating
- Embedding thin-layer underfloor heating systems
- Moist and wet rooms (with composite seal)
- Residential and industrial flooring
- Renovation and restoration work
- As rapid construction system component

TECHNICAL SPECIFICATIONS

Pack type	paper bag
Pack size	25 kg
Shelf life	min. 6 months
Color	grey
Thickness	from 35 mm to 80 mm
Minimum working temperature	+ 5 °C up to + 30 °C
Ideal working temperatures	+ 15 °C up to + 25 °C
Water quantity required	0.14 litres/ kg 3.5 litres/ 25 kg
Working Time/ Pot Life	approx. 60 minutes*
Spreading size	23 cm (Hägermann funnel)
Set to foot traffic	after approx. 3 - 4 hours*
Ready for covering	see back
Burning behaviour	A1 fl
Bending tensile strength	F5
Consumption	2 kg/m²/mm layer thickness

*At 23 °C and 50 % relative humidity.

C25 DIN EN 13813 F5

GEV-EMICODE EC 1 PLUS very low emission

CE

codex | A brand of Uzin Utz Group
GB | Uzin Utz UK Ltd. | Unit 2, Mitchell Court | Central Park, Rugby | Warwickshire, CV23 0UY | Phone +44 1788 530 080 | Fax +44 1788 536 508 codex.uk@uzin-utz.com | www.codex-x.com
DE | codex GmbH & Co. KG | Heuweg 5/1 | 89079 Ulm | Tel +49 731 927093-0 | Fax +49 731 927093-190 | info@codex-x.de | www.codex-x.com

CODEX EX 80 FLOW

SUBSTRATE PREPARATION

The requirements and specifications for the substrate in accordance with DIN 18 560 “Screeds in the building industry” and DIN 18 353 “Screed work” must be followed. On mastic asphalt screeds please do not apply codex EX 80 Flow as coumpound, but always on separating or insulation layers.

Bonded screeds:

The substrate must be properly dry, load-bearing, rough, free of cracks and free of materials that could impair adhesion. Brush off, abrade, grind or shot-blast weakly bonded or soft substrate surfaces, remove loose material and thoroughly vacuum the surface. A suitable barrier primer such as codex FG 550 is required for rising moisture. Possible deformation of the substrate must be completed as much as possible. Absorbent mineral-based substrates must be primed with codex FG 300.

Screed on separating or insulation layers:

For separating and insulating layers, the load-bearing substrate must comply with DIN 18202 in order to ensure even thickness of the screed. In the event of potential exposure to moisture from adjacent components, sealing-up in accordance with DIN 18533 must be provided.

Separating layers must be applied without folds and with sufficient overlap in the joint area. Install insulating materials on the substrate with adequate dynamic rigidity lying flat. Insulation, edges (with film flaps), bay joints and movement joints need to be planned and installed professionally. The overlaps and foil flaps of the edged may have to be taped off with adhesive tape to prevent underflow.

Unheated screeds can be installed up to screed fields of 200 m² and have an aspect ratio of max. 1:2. Heated screeds are possible up to 60 m² screed fields. Separately controllable heating circuits have to be in one area as well as heated and unheated screeds have to be divided through expansion joints. Please note a maximum side length of 8 m.

In doorways and on cants (L-form) joints have to be installed.

Refer to the product data sheets for other codex products used.

Screed thicknesses:

Please refer to screed thicknesses according to DIN 18 560:

Compound screeds: min. 35 mm
On separating layer: min. 35 mm
On sound insulation: min. 40 mm*
Covering heating pipes: min. 45 mm
Maximum thickness: 80 mm

*The screed thickness on insulation layers can be reduced to 35 mm for a vertical payload of ≤ 2 kN/m² in accordance with the IWM Industrieverband WerkMörtel e.V. "Cementitious Screed" leaflet. This is a special construction and must be agreed with the customer.

APPLICATION

1. Provide cold, clean water, add floor screed and mix mechanically with a suitable agitator until lump-free. Do not add any further cements or additions.
2. Only mix as much mortar as can be processed within the processing time. Do not mix screed mortar that is already stiffening.
3. When mixing pumps are used, mixers, pumps and hoses must be emptied and cleaned immediately when work is interrupted.
4. Apply codex EX 80 Flow to the prepared substrate and bring to the correct height. Then work through the floor screed with a buffing rod in order to achieve an optimum flow and an even surface.
5. Protect the flow screed during the setting phase from premature drying out by draughts, rain, strong sunlight and frost.

READY FOR COVERING

Planned Top Layer	Layer Thickness	Ready for Covering
Tile coverings	up to 45 mm	after approx. 24 hours*
Steam-open coverings	up to 45 mm	After approx. 3 days* < 2,5 CM%**
Steam-tight coverings	up to 45 mm	after approx. 7 days* < 2 CM%**

*At 23 °C and 50 % relative humidity ** The CM measurement must be carried out with a sample weight of 50 g over the entire screed cross-section. Shake for 1 minute and read off the value after another 4 minutes. Longer waiting times falsify the value. For screed thicknesses of more than 45 mm, one additional day drying time must be observed for each additional cm of thickness.

IMPORTANT NOTES

- Store in a cool and dry place. Re-seal opened containers carefully and use contents as quickly as possible.
- Optimum processing at 15 – 20 °C and relative humidity below 75%. Low temperatures, high humidity and greater thickness will delay whilst high temperatures will accelerate setting, drying and readiness for covering. In summer, store in cool conditions and use cold water.
- Readiness for covering and strength depend, amongst others, on the amount of water used. Too much water reduces the strength, delays drying, increases shrinkage and the risk of cracking. If readiness for covering is reached install covering or prime area. Leaving such flowable cementitious screeds open too long promotes such cracking and should therefore be avoided.

The above information is based on our experience and careful investigations. The variety of associated materials and different construction and working conditions cannot be individually checked or influenced by us. The quality of your work depends, therefore, on your own professional judgement and product usage. If in doubt, conduct a small test or obtain technical advice. Observe the installation recommendations of the covering manufacturer. The publication of this datasheet invalidates all previous Information. The respective updated version of this datasheet can be found on our website: www.codex-x.com | 01/2022

- Heat drying: When used as heated screed with conventional underfloor heating, you can start heating up after 72 hours. The flow temperature of approx. 25 °C must be maintained for 3 days, then raise the temperature to the max. rated temperature. Maintain maximum temperature for at least 4 days, then allow to cool to room temperature. Initial temperature increase and decrease must be performed before installing the top cover. The heating constructor shall maintain a corresponding protocol on this process. A heating protocol is available upon request or via the Internet.
- The hardened screed surface can vary in colour and appearance.
- Pipes and cables must not protrude into the screed structure.
- Do not use in underwater areas.
- On construction sites with draughts or exposure to direct sunlight, the freshly laid screed should be covered with a foil (1 day) to avoid drying out too quickly. In external areas, protect screed from rain.
- Amongst others, the following standards, guidelines and bulletins represent supporting information and are recommended for special attention:
  - DIN EN 13 813 "Screeds material and floor screeds"
  - DIN 18 352 "Tile and slab work"
  - DIN 18 157 "Ceramic work in thin bed processes"
  - DIN 18 365 "Working with floor coverings"
  - DIN 18 353 "Working with screeds"
  - DIN 18 195 "Sealing buildings"
  - DIN 18 560 "Screeds in the building industry"
  - BEB bulletin "Instructions for the laying of cement screeds".
  - ZDB bulletins:
    - "Pipes, cables and cable ducts on bare floors"
    - "Interface coordination with heated floor constructions"
  - IWM bulletin:
    - "Cementitious screed"

SEALS OF QUALITY & ECOLABELS

- Low chromate content acc. Regulation (EC) No. 1907/2006 (REACH)
- EMICODE EC 1 PLUS / Very low-emission

CONSTITUENTS

Special cements, mineral aggregates, redispersible polymers and additives.

PROTECTION OF THE WORKPLACE AND ENVIRONMENT

Contains cement low in chromate acc. Regulation (EC) No. 1907/ 2006 (REACH). Cement produces strong alkaline on reaction with water. Avoid contact with skin and eyes. In the event of contact, rinse immediately with water. In the event of skin or eye irritation, seek medical advice. Use protective gloves. When mixing wear a protective dust-mask. Presents no physiological or ecological risk when fully cured.

DISPOSAL

Where possible, collect product residues and re-use. Do not allow to get into drains, sewers or ground. Empty paper packaging is recyclable. Collect waste product, mix with water, allow to harden, then dispose as Construction Waste.

The above information is based on our experience and careful investigations. The variety of associated materials and different construction and working conditions cannot be individually checked or influenced by us. The quality of your work depends, therefore, on your own professional judgement and product usage. If in doubt, conduct a small test or obtain technical advice. Observe the installation recommendations of the covering manufacturer. The publication of this datasheet invalidates all previous Information. The respective updated version of this datasheet can be found on our website: www.codex-x.com | 01/2022