Product Datasheet

Flexible thin-bed mortar

CODEX POWER CX 1

Thin-bed mortar for ceramic wall and floor coverings

APPLICATIONS

Low-slump, hydraulically hardening, flexible thin-bed mortar according to EN 12 004 C2 TE for the installation of ceramic wall and floor covering.

With Power CX 1 small undulations in the substrate can also be compensated up to 5 mm thickness. For use in interior and exterior areas.

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

SUITABLE FOR

- Fine and coarse ceramic tiles and slabs
- Domestic ceramics, glazed vitrified tile, clinkers
- Fine stoneware in interior areas
- Compound-suitable insulation and light building boards

SUITABLE ON

- Gypsum plasterboards
- Tile carrier elements
- Cement, lime cement and gypsum plaster
- Walls from brick, concrete blocks, gas concrete, lime sand brick
- Site-mixed concrete, prefab concrete elements (at least 6 months old)
- Calcium sulphate and cementitious screeds
- Hot water underfloor heating
- Floor temperature control with electric heating conductors for panel heating

PRODUCT BENEFITS/FEATURES

- Low-slump, for the application of wall coverings
- Universal use
- Up to 5 mm mortar bed thickness
- Extended working time

TECHNICAL SPECIFICATIONS

Pack type	paper bag
Pack size	25 kg
Shelf life	12 months
Color	light grey
Minimum working temperature	+ 5 °C to + 25 °C
Ideal working temperatures	+ 10 °C to + 25 °C
Water quantity required	0.32 - 0.34 litres/ kg 8 - 8.5 litres/ 25 kg
Working Time/ Pot Life	approx. 2,5 hours*
Working time	approx. 30 minutes*
Set to foot traffic	after approx. 12 hours*
Ready for jointing	after approx. 12 hours*
Resilient	after approx. 72 hours*
Final strength	after approx. 28 days*
Consumption	1.7 - 3.0 kg/m²

*At 23 °C and 50% rel. humidity.

GEV-EMICODE EC 1 PLUS very low emission · C2 TE Meets the requirements according to EN 12004 · CE

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CODEX POWER CX 1

SUBSTRATE PREPARATION

The substrate must be sound, dry, flat, free of cracks, clean, load-bearing and free of materials that could impair adhesion strength.

Test the substrate in accordance with applicable standards or bulletins and report any deficiencies. Mechanically prepare smooth concrete surfaces, adhesion-reducing or weak layers and clean dust-free, if necessary. Prepare according to type and properties with suitable primers and levelling compounds from the codex range of products. Prime gypsum-based substrates.

Flowscreeds must be ground, vacuumed and primed. Allow primers to always dry completely. Heated screeds must be treated according to "Interface coordination for heated floor constructions" (heat drying, heating to accelerate readiness for covering).

For outdoor coverings, there must be a surface slope of at least 1.5 % for safe drainage. If necessary, plan a steeper slope for rough or structured coverings.

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

APPLICATION

1. Provide cold water, cast in powder while stirring vigorously and mix to a homogeneous mortar. Mix well again briefly after a short maturing time. Note pot life.
2. Using a smoothing trowel, spread a thin, continuous contact layer onto the substrate, top up with fresh mortar and comb evenly with a notched trowel. A largely full-surface bed is achieved by choosing the suitable tooth profile and application technique (e.g. buttering / floating).
3. Before the skin starts to form, push the tiles into the adhesive bed with a slight twisting motion and press down.
4. Do not stir or mix material that has already set with water or powder. Clean tools and soiled ceramics with water while fresh.
5. Joint floor covering only after sufficient setting and drying of the installation mortar. Avoid foot traffic too early.

COVERAGE

Notch size	Approx. consumption
C1, 4 mm	1.3 kg/m²
C2, 6 mm	1.7 kg/m²
C4, 8 mm	2.5 kg/m²
C5, 10 mm	3.0 kg/m²

IMPORTANT NOTES

- Store in a cool and dry place. Carefully and tightly reseal opened packaging and use the contents quickly.
- Optimum processing at + 15 to + 25 °C, relative humidity 75%. Cold, high humidity and non-absorbent substrates will delay whilst heat, dryness and absorbent substrates will accelerate the working, setting and drying time.
- Drying and strength development depend on the weather conditions. Weather cycles ensuring sufficient setting and drying of the coverings must be taken into account with exterior use; appropriate protective measures must otherwise be taken.
- Protect newly installed areas from drafts, direct sunlight and heat as well as wetness.
- For high application thicknesses (over 5 mm) on moisture-sensitive substrates such as calcium sulphate screeds, a suitable codex barrier primer should be used.
- For the installation of large-format tiles and slabs, the relevant data sheets and technical information of the “Fachverbandes Fliesen und Naturstein” in the ZdB e.V. (Association for Tiles and Natural Stone) as well as the applicable standards and regulations must be observed. Obtain technical application advice if necessary.
- Use codex products according to the current product overview for areas with increased exposure to chemicals and acids as well as on wood or chipboard panels, metal and plastics or solicit application consulting.
- Floor temperature control through radiator connection lines returns must be equipped with a temperature limiter (max. 38 °C).
- Always apply proper codex composite seal for external applications. Glazed vitrified tiles are a preferred covering material. Obtain application consulting for dust-pressed vitrified tiles.
- Observe the generally acknowledged rules of the trade and technology for tile and natural stone laying as well as the respective applicable national standards and data sheets (e.g. EN, DIN, VOB, ÖNORM, SIA, SPV, etc.). The following standards and bulletins apply as well, amongst others, or are recommended for special consideration:
  - DIN 18 352 "Tile and slab work"
  - DIN 18 157 "Ceramic work in thin bed processes"
  - ZDB bulletins:
    - "Coverings on cementitious screed – heated"
    - "Coverings on cementitious screed – unheated”
    - "Coverings on calcium sulphate heated screed"
    - "Exterior coverings"
    - "Interface coordination“
  - BEB bulletin:
    - "Assessment and preparation of substrates"

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

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 | 04/2025

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.

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