

S2 Thin-bed mortar

# CODEX POWER CX 9

Highly flexible thin-bed mortar for the sure installation of tiles and natural stone covering

## APPLICATIONS

1-component, highly deformable, low-slump thin-bed mortar according to EN 12004 C2 TE S2. For installing ceramic tiles and slabs, fine stoneware and glass and porcelain tiles. Suitable for substrates such as cement and calcium sulphate screeds, mastic asphalt, lime-cement plaster, cement plaster, gypsum plaster, concrete (older than 28 days), masonry, gypsum floor boards, precast concrete, tile support elements, UZIN Multimoll tiles, underfloor heating. Used for interior and exterior wall and floor coverings\*.

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

## SUITABLE FOR

- ▶ Fine and coarse ceramic tiles and slabs
- ▶ Earthenware, stoneware
- ▶ Fine stoneware
- ▶ Natural stone covering and concrete slabs resistant to deformation and discolouration
- ▶ Glass and porcelain tiles with rough backing
- ▶ Compound-suitable insulation and light building boards

## SUITABLE ON

- ▶ Gypsum plasterboard
- ▶ Lime-cement plaster, cement plaster, gypsum plaster
- ▶ Walls from brick, concrete blocks, gas concrete, lime sand brick
- ▶ Tile carrier elements
- ▶ Site-mixed concrete, prefab concrete elements (at least 6 months old)
- ▶ Calcium sulphate and cementitious screeds
- ▶ Fresh cementitious screeds (unheated)\*
- ▶ Compound-capable dry construction elements
- ▶ Sufficiently gritted mastic asphalt
- ▶ Heated floor constructions
- ▶ UZIN Multimoll plates



## PRODUCT BENEFITS/FEATURES

- ▶ Very easy to process
- ▶ Highly deformable
- ▶ High adhesive strength
- ▶ Extended working time
- ▶ Up to 10 mm mortar bed thickness

## 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	6.25 - 7.75 litres/ 25 kg 0.25 - 0.3 litres/ kg
Working Time/ Pot Life	approx. 3 hours*
Working time	approx. 30 minutes*
Set to foot traffic	after approx. 24 hours*
Ready for jointing	after approx. 24 hours*
Resilient	after approx. 72 hours*
Final strength	after approx. 28 days*
Consumption	1.1 - 2.9 kg/m <sup>2</sup>

\*At 23 °C and 50% rel. humidity.



## 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).

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

## APPLICATION

1. Provide cold, clean, clear water. Pour in powder while stirring vigorously and mix to a smooth, lump-free mortar. Allow to mature for approx. 3 minutes. Now stir well once more.
2. Apply a thin, continuous contact layer with the smoothing trowel to the substrate.
3. Uniformly brush on mortar wet-to-wet immediately with the grooved trowel onto the contact layer. Brush only as much area as can be covered within the open time (finger test).
4. Slide tiles with slight rotating movement into the adhesive bed and press down.

The desired largely full-surface bed is achieved by choosing the suitable tooth profile and application technique (e.g. buttering / floating).

## COVERAGE

Notch size	Approx. consumption
3 mm, C3	1.1 kg/m <sup>2</sup>
4 mm, C1	1.5 kg/m <sup>2</sup>
6 mm, C2	2.0 kg/m <sup>2</sup>
8 mm, C4	2.6 kg/m <sup>2</sup>
10 mm, C5	2.9 kg/m <sup>2</sup>

## IMPORTANT NOTES

- ▶ Store in a cool and dry place. Carefully and tightly re-seal opened packaging and use the contents as quickly as possible.
- ▶ Cold and high humidity prolong the installation, setting and drying times, while heat, dryness and absorbent substrates shorten them.

- ▶ Fresh, unheated cement screeds (floating or on a separating layer) must be laid as quickly as possible after they are ready for foot traffic and have a corresponding load-bearing capacity, up to a screed age of 5 days. The usual drying deformations must not have begun yet. The screed installation must be carried out according to DIN 18560. Tile formats up to 60 cm edge length.
- ▶ 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 (< 38 °C).
- ▶ Joint floor covering only after sufficient setting and drying of the installation mortar. Avoid foot traffic too early.
- ▶ Always apply proper codex composite seal for external applications. Glazed vitrified tiles are a preferred covering material. Weather cycles ensuring sufficient setting and drying of the coverings must be taken into account; appropriate protective measures must otherwise be taken. Obtain application consulting for dust-pressed vitrified tiles.
- ▶ The following 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"
    - "Underfloor heating 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

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.