Product Datasheet

Flexible large format mortar

# CODEX POWER RX 4 ULTRA

Flexible thin-bed mortar for large format tiles

## APPLICATIONS

Flexible thin bed mortar with crystalline water retention for installing ceramic tiles, especially large format tiles. Excellent processing properties due to variably adjustable consistency with optimal transfer especially with large format tiles and slabs. Optimal fabrication because of long pot life with comparatively early readiness for foot traffic.

codex Power RX 4 Ultra meets the requirements as per EN 12 004 C2 E S1. Unevennesses in the installation substrate can be compensated up to 15 mm in one coat. Areas of use are residential, commercial and industrial buildings, indoor and outdoor use.

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

## SUITABLE FOR

- Large size tiles and plates
- For fine and coarse ceramic tiles and slabs
- Earthenware, stoneware
- Fine stoneware (only for interior use)
- Natural stone covering and concrete slabs

## SUITABLE ON

- Calcium sulphate and cementitious screeds
- Fresh cementitious screeds (unheated)
- Sufficiently gritted mastic asphalt
- Precast concrete elements
- Lime cement, cement and gypsum plaster
- Site-mixed concrete, prefab concrete elements (at least 6 months old)
- Gypsum carton and gypsum board plates
- Walls from brick, gas concrete, lime sand brick
- Tile backing elements
- Heated floor constructions
- codex decoupling underlays

## PRODUCT BENEFITS/FEATURES

- Excellent transfer
- Up to 15 mm mortar bed thickness
- Ready for foot traffic and jointing after approx. 6 hours
- Extended working time
- Low chromate according to EU-VO 1907/2006 (REACH)

## TECHNICAL SPECIFICATIONS

| | |
|---|---|
| Pack type | paper bag |
| Pack size | 25 kg |
| Shelf life | 12 months |
| Color | grey |
| Minimum working temperature | + 5 °C to + 25 °C |
| Ideal working temperatures | + 10 °C to + 25 °C |
| Water quantity required | 0.23 - 0.27 litres/kg<br>5.75 - 6.75 litres/25 kg |
| Working Time/ Pot Life | after 3 hours |
| Working time | after 30 minutes |
| Set to foot traffic | after approx. 6 hours |
| Ready for jointing | after approx. 6 hours |
| Resilient | after approx. 2 days |
| Final strength | after approx. 28 days* |
| Consumption | 2.7 - 3.9 kg/m² |

*At 23 °C and 50% rel. humidity.

**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

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## SUBSTRATE PREPARATION

The substrate must be firm, dry, flat, free of cracks, clean, load-bearing and free of materials that could affect adhesive 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 substrate according to type and properties with suitable primers and smoothing compounds from the codex range of products.

Calcium flow screeds must be ground, vacuumed and primed. Allow primers to always dry completely. Heat drying or heating to accelerate readiness for covering must be performed for heated screeds.

When installing large-format tiles and plate coverings (from 60 cm edge length and/or tile size over 0.2 m²) on substrates sensitive to moisture, such as calcium sulphate screeds, they must be pretreated with a codex protective or barrier primer.

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. The use of tile wedges may be required for wall installation.
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 |
|---|---|
| 8 mm | 2.7 kg/m² |
| 10 mm | 3.0 kg/m² |
| 12 mm | 3.9 kg/m² |

## IMPORTANT NOTES

- Store in a cool and dry place. Carefully and tightly reseal opened packaging and use the contents as quickly as possible.
- Optimum processing at +15 °C to + 25 °C, relative humidity to 75%. Cold, high humidity and non-absorbent substrates will delay whilst heat, dryness and absorbent substrates will accelerate the installation, setting and drying times.
- 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 advise 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.
- 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 (Central Association of the German Construction Industry) 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

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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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