

Tiling Levelling Compound

# codex FM 50 Turbo

Self-levelling cement floor-levelling compound for layer thicknesses from 3 to 50 mm

## Description:

Very low-emission, self-levelling, rapid-setting cement floor-levelling compound for layer thicknesses from 3 to 50 mm. Suitable for levelling and filling of substrates. For creation of level laying surfaces for following tile and natural stone coverings in interior areas.

### Suitable for / on:

- ▶ creation of level, firm laying surfaces for ceramic large and small format tiles, natural stone floor coverings, etc.
- ▶ calcium sulphate and cement screeds
- ▶ concrete
- ▶ existing large and small format tiles and terrazzo coverings
- ▶ mastic asphalt (max. 10 mm layer thickness)
- ▶ existing substrates with firmly adhering adhesive and filling compound residues
- ▶ residential and commercial areas subject to normal to high stresses
- ▶ damp areas
- ▶ warm water underfloor heating
- ▶ floor heating with surface electrical cabling

## Product Properties / Benefits:

Plasticised, dry mortar in powder form with special, medium particle size. On mixing with water, produces a hydraulically hardening flow compound with outstanding application properties for the special requirements of tiles and natural stone coverings.



<b>CE</b>	
UZIN UTZ AG Dieselstraße 3 D-89079 Ulm 06	
EN 13813 CT-C30-F7 Cementitious levelling compound for substrates in interior locations	
Fire resistance	<b>A 1fl</b>
Compressive strength	<b>C 30</b>
Tensile strength	<b>F 7</b>



**Composition:** Special cements, mineral aggregates, poly-vinyl-acetate copolymers, flow agents and additives.

- ▶ Layer thickness range from 3 – 50 mm
- ▶ Excellent flowing and pumping properties
- ▶ Rapid-setting
- ▶ Quickly ready for laying
- ▶ Low stress
- ▶ High compressive and tensile strength
- ▶ Low chromate content
- ▶ EMICODE EC 1 R/Very low emission

## Technical Data:

Packaging:	paper sack
Package size:	25 kg
Shelf life:	min. 6 months
Required water quantity:	5.0 – 5.5 litres per 25 kg sack
Colour:	grey
Consumption:	1.3 kg / m <sup>2</sup> per mm layer thickness
Working temperature:	5°C to 25°C / 41°F to 77°F
Working time:	approx. 30 minutes*
Set to foot traffic:	after 1 – 2 hours*
Ready for laying:	see overleaf

\* At 23°C / 73°F and 50 % rel. humidity.

## Substrate Preparation:

The substrate must be dry, load bearing, crack-free and free of any materials which might impair adhesion.

Calcium sulphate screeds must be sanded down and vacuumed, either by the plasterer as a finishing process or by the tile-layer prior to application.

Possible deformation of the substrate must be avoided as far as possible. Thicker composite layers require a very firm and gripping substrate. Substrate surfaces that might impair adhesion must be brushed down, sanded, ground or shot-blasted. Loose materials and dust must be vacuumed off.

Use a suitable primer from the codex Product Guide matching the type and properties of the substrate. Allow the primer to dry thoroughly.

Refer to the Product Data Sheets for other products used.

## Application:

1. Put 5.0 – 5.5 litres of cold, clean water into a clean container. Sprinkle in the contents of the bag (25 kg) while stirring vigorously, and mix into a smooth, fluid, lump-free mass. Use a stirrer with UZIN levelling compound mixer. Do not mix too thin.
2. Pour the compound onto the primed substrate and distribute evenly using a smoothing trowel or Large Surface Rake. For thicker layers or when using the screed rake, the spreading characteristics and surface can be improved by ventilation with the Spike Roller. Apply the required layer thickness in one single process wherever possible.

## Ready for laying:

### – Ceramic tile coverings\*

Layer thicknesses up to 30 mm when ready for foot traffic

Layer thicknesses up to 40 mm after 1 day

Layer thicknesses up to 50 mm after 2 days

### – Natural stone coverings\*

after complete drying of the compound layer  
(danger of stains due to damp)

\* At 23°C / 73°F and 50% rel. humidity.

## Consumption:

Layer thickness	Consumption	25 kg sack covers approx.
3 mm	3.9 kg / m <sup>2</sup>	6.4 m <sup>2</sup>
6 mm	7.8 kg / m <sup>2</sup>	3.7 m <sup>2</sup>
10 mm	13.0 kg / m <sup>2</sup>	1.9 m <sup>2</sup>

## Important Notes:

- ▶ Shelf life approx. 6 months in original packaging when stored in dry conditions. Tightly reseal opened packaging and use the contents as quickly as possible.
- ▶ Best applied at temperatures of 15 – 25°C/59 – 77°F and relative humidity of below 75%. Low temperatures, high humidity and high layer thicknesses will slow down hardening and drying, while high temperatures accelerate drying. Store in a cool area in summer, and use cold water for mixing.
- ▶ When using on anhydrite screeds or bituminous substrates, e.g. mastic asphalt, obtain technical advice.
- ▶ In case of larger layer thicknesses above 5 mm on unstable or moisture-sensitive substrates (e.g. calcium sulphate screeds or old adhesive residues), sanded-down epoxy resin primers such as 2-Component Epoxy Primer-Sealer UZIN PE 460 should be used.
- ▶ On ascending components, fit edge concealing strips and do not allow the compound to run into connecting joints.
- ▶ Expansion and movement joints in the substrate should also be made in the upper layer.
- ▶ For layer thicknesses above 20 mm, the mixed compound can be further mixed up to 50% with UZIN Strecksand 2.5 (up to approx. 12.5 kg sand per 25 kg sack). The flow and application properties will be altered by the addition of sand.
- ▶ In case of multi-layer application of codex FM 50 Turbo, prime the surface in advance after a suitable drying time with codex Fliesengrund, and smooth off again after a further 1 – 2 hours.
- ▶ Protect freshly laid surfaces against draughts, direct sunlight, the effects of heat and damp.
- ▶ codex FM 50 Turbo can be processed and applied using continually mixing worm-gear pumps, e.g. Type P.F.T – T2E or M-tec.
- ▶ In addition to all applicable standards, guidelines and data sheets, the following should also be observed:
  - DIN 18 352 "Working with large and small format tiling"
  - DIN 13 332 "Natural stone work"
  - DIN 13 333 "Concrete slab work"
  - DIN 18 353 "Screed work"
  - DIN 18 195 "Construction work sealing"
  - ZDB data sheet "Instructions for the application of composite sealing in claddings and coverings of tiles and panels in interior and exterior areas"
  - BEB data sheet "Assessment and preparation of substrates", "Interface co-ordination for heated floor surfaces"

## Protection of the Workplace and the Environment:

Irritant. Contains cement low in chromate acc. Directive 2003/53/EC. Cement produces strong alkaline on reaction with water. Avoid contact with skin and eyes. In the event of contact, rinse thoroughly and immediately with water. In the event of skin or eye irritation, consult a doctor. When mixing wear a protective dust-mask. Use protective gloves. Presents no physiological or ecological risk when fully cured.

## Disposal:

Dispose of empty packaging according to local regulations. Collect waste material, mix with water and allow to harden, then dispose as Construction Waste.