



Premium Levelling Compound

# UZIN NC 170 LevelStar

Self-levelling, extremely smooth cement-based levelling compound with Level Plus Effect for every layer thickness range

**UZIN ÖkoLine:** A system of tested and proved installation materials based on the principles of neutral odour and clean indoor air (see "Protection of the Workplace and the Environment").

## Description:

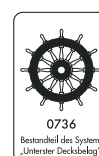
Filling, smoothing and levelling compound with high-performance plasticiser technology prior to the laying of textile and elastic floor coverings of all types, wood flooring as well as ceramics and natural stone linings. Pumpable. For interior use only.

Suitable for / on:

- ▶ the subsequent laying of textile and elastic floor coverings of all types
- ▶ the subsequent laying of wood flooring, in association with UZIN 2-Component PU, 1-Component PU or MSP adhesives
- ▶ the subsequent laying of ceramics and natural stone coverings
- ▶ high stressing loads in the residential, commercial and industrial sectors, e.g. hospitals, highly-frequented shopping centres, industrial halls etc.
- ▶ warm water underfloor heating
- ▶ loading with chair castors according to DIN EN 12 529 above 1 mm underlay level thickness



<b>CE</b>
UZIN UTZ AG Dieselstraße 3 D-89079 Ulm
See date of manufacture on the packaging
<b>EN 13 813 CT-C35-F7</b> Cementitious levelling compound for substrates in interior locations
Fire resistance <b>A 1 fl</b>
Compressive strength <b>C 35</b>
Tensile strength <b>F 7</b>



**ÖKOLINE**

**Composition:** Special cements, mineral aggregates, polyvinyl acetate copolymers, high-performance plasticisers and additives.

- ▶ Extremely good application characteristics
- ▶ Very smooth surface
- ▶ Very easy adhesive application
- ▶ Up to 10 % less adhesive consumption
- ▶ Very good absorption capacity
- ▶ Shear-resistant under wood flooring
- ▶ Low chromate content
- ▶ EMICODE EC 1 R/Very low emissions

## Technical Data:

Packaging:	paper sack
Packsize:	25 kg
Shelf life:	min. 6 months
Required water quantity:	6.25 – 6.75 litres per 25 kg sack
Ideal water quantity at 2 mm:	6.75 litres per 25 kg sack
Colour:	grey
Consumption:	approx. 1.4 kg / m <sup>2</sup> per mm thickness
Minimum working temperature:	10 °C / 50 °F at floor level
Ideal working temperature:	15 – 25 °C / 59 – 77 °F
Working time:	20 – 30 minutes*
Set to foot traffic:	after 1 – 2 hours *
Dry for covering:	after approx. 18 hours *

\* At 20 °C / 68 °F and 65 % relative air humidity with maximum thickness of 3 mm. See also "Application – Drying".

## Areas of use:

Suitable for/on:

- ▶ the subsequent laying of textile and elastic floor coverings of all type
- ▶ the subsequent laying of wood flooring, in association with UZIN MK 92 S, UZIN MK 95 or UZIN MK 100
- ▶ the subsequent laying of ceramics and natural stone coverings
- ▶ new substrates, e.g. cement screeds, calcium sulphate screeds or concrete
- ▶ new, fixed-screwed chipboards V 100\* or OSB boards\*
- ▶ old substrate bases, e.g. on sealed, bonded, water-proof adhesive bed
- ▶ existing ceramic and natural stone coverings, terrazzo and similar.
- ▶ new (and dependent on age\*) mastic asphalt screeds, as well as scraping troweling on asphaltic fine concrete
- ▶ magnesia and stone wood screeds
- ▶ Pre-cast component covers, e.g. gypsum fibre board

\*Up to max. 3 mm thickness.

## Product Properties / Benefits:

High-quality, premium levelling compound with novel raw-material technology and super-plasticiser. As a result of the special composition, the Level Plus Effect results from extremely good flow characteristics, very smooth surface, uniform and homogeneous surface appearance, as well as a consumption reduction of adhesive with subsequent working with adhesive. The adhesive is meshed uniformly and effortlessly with the very absorbent surface. As a result of that, the floor covering surface is smoother and more uniform in case of the laying of sensitive, elastic linings. Abrasives and toothed strips are less worn and can be employed for a longer time.

Premium compound for new and old construction, with high strength, low-stress characteristics and for high loading demands. Extreme over-water stability and shear-resistant under parquet.

UZIN NC 170 LevelStar is employed where the substrates are difficult, where the stressing from use is highest and where the user wishes to deliver a perfect result.

## Application Example:



In this historical cloister area with a clinic operation UZIN NC 170 LevelStar was applied in different thicknesses on the most difficult substrates. The result is a perfect surface with optimal spread characteristics, and of course without any cracks.



On other floors, stressed, highly-loaded floor coverings were laid on NC UZIN 170 LevelStar. The appearance is high-quality and there are no longer any corrugations or trowel marks with this premium levelling compound.

## Substrate Preparation:

The substrate must be sound, load-bearing, dry, free from cracks, clean and free from materials (dirt, oil, grease) which would impair adhesion. Cement and calcium sulphate screeds must be sanded and vacuumed off. Test the substrate in accordance with applicable standards and specification sheets and report any deficiencies.

Remove any adhesion-reducing or unstable layers, e.g. separating agents, levelling compounds, covering or paint coat residues etc. by brushing-off, abrading, grinding or shot-blasting. Thoroughly vacuum off loose material and dust. According to type and characteristic quality of the substrate, select a suitable priming from the UZIN product range. Allow primer to dry out completely.

Refer to the Product Data Sheets for other products used.

## Application:

- Put 6.25 – 6.75 litres of cold, clear water into a container. In case of a 2 mm thickness, 6.75 litres is the ideal water factor. Sprinkle in the sack contents (25 kg) while stirring vigorously and blend to a semi-viscous, lump-free mixture. Use a drill-mixer with the UZIN levelling compound mixing accessory.
- Pour out the mixture onto the substrate and distribute evenly with a smoothing trowel or the UZIN surface rake. In case of thicker coats and/or when the rake is used, the already excellent flow and surface characteristics can be further improved by removing air with the UZIN spike roller. Where possible, apply the required layer thickness in one work operation.

## Consumption:

Thickness	Consumption	Approx. coverage per 25 kg sack
1 mm	1.4 kg / m <sup>2</sup>	18 m <sup>2</sup>
3 mm	4.2 kg / m <sup>2</sup>	6 m <sup>2</sup>
10 mm	14.0 kg / m <sup>2</sup>	2 m <sup>2</sup>

## Spreading UZIN NC 170 LevelStar:

Thickness	Ideal spreading quality and make-up quantities
10 – 15 mm	30 % UZIN Fine Sand 0.8 (8 kg sand / 25 kg powder)
15 – 30 mm	50 % UZIN Coarse Sand 2.5 (12.5 kg sand / 25 kg powder)
30 – 50 mm	50 % screed sand 0/8 (12.5 kg sand / 25 kg powder)

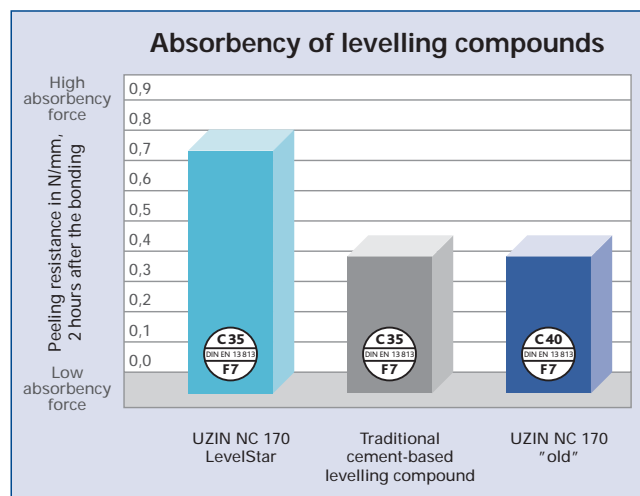
According to sand, thickness and moisture content, the water factor is to be correspondingly reduced.

## Ready for Application:

Thickness	Ready for application
3 mm	18 hours*
5 mm	24 hours*
10 mm	48 hours*
20 mm	72 hours*

\*With 20 °C / 68 °F and 65 % relative air humidity.

## Practical Note:



The absorbency of the new premium levelling compound is approx. twice as high as previous levelling compounds. The open time of the adhesive during the laying is considerably reduced in comparison with usual compounds. The installer of the covering works far faster and the overall appearance of the finished floor covering surface is very smooth and flat.

## Important Notes:

- ▶ Shelf life minimum 6 months in original containers when stored in dry conditions. Tightly re-seal opened containers and use the contents as quickly as possible.
  - ▶ Optimum working conditions are 15 – 25°C/59 – 77°F and relative humidity below 65%. Low temperatures, high humidity and greater thickness will delay, whilst high temperatures and low humidity will accelerate the setting, drying and readiness for covering. In summer, store in cool conditions and use cold water.
  - ▶ Expansion, movement and wall connection joints resulting from the substrate must be taken up. As required, fit UZIN expansion strips against adjacent structures to prevent ingress of the compound into connection joints. For thickness above 5 mm, expansion strips should be used.
  - ▶ Pumpable with continuous feed mixer-pumps, e.g. from the manufacturers m-tec, P.F.T. and other. Employ a remixer.
  - ▶ Minimum 1 mm thickness for resistance to castor wheels. On non-absorbent surfaces, such as e.g. old screeds with a full cover of old, waterproof adhesive, apply 2 – 3 mm.
  - ▶ If additional coats are required, allow the compound to dry out completely, intermediate-prime with UZIN PE 360 and after drying (1 hour\*) apply the next coat. The second compound application must not exceed the layer thickness of the first coat.
  - ▶ Under wood flooring, the minimum layer thickness is 2 mm.
  - ▶ In case of thicknesses above 10 mm, on moisture-sensitive (calcium sulphate screeds) or unstable substrates (e.g. adhesive residues), epoxy resin primers should be used, e.g. UZIN PE 460 gritted.
  - ▶ In case of unstable old substrate bases with several adhesive or levelling compound layers, the use of a gypsum-based levelling compound, such as UZIN NC 110 or UZIN NC 115, is preferable.
  - ▶ In case of freshly poured asphalt screeding, thicknesses to max. 5 mm are admissible, and in case of older poured asphalt screeding with old layers, thicknesses to max. 3 mm are admissible. In case of higher thicknesses, gypsum-based levelling compounds, such as e.g. UZIN NC 110 or UZIN NC 115, are to be employed.
  - ▶ Do not use in exterior or wet areas.
  - ▶ Protect freshly prepared surfaces from draughts, direct sunlight and sources of heat. On soft or tacky surfaces, cement-based levelling compounds have a tendency to crack. Therefore, soft or tacky surfaces must be removed as far as possible before applying the levelling compound. Levelling compounds left uncovered for too long will also tend to crack formation and therefore this should be avoided.
  - ▶ Do not use as a screed cement or as a wearing surface – a covering must always be applied.
  - ▶ UZIN NC 170 LevelStar is a component part of the system "Lowest cover coating", consisting of UZIN NC 170 LevelStar, UZIN PE 520, UZIN PE 460 and UZIN Fine Sand 0.8. This system has certification as a marine equipment product from the Hamburg Marine Trade Social Insurance against Occupational Accidents, Module B and Module D. Certificates are available on request. The authorised thickness is 8 mm. USCG-No. Module B 164.106/EC0736/113.069.
- ▶ The following standards, regulations and publications are applicable and especially recommended:
    - DIN 18 365 "Working with floor coverings"
    - DIN 18 356 "Working with parquet and wood blocks"
    - DIN 18 352 "Working with tiles and panels"
    - TKB publication "Assessment and preparation of substrates for floor covering and parquet work"
    - TKB publication "Technical description and processing of cement floor levelling compound"
    - BEB publication "Assessing and preparation of substrates"

## Protection of the Workplace and the Environment:

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 immediately with water. In the event of skin or eye irritation, seek medical advice. When mixing wear a protective dust-mask. Use protective gloves. Presents no physiological or ecological risk when fully cured.

EMICODE EC 1 R – very low emission. Within the scope of current knowledge, gives off no emissions of formaldehyde, hazardous materials or volatile organic compounds (VOC).

Basic prerequisites for best possible indoor air quality following floor covering work are conformity to standards of the working conditions, as well as thoroughly dry substrate, primer and smoothing compound.

## Disposal:

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