

## Premium smoothing compound

# UZIN NC 170 LevelStar

Extremely smooth and quick setting cementitious smoothing compound with Level Plus Effect S for any thickness range

### MAIN APPLICATION FIELD:

High performance smoothing compound with excellent flow properties. Quick drying, even under unfavourable climatic conditions. For the subsequent installation of all floor coverings, wood flooring as well as ceramics and natural stone. It is ready to accept most floor coverings after approx. 6 hours\* and allows for quick and reliable installation under tight deadlines. Pumpable, for interior application.

### SUITABLE ON / FOR:

- ▶ cementitious screeds, calcium sulphate screeds or concrete
- ▶ rapid cement screeds
- ▶ substrates with old waterproof adhesives or compound residues adhering to them
- ▶ new, firmly screw-fixed chipboard P4 – P7 or OSB/2 – OSB/4 panels
- ▶ existing ceramic and natural stone coverings, terrazzo or similar
- ▶ precast screeds, gypsum fibre boards
- ▶ hot-water underfloor heating or thin-layer heating systems
- ▶ loads from chair castors according to DIN EN 12 529 from 1 mm compound thickness



|  |         |
|--|---------|
| <b>CE</b>  |         |
| 0761   |         |
| Uzin Utz AG  |         |
| Dieselstrasse 3  |         |
| 89079 Ulm  |         |
| 17   |         |
| 01/01/0065.01  |         |
| EN 13813:2002  |         |
| Cementitious levelling compound for substrates in interior locations |         |
| EN 13813: CT-C40-F7  |         |
| Reaction to fire   | A2fl-s1 |
| Release of corrosive substances                                      | CT      |
| Compressive strength   | C40     |
| Flexural strength  | F7      |

### PRODUCT BENEFITS/FEATURES:

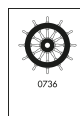
UZIN NC 170 LevelStar is a high-performance smoothing compound with excellent flow properties. It is fast drying, even with unfavourable climatic conditions. Many types of floor coverings can be installed after 6 hours\*. Offers a fast and secure installation. For interior use.

- ▶ excellent flow characteristics
- ▶ ready to accept floor coverings after 6 hours\*
- ▶ very high strength
- ▶ very smooth surface

### TECHNICAL DATA:

|                                 |   |
|---------------------------------|---|
| Packaging                       | paper bag                                 |
| Pack size                       | 20 kg                                     |
| Shelf life                      | min. 9 months                             |
| Water quantity                  | 5.25 litres per 20 kg bag                 |
| Colour                          | grey                                      |
| Consumption                     | approx. 15 m <sup>2</sup> at 1 mm per bag |
| Ideal application temperature   | 15 - 25 °C                                |
| Working time                    | 20 - 30 minutes*                          |
| Ready for foot traffic          | after 1.5 - 2 hours*                      |
| Ready for covering              | after approx. 6 hours*                    |
| Minimum application temperature | 10 °C at ground level                     |
| Flow ring spread                | approx. 150 mm ± 5 mm                     |
| Fire reaction                   | A2fl-s1 acc. to DIN EN 13 501-1           |

\*At 20 °C and 65% relative humidity and max. thickness of 5 mm. See "Ready for covering".



## SUBSTRATE PREPARATION:

The substrate must be firm, load-bearing, dry, free from cracks, clean and free from materials (dirt, oil, grease), that would impair adhesion. Cement and calcium sulphate screeds must be abraded and vacuumed. Test the substrate in accordance with applicable standards and bulletins and report any deficiencies.

Any adhesion-reducing or unstable layers, e.g. release agents, loose adhesives, compounds, covering or paint residues etc. must be removed, e.g. by brushing-off, abrading, grinding or shot-blasting. Thoroughly vacuum loose material and dust. Use a suitable primer from the UZIN Product Guide according to the type and condition of the substrate. Allow any primers that are applied to dry completely.

The product data sheets of the other products used must be observed.

## APPLICATION:

1. Pour approx. 5.25 litres of cold, clean water into a clean container. Sprinkle in contents of sack (20 kg) while thoroughly stirring at the same time and mix to form a thick lump-free consistency. Use a drill or mixer fitted with a UZIN Mixing Paddle.
2. Pour out the mix onto the substrate and distribute evenly with a smoothing trowel or the UZIN Screed Rake, notch size R 2. The flow and surface can be improved by removing air using the UZIN Spike Roller. Where possible, apply to the desired thickness in one coat

## EXTENSION:

| Layer Thickness | Ideal additive amount                                  |
|-----------------|--|
| 20 - 50 mm      | 30 % UZIN quartz sand 0.3 – 0.8 mm (6 kg sand / 20 kg) |

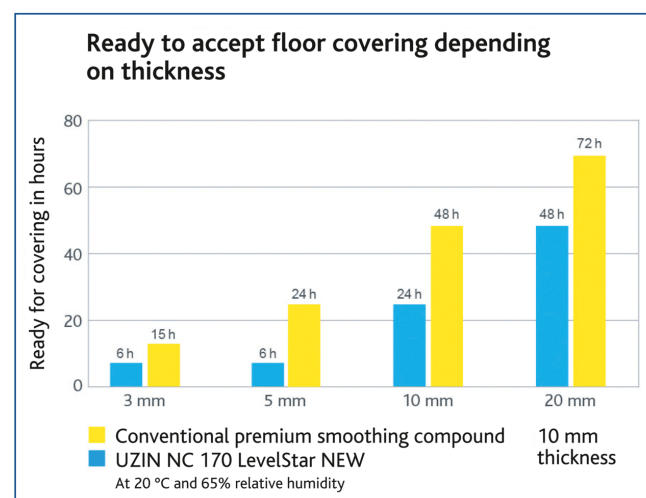
Depending on the type of sand and the thickness, the water amount may be adapted.

## READY FOR COVERING:

| Planned Top Layer  | Layer Thickness                                  | Ready for Covering                        |
|--|--|---|
| Floor Coverings  | Ready for covering at 20 °C / 65 % rel. humidity |   |
| Textiles and resilient flooring (e.g. PVC, linoleum, rubber), ceramic and natural stone flooring | 3 mm   | approx. 6 hours*                          |
|  | 5 mm   | approx. 6 hours*                          |
|  | 10 mm  | approx. 24 hours*                         |
|  | 20 mm  | approx. 48 hours*                         |
| Textile and elastic coverings with Sigan 1 or Sigan Elements Plus + Planus Primer                | 3 mm   | Apply Planus approx. 12 h at the earliest |
| Wood Flooring  | 3 mm   | approx. 15 hours*                         |
|  | 5 mm   | approx. 15 hours*                         |
|  | 10 mm  | approx. 24 hours*                         |
|  | 20 mm  | approx. 72 hours*                         |

\*Ready for covering: At 20 °C and 65% relative humidity.

\*\*At 10 °C and 80% relative humidity.



## CONSUMPTION:

| Thickness | Approx. consumption per 20 kg |
|-----------|-------------------------------|
| 1 mm      | 15 m <sup>2</sup>             |
| 3 mm      | 5 m <sup>2</sup>              |
| 10 mm     | 1.5 m <sup>2</sup>            |

## IMPORTANT NOTES:

- ▶ Minimum shelf-life 9 months in original packaging and in cool and dry storage conditions. Over time the length of storage may also cause an extension to the setting and drying time. The performance of the cured material is not affected. Tightly seal opened packaging and use the contents as quickly as possible.
- ▶ Optimum conditions at 15 – 25 °C and relative humidity below 65 %. Low temperatures, high humidity.
- ▶ High thickness, non-absorbent or blocked substrates will delay setting, drying and readiness for covering. High temperatures, low humidity and absorbent substrates accelerate setting, drying and readiness for covering. Furthermore, drying progress depends largely on the air flow per hour. Removing moist air, e.g. through ventilation, is therefore essential to achieving quick readiness for covering.
- ▶ Store in cool and dry conditions in summer and use cold water. If not the working time is shortened.
- ▶ Expansion, movement and perimeter joints in the substrate must be adopted. Install UZIN expansion strips on all vertical components.
- ▶ To prevent ingress of the compound into the connection joints. Expansion strips are generally necessary for thicknesses over 5 mm. On wooden substrates the expansion strip must be completely removed after work.
- ▶ Can be pumped with continuously mixing spiral pumps, e.g. from manufacturers such as m-tec, P.F.T. and others. Subsequent agitator recommended.
- ▶ Rooms without a basement underneath must be sealed against rising moisture in compliance with standards.
- ▶ The substructure of wooden floors must be dry to prevent damage due to dampness through rotting or mould formation. Adequate ventilation or rear-ventilation must be provided especially when installing impermeable flooring, e.g. by removing the existing expansion strip and by installing special skirting with vent openings.
- ▶ Minimum thickness for resistance to castors is 1 mm. On non-absorbent substrates such as old screeds, a closed firmly adhering waterproof adhesive bed with a thickness of 2 – 3 mm must generally be applied.
- ▶ When smoothing in several layers allow compound to dry completely, apply e.g. UZIN PE 360 as intermediate primer and smooth subsequently after drying. Subsequent application must not exceed the thickness of the previous one.
- ▶ The minimum thickness beneath wood flooring is 2 mm. Adequate drying of the smoothing compound prior to bonding wood flooring is especially important.
- ▶ ]For thicknesses above 10 mm or on moisture-sensitive (calcium sulphate screeds) or weak substrates (adhesive residues), use reaction epoxy resin primers, such as UZIN PE 460 or UZIN PE 414 Turbo, gritted.
- ▶ On weak older substrates with several layers of adhesive or smoothing compound the use of gypsum-based smoothing compounds such as UZIN NC 110, UZIN NC 112 Turbo or UZIN NC 115 is to be preferred.
- ▶ For new mastic asphalt screeds thicknesses up to max. 5 mm and for older mastic asphalt screeds with old layers attached thicknesses up to max. 3 mm are permissible. For greater thicknesses gypsum-based smoothing compounds such as UZIN NC 110, UZIN NC 112 Turbo or UZIN NC 115 are to be used.

- ▶ Thicknesses up to max. 3 mm are allowed for new, firmly screw-fixed chipboard P4 – P7 or OSB/2 – OSB/4 panels.
- ▶ Do not use in exterior or wet areas.
- ▶ Protect freshly smoothed areas from draughts, direct sunlight and sources of heat. Cementitious compound layers on soft or tacky substrates are prone to stress crack propagation. These soft or tacky layers must therefore be removed as much as possible before applying smoothing compounds. Leaving such compound layers open too long also tends to propagate stress cracks and should therefore be avoided.
- ▶ Do not use as wearing floor covering or wearing surface; always apply a top covering.
- ▶ UZIN NC 170 LevelStar NEW has the approval as shipbuilding equipment product by the maritime occupational association "See-Berufsgenossenschaft Hamburg", module B and module D. Certificates are available upon request. The permissible thickness is 20 mm. USCG-No. for the system is 164.106/EC0736/113.113.
- ▶ Smoothing compound must not enter between insulation and heating pipes because of the risk of corrosion. This applies in particular for heating pipes from galvanized steel. Insulation may only be cut off after.
- ▶ Follow the generally acknowledged rules of the trade and practice for the installation of wood flooring and floor covering of the respective applicable standards (e.g. EN, DIN, Ö-standard, SIA, etc.).
- ▶ The following standards and bulletins represent supporting information and are recommended for special attention:
  - DIN 18 365 "Working with floor covering", Ö-Norm B 2236
  - DIN 18 356 "Working with wood flooring", Ö-Norm B 2218
  - DIN 18 352 "Tile and slab work"
  - TKB publication "Assessment and preparation of substrates for floor covering and wood flooring installation"
  - BEB publication "Assessment and preparation of substrates"
  - TKB publication "Technical description and processing of cementitious floor levelling compounds"
  - ZVPF Technical Bulletin "Quality Requirements on the Flatness of Substrates for Floor covering and Wood flooring"

## SEALS OF QUALITY & ECOLABELS:

- ▶ Low chromate content acc. Regulation (EC) No. 1907/2006 (REACH)
- ▶ EMICODE EC 1 PLUS / Very low-emission
- ▶ DE-UZ 113 / Environmentally friendly because of low emissions

## COMPOSITION:

Special cements, mineral aggregates, redispersible polymers, high-performance liquefiers and additives.

## PROTECTION OF THE WORKPLACE AND THE ENVIRONMENT:

Contains cement low in chromate acc. Regulation (EC) No 1907/2006 (REACH). Keep out of reach of children! Keep

children away from fresh product / installation material. Store in a dry and cool place. Once opened, immediately close packaging tightly. Wear nitrile impregnated cotton-gloves and long trousers. During mixing wear a suitable dust-mask and goggles. Thorough ventilation must be ensured during and after the installation and drying time of the product. Drinking, eating and smoking are prohibited during the installation. In case of eye contact, wash immediately with plenty of water and seek medical attention. Avoid prolonged skin contact with the product. After skin contact thoroughly rinse with water immediately. The longer the freshly mixed product remains on the skin, the greater the risk of serious skin damage. Do not allow dispersal into drains, sewers or ground. Rinse tools with water and soap immediately after use. Presents no physiological or ecological risk when fully cured. 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. For allergy information, call +49 731 4097-0 (Germany).

## **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.