

Fibre-Reinforced smoothing Compound

UZIN NC 175

Self-smoothing, fibre-reinforced cementitious smoothing compound with Level Plus Effect for thicknesses up to 20 mm

MAIN APPLICATION FIELD:

Very low-emission, rakable self-smoothing, fibre-reinforced cement floor-smoothing compound for wood substrates with 3 – 20 mm thickness. Suitable for the fabrication of level installation surfaces with good absorbency for floor covering and wood flooring work. Pump-ready, for interior application.

SUITABLE ON / FOR:

- subsequent flooring of textile and resilient floor coverings of all types
- subsequent installation of wood flooring
- subsequent installation of ceramics and natural stone floor coverings
- high wear in residential, commercial and industrial areas, e.g. in hospitals, high-traffic shopping malls, industrial shops, etc.
- hot water underfloor heating systems
- ▶ traffic from chair castors according to DIN EN 12 529
- wood substrates such as floorboards, multi-ply wood, chipboard P4 – P7 (screw-fixed), OSB 2 – OSB 4 (screwfixed), wood flooring, or other wood substrates with a number of joints conforming to current British Standards
- other joint-containing or critical substrates, e.g. precast screed boards
- raised access flooring (mechanically fixed) in conjunction with UZIN PE 630.
- all other common screeds and substrates











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EN 13813:2002			
Fibre-reinforced cementitious levelling compound for substrates in interior locations			
EN 13813: CT-C40-F10			
Reaction to fire	A2fl-s1		
Release of corrosive substances CT			
Compressive strength	C40		
Flexural strength	F10		

PRODUCT BENEFITS/FEATURES:

The special advantage of UZIN NC 175 is the high fibre and polymer content. On critical substrates, UZIN NC 175 offers the best adhesion to the substrate as well as highest safety when renovating. For interior use.

- ► Superior flow characteristics
- Can be raked using a WOLFF Screed Rake with an R3 Notch
- ► Highly absorbent
- ▶ Highly flexible

TECHNICAL DATA:

Packaging	paper bag	
Pack size	25 kg	
Shelf life	min. 9	
Water quantity	6.0 - 6.5 litres per 25 kg bag	
Colour	grey	
Consumption	approx. 5 m² at 3 mm per bag	
Ideal application temperature	20 °C	
Pot life	25 - 35 minutes*	
Ready for foot traffic	approx. 2 - 3 hours*	
Ready for covering	after approx. 6 hours*	
Minimum application temperature	10 °C at ground level	
Flow ring spread	approx. 145 mm ± 5 mm	
Fire reaction	A2 _{ff} -s1 acc. to DIN EN 13 501-1	
*At 20 °C and 65% relative humidity with may thickness of 3 mm. See "Ready for covering"		

*At 20 °C and 65% relative humidity with max. thickness of 3 mm. See "Ready for covering"



SUBSTRATE PREPARATION:

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

Any adhesion-reducing or unstable layers, e.g. release agents, residues of loose adhesives, smoothing compounds, covering or paint, etc. must be removed, e.g. by brushing off, abrading, grinding or by intensive sanding, for example, with Wolff Mambo with Ninja grinding disc. Intensively sand floorboards, chipboard and all other wooden substrates; retighten screws, if necessary. Thoroughly vacuum loose material and dust.

Use a suitable primer from the UZIN product range according to the type and condition of the substrate. Allow any primers that are applied to dry completely.

Refer to the product data sheets for the products used.

APPLICATION:

- Pour 6 6.5 litres of cold, clean water into a clean container. Add bag contents (25 kg) into the water whilst stirring vigorously until a creamy and lump-free compound is obtained. Use agitator with the UZIN levelling compound stirrer.
- Pour compound onto the substrate and spread uniformly with the smoothing trowel or rake (notch size R3). With thicker layers the already excellent flow characteristics and the surface can be improved even further by using the UZIN spike roller. Spread the UZIN NC 175 preferably in one application at the desired thickness.

READY FOR COVERING:

Planned Top Layer	Layer Thickness	Ready for Covering
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*
Textiles and resilient floor coverings with Sigan 1 or Sigan Elements Plus + Planus primer	3 mm	approx. 12 hours*
Wood Flooring	3 mm	approx. 15 hours*
	5 mm	approx. 15 hours*
	10 mm	approx. 24 hours*
	20 mm	approx. 72 hours*

^{*}At 20 °C and 65% relative humidity

CONSUMPTION:

Thickness	Approx. coverage per bag	
3 mm	5 m²	
5 mm	3.1 m²	
10 mm	1.5 m²	

IMPORTANT NOTES:

- Shelf life at least 9 months in original packaging when stored in dry conditions. Setting and drying properties may become prolonged with increasing storage period. The properties of the cured material are not affected hereby. Carefully and tightly re-seal opened packaging and use the contents as quickly as possible.
 Optimum processing at 15 25 °C and relative humidity
- ▶ Optimum processing 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 changes per hour. Removing moist air, e.g. through brief intermittent full ventilation, is therefore essential to achieving quick readiness for covering.
- Store in cool and dry conditions in summer and use cold water. Note: shortened pot life at high material or ambient temperatures.
- ▶ Expansion, movement and perimeter joints in the substrate must be adopted. Fit UZIN Foam Expansion Strips to any adjoining rising structures 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 levelling work.
- ▶ The substructure of wooden floors must be dry to prevent damage due to damp 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 or by installing special skirting with vent openings. NC 175 will not disguise the deformation of any wooden substrate if any climatic conditions change and the substrate moves.
- When applied to raised access panels, they must be contiminate free and mechanically fixed. Any subsequent movement in the panels may reflect through.
- ► Can be pumped with continuously mixing spiral pumps, e.g. from manufacturers such as m-tec, P.F.T. and others.
- Rooms without a basement underneath must be sealed against rising dampness in compliance with standards.
- ▶ Min. thickness 3 mm. Rakable with notch size R3.
- When smoothing in several layers allow the compound to dry completely, prime in between with UZIN PE 360 and apply, for example, UZIN NC 175 after drying (1 hour*). The thickness of the second smoothed layer must not exceed the thickness of the first one.
- ▶ 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/PE 480 or UZIN PE 404, gritted.

UZIN NC 175



- ▶ Use UZIN PE 630 for priming on floorboards and other substrates with joints (must be mechanically fixed). On weak, creaking or slightly cushioned substrates the "resilient" primer UZIN KR 410 needs to be rolled on and gritted. Where thicknesses exceed 10 mm, an epoxy resin primer such as UZIN PE 460 or PR 480, gritted, is required.
- ▶ To prevent damage due to damp for wooden floors, they must be permanently dry. The wood moisture shall correspond to the room climate. Adequate ventilation must be provided especially when installing impermeable coverings, e.g. by integrating ventilation slots. Floorboards must not move against each other and need to be completely fastened on the supporting beams (e.g. by screw-fixing).
- On weak older substrates with several layers of adhesive or levelling compound the use of the fibrereinforced gypsum based smoothing compound UZIN NC 115 is to be preferred.
- ► Can be used on mastic asphalt (screed) if resilient or textile floor coverings shall subsequently be installed and the mastic asphalt corresponds to the hardness classes IC 10 and IC 15 acc. to DIN EN 13 813
- ▶ 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 or UZIN NC 115 are to be used.
- ▶ 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 tend to cause stress cracks. These soft or tacky layers must therefore be removed before applying smoothing compounds. Leaving the compound open too long also promotes cracking and should therefore be avoided.
- Do not use as wearing floor covering or wearing surface; always apply a top covering.
- 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 smoothing.
- ▶ 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 bulletin "Assessment and preparation of substrates"
- TKB publication "Technical description and application of cementitious floor smoothing compounds"
- ZVPF 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

COMPOSITION:

Special cements, mineral aggregates, redispersible polymers and additives.

PROTECTION OF THE WORKPLACE AND THE 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. 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 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.