

Low-slump cementitious rapid repair and ramping mortar

UZIN NC 181

For rapid filling, smoothing, and ramping without compromise

MAIN APPLICATION FIELD:

- ▶ Patching, repair, filling and ramping for most substrates in need of renovation prior to levelling and installation works.
- ▶ Efficient forming of high strength, smooth and absorbent installation substrates, in rapid cure time.

SUITABLE ON / FOR:

- ▶ calcium sulphate screeds, cementitious screeds or concrete
- ▶ precast screeds, screed boards
- ▶ old screeds or concrete, which may contain old compounds and water-proof adhesive residues
- ▶ existing or new P3 - P7 or OSB 2 - OSB 4 boards, screwed
- ▶ existing ceramic and natural stone coverings, terrazzo or similar
- ▶ existing and new IC 10 and IC 15 mastic asphalt screeds
- ▶ magnesia and xylolite screeds
- ▶ as "low-slump" levelling compound or as a "feather-edge"
- ▶ warm water underfloor heating systems
- ▶ exposure to castor wheels in accordance with DIN EN 12 529 from 1 mm thickness
- ▶ suitable for residential, commercial and industrial areas, e.g. hospitals, busy shopping malls, industrial halls, etc.



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Uzin Utz Polska Sp. z o.o. ul. Jaworzyńska 287 59-220 Legnica	
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EN 13813:2002	
Cementitious levelling compound for substrates in interior locations	
EN 13813: CT-C30-F7	
Reaction to fire	A1fl
Release of corrosive substances	CT
Compressive strength	C30
Flexural strength	F7

PRODUCT BENEFITS/FEATURES:

UZIN NC 181 is an easy to use and quick drying repair mortar with ideal working properties. The short drying time enables subsequent priming, levelling or installation works to be carried out quickly. Can be used for patching and use as a "feather edge". For interior use only.

- ▶ ready to accept floor coverings after 60 minutes*
- ▶ hydraulic setting
- ▶ fine grain, smooth finish, no visible patching marks

TECHNICAL DATA:

Packaging	paper bag
Pack size	20 kg
Shelf life	min. 12 month
Water quantity	5.0 - 5.75 litres per 20 kg bag
Small quantity dosage	1 kg powder - 250 - 300 ml water
Colour	grey
Consumption	approx. 1.5 kg/m ² /mm thickness
Ideal application temperature	15 - 25 °C
Working time	approx. 15 minutes*
Ready for foot traffic	after approx. 25 minutes*
Ready for covering	after 60 minutes*
Minimum application temperature	10 °C at ground level
Cut edges	after approx. 15 minutes*
Fire reaction	A1fl acc. to DIN EN 13 501-1

*At 20 °C and 65% relative humidity. See "Ready for covering".



SUBSTRATE PREPARATION:

The substrate must be sound, load-bearing, dry, free from cracks 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 standard or notices 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, 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. On certain substrates, e.g. old screeds or concrete, which may contain old compounds and water-proof adhesive residues, the use of a primer is not necessary. With thicknesses above 3 mm it has to be primed generally.

Allow any primer that is applied to dry completely.

The datasheets for other used products have to be observed.

APPLICATION:

1. Mix UZIN NC 181 with water to the desired consistency. The correct water quantity for 20 kg is 5 - 5.75 litres. However, as partial quantities are usually mixed, 250 - 300 ml of water is to be used for 1 kg of powder. Put cold, clear water into a clean container. Sprinkle in the powder while mixing vigorously until a smooth and lump-free compound is achieved. Mix only as much mortar as can be applied within the working time of approx. 10 - 15 minutes*.
2. Load the compound onto the substrate and spread evenly with a smoothing trowel to the desired thickness. Leave the compound for approx. 25 minutes* and smooth over with moist trowel. Apply to the desired thickness in one application.

* At 20 °C and 65% relative humidity

CONSUMPTION INFORMATION:

Layer Thickness	Approx. Consumption	Size / Coverage
1 mm	1.5 kg/m ²	20 kg / 13.3 m ²
3 mm	4.5 kg/m ²	20 kg / 4.4 m ²
10 mm	15.0 kg/m ²	20 kg / 1.3 m ²

READY FOR COVERING:

Layer thickness	Ready for Covering
1 - 30 mm	1 hour*
> 30 mm	minimum 1.5 hours**

*At 20 °C and 65% relative humidity

**At 10 °C and 80% relative humidity.

IMPORTANT NOTES:

- ▶ A shelf life of minimum 12 months when stored in dry conditions, in the original packaging. The setting and drying times may become longer if the storage time is prolonged. The properties of the cured material are not affected. Carefully and tightly reseal opened packaging and use the contents as quickly as possible.
- ▶ Best applied between 15 - 25 °C and relative humidity below 65%. Low temperatures, high humidity, little air circulation, dense substrates and large thickness will delay the setting and drying time. Whilst high temperatures and low humidity, strong air circulation and absorbent substrates will accelerate setting, drying and readiness for covering. In summer, store in cool conditions and use cold water.
- ▶ Expansion, movement and perimeter joints in the substrate must be reflected through to the surface. Fit UZIN Foam Expansion Strips to any adjacent, vertical structures to prevent the ingress of the compound into the joints.
- ▶ Minimum thickness for resistance of castors is 1 mm.
- ▶ With subsequent application of a self-levelling compound or when applying in several coats, allow the compound to dry completely. Then apply UZIN PE 260 as a intermediate primer and leave to dry, before applying subsequent coats.
- ▶ For thicknesses above 10 mm on moisture-sensitive substrates, use epoxy primers, such as UZIN PE 460, gritted.
- ▶ To bridge and armour cracks, joints or transitions, use NC 181 in combination with UZIN RR 203 Crack Bridge.
- ▶ Without a primer, thicknesses up to max. 3 mm are allowed for mastic asphalt or screeds with adhesive residues, P4 - P7 chipboard or OSB 2 - OSB 4 panels.
- ▶ Do not use in exterior situations or areas directly exposed to moisture.
- ▶ Protect freshly applied areas from direct sunlight and sources of heat. Cement-based compounds tend to form surface cracks on soft or tacky substrates. These soft and tacky layers must therefore be removed as much as possible before applying the compound. Leaving such compounds open for too long also promotes surface cracking and should therefore be avoided.
- ▶ Do not use as a screed or as a wear surface, a surface covering must always be applied.
- ▶ Compounds must not enter between insulation and heating pipes because of the risk of corrosion. This applies in particular for heating pipes made from galvanized steel. Insulation must only be cut off after smoothing.
- ▶ Follow the generally acknowledged rules of the trade and technology for the installation of wood flooring and floor covering in respect of the applicable national standards (e.g. EN, DIN, OE, SIA, etc.)

SEALS OF QUALITY & ECOLABELS:

- ▶ Low chrome content acc. Regulation (EC) No. 1907/2006 (REACH)
- ▶ EMICODE EC 1 PLUS / Very low-emission
- ▶ Blue Angel according to DE-UZ 113 / Environmentally friendly because of low emissions
- ▶ European Model EPD
- ▶ Suitable for sustainable building certifications according to: DGNB, QNG, BNB, BREEAM, LEED

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.