

Bonded gypsum screed

UZIN NC 117

Self-levelling bonded gypsum screed for thicknesses from 3 – 50 mm

Applications:

Self-levelling gypsum screed with coarse grain for thicknesses from 3 to 50 mm. Suitable for producing level, prepared surfaces with good absorbency. For low stress levelling work in areas with normal wear. Pumpable, for interior application.

Suitable for:

- ▶ subsequent installation of textile and resilient floor covering such as textile flooring, PVC/CV floor covering
- ▶ subsequent installation of multi-ply wood flooring
- ▶ subsequent installation of ceramics and natural stone floor coverings
- ▶ heavy duty for residential and commercial areas, e.g. in office buildings, residential dwellings, nursing homes, etc.
- ▶ hot water underfloor heating systems, especially for low-thickness systems
- ▶ traffic from chair castors according to DIN EN 12 529

Product benefits / features:

UZIN NC 117 develops little tension when drying. This benefits greater thicknesses in combination with low-thickness hot water underfloor heating. The calcium sulphate screed, combined with UZIN dispersion primers, can be applied from 3 mm minimum thickness. It is also suitable as floating screed on a separating layer from a thickness of 25 mm.



CE	
0761	
Uzin Utz AG Dieselstraße 3 D-89079 Ulm	
13	
01/01/0040.01	
EN 13 813:2002 Gypsum screed for substrates in interior locations EN 13 813: CA-C30-F6	
Reaction to fire	A 1 fl
Release of corrosive substances	CA
pH	> 7
Compressive strength	C 30
Flexural strength	F 6



Composition: Calcium sulphate binding agent, mineral aggregates, polyvinyl acetate copolymers and additives.

- ▶ Compound installation or on separating layer
- ▶ Good flow
- ▶ Excellent for pumping
- ▶ Low stress
- ▶ No extension required
- ▶ EMICODE EC 1 PLUS/very low-emission

Technical specifications:

Packaging:	paper sack
Pack size:	25 kg
Shelf life:	min. 12 months
Required water quantity:	3.75 – 4.0 litres per 25 kg sack**
Colour:	light grey
Consumption:	approx. 1.8 kg/m ² per mm thickness
Minimum working temperature:	10 °C at ground level
Ideal working temperature:	20 °C at ground level
Working time:	30 – 40 minutes*
Set to foot traffic:	after approx. 6 hours*
Ready for covering:	after approx. 24 hours*
Fire class:	A1 _{fl} according to DIN EN 13 501-1

* At 20 °C and 65 % relative humidity at max. 3 mm thickness.
See also "Readiness for covering" for greater thicknesses.
** See Application.

Extended area of application:

Suitable for use on:

- ▶ Cementitious screeds, calcium sulphate screeds or concrete
- ▶ Old waterproof substrates with waterproof adhesive residues or smoothing compound residues
- ▶ Precast screeds, gypsum fibre boards
- ▶ Screw-fixed chipboard P4 – P7 or OSB panels
- ▶ Magnesia and xylolite screeds
- ▶ Existing ceramic and natural stone coverings, Terrazzo or similar
- ▶ New and old mastic asphalt IC 10 and IC 15
- ▶ Separating layer, from a thickness of 25 mm

Substrate preparation:

The substrate must be sound, load-bearing, dry, free of cracks, clean and free of materials that could impair adhesion (dirt, oil, grease). Cement and calcium sulphate screeds must be abraded and vacuumed off. 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, abrading, grinding or shot-blasting. Thoroughly vacuum off 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. Use film/separating layer without wrinkles when using as thin screed on separating layer.

Refer to the product data sheets for other products used.

Fabrication:

1. Pour 3.75 – 4.0 litres of cold, clean water into a clean container. Add sack contents (25 kg UZIN NC 117) whilst stirring vigorously until a smooth and lump-free compound is obtained. Use mixing paddle with the UZIN levelling compound stirrer.
2. Pour the compound onto the primed substrate and distribute evenly using a smoothing trowel or the UZIN Screed Rake. In thicker coats or when using the screed rake, flow and surface finish can be improved by use of the UZIN Spike Roller. Where possible, apply to the desired thickness in one coat, at least 3 mm or 25 mm for separating layers.

Consumption information:

Thickness	Consumption	25 kg sack covers approx.
3 mm	5.4 kg / m ²	4 m ²
5 mm	9.0 kg / m ²	3 m ²
10 mm	18.0 kg / m ²	1 m ²

Readiness for covering:

Thickness	Readiness for covering
3 mm	24 hours*
per cm	approx. 7 days*

* At 20 °C and 65 % relative humidity.

As a rule of thumb it can be assumed that readiness for covering is reached after approx. 24 hours* up to thicknesses of 3 mm. The drying time is approx. 7 days* for each additional cm of thickness.

* At 20 °C and 65 % relative humidity.

Important notes:

- ▶ Shelf life at least 12 months in original packaging when stored in dry conditions. Carefully and tightly re-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 and 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. 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 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.
- ▶ Can be pumped with continuously mixing spiral pumps, e.g. from manufacturers such as m-tec, P.F.T. and others. Use subsequent agitator.
- ▶ When smoothing in several layers allow compound to dry completely, apply UZIN PE 360 as intermediate primer and smooth subsequently after drying. The thickness of the second smoothed layer must not exceed the thickness of the first one.
- ▶ 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 or by installing special skirting with vent openings.
- ▶ The minimum thickness for application on separating layer is 25 mm.
- ▶ For thicknesses above 10 mm, on moisture-sensitive (calcium sulphate screeds) or weak substrates (e.g. adhesive residues), use epoxy-resin primers, such as UZIN PE 460, gritted.
- ▶ With old mastic asphalt (screed), new firmly bolted chipboard P4 – P7 or OSB panels, thicknesses up to max. 10 mm are permitted. Priming with anhydrous primers must be applied here, e.g. with UZIN PE 414 Turbo (2 coats), UZIN PE 460 or UZIN KR 410, each sanded.
- ▶ Attention must be given to installing the film without wrinkles and in tub-fashion, similar to the processing of flowscreeds on separating layers.
- ▶ Avoid contact to metallic materials, e.g. pipes, water lines, etc. especially from galvanised steel since they do not exhibit permanent corrosion protection.
- ▶ Do not use in exterior or wet areas.
- ▶ Wet rooms, such as residential baths, require suitable compound sealing from the codex product offering before installing the tiles; application consulting may be required.
- ▶ Before installing large-format tiles and plates, the system primer codex FG 500 S + codex FG 500 H is to be used as barrier primer to protect against the effects of moisture from subsequent thin-bed mortars.
- ▶ UZIN NC 117 must be primed with UZIN PE 414 Turbo from a thickness >10 mm for wood flooring work (application with spring spatula, consumption approx. 50 – 60 g/m²).
- ▶ Sanding of the screed based on calcium sulphate creates very fine micro-dust. Vacuuming it off with a powerful industrial vacuum cleaner is mandatory to creating a good bond between the screed, adhesive and floor covering.
- ▶ Do not use as wearing floor covering or wearing surface; always apply a top covering.
- ▶ Follow the generally acknowledged rules of the trade and the technology for the installation of wood flooring and floor covering of the respective applicable standards (e.g. EN, DIN, Ö-standard, SIA, etc.).
 - DIN 18 365 “Working with floor coverings”, B 2236
 - DIN 18 356 “Working with wood flooring”, B 2218
 - DIN 18 352 “Tile and slab work”
 - DIN 18 353 “Working with screeds”
 - DIN 18 560 “Screeds in the building industry”
 - TKB publication “Assessment and preparation of substrates for floor covering and wood flooring installation”
 - BEB publication “Assessment and preparation of substrates”
 - BEB publication “Notices for the installation of large size ceramic tiles and plates, concrete, natural and artificial stone on calcium sulphate-bonded screeds”
 - ZDB publication “Notes on carrying out composite sealing with coverings of tiles and slabs for interior and exterior use”
 - TKB publication “Technical description and processing of floor levelling compounds”

Protection of the Workplace and the Environment:

Gypsum-based levelling compound, hygienic in the workplace and generally harmless. The use of barrier creams is recommended. Keep out of the reach of children! When mixing, wear a dust-mask and gloves when indicated. Thorough ventilation must be ensured during and after the installation and drying time of the product. Do not eat, drink or smoke during the installation. After contact with eyes or skin, wash immediately with plenty of water.

Produces no physiological or ecological risk when fully cured.

EMICODE EC 1 PLUS – 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:

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.