

LE 30 GPS

Levelling material



Self-levelling gypsum material for the levelling of bases, for layers of 5 - 30 mm.

DECLARATION: EN 13813 CA-C25-F5-B0,5-RWFC550

Calcium-sulphate (CA) screed material according to EN 13813, intended for the laying of floor covering, wear-resistant to rolling loads.

APPLICATION:

Self-levelling screed for manual and mechanical treatment in interiors.

This product is intended for the levelling of bases before the laying of ceramic tiles and other floor coverings (floating floors, parquet floors, carpets, PVC, etc.) during the building of flats, office spaces, administrative buildings, hotels, schools, etc.

Levelling stopper under floor coverings – **resistant to rolling loads of wheelchairs.**

This material can be applied as a composite levelling layer on concrete in a thickness of 5-30 mm, or on lightweight concrete in a thickness of 10-15 mm (according to static calculations) – the optimal design thickness is approx. 10 mm (at the layer width exceeding 15 mm, vertical structures should be separated using a dilatation tape).

As a corrective levelling layer of calcium-sulphate screeds (α - gypsum, anhydrite) at a thickness of 5-30 mm.

This material should be applied only in one layer!

This material is not intended as a final end-use walking layer.

COMPOSITION:

Aggregates, calcium sulphate, and additives improving processing and end-use properties of the stopper.

TECHNICAL PARAMETERS:

MANDATORY			
Compression strength (class C25)	min. 25.0 MPa	Reaction to fire	Class A1 _n
Tensile bending strength (class F5)	min. 5.0 MPa	Release of dangerous substances	CA
Binding force (class B0.5)	min. 0.5 MPa	Volume weight of hardened mortar	1700-1900 kg/m ³
Resistance of screed layer with floor covering against rolling load wear (Class RWFC550)	min. 550 N	Coefficient of heat conductivity λ	min. 1.05 W/m.K *)
		Ph value	min. 7
*) tabular value			

INFORMATIVE		
Grain size		0-0.7 mm
Amount of mixing water:	per 1 kg of dry mixture	0.21-0.25 l/kg
	per 1 bag (25 kg)	5.25-6.25 l
Consistency according to EN 12706		(140 ± 10) mm
Spreading rate		approx. 1700 kg/m ³
Pot life (at 5-30°C)		approx. 20 min
Average thickness of layer (design thickness)		10 mm
Usage:	unit – at layer of 10 mm	approx. 17 kg/m ²
	at average layer of 10 mm	
Spreading rate from one bag (25 kg) – screed area at an average thickness of 10 mm		approx. 1.5 m ²
Surfaces loaded by walking people (final walking surface) – waiting time		after 12 hour

NOTE: The technical parameters are determined under standard conditions (23 ± 2)°C and (50 ± 5)% of relative air humidity.

LASSELSBERGER, s.r.o.
Adelova 2549/1
320 00 Plzeň - Jižní Předměstí
Czech Republic

TEL +420 378 021 111
FAX +420 378 021 119
E-MAIL info@rako.cz
WEB www.rako.cz

BANK DETAILS: Česká spořitelna, a. s.
6221912/0800
Company ID number 25238078
Tax ID number CZ25238078

BASE PREPARATION:

The base must be dry, cohesive, and free dust or greasy impurities. Gross impurities and crusts of cement milk should be removed by grinding, and cleaned with a vacuum cleaner. Any cracks need to be repaired in advance. It is advisable to fill expansion joints in the base (Sealing, PES sealing cord, etc.). The course of base dilations should be marked so that the dilatations are visible again after cutting. If the stopper is applied at the layer width exceeding 15 mm, vertical structures should be separated using a dilatation tape. The cleaned and repaired base is to be provided with PE 202 penetration, or CP 203 contact coating (concentration and number of penetration coatings - see the Table).

Base type	Penetration type – dilution – number of coatings	Usage of concentrated penetration
Highly absorbing (lightweight concrete)	PE 202 : H ₂ O 1st coating 1 : 5; 2nd and 3rd coating 1 : 3	PE 202 : 0.35 l/m ²
Medium absorbing (normally polished concrete, anhydrite)	PE 202 : H ₂ O 1st coating 1 : 5; 2nd coating 1 : 3	PE 202 : 0.25 l/m ²
Low absorbing (mechanically polished concrete)	PE 202 : H ₂ O one coating 1 : 3	PE 202 : 0.15 l/m ²
Non-absorbing (ceramics, stone, hardened polymers)	CP 203 one coating	CP 203: 0.25 kg/m ²

The penetration should be applied uniformly and directly on the base, using a brush, or roller. The subsequent coating should always be applied when the previous coating is dry. Under normal conditions, the drying time of PE 202 coating is 60-120 minutes, depending on concentration. CP 203 will dry after approx. 6 hours. (lower temperatures and higher relative humidity prolong the time of drying up to 48 hours).

PROCESSING:

Pour the dry mixture uniformly into the prescribed amount of water, and mix with a propeller stirrer. Stir for approx. 2 minutes to form a liquid homogeneous mass, allow the mixture to stand for approx. 1/2 minutes, then briefly stir again at slow speed. Before applying the stopper, its consistency should be checked. After uniform pouring the mass onto the base surface, the layer should be brought to the desired thickness as required, using a toothed trowel, and continuously de-aerated using a porcupine roller, which also helps to level the surface. In case of machine application, stirring is carried out, for example, with the m-tec duo-mix device, or PFT machine with accessories recommended by the manufacturer for applications of self-levelling floor materials. A freshly applied stopper should be protected at least for 24 hours to avoid quick drying or heat shocks (draft, direct sunlight, radiant heat from heaters, etc.).

Loading, drying:

The surface is intended as a final walking surface after approx. 24 hours after application, and it may be fully stressed after laying of floor coverings. Laying of floor coverings can be preformed after drying the stopper to the desired state. Under normal conditions, to achieve the equilibrium moisture content, the stopper needs 1 day for 1-2 mm of thickness.

CAUTION:

- The general rules specified in ČSN 74 4505 Floors - Common Regulations should be followed when designing, applying, and treating screeds.
- The mixture can be mixed only with drinking water, or water conforming to standard EN 1008.
- It is inadmissible to add additional binders, aggregates, and other inadvisable additives. Sifting of the mixture is inadmissible too.
- Performing the penetration of bases according to the Table must be followed!
- The mixture can be processed only under material, base and air temperatures ranging from +5°C to +30°C! Lower and higher temperatures may have a negative impact on the application and functional properties of this material. The prescribed temperature conditions must also be followed for at least 7 days after application.
- Vapour-impermeable surface treatments require a residual moisture content of ≤ 0.5% in the mass, vapour-permeable surfaces require a residual moisture content of ≤ 1.0% in the mass.
- This mass is not resistant to acidic, aggressive environments.
- Unused residues should be mixed with water and allow them to harden - disposed in a controlled landfill, contaminated containers should be disposed as of hazardous wastes (see the Safety Data Sheet).
- Only completely emptied and clean packaging may be handed over to recycling.

FIRST AID, SAFETY AND HYGIENE REGULATIONS:

See the product Safety Data Sheet.

STORAGE:

The product should be stored in original containers – protected from damage, action of water, and high relative air humidity. If the storage conditions are met, the shelf life will be 6 months. The expiration date is specified on the packaging.

SHIPPING:

The dry mixture is supplied in 25 kg paper bags placed on pallets wrapped in foils.

LASSELSBERGER, s.r.o.
Adelova 2549/1
320 00 Plzeň - Jižní Předměstí
Czech Republic

TEL +420 378 021 111
FAX +420 378 021 119
E-MAIL info@rako.cz
WEB www.rako.cz

BANK DETAILS: Česká spořitelna, a. s.
6221912/0800
Company ID number 25238078
Tax ID number CZ25238078

TECHNICKÝ LIST /

QUALITY:

- The product quality is regularly checked in the manufacturer's laboratories.
- The production control system is used in manufacture, and a certified quality management system, according to ISO 9001, is applied.
- Continuous surveillance and proving the conformity of products (if necessary) is ensured by TZÚS Prague, OS 1020.

DISTRIBUTOR:

LASSELSBERGER, s.r.o., Adelova 2549/1, 320 00 Pilsen – Jižní Předměstí

VALIDITY:

Since 1 May 2015

We reserve the right to make any changes that are the result of technical progress. This issue cancels and supersedes all previous issues.