SOLOPLAN®

Floor levelling compound

Material number	Contents	Unit of quantity	Packaging	Colour
201353001	25	KG	Bag	Grey

Product features

- self-levelling floor levelling compound
- CT-C25-F6 in accordance with DIN EN 13813
- Layer thicknesses von 2 mm bis 20 mm
- Soon ready for foot traffic
- Manual and mechanical application

Advantages

- Convenient flowing capability
- rapid construction progress

Areas of application

- To level uneven substrates
- For heated and unheated substrates
- For interior

Existing test certificates

EMICODE licence

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Technical Data

Material properties

Product components	1 component system
Base material	Special cement Cementitious aggregates Additive
Consistency	Powdered
Flexural strength (28 days, DIN EN 13813)	≥ 6 N/mm²
Compressive strength (28 days, DIN EN 13813)	≥ 25 N/mm²
Classification of the reaction to fire in accordance with DIN EN 13501-1	Efl

Mixing

Mixing time	approx. 3 - 5 minutes
Water addition	from 5.6 l to 6 l

Application

Substrate temperature	from 5 °C to 25 °C
Pot life	approx. 30 minutes
Consumption pro m² and mm layer thickness	approx. 1.7 kg/m²
Consumption (surface levelling) per mm layer thickness	approx. 1.7 kg/m²
Foot traffic after	approx. 3 hours
Ready for covering with tiles	approx. 4 hours
Application temperature	from 5 °C to 25 °C
Hardening time / full resilience	approx. 28 days

Application technology

Aids/tools

- Flat trowel
- Flail squeegee
- Stirrer
- spiked roller
- Clean mixing bucket

Suitable substrate

- Cement screed (CT)
- Calcium sulphate screeds (CA, CAF)
- Concrete
- Dry screeds
- Raised floors
- Floor levelling compounds
- Tile bearing elements
- Firmly adhering tiled finishes

Substrate preparation

Requirement for substrate

1. Dry
2. Load-bearing
3. Firm
4. Grippy
5. Free of cracks
6. Free of adhesion inhibiting substances

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Measures for substrate preparation

The substrate must correspond to the payloads associated with the load-bearing capacities in accordance with DIN EN1991-1-1.

Preparing the surface

1. Check the application substrate and determine the moisture content using the CM method.
2. Remove impurities, adhesion-reducing substances and binder accumulations/laitance layers.
3. Prime absorbent substrates with ASO-Unigrund-GE or ASO-Unigrund-K.
4. Prime non-absorbent substrates with ASO-Unigrund-S.

Moisture content of the CM measurement

Maximum moisture content of the levelling compound, determined with the CM device (refer to the following instructions)

Top layer		heated	unheated
Parquet	floating installation	1.8 %	2.0 %
Laminate floor	floating installation	1.8 %	2.0 %
Ceramic tiles or natural/artificial stone	Thick layer	2.0 %	2.0 %
	Thin-bed	2.0 %	2.0 %

The CM measurement must be completed in accordance with the current working instructions FBH-AD from the technical information "Interface coordination with heated floor constructions".

Usage

Mixing

1. Put the water into a clean mixing bucket and mix with the powder component with a stirrer to produce a homogeneous, lump-free mass.
2. In between, scrape the unmixed material from the side walls with a trowel and feed it to the mixing process.
3. The mixing time is ca. 3 - 5 minutes.

Application

1. Set level points, so that it will be possible to check the desired height level while the mixture is still fresh.
2. Apply SOLOPLAN® to the primed substrate, and use a suitable tool to distribute it evenly during the pot life.
3. Apply the relevant layer thickness in one application step.
4. Use a spiked roller (or other suitable tools) to de-aerate the layer that is still liquid.
5. Ideally, any potential skimming operation involving the use of SOLOPLAN® should be carried out when the first layer can be walked on, but is still somewhat damp, as can be seen by the darker colour.
6. The setting material should be protected against rapid water removal, e.g. due to a high room temperature, direct solar radiation and draughts!
7. SOLOPLAN® is walkable with tiles and boards after ca. 4 hours.
8. When it comes to other surface coverings, use the CM method to test the moisture content.

Cleaning tools

Clean tools thoroughly with water after use.

Storage conditions

Storage

Store in a cool and dry place. Min. 12 months in the original canister. Promptly use opened canister.

Disposal

Product leftovers can be disposed of in accordance with disposal code AVV 17 01 01.

Emission behaviour / building certification systems

- Very low emissions in accordance with GEV-EMICODE, which normally results in positive evaluations within the scope of building certification systems in accordance with DGNB, LEED, BREEAM, HQE.
- Maximum quality level 4, line 8 in accordance with DGNB criteria "ENV 1.2 Risks to the local environment".

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Notes

- In order to reliably avoid pore formation, work ASO®-Unigrund into the substrate in a meticulous manner and allow thorough drying.
- The installation location must be ventilated. However, draughts and direct solar radiation should be avoided during application and the hardening process. The indoor temperature and floor temperature must be at least +5°C during application, and during the following week! Air dehumidifiers may not be used during the first 3 days!
- The condition of the substrate is essential to the success of floor levelling. Porous substrates negatively alter the flow behaviour of the smoothing compound, therefore carefully prepare the substrate: clean and prime!
- A moisture measurement must be carried out using the CM method to assess whether it is ready to receive.
- For calcium sulphate screeds, the carbide method moisture content may not exceed 0.5% if there is no floor heating system, or 0.3% if there is a floor heating system at the time of levelling with SOLOPLAN. Prime the calcium sulphate screed with ASODUR®-GBM and scatter quartz sand (Ø 0.5–1.0mm). Then remove the unbound quartz sand thoroughly and then level with SOLOPLAN to a layer thickness of von 2 mm bis 20 mm. The following moisture migration should be avoided. We recommend SOLOPLAN®-30-CA for levelling calcium sulphate binded substrates, e.g. calcium sulphate screeds.
- Direct contact between cement mortar and magnesite screeds leads to the destruction of the magnesite screeds through a chemical reaction known as "magnesite pouring". Moisture pressure from the rear of the substrate must be prevented through appropriate measures. Mechanically roughen up the magnesite substrate and prime with ASODUR®-GBM epoxy resin. While the coat is still fresh, apply plenty of quartz sand with a grain size of 0.5–1.0 mm. Perform the laying work after a further waiting time of approx. 12 - 16 hours. Remove the unbound quartz sand meticulously.
- It is imperative to rinse the mixing pump and the hoses in the event of work interruptions!
- When using a PFT G4/G5 mixing pump, use the standard PFT G4 mixing screw, the D 6-3 rotor and the D 6-3 stator twister, and set the water flow meter to approx. 370–420 l/h. The flow rate would then be approx. 20 l/min. In case of larger layer thicknesses, we would recommend using the pump unit, the R7-2.5 rotor and the R7-2.5 stator; in such a case, the water flow meter should be set to approx. 900 l /h. The flow rate would then be approx. 40 l/min. The PFT consistency test socket can be used to check and set the correct water addition level on the basis of the slump. It should not exceed the level of 61 cm on a prepared substrate, and it should be monitored continuously during application!
- Border, field, building separation and movement joints should be carried over to or installed at the designated location; suitable means such as RD-SK50 edging strips should be used to detach them! Crack control joints should be cut in after the SOLOPLAN® has hardened to the level of up to a third of the introduced layer thickness!
- We recommend that SOLOPLAN®-30-CA be used up to a layer thickness of 10 mm for levelling mastic asphalt screeds of IC10 quality!
- Only use clean tools and clean water!
- Excessively rapid water removal (heated spaces or strongly-absorptive substrates) leads to a risk of crack formation! The fresh equalising layer should be protected from excessively rapid drying and should be covered with tiles within 28 days. If this cannot be done in this period of time, suitable measures such as the use of a protective film should be implemented to protect SOLOPLAN® from excessively rapid drying or deposits.

Planning, inspection of substrates and building site circumstances, laying, grouting and subsequent care of the work must be done in accordance with the relevant DIN standards and recognised rules of technology (e.g. the ZDB sheets of the Zentralverband Deutsches Baugewerbe e.V.) in the latest version.

GISCODE: ZP1