

SOLOPLAN[®]-FA

SELF LEVELLING, FIBRE-REINFORCED FLOOR LEVELLING COMPOUND

Product Description:

- Fibre reinforced and low shrinkage.
- Ver low emissions.
- Suitable for heated screeds.
- For interiors.
- For thicknesses from 3 to 20 mm, on mineral-based cementitious substrates up to 30 mm.
- Rapid hardening.
- Highly polymer modified.
- Self levelling.
- Class RWFC-550, according to EN 13892-7 after 16 hours.

Areas of Application:

SOLOPLAN[®]-FA is a powder based, highly modified factory blended mortar with reinforcing fibres, which minimise cracks on wooden floors. SOLOPLAN[®]-FA is used of thicknesses from 3 – 20 mm for smoothing, floating and levelling. The wooden floor levelling compound SOLOPLAN[®]-FA is suitable for producing flat, absorbent installation surfaces e.g. for textile finishes, vinyl or cushion flooring, PVC designer flooring, linoleum, cork and tiles.

- On timber floor boards, V100 chipboard without additional reinforcing mesh.
- On old substrates with banded adhesive and levelling compound residues.
- For the restoration and repair of wooden floors and additionally for screeds and substrates in old and new construction.

- For producing flat, absorbent, high strength installation surfaces for textile and elastic floor finishes as well as ceramic tiles. When using beneath tiles and natural or agglomerate stone, plan for additional de-coupling membranes on wooden substrates. STEPBOARD in 9 and 15-mm thicknesses are available for this purpose.
- Suitable for use on heated substrates and as a flowing.
- Material over thin build-up electrical and warm water heating systems.

SOLOPLAN[®]-FA is used in dry areas and can also be incorporated into rooms with low moisture exposure (wet duty exposure class A0 in accordance with the ZDB data sheet [*1] when used beneath a waterproof membrane from AQUAFIN[®]-2K/M, AQUAFIN[®]-2K or AQUAFIN[®]-RS300. Not suitable as a wearing finish without additional planned coatings.

SOLOPLAN[®]-FA is suitable for use in interior rooms in accordance with AgBB evaluation scheme (Committee for Health-related Evaluation of Building Products), the French OC by law and the Belgian Royal Decree C-2014/24239 Very low emissions in accordance with GEV-EMICODE, which as rule leads to positive evaluations within the framework of building certification systems according to DGNB, LEED, BREEAM and HQE. Highest quality level 4, row 8 in accordance with the DGNB criterion "ENV 1.2 Local environmental impact".

Technical Properties:

Basis	: special cement with mineral-based aggregates and additives.
Colour	: grey.
Application temp	: min. +10°C floor, ideally +15°C to +25°C at relative humidity <75%.
Pot life *1)	: approx. 45 mins.
Foot traffic after *1)	: approx. 3 hours.
Full service	
Conditions after *1)	: approx. 24 hours.
Drying time *1)	: <ul style="list-style-type: none"> • Approx. 1 day/ 3 mm thickness with elastic, textile finishes and natural stone finishes. • Approx. 8 hours on mineral-based substrates in combination with ceramic tiled finishes. • Approx. 24 hours on timber substrates in combination with ceramic tiled finishes.
Classification	: EN 13813 CT-C30-F7.
Reaction to fire	: class E.
Cleaning	: with water whilst fresh.
Consumption	: approx. 1.6 kg/m ² /mm thickness.

Thickness	Consumption	Sufficient for approx.
3 mm	4.8kg/m ²	5.2 m ²
6 mm	9.6kg/m ²	2.6 m ²
9 mm	14.4kg/m ²	1.7 m ²

Storage : dry, 6 months in the original unopened packaging. Use opened packaging promptly.

Packaging : 25 kg plastic bags.

*1) The values relate to +23°C and 50% relative humidity for a 3 mm thickness. Higher temperatures accelerate and lower temperatures retard the setting time.

*2) This information is related to guide values, which does not negate the need for moisture measurements by the carbide method.

Substrate Preparation:

The substrate must be load-bearing conforming to loading requirements of DIN EN 1991 and in accordance with DIN 18365 and DIN 18352, must be sound, dry, free from fracks, clean and free from substances acting as a separating layer. Thoroughly mechanically remove friable layers, separating and laitance layers and similar y suitable measures e.g., planning, blast cleaning techniques or scrubbing. Vacuum abrasion dust, then prime with ASO®-Unigrund-S. Block off wall/floor junctions e.g. with the edge insulating strip RD-SK50. Moisture from the substrate must be eliminated. Clean and abrade well-bonded ceramic tiles, prime WITH ASODUR-SG2 blinded with 0.5 – 1.0 mm sand. Remove excess by vacuum once cured. Wooden substrates must be clean, dry and load-bearing. Replace damaged floorboard. Secure loose, springy or squeaking boards or sheets with screws. Chipboard must be laid with staggered joints, screwed and glued. The residual moisture for wooden substrates (measured by kiln drying or with a moisture meter suitable for wood may not exceed 6 to 12% by weight from equilibrium moisture content. Seal joints, cracks and holes with acrylic sealant. Follow the product information for the application of products to be used. The readiness of substrates to receive SOLOPLAN®-FA is to be tested by the carbide method. The carbide hygrometer (CM device) may not exceed for:

- Cement-based screeds 2.0 CM%
- Calcium sulfate screeds with underfloor heating 0.5 CM%.
- Calcium sulfate screeds with underfloor heating 0.3 CM%.

The CM measurements are to be carried out in accordance with current FBH-AD work instructions from the technical information "Coordination of cut-out points with heated floor constructions".



Product Preparation:

1. Prime substrates with ASO-Unigrund-S and allow to dry. On calcium sulfate and cement-based screeds, use diluted 1:1 with water. Use two undiluted coats of ASO-Unigrund-S on timber substrates.
2. Place 6.0 – 6.3 litres of clean water into a clean bucket and sprinkle in 25 kg SOLOPLAN®-FA. Mix the contents until homogenous with a drill rotating mixer (max. 600 rpm). We recommend the use of a drill with 500 – 600 rpm using a Collomix paddle type RR 140 to 160.
3. Pour SOLOPLAN®-FA onto the primed substrate and evenly spread with a smoothing trowel or rake within the pot life, so that the required thickness is applied in one operation where possible. De-aerate the liquid layer with a spiker roller and encourage it to flow the surface and flow is decidedly improved.
4. Protect setting material from rapid water loss from e.g., high room temperatures, direct sunlight and draughts. The air, and material substrate temperatures may not drop below +5°C during application and for the week after.
5. The surface quality and absorption is increased by abrading with 40 to 60 grit after 12 – 24 hours.

Priming Table	
Calcium sulfate screeds	ASO®-Unigrund-S (Mixing ratio 1:1 with water)
	ASO®-Unigrund-GE
	ASO®-Unigrund-K (Mixing ratio 1:3 with water)
Cement-based screed	ASO®-Unigrund-S (Mixing ratio 1:1 with water)
	ASO®-Unigrund-GE
	ASO®-Unigrund-K (Mixing ratio 1:3 with water)

Wooden substrates (screwed) such as e.g., OSB boards, wooden floor boards, V100 chipboard	2 x ASO®-Unigrund-S
Well-bonded ceramic tiles	ASO®-Unigrund-S oder ASODUR-SG2
Terrazzo	ASO®-Unigrund-S oder ASODUR-SG2
*Blinded to excess with 0.5 – 1.0 mm quartz sand. Only sweep off and vacuum excess sand once reacted (approx. 16 hours *1)	

Important Advice:

- Before installing finishes, the levelling compound must be fully dry. We recommend that moisture measurements are carried out with a carbide hygrometer.
- Adequate ventilation beneath the wooden floor must be guaranteed especially when installing further vapor-proof finishes e.g., by installing ventilation slots or by inserting special skirting strips with vented openings.
- The subfloor construction of wooden floors must be permanently dry in order to prevent moisture damage from decay or mould formation.
- There is a risk of cracking through rapid water loss in heated rooms or highly absorbent substrates.
- Ventilation on site is necessary. However, avoid draughts during the application and curing process as well as direct sunlight. The floor and interior temperature must be at least +5°C during application and for the week after. Dehumidifiers may only be used after the first 3 days.



- Essential to the success of floor levelling is the condition of the substrate. Absorbent substrates negatively alter the flow performance of the compound. Therefore thoroughly prepare the substrate, clean and prime it.
- Completely remove sulphite lye adhesives.
- Negligible quantities of water-soluble dispersion-based flooring adhesives, (surface coverage < 25%/m²) can remain on the substrate. Clean the substrate, prime with ASODUR-SG2, blind with 0.5 – 1.0 mm quartz sand and remove excess by vacuum once cured.
- Watch the water addition. Adding too much water produces separation together with a weak surface. This causes increased cracking and hollow areas. Such weak surfaces are to be mechanically removed.
- Poured asphalt screeds of hardness class IC10 can be levelled up to a thickness of 5 mm with SOLOPLAN®-FA. Prime beforehand with ASO®-Unigrund-S.
- Perimeter, bay structural and intermediate movement joints are to be brought through or incorporated as designed and blocked off with a suitable material e.g., edge insulation strip (RD-SK50).
- Substrates with a coarse texture will lead to greater material consumption.
- High temperatures accelerate and low temperatures retard the setting process.
- Observe the relevant current regulates e.g.:
 - DIN 18157 DIN18365
 - DIN 18352 DIN18560
 - DIN EN 13813 DIN1055

The BEB information sheets, distributed by the Bundesverband Estrich und Belag e.V. The ZDB information sheets, distributed by the technical information "coordination of cut out points in heated floor constructions", professional association of the German tile industry:

- [*1] "Bonded waterproof membranes"
- [*2] "Tiling to calcium sulfate screeds"
- [*3] "Movement joints in wall and floor tiles finishes"
- [*5] "Ceramic tiles, natural stone and cement-bound composite slabs on cement-based floor constructions and insulations."
- [*6] "Ceramic tiles, natural stone and cement-bound composite slabs on heated cement-based floor constructions"
- [*9] "Tolerances in level"
- [*10] "Tolerances"

- Use only clean tools and clean water.
- Follow the information in the technical data sheets for the products used.

Please observe a current valid EU Safety Data Sheet!

GISCODE:ZP1