SCHOMBURG GmbH & Co. KG Aquafinstrasse 2 - 8 D-32760 Detmold (Germany)

phone +49-5231-953-00 fax +49-5231-953-108 email export@schomburg.de

www.schomburg.com



# **II** SCHOMBURG



#### **Technical Data Sheet**

### **SOLOPLAN®-30-PLUS**

Art.-No. 2 01337

### Fibre reinforced smoothing compound up to 30 mm







- Fibre reinforced
- Polymer modified
- Self-levelling
- Very low emissions
- For interior and exterior use
- Easy to apply
- Rapid setting
- Suitable for heated screeds
- Pumpable
- For thicknesses from 2 30 mm in one layer
- conforms to DIN EN 13892-7 as class RWFC-550 after 16 h and 40 h

#### Areas of application:

SOLOPLAN-30-PLUS is used at thicknesses from 2–30 mm for smoothing, patching and levelling. Suitable surfaces are floors made of concrete in accordance to German Industrial Standard DIN 1045, heated and unheated cement screeds according to DIN 18560, old hardened tile surfacess and rapid hardening cement screeds (for example ASO-EZ6 Plus). SOLOPLAN-30-PLUS is suitable for exterior areas and those exposed to moisture provided that a suitable SCHOMBURG bonded waterproof membrane is subsequently applied. Other than the already planned

surface, it is not suitable as a wearing surface without

additional coating!

SOLOPLAN-30-PLUS is suitable for use in interior rooms in accordance with the French VOC regulation. It is very low emissions in accordance with GEV-EMICODE, which, as a rule, leads to positive assessments within the framework of building certification systems according to DGNB, LEED, BREEAM, HQE. Highest quality level 4, row 8 according to DGNB criteria "ENV 1.2 local environmental impact".

#### **Technical Data:**

Basis: cement, aggregates, additives

Colour: grey

Bulk density: 1.4 kg/dm<sup>3</sup>

Application / surface

temperature: +5 °C to +25 °C

Pot life\*!: 35 minutes

Foot traffic after\*!: approx. 2 hours

Full service

conditions after\*): approx. 7 days

Compressive strength\*):  $\geq$  30 N/mm² after 28 days Flexural strength\*):  $\geq$  7 N/mm² after 28 days Classification: EN 13813 CT-C30-F7

Reaction to fire:

Cleaning: Whilst still fresh with water approx. 1.65 kg/m²/mm

thickness

Storage: dry, 9 month in the original

unopened packaging. Seal opened bags well and use

promptly.

Packaging: 25 kg bag

\*) The values stated are applicable with ambient temperatures of +23° C and at 50% relative air humidity. Higher temperatures shorten the processing time, whilst lower temperatures extend the processing time.

#### Surface and product preparation

The surface is to be dry, of load bearing capacity, hardened, be skid-proof and be free from substances

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#### Priming table:

	At thicknesses ≤ 30 mm	
Concrete	ASO-Unigrund	
Cement screed	ASO-Unigrund	
Cement quick screed		
Smooth, mature cement-based substrates, Terrazzo	ASODUR-GBM + sand broadcasting or ASODUR-SG2 + sand broadcasting	
Well-bonded ceramic tiled finishes	ASO-Unigrund-S (neat) or ASODUR GBM + sand broadcasting or ASODUR-SG2 + sand broadcasting	
When using epoxy resin primers, correctly broadcast the fresh material with 0.2-0.7 or 0.5-1.0 mm augrtz sand to excess. Once the		

When using epoxy resin primers, correctly broadcast the fresh material with 0.2-0.7 or 0.5-1.0 mm quartz sand to excess. Once the reaction has ended, thoroughly remove all non-bound quartz sand.

acting as separating agents. The surface has to meet the load carrying capacity requirements as specified in DIN 1055. Separating and sintering layers have to be removed by suitable measures such as blasting, milling or mechanically. With unbonded or floating cement-based screeds, the readiness to receive an application of SOLOPLAN-30-PLUS is to be tested by the carbide method with a CM device in order to eliminate further deformation within the screed slab due to shrinkage processes. The temperature of air and ground surface must not fall below +5° C during and one week after application.

The moisture content, measured with a carbide hygrometer, in screeds on a separating layer or insulation may not exceed 2.0 CM%. The moisture measurement is to be carried out in accordance with current FBH-AD work instructions following the technical information "coordination of cut out points in heated floor constructions".

- Prime the substrate following the primer table and once dried, apply SOLOPLAN-30-PLUS. We recommend that the primer used is allowed to fully film-form/dry/ react so that the absorption of the substrate is minimized and therefore the flow performance of the SOLOPLAN-30-PLUS remains.
- Place 6.0-6.3 I water into the container, dependent on the desired consistency, tip in 25 kg

SOLOPLAN-30-PLUS and mix to a lump-free, flowing mass. In between, scrape a trowel around the walls of the mix container to allow un-mixed sticking material to be mixed in. Then stir through once again. The use of a stirrer capable of approx. 500–700 rpm is recommended with a Collomix paddle type KR140 to 160.

#### Mix ratios:

25 kg SOLOPLAN-30-PLUS: 6.0-6.3 litres water

- 3. SOLOPLAN-30-PLUS is poured onto the primed surface and spread evenly with a suitable tool (surface blade etc.) within the handling time given. It is proved to be quite advantageous by setting level pointers during the green state of the surface to control the exact height of the levels required. The required layer thickness should be applied in one working coat. The wet layer is to be de-aerated with a toothed roller (or other suitable tool), activating the flowing movement. The surface and flowing is substantially improved by this method.
- 4. SOLOPLAN-30-PLUS under curing is to be protected against quick water withdrawal caused by high room temperatures, direct sun influence or draught air! If a recoating of SOLOPLAN-30-PLUS is required then this should be carried out when the first layer becomes traversable, but has still a slightly moist texture noticeable by its dark colouration. If the first layer has already dried out, intermediate priming with ASO-Unigrund-GE is essential.

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5. SOLOPLAN-30-PLUS is ready to be tiled after approx. 10 hours\*<sup>1</sup>. With other floor finishes or at thicknesses >20mm, it is necessary to test the residual moisture by the carbide method (CM device). Keep to the maximum permissible residual moisture content given in the current data sheet. See the section "important advice".

#### Important advice:

- ASO-Unigrund-K (1: 3 diluted with water) can be used instead of ASO-Unigrund-GE!
- In order to reliably eliminate pinholes, thoroughly brush ASO-Unigrund into the substrate and allow to dry completely; approx. 6-12 hours\*) when using ASO-Unigrund-GE/K or in combination with ASO-Unigrund-S approx. 1 hour. The still wet SOLOPLAN-30 layer is to be de-aerated with a toothed roller!
- If rapid water vapour withdrawal has occurred (in heated rooms or strongly absorbing surfaces) the surface layer may suffer the danger of cracking! Protect the freshly installed levelling layer from drying out too quickly and preferably fix tiles within 28 days. If this is not possible within this time frame, then protect the SOLOPLAN-30-PLUS from drying out too quickly or from

- rainfall, by suitable means e.g. polythene sheeting.
- Ventilation around the work area is necessary, drafts and excessive sun rays during the hardening process are to be avoided. The inner and floor temperature must be maintained at +5° C during and also 1 week after working. Air dehumidifiers must not be used within the first three days.
- The condition of the surface underneath is essential
  for the success of floor spactling. Absorbing surfaces
  influence the flow capacity of the spactling compound
  negatively, therefore, the surface is to be pretreated
  thoroughly: it is to be cleaned and primed!
- Sulphite lye adhesive is to be totally removed!
- Only very small quantities of water soluble flooring adhesives on dispersion basis (surface part <25% /m²) may remain on the surface. The surface is to be cleaned, primed with ASODUR-SG2, spread over with excessive amounts of quartz sand (grain size 0,5 1,0 mm) and is to be exhausted after complete reaction. A moisture load from the surface underneath and from the top has to be excluded, otherwise the adhesive residues have to be removed completely. Followed by levelling off with SOLOPLAN-30-PLUS up to a maximum layer thickness of 15 mm.</li>
- In order to evaluate the grade of maturity for covering the moisture has to be measured by means of a

#### Maximum moisture content of the levelling compound, determined with a CM device:

Upper flooring		heated	unheated
Water permeable surface density		1.8%	2.0%
Textiled surface	Water vapour seal	1.8 %	2.5%
	Water vapour permeability	2.0%	3.0%
Parquet	Floating layed	1.8%	2.0%
Laminate flooring	Floating layed	1.8 %	2.0%
Ceramic tiles and/or	Thick bed	2.0%	2.0%
Natural stone/Cast stone	Thin bed	2.0%	2.0%

CM measurements are to be carried out following current FBH-AD work instructions taken from the technical information paper for "coordination of cut-out points in heated floor constructions".

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CM-device. The following values are to be kept (see table).

- Old waterproof adhesives have to be removed mechanically as much as possible, cleaned, primed with ASODUR-GBM or ASODUR-SG2, spread over with excessive amounts of Quartz sand (grain size 0,5 - 1,0 mm) and after complete reaction be vacuumed! Followed by levelling off with SOLOPLAN-30-PLUS upto a maximum layer thickness of 1.5 mm.
- With calcium sulphate based screeds, do not exceed a CM moisture content of 0.5% without underfloor heating and 0.3% with underfloor heating at the time the SOLOPLAN-30-PLUS is to be installed. Prime the calcium sulphate screed with two coats of ASO-Unigrund-S at a dilution rate of 1:1 with water and allow to fully dry. Subsequently level with SOLOPLAN-30-PLUS to a maximum thickness of 10 mm. Prevent subsequent moisture contact. For levelling calcium sulphate based substrates e.g. calcium sulphate screeds, we recommend ASO-NM15.
- Direct contact of cementitious mortar and magnesite screed leads to destruction of the magnesite screed by means of a chemical reaction resulting in expansion tendency due to magnesia. Moisture from the negative side of the surface underneath has to be excluded by means of corresponding measures. The magnesite surface is to be roughened mechanically and to be primed with the epoxy resin ASODUR-V360W and an addition of max. 5% water (approx. 250 g/m²). After a waiting time of approx. 12 hours up to 24 hours at +20° C the second layer of ASODUR-V360W is to be applied (approx.  $300 - 350 \text{ g/m}^2$ ). The fresh second layer is to be spread over with an excessive amount of quartz sand (grain size 0.2 - 0.7 mm). After an additional waiting time of approx. 12 to 16 hours levelling off with SOLOPLAN-30-PLUS up to a maximum layer thickness of 20 mm can be carried out.
- Regard the amount of water addition! If too much water is added, the mixture tends to segregate combined with surfaces of reduced strength capacity. Such surfaces

- with reduced strength should be removed mechanically.
- When using a mixing pump, for example PFT G4 or G5 or similar, especially when work is stopped, both the pump and the tubes must be cleaned.
- When using a PFT G4/G5 mixing pump and the standard PFT G4 mixing helix, the D 6-3 rotor and stator D 6-3 Twister, set the water flow rate to 370 420 litres/hour. The pump capacity should then be approx. 20 litres/minute. When applying greater thicknesses it is recommended that rotor R7-2.5 and stator R7-2.5 are used in the pump unit and the water flow rate is then set to 900 litres/hour. The pump capacity should then be approx. 40 litres/minute. With the PFT consistency checking tube, the correct water addition can be checked and adjusted from the slump result. This may not exceed 61 cm on the prepared substrate and should be checked continuously as work proceeds.
- Perimeter, bay, structural and general movement joints are to be brought through or inserted as designed and stopped with a suitable material e.g. RD-SK50 edge strips. Cut shrinkage control joints in the SOLOPLAN-30-PLUS once cured down to a third of the depth.
- For levelling IC10 poured asphalt, we recommend ASO-NM15 up to a thickness of 10 mm.
- Preparations such as the levelling off of transitions, excavations and uneven areas is to be applied with a stable repair mortar such as ASOCRET-M30, SOLOCRET-15 or SOLOCRET-50!
- Very porous substrates cause greater material consumption.
- High temperatures accelerate and lower temperatures slow down the setting process.
- Only use clean tools and clean water.
- Follow the technical data sheet for the products listed!
- Observe the relevant current regulations. E.g.

DIN 18157 DIN 18352 DIN 18560 DIN 18534

EN 13813 DIN 1055

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The BEB information sheets, distributed by the Bundesverband Estrich und Belag e.V.

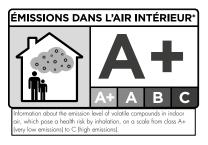
The technical information "coordination of cut out points in heated floor constructions".

The ZDB information sheets, distributed by the professional association of the German tile industry:

- [\* 1] "Bonded waterproof membranes"
- [\*3] "Movement joints in wall and floor tile finishes"
- [\*5] "Ceramic tiles, natural stone and cementbound composite slabs on cement-based floor constructions with insulation"
- [\*6] "Ceramic tiles, natural stone and cement-bound composite slabs on heated cement-based floor constructions"
- [\*7] "Finishes in exterior areas"
- [\*9] "Tolerances in level"
- [\*10] "Tolerances"
- [\*11] "Cleaning, protecting, maintenance"
- [\*12] "Swimming pool construction"

Please observe a current valid EU safety data sheet.

**GISCODE: ZP1** 



This technical data sheet is a translation from the German language version and does not consider local building codes or legal requirements. It shall be used as general reference for the product. Legally binding is only the German technical data sheet or the latest Data sheet from one of our foreign subsidiaries inside their sales territory.

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