

Order-No.  
**551**

# Sopro FAS 551

## Fibre-reinforced self-levelling filler



Self-levelling, cementitious floor filler used to even out irregularities in timber and mineral substrates prior to flooring installation.

Low-chromate to Regulation (EC) No 1907/2006, Annex XVII.

- For 3–20 mm coat thicknesses (up to 40 mm when extended)
- Self-levelling
- Rapid-setting
- Fibre-reinforced and highly flexible
- Pumpable
- Suitable for floor heating systems
- Particularly suitable on refurbishment/renovation contracts
- EMICODE system of GEV (German Association for Control of Emissions in Products for Flooring Installation): EC1<sup>PLUS</sup> ("very-low-emission-plus") rating
- DGNB (German Sustainable Building Council): Top-quality level 4, Line 8\*
- For indoor use

### Use

Floor-levelling compound for production of smooth, unbroken surfaces to receive any flooring type, e.g. ceramic tiles, natural stone coverings, carpeting, parquet, linoleum and PVC

### Suitable substrates

Old, rigid timber flooring, wood floorboards, grade V 100 G particleboard to DIN 68763; concrete; cement screeds; board (e.g. gypsum plasterboard or gypsum fibreboard) subfloors

### Coat thickness

Not extended: 3–20 mm  
Extended: 3–40 mm; for thickness upwards of 20 mm, shall be extended using 0–4 mm graded silica sand by up to approx. 1/3 of prepared compound volume

### Mixing ratio

Approx. 6.5 ltr water : 25 kg Sopro FAS 551  
Take care to ensure exact proportioning of water

### Flow table value

24.5–25.5 cm (Vicat ring to DIN 1164; size: internal diameter 65 mm at top and 75 mm at bottom, height 40 mm; on suitable, dry, clean glass plate)

### Working life

20–30 minutes

### Walkable

After approx. 2 hours

### Ready to receive covering

After approx. 24 hours per centimetre coat thickness

### Application temperature

From +5 °C to +25 °C (substrate, air, material)

### Coverage

Approx. 1.3 kg/m<sup>2</sup> per mm coat thickness

### Shelf life

Approx. 6 months, subject to storage on pallet in dry conditions in original containers

### Packaging

25 kg bag

\* Based on DGNB (German Sustainable Building Council) criterion "ENV1.2 Local Environmental Impact" (version 2015).

## Application of Sopro FAS 551 fibre-reinforced self-levelling filler



**1** To ensure stability, additionally screw down timber substrate to be refurbished.



**2** Seal joints and holes using Sopro DA 049 acrylic sealant.



**3** Install self-adhesive Sopro RDS 960 perimeter insulation strip to prevent infiltration of filler at joints.



**4** Properly remove adhesion-improving substances (e.g. dust) from substrate prior to application of Sopro adhesion promoter.



**5** To improve adhesion, pretreat timber substrate with Sopro HPS 673 special primer.



**6** Using mixing attachment, mix Sopro FAS 551 fibre-reinforced self-levelling filler to homogeneous, lump-free consistency ...



**7** ... and pour onto floor.



**8** Sopro FAS 551 may be spread uniformly using squeegee or finishing trowel.



**9** A spiked roller may be used to release entrapped air from applied filler compound.



**10** Once set, Sopro FAS 551 provides level surface ready to receive floor covering.



**11** To accommodate movement in substrate, subsequent incorporation of Sopro FDP 558 tile insulation board using Sopro flexible adhesive (e.g. Sopro's No.1) is strongly recommended.



**12** Apply Sopro flexible adhesive (e.g. Sopro's No.1) and place tiles.

## Properties

Sopro FAS 551 is a self-levelling, cementitious, fibre-reinforced floor filler used to even out irregularities in timber and mineral substrates, especially on refurbishment/renovation contracts. Highly flexible, castor chair resistant with early walkability.

## Substrate preparation

Substrate shall be dry, strong, crack-free, dimensionally stable and free from adhesion-impairing substances (e.g. dust, oil, wax, release agent, efflorescence, laitance, paint, lacquer and varnish residue). Timber flooring shall be tested using a suitable measurement technique to ensure it exhibits moisture content of 6–12% CM. Smooth and non-absorbent substrates, e.g. old flooring adhesive residue, paintwork or soft intermediate coatings, constitute particularly critical surfaces and shall therefore be removed wherever possible.

Incorporate a suitable Sopro perimeter insulation strip at junctions with vertical elements to prevent restraint and escape of self-levelling filler compound. Where perimeter insulation strips are already incorporated in substrate, adopt same line and width of these strips. Timber substrates shall be permanently dry, rear-ventilated, firmly screwed down and unsusceptible to deformation. Additionally secure where necessary. Use of 4/7/9/12 mm Sopro FDP 558 tile insulation board is recommended for timber substrates after filler application (see Sopro FDP 558 product information). This significantly improves rigidity and impact sound insulation. Following covering is then installed on Sopro FDP 558 tile insulation board.

Joints and holes in timber substrates shall be sealed using Sopro DA 049 acrylic sealant. Any existing cracks or dummy joints in mineral substrates shall be filled with structurally bonding Sopro GH 564 casting resin.

Use of Sopro AFS 561 anhydrite floor-levelling compound is recommended for calcium sulphate, mastic asphalt and magnesium oxychloride (magnesite) screeds as well as board subfloors.

Assessment of substrate shall comply with relevant standards and regulations.

## Priming

**Sopro HE 449 bonding emulsion:** for wet-on-wet application after short flash-off time of 10–15 minutes (max. 30 minutes). No liquid Sopro HE 449 shall remain on surface. Any dried films shall be removed. Suitable substrates include: cement screeds, untreated concrete surfaces (min. 3 months old), existing ceramic, terrazzo, natural and cast stone coverings, existing firmly adhering screed coatings.

**Sopro GD 749 primer:** all mineral, high- or variable-suction substrates, e.g. cement screeds, concrete and untreated concrete surfaces (min. 3 months old), composite substrates, board subfloors, calcium sulphate (anhydrite and self-levelling anhydrite) screeds.

**Sopro HPS 673 special primer:** timber substrates and all smooth, non-absorbent substrates, e.g. existing tile and terrazzo coverings, mastic asphalt screeds or firmly adhering adhesive residue.

## Application

Fill clean container with approx. 6.5 ltr water, add 25 kg Sopro FAS 551 and mix mechanically to homogeneous, lump-free consistency. Pour onto floor and spread uniformly using squeegee or finishing trowel. A spiked roller may be used to release entrapped air from freshly applied levelling compound.

For 20–40 mm coat thicknesses, Sopro FAS 551 shall be extended with silica sand, e.g. graded 0–4 mm, by up to approx. 1/3 of prepared compound volume.

Wherever possible, levelling compound shall be applied to required thickness in a single coat. If, in specific cases, application in several coats proves necessary, following coat shall be applied as soon as preceding coat is walkable. Otherwise, preceding coat shall be allowed to set and shall then be pre-treated with Sopro HE 449 bonding emulsion prior to continuation of work.

In case of low humidity and high room temperature, draughts and direct exposure to sunlight, freshly applied coat shall be covered with sheeting to ensure optimum, crack-free setting.

For treatment of large areas, Sopro FAS 551 may be efficiently prepared and applied using mixing pump equipment.

## Specified times

Apply for normal temperature range of +23°C and 50% relative humidity; higher temperatures shorten and lower temperatures lengthen these times.

## Tools/ tool cleaning

Mixing attachment, squeegee, finishing trowel, mixing pump (e.g. Putzknecht S 48 or Putzmeister G 78), spiked roller; wash tools with water immediately after use.

Test reports

Available upon request

Licence

**EMICODE system of GEV (German Association for Control of Emissions in Products for Flooring Installation): EC1<sup>PLUS</sup>** ("very-low-emission-plus") rating

Safety precautions

**Labelling:** Exempt from labelling requirements under German Hazardous Substances Ordinance (GefStoffV)/EC Directives. Contains cement. Exhibits alkaline reaction upon contact with moisture/water; protection required for skin and eyes. Rinse with water in case of contact. In case of contact with eyes, also seek medical advice.

**Safety recommendations (S phrases):** S2 Keep out of the reach of children.

**GISCODE (German hazardous substances classification):** ZP1 · Low-chromate to Regulation (EC) No 1907/2006, Annex XVII

CE marking

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	11 CPR-DE3/0551.1.eng EN 13813:2002 CT-C30-F7 Sopro FAS 551 Cementitious screed material for internal use	
Reaction to fire	Class A2 <sub>s</sub> -s1	
Release of corrosive substances	CT	
Water permeability	NPD	
Water vapour permeability	NPD	
Compressive strength	C30	
Flexural strength	F7	
Wear resistance	NPD	
Sound insulation	NPD	
Sound absorption	NPD	
Thermal resistance	NPD	
Chemical resistance	NPD	
Release of dangerous substances	see SDS	

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