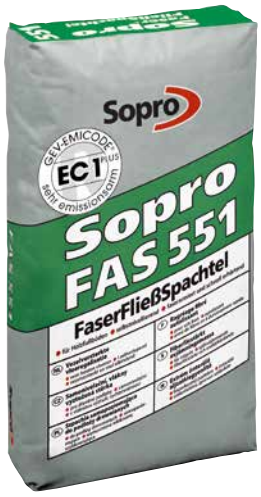
Sopro FAS 551

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-set**
- **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^{PLUS} ("very-low-emission-plus") rating**
- **DGNB (German Sustainable Building Council): Top quality level 4, Line 8 [2)]**
- **For indoor use**

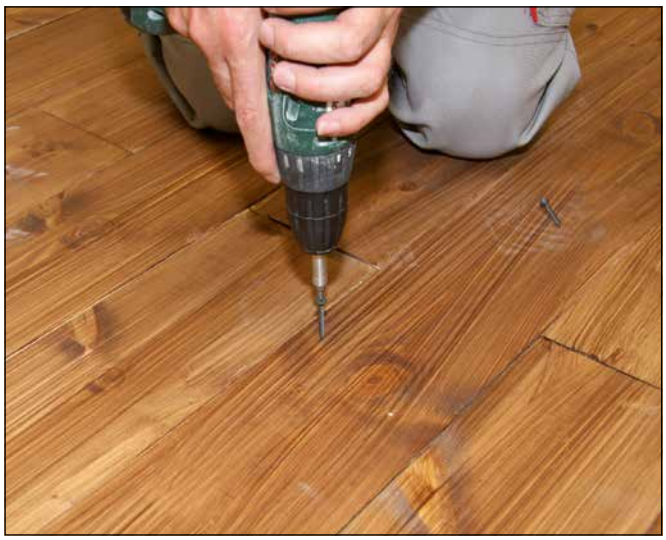
Use	Floor-levelling compound for production of smooth, unbroken surfaces to receive any flooring type, e.g. ceramic tiles, natural stone coverings, carpeting, parquet, linoleum and PVC.
Suitable substrates	Old, rigid timber flooring, wood floorboards, grade V 100 G particleboard to DIN 68763
Coat thickness	Not extended: 3–20 mm Extended: for coat thickness upwards of 20 mm, shall be extended using 0–4 mm graded silica sand (e.g. Sopro EEK 871 epoxy screed aggregate) 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 floor covering	After 2–3 hours for ceramic finish; after 24 hours for natural stone finish; applicable maximum permissible moisture content ≤ 1.8 % CM shall, as a general requirement, be confirmed by CM measurement prior to flooring installation. Particularly impervious floor coverings, e.g. linoleum, PVC, parquet etc., can – depending on filler coat thickness – be applied at earliest: – 3–5 mm coat thickness: after 1 day – 5–10 mm coat thickness: after approx. 5 days – 10–20 mm coat thickness: after 5–7 days
Application temperature	From +5 °C to +25 °C (substrate, air, material)
Coverage	Approx. 1.6 kg/m² per mm coat thickness
Apparent density	Approx. 1.8 kg/dm³
Shelf life	Approx. 6 months, subject to storage on pallet in dry conditions in original containers
Packaging	25 kg bag

[1)] See TKB (German Technical Committee for Construction Adhesives) data sheet 14 "Rapid-hardening cementitious screeds and cementitious screeds with screed admixtures" issued on 11 August 2015 by Industrieverband Klebstoffe e.V. (German Adhesives Industry Association).

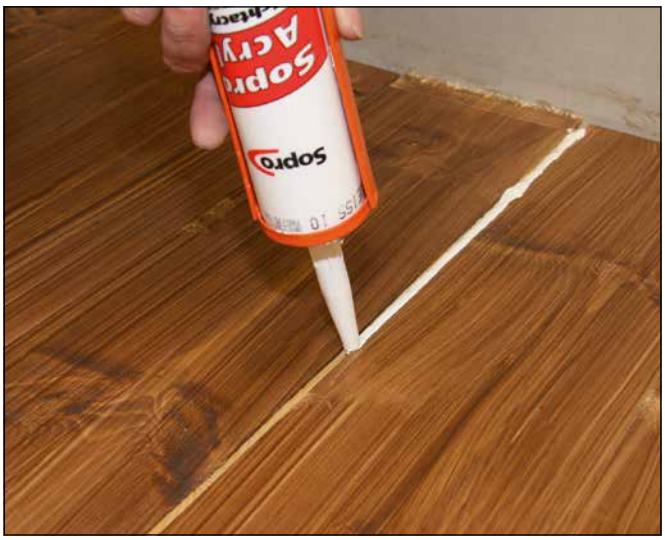
[2)] Based on DGNB (German Sustainable Building Council) criterion "ENV1.2 Local Environmental Impact" (2015 version).

EN 02.06.18 · DE 12.04.18 · Subject to change without notice

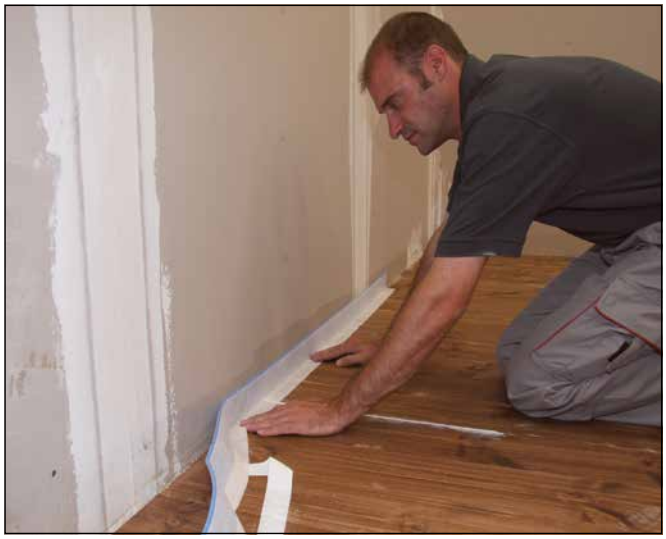
Application of Sopro FAS 551 fibre-reinforced self-levelling filler



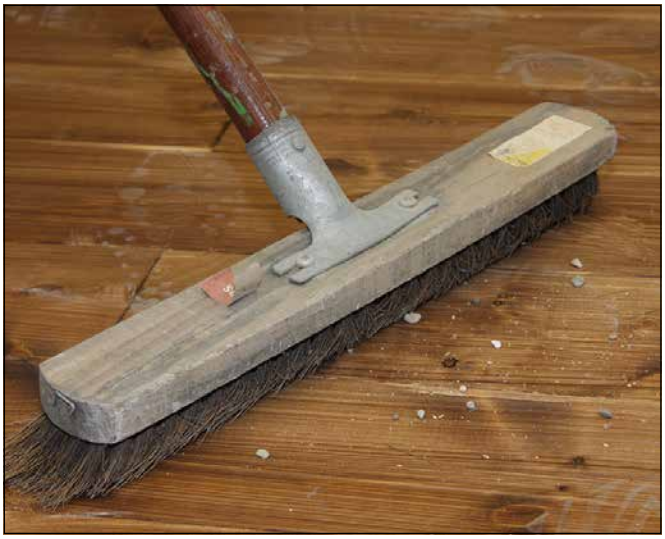
1 To ensure stability, additionally screw down timber substrate to be refurbished.



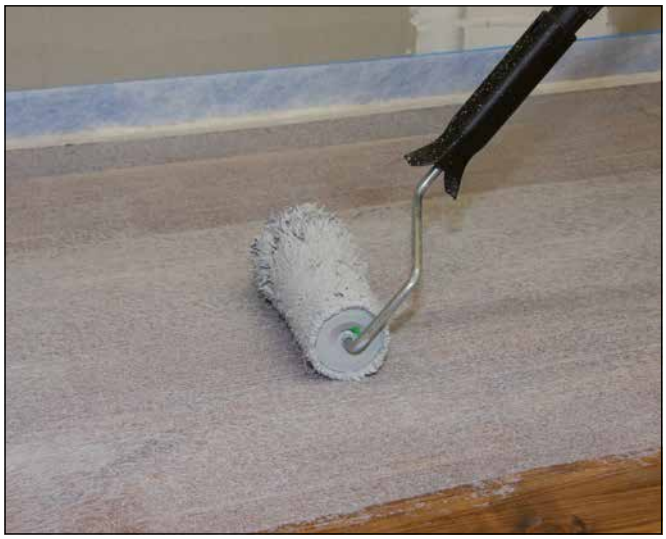
2 Seal joints and holes using Sopro DA 049 acrylic sealant.



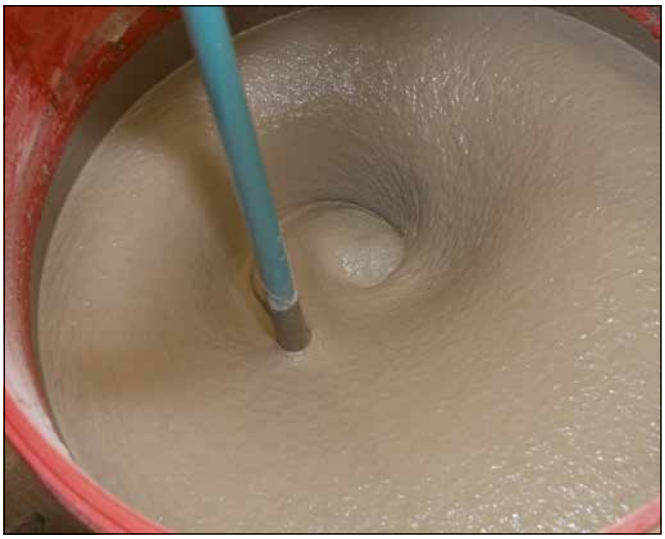
3 Install self-adhesive Sopro RDS 960 perimeter insulation strip to prevent infiltration of filler at joints.



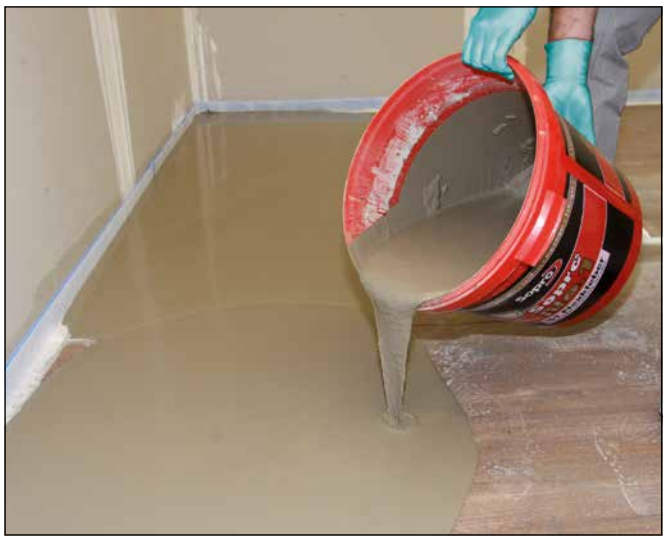
4 Properly remove adhesion-impairing substances (e.g. dust) from substrate prior to application of Sopro adhesion promoter.



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



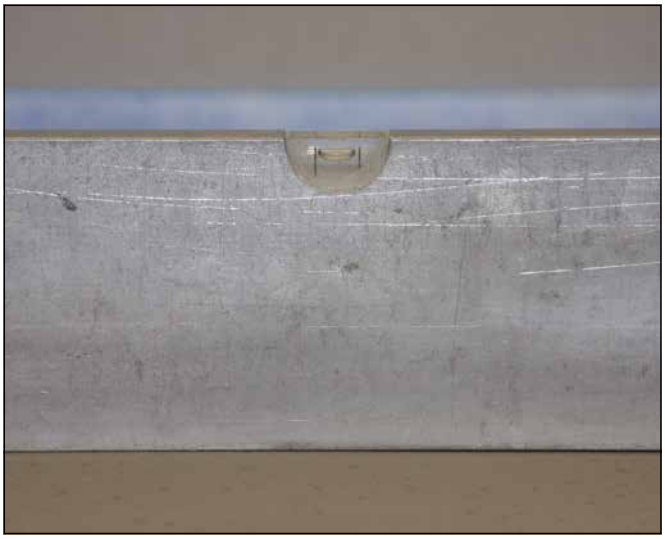
6 Using mixing attachment, mix Sopro FAS 551 fibre-reinforced self-levelling filler to homogeneous, lump-free consistency ...



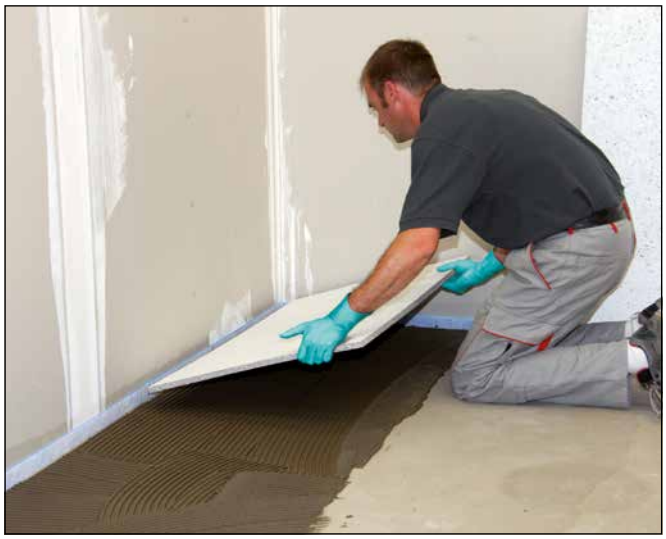
7 … and pour onto floor.

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

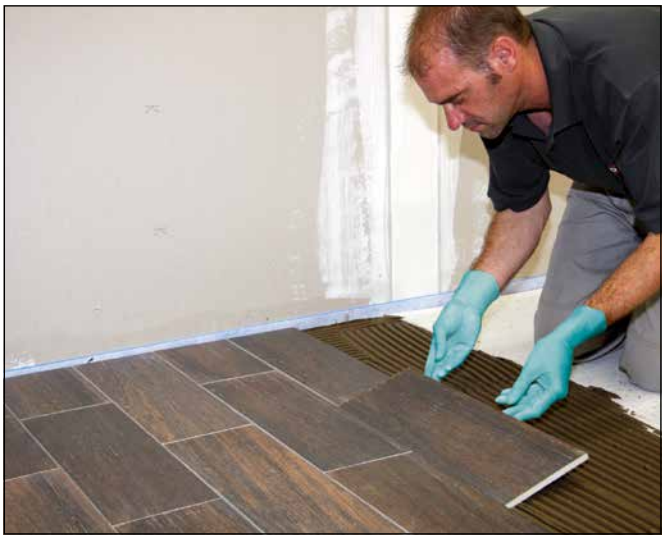
9 A spiked roller may be used to release entrapped air from applied filler compound.



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.1 400) is strongly recommended.



12 Apply Sopro flexible adhesive (e.g. Sopro's No.1 400) 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%. 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 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 bonding 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 (e.g. Sopro EEK 871 epoxy screed aggregate), 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 pretreated 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 curing.
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 certificates

BG Verkehr (institution for statutory accident insurance and prevention for transport and traffic):
– Zulassung für den Schiffbau als Systemkomponente im Sopro System 3.9 (Boden), MED-Zulassungs-Nr. 124.125, USCG-Zulassungs-Nr. 164.117/EC0736/124.125. Wet-applied quantity Sopro FAS 551: max. 19.6 kg/m² (approx. 25 mm thickness). Other components in Sopro System 3.9: Sopro HPS 673 bonding primer, Sopro FKM XL 444 multi-purpose eXtraLight flexible tile adhesive, fully vitrified stoneware tile (thickness 8 mm), Sopro TF⁺ high-strength tile grout. Joints ≤ 4 mm.
– Zulassung für den Schiffbau als Einzelprodukt Sopro System 3.5 (Boden), MED-Zulassungs-Nr. 124.095, USCG-Zulassungs-Nr. 164.117/EC09736/124.095. Wet-applied quantity Sopro FAS 551: max. 18.34 kg/m² (approx. 10 mm thickness).

Please observe technical product information for relevant system components.

Licence

EMICODE system of GEV (German Association for Control of Emissions in Products for Flooring Instal-lation): EC1^{PLUS} R ("very-low-emission-plus") rating

Safety precautions

Labelling in accordance with Regulation (EC) No 1272/2008 (CLP)

GHS05
Signal word: Danger

Contains Portland cement. Exhibits strong alkaline reaction upon contact with moisture/water; protection required for skin and eyes. All standard precautions for the handling of construction materials/chemicals shall be taken.

Hazard statements: H318 Causes serious eye damage.

Precautionary statements: P102 Keep out of reach of children. **P261** Avoid breathing dust. **P280** Wear protective gloves/protective clothing/eye protection/face protection. **P302+P352** IF ON SKIN: Wash with plenty of water and soap. **P305 +P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **P310** Immediately call a POISON CENTER or doctor. **P332+P313** If skin irritation occurs: Get medical advice/ attention.

GISCODE (German hazardous substances classification): ZP 1 · Low-chromate to Regulation (EC) No 1907/2006, Annex XVII.

Disposal

Waste treatment methods.Recover if possible. In so doing, comply with the local and national regulations currently in force. 91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.
Disposal of hardened product (EC waste code) : 17 01 01
Disposal of not hardened product (EC waste code) : 17 01 01
The suggested European waste code is just based on the composition of the product. According to the specific process or application field a different waste code may be necessary.

CE marking

CE
0767

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CPR-DE3/0551.1.eng
EN 13813:2002 CT-C30-F7
Sopro FAS 551
Cementitious screed material for internal use

Reaction to fire	Class $A2_{fl}$-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