



Sopro FKM 600

Silver multi-purpose flexible tile adhesive



Universal, silver-grey, multi-purpose, high-coverage, extra-rapid-set, highly polymer-modified, cementitious tile adhesive with Rhenish trass. For installation of ceramic coverings and discoloration-sensitive natural stone tiles on all substrates. With high crystalline water binding capacity. For large-format fully vitrified stoneware wall and floor coverings. Low-chromate to Regulation (EC) No 1907/2006, Annex XVII.

- Early high strength, walkable and groutable after only approx. 2 hours
- Extra-sag-resistant for laying natural stone coverings
- Silver-grey adhesive colour, also suitable for light-coloured, translucent natural stone types
- For deformation-sensitive resin-bonded tiles
- Universal application: thin-bed, floating-bed and medium-bed laying and surface filling with up to 20 mm thick coats²⁾
- Suitable for heated wall and floor constructions
- EMICODE system of GEV (German Association for the Control of Emissions in Products for Flooring Installation, Adhesives and Building Materials): EC1^{PLUS} R ("very-low-emission-plus") rating
- DGNB (German Sustainable Building Council): Top quality level 4, Line 8³⁾
- For indoor and outdoor use

Use

Wall and floor tile products: earthenware, stoneware and fully vitrified stoneware tiles, ceramic split tiles and split tile fittings, clinker floor tiles, light-coloured, discoloration-sensitive and translucent natural stone units, cast stone units, dishing-prone, resin-bonded tiles, e.g. agglomerate tiles. Particularly suitable for large-format fully vitrified stoneware units. Suitable for filling and levelling out irregularities on limited wall and floor areas with up to 20 mm thick coats (for drylining/dry construction and mastic asphalt screeds, max. 5 mm coat thickness). For fast-track refurbishment/renovation on tightly scheduled projects. In private housing, commercial and industrial facilities, hospitals, public buildings, airports, railway stations etc.

Suitable substrates

Concrete and lightweight concrete, min. 3 months old; cement screeds; calcium sulphate (anhydrite and self-levelling anhydrite) screeds; mastic asphalt screeds (indoors); board subfloors; heated floor constructions (cement and calcium sulphate screeds); strong existing ceramic, natural stone, terrazzo or cast stone coverings; paperless gypsum panels, gypsum plasterboard and gypsum fibreboard; flush-jointed masonry (no composite masonry); renders made from masonry cement; cement render; lime/cement render; gypsum plaster; rigid foam board, metal substrates (indoors); Waterproof membranes using Sopro FDF flexible sealing compound, Sopro DSF 523 one-component flexible sealing slurry, Sopro DSF 623 one-component flexible rapid-set sealing slurry, Sopro DSF 423 two-component flexible sealing slurry or Sopro TDS 823 two-component turbo sealing slurry.

Mixing ratio

Thin-bed, medium-bed and surface filler consistency: 7.0–7.5 ltr water : 25 kg Sopro FKM 600
Floating-bed consistency: 8.0–8.5 ltr water : 25 kg Sopro FKM 600

Maturing time

3–5 minutes

Working life

20–30 minutes; stiffened mortar shall not be retempered by addition of water or fresh mortar to restore workability.

Walkable/groutable

After approx. 2 hours or after setting of adhesive; take measures to spread loads over floor.

Loadable

After approx. 5 hours; in commercial facilities after approx. 2 days, in areas subject to high wet exposure after approx. 3 days, for underwater applications after approx. 10 days, in conjunction with wall and floor heating after approx. 14 days.

Application temperature

Between +5 °C and +25 °C

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 Industrierverband Klebstoffe e.V. (German Adhesives Industry Association).

²⁾ For drylining/dry construction and mastic asphalt screeds, max. 5 mm coat thickness.

³⁾ Based on DGNB (German Sustainable Building Council) criterion "ENV1.2 Local Environmental Impact" (version 2015).

Coverage

Approx. 1.1 kg/m² per mm coat thickness

Shelf life

Approx. 12 months, subject to storage on pallet in dry conditions in original unopened containers

Packaging

25 kg bag, 5 kg bag

Properties

Universal, silver-grey, multi-purpose, high-coverage, rapid-set, highly polymer-modified, cementitious flexible tile adhesive, meeting C2 FT S1 requirements to DIN EN 12004, with original Rhenish trass. For installation of ceramic wall and floor coverings, in particular for discoloration-sensitive and/or translucent natural stone tiles, on all substrates. For large-format fully vitrified stoneware wall and floor coverings. For reliable laying of large-format and dishing-prone units, e.g. agglomerate and resin-bonded tiles. For balconies and patios. Suitable for use in conjunction with floor heating and composite (membrane plus tile finish) waterproofing systems.

Creamy consistency and exceptionally smooth workability, though still with high sag resistance. Rapid-set properties make it ideal for fast-track or tightly scheduled projects where rapid reuse of floorspace is required. With high crystalline water binding capacity.

With celebrated 4-in-1 formulation; thin-bed, medium-bed and floating-bed laying as well as surface filling with up to 20 mm thick coats (for drylining/dry construction and mastic asphalt screeds, max. 5 mm coat thickness).

Substrate preparation

Substrate shall be clean, solid, strong, dimensionally stable and free from any adhesion-impairing substances. Fill any existing cracks in screed with structurally bonding Sopro GH 564 casting resin. Level out any gross irregularities using Sopro RAM 3 454 renovation and levelling mortar, Sopro RS 462 repair filler or Sopro AMT 468 levelling mortar with trass; for floors, use Sopro FS 15 550 plus floor-levelling compound or Sopro FAS 551 fibre-reinforced self-levelling filler. On balconies and patios, use Sopro RAM 3 454 renovation and levelling mortar to create falls (where absent) and waterproof as required (e.g. using Sopro TDS 823 two-component turbo sealing slurry, Sopro DSF 523 one-component flexible sealing slurry or Sopro AEB plus 639 waterproofing and separating membrane). Metal substrates (indoors only) shall be dry, clean, solid, strong, rigid, of adequate dimensional stability and free from any adhesion-impairing substances. Metal substrates shall also be pretreated with Sopro HPS 673 bonding primer to provide continuous, full-cover coat, which shall then be allowed to dry properly.

Corrosion-prone metal surfaces shall be pretreated as necessary. In addition, all relevant standards, guidelines and recommendations shall apply; workmanship shall comply with good practice.

Cement screeds shall be 28 days old and dry. Screeds incorporating Sopro Rapidur® B1 rapid-set binder are ready to receive tiles after only 12 hours. Calcium sulphate (anhydrite and self-levelling anhydrite) screeds shall exhibit a moisture content $\leq 0.5\%$ CM and be adequately ground, vacuum-cleaned and primed. Mastic asphalt screeds shall be blinded with sand.

Cement and calcium sulphate screeds incorporating heating elements shall be heated up to ensure adequate drying out prior to flooring installation:

required moisture content for cement screeds $\leq 2.0\%$ CM, for calcium sulphate screeds $\leq 0.3\%$ CM.

Gypsum plasterwork shall be dry, single-coat and shall not be felt-floated or smoothed.

All relevant standards, guidelines and recommendations shall apply; workmanship shall comply with good practice.

Priming

Sopro GD 749 primer: Cement screeds, calcium sulphate (anhydrite and self-levelling anhydrite) screeds for tile formats ≤ 1.0 m², board subfloors, paperless gypsum wall panels, gypsum plasterboard/joints and filler, gypsum fibreboard, gypsum plaster, high- or variable-suction (interior) aerated concrete; cement and lime/cement render, renders made from masonry cement, flush-jointed masonry

Sopro HPS 673 bonding primer: Smooth and closed-pore substrates, e.g. existing tile, terrazzo, natural and cast stone coverings, adhesive residue from PVC flooring or carpeting, oriented strand board and metal substrates (indoors)

Sopro MGR 637 multi-purpose primer/Sopro EPG 522 epoxy primer: Calcium sulphate (anhydrite and self-levelling anhydrite) screeds for tile formats ≥ 1.0 m²

Without primer: Sufficiently strong concrete or lightweight concrete; strong rigid foam board; strong and uniformly absorbent mineral substrates

Application

Place water in clean mixing container, add Sopro FKM 600 and mix thoroughly until required workable, lump-free consistency is achieved. After 3–5 minutes maturing time, remix thoroughly.

Thin-bed, medium-bed and surface filler consistency: 7.0–7.5 ltr water : 25 kg Sopro FKM 600;

Floating-bed consistency: 8.0–8.5 ltr water : 25 kg Sopro FKM 600.

Apply contact layer and combed bed. Press tiles firmly into fresh adhesive bed, position and align before adhesive skins over. Apply only as much adhesive as can be covered by tiles during open time (20–30 min.).

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, notched trowel with suitable serration (tooth size up to 12 mm), medium-bed trowel; wash tools with water immediately after use.

Test certificates, test reports and licences

C2 FT S1 to DIN EN 12004

National test certificate (abP) based on system test under PG-AIV-F (Criteria for Award of National Test Certificates for Liquid-Applied Waterproof Membranes Used in Conjunction with Tile Coverings) for use with Sopro DSF 423, Sopro TDS 823, Sopro ZR 618, Sopro FDF 525/527, Sopro GD 749 and other Sopro components.

National test certificate (abP) based on system test under PG-AIV-B (Criteria for Award of National Test Certificates for Waterproof Sheet Membranes Used in Conjunction with Tile Coverings) for sheet membranes: combinations featuring Sopro AEB 640, Sopro AEB 641, Sopro AEB 642/643, Sopro AEB 644/645, Sopro AEB 112/129 – 133, Sopro DWF 089 with Sopro FKM 600 as tile adhesive and Sopro RMK 818, Sopro MKS 819 or Sopro TDS 823 as adhesive and sealing product at laps

Approval for shipbuilding as individual product in Sopro System 1.4 (wall and floor), MED approval no. 118.432. Wet-applied quantity Sopro FKM 600: max. 14,800 g/m² (approx. 10 mm thickness).

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

	 Sopro Bauchemie GmbH Biebricher Straße 74 – 65203 Wiesbaden (Germany) www.sopro.com
	13 CPR-DE3/0600.1.eng EN 12 004:2007 + A1:2012 Sopro FKM 600 Fast setting, improved, cementitious adhesive for tiling internal and external floors and walls
Reaction to fire	Class E
Bond strength as:	
Early tensile adhesion strength	≥ 0.5 N/mm ²
Initial tensile adhesion strength	≥ 1.0 N/mm ²
Durability for:	
Tensile adhesion strength after water immersion	≥ 1.0 N/mm ²
Tensile adhesion strength after heat ageing	≥ 1.0 N/mm ²
Tensile adhesion strength after freeze/thaw cycles	≥ 1.0 N/mm ²
Release of dangerous substances	see SDS

bringing european innovation

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Sopro FKM 600 Silver multi-purpose flexible tile adhesive: Universal application for all types of ceramic and natural stone ...



1 Mixing of Sopro FKM 600 to required consistency for thin-bed, floating-bed or medium-bed laying or for surface filling.



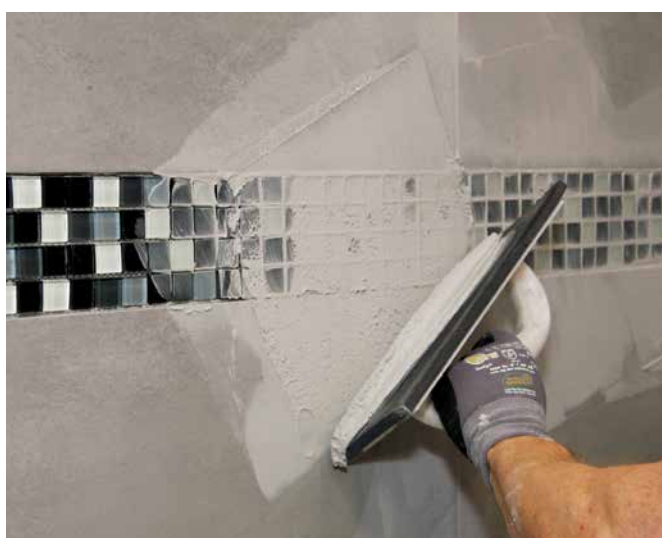
2 Application of contact layer and combed bed in thin-bed consistency.



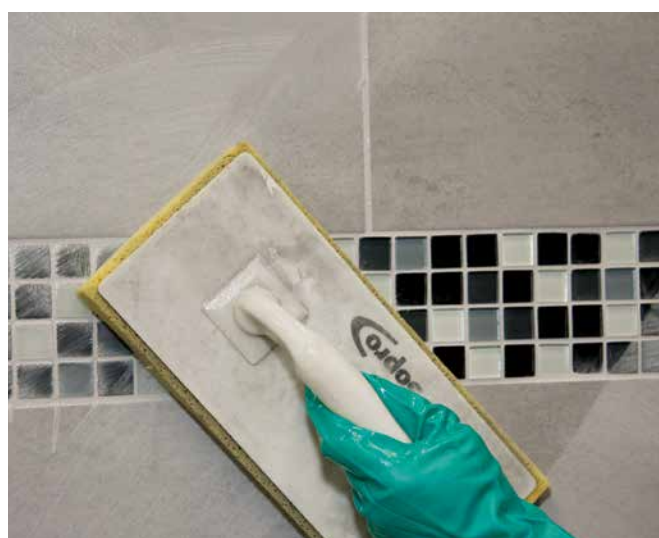
3 Laying of glass mosaic in prepared adhesive bed.



4 Easy wall installation of large-format fully vitrified stoneware units due to high sag resistance.



5 Grouting with Sopro DF 10 flexible designer tile grout in silver-grey colour.



6 Washing down of covering after allowing adequate drying time for tile grout.

... using **thin-bed**, **floating-bed** and **medium-bed** method and for **greater coat thicknesses up to 20 mm**.



1 Application of contact layer and combed bed in floating-bed consistency.



2 Laying of agglomerate tile. Rapid-set properties of Sopro FKM 600 also make it suitable for laying deformation-sensitive coverings.



1 Application of Sopro FKM 600 in medium-bed consistency for medium-bed laying.



2 Laying of natural stone unit. Due to its light colour, Sopro FKM 600 is also suitable for laying translucent materials.



1 Sopro FKM 600 can also be applied in greater coat thicknesses of up to 20 mm.



2 Installation of step. Rapid-set properties of adhesive allow early loading.