



SCHÖNOX® SPF

TILING RANGE

Very low stress, fibre-reinforced levelling compound with high flexural tension

in combination with ceramic coverings and natural stones because of the embedded fibres ideal for restructuring and renovation. SCHÖNOX SPF is ideal in combination with the power reinforcement SCHÖNOX PZG. SCHÖNOX SPF is suitable in combination with lamina panel heatings (warmwater or electrical), e.g. Uponor or Magnum. For interior use.



Product characteristics

- EMICODE EC 1^{PLUS}: very low emission
- for interior use
- with synthetic fibres
- crackbridging
- self-levelling
- low consumption / high coverage
- ready for foot traffic after approx. 3 hours
- high flexural strength
- high strength values
- highly synthetic-resin modified
- easy to handle
- pumpable
- low tension/stress
- layer-thickness 3 to 20 mm without aggregates
- suitable for application on subfloor heating systems
- suitable for thin-layer floor heatings
- suitable for castor wheels in accordance with EN 12 529
- low in chromate according to REACH

Applications

SCHÖNOX SPF is suitable for filling, smoothing, evening and levelling of substrates:

- under ceramic coverings and natural stones
- in combination with SCHÖNOX uncoupling systems (SCHÖNOX EDP)
- Ideal in combination with thin-layer floor heating systems according to BVF guidelines (e.g. Uponor MiniTec, Roth Climacomfort, Blanke Permatop SF, Kermi xnet C16 und C 17 System, Lofec Flächenheizung, hicoTHERM)
- in wet rooms SCHÖNOX SPF needs to be protected by a SCHÖNOX water membrane and a tile covering.
- in interior areas.

Substrates

SCHÖNOX SPF is suitable for filling, smoothing, evening and levelling of:

- concrete
- cement and rapid cement screeds
- calcium sulphate based screeds
- magnesia screeds with mineral aggregates
- old substrates such as ceramic tiles, natural stones and terrazzo
- old substrates with old water-resistant adhesive residues
- suitable particle board or OSB constructions, screwed
- wooden substrates in connection with ceramic coverings and natural stones (thickness at least 15 mm), combined with SCHÖNOX PZG and SCHÖNOX Q12, layer thickness of SCHÖNOX SPF at least 8 mm. On wooden substrates, levelled by SCHÖNOX SPF it is possible to lay ceramic coverings and natural stones not sensitive to discolouration without priming with the highly flexible and tension relieving thin bed mortar SCHÖNOX Q12. SCHÖNOX Q12 complies to the classification C2 TE S2. The product data sheet of SCHÖNOX Q12 has to be taken in account. An additional uncoupling is not necessary.

Requirements of substrate

- Adequate strength, load bearing capacity, dimensional stability and permanent dryness.
- Free of residues which reduce adhesion, e.g. dust, dirt, oil, fat and loose particles.
- Surface treatments or any "friable" areas of the subfloor must be mechanically removed and the subfloor repaired with SCHÖNOX leveling compounds as required.
- Old, loose and weak levelling layers should be removed mechanically.
- With subsequent installation of ceramic coverings cement screeds are required to be at least 28 days old and to display a residual moisture reading of ≤ 2.0 CM-% (heating screeds ≤ 2.0 CM-%), calcium sulphate screeds should

Technical data

- Pot life: approx. 30 minutes at +20 °C
- Ready for foot traffic: after approx. 3 hours
- Ready for covering:
 - up to 10 mm after approx. 24 hours for ceramic coverings
 - for increasing by further 5 mm, each with 24 hours longer drying time
- Application temperature: not below +5 °C floor temperature
- Material consumption: approx. 1,5 kg/m²/mm
- Reaction to fire: A2_{fl} s1

All values are approximate and are subject to climatic fluctuations.



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have a reading of ≤ 0.5 CM-% (heating screeds ≤ 0.3 CM-%).

- Layers of water-soluble adhesives, e.g. sulphite-waste-adhesives, are to be mechanically removed. Remaining adhesive residues should be primed with SCHÖNOX GEA oder SCHÖNOX HP RAPID.
- Old water-resistant adhesives are to be mechanically removed as far as possible.
- Old, ceramic coverings and natural stones should be firmly laid, thoroughly cleaned and eventually abraded.
- Rooms in buildings without a basement, are to be sealed against rising dampness in compliance with the standard.
- The requirements of the relevant valid standards, guidelines and data sheets apply.
- In combination with thin layer floor heating systems the requirements of the manufacturer should be taken in account. Because of the manifold systems, we recommend to ask for special information from our application technique.

Wooden substrates:

- Wooden planks should be fixed well on the timber work and inserted in groove and tongue. They should not move opposite to one other and should have an even moisture of wood. Damaged planks should be renewed with a wooden construction minor sensitive to expansion.
- The substructure of wooden floors should be permanently dry to avoid damages from moisture, deformation, rottenness, mildew and so on. Take care for an adequate ventilation through edge strips and space.
- The installing of ventilated skirtings or ventilation slots should be considered.
- Prevent run through of SCHÖNOX SPF in edge joints by appropriate action.
- Joints, cracks and holes can be closed with SCHÖNOX PL or an acrylic sealing.
- Floating chipboard (V 100) constructions, installed as a dry screed, are not possible to level.

- The breaking force of the used ceramic covering should be adapted to the expected load. Breaking force at least 1500 N. This is equivalent to a ceramic tile according EN 176 ≤ 3 % (stoneware slab) with a thickness of 7,5 mm and quadratic dimensions. We recommend to use quadratic coverings, because for rectangular sizes breaking force is cut in halve. Advices to calculate the breaking force you can take out of the ZDB-leaflet "Mechanisch hochbelastbare Bodenbeläge".
- Grouting is normally carried out with the universal flexible grouting mortars SCHÖNOX SU or SCHÖNOX SF DESIGN. Characteristics specific to the covering should be taken in account.
- For laying natural stones on floors a thickness of ≥ 15 mm is necessary. Quadratic sizes up to 40 x 40 cm respectively rectangular sizes with a width to height ratio of 1 : 2 and a size of 60 x 30 cm are allowed. The covering should be laid with straight lined, continuous joints. Granite, quartzite and similar hard stones should be preferred.

Priming

- **normal absorbent substrates such as:**
 - cement screeds
 - rapid cement screeds
 prime with SCHÖNOX KH (1:5) or SCHÖNOX KH FIX .
- concrete
- prime with SCHÖNOX KH (1:3) or SCHÖNOX KH FIX .
- **non-absorbent, smooth, sound substrates such as:**
 - water-resistant adhesive residues (removed as far as possible)
 - ceramic tiles (thoroughly cleaned and abraded)
 prime with SCHÖNOX SHP.
- **calcium sulphate substrates such as:**
 - calcium sulphate screeds
 prime with SCHÖNOX KH (1:1) (drying time at least 24 hours) or SCHÖNOX KH FIX (drying time at least 1 hour). We recommend a sanded sub-coat of SCHÖNOX GEA or SCHÖNOX HP RAPID for layer-thickness exceeding 10 mm.

Instead of sanding, SCHÖNOX GEA or SCHÖNOX HP RAPID can be primed with SCHÖNOX SHP.

■ magnesia screeds:

prime with SCHÖNOX GEA or SCHÖNOX HP RAPID and sand.

Instead of sanding, SCHÖNOX GEA or SCHÖNOX HP RAPID can be primed with SCHÖNOX SHP.

■ Wooden substrates like e.g.:

- Chipboard or OSB

prime with SCHÖNOX KH (neat) (drying time approx. 4 hours) or SCHÖNOX KH FIX (drying time at least 1 hour).

Mixing ratio

- For 25,0 kg SCHÖNOX SPF approx. 5,5 l water

Recommended method of working

- Using a clean receptacle, add SCHÖNOX SPF to cold clean water to form a homogeneous mixture. Use of a mixer with 600 rpm is recommended. After letting it stand for approx. 3 minutes, mix again thoroughly. Then pour out the levelling compound and spread using a smoothing trowel.
- Due to the high fibre content, full containers should be mixed to guarantee even distribution of the fibres.
- In the case of higher layer-thickness, contact with vertical structures should be avoided by putting in an perimeter isolating strip.
- If a second layer of levelling compound is to be applied, the first levelling compound layer should be primed with SCHÖNOX KH (1:1) or SCHÖNOX KH FIX. The maximum layer thickness may not be exceeded in case of two-layer application. The second layer may not exceed the layer thickness of the first.
- Protect curing SCHÖNOX SPF leveling layers from high ambient temperatures, direct sunlight and draughts.
- Contact to metal like water-bearing pipes must be avoided (e.g. sealing of pipe penetrations), because especially galvanised steel pipes have no sufficient corrosion protection.

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- Clean tools in water immediately after use.

Packaging

- 25.0 kg paper sack

Storage

- Store SCHÖNOX SPF in cool, dry conditions.
- Storage life of 6 months (in closed packaging).
- Opened packages should be closed immediately and used up as soon as possible.

Disposal

- Empty packaging completely and dispose of in accordance with regulations
- For the disposal of product residues, waste water and containers with adherent product residues please follow the local governmental regulations.

EMICODE

- EC 1^{PLUS}: very low emission

GISCODE

- ZP1 - cement products, low in chromate

EPD - Self-declaration

- Sika Deutschland GmbH declares that the product fulfills the criteria of one Environmental Product Declaration acc. to ISO 14025 and EN 15804
- Declaration available for download at www.schoenox.com at SCHÖNOX SPF

Instructions

- All information applies to standard conditions and relates to the non-extended levelling compound.
- SCHÖNOX SPF contains cement. Alkaline reaction when it comes in contact with moisture, therefore protect skin, eyes and respiratory system. Do not breathe in dust. In case of contact rinse immediately with plenty of water. In case of contact with eyes seek additional medical advice.
- Please follow the relevant product data sheets when using complementary products. If in doubt, we recommend

obtaining further information from the manufacturer.

- Asphalt mastic screeds IC 10 and IC 15 according to EN 13 813: We recommend to use calcium sulphate based SCHÖNOX-levelling compounds free of tension. In case of doubt ask for special information.
- The TKB-data sheet "Technische Beschreibung und Verarbeitung von Bodenspachtelmassen" should be followed.

The applicable recommendations, guidelines, DIN regulations and safety data sheets are to be observed, together with the recognised architectural and engineering regulations. We guarantee that our products leave the factory in perfect condition. While our recommendations for use are based on tests and practical experience, they can only provide general guidance without any assurance as to product characteristics, since we have no influence over the conditions on site, the execution of the work or the method of processing. This product data sheet supersedes all previous editions.



The Sika management system is certified to ISO 9001 and 14001 by SQS

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