Self levelling compound for use from 3 to 60 mm

SCHÖNOX FPL PLUS is a self-levelling screed in layer-thickness of 3 – 50 mm. With aggregate 60 mm. SCHÖNOX FPL PLUS is noted for very little shrinkage. After adding of 4.5 l water to 25 kg of powder, SCHÖNOX FPL PLUS is ready to use. Interior and exterior.

Product characteristics

- EMICODE EC 1PLUS R: very low emission, regulated
- self-levelling
- frost resistant
- waterproof
- rapid hardening
- high level of hardness and strength
- suitable for application on subfloor heating systems
- low tension/stress
- pumpable
- suitable to build bonded-Screeds under ceramic tiles on cemetitious subfloors
- layer-thickness 3 to 50 mm without aggregates
- layer-thickness 10 to 60 mm with aggregates
- ready for covering after approx. 4 hours for ceramic tiles on concrete floors and cement screed for interior areas
- low in chromate according to REACH

Applications

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

- under ceramic coverings and bonded sealings
- in swimming pools
- in wet areas
- on balconies and terraces
- as a repairing mortar for filling holes and deepenings

In outdoor and wet areas is SCHÖNOX FPL PLUS be protected by a SCHÖNOX waterproofing membrane and tiles.

SCHÖNOX FPL PLUS is suitable for preparing bonded screeds on cementitious subfloors under ceramic coverings in layer-thickness of 3 - 60 mm in:

- new and old buildings
- renovation work

Substrates

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

- concrete
- cement and rapid cement screeds
- calcium sulphate based screeds
- old substrates such as ceramic tiles, natural stones and terrazzo
- old substrates with old water-resistant adhesive residues
- magnesia screeds
- mastic asphalt screeds (sanded) IC 10 and IC 15 according to EN 13 813, layer-thickness 3,0 to 5,0 mm
- Old mastic asphalt screeds IC 10 and IC 15 (if necessary, obtain advice on the hardness class test in an asphalt laboratory) according to EN 13 813, often contain cracks or are embrittled, depending on their composition, age, strength and use. This renovation substrate does not display sufficient load-bearing strength for taking even a low-stress, cementitious levelling compounds. For this purpose, we recommend using stress-free, gypsum SCHÖNOX-levelling compound. If in doubt, please obtain supplementary information.

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 "fragile" areas of the subfloor must be mechanically removed and the subfloor repaired with SCHÖNOX levelling compounds as required.
- Old, loose and weak levelling layers should be removed mechanically.
- Rooms in buildings without a basement, are to be sealed against rising

Technical data

- Pot life: approx. 40 minutes at +20 °C
- Ready for foot traffic: after approx. 4 hours
- Ready for covering:
  - up to 60 mm after approx. 4 hours for ceramic coverings on concrete and cementitious screeds interior
  - On other substrates longer drying times are required:
    - up to 10 mm after approx. 1 day
    - up to 20 mm after approx. 3 days
    - up to 30 mm after approx. 7 days
    - up to 40 mm after approx. 10 days
    - up to 50 mm after approx. 14 days
- Application temperature: not below +5 °C floor temperature
- Material consumption: approx. 1,8 kg/m²/mm
- Reaction to fire: A1 / A1f1

All values are approximate and are subject to climatic fluctuations.
dampness in compliance with the standard.

- 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 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 Sika® Primer MB.

- Old water-resistant adhesives are to be mechanically removed as thoroughly as possible.

- Old, ceramic coverings and natural stones should be firmly laid, thoroughly cleaned and eventually abraded.

- The requirements of the relevant valid standards, guidelines and data sheets apply.

### Priming

- **Normal absorbent substrates such as:**
  - cement screeds
  - rapid cement screeds
  - prime with SCHÖNOX KH (1:5), SCHÖNOX KH FIX or SCHÖNOX VD (1:3).
  - concrete
  - prime with SCHÖNOX KH (1:3), SCHÖNOX KH FIX or SCHÖNOX VD (1:3).

- **Non-absorbent, smooth, sound substrates such as:**
  - old water-resistant adhesive residues, almost completely removed
  - ceramic tiles
  - mastic asphalt screeds
  - prime with SCHÖNOX SHP.

- **Calcium sulphate substrates such as:**
  - calcium sulphate screeds
  - prime with SCHÖNOX KH (1:1) (drying time at least 24 hours), SCHÖNOX KH FIX (drying time at least 1 hour) or SCHÖNOX VD (1:1).

  We recommend a sanded sub-coat of Sika® Primer MB for layer-thickness exceeding 10 mm.

Instead of sanding, Sika® Primer MB can be primed with SCHÖNOX SHP.

### Magnesia screeds:

- prime with Sika® Primer MB and sand.

- Instead of sanding, Sika® Primer MB can be primed with SCHÖNOX SHP.

### Exterior use and high layer thicknesses:

- prime with SCHÖNOX KH (1:3), SCHÖNOX KH FIX or SCHÖNOX VD (1:3).

- With power troweled surfaces and other substrates ask for special information.

### Cementitious substrates with a high moisture content:

- up to 90 % RH use SCHÖNOX SDG (2-layers)
- up to 93 % RH use SCHÖNOX SDG (3-layers)
- up to 99 % RH use Sika® Primer MB

### Mixing ratio

**Layer thickness of 3 to 50 mm:**

- For 25,0 kg SCHÖNOX FPL PLUS approx. 4,5 l water

**Extended levelling compound:**

- The additive is added last.

**Layer thickness of 10 to 60 mm:**

- Bulking material approx. 65 wt.% corresponds to 16,0 kg or 10 l of SCHÖNOX QUARZSAND 0,1 - 3,0 mm for 25,0 kg SCHÖNOX FPL PLUS

### Recommended method of working

- Using a clean receptacle, add SCHÖNOX FPL PLUS to cold clean water to form a homogeneous mixture. Use of a disc stirring rod or a pump like Putzmeister MP 20 / 25, Berö TINO, Wagner T 25 und PC 25, PFT G 4 oder G 5 or other suitable pumps, is recommended. In case of interruption of work pump and hoses necessarily should be cleaned immediately

- Spread SCHÖNOX FPL PLUS using a suitable tool (surface blade) and ventilate using a spike roller.

- Edge and movement joints must be taken over and should be protected (e.g. SCHÖNOX RANDSTREIFEN) against levelling compound to run in.

### For levelling works on concrete the levelling is done in accordance with the laid covering directly before the laying of the covering starts.

- Carry out preparatory work - such as filling joints, evening out hollows and unevenness - using the sturdy repair mortar SCHÖNOX PL or SCHÖNOX PL PLUS.

- If a second layer of levelling compound is to be applied, the first levelling compound layer should be primed with SCHÖNOX KH (1:1), SCHÖNOX KH FIX or SCHÖNOX VD.

- Protect curing SCHÖNOX FPL PLUS levelling layers from high ambient temperatures, direct sunlight and draughts.

- High temperatures accelerate, low temperatures slow down the setting.

- Pay attention to the ZDB-leaflets „Hinweise für die Ausführung von Abdichungen im Verbund mit Bekleidungen und Belägen aus Fliesen und Platten für den Innen- und Außenbereich“ and „Keramische Beläge im Schwimmbadbau - Hinweise für Planung und Ausführung“ as well as „Bodenbeläge aus Fliesen und Platten außerhalb von Gebäuden“.

- 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.

- Immediately after use clean tools with water.

### Packaging

- 25.0 kg paper sack

### Storage

- Store SCHÖNOX FPL PLUS in cool, dry conditions.

- Storage life of 1 year (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 1PLUS: R: very low emission, regulated

GISCODE
- ZP1 - cement products, low in chromate

EPD - Self-declaration
SCHÖNOX GmbH declares as a statutory member of Deutsche Bauchemie and Industrieverband Klebstoffe that the product fulfills the criteria for modified mineral mortars of group 1.

ENVIRONMENTAL PRODUCT DECLARATION
acc. to ISO 14025 and EN 15804

Owner of declaration
Deutsche Bauchemie e.V.
Industrieverband Klebstoffe e.V.
Verband der deutschen Lack- und Druckfarbenindustrie e.V.

Editor
Institut für Bauen und Umwelt e.V. (IBU)
Program owner
Institut für Bauen und Umwelt e.V. (IBU)
Number of declaration
EPD-DIV20130096-IBE1-DE
Date of issue
30.07.2013
Valid until
29.07.2018

Instructions
- All information applies to standard conditions and relates to the non-extended levelling compound.
- SCHÖNOX FPL PLUS 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.
- The TKB-data sheet "Technische Beschreibung und Verarbeitung von zementären Bodenspachtelmassen" should be followed.