



# SCHÖNOX® HS 50

## Thick layer levelling compound containing Hybrid Active Dry Technology

SCHÖNOX HS 50 is an extremely low-stress hybrid levelling compound with a wide range of application. It combines the advantages of a low tension calciumsulphate based leveling compound with the fast drying of cementitious systems. Because of the innovative Hybrid Active Dry Technology it is also in thick layers ready for covering already after 48 hours.



### Product characteristics

- EMICODE EC 1<sup>PLUS</sup>: very low emission
- RAL UZ 113: Environment-friendly, because very low-emission
- quickly ready for covering through high water binding capacity
- fast development of strength
- pumpable
- self-levelling
- ideal in combination with Sika coatings
- ready for laying after approx. 48 hours
- heavy mechanical load capacity
- self-levelling
- low tension/stress
- suitable for application on subfloor heating systems
- low construction heights are possible
- high strength values
- layer-thickness 3,0 to 50 mm
- suitable for castor wheels in accordance with EN 12 529
- for interior use

### Applications

**SCHÖNOX HS 50 is suitable for preparation of bonded screeds in layer thicknesses of 3 - 50 mm in:**

- commercial and industrial areas
- new and old buildings
- renovation work
- modernisation work
- 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 and C 17 System, Lofec Flächenheizung, hicoTHERM)

**SCHÖNOX HS 50 is suitable:**

- under textile and elastic coverings as well as parquet
- for full-surface levelling under sealings and coatings
- under ceramic tiles and natural stones in combination with quick-drying primers and rapid setting tile adhesives

- leveling compound system for laying ceramic coverings with SCHÖNOX Q20 HYBRID without primer
  - in interior areas.
- For heavy load by milling, strike, hit, fall, railway traffic systems and especially by dragging of objects or moving of bulk goods and as a protection against contaminations we recommend to apply a coloured surface coating adapted to the traffic load / use.
- for full-surface levelling under sealings and coatings (Note the system design in combination with Sika coatings)

### Substrates

**SCHÖNOX HS 50 is suitable on:**

- concrete
- cement and rapid cement screeds
- calcium sulphate based screeds
- mastic asphalt screeds (sanded) AS IC 10 and AS IC 15 according to EN 13 813, layer-thickness 3,0 to 10,0 mm
- magnesia screeds with mineral aggregates
- old substrates such as ceramic tiles, natural stones and terrazzo
- old substrates with old water-resistant adhesive residues

### 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.
- Separation layers, sinter layers, and other similar contamination should be removed through appropriate measures, such as sanding, brushing, abrasive blast cleaning, milling or thorough cleaning.
- Old, loose and weak levelling layers should be removed mechanically.
- Separate SCHÖNOX HS 50 from the vertical surfaces by installing the deformation tape SCHÖNOX RS 50.

### Technical data

- Pot life: approx. 30 minutes at 20 °C
- Ready for foot traffic: after approx. 2 - 3 hours
- Ready for covering:
  - up to 50 mm after approx. 48 hours, residual-moisture ≤ 3,0 CM-%
- Application temperature: not below 5 °C floor temperature
- Material consumption: approx. 1,8 kg/m<sup>2</sup>/mm
- Strength class: CA-C40-F10
- Reaction to fire: A1 / A1<sub>f1</sub>

All values are approximate and are subject to climatic fluctuations.

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- With subsequent installation of floor coverings, cement screeds are required to display a residual moisture reading of  $\leq 2.0$  CM-% (heating screeds  $\leq 1.8$  CM-%), calcium sulphate screeds should have a reading of  $\leq 0.5$  CM-% (heating screeds  $\leq 0.3$  CM-%).
- Layers of water-soluble adhesives, e.g. sulphite-waste-adhesives, are to be mechanically removed. Remaining adhesive residues should be primed with SCHÖNOX HP RAPID.
- Old water-resistant adhesives are to be mechanically removed as far as possible.
- Old floors, such as ceramic tiles are to be thoroughly cleaned and sanded.
- 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.

## Priming

- **normal absorbent substrates such as:**
  - cement screeds
  - rapid cement screeds
  - concrete
 prime with SCHÖNOX VD (1:3) or SCHÖNOX KH FIX.
- **non-absorbent, smooth, sound substrates such as:**
  - mastic asphalt screeds, insufficient sanded
  - water-resistant adhesive residues (removed as far as possible)
  - ceramic tiles (thoroughly cleaned and abraded)
 prime with SCHÖNOX SHP or SCHÖNOX VD (neat).
- **calcium sulphate substrates such as:**
  - calcium sulphate screeds
 prime with SCHÖNOX SCHÖNOX VD FIX or SCHÖNOX SCHÖNOX VD (1:1).
- **magnesia screeds (not xylolite):**
 prime with SCHÖNOX SHP.
- For layer-thickness exceeding 10 mm on substrates sensitive to moisture (e.g. calcium sulphate screeds, wooden substrates etc.) we recommend prim-

ing with a reaction resin based primer e.g. SCHÖNOX HP RAPID.

## Mixing ratio

- For 25,0 kg SCHÖNOX HS 50 approx. 4,25 l water

## Recommended method of working

- The ideal working temperature is 15 °C floor temperature, 18 °C air temperature,  $\leq 65\%$  relative humidity.
- Using a clean receptacle, add SCHÖNOX HS 50 to cold clean water to form a homogeneous mixture. Use of a disc stirring rod or a pump like Using a clean receptacle, add SCHÖNOX HS 50 to cold clean water to form a homogeneous mixture. Use of a disc stirring rod or a pump like inotec, Putzmeister, Wagner, PFT or other suitable pumps, is recommended. In case of interruption of work pump and hoses necessarily should be cleaned immediately
- Spread SCHÖNOX HS 50 using a suitable tool (surface blade, trowel) and as needed ventilate using a spike roller.
- Edge and movement joints should be taken over.
- In the case of higher layer-thickness, contact with vertical structures should be avoided by putting in an perimeter isolating strip.
- Carry out preparatory work - such as filling joints, evening out hollows and unevenness - using the sturdy repair mortar SCHÖNOX RM or SCHÖNOX RR.
- Readiness for covering must be guaranteed by testing residual moisture with CM-apparatus. The sampling takes place over the whole cross section. Original sample weight 50 g. Shake the sample for 1 minute and read off the final value after further 4 minutes.
- If a second layer of levelling compound is to be applied, the first levelling compound layer should be primed with SCHÖNOX VD (1:1) or SCHÖNOX KH FIX when dry. 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 HS 50 levelling layers from high ambient temperatures, direct sunlight and draughts.
- If grinding of SCHÖNOX HS 50 is necessary use a paper or net with grit-size  $\geq 80$ .
- 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.
- Clean tools in water immediately after use.

## Packaging

- 25.0 kg paper sack

## Storage

- Store SCHÖNOX HS 50 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
- Material leftovers may disposed of dried up or hardened as commercial solid waste or domestic waste.
- For the disposal of product residues, waste water and containers with adherent product residues please follow the local governmental regulations.
- Do not empty into drains, waters or soil.

## EMICODE

- EC 1<sup>PLUS</sup>: very low emission

## GISCODE

- CP3 - levelling compounds based on calcium sulphate, calcium oxide content  $> 3\%$

## 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

# SCHÖNOX® HS 50

- Declaration available for download at [www.schoenox.com](http://www.schoenox.com) at SCHÖNOX HS 50

## Instructions

- All information applies to standard conditions and relates to the non-extended levelling compound.
- The TKB-data sheet "Technische Beschreibung und Verarbeitung von Bodenspachtelmassen" should be followed.
- Please follow the relevant product data sheets when using complementary products. If in doubt, we recommend obtaining further information from the manufacturer.
- Composition:
  - Calcium sulphate
  - Mineral fillers
  - Cement (Chromate reduced)
  - Redispersed copolymer powder
  - Additives
- Keep out of the reach of children.
- Insure a good ventilation during application and drying.
- Avoid eating, drinking and smoking while working with the product.
- Wear suitable protective goggles.
- Avoid longer skin contact.
- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Protect your hands with waterproof, robust gloves.
- Wear long trousers.
- The longer fresh adhesive or laying materials remain on skin, the greater the risk of serious skin damage.
- Keep away children from fresh adhesive and laying material.

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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