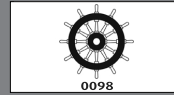
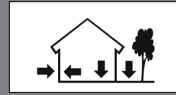


# SCHÖNOX® 2K PU SOLID

## White two component polyurethan tile adhesive

for laying ceramic coverings and natural stones on difficult and also vibrating substrates like metal, PVC and boards coated with plastic materials. Fullfills the requirements R2 according to EN 12 004. Solvent free. For interior and exterior use.



### Product characteristics

- EMICODE EC 1<sup>PLUS</sup>: very low emission
- fulfills the R2 requirements according to EN 12004
- water-proof according to EN 12004
- frost resistant according to EN 12004
- for interior and exterior use
- sturdy
- long open time
- on many substrates no priming required
- Meets the requirements of the Marine Equipment Directive (MED) 2014/90/EU
- extreme tensile-, compression- and shear strength
- suitable for application on subfloor heating systems
- possible to level out
- safe application and multi-purpose use
- resistant against ageing
- high tensile and shearing strength
- universal suitability
- relieves stress
- hardening without shrinkage
- deformable
- hard elastic
- contains no plasticizer
- watertight
- solvent-free according to TRGS 610

### Applications

**SCHÖNOX 2K PU SOLID is suitable for setting with the thin-bed-method according to DIN 18 157 of:**

- ceramic coverings
- fully vitrified tiles
- stoneware tiles
- split clinker flags and floor quarry
- clinker one-quarter bricks
- glass and porcelain mosaic
- ceramic tiles on substrates, where stress can occur
- natural and artificial stones, sensitive to discoloration and deformable

### Substrates

**SCHÖNOX 2K PU SOLID is suitable on:**

- concrete (at least 6 months old)
- aerated concrete
- cement plaster, lime-cement plaster (CS II, CS III of CS IV according to EN 998-1, compression strength  $\geq 2,5$  N/mm<sup>2</sup>)
- gypsum plaster according to EN 13279-1, compression strength  $\geq 2,5$  N/mm<sup>2</sup>; residual moisture  $\leq 1,0$  CM-%)
- gypsum board
- soft and construction boards
- masonry
- cement and rapid cement screeds
- mastic asphalt screeds (completely sanded) AS IC 10 and AS IC 15 according to EN 13813
- dry screeds
- calcium sulphate based screeds
- magnesia screeds
- old concrete blocks and natural stones
- old ceramic coverings
- Steel and other metals (free of rust and grease)
- wooden-cement-boards
- old PVC-coverings
- plastic laminated boards (formica, kitchen worktops)
- old substrates with old water-resistant adhesive residues
- smooth and sound substrates (GRP, Polyester)
- Suitable particle board (V100) or OSB constructions, screwed. Ask for special advice via SCHÖNOX application technique.

### Requirements of substrate

- Adequate dryness, strength, bearing strength, evenness and dimensional stability.
- 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

### Technical data

- Pot life: approx. 45 minutes at +20 °C
- Open time (EN 1346):<sup>1</sup> approx. 45 minutes
- Ready for foot traffic: after approx. 8 hours
- Ready for grouting: after approx. 8 hours
- Loadable: after approx. 24 hours
- Chemical resistant: after approx. 7 days
- Application temperature and substrate temperature: +10 °C to +30 °C
- Max. 65% rel. air humidity
- Temperature resistance: completely cured -20 °C to +80 °C
- Density: 1,40 kg/l mixed material
- Material consumption: with 4 mm notched trowel approx. 1,5 kg/m<sup>2</sup> with 6 mm notched trowel approx. 2,5 kg/m<sup>2</sup> with 8 mm notched trowel approx. 4,0 kg/m<sup>2</sup>
- Reaction to fire: E

<sup>1</sup>The open time is subject to temperature- and building site related variations. Therefore check the wetting properties of the applied tile adhesive with the finger.



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repaired with SCHÖNOX levelling compounds as required.

- Substrate should fulfill the requirements of DIN 18 202, tolerances in building constructions.
- The requirements of DIN 18 157 are applicable.
- 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  $\leq 2.0 \text{ CM-}\%$  (heating screeds  $\leq 2.0 \text{ CM-}\%$ ), calcium sulphate screeds should have a reading of  $\leq 0.5 \text{ CM-}\%$  (heating screeds  $\leq 0.3 \text{ CM-}\%$ ).
- Steel and other metal substrates if needed degrease, derust and paint with rust protection.
- Old water-resistant adhesives are to be mechanically removed as far as possible.
- If a levelling is necessary, an even and solid substrate is achieved with a SCHÖNOX floor levelling compound.
- Remove old wax from old PVC-covering and clean thoroughly.
- Old polyester and GRP areas must be roughen mechanically and cleaned with thinner.
- Old ceramic coverings should be thoroughly cleaned (black pad) and probably abraded.
- Prepare calcium sulfate screeds following the BEB leaflet „Hinweise zur Beurteilung und Vorbereitung der Oberfläche von Anhydritestrichen“.
- For laying on heating screeds pay attention to the leaflet ceramic tiles and slabs, natural and concrete stones on heated and unheated cementitious floor constructions as well as EN 1264, part 4. We recommend for heated floor constructions to pay attention to the professional information "Schnittstellenkoordination bei beheizten Fußbodenkonstruktionen" of the BVF. Basically, floor heating systems should be started up slowly after laying the ceramic tiles at the earliest after 7 days at room temperature.

## Priming

- **normal absorbent substrates such as:**
  - cement screeds
  - rapid cement screeds
  - cement plaster
  - aerated concrete
  - lime-cement plaster
- prime with SCHÖNOX KH (1:5) or SCHÖNOX KH FIX .
- **calcium sulphate substrates such as:**
  - calcium sulphate screeds
  - gypsum plaster
- prime with SCHÖNOX KH (1:1) (drying time at least 24 hours) or SCHÖNOX KH FIX (drying time at least 1 hour).
- **increased residual moisture in alkaline substrates such as**
  - cement screeds
  - concrete
- prime with SCHÖNOX GEA or SCHÖNOX HP RAPID and sand.

## Mixing ratio

5 : 1 (resin : hardener)

## Recommended method of working

- SCHÖNOX 2K PU SOLID should only be used at temperatures above  $+10 \text{ }^\circ\text{C}$ . The ideal working temperature is of  $+18$  bis  $+25 \text{ }^\circ\text{C}$  and a substrate temperature of  $+15 \text{ }^\circ\text{C}$ .
- By low temperatures ( $\leq +15 \text{ }^\circ\text{C}$ ) hardening is decelerated. The relative humidity should be not higher than 65 %. The temperature of subfloor, adhesive and covering should not fall below  $+10 \text{ }^\circ\text{C}$ .
- Wear suitable protective gloves and protective goggles.
- Thoroughly mix the SCHÖNOX 2K PU SOLID resin component (A) with the SCHÖNOX 2K PU SOLID hardener component (B) until the material is homogenous and free of streaks.
- Slowly mixing using a continuously adjustable mixer with max. 300 rpm is recommended.
- To avoid unsatisfactory mixes, transfer the mix to a clean container and repeat the mixing process.

- Mix only the entire contents of a bucket (not partial quantities) to a homogeneous compound.
- Do not mix more material than can be handled within 45 minutes.
- The adhesive is applied with a smoothing tool and the combed with a suitable notched trowel. Place tiles firmly in position with a slight twisting motion to ensure sufficient wetting. SCHÖNOX 2K PU SOLID is suitable for the floating-method following DIN 18157.
- Remove adhesive coming up through the grouts during gluing immediately. While working with SCHÖNOX 2K PU SOLID the material may not get in contact with water. Pay attention that ceramic is dry. Alkaline moisture impacts the strength of the adhesive and therefore should be expected.
- For small repairs or remaining work, SCHÖNOX 2 KR can be used. The small cask avoids unnecessary loss of material.
- For the laying of tiles over tiles on walls, we recommend to apply a scratch coat
- For laying large-sized tiles and labs, pay attention to the valid basic rules and standards. For laying thin-layer ceramic tiles ( $< 7.5 \text{ mm}$ ) please obtain special information.

## Grouting

**For grouting of ceramic tiles with absorbent shards we recommend in case of joint width:**

- from 1 to 6 mm SCHÖNOX WD FLEX
- from 1 to 12 mm SCHÖNOX UF PREMIUM

**For grouting of ceramic tiles with low absorbent and nonabsorbent shards we recommend in case of joint width:**

- from 1 to 10 mm SCHÖNOX SF DESIGN
- from 1 to 12 mm SCHÖNOX UF PREMIUM
- from 2 to 20 mm SCHÖNOX SB FLEX
- from 3 to 15 mm SCHÖNOX SU
- from 2 to 40 mm SCHÖNOX XR 40

**For grouting of natural stone tiles we recommend in case of joint width:**

- from 1 to 5 mm SCHÖNOX SF DESIGN
- from 1 to 12 mm SCHÖNOX UF PREMIUM

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- from 3 to 15 mm SCHÖNOX SU

**For grouting with chemical resistant joint filler we recommend in case of joint width:**

- from 1 to 10 mm SCHÖNOX CF DESIGN
- from 1 to 10 mm SCHÖNOX CON BODEN
- from 2 to 40 mm SCHÖNOX XR 40

**For building movement joints and field definition joints we recommend:**

- SCHÖNOX ES respectively SCHÖNOX MES

Follow the relevant product data sheets.

## Packaging

- 5,0 kg combined packaging composed of:
  - 4,17 kg component A (resin)
  - 0,83 kg component B (hardener)

## Storage

- Store SCHÖNOX 2K PU SOLID in cool, dry, frost-free conditions.
- Storage life of 1 year (in closed packaging).
- SCHÖNOX 2K PU SOLID can be transported up to -20 °C for max. 7 days.

## 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<sup>PLUS</sup>: very low emission

## GISCODE

- RU1 - solvent-free polyurethane adhesive / primer

## EPD - Self-declaration

Sika Deutschland GmbH declares that the product fulfills the criteria for reaction resins based on polyurethane or SMP, filled or aqueous, solvent-free.

## ENVIRONMENTAL PRODUCT DECLARATION

acc. to ISO 14025 and EN 15804

## Owner of declaration

FEICA - Association of the European Adhesive and Sealant Industry

### Editor

Institut für Bauen und Umwelt e.V. (IBU)

### Program owner

Institut für Bauen und Umwelt e.V. (IBU)

### Number of declaration

EPD-FEI-20150250-IBG1-EN

## Risk phrases

- Information on the safe handling of chemical products, as well as the essential physical, safety-related, toxicological and ecological data can be found in the current safety data sheets. Observe all relevant regulations, e.g. the hazardous substances act. Further instructions can be found on the internet at [www.schoenox.com](http://www.schoenox.com)
- For professional use only.
- This product contains isocyanates. Follow the instructions of the manufacturer. For more detailed information see Safety Data Sheet.
- To wear suitable personal protective equipment is necessary in any case. Please, find details on in the safety data sheet, chapter 8.

## Instructions

- All values are approximate and are subject to local climatic fluctuations.
- Clean tools immediately after use with SCHÖNOX FIX CLEAN.
- Wipe impurities immediately from the covering surface and remove residual skin using a suitable cleaning agent (e.g. SCHÖNOX FIX CLEAN). Although keep in mind occupational safety.
- Hardened material can only be removed mechanically.
- Protect SCHÖNOX 2K PU SOLID during the working process from high ambient temperatures, direct sunlight and draughts because the open time will strongly interacted. Observe skin formation.
- For working in exterior areas basically the atmospheric conditions must be stronger considered. Protect the work against imminent rainfalls with a suitable roofing.

# SCHÖNOX® 2K PU SOLID

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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