# SCHÖNOX® KR

### Epoxy-resin tile adhesive



for gluing of ceramic in foodstuffs, drinks and tobacco, labour-, an chemical areas as well as in swimming pools. Highly loadable and resistant against alcalines and thinned organic and anorganic acids. Fullfills the R2T-requirements according to EN 12004. For interior and exterior use.













### **Product characteristics**

- fulfills the R2 T requirements according to EN 12004
- water-proof according to EN 12004
- frost resistant according to EN 12004
- unaffected by alkaline solutions and diluted mineral and organic acids
- resistant against water aggressive to concrete according to DIN 4030
- Meets the requirements of the Marine Equipment Directive (MED) 2014/90/ EU
- sturdy
- on many substrates no priming required
- extreme tensile-, compression- and shear strength
- very smooth application
- suitable for application on subfloor heating systems
- long open time
- possible to level out
- safe application and multi-purpose use
- water-proof against undermining
- resistant to saponification
- resistant against ageing
- solvent-free according to TRGS 610

### **Applications**

SCHÖNOX KR 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
- natural-, artificial- and cast stone tiles not sensitive to discolouration
- ceramic tiles on substrates, where stress can occur
- ceramic tiles on balconies, terraces, facades
- unaffected by alkaline solutions and diluted mineral and organic acids

■ soft and construction boards

### Substrates

### SCHÖNOX KR 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  $\geq 2.5 \text{ N/mm}^2$ )
- gypsum plaster according to EN 13279-1, compression strength ≥ 2,5 N/mm<sup>2</sup>; residual moisture ≤ 1,0 CM-%)
- gypsum board
- soft and construction boards
- masonry
- SCHÖNOX water membranes
- 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)
- SCHÖNOX water membranes
- wooden-cement-boards

For further substrates ask for special advice.

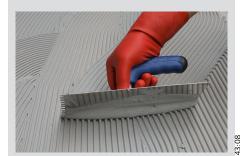
### Requirements of substrate

- 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 repaired with SCHÖNOX leveling compounds as required.
- Substrate should fulfill the requirements of DIN 18 202, tolerances in building constructions.

### Technical data

- Pot life: approx. 90 minutes at +20 °C
- Open time (EN 1346):1 approx. 30 minutes
- Ready for foot traffic: after approx. 16 hours
- Ready for grouting: after approx. 16 hours
- Chemical resistant: after approx. 7 days
- Application temperature: not below +10 °C
- Temperature resistance: completely cured -20 °C to +80 °C
- Material consumption: with 4 mm notched trowel approx. 2,4 kg/m<sup>2</sup> with 6 mm notched trowel approx. 3,2 kg/m<sup>2</sup> with 8 mm notched trowel approx. 3,8 kg/m<sup>2</sup> with 10 mm notched trowel approx. 4,3 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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- 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 ≤ 2.0 CM-% (heating screeds ≤ 2.0 CM-%), calcium sulphate screeds should have a reading of ≤ 0.5 CM-% (heating screeds ≤ 0.3 CM-%).
- If used on above mentioned substrates in moist or wet rooms, an additional SCHÖNOX bonded sealing has to be performed. The corresponding product data sheets of the SCHÖNOX bonded sealings in combination with the thinbed mortar in the corresponding moisture loading classes should be followed.
- Old ceramic coverings should be thoroughly cleaned (black pad) and probably abraded.
- Steel and other metal substrates if needed degrease, derust and paint with rust protection.
- Prepare calcium sulfate screeds following the BEB lealet "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**

- 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).

### Mixing ratio

100 : 60 (resin : hardener)

# Recommended method of working

- Thoroughly mix the SCHÖNOX KR resin component (A) with the SCHÖNOX KR 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 90 minutes.
- Mixing and processing of SCHÖNOX KR should preferably take place at +15 °C (room, surface and subsurface temperature) may be cool in a water bath or heat packs.
- The mortar is to be applied and combed off using a suitable notched trowel. The material to be laid is inserted and pressed into the fresh bed of adhesive while it is still wet. Remove mortar residues.
- Clean tools in water immediately after
- SCHÖNOX KR is suitable for application with the floating-, the buttering- and floating-buttering method according to DIN 18 157.
- 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 mm) please obtain special information.

### Additional laying recommendations:

- Do not use for natural stones sensitive to discolouration, because discolouration can not be excluded.
- Unevenness up to 5 mm on walls and floors can be levelled with SCHÖNOX KR before applying the adhesive. For

this the adhesive is extendable with up to 30 % in weight with silica sand.

### 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
- 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:
  - -3,127 kg component A (resin)
  - -1,873 kg component B (hardener)

### Storage

- Store SCHÖNOX KR in cool, dry, frostfree conditions.
- Storage life of 2 years (in closed packaging).
- SCHÖNOX KR can be transported up to -20 °C for max. 7 days.

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## **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.

### **GISCODE**

■ RE 30 - epoxy resin products, sensitizing, total solid

## 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
- For professional use only.
- Product contains epoxy resin. This may act irritating to the skin and may cause sensitization. See information supplied by 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.
- Wear suitable gloves e.g. from nitrile.
  Recommendation of KCL, Germany:
  CAMATRIL 730 material thickness 0,40 mm); max. wearing time: 8 hours.

### Instructions

- All values are approximate and are subject to local climatic fluctuations.
- Clean tools in water immediately after use.
  - Although keep in mind occupational safety.
- Hardened material can only be removed mechanically.
- Please follow the relevant product data sheets when using complementary products. If in doubt, we recommend obtaining further information from the manufacturer.
- Protect SCHÖNOX KR during the working process from high ambient temper-

- atures, 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.

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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