## SCHÖNOX® SF DESIGN



#### **Design Flexible Grout**

especially for grouting of fully vitrified tiles, natural stone tiles sensitive to discoloration and discolor-resistant as well as glass ceramic in interior and exterior areas for wall and floor application. Available in different colors. SCHÖNOX SF DESIGN is optimized for an initial strength build-up, has increased color consistency, very good flank adhesion and increased abrasion resistance.













#### **Product characteristics**

- fulfills CG2 WA requirements according to EN 13888
- EMICODE EC 1<sup>PLUS</sup>: very low emission
- Meets the requirements of the Marine Equipment Directive (MED) 2014/90/ EU
- dust reduced
- high color brilliance
- rapid hardening
- fast developement of strength
- water-resistant
- frost resistant
- very smooth application
- minimizes the risk of discoloration on natural stones
- water and dirt repellent
- preventive of infestation with microorganisms
- flexible
- very fine visual appearance
- synthetic resin-modified
- highly fillable
- high adhesion to flänks
- ideal for vitrified tiles
- suitable for application on subfloor heating systems
- hardening without cracks
- very high abrasion-resistance
- compact mortar structure
- low in chromate according to REACH

# **Applications**SCHÖNOX SF DESIGN is suitable for grouting of:

- fully vitrified tiles
- stoneware tiles
- Glassmosaic
- glass tiles
- artificial stone tiles
- natural stones sensitive to discolouration

### SCHÖNOX SF DESIGN is suitable for grouting:

- for walls and floors
- on balconies and terraces

#### ■ on facades

- in normal loaded commercial areas
- in permanently wet areas
- in swimming pools in interior and exterior areas

For grouting of ceramic tiles with absorbent shards we recommend SCHÖNOX WD FLEX.

In case of chemical load use SCHÖNOX epoxy grout mortar.

Surfaces cleaned by using high-pressure cleaners or acidic cleaning agents should be grouted with SCHÖNOX CF DESIGN or SCHÖNOX XR 40.

By grouting on non-slip or rough-surfaced floorings as well as fully vitrified tiles, the remaining bloom must be carefully removed being still fresh (carry out a trial grouting as well as a trial cleaning). In case of polished vitrified tiles, colour pigments can adhere to the micropores in the surface of the slabs. A strong colour contrast between the tiles and the grouts should be avoided.

If there is no information about grouting or pre-treatment of the tiles on the packaging, we recommend asking the manufacturer about factory pre-treatment. In case no factory pre-treatment is existent or in case of doubt a trial grouting has to be carried out, respectively a cleaning agent manufacturer has to be contacted concerning grouting assistance / impregnation.

For laying and grouting glass mosaic in steam-baths we recommend using the epoxy resin adhesive and grouting mortar SCHÖNOX CF DESIGN.

For grouting glass tiles, glass mosaic, borders and similar covering material, the use of a grouting mortar without silica sand can be necessary because of the surface sensitivity (contact the manufacturer).

#### Requirements of substrate

■ Flanks of joints must be clean and free of separating substances.

#### Technical data

- Pot life: approx. 30 minutes at +20 °C
- Ready for foot traffic: after approx. 3 hours
- fully loadable: after approx. 7 days.
- Application temperature: +5 °C to +25 °C
- Joint width: from 1 to 10 mm
- Joint width natural/artificial stone tiles: from 1 to 5 mm
- Material consumption: 0,3 - 3,0 kg/m², depending on tile size and size of the grout
- Colour: available in various colors
- Temperature resistance:
- -20 °C up to +80 °C





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- Immediately after laying, raking-out the joints to tile thickness evenly.
- The point for grouting tiles laid according to the thin-bed method is depending on the used tile adhesive and is inbetween 3 and 24 hours. In the case of large-format tiles, the time until the tile adhesive has hardened can affect the substrate's absorbency and the climatic conditions. If necessary, fast-setting SCHÖNOX tile adhesives must be included.
- Using the thick-bed method, the mortar must be sufficiently hard and dry, gouting at the earliest after 7 days.
- The requirements of DIN 18 352 are applicable.

#### Mixing ratio

■ For 5,0 kg SCHÖNOX SF DESIGN approx. 1,4 - 1,45 l water

### Recommended method of working

- Using a clean receptacle, add SCHÖNOX SF DESIGN to cold clean water to form a homogeneous mixture. Use of a mixer with 600 rpm is recommended.
- The grout mortar is deeply inserted into the grout with a slurry consistency using a rubber spatula or grout float.
- To achieve an optimum filling of the joint, repeat the grouting, avoid to powder the joints.
- After applying the jointing material, approx. 15 to 45 minutes depending on the absorbency of the covering, wash off the contours with a sponge or sponge board and some water without washing out the joints. If residues of the jointing material are more strongly attracted to the surface of the covering and have dried in, you can simply loosen and wash off the contours by moistening the surface.
- For clean and rapid grouting we recommend using a grouting box.
- Because of the different absorbency for natural stones, we recommend rewashing with a damp sponge.
- Marble, limestone and carbonate containing natural stones may not be acidified.

- In border area of porous natural stones shades can occur. This hues are not due to the quality of the grout mortar.
- It is advisable to create and evaluate a sample surface for natural stones which are sensitive to discoloration. In individual cases, the pretreatment can be carried out with a suitable joining aid, e.g. Lithofin, make sense.
- With high absorbent natural stones, the joint should be wiped wet within the first three days. This finish-treatment guarantees an optimum hardening.
- For building movement joints and field definition joints we recommend using SCHÖNOX ES and for natural stones SCHÖNOX MFS.

#### **Packaging**

■ 5 kg polyethylene-aluminum bag (4 pieces per box)

#### Storage

- Store SCHÖNOX SF DESIGN in cool, dry conditions.
- 5,0 polyethylene-aluminum bag, storage life 18 month
- 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<sup>PLUS</sup>: very low emission

#### **GISCODE**

■ ZP1 - cement products, low in chromate

#### **EPD - Self-declaration**

Sika Deutschland GmbH declares that the product fullfills the criteria for modified mineral mortars of group 2.

### 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

EPDEPD-FEI-20160042-IBG1-EN

#### Instructions

- Brighter colours may become soiled faster than darker colours, especially in floor and outside areas.
- Protect ceramic coverings during and after grouting against direct sunlight and draughts.
- Clean tools in water immediately after use.
- All values are approximate and are subject to local climatic fluctuations.
- All information applies to standard conditions.
- SCHÖNOX SF DESIGN 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.
- Uneven effects of moisture caused by, e.g. the substructure, mortar bed or covering may result in colour shading in the structure of the grouts. This does not effect the quality of the grouting material and may increasingly normalize if the environmental conditions are good. We do not accept any warranty for differences in the colour tone.
- The use of SCHÖNOX SF DESIGN does not replace the necessity for sealing measures.
- When selecting the grouting, we recommend always observing the specifications of the ceramics manufacturer.
- Slight colour deviations are possible. Therefore use only grout mortar with the same lot number on the same object.

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- The grouting with SCHÖNOX SF DESIGN is not acid-proof. Acidic cleaners that are made using, e.g. citric acid, acetic acid or other acids may lead to long-term damages to the grout. Therefore cleaning preferably should be done by using neutral or slightly alkaline cleaning agents. When using these cleaning agents, observe the instructions of the manufacturer and avoid overdosing. Improper cleaning voids the warranty.
- Areas which are grouted with SCHÖNOX SF DESIGN can be cleaned with household steam cleaners (without using scrabbers) 7 days after grouting.
- For grouting glass mosaic in public swimming pools with high requirements e.g. high pressure cleaning or chemical resistance, we recommend the epoxy resin colour grouting compound SCHÖNOX CF DESIGN for grouting.

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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