

### Flexible 1-component cementitious membrane

for interior applications. Intended for waterproofing under ceramic tiles and natural stones in wet room. With the addition of 18.0 kg powder and 4.7 l of water, SCHÖNOX 1K DS is ready for use. SCHÖNOX 1K DS is waterproof and crackbridging, approved according ETAG 022.

### Product characteristics

- Approved according ETAG 022
- EMICODE EC 1<sup>PLUS</sup>: very low emission
- watertight
- highly flexible
- crackbridging
- suitable for application on subfloor heating systems
- diffusion permeable
- high bonding strength
- resistant against ageing
- hydraulic setting
- easy to apply
- sprayable
- low in chromate according to REACH

### Applications

**SCHÖNOX 1K DS is especially suitable before the sealing:**

- in wet rooms
- in highly loaded commercial wet rooms, such as shower rooms in sport halls, therapy rooms in hospitals and the like

### Substrates

**SCHÖNOX 1K DS is suitable for sealing on:**

- concrete
- masonry (fully grouted)
- cement and rapid cement screeds
- calcium sulphate based screeds
- old substrates such as ceramic tiles, natural stones and terrazzo
- 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  $>2,5 \text{ N/mm}^2$
- composite elements of polystyrene coated with mortar
- pre-cast hollow wall panels of lightweight concrete
- pre-cast aerated concrete wall slabs
- gypsum board

### 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 "friable" areas of the subfloor must be mechanically removed and the subfloor repaired with SCHÖNOX levelling compounds as required.
- Layers of water-soluble adhesives, e.g. sulphite-waste-adhesives, are to be mechanically removed.
- 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.
- Smooth rock pockets in concrete and coarsely porous concrete substrates using SCHÖNOX PL.

### Priming

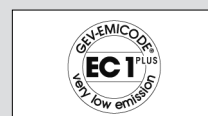
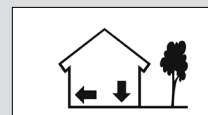
- **normal absorbent substrates:**  
priming not required  
Cement screeds and concrete can be pre-wetted so that is matt-damp.
- **highly absorbent substrates:**  
prime with SCHÖNOX KH (1:3) or SCHÖNOX KH FIX .
- **calcium sulphate substrates such as:**  
- gypsum plaster  
- gypsum fibreboards  
- calcium sulphate screeds  
prime with SCHÖNOX KH (1:1) (drying time at least 24 hours) or SCHÖNOX KH FIX (drying time at least 1 hour).

### Material consumption

- **The applications in wet rooms:**  
approx.  $2,8 \text{ kg/m}^2$  for two layer application.
- **Layer thickness:**  
Wet layer thickness minimum 1,2 mm for each application, dry layer-thick-

### Technical data

- Color: grey
- Pot life: approx. 60 minutes at +20 °C
- Application temperature: not below +5 °C
- Temperature resistance: -20 °C up to +80 °C
- Ready for foot traffic/drying time between 1. and 2. coat. approx. 5 hours
- Ready for covering: after approx. 24 hours for interior areas. Please note that the stated drying times and times for further processing are influenced by ambient conditions like temperature, relative humidity, solar radiation, different substrates and so on.



ness of the whole coating minimum 2,0 mm.

- During the application of SCHÖNOX 1K DS the wet film thickness could be controlled with the SCHÖNOX NASSSCHICHTDICKENMESSER.
- Alternatively the layer thickness could be controlled and calculated during the application in dependence of the material consumption (kg per m<sup>2</sup>).

### Mixing ratio

- For 18.0 kg SCHÖNOX 1K DS approx. 4.7 l water

### Recommended method of working

- Using a clean receptacle, add SCHÖNOX 1K DS to cold clean water to form a homogeneous mixture. Use of a mixer with 600 rpm is recommended.
- To get a spreadable consistency for the first layer approx. 0,5 l water can be added.
- To guarantee a save sealing SCHÖNOX 1K DS has to be applied in min. two work steps. The needed dry layer thickness must be observed. Apply the first layer with brush, roll or steel float. Second layer should be applied with a steel float.
- Protect curing SCHÖNOX 1K DS layers from high ambient temperatures, direct sunlight and draughts.
- Movement joints as well as floor- and wall connection joints should be bridged with SCHÖNOX ST SEALING TAPE, SCHÖNOX ST INTERIOR ANGLE and SCHÖNOX ST EXTERIOR ANGLE.
- The penetrations around floor drains and pipes should be sealed with SCHÖNOX ST BC, ST BC L, ST FC
- The SCHÖNOX ST SEALING TAPE and the SCHÖNOX ST-COMPONENTS are used for the realization of details before applying the membrane to the entire surface area.
- Install SCHÖNOX ST SEALING TAPE and SCHÖNOX ST-COMPONENTS at abutting edges with at least 5 cm overlapping.
- After execution of all details, applying the bonded sealing to the whole surface can start.

- Sealing tapes, sealing sleeves and sealing angles can be fully worked over with the second layer of the bonded sealing.
- In areas with moveable zones, e.g. loop installing or over movement- and building joints, spare the bonded sealing in the same width.
- To guarantee the function of the membrane, this procedure must be carried out carefully.
- For more information see product data sheet SCHÖNOX ST SEALING TAPE.
- SCHÖNOX 1K DS can also be applied with the spraying method. Therefore we recommend using the spraying machine duo mix 2000 from m-tec. Please ask for additional information.
- Clean tools in water immediately after use.
- On the completely dried membrane tiles can be bonded directly.
- Repair of subsequently damaged areas: Reconstruct using the same layer thickness, overlapping the undamaged area by at least 5 cm. Required drying times must be observed prior to laying new tiles.

### Packaging

- 18.0 kg paper sack

### Storage

- Store SCHÖNOX 1K DS in cool, dry, frost-free 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 of all trickles and dispose of in accordance with the regulations.
- For the disposal of product residues, waste water and containers with adherent product residues please follow the local governmental regulations.

### Instructions

- All values are approximate and are subject to local climatic fluctuations.

- SCHÖNOX 1K DS 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.
- During the curing process the sealing may not be loaded with water.
- High temperatures accelerate, low temperatures decelerate the working and curing process.
- Direct contact with metals such as copper, zinc and aluminum is to be prevented by a pore sealing primer (SCHÖNOX GEA, 2 coats).
- Penetrations should be treated with thin bed flanges in a minimum circumferential width of 5 cm and made from a material suitable for bonding. Untreated metal surfaces, e.g. Stainless steel, gunmetal and PVC surfaces are to be primed with SCHÖNOX GEA and sand in the fresh state. If necessary obtain special information about flange systems.
- EC 1<sup>PLUS</sup>: very low emission

The applicable recommendations, guidelines 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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