

### Flexible 1-component cementitious membrane

for interior and exterior areas. With the addition of 20.0 kg of powder to 5.2 l water, SCHÖNOX 1K DS is ready to use. SCHÖNOX 1K DS is waterproof and crackbridging. For example on balconies and terraces and in swimming pools. SCHÖNOX 1K DS meets the requirements of the moisture loading classes A0 and B0. SCHÖNOX 1K DS is authorized by the German building supervision for the preparation of bonded membranes in highly loaded wet areas in the moisture loading classes A and B according to building regulation A, Part 2, Figure 2.50.

### Product characteristics

- officially approved - no.:
  - P-5114/550/10-MPA-BS
  - P-5216/636/07-MPA-BS
  - P-5218/638/07-MPA-BS
  - P-AB/10361/03.1-2007
  - P-AB/10361/01.2-06
  - P-AB/10361/07.2-06
- watertight
- highly flexible
- crackbridging
- suitable for application on subfloor heating systems
- frost resistant
- diffusion permeable
- high bonding strength
- resistant against ageing
- hydraulic setting
- easy to apply
- sprayable
- fulfills the requirements of DVGW leaflet W 270 "Increase of microorganism on materials in drinking water areas" in combination with SCHÖNOX PFK and SCHÖNOX SU
- fulfills the KSW-requirements in combination with SCHÖNOX PFK and SCHÖNOX SU
- low in chromate according to REACH

### Applications

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

- on balconies and terraces
- in highly loaded commercial wet rooms, such as shower rooms in sport halls, therapy rooms in hospitals and the like
- in swimming pools and water basins in combination with ceramic coverings also in combination with the thick-bed method.
- SCHÖNOX 1K DS meets the requirements of the moisture loading classes A0 and B0 for membranes in the leaflet „Hinweise für die Ausführung von Ab-

- dichtungen im Verbund mit Bekleidungen und Belägen aus Fliesen und Platten für den Innen- und Außenbereich" and the leaflet „Keramische Beläge im Schwimmbadbau - Hinweise für Planung und Ausführung".
- SCHÖNOX 1K DS is authorized by the German building supervision for the preparation of bonded sealings in highly loaded wet areas in the moisture loading classes A and B according to building regulation A, Part 2, Figure 2.50.
- also by the subsequent thickbed method with sprayed-on daub

### Substrates

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

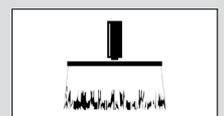
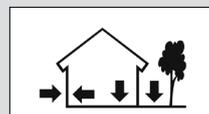
- concrete
- masonry (fully grouted)
- cement and rapid cement screeds
- calcium sulphate based screeds
- old substrates such as ceramic tiles, natural stones and terrazzo
- cement plaster, lime-cement plaster (CS II, CS III of CS IV according to EN 998-1, compression strength  $\geq 2,5 \text{ N/mm}^2$ )
- gypsum plaster according to EN 13279-1, compression strength  $\geq 2,5 \text{ N/mm}^2$ ; residual moisture  $\leq 1,0 \text{ CM-\%}$ )
- 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

### 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 and exterior areas. Please note that the stated drying times and times for further processing are influenced by ambient conditions like temperature, relative humidity, solar radiation, wind regime, different substrates and so on.



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 thoroughly 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

**Moisture loading class A0, B0 and A:**  
approx. 2,6 kg/m<sup>2</sup> for two layer application.

**Moisture loading class B:**  
approx. 3,6 kg/m<sup>2</sup> for two layer application.

- **Layer thickness:**  
**Moisture loading class A0, B0 and A:**  
Wet layer thickness minimum 1,2 mm for each application, dry layer-thickness of the whole coating minimum 2,0 mm.  
**Moisture loading class B:**  
Wet layer thickness minimum 1,7 mm for each application, dry layer-thickness of the whole coating minimum 2,8 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. 5.2 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.
- Floor drains and pipe penetrations should be furnished with SCHÖNOX ST FC SEALING SLEEVE FLOOR and SCHÖNOX ST D STRETCHABLE SEALING SLEEVE WALL.
- 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 7.65, 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.
- Immediately after use clean tools with water.
- 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

- 20.0 kg paper sack

### Storage

- Store SCHÖNOX 1K DS in cool, dry, frost-free conditions.
- Storage life of 1 year (in closed packaging).
- Opened bags 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.

### GISCODE

- ZP1 - cement products, low in chromate

### 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.
- Wipe impurities immediately from the covering surface and remove residual skin using a suitable cleaning agent (e.g. SCHÖNOX FIX CLEAN).
- For working in exterior areas basically the atmospheric conditions must be stronger considered. Protect the work against imminent rainfalls with a suitable roofing.
- 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.
- For sealing application in brine baths please ask for further information.

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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