

### Highly dust reduced, extremely flexible special powder adhesive

Characterized by very good application properties, highest flexibility and highest elastic deformation. Especially suitable for laying on "infant cementitious screeds". Acts as an uncoupling layer, reduces tension and can be used in many cases without priming. Ideal for large-sized fully vitrified tiles. Q12 all-purpose suitable with the thin-bed method on walls and floors. Applicable as pourable mortar on floors. For interior and exterior.

### Product characteristics

- appr. 90 % less dust while mixing
- EMICODE EC 1<sup>PLUS</sup> R: very low emission, regulated
- fulfills the C2 TE S2 requirements according to EN 12004
- frost resistant according to EN 12004
- water-proof according to EN 12004
- Q-TEC - 100% Safe Performance - variable mix
- component of the SCHÖNOX BALTERRA®-system
- with external official test certificate, proved with min. and max. addition of water
- variable adjustable consistency
- contains lightweighted fillers
- highly deformable
- highly flexible
- relieves stress, functions as a uncoupling layer
- for interior and exterior use
- long adjusting time
- sturdy
- reinforced with fibres
- on many substrates no priming required
- extreme tensile-, compression- and shear strength
- very smooth application
- suitable for application on subfloor heating systems
- highly synthetic-resin modified
- long open time
- layer-thickness up to 10 mm
- possible to level out
- safe application and multi-purpose use
- low in chromate according to REACH

### Applications

**SCHÖNOX Q12 is suitable for setting with the thin-bed-method according to DIN 18 157 of:**

- ceramic coverings
- fully vitrified tiles
- earthenware tiles

- stoneware tiles
- stoneware mosaic
- split clinker flags and floor quarry
- clinker one-quarter bricks
- cotto
- hand-made slabs
- coarse-ceramic
- natural, artificial and concrete stone slabs not sensitive to deformation
- natural-, artificial- and cast stone tiles not sensitive to discolouration
- ceramic tiles on substrates, where stress can occur
- ceramic tiles on balconies, terraces, facades
- ceramic tiles in swimming pools
- soft and construction boards

**SCHÖNOX Q12 is particularly suitable with the thinbed- method according to DIN 18157 part 1 for the following application fields:**

- on "Infant cementitious screeds" (unheated)
  - for reconstruction and renovation, wherever, there an additional uncoupling is necessary
  - in vapour-baths
- For laying and grouting glass mosaic in steam-baths we recommend using the epoxy resin adhesive and grouting mortar SCHÖNOX CF DESIGN.

### Substrates

**SCHÖNOX Q12 is suitable on:**

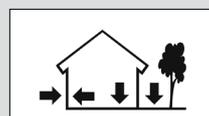
- substrates, exposed to stresses
- SCHÖNOX water membranes
- "Infant cementitious screeds" (unheated) after subjected to foot traffic up to 5 days after installation, quality at least CT-F4
- concrete floors (at least 28 days old respectively obtain supplementary information.)
- concrete walls (at least 3 months old respectively obtain supplementary information.)
- aerated concrete

### Technical data

- Pot life: approx. 60 minutes at +20 °C
- Open time (EN 1346):<sup>1</sup> approx. 30 minutes
- Ready for foot traffic: after approx. 24 hours
- Ready for grouting: after approx. 24 hours in interior areas, at least after approx. 48 hours in exterior areas.
- Application temperature: not below +5 °C
- Temperature resistance: completely cured -20 °C to +80 °C
- Material consumption (powder):
  - with 4 mm notched trowel approx. 1,4 kg/m<sup>2</sup>
  - with 6 mm notched trowel approx. 1,7 kg/m<sup>2</sup>
  - with 8 mm notched trowel approx. 2,2 kg/m<sup>2</sup>
  - with 10 mm notched trowel approx. 2,7 kg/m<sup>2</sup>
  - with half-moon (20/13) notched trowel: approx. 3,9 kg/m<sup>2</sup>

<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.

- Reaction to fire: E



- 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  $\leq 1,0 \text{ CM-}\%$ )
- gypsum board
- soft and construction boards
- masonry
- gypsum bricks (moisture content  $\leq 5,0 \%$ )
- SCHÖNOX water membranes
- cement and rapid cement screeds
- mastic asphalt screeds (sanded) IC 10 and IC 15 according to EN 13 813, layer-thickness 1 to 5 mm
- dry screeds
- calcium sulphate based screeds
- magnesia screeds
- old concrete blocks and natural stones
- old ceramic coverings
- On floors in exterior areas, and in combination with bonded sealings and/or thin-bed drainages (e.g. SCHÖNOX 2K DS RAPID, SCHÖNOX EP DRAIN or SCHLÜTER DITRA-DRAIN) adhesive layer thickness max. 5 mm for floating- or floating- and the buttering-floating-method. Regarding the BALTERRA®-combination with SCHÖNOX EP DRAIN: SCHÖNOX Q12, SCHÖNOX Q6, SCHÖNOX Q6 W and SCHÖNOX TT S8 are recommended.
- The mid-bed or thick-bed method in the BALTERRA®-combination is recommended with SCHÖNOX MSE, SCHÖNOX Q6 und SCHÖNOX Q6 W. For supporting the functionality of the drainage in the joint area, the buttering-method has to be used.
- The product data sheets of the system-products have to be respected.

### 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 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.
- Laying on "infant cementitious screeds" (unheated) after accessibility up to 5 days after installation. Quality of the screed at least CT-F4 according to EN 13 813.
- With subsequent installation of ceramic coverings, cement screeds are required to be at least 28 days old, match strength class F4 and to display a residual moisture reading of  $\leq 4.0 \text{ CM-}\%$  (heating screeds  $\leq 2.0 \text{ CM-}\%$ ), calcium sulphate screeds should have a reading of  $\leq 0.5 \text{ CM-}\%$  (heating screeds  $\leq 0.3 \text{ CM-}\%$ ).
- 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 thin-bed mortar in the corresponding moisture loading classes should be followed.
- 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.
- For laying mosaic in walk-in showers, we recommend using front side paper bonded or foil bonded material. For bonding mosaic on the floor of walk-in showers (build with mortar coated rigid-foam boards XPS or EPS) use an epoxy mortar like SCHÖNOX CF DESIGN.

### 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).
- On gypsum-bricks tiles can be laid without using a primer up to a moisture content of max. 5,0 % with SCHÖNOX Q12. Unevenness up to 5 mm can be levelled with SCHÖNOX Q12 before applying the adhesive.
- **magnesia screeds:**
  - prime with SCHÖNOX GEA and sand. Instead of sanding, SCHÖNOX GEA can be primed with SCHÖNOX SHP.
- **non-absorbent, smooth, sound substrates such as:**
  - mastic asphalt screeds, insufficient sanded
  - prime with SCHÖNOX SHP.
  - ceramic coverings, stable, thoroughly cleaned and if necessary abraded
  - priming not required

### Mixing ratio

#### Thin-bed mortar:

- For 25,0 kg SCHÖNOX Q12 approx. 7,0 l water

#### Flow-bed mortar:

- For 25,0 kg SCHÖNOX Q12 approx. 9,0 l water

#### Levelling consistency:

- For 25,0 kg SCHÖNOX Q12 approx. 9,0 l water

### Recommended method of working

- Using a clean receptacle, add SCHÖNOX Q12 to cold clean water to form a homogeneous mixture. Use of a mixer with 600 rpm is recommended.
- Do not mix more material than can be handled within 60 minutes.
- 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.
- Unevenness up to 10 mm can be levelled with SCHÖNOX Q12.

- We recommend SCHÖNOX floor levelling compounds for full-surface levelling.
- Material that has already been set cannot be re-mixed with additional water or powder.
- Immediately after use clean tools with water.
- SCHÖNOX Q12 is suitable for application with the floating-, the buttering- and floating-buttering method according to DIN 18 157.
- For laying large-sized tiles and slabs, pay attention to the valid basic rules and standards.
- For laying on old ceramic coverings on walls in interior areas we recommend SCHÖNOX SHP for priming. Alternative pre-scratch levelling can be done with SCHÖNOX Q12.
- Outer wall coverings on WDVS systems are excluded, as this area requires an officially approved test certificate for the entire system.
- In case of laying highly absorbent Chinese granite (e.g. Padang) irreversible discolouration can appear. We recommend a test bonding.
- For exterior areas use only suitable natural stones.
- The laying of ceramic tiles and slabs and natural stones on hollow floors without a screed as additional burden-sharing layer, should not be done without the approval of the planner for the hollow floor and the designated covering. It is to use a thin-bed mortar of the category C2 S1 with the buttering-floating method or a TT-floor adhesive of the category C2 S1 with flowing consistency. For sizes from 40/40 cm respectively from 60/30 cm also with TT-floor adhesives it is necessary to apply a contact layer on the backside of the tiles.
- For laying natural stones sensitive to discolouration we recommend depending on the substrate and the covering: SCHÖNOX Q9 W.
- To avoid deformation of "infant" cementitious screeds because of uneven drying out (dish of the screed), floating screeds or screeds on separating layer

should be covered as soon as possible (as soon as the screed is accessible). Not later than 5 days after installation of the screed, tiling should be finished. If necessary screed should be covered with a foil or primed with SCHÖNOX KH, 1:3 diluted with water, to avoid quick drying out.

### 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 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 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

- 25.0 kg paper sack

### Storage

- Store SCHÖNOX Q12 in cool, dry 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.

### EMICODE

- EC 1<sup>PLUS</sup> R: very low emission, regulated

### GISCODE

- ZP1 - cement products, low in chromate

### EPD - Self-declaration

SCHÖNOX GmbH declares as a statutory member of Deutsche Bauchemie and Industrieverband Klebstoffe that the product fulfills the criteria for modified mineral mortars of group 3.

### ENVIRONMENTAL PRODUCT DECLARATION

acc. to ISO 14025 and EN 15804

### Owner of declaration

Deutsche Bauchemie e.V.  
Industrieverband Klebstoffe e.V.  
Verband der deutschen Lack- und Druckfarbenindustrie e.V.

### Editor

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

### Program owner

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

### Number of declaration

EPD-DIV201300981BE1DE

### Date of issue

30.07.2013

### Valid until

29.07.2018

### Instructions

- All values are approximate and are subject to local climatic fluctuations.
- SCHÖNOX Q12 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.

- Please follow the relevant product data sheets when using complementary products. If in doubt, we recommend obtaining further information from the manufacturer.
- Protect SCHÖNOX Q12 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.

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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