

# SCHÖNOX ZM

Product data sheet **3.83**

## Very low emission, self levelling, cementitious smoothing and levelling compound

for all substrates suitable for laying, also for improvement areas interior. SCHÖNOX ZM is characterised by a very low shrinkage and good self levelling properties.

### Product characteristics

- EMICODE EC 1<sup>PLUS</sup> R: very low emission, regulated
- for interior use
- self-levelling
- very smooth application
- very good grindable
- optimized absorptivity
- high level of hardness and strength
- suitable for application on subfloor heating systems
- synthetic resin-modified
- layer-thickness 1,0 to 15 mm without aggregates
- layer-thickness 10 to 25 mm with aggregates
- drying by hydration
- pumpable
- low tension/stress
- suitable for castor wheels loading with layer-thickness more than 1,0 mm according to EN 12 529
- low porosity surface
- high filling capacity in deepenings
- low in chromate according to REACH

### Applications

**SCHÖNOX ZM is suitable for filling, smoothing, evening and levelling of substrates:**

- under textile and elastic coverings
- for full-surface levelling under parquet, layer thickness at least 2,0 mm
- in interior areas.

### Substrates

**SCHÖNOX ZM is suitable for filling, smoothing, evening and levelling of:**

- concrete
- cement and rapid cement screeds
- calcium sulphate based screeds
- old substrates with old water-resistant adhesive residues
- mastic asphalt screeds (sanded) IC 10 and IC 15 according to EN 13 813, layer-thickness 1,5 to 3,0 mm

- Old mastic asphalt screeds IC 10 and IC 15 (if necessary, obtain advice on the hardness class test in an asphalt laboratory) according to EN 13 813, often contain cracks or are embrittled, depending on their composition, age, strength and use. This renovation substrate does not display sufficient load-bearing strength for taking even a low-stress, cementitious levelling compounds. For this purpose, we recommend using stress-free, gypsum SCHÖNOX-levelling compound. If in doubt, please obtain supplementary information.
- magnesia screeds with mineral aggregates
- old substrates such as ceramic tiles, natural stones and terrazzo
- suitable particle board or OSB constructions, screwed

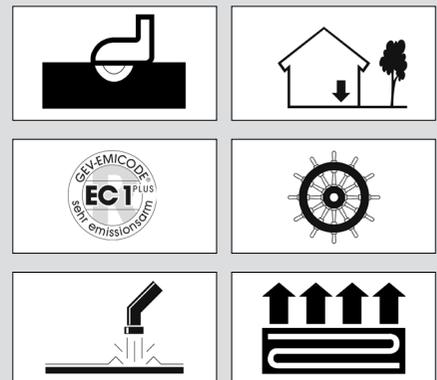
### Requirements of substrate

- 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.
- Old, loose and weak levelling layers should be removed mechanically.
- With subsequent installation of floor coverings, cement screeds are required to display a residual moisture reading of  $\leq 2.0$  CM-% (heating screeds  $\leq 1.8$  CM-%), calcium sulphate screeds should have a reading of  $\leq 0.5$  CM-% (heating screeds  $\leq 0.3$  CM-%).
- Layers of water-soluble adhesives, e.g. sulphite-waste-adhesives, are to be mechanically removed. Remaining adhesive residues should be primed with SCHÖNOX HP RAPID.

### Technical data

- Pot life: approx. 30 minutes at 20 °C
- Ready for foot traffic: after approx. 2 hours
- Ready for covering:
  - up to 3 mm after approx. 12 hours for all kinds of coverings
  - up to 5 mm after approx. 24 hours for all kinds of coverings
  - up to 10 mm after approx. 48 hours for all kinds of coverings
- Application temperature: not below 5 °C floor temperature
- Material consumption: approx. 1,5 kg/m<sup>2</sup>/mm
- Reaction to fire: A1 / A1<sub>fl</sub>

All values are approximate and are subject to climatic fluctuations.



- 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.
- Rooms in buildings without a basement, are to be sealed against rising dampness in compliance with the standard.
- The requirements of the relevant valid standards, guidelines and data sheets apply.

## Priming

### ■ normal absorbent substrates such as:

- cement screeds
- rapid cement screeds
- concrete

prime with SCHÖNOX VD (1:3) or SCHÖNOX VD FIX.

### ■ non-absorbent, smooth, sound substrates such as:

- mastic asphalt screeds, insufficient sanded
- old water-resistant adhesive residues, almost completely removed
- ceramic tiles

prime with SCHÖNOX SHP or SCHÖNOX VD (neat).

### ■ calcium sulphate substrates such as:

- calcium sulphate screeds
- prime with SCHÖNOX VD FIX (drying time 60 minutes) or SCHÖNOX VD (1:1 / drying time at least 24 hours).

For layer-thickness exceeding 10 mm we recommend priming with SCHÖNOX HP RAPID.

### ■ magnesia screeds (not xylolite):

prime with SCHÖNOX SHP.

### ■ Wooden substrates like e.g.:

- Chipboard or OSB
- protect against moisture with SCHÖNOX VD (neat)(drying time 2 hours).

## Mixing ratio

- For 25,0 kg SCHÖNOX ZM approx. 6,25 - 6,50 l water

### Extended levelling compound:

Max. 6,50 l water for 25,0 kg SCHÖNOX ZM. The additive is added last.

**Layer thickness of 10 to 25 mm:**

Bulking material approx. 65 wt.% corresponds to 16,0 kg or 10 l of SCHÖNOX QUARZSAND 0,1 - 3,0 mm for 25,0 kg SCHÖNOX ZM

## Recommended method of working

- Using a clean receptacle, add SCHÖNOX ZM to cold clean water to form a homogeneous mixture. Use of a mixer with disc stirring rod is recommended. After a short maturing time, mix again thoroughly. Then pour out the levelling compound and spread using a smoothing trowel. Even surfaces are easily achieved with the SCHÖNOX SCHWEDENRAKEL. With the use of the SCHÖNOX SCHWEDENRAKEL it is possible to achieve an even surface without difficulties. It is usually not necessary to remove trowelling defects or to level more than once.

- In the case of higher layer-thickness, contact with vertical structures should be avoided by putting in an perimeter isolating strip.

- If a second layer of levelling compound is to be applied, the first levelling compound layer should be primed with SCHÖNOX VD (1:1) or SCHÖNOX VD FIX when dry. The maximum layer thickness may not be exceeded in case of two-layer application. The second layer may not exceed the layer thickness of the first.

- Carry out preparatory work - such as filling joints, evening out hollows and unevenness - using the sturdy repair mortar SCHÖNOX RR.

- Protect curing SCHÖNOX ZM levelling layers from high ambient temperatures, direct sunlight and draughts.

- Full-surface levelling is needed under elastic coverings at least 2mm.

- Contact to metal like water-bearing pipes must be avoided (e.g. sealing of pipe penetrations), because especially galvanised steel pipes have no sufficient corrosion protection.

- Immediately after use clean tools with water.

## Packaging

- 25.0 kg paper sack
- 1000 kg Big Bag

## Storage

- Store SCHÖNOX ZM in cool, dry conditions.
- Storage life of 6 months.
- 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.

## 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 1.

## 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

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## Date of issue

30.07.2013

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**Valid until**  
29.07.2018

## Instructions

- All information applies to standard conditions and relates to the non-extended levelling compound.
- SCHÖNOX ZM 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.
- The BEB-leaflet "Beurteilen und Vorbereiten von Untergründen; Verlegen von elastischen und textilen Bodenbelägen, Schichtstoffelementen (Laminat), Parkett und Holzpflaster; Beheizte und unbeheizte Fußbodenkonstruktionen" should be followed.

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 SCHÖNOX management system is certified to  
ISO 9001 and 14001 by SQS

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