

Cementitious primary deck covering for ships and offshore rigs

for use at a density of 0,7 - 2,0 kg/dm³. The screed can be laid directly on to shop-primed steel substrates without further priming. The weight of SCHÖNOX MDE SF I can be reduced further by extending up to 65 % Poraver® (4 mm) / 200 % sand . SCHÖNOX MDE SF I complies with MED Directive 2014/90/EU.

Product characteristics

- self-levelling
- EMICODE EC 1^{PLUS} R: very low emission, regulated
- one component
- pumpable
- water resistant
- synthetic resin-modified
- quick drying time
- high strength values
- low flammability characteristics
- extendable with Poraver® (1,0 to 4,0 mm grain size)
- layer-thickness 1 to 10 mm without aggregates
- layer-thickness 1 to 30 mm with aggregates
- low in chromate according to REACH
- hydraulic setting

Applications

SCHÖNOX MDE SF I is suitable for:

- levelling of metal substrates
- preparing floors to accept ceramic tiles, natural stone tiles, parquet flooring, PVC, rubber and textile coverings as well as reaction resin coatings
- preparing screeds and sloping screeding compounds for cabins, kitchens, bathrooms, rest rooms, store rooms, crew's quarters and staircases

Substrates

- Shop primed steel substrates can be primed directly
- Aluminium, zinc, stainless steel and other coated substrates prime with SCHÖNOX SHP.

Requirements of substrate

- The substrate must be resistant to compressive and tensile forces, suitably load-bearing, dry and free of dirt, oil, grease and separating layers.
- Loose particles of substrate, remnants of adhesives, coats of paint, etc. are

to be removed by suitable mechanical methods, e.g. grinding, brushing or blasting.

- Dirt and residues of oil and grease must be removed with suitable cleaning chemicals, using a cleaning machine with a black pad.
- The washing solution must be removed without trace, after which at least one washing process with clean water is to be carried out.
- Metal decks must always be sufficiently protected from corrosion.

Priming

■ Shop primed steel decks:

no priming required

■ Metal substrates (in dry areas) such as:

- aluminium, zinc, stainless steel
- coated steel

prime with SCHÖNOX SHP.

Use a suitable roller and build up a close film (approx. 100 - 150 g/m²).

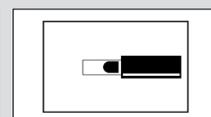
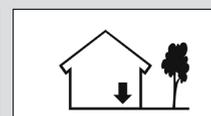
In permanently wet loaded areas (such as Crew Showers) always prime with fully sand broadcasted epoxy.

Mixing ratio

- Without addition of Poraver®: 5,5 l water + 25,0 kg SCHÖNOX MDE SF I gives 1,6 rel.density, dry (kg/mm/m²).
- With addition of Poraver®: 9,0 l water + 25,0 kg SCHÖNOX MDE SF I + 16,5 kg Poraver® 0.5 - 1 mm gives 0,7 rel.density, dry (kg/mm/m²).
- The mixture SCHÖNOX MDE SF I with Poraver® gives a sturdy mortar.
- All values are approximate and apply to +20°C and 65% rel. humidity.
- With addition of Silica sand: 5,5 l water + 25,0 kg SCHÖNOX MDE SF I + 12,5 kg Silica sand (0,2 - 0,8 mm) gives 1,8 rel.density, dry (kg/mm/m²).
- With addition of Silica sand: 6,5 l water + 25,0 kg SCHÖNOX MDE SF I + 50,0 kg Silica sand (0,1 - 3,0 mm) gives 2,0 rel.density, dry (kg/mm/m²).

Technical data

- Basis: polymer modified cement mortar
- Color: grey
- Compressive strength: approx. 48 MPa (after 28 days)
- Flexural strength: approx. 12 MPa (after 28 days)
- Density (fresh mixed): 1,8 g/cm³
- Density (cured): 1,6 g/cm³
- Modulus of elasticity in compression: 11 GPa
- Tensile strength: 3,4 MPa (SCHÖNOX MDE SF I on SCHÖNOX SHP)
- Pot life: approx. 45 minutes at +20 °C
- Ready for foot traffic: after approx. 3 hours
- Ready for covering: after approx. 16 hours with ceramic tiles, other coverings after 3 days (up to 10 mm layer thickness). In case of thick compensating coats, extending with Poraver® and adverse climatic conditions, longer drying times can be expected.
- Application temperature: +10 °C to +30 °C
- Material consumption: approx. 1,6 kg/m²/mm
- SCHÖNOX MDE SF I with addition of Poraver®: 0,7 kg/m²/mm.



Recommended method of working

- Using a clean receptacle, add SCHÖNOX MDE SF I to cold clean water to form a homogeneous mixture. Use of a mixer with 600 rpm is recommended.
- The additive is added last.
- The mortar will be applied and spread to the substrate using a smoothing trowel.
- Mortar and bulking material must be smoothed with SCHÖNOX ZM before laying textile and elastic coverings.

- Ceramic tiles and natural stones could be laid directly on SCHÖNOX MDE SF I in areas that are not constantly loaded with water.
- In moist rooms and kitchen an additional waterproofing membrane is necessary.
- Clean tools in water immediately after use.

Packaging

- 25,0 kg paper sack

Storage

- Store SCHÖNOX MDE SF I in cool, dry conditions.
- Storage life of 6 months.
- Opened packages should be closed immediately.

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.

GISCODE

- ZP1 - cement products, low in chromate

EMICODE

- EC 1^{PLUS} R: very low emission, regulated

Instructions

- All information applies to standard conditions and relates to the non-extended levelling compound.
- SCHÖNOX MDE SF I 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.

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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