



SCHÖNOX APF

Synthetic Gypsum Based Fiber-reinforced, Self-leveling Compound

Especially suitable for wooden floors as well as other critical substrates designed for refurbishment work in interior areas. Embedded fibers provide reinforcement making it unnecessary to install metal lath. SCHÖNOX APF is installed above 1/8" up to 1".



Product characteristics

- EMICODE EC 1 PLUS: very low emission
- does not support mold growth
- for interior use only
- self-leveling
- low dust
- high hardness and strength
- suitable on underfloor heating systems
- layer-thickness above 1/8" up to 1"
- very low shrinkage
- free of cracks even in higher thicknesses
- suitable for castor wheel loadings
- tested in accordance with ASTM C1708
- exceeds minimum Ff/FI requirements of ASTM and ACI when installed in accordance with the guidelines

Applications

SCHÖNOX APF is suitable for filling, smoothing and leveling of substrates:

- under flexible coverings
- under wood floor (use elastic adhesives only)

Substrates

SCHÖNOX APF is suitable on:

- timber, OSB board, plywood (well screwed down and/or bonded)
- old substrates such as ceramic tiles, terrazzo and sheet vinyl
- old, water-resistant adhesive residues
- concrete, cement substrates
- gypsum substrates

Requirements of substrate

- Subfloors must be smooth, sound, clean, dry and free of any contaminants which may hinder adhesion.
- Surface treatments or any "friable" areas of the subfloor must be mechanically removed back to a sound base and the substrate repaired with SCHÖNOX repair compounds as required.
- Thoroughly vacuum all dust or other loose material.
- All slabs on or below grade level must be known to have an intact vapor retarder directly beneath the concrete in conformance to the relevant standards. If in doubt, please contact our SCHÖNOX representative for further advise.
- This product is not a vapor barrier and will allow free passage of moisture. Follow the directions of the floor covering manufacturer regarding the maximum allowable substrate moisture content and test the substrate prior to installing SCHÖNOX APF. Where substrate moisture exceeds the maximum allowed then

application of SCHÖNOX MR 18, SCHÖNOX EPA or SCHÖNOX EPA RAPID may be used to suppress residual moisture.

- Do not install where moisture vapor emission rate (MVER) exceeds 5 lbs. per 1,000 sq. ft. per 24 hours, when using the anhydrous calcium chloride test (ASTM F1869) or when the relative humidity (RH) of the concrete slab exceeds 80% (ASTM F2170)
- Gypsum substrates should always be dry. Do not use moisture mitigation systems on gypsum substrates.
- Old water-soluble adhesives should be removed completely, old water-resistant adhesives should be mechanically removed as far as possible. The complete mechanical removal of cutback (i.e. grinding, sanding, blasting) can be hazardous as old cutback adhesive may contain asbestos. Do not sand or grind adhesive residue. Refer to the Resilient Floor Covering Institute's publication "recommended work practice for removal of resilient floor coverings" for instruction. Prime remaining adhesive residues accordingly.
- Old floors such as ceramic tiles should be thoroughly cleaned and abraded.
- Prior to install ceramic tiles we recommend to use SCHÖNOX US.
- Timber and wood floors must be stable, sound, require a normal moisture content of wood and require some space to the walls to ensure a proper ventilation of the construction. Loose boards and planks must be firmly screwed down.
- The requirements of the relevant valid standards (such as ASTM 2873-13), guidelines and data sheets apply.

Priming

- **porous substrates such as**
 - concrete, cement substrates prime with SCHÖNOX VD (1:3) or KH FIX.
 - **non porous, smooth, sound substrates such as**
 - ceramic tiles
 - old water-resistant adhesive residues, removed as far as possible
 - OSB board, plywood (well screwed down and/or bonded)
- prime with SCHÖNOX SHP or SCHÖNOX FP.
- **gypsum substrates (sanded and vacuumed)** prime with SCHÖNOX KH FIX.

Technical data

- pot life: approx. 30 minutes
- ready for foot traffic: approx. 3 hours
- ready for covering:
 - after approx. 16 hours, at 1/8"
- working temperature: 41°F - 90°F
- coverage per unit:
 - approx. 60 – 70 sq.ft. at 1/8" (depending on substrate conditions and aggregate used)
- compressive strength (ASTM C109):
 - 6200 psi / 40 N/mm² / 420 kg/cm² after 28 days
 - 2400 psi / 16 N/mm² / 144 kg/cm² after 1 day
- flexural strength (ASTM C348):
 - approx. 1600 psi / 10 N/mm² after 28 days
- tensile strength (ASTM C1583) at 1/8":
 - above 400 psi / 2.5 N/mm² after 3 days
- initial Set (ASTM C191):
 - approx. 170 minutes
- final Set (ASTM C191):
 - approx. 200 minutes
- cured density: 113 lbs. / cu.ft.
- UL-classified in accordance with ASTM E84 (ANSI/UL 723):
 - Flame Spread 0; Smoke Development 0

All values are approximate, are subject to local climatic fluctuations based upon conditions at 70°F with atmosphere of less than 65 % relative humidity following the recommended mixing ratio. Do not install underlayment or topping before the substrate has dried thoroughly.



SCHÖNOX APF

Mixing ratio

- mix each 25kg / 55lb. bag with 5.5 liters / 5.8 quarts of water

Do not overwater! Foam while mixing, or settling of the sand aggregate while placing, indicates overwatering.

Recommended method of working

- Adequate ventilation is essential when SCHÖNOX APF is being worked to ensure faster drying.

Using a clean mixing drum, add SCHÖNOX APF to cold, clean water to form a homogeneous mixture. Mix thoroughly for approx. 3 minutes using a heavy-duty drill (min. 600 rpm) to obtain a lump-free mix. Then pour the mix and spread using a smoothing trowel. Even surfaces are easily achieved using a pin leveler. In higher thicknesses using a spike roller is recommended.

- Contact to vertical structures should be avoided by putting in SCHÖNOX FOAMTAPE or SCHÖNOX RS-50. Avoid direct contact to metallic constructions (e.g. heating pipes), which can lead to corrosion.
- If a second layer of leveling compound is to be applied, prime the first layer with SCHÖNOX KH FIX after drying. The maximum layer thickness must not be exceeded in case of two layer applications. The second layer must not exceed the layer thickness of the first layer.
- Protect curing SCHÖNOX APF layers from high ambient temperatures, direct sunlight and draughts.
- Clean tools in water immediately after use.

Packaging

- 25kg / 55lb. net weight in paper bags

Storage

- Store in cool and dry conditions.
- Shelf life: 18 months unopened.
- End of shelf life does not generally indicate the end of the products suitability for the intended use. Always test in a small area.

Disposal

- Empty packaging and dispose of in accordance with federal, state and local waste disposal regulations.

VOC Content

- 0g/l (calculated), SCAQMD 1113

LEED

Contributes to LEED v4.1 certification of projects in the categories:

- EQc2 - 3 points
Low-Emitting Materials
- MRC1 - up to 2 points
Life-Cycle Impact Reduction
- MRC2 - 1 point
Environmental Product Declaration
- MRC3 - 1 point
Sourcing of Raw Materials
- MRC4 - 1 point
Material Ingredients

Environmental Product Declaration (EPD)

- Declaration number:
EPD-DBC-20220217-IBF1-EN

Instructions

- Do not use in areas of constant water exposure (such as interior swimming pools).
- Always install an adequate number of properly located test areas, to include the finish flooring, to determine the suitability of the product for its intended use. As floor coverings vary, always contact and rely upon the floor covering manufacturer for specific directions such as maximum allowable moisture content, adhesive selection, and intended end use of the product.
- Low substrate temperatures and/or high ambient humidity require longer drying times.

Precautions

- SCHÖNOX APF contains gypsum and sand aggregate. In case of contact, rinse immediately with plenty of water. In case of contact with eyes seek additional medical advice. Mix in a well ventilated area and avoid breathing powder or dust.
- Never mix with cement or additives other than SCHÖNOX approved products. Observe the basic rules of concrete work. Do not install below 41°F surface temperature. Install quickly if substrate is warm.

Prior to each use of any SCHÖNOX product, the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at www.hpsubfloors.com, or by calling the HPS SCHÖNOX Technical Service Department at 855-391-2649. Nothing contained in any SCHÖNOX materials relieves the user of the obligation to read and follow the warnings and instruction for each SCHÖNOX product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to product use. This product data sheet supersedes all previous editions.



Management system certified to ISO 9001 and 14001 by SQS.

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