

# 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 a reinforcement making it unnecessary to lay a reinforcement fabric. SCHÖNOX APF is installed above 1/8" up to 1".

### Product characteristics

- EMICODE EC 1<sup>PLUS</sup>: 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
- pumpable
- very low shrinkage
- free of cracks even in higher thicknesses
- suitable for castor wheel loadings above 1/8" according to DIN EN 12 529
- 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, layer thickness at least 1/8" (use elastic adhesives only)

### Substrates

**SCHÖNOX APF is suitable on:**

- timber floor boards, OSB board, plywood
- wood-cement-boards
- old substrates such as ceramic tiles, terrazzo and sheet vinyl
- old, water-resistant adhesive residues
- concrete, cement substrates
- rapid cement screed systems
- 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 SDG, SCHÖNOX MR 18 or SCHÖNOX EPA may be used to suppress residual moisture.

- Gypsum screeds 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. Harmful dust may result. Inhalation of asbestos dust may cause asbestosis or other serious bodily harm. Please consult the adhesive manufacturer and all applicable government agencies for rules and regulations concerning the removal of flooring and adhesives that contain asbestos. Prime remaining adhesive residues accordingly.
- Old floors such as ceramic tiles should be thoroughly cleaned and abraded.
- Timber 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, guidelines and data sheets apply.

### Priming

■ **porous substrates such as:**

- concrete, cement substrates prime with SCHÖNOX VD (1:3)

■ **non porous, smooth, sound substrates such as:**

- ceramic tiles
- old water-resistant adhesive residues, removed as far as possible prime with SCHÖNOX SHP.

■ **gypsum substrates (sanded and vacuumed)**

- prime with SCHÖNOX KH FIX.

■ **wooden substrates such as**

- OSB board, plywood (well screwed and/or bonded)
- prime with SCHÖNOX VD (undiluted).

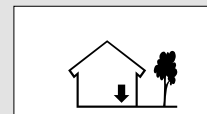
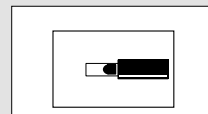
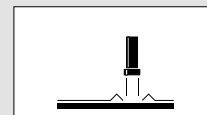
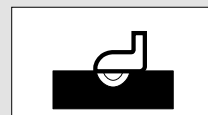
### Mixing ratio

- 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,

### Technical data

- pot life: approx. 30 minutes
- ready for foot traffic: approx. 3 hours
- ready for covering: approx. 16 hours, up to 1/8" layer-thickness
- working temperature: not below 41°F
- coverage: approx. 60 – 70 sq.ft. per unit at a thickness of 1/8" (depending on substrate conditions and aggregate used)
- compressive strength (ASTM C109):  
6200 psi / 40 N/mm<sup>2</sup> / 420 kg/cm<sup>2</sup> after 28 days  
2400 psi / 16 N/mm<sup>2</sup> / 144 kg/cm<sup>2</sup> after 1 day
- flexural strength (ASTM C348):  
approx. 1600 psi / 10 N/mm<sup>2</sup> / after 28 days
- tensile strength (ASTM C1583) at 1/8":  
above 400 psi / 2.5 N/mm<sup>2</sup> 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.



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) is recommended 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 an edge strip. 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 VD (diluted 1:1 with water) 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: 12 months unopened.

### Disposal

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

### VOC Content

- 0g/l (calculated), SCAQMD 1113

### LEED

May help contribute to LEED certification of projects in the categories:

- EQc2  
Low-Emitting Materials – 1 to 3 points
- MR Credit 1.1  
Building Reuse-Maintain –  
Existing Walls, Floors and Roof  
up to 3 points
- MR Credit 1.2  
Building Reuse-Maintain –  
Existing Interior Nonstructural Elements  
1 point
- MRC3  
Environmentally Preferable Products  
0,5 to 5 points

### Environmental Product Declaration (EPD)

- Declaration number:  
EPD-DIV-2013311-EN

### Instructions

- This product is intended for interior use over dry substrates only. Do not use in areas of constant water exposure or in areas exposed to permanent or intermittent substrate moisture as this may jeopardize the performance of the underlayment and the floor covering.
- 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 for primers.

### 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. KEEP OUT OF REACH OF CHILDREN. Carefully read and follow all cautions and warnings on product label. For complete safety information, please refer to the Material Safety Data Sheet, or visit our website at [www.schonox.us](http://www.schonox.us).
- 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.
- Free of chromate.

### Limitation of Liability

To the best of our knowledge, the technical data contained herein are true and accurate at the date of issuance but are subject to change without prior notice. We guarantee our product to conform to the specifications contained herein. We make no other warranty or guarantee of any kind, express or implied, including merchantability and fitness for particular purpose. Liability, if any, is limited to replacement of the product or refund of the purchase price. Labor or cost of labor and other consequential damages are hereby excluded. SCHÖNOX does not authorize anyone, including SCHÖNOX Representatives, to make any statements which supersede, modify or supplement the information provided on its printed literature or package labels without written confirmation.

The applicable recommendations, guidelines, regulations and safety data sheets are to be observed, together with the recognized 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 DQS.

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