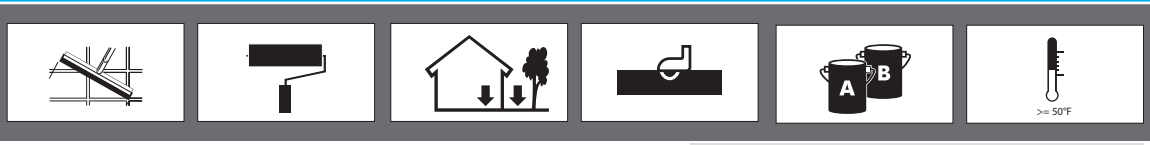
SCHÖNOX EPA

Two-Part, Epoxy Based Moisture Mitigation System

Suitable on porous, unheated concrete slabs to reduce moisture vapor emission rates from 100% RH or 25 lbs./1000 sq.ft./24 hrs to suitable levels before applying SCHÖNOX underlayments. Only one coat required to penetrate and to fully seal the substrate.



Product characteristics

- solvent-free, 100% solids epoxy
- complies to SCAQMD 1113
- low viscosity
- water proof
- high penetrating
- problem solver on damp concrete (after the concrete is visually dry and porous)
- resistant to chemical loadings
- for interior and exterior use

Applications

- To suppress moisture on unheated, moisture resistant, porous concrete with residual moisture up to 100% RH or 25 lbs./1000 sq.ft./24 hrs. before applying SCHÖNOX underlayments prior to installing flexible coverings as well as wood floor.

Requirements of substrate

- Before applying SCHÖNOX EPA, a Moisture Vapor Emission Rate per ASTM F-1869 or a relative humidity of the concrete, using ASTM F-2170 must be obtained.
- Substrates must be profiled to achieve CSP 2 - 3 prior to the use of SCHÖNOX EPA.
- Subfloors must be porous, smooth, sound, clean and free of any contaminants which may hinder adhesion.
- Approve on porosity doing a water drop test following the standards. Sprinkle water onto the surface, if water forms droplets without absorbing within 2 minutes, the surface is non porous and is probably contaminated with sealers, curing compounds, abatement chemicals or oil. Such invisible contaminants must be removed completely by mechanical methods such as shot blasting.
- Concrete must support a minimum adhesion strength of 150 psi (1 MPa) when tested per ASTM D-4541 (tensile bond test).
- Surface treatments or any "friable" areas of the subfloor must be mechanically removed and the subfloor repaired with water resistant SCHÖNOX underlayments as required.
- Repair non structural cracks using SCHÖNOX PGH following the referring product data sheet. Moving joints must be honored up to the final surface.
- 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.
- To ensure an ideal, dust-free surface, vacuum the substrate properly using an industrial vacuum cleaner.
- The subfloor surface must be visually dry and porous to ensure a suitable adhesion of SCHÖNOX EPA.
- Substrate temperature must be at least 5°F away from the dew point during application and drying to avoid condensation on the surface.
- Do not use moisture mitigation systems on gypsum based substrates.
- Do not use SCHÖNOX EPA where hydrostatic pressure conditions exist or where moisture vapor emissions exceed the recommended levels.
- SCHÖNOX EPA may be used as a migration barrier over abated concrete slabs prior to install SCHÖNOX underlayments. Therefore remove any existing adhesive and abatement residues by mechanical means down to a clean, sound and porous concrete surface prior to the installation of SCHÖNOX EPA. As abatement products/ adhesive removers vary, please contact the SCHÖNOX Technical Service for further advice.
- SCHÖNOX EPA may be used as a primer to solidify substrates such as wood, dry gypsum based substrates or adhesive residues.
- SCHÖNOX EPA may be used to mix a heavy duty, rapid drying epoxy based repair mortar to fill breakouts or create ramps in heavy duty areas. Therefore add the ready mixed SCHÖNOX EPA last to clean, dry silica sand (grain size 1/64" – 1/8") following a mixing ratio of 1 : 12 in parts per weight (i.e. 1/2 gal of ready mixed SCHÖNOX EPA + 55lb of silica sand) and mix thoroughly to a homogenous mix. Apply the mixed epoxy mortar to the clean, vacuumed substrate and compress accordingly using a trowel. Very porous substrates prime with SCHÖNOX EPA prior to apply the epoxy mortar into the fresh primer. Coverage: approx. 75 sq.ft. per unit at the minimum thickness of 3/8". After drying (approx. 12 hours at 65 °F floor temperature) prime with SCHÖNOX SHP prior to installing SCHÖNOX underlayments or thin set adhesives as required.
- SCHÖNOX EPA meets or exceeds the requirements of ASTM F3010-13.
- The requirements of the relevant valid standards, guidelines and data sheets apply.

Recommended method of working

- Thoroughly mix the SCHÖNOX EPA resin (component A) with the SCHÖNOX EPA

Technical data

- Two Part Epoxy
- Color: transparent-amber
- Density: 1.09 kg/l (mixed material)
- Storage temperature: not below 41°F
- Working time: approx. 40 min. at 65°F
- Working temperature: not below 50 °F floor temperature (recommended: > 65°F, relative humidity <=75%)
- Maximum Coverage Rate: approx. 290 sq.ft. per unit; the finished application must cover the substrate completely without any voids or pinholes to ensure moisture vapor suppression!
- Ready for leveling (after back roll):
  - after approx. 4 - 6 hours at 65°F floor temperature
- Permeance (ASTM E96): ≤ 0.1 perm

All values are approximate at 65 °F floor temperature, are subject to local climatic fluctuations and vary according to the absorbency of the substrate and to the applicator device. Lower temperatures will lengthen the working and curing time, higher temperatures may shorten it dramatically. Do not install underlayment or topping before the substrate has dried thoroughly.

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hardener (component B) to a homogenous mix (approx. 3 minutes) using a low speed mixer (approx. 150 rpm) preventing entraining air. Refill the mixed material into a clean bucket and mix again for approx. 1 minute.

- Apply the mixed SCHÖNOX EPA evenly across the area and spread with a squeegee/notched squeegee avoiding moving too fast allowing SCHÖNOX EPA to saturate the concrete surface. After a waiting time of approx. 15 - 30 minutes saturate a 3/8" nap roller and begin to back roll to evenly distribute the epoxy film over the surface avoiding puddles.
- After a drying time of approx. 4 - 6 hours (no transfer to the touch at 65°F floor temperature) prime with SCHÖNOX SHP following the referring product data sheet prior to install a SCHÖNOX underlayment or patching and smoothing compound.
- If any following materials are not applied within the first 24 hours after drying of SCHÖNOX EPA, then always rough the top surface of SCHÖNOX EPA up using a suitable pad, but without affecting the moisture mitigation properties.
- Do not dilute SCHÖNOX EPA.
- SCHÖNOX EPA is not a crack isolation membrane.
- Clean tools in water immediately after use.
- Hardened material can only be removed mechanically.
- **Note:** Mixed material left in the mixing container will generate intense heat. In this case, do not touch container! Close lid loosely and transport the container by the handle outdoors until it sets to a disposable cool solid.
- If the concrete surface is sufficiently smooth and level, SCHÖNOX MSP CLASSIC Wood Flooring Adhesive and SCHÖNOX EMICLASSIC, Universal Pressure Sensitive Adhesive or SCHÖNOX ROLL AND GO Rollable Adhesive may be applied directly to SCHÖNOX EPA after curing but within the first 48 hours after SCHÖNOX EPA has been installed.

Mixing ratio

- 6,25 kg / 1.47 gal. component A (resin)
  3,75 kg / 0.96 gal. component B (hardener)

Packaging

- 2-Component system:
  - 6,25 kg / 1.47 gallons component A (resin) in metal canister
  - 3,75 kg / 0.96 gallons component B (hardener) in metal canister

Storage

- Store in cool, dry, frost-free conditions. Acclimate SCHÖNOX EPA sufficiently at room temperature prior to installing.
- Shelf life: 18 months unopened

Disposal

- Empty canisters and dispose of in accordance with federal, state and local waste disposal regulations. Pour excess material onto a disposable surface (such as cardboard) or into disposable containers (at a thickness no greater than ¼") and dispose of after curing following the regulations.

VOC Content

- 0g/l (calculated), SCAQMD 1113

LEED

May contribute to LEED v4 in categories:

- EQc2 - 1 to 3 points
  Low-Emitting Materials

Environmental Product Declaration (EPD)

- Declaration number:
  EPD-DIV-2012111-E

Instructions

- 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

- Avoid eye and skin contact. Close container after each use. Do not reuse container. Do not flush primer down drains, sewers or waterways.

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.schonox.us, 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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