

## SCHÖNOX ZM RAPID

#### **Rapid Setting Self-leveling Compound**

Suitable on cement and gypsum based substrates. Designed for leveling of floors under time pressure in interior areas. Many types of floor coverings can be installed after 1.5 hours. SCHÖNOX ZM RAPID can be installed up to 1 1/2".



### **Product characteristics**

- EMICODE EC 1<sup>PLUS</sup> R: very low emission
- Benefits to Environment and Health
- for interior use only
- self-leveling
- ready for covering after approx. 1.5 hours for many types of coverings
- suitable on underfloor heating systems
- high hardness and strength
- layer thicknesses above 1/16" up to 1 1/2"
- pumpable
- suitable for castor wheel loadings
- suitable for forklift truck traffic above 1/8"
- tested in accordance with ASTM C1708
- exceeds minimum Ff/Fl requirements of ASTM and ACI when installed in accordance with the guidelines

#### Applications SCHÖNOX ZM RAPID is suitable for filling, smoothing and leveling of substrates:

under flexible coverings

- under ceramic tiles
- under wood floor and coatings, layer thickness at least 1/8" (drying time at least 12 hours)

#### **Substrates**

### SCHÖNOX ZM RAPID is suitable for filling, smoothing and leveling of:

- concrete, cement substrates
- old substrates such as ceramic tiles
- old, water-resistant adhesive residues
- gypsum substrates
- OSB board, plywood (well screwed and/ or bonded) prior to installing flexible coverings.

#### **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.
- 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 ZM RAPID. 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.

- 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.
- 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

- concrete, cement substrates prime with SCHÖNOX VD (up to 1:3) or KH FIX.

- non porous, smooth, sound substrates such as:
  - 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.
- prior to install SCHÖNOX ZM RAPID under coatings

prime with SCHÖNOX EPA to avoid pinholing or surface irregularities.

#### Mixing ratio

- mix each 25kg / 55lb. bag with 5.8 liters / 6.1 quarts of water
- we recommend to extend SCHÖNOX ZM RAPID with dry, clean aggregate (aggregate is added last) at a layer thickness above 1/2": Type and amount of aggregate used will affect product performance. As qualities of locally available aggregates vary, we recommend to perform tests prior to use on a larger scale.

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

#### **Technical data**

- pot life: approx. 25 minutes
- ready for foot traffic: approx. 1 1.5 hours
   ready for covering:
  - after approx. 1.5 2 hours at 1/2"
  - after approx. 12 hours at 1/2" prior to installing wood floor, cork, rubber or coatings
- 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): 7550 psi / 50 N/mm<sup>2</sup> / 600 kg/cm<sup>2</sup> after 28 days 5000 psi / 30 N/mm<sup>2</sup> / 400 kg/cm<sup>2</sup> after 1 day
- flexural strength (ASTM C348): approx. 1550 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> / 400 psi after 3 days
- initial Set (ASTM C191): approx.35 minutes
- final Set (ASTM C191): approx. 45 minutes
- cured density: 121 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 ZM RAPID

#### **Recommended method of** working

- Using a clean mixing drum, add SCHÖNOX Shelf life: 18 months unopened. ZM RAPID 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 gauge rake. 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
- 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 laver must not exceed the laver thickness of the first layer.
- Protect curing SCHÖNOX ZM RAPID layers from high ambient temperatures, direct sunlight and drafts.
- Clean tools in water immediately after use.

#### **VOC Content**

■ 0g/l (calculated), SCAQMD 1113

#### LEED

May help contribute to LEED v4 certification 
SCHÖNOX ZM RAPID contains Portland 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** MRc4 - 1 point
- Material Ingredients

#### **Environmental Product Declaration (EPD)**

Declaration number: EPD-DIV-2013311-EN

#### Packaging

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

#### Storage

- Store in cool and dry conditions.
- 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.

#### 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

- cement and sand aggregate. Avoid eye and skin contact. 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.

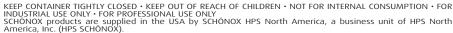
Prior to each use of any SCHÖNOX product, the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at www.hpsubfloors.com, or by calling the HPS SCHÖNOX Technical Service Department at 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.

#### In North America provided by:

HPS North America, Inc 511 Wilhite Street Florence, AL 35630 Phone: 256.246.0345 Fax: 256.246.0346 Email: info@hpsubfloors.com http://www.hpsubfloors.com



KEEP CONTAINER TIGHTLY CLOSED • KEEP OUT OF REACH OF CHILDREN • NOT FOR INTERNAL CONSUMPTION • FOR INDUSTRIAL USE ONLY • FOR PROFESSIONAL USE ONLY SCHONOX products are supplied in the USA by SCHONOX HPS North America, a business unit of HPS North America, Inc. (HPS SCHONOX). For further information and advice regarding transportation, handling, storage and disposal of chemical products, users should refer to the actual Safety Data Sheets containing physical, ecological, toxicological and other safety related data. Read the current actual Safety Data Sheets before using the product. In case of emergency, call GBK/Infortac ID 108313 at 1 800 535 SD53 (USA) or 001 352 323 3500 (International). HPS SCHONOX warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NO OTHER WARRANTIES EXPRESSED OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. HPS SCHÖNOX SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. HPS SCHÖNOX SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS. Sale of SCHÖNOX products are subject to the Terms and Conditions of Sale which are available at www.schonox.us.