



DIVISION 9 - FINISHES
Section 09 96 00 High Performance Coatings
09 96 56 Epoxy Coatings

Part 1 - General

1.01 Summary

- A. This specification describes a 2-component, solvent free, low viscosity, epoxy primer for use under wood flooring products that require protection from subfloor moisture. The primer will tenaciously bond to concrete, leveling and patching underlayments, that have been properly prepared.

1.02 Quality Assurance

- A. Manufacturing qualifications: The manufacturer of the specified product shall be ISO 9001/9002 certified and have in existence a recognized ongoing quality assurance program independently audited on a regular basis.
- B. Contractor qualifications: Contractor shall be qualified in the field of wood floor installations with a successful track record of 5 years or more. Contractor shall maintain qualified personnel who have received product training by a manufacturer's representative.
- C. Install materials in accordance with all safety and application conditions required by the manufacturer or as modified by applicable rules and regulations of local, state and federal authorities having jurisdiction. Consult Material Safety Data Sheets for complete handling recommendations.

1.03 Delivery, Storage, and Handling

- A. All materials must be delivered in original, unopened containers with the manufacturer's name, labels, product identification, and batch numbers. Damaged material must be removed from the site immediately.
- B. Store all materials off the ground and protect from rain, freezing or excessive heat until ready for use.
- C. Condition the specified product as recommended by the manufacturer.

1.04 Job Conditions

- A. Environmental Conditions: All applications are indoors. Minimum application temperature 50 ° F (10 ° C) and in case of radiant floor heating < 86 ° F (30 ° C). Application temperature of substrate must be minimum 5 ° F (3 ° C) above the measured dew point temperature.
- B. Protection: Precautions should be taken to avoid damage to any surface near the work zone due to applying and handling of the specified acoustical system.
- C. Wood floor manufacturer's recommendations for installation, i.e. levelness, wood acclimation, wood moisture content, etc. must be followed.

1.05 Submittals

- A. Submit two copies of manufacturer's literature, to include: Product Data Sheets, and appropriate Material Safety Data Sheets (MSDS).

1.06 Warranty

- A. Sika 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 Technical 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 express or implied shall apply including any warranty of purpose. Sika shall not be liable under any legal theory for special or consequential damages. Sika 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.

Part 2 - Products

2.01 Manufacturers

- A. **SikaPrimer MB**, as manufactured by Sika Corporation, 1682 Marion Williamsport Road, Marion OH 43302 is considered to conform to the requirements of this specification.

2.02 Materials

A. **SikaPrimer MB:**

1. The epoxy primer shall be a 2-component, solvent free, low viscosity, primer for use under wood flooring products that require protection from subfloor moisture. Primer contains no water.
2. The epoxy primer in conjunction with SikaBond Wood Floor Adhesives is used as:
 - Moisture regulator, to help control osmotic moisture propagation in cementitious substrates with a moisture content up to 4 % CM method (approx. 6 % Tramex)
 - Substrate consolidator on concrete, gypsum screeds and old substrate
 - Adhesion promoter for old adhesive residues

- B. Any primers, as required, recommended by the manufacturer of the specified product, approved by the engineer.

2.03 Performance Criteria

A. Properties of the uncured epoxy primer (mixed A + B):

1. Tack-Free Time: 45 - 60 minutes cured at 73° F (23° C) and 50 % RH
2. Consistency: low viscosity
3. Color: blue tint
4. Density: 9.14 lbs/ gal (1.1 kg/ l)
5. Pot Life (max. open time):
if primer is left in pail after mixing

at 50° F (10° C)	~ 60 minutes
at 68° F (20° C)	~ 30 minutes
at 86° F (30° C)	~ 15 minutes

6. Shelf Life: 2 years from date of production if stored in undamaged original sealed containers, in dry conditions and protected from direct sunlight at temperatures between + 50° F and + 77° F (+ 10° C and + 25° C)
7. VOC \leq 35 g/ l (mixed A + B) tested per EPA Method 24

B. Properties of the cured polyurethane adhesive:

1. Compressive Strength: 10,000 psi cured after 7 days at 73° F (23° C) and 50 % RH
2. Shore "D" Hardness: 83 after 7 days at 73° F (23° C) and 50 % RH
3. Service Temperature: -40 ° F to +158 ° F

4. Curing Rate:

Minimum curing time, prior to walking on primer / or for applying SikaBond adhesives:

at 50° F (10° C)	18 hours
at 68° F (20° C)	12 hours
at 86° F (30° C)	6 hours

When primer is left on the substrate for more than 36 hours, the surface must be prepared, i.e. screened, sanded, solvent wiped and checked for any damage before proceeding

Note: Tests were performed with material and curing conditions at 73° F (23° C) and 50 % RH

Part 3 - Execution

3.01 Surface Preparation

- A. Minimum compressive strength > 1160 psi, Tensile Bond strength > 116 psi.
- All concrete surfaces must have an open textured surface to allow Primer MB to penetrate the surface and function properly as a moisture barrier or surface consolidator. Substrates must be structurally sound and solid, surface dry, and thoroughly clean and free of laitance, oil, wax, grease, paint, latex compounds, curing and sealing compounds, and any contaminant that could act as a bond breaker. Concrete, Cement based, gypsum based sub-floors can be mechanically prepared to achieve an open textured surface - blast cleaning or grinding with a diamond cup wheel is appropriate. Acid etching is not acceptable. Thoroughly clean the floor with an industrial vacuum prior to installation of the primer. Consult level/ patch system manufacturer regarding priming prior to the placement of materials. If surface contains asphalt (cutback) adhesive follow the Resilient Floor Covering Institute "Recommended Work Practices" for removal. When the asphalt (cutback) adhesive is sufficiently removed use the primer to help promote adhesion to the subfloor - or use an industry approved leveling compound over the cutback residue. Due to differences in asphalt based adhesive types and performance capabilities; applicator must verify that preparation of the surface is sufficient prior to using the primer or patch/ level compound. Floors with other adhesive residue: Must have a minimum of 50 % of the old adhesive removed - regularly distributed - this can be done by grinding or other mechanical methods. All remaining residues must be structurally sound and securely bonded to subflooring. On fiber reinforced concrete, plastic fibers should be flamed off the surface, prior to application of the primer as moisture regulator.

3.02 Mixing and Application

- A. Product:
1. Add one full can of Component A to one full can of Component B then mix with an electric drill and mixing (Jiffy Mixer type) paddle at a low speed to reduce air entrainment (300 - 400 rpm). Using a paint stick or similar is not sufficient to mix the primer.
 2. A minimum mixing time of 3 minutes shall be observed; mixing shall continue until a homogeneous mix has been achieved. Scrape sides of pail with paint stick or paddle to ensure all contents are thoroughly mixed together. Unmixed material applied to the floor will not cure properly.
 3. Placement procedure: Prime the prepared substrate with the mixed epoxy resin primer with roller. Do not overprime or puddle. Coverage should be 95 – 115 square feet per gallon depending on porosity.
- A. Substrate:
1. After mixing part A and B completely to a homogeneous mixture - pour contents of pail onto the floor for best working time. Attempting to work from the pail will reduce working time - see pot live chart. Apply Sika Primer MB uniformly (crosswise) to the substrate using a medium nap roller, ensuring that a continuous coat is achieved over the entire surface (a mirror finish should be achieved). If Sika Primer MB is used as a moisture regulator as well as substrate consolidation, 2 coats are necessary.
 4. A waiting time of minimum 8 hours and maximum 36 hours should be observed between applications of Sika Primer MB. If primer has cured for 8 hours (depending on room and slab temperature) and only a tacky surface remains - then second primer step of a 2-coat system can be applied. Note: If primer is still very soft, then let more time elapse until only a tacky surface exists - then apply second coat.

3.03 Cleaning

- A. Clean all tools and application equipment with cleaning solvent (Xylene, MEK are effective). Hardened/ cured material can only be removed mechanically.

SC-09

SikaPrimer MB

Primer, Moisture Regulator and Adhesion Promoter

Figure 1 – Homogeneous Mixture

1. After mixing part A and B completely to a homogeneous mixture - pour contents of pail onto the floor for best working time.

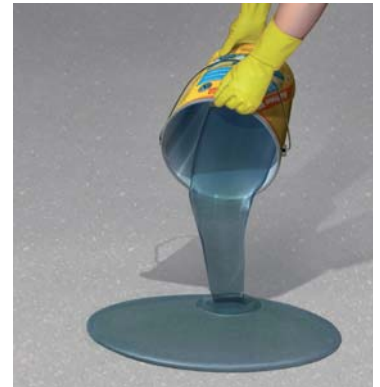


Figure 2 – Uniform Application

1. Apply Sika Primer MB uniformly (crosswise) to the substrate using a medium nap roller, ensuring that a continuous coat is achieved over the entire surface (a mirror finish should be achieved). If Sika Primer MB is used as a moisture regulator as well as substrate consolidation, 2 coats are necessary.

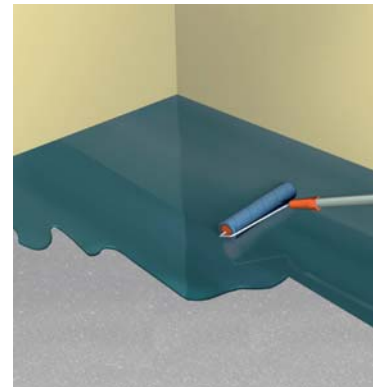


Fig. 2

Figure 3 – Waiting time

1. A waiting time of minimum 8 hours and maximum 36 hours should be observed between applications of Sika Primer MB. If primer has cured for 8 hours (depending on room and slab temperature) and only a tacky surface remains - then second primer step of a 2-coat system can be applied. Note: If primer is still very soft, then let more time elapse until only a tacky surface exists - then apply second coat.



Fig. 3