Product Data Sheet Edition 4.26.2013 Sikafloor® 107

Sikafloor® 107

Low Modulus, Low Viscosity Epoxy Primer

Description	A two component high solids, low modulus, low viscosity epoxy primer. Sikafloor 107 is designed as a primer for Sikafloor epoxy and urethane coatings, as well as the Sikafloor broadcast and troweled systems.		
Where to Use			
Advantages	 High solids, Low VOC's Low tensile modulus Higher tensile elongation Excellent penetration and adhesion Easy to apply 		

TYPICAL DATA

RESULTS MAY DIFFER BASED UPON STATISTICAL VARIATIONS DEPENDING UPON MIXING METHODS AND EQUIPMENT, TEMPERATURE, APPLICATION METHODS, TEST METHODS, ACTUAL SITE CONDITIONS AND CURING CONDITIONS.

Packaging	Component A: 2 US gal. (7.6 L)	Component A: 5 US gal. (18.9 L)*	Component A: 55 US gal. (208.2 L)*
	Component B: 1 US gal. (3.8 L)	Component B: 5 US gal. (18.9 L)	Component B: 55 US gal. (208.2 L)
	Components A+B: 3 US gal. (11.4 L)	Components A+B: 15 US gal. (56.7 L)	Components A+B: 165 gal. (624.6 L)
	(Ready to mix unit)	*(2 units needed)	*(2 units needed)

Colors Clear transparent after mixing

Coverage $160 - 320 \text{ ft}^2 / \text{ US gal } (3.9 - 7.9 \text{ m}^2 / \text{ L}) \text{ at } 5 - 10 \text{ mils } (0.13 - 0.25 \text{ mm})$

wet film thickness (w.f.t.)

 Material Temperature
 Time

 +50°F (10°C)
 ~ 50 minutes

 +68°F (20°C)
 ~ 25 minutes

 +86°F (30°C)
 ~ 15 minutes

Waiting /

Recoat Times Before applying second coat of Sikafloor 107 allow:

 Ambient & Substrate Temperature
 Minimum
 Maximum

 +50°F (10°C)
 24 hours
 3 days

 +68°F (20°C)
 12 hours
 2 days

 +86°F (30°C)
 6 hours
 1 day

 Ambient & Substrate Temperature
 Minimum
 Maximum

 +50°F (10°C)
 24 hours
 3 days

 +68°F (20°C)
 12 hours
 2 days

 +86°F (30°C)
 6 hours
 1 day

Cure Times Ambient & Substrate Temperature Foot traffic Light traffic Full cure +50°F (10°C) +68°F (20°C) ~ 24 hours ~ 6 days ~ 10 days ~ 12 hours ~ 4 days ~ 7 days +86°F (30°C) ~ 6 hours ~ 2 days ~ 5 days

Properties Tested at 73°F (23°C) and 50 % R.H:

 Tensile Strength
 ASTM D638
 3,410 psi (23.5 MPa)

 Pull-off Strength
 ASTM D4541
 > 400 psi (2.8 MPa)

 Tensile Elongation
 ASTM D638
 15% to 20%

 VOC Content
 ASTM D2369
 ≤ 50 g/L

Shelf Life 2 years in unopened container, Store dry between 40° - 90°F (4°- 32°C).

Chemical Resistance Please consult Sikafloor Technical Services.



How to Use Surface Preparation

Surface must be clean, sound and dry. Remove dust, laitance, grease, curing compounds, bond inhibiting impregnations, waxes and any other contaminants. All projections, rough spots, etc. should be dressed off to achieve a level surface prior to the application. **Concrete** - Should be cleaned and prepared to achieve a laitance-free and contaminant-free, open textured surface by shot blasting or equivalent mechanical means (CSP-3 to CSP-4 as per ICRI guidelines). Sweep and vacuum any remaining dirt and dust with a wet/dry vacuum. Removing residual dust will help ensure a tenacious bond between the primer and substrate.

Whenever "shot-blasting" is utilized, be careful to leave concrete with a uniform texture. "Overblasting" will result in reduced coverage rates of the primer and/or subsequent topcoats. The "shotblast" pattern may show through the last coat, known as "tracking". The compressive strength of the concrete substrate should be at least 3,500 psi (24 MPa) at 28 days and at least 215 psi (1.5 MPa) in tension at the time of application. For other substrates, please contact SikafloorTechnical Services.

Mixing

Mixing Ratio - 2 : 1 by volume.

For bulk packaging, when not mixing full units, each component must be pre-mixed separately to ensure product uniformity.

Primer and Intermediate:

Premix each component separately. Empty Component B (Hardener) in the correct mix ratio into Component A (Resin). Mix the combined components for at least 3 minutes using a low speed drill (300 - 450 rpm) and Exomixer or Jiffy type paddle suited to the volume of the mixing container to minimize entrapped air. Be careful not to introduce any air bubbles while mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in the primer. During the mixing operation, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once to ensure complete mixing.

Do not mix more material than can be applied within the working time limits (i.e. Pot Life) at the actual field temperature.

Application

Apply primer by squeegee and back roll at the rate of $160 - 320 \, \text{ft}^2$ / US gal $(3..9 - 7.9 \, \text{m}^2$ / L) at $5 - 10 \, \text{mils}$ ($0.13 - 0.25 \, \text{mm}$) wet film thickness (w.f.t.). Coverage will vary depending on the porosity of the prepared floor. Product has a limited Pot Life, see Typical Data. Do not apply by dipping roller into mixing container. Pour a bead of product in the form of a ribbon on the surface to be coated, then spread with squeegee and back roll. Ensure that the coating is pore-free and pinhole-free and provides uniform and complete coverage over the entire concrete substrate. If necessary, apply an additional coat to ensure the primer/coating is pore-free and pinhole-free and provides uniform and complete coverage over the entire concrete substrate.

Limitations

Notes on Limitations:

Prior to application, measure and confirm Substrate Moisture Content, Ambient Relative Humidity, Ambient and Surface Temperature and Dew Point. During installation, confirm and record above values at least once every 3 hours, or more frequently whenever conditions change (e.g. Ambient Temperature rise/fall, Relative Humidity increase/decrease, etc.).

Substrate Moisture Content: Moisture content of concrete substrate must be $\leq 4\%$ by mass (pbw – part by weight) as measured with a Tramex® CME/CMExpert type concrete moisture meter on mechanically prepared surface according to this product data sheet (preparation to CSP-3 to CSP-4 as per ICRI guidelines). Do not apply to concrete substrate with moisture levels > 4% mass (pbw – part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter. If moisture content of concrete substrate is > 4% by mass (pbw – part by weight) as measured with Tramex® CME/CMExpert type concrete moisture meter, use Sikafloor 1610 or Sikafloor 81 EpoCem.

When relative humidity tests for concrete substrate are conducted per ASTM F2170 for project specific requirements, values must be \leq 85%. If values are > 85% according to ASTM F2170 use Sikafloor 1610 or Sikafloor 81 EpoCem.

ASTM F2170 testing **is not** a substitute for measuring substrate moisture content with a Tramex® CME/CMExpert type concrete moisture meter as described above.

Material Temperature: Precondition material for at least 24 hours between 65° to 75°F (18° to 24°C)

Ambient Temperature: Minimum/Maximum 50°/85°F (10°/30°C)

Substrate Temperature: Minimum/Maximum 50°/85°F (10°/30°C). Substrate temperature must be at least 5°F (3°C) above measured Dew Point.

Mixing and Application attempted at Material, Ambient and/or Substrate Temperature conditions less than 65°F (18°C) will result in a decrease in product workability and slower cure rates.

Relative Ambient Humidity: Maximum ambient humidity 85%



Dew Point: Beware of condensation!

The substrate must be at least $5^{\circ}F$ ($3^{\circ}C$) above the Dew Point to reduce the risk of condensation, which may lead to adhesion failure or "blushing" on the floor finish. Be aware that the substrate temperature may be lower than the ambient temperature.

Mixing: Do not hand mix Sikafloor materials. Mechanically mix only.

Do not thin this product. Addition of thinners (e.g. water, solvent, etc.) will slow cure and reduce ultimate properties of this product. Use of thinners will void any applicable Sika warranty. Improper mixing procedure or incorrect mixing ratio may result in moisture sensitivity, whitening, slow cure, soft spots, and other defects.

Application: Apply the primer/coating to the prepared surface using a squeegee and back roll to provide uniform coverage. Ensure that the coating is pore-free and pinhole-free and provides uniform and complete coverage over the entire concrete substrate. If necessary, apply an additional coat to ensure the primer/coating is pore-free and pinhole-free and provides uniform and complete coverage over the entire concrete substrate.

- Do not apply while ambient and substrate temperatures are rising, as pinholes may occur. Ensure there is no vapor drive at the time of application. Refer to ASTM D4263, may be used for a visual indication of vapor drive.
- Freshly applied material should be protected from dampness, condensation and water for at least 72 hrs.
- Will discolor over time when exposed to sunlight (UV) and under certain artificial lighting conditions. Use of clear UV resistant top coat may not prevent discoloration of underlying coatings.
- Do not apply Sikafloor to concrete substrate containing aggregates susceptible to ASR (Alkali Silica Reaction) due to risk of natural alkali redistribution below the Sikafloor product after application. If concrete substrate has or is suspected to have ASR (Alkali Silica Reaction) present, do not proceed. Consult with design professional prior to use.
- Any aggregate used with Sikafloor systems must be non-reactive and oven-dried.
- This product is not designed for negative side waterproofing.
- Typically not recommended for exterior slabs on grade where freeze/thaw conditions may exist.
- Use of unvented heaters and certain heat sources may result in defects (e.g. blushing, whitening, debonding, etc.).
- Beware of air flow and changes in air flow. Introduction of dust, debris, and particles, etc. may result in surface imperfections and other defects.
- For professional use only by experienced applicators.

Caution

COMPONENT A: WARNING - IRRITANT, SENSITIZER: Contains epoxy resins, Nonyl Phenol (CAS 25154-52-3). Eye irritant. May cause skin/respiratory irritation. Prolonged and/or repeated contact with skin may cause allergic reaction/sensitization. Deliberate concentration of vapors for purposes of inhalation is harmful and can be fatal. Harmful if swallowed. **Strictly follow all use, handling and storage instructions.**

COMPONENT B: WARNING: CORROSIVE, SENSITIZER, IRRITANT. Contains amines (mixture). Contact with skin and eyes causes severe burns. Respiratory irritant. May cause eye/skin irritation. Possible sensitization/allergic reaction with prolonged or repeated exposure. Harmful if swallowed. Deliberate concentration of vapors for purposes of inhalation is harmful and can be fatal. **Strictly follow all handling, use and storage instructions.**

First Aid

Eyes – Hold eyelids apart and flush thoroughly with water for 15 minutes. **Skin** – Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. **Inhalation** – Remove to fresh air. **Ingestion** – Do not induce vomiting. Dilute with water. **Contact physician.** In all cases contact a physician immediately if symptoms persist.

Handling and Storage

Wear protective equipment (gloves/safety glasses/clothing) to prevent contact with skin and eyes. Keep container closed in a cool dry place. Wash skin thoroughly with soap and water after use. Use with adequate, general and local, exhaust ventilation. In absence of adequate ventilation, use a properly fitted NIOSH respirator. Remove contaminated clothing. Launder before reuse.

Clean Up

Avoid direct contact with eyes and skin. Wearing chemical resistant goggles/gloves/clothing, collect spill. Ventilate area. In absence of adequate ventilation, use properly fitted NIOSH respirator. Sweep up spill and place in closed container. Dispose of in accordance with applicable local, state and federal environmental regulations. Uncured materials can be removed with approved solvents. Cured material can only be removed mechanically.



KEEP CONTAINER TIGHTLY CLOSED • KEEP OUT OF REACH OF CHILDREN • NOT FOR INTERNAL CONSUMPTION • FOR INDUSTRIAL USE ONLY

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Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's most current Product Data Sheet, product label and Material Safety Data Sheet which are available online at www.sikausa.com or by calling Sika's Technical Service Department at 800-933-7452. Nothing contained in any Sika materials relieves the user of the obligation to read and follow the warnings and instruction for each Sika product as set forth in the current Product Data Sheet, product label and Material Safety Data Sheet prior to product use.

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 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 EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDERANY 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.

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