

Product Data Sheet
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Sikafloor® 700

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Chemical Resistant Coating

Description A two component, high solids, novolac epoxy with exceptional chemical resistance. Sikafloor 700 can be installed as a stand-alone coating. Its versatility allows Sikafloor 700 to be applied as a topcoat for many of the Sika flooring systems or used as a binder in a slurry/broadcast system. Sikafloor 700 can be applied as a topcoat with Sikafloor Epoxy Color Additive to create a variety of colors.

Where to Use Designed for use as a medium to heavy coat epoxy resurfacer in areas subjected to chemical spillages. Ideal for use in chemical processing, chemical storage areas, and battery charge stations.

- Advantages**
- Low Odor
 - Very good chemical resistance
 - Wide range of colors with Epoxy Color Add
 - Easy application

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: 2.0 US gal. (7.6 L) Component B: 1 US gal. (3.8 L) Component A+B: 3.0 US gal. (11.3 L) (Ready to mix unit)			
Color	Pigmented with Sikafloor Epoxy Color Additive; 1 quart (0.9 L) size per 3.0 gallon.			
Coverage	Approximately 80 - 130 ft ² / US gal (1.9 - 3.2 m ² / L) at 12 to 20 mils (0.3 - 0.5 mm) wet film thickness (w.f.t) or 240 - 390 ft ² /US gal (5.9 - 9.6 m ² / L) per 3 gallon unit over primed, relatively smooth, dense concrete surfaces. (The above figures do not allow for surface profile or wastage)			
Pot Life	Material Temperature	Time		
	+50°F (10°C)	~ 50 minutes		
	+68°F (20°C)	~ 25 minutes		
	+86°F (30°C)	~ 15 minutes		
	*Do not apply after indicated Pot Life is exceeded. End of Pot Life is not visible.			
Waiting / Recoat Times	Before applying second coat of Sikafloor 700 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	
Cure Times	Ambient & Substrate Temperature	Foot traffic	Light traffic	Full cure
	+50°F (10°C)	~ 36 hours	~ 6 days	~ 10 days
	+68°F (20°C)	~ 24 hours	~ 4 days	~ 7 days
	+86°F (30°C)	~ 18 hours	~ 2 days	~ 5 days

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

Compressive Strength	ASTM D695	9, 400 psi (28 days)
Pull-off Strength	ASTM D4541	> 400 psi (2.76 MPa) (100% concrete failure)
Elongation	ASTM D638	24%
Shore D Hardness	ASTM D2240	85 - 88
Impact Resistance	ASTM D2794	160 in.-lbs.
Abrasion Resistance	ASTM D4060	25 mg loss
Flammability	ASTM D635	Film is Self Extinguishing
VOC Content	ASTM D2369	≤ 50 g/L
Tensile Strength	ASTM D638	4,340 psi (7 Days)
Shelf Life	2 years in original unopened container under proper storage conditions. Store dry between 40° - 90°F (4° - 32°C).	
Chemical Resistance	Please consult Sikafloor Technical Services.	

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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. "Over-blasting" 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 Sikafloor Technical Services.

Priming

Priming for concrete substrate is required. Prime with either **Sikafloor 107, Sikafloor 160, Sikafloor 161 or Sikafloor 1610**. Allow the primer to cure (varies with temperature and humidity) until tack free before applying subsequent coats. Ensure that the primer is pore-free, pinhole-free and provides uniform and complete coverage over the entire substrate.

Please refer to the individual most current and respective Product Data Sheet for specific and detailed information.

Mixing

Mix Ratio - 2 : 1 by volume.

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

Field Pigmented:

Make sure all surface preparation is complete and installation equipment is ready before starting the mixing sequence. Premix each Component separately, the appropriate Sikafloor Polyurethane Color Additive is added to Component A at a rate of 1 quart per 3.0 mixed gallons (i.e. Components A+B). Mix Component A and Sikafloor Epoxy Color Additive for 2 minutes or until a uniform color is achieved with a low speed drill (300 - 450 rpm) and Exomixer or Jiffy type paddle suited to the volume. Empty Component B (Hardener) in the correct mix ratio to Component A (Resin) and mix for additional 2 minutes. 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 coating. 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

Pour a thin approximately 6 – 12 in. wide bead of Sikafloor 700 in the form of a ribbon on the surface and spread the material at a rate of approximately 130 ft²/ US gal (3.2 m² / L) with a notched squeegee, flat squeegee, or trowel. Apply as evenly as possible, working from left to right, and then back. Back rolling is typically done with an 18 inch (454 mm) wide short nap, 3/8-inch (10 mm), solvent-resistant roller cover. Back roll the Sikafloor 700 only to level the squeegee applied material. Over-rolling and late back rolling may cause bubbling and leave roller marks.

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 ≤ 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 ≤ 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)



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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% (during application and curing)

Dew Point: Beware of condensation!

The substrate must be at least 5°F (3°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.

Application: Apply the coating to the prepared substrate which should be pore-free and pinhole-free. If necessary, apply an additional coat of a suitable material to ensure the substrate is pore-free and pinhole-free and provides uniform and complete coverage over the entire 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.
- 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, Furfuryl Alcohol (CAS 98-00-0). 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), bisphenol A (CAS 80-05-7). Contact with skin and eyes causes severe burns. Respiratory irritant. May cause eye/skin irritation. Possible skin 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. Store in cool, dry and well ventilated area with container closed.

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.



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

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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. SIKASHALL NOT BELIEABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKASHALL 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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