

## Sikafloor® 171 Chemical-Resistant Resurfacer

<b>Description</b>	Sikafloor 171 is a chemical resistant, five-component, resin rich, monolithic epoxy floor resurfacer primarily designed for power troweling. It is ideal for restoring old or worn concrete or as a protective overlay on new concrete. The extra resin combined with the effects of power troweling produce a very dense, abrasion, and impact-resistant surface resistant to chemical attack producing higher compressive, tensile and flexural strengths.
<b>Where to Use</b>	<ul style="list-style-type: none"> <li>■ Areas exposed to heavy industrial traffic from steelwheeled carts and forklift trucks</li> <li>■ Areas exposed to abrasion and impact from heavy equipment</li> <li>■ Wet process areas where skid resistance is necessary</li> </ul>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>■ Product may be trowel applied as supplied</li> <li>■ High solids/Low odor</li> <li>■ Good abrasion resistance</li> <li>■ Good impact resistance</li> </ul>
<b>Chemical Resistance</b>	Please refer to the Sikafloor 171 chemical resistance guide or contact Sika Industrial Flooring Technical Service for specific chemical recommendations at 800-933-SIKA.
<b>How to Use</b>	
<b>Surface Preparation</b>	<p>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.</p> <p>Concrete - Should be cleaned and prepared to achieve a laitance and contaminant free, open textured surface by shot blasting or equivalent mechanical means (CSP-3 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.</p> <p>The compressive strength of the concrete substrate should be at least 3500 psi (24 MPa) at 28 days and at least 250 psi (1.7 MPa) in tension at the time of application of the Sikafloor 171.</p>

### Typical Data

<b>Shelf Life</b>	2 years in original unopened container under proper storage conditions. Store dry between 40° - 90°F (5° - 32°C)	
<b>Coverage</b>	220-Square Foot Kit @ 3/16"	
<b>Mixed Materials:</b>		
<b>Cure Rate</b>	Substrate at 73°F (23°C), 50% R. H. Applied at 3/16 inches	
<b>Tack Free</b>	6-8 hours	
<b>Dry Hard</b>	8-12 hours	
<b>Full Cure</b>	5-7 days	
<b>Typical Physical Properties:</b>		
<b>Compressive Strength</b>	ASTM C-579, method A	15,000 psi
<b>Tensile Strength</b>	ASTM C-307	2,000 psi
<b>Flexural Strength</b>	ASTM C-580	4,000 psi
<b>Modulus of Elasticity</b>	ASTM C-580	1.91 x 10 <sup>6</sup> psi
<b>Coefficient of Thermal Expansion</b>	ASTM C-531	1.2 x 10 <sup>-5</sup> in./in./°F
<b>Abrasion Resistance</b>	ASTM D 4060 Taber Abraser 1000 gm. load per wheel; film thickness H-10 Wheels lost during 1000 cycles = 0.011 in.	
<b>Effective Shrinkage</b>	ASTM C-883	passes test
<b>Thermal Compatability</b>	ASTM C-884	passes test
<b>Flammability</b>	ASTM D-635	self-extinguishing
<b>Adhesion - Concrete</b>	concrete failure (ACI Committee 503R Appendix A)	> 400 psi (2.4 MPa)
<b>Water Absorption</b>	ASTM C-413	< 0.1%
<b>Packaging:</b>	Sikafloor 171, conveniently packaged in kit form, is a five-component, 100% reactive epoxy resin	

system. The mix ratio is 1.75 parts resin (CM-052-B Part B) to 1 part activator (CM-067-A Part A) to 13 parts aggregate (F-61 Part E) by volume. Standard packaging consists of:

Component	Container	Size Code
<b>36-Square Foot Kit @ 3/16"</b>		
Part B Resin	1-gallon (3.8 liters)	CM-052-B/1
Part A Activator	1/2-gallon (1.9 liters)	CM-067-A/HG
Part C Color Pack	1/2-pint (0.3 liter)	CCP-xxx/HP*
Part D Troweling Aid	1-pint (0.5 liter)	F-27/P
Part E Aggregate	6-gallon (18.9 liters)	F-61/50
<b>220-Square Foot Kit @ 3/16"</b>		
Part B Resin	5-gallon (19.0 liters)	CM-052-B/5
Part A Activator	3-gallon (11.4 liters)	CM-067-A/3
Part C Color Pack	1-pint (0.5 liter)	CCP-xxx/P*
Part D Troweling Aid	1-pint (0.5 liter)	F-27/P
Part E Aggregate	6 each 50-pound bags	F-61/50
* the - xxx in the CCP-xxx/HP or /P is the color code designation		

<b>Priming</b>	Sikafloor 207 should be applied at 275-300 sq. ft. (6.75 - 7.36 m <sup>2</sup> ) per gallon, over damp or dry concrete. Rough concrete surfaces will result in reduced coverage. Lightly broadcast with 50 mesh sand at 0.10 to 0.25 lbs per square foot and allow to cure (varies with temperature and humidity) until tack free and clear in appearance before applying the mortar.
<b>Mixing</b>	For bulk packaging when not mixing full units each component must be pre-mixed separately to ensure product uniformity. Do not mix more material than can be applied within the working time limits at the actual field temperature. Sikafloor 171 is available in prepackaged 5-gallon and 3-gallon pails or in bulk (55-gallon drums). Mixing procedures for the prepackaged 220-sq. ft. unit is: Open the Sikafloor 171 Part 'R' (CM-052-B/5 pail) and pour into the running mortar mixer. Immediately add the Sikafloor 171 Part 'H' (CM-067-A/3 and CCP-xxx/P). Immediately add the six bags of F-61 sand and F-27/P. Mix these components for 3 minutes. Do not let the materials sit in the mixer, screed box or on the floor. The working time of the material begins when the components are added to the mixer. The longer these materials set before raking and/or power troweling the stiffer they will become.
<b>Application</b>	Sikafloor 171 is poured in a line on the floor and is then spread with a rake and power-troweled. The first pass of the power trowel compacts the material and removes voids to make the floor smooth and dense. Adjust the blades of the power trowel to a lower setting and make second pass to finish and close the floor. Excessive power troweling in either the first or the second pass will cause blisters. Sikafloor 171 has a very wet consistency. Finishing areas where power trowels cannot reach is done by using light "feathering" strokes with a hand trowel to smooth the surface. When the resurfacer has set, lightly sand or grind the surface to remove burrs or surface defects. Sikafloor 171 can then be top coated.
<b>Limitations</b>	<ul style="list-style-type: none"> <li>■ Minimum/Maximum substrate temperature: 60°F/85°F (15.5°C/30°C).</li> <li>■ Maximum relative humidity: 85%.</li> <li>■ Substrate temperature must be at least 5°F (3°C) above measured dew point.</li> <li>■ Determine the surface moisture content by using an impedance moisture meter designed for use on concrete as detailed in ASTM E-1907. Acceptable test results shall be 4% by mass or less. Conduct quantitative anhydrous calcium chloride testing in accordance with ASTM F1869. Maximum acceptable test result is 3 pounds per 1,000 ft<sup>2</sup> per 24 hours. If over use Sikafloor Epocem 81/82, or Sikafloor Vapor Block.</li> <li>■ Do not use on exterior, on-grade substrates.</li> <li>■ Freshly applied Sikafloor 171 should be protected from dampness, condensation and water for at least 24 hrs.</li> <li>■ Do not thin this product. Addition of thinners will slow the cure and reduce the ultimate properties of this product. Critical recoat times will also be affected.</li> <li>■ This product is not designed for exterior use, immersion, or any use where moisture can reach the underside of the resurfacer.</li> <li>■ Will discolor over time when exposed to sunlight (UV) and under certain artificial lighting conditions. UV resistant, light stable topcoats are available where ultimate color/clarity retention is required.</li> </ul>

# Industrial Flooring

<b>Caution</b>	<p><b>COMPONENT R: WARNING:</b> Contains Epoxy Resins (Mixture). May cause eye irritation. May cause skin sensitization/allergic reaction following prolonged or repeated contact. Harmful if swallowed.</p> <p><b>COMPONENT H: WARNING: CORROSIVE, IRRITANT, SENSITIZER.</b> Avoid direct contact. Contains Amine (Mixture). Corrosive to eyes/skin/respiratory tract. Causes burns to eyes/skin/respiratory/digestive tract. Causes severe eye/skin irritation. Harmful if swallowed. May cause skin and/or respiratory sensitization after prolonged contact.</p> <p>Deliberate concentration of vapors of 'R' &amp;/or 'H' components for purposes of inhalation is harmful and can be fatal. <b>Strictly follow all usage, handling and storage instructions.</b></p>	
<b>First Aid</b>	<p><b>Eyes</b> – Hold eyelids apart and flush thoroughly with water for 15 minutes. <b>Skin</b> – Remove contaminated clothing. Wash skin thoroughly for 15 minutes with soap and water. <b>Inhalation</b> – Remove to fresh air. <b>Ingestion</b> – Do not induce vomiting. Dilute with water. Contact physician. <b>In all cases, contact a physician immediately if symptoms persist.</b></p>	
<b>Handling &amp; Storage</b>	<p>Avoid direct contact. Wear personal protective equipment (chemical resistant goggles/gloves/clothing) to prevent direct contact with skin and eyes. Use only in well ventilated areas. Open doors and windows during use. Use a properly fitted NIOSH respirator if ventilation is poor. Wash thoroughly with soap and water after use. Remove contaminated clothing and launder before reuse.</p>	
<b>Clean Up</b>	<p>Avoid contact. Wear chemical resistant clothing/gloves/goggles. In absence of adequate ventilation; use a properly fitted NIOSH respirator. Uncured material can be removed with approved solvent. Follow solvent manufacturer's instructions for use and warnings. Cured material (when Component R combined with Component H) can only be removed mechanically. In case of spill, ventilate area and contain spill. Collect with absorbent material. Dispose of in accordance with current, applicable local, state, and federal regulations.</p>	
<b>Additional Info</b>	<p>Technical Data Sheets are updated periodically. To ensure the most current version is being used, visit Technical Resources on <a href="http://www.sikafloorusa.com">www.sikafloorusa.com</a>. Proper material application is the responsibility of the user. Site visits made by Sika personnel are for making technical recommendations only and not for supervising or providing quality control.</p>	
<b>Trouble Shooting</b>	<b>Problem Observed</b>	<b>Possible Causes</b>
	Fisheyes	Oil Contamination; Improper substrate cleaning; Mold release agents; Improper mixing.
	Peeling From Substrate	Insufficient preparation process; Oil impregnation; Moisture in concrete.
	Peeling Between Coats	Past critical recoat time; Contamination between coats.
	Coating Soft, Dulling	Improper mixing; Use of thinner in product; Extreme weather conditions.
	Slow Cure	Low floor and ambient temperatures; Use of thinner in product; Improper mixing; Product applied too thin.
	Fast Cure	High floor and ambient temperatures.
	Bubbling	High temperatures and or direct sunlight exposure; Excessive substrate outgassing due to rising temperatures; Working product past pot life; Improper mixing overworked the product.

**KEEP CONTAINER TIGHTLY CLOSED • KEEP OUT OF REACH OF CHILDREN • NOT FOR INTERNAL CONSUMPTION • FOR PROFESSIONAL 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 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 MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKASHALLNOTBELIABLEUNDERANYLEGALTHEORYFORSPECIALORCONSEQUENTIALDAMAGES.SIKASHALLNOTBERESPONSIBLEFOR 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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1-800-933-SIKA NATIONWIDE

Regional Information and Sales Centers. For the location of your nearest Sika sales office, contact your regional center.

**Sika Corporation**  
201 Polito Avenue  
Lyndhurst, NJ 07071  
Phone: 800-933-7452  
Fax: 201-933-6225

**Sika Canada Inc.**  
601 Delmar Avenue  
Pointe Claire  
Quebec H9R 4A9  
Phone: 514-697-2610  
Fax: 514-694-2792

**Sika Mexicana S.A. de C.V.**  
Carretera Libre Celaya Km. 8.5  
Fracc. Industrial Balvanera  
Corregidora, Queretaro  
C.P. 76920  
Phone: 52 442 2385800  
Fax: 52 442 2250537

