

# **BUILDING TRUST**

# PRODUCT DATA SHEET

# Sikafloor®-217 Thixo Lite

Thixotropic Epoxy Grout and Topcoat for Decorative Quartz and Flake Application

#### PRODUCT DESCRIPTION

A two-component, high solids, epoxy based, thixotropic topcoat providing a light orange peel texture finish. May be used as a grout and top coat on Sikafloor Cove Base Systems, Sikafloor Quartzite® Decorative Quartz Flooring Systems. Designed as a top dressing over Sikafloor trowelled epoxy mortar systems to enhance abrasion and chemical resistance.

#### **USES**

Sikafloor®-217 Thixo Lite may only be used by experienced professionals.

Sikafloor 217, used in conjunction with Sikafloor 217 Thixo Lite B hardener, is ideal as a low odor grout coat and topcoat for quartz or vinyl flake floor broadcast systems. Sikafloor 217 Thixo Lite is especially suitable for vertical applications and as a topcoat for Sikafloor Epoxy Systems, creating a light orange peel texture finish. Sikafloor®-217 Thixo Lite may also be field pigmented. Sikafloor®-217 Thixo Lite clear and/or pigmented can also be top coated with an aliphatic urethane when increased chemical and abrasion resistance are required.

Typical applications would include:

- Auto dealerships
- Institutions
- Grocery, department and retail stores
- Pharmaceutical laboratories, production rooms and offices
- Museum and galleries
- Animal shelter and veterinary clinics
- Laboratories, Bathroom/Shower areas

# **CHARACTERISTICS / ADVANTAGES**

- Good chemical and mechanical resistance
- 100 % solids as supplied
- Attractive, high gloss, reflective coating
- Tough, smooth, non-porous surface is easy to clean
- Durable, impermeable and seamless
- Easily applied with brush, roller or squeegee
- Good abrasion resistance
- Optional integral cove base and curbs can be installed without seams and joints
- Excellent impact resistance

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# PRODUCT INFORMATION

Packaging	Component A: 3.00 US gal. (11.3 L)		
	Component B: 1.50 US gal. (5.68 L)		
	Component A: 5.00 US gal. (18.9 L)		
	Component B: 5.00 US gal. (18.9 L)	Component B: 50 US gal. (189.3 L)	
	A+B: 15 US gal. (56.7 L)	A+B: 150 US gal. (567 L)	
	* (2 units needed)		
Appearance / Color	Clear or field pigmented with Sikafloor Epoxy Color Additive-N		
Shelf Life	24 months in original unopened container under proper storage conditions		
Storage Conditions	Store dry between 40 °F and 90 °F (4–32 °C)		
Solid Content	~ 100 % (by volume) / ~ 100 % (by weight)		
Volatile organic compound (VOC) content	34 g/L (217 A+Thixo Lite B Combined)		
Viscosity			
TECHNICAL INFORMATION			
Shore D Hardness	78–82	(ASTM D-2240) (28 days at 73 °F (23 °C) and 50 % R.H.)	
Abrasion Resistance	76 mg	(ASTM D-4060 ) CS-17/1000 cycles/1000g	
Compressive Strength	7,250 psi (50 N/mm²) (A	(ASTM C-579) Resin (filled 1:0,9 with Sikadur 504) (28 days at 73 °F (23 °C) and 50 % R.H.)	
Flexural Strength	9,384 psi	(ASTM D-790) (28 days at 73 °F (23 °C) and 50 % R.H.)	
Tensile Strength	5,728 psi	(ASTM D-638)	
Elongation at Break	11 %	(ASTM D-638) (28 days at 73 °F (23 °C) and 50 % R.H.)	
Tensile Adhesion Strength	> 362.5 psi (2.5 Mpa)	(ASTM D-4541) Concrete failure (28 days at 73 °F (23 °C) and 50 % R.H.)	
Chemical Resistance	Please consult Sikafloor Technical Services.		
Gloss Level	1.30 % (MIL-PRF-24613 (28 days at 73 °F (23 °C) and 50 % R.H.		
APPLICATION INFORMATION			
Coverage	Finish Coating: $200-265 \text{ ft}^2$ / per mixed US gal. $(4.9-6.5 \text{ m2 / L})$ at $6-8 \text{ mils}$ $(0.15-0.2 \text{ mm})$ wet film thickness (w.f.t.).		
Pot Life	Material Temperature	Time	
	50 °F (10 °C)	~ 50 minutes	
	68 °F (20 °C)	~ 25 minutes	
	86 °F (30 °C)	~ 15 minutes``	

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Ambient & Substrate Temperature	Foot traffic	Light traffic	Full cure
50 °F (10 °C)	~ 24 hours	~ 3 days	~ 10 days
68 °F (20 °C)	~ 16 hours	~ 2 days	~ 7 days
86 °F (30 °C)	~ 12 hours	~ 36 hours	~ 4 days

# **Waiting/Recoat Times**

Before applying second coat of Sikafloor®-217 Thixo Lite allow:

Ambient & Substrate	Minimum	Maximum	
Temperature			
50 °F (10 °C)	24 hours	36 hours	
68 °F (20 °C)	8 hours	24 hours	
86 °F (30 °C)	6 hours	24 hours	_

Before applying Sikafloor Epoxy or Polyurethane on Sikafloor®-217 Thixo Lite allow:

Ambient & Substrate	Minimum	Maximum
<u>Temperature</u>		
50 °F (10 °C)	24 hours	3 days
68 °F (20 °C)	8 hours	2 days
86 °F (30 °C)	6 hours	1 day

# **APPLICATION INSTRUCTIONS**

#### 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 removed to achieve a level surface prior to the application. Concrete - Should be cleaned and prepared to achieve a laitancefree 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/coating and the 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.

#### 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.

Clear Resin:

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 and until uniform 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 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.

#### Field Pigmented:

Premix each component separately. If color is desired, the appropriate Sikafloor Epoxy Color Additive-N is added to Component A at a rate of 1 quart (1 L) per 4.5 to 5 mixed gal. (18.9 L) [(i.e. Components A+B)] for all colors except bright colors like White, Safety Yellow or Tile Red which require 2 quarts (2 L) per 5 mixed gal. (18.9 L) [(i.e. Components A+B)]. Mix Component A and Sikafloor Color Additive for 2 minutes and until a uniform color is achieved with a low speed drill (300–450 rpm) and Exomixer or Jiffy type paddle suited to the volume.

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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**

As a Grout coat on Sikafloor Epoxy Mortar Systems: Sikafloor 217 Thixo Lite is applied with a flat rubber squeegee or flat metal trowel tightly over a smooth surface. Back rolling is typically done with an 18 in. (455 mm) wide short nap, 3/16 or 1/4 in. (4 to 6mm), solventresistant roller cover. Back roll the Sikafloor®-217 Thixo Lite only to level the squeegee applied material. Overrolling and late back rolling may cause bubbling and leave roller marks. 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.

#### As a Top coat:

Sikafloor®-217 Thixo Lite is applied with a flat or notched rubber squeegee over a smooth surface. Back rolling is typically done with an 18 in. (455 mm) wide short nap, 3/16 or 1/4 in. (4 to 6mm), solvent-resistant roller cover. Back roll the Sikafloor®-217 Thixo Lite only to level the squeegee applied material. Over-rolling and late back rolling may cause bubbling and leave roller marks. 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. Note: The texture peak through height will vary depending on the mill thickness and type of roller used. Use with "Texture paint roller; foam roller - rough 10 in. (25 cm)" by Friess Specialties. Obtain through Sikaflooring accessories distributor (Friess Article No: 3925730/8500) or Sika Corp. Do not apply the material above the recommended thickness, cloudiness/whitening may occur.

## **LIMITATIONS**

Moisture Content, Ambient Relative Humidity, Ambient and Surface Temperature and Dew Point. During installation, confirm and record such 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<sup>®</sup> 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<sup>®</sup> 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 22NA PurCem. 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 22NA PurCem. ASTM F2170 testing is not a substitute for measuring substrate moisture content. Use a Tramex<sup>®</sup> CME/CMExpert type concrete moisture meter as described above.

Prior to application, measure and confirm Substrate

Material Temperature: Precondition material for at least 24 hours between 65 °F and 75 °F (18-24 °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.

Ambient Relative Humidity: Maximum ambient and 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. Improper mixing procedure or incorrect mixing ratio may result in moisture sensitivity, whitening, slow cure, soft spots, and other defects.



- 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.
- 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.

### **BASIS OF PRODUCT 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.

#### OTHER RESTRICTIONS

See Legal Disclaimer.

# **ENVIRONMENTAL, HEALTH AND SAFETY**

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

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# LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED.
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), 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 usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

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 the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR 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.

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