

## **BUILDING TRUST**

# PRODUCT DATA SHEET

# Sikafloor®-293

#### **CLEAR EPOXY COVE RESIN**

#### PRODUCT DESCRIPTION

Sikafloor®-293 is a thixotropic binder resin specifically designed for cove and vertical applications. Sikafloor®-293, when mixed with Sikafloor- Decorative® Quartz, Sikadur®-505, - 506, -506ER,- 506RC and -508 aggregates, may be applied up to 1/4" thick vertically.

#### **USES**

Sikafloor®-293 may only be used by experienced professionals.

Sikafloor®-293 is used where the maximum Sanitation/Hygiene is required. It can provide rounded and sealed corners.

# **CHARACTERISTICS / ADVANTAGES**

- Designed specifically for trowel application on vertical surfaces
- Good mechanical resistance
- Versatile usage with other Sikafloor systems
- Excellent adhesion

#### PRODUCT INFORMATION

Packaging	Component A:	1.5 US gallon. (5.6 L) fill in 2 gallon pail		
	Component B:	0.5 US gallon. (1.8 L) fill in 1 gallon can		
	Components A+B:	2 US gallon kit. (7.57 L)		
Appearance / Color	Neutral/Clear			
Shelf Life	2 years in original unopened container under proper storage			
Storage Conditions	Store dry between 40–90 °F (4–32 °C)			
Volatile organic compound (VOC) content	21 g/l	A+B Combined		

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# **TECHNICAL INFORMATION**

Shore D Hardness	80			ASTM D2240 73°F (23°C) and 50 % R.H	
Abrasion Resistance	2.8 g (H-22) 1000 rotations/1000 g			ASTM-D4060 at 73°F (23°C) and 50 % R.H	
Compressive Strength	7,832 Psi (54 MPa)			ASTM C579 at 73°F (23°C) and 50 % R.H	
Flexural Strength	2,132 Psi (14.7 MPa)			ASTM C580 at 73°F (23°C) and 50 % R.H	
Tensile Strength	2,031Psi (14 Mpa)			ASTM C307 at 73°F (23°C) and 50 % R.H	
Tensile Modulus of Elasticity	217,267 Psi (1,498 Mpa)			ASTM C580 at 73°F (23°C) and 50 % R.H	
Tensile Adhesion Strength	725 Psi (>5 Mpa)		at	ASTM D4541 at 73°F (23°C) and 50 % R.H	
Impact Strength	2.62 ft.lb		at	ASTM D2794 at 73°F (23°C) and 50 % R.H	
Indentation	0.40%		at	ASTM Mil-PRF-24613 at 73°F (23°C) and 50 % R.H	
Thermal Resistance	Pass	Pass		ASTM C844 at 73°F (23°C) and 50 % R.H	
Water Absorption	1.2% (24 hours b	1.2% (24 hours boiling)  ASTM C41 at 73°F (23°C) and 50 % R.			
Coefficient of Friction	1.50x10-5 in/in°F 2.71x10-5mm/mm/°C ASTM D696 at 73°F (23°C) and 50 % R.H				
Mixing Ratio	3: 1 by volume plus approximately 45-60 pounds of the aforementioned Sikafloor-Decorative® Quartz and Sikadur® aggregates per gallon of mixed Sikafloor®-293.				
Coverage	As a primer, applied at 4 - 6 wet mils vertically. For cove application, applied at approximately 50 ln. ft. per gallon with specified aggregates at 1/8" thick at 4" high. Coverage rates are calculated based on material needed for finishing of smooth surfaces.				
Substrate Temperature	50°F (10°C) min./95°F (35°C) max				
Pot Life	Material Tempe 50 °F (10 °C)	perature Time ~ 40 minutes			
Cure Time	Ambient & Substrate Temperature	Foot Traffic	Light Traffic	Full cure	
	50 °F (10 °C)	~ 24 hours	~ 3 days	~ 10 days	
	73 °F (23 °C)	~ 8 hours	~ 2 days	~ 7 days	
	96°F (35 °C)	~ 3 hours	~ 1 days	~ 4 days	
Waiting / Recoat Times	Temperature 50 °F (10 °C)	-		Time Minimum ~ 20 hours	
	73 °F (23 °C) 95 °F (35 °C)	, ,		~ 5 hours ~ 2 hours	

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#### **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.

### **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.

#### LIMITATIONS

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

- 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.
- Sikafloor<sup>®</sup>-293 must be applied as supplied.
- Any aggregate used with Sikafloor®-293 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. 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.
- 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.
- Not recommended when using a clear system. 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
- 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.

#### APPLICATION INSTRUCTIONS

#### SURFACE PREPARATION

Concrete surfaces must be clean and sound. Remove all dust, dirt, existing paint films, efflorescence, exudates, laitance, form oils, hydraulic or fuel oils, brake fluid, grease, fungus, mildew, biological residues or any other contaminants which may prohibit a good bond. Prepare the surface by any appropriate mechanical means, in order to achieve a profile equivalent to ICRI - CSP 3-6.

The compressive strength of the concrete substrate should be at least 3,625 psi (25 MPa) at 28 days and a minimum of 218 psi (1.5 MPa) in tension at the time of application. Repairs to cementitious substrates, filling of blowholes, leveling of irregularities, etc. should be carried out using an appropriate Sika profiling mortar. Contact Sika Technical Service for a recommendation.

#### Primer

Sikafloor 293 can be used as a thixotropic primer or use Sikafloor-160 or Sikafloor-161. Apply at approximately 4 –6 mils. Allow primer to start to become tacky for best results. If the primer loses its tack, re-prime. If the primer will be cured prior to the application of the cove, it is recommended to broadcast an angular aggregate to assist in a creating a tooth or roughened surface for the wet cove material to grab.



#### **MIXING**

Mixing Ratio: 3: 1 by volume plus approximately 45-60 pounds of the aforementioned Sikafloor-Decorative® Quartz and Sikadur® aggregates per gallon of mixed Sikafloor®-293.

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 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.

Transfer the mixed binder (components A+B) into a suitable mechanical mixer. Gradually add specified aggregates aggregates (component C) to the binder. Once all ingredients are combined, mix continuously and thoroughly for 2 to 4 minutes to ensure complete mixing. Make sure the contents are completely mixed to avoid any weak or partially cured spots in the mortar. Immediately transfer the materials onto the floor where the cove is to be installed.

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

#### **APPLICATION**

The use of a low level light along the floor/wall intersection will show shadows and aide in reducing trowel marks or ridges. After thoroughly mixing, immediately deliver material along the floor/wall. Apply the material by striking it up the wall with a steel trowel or margin trowel, ensure the thickness is consistent. Keep the trowel clean by wiping with a rag dampened with solvent. The solvent will act as a lubricant to assist in troweling, do not use water. Finish with a cove trowel.

#### OTHER RESTRICTIONS

See Legal Disclaimer.

#### 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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