

PRODUCT DATA SHEET

Sikalastic®-350

RAPID-SETTING, EPOXY-BASED CONCRETE OVERLAY SYSTEM

PRODUCT DESCRIPTION

Sikalastic®-350 is a rapid-curing, skid-resistant, epoxy-based concrete overlay system. When mixed with aggregate it can be used as a repair mortar.

USES

- Parking structures
- Horizontal surfaces
- Interior and exterior
- Bridge decks
- Steel decks
- Warehouse floors
- Elevated airport runways
- Balconies
- Concrete
- Steel

CHARACTERISTICS / ADVANTAGES

- Rapid strength development helps minimize traffic disruption
- Waterproof to prevent chloride ion contamination, freeze-thaw damage and salt scaling
- 90% lighter than typical concrete overlays to limit dead load in suspended structures
- Excellent adhesion to the substrate to prevent delamination and extend surface life
- Skid resistant increasing safety for vehicles and pedestrians
- One-to-one mix ratio by volume simplifies application
- Durable surface extends service life
- No primer required for faster installation
- 100% solids

APPROVALS / STANDARDS

- ASTM C 881

PRODUCT INFORMATION

Chemical Base	Sikalastic®-350 is a two-component epoxy-based binder.
Packaging	<ul style="list-style-type: none"> ▪ 10 gallon (38 L) kits ▪ 110 gallon (412 L) kits ▪ 530 gallon (2006 L) kits
Shelf Life	2 years when properly stored
Storage Conditions	Store in unopened containers at 60– 80 °F (16–27 °C) in clean, dry conditions.
Viscosity	20–25 poise (ASTM D 2393) at 75 °F (24 °C); 20–25 ASTM D 2393 #3 spindle at 20 rpm

TECHNICAL INFORMATION

Shore D Hardness	62	(ASTM D 2240) at 7 days
Abrasion Resistance	Abrasion - Taber 1000 cycles - CS 17 wheel	70 mg (neat) 77 mg (with aggregate) (ASTM D 4060)
Compressive Strength	24 hrs 7 days	4,000–4,500 psi 6,500–7,000 psi (ASTM D 695)
	Mixed with Aggregate 3 hrs 24 hrs	3,000–3,500 psi 5,000–5,500 psi (ASTM C 579)
Flexural Strength	Modulus of Elasticity in Compression 1.21 x 10 ⁵ psi (834 mPa)	(ASTM C 695)
Tensile Strength	6,525 psi	(ASTM D 638) at 7 days
Tensile Resistance	Tensile elongation >30%	(ASTM D 638) at 7 days
Adhesion in peel	Adhesion Pull Test >536 psi (break in concrete)	(ASTM D 7234) 24 hours (ACI 503 Appendix A)
Thermal resistance	Thermal compatibility 5 cycles	Pass (ASTM C 884) Modified: 8 hours @ 60 °C plus 16 Hours @ -21 °C
Water Absorption	0.02%	(ASTM D 570) 24 hrs
Rapid Chloride Permeability	Rapid Chloride Permeability 0 Chloride ion penetration @ 28 days	negligible (ASTM C1202) (AASHTO T277)

APPLICATION INFORMATION

Mixing Ratio	1 to 1, by volume
Coverage	<ul style="list-style-type: none"> ▪ Parking Decks: 40 - 60 ft² /gallon (1.0 - 1.5 m² /L), depending on porosity and profile of substrate ▪ Bridge Decks: 20 - 40 ft² /gallon (0.5 - 1.0 m² /L), depending on porosity and profile of substrate ▪ 80 ft² /gallon (1.96 m² /L) as a primer for epoxy binder ▪ Binder yield varies depending on mix ratio (aggregate to epoxy) and aggregate size and gradation. ▪ Mortar Mix Yield: A ratio of 3 GAL Sand + 1 GAL mixed Sikalastic®-350 = 2.8 GAL mortar mix (650 in³)
Gel time	15–20 min (ASTM C 881) at 72 °F (22 °C); (Modified to test 70 g sample)

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.

LIMITATIONS

For Best Performance

- Minimum application temperature is 50 °F (10 °C) and rising. Contact Technical Service when temperatures are above 90 °F (32 °C)
- Precondition all components to 70 °F (21 °C) for 24 hours before using.
- Do not apply when rain is expected within 12 hours.
- Finished product is a vapor barrier and should not be applied to on-grade slabs subject to exterior service conditions or other structures where moisture-vapor transmission is a concern.
- Do not use neat (without aggregate).
- Proper application is the responsibility of the user. Field visits by Sika personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the job site.
- The Sikalastic®-350 topcoat is a rigid epoxy material and may crack due to substrate flex and movement under the membrane system. Do not install it over moving joints.

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.

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

Uncoated Metal Surfaces

Remove dust, debris and any other contaminants from vent, drain pipe and post penetrations, reglets and other metal surfaces. Clean surfaces to near white per SSPC-NACE2.

Concrete

- Concrete must be fully cured (28 days), structurally sound, clean and dry (ASTM D 4263). All concrete surfaces (new and old) must be shot blasted to remove previous coatings, laitance and all miscellaneous surface contamination and to provide profile for proper adhesion. Abrasive shot blasting must occur after concrete repair has taken place. Acid-etching is not permitted. Proper profile should be a minimum of ICRI CSP-5 (as described in ICRI document 03732.)
- Repair voids and delaminated areas with Sika branded cementitious and epoxy patching materials. For application when fast-turn repairs are required, Sikalastic®-350 can be used to repair patches up to 1.5" in depth when used in aggregate slurry mix.
- All units must be applied within the specified pot life.

MIXING

1. Thoroughly mix each separate component for 2–3 minutes.
2. Mix Part A (resin) and Part B (hardener) in the proper ratio (1:1 by volume), using a slow-speed drill (500 rpm) and paddle for 2–3 minutes.
3. Because of the quick cure rate of this product, do not mix more material than can be applied within the pot life of 15–25 minutes at 75°F (24°C). Elevated temperatures decrease pot life, and reduced temperatures increase pot life.
4. The maximum recoat window for additional coats of Sikalastic®-350 is 24 hours.

APPLICATION

Broadcast-Aggregate Method

Parking Decks

1. Spread the mixed Sikalastic®-350 onto the substrate with a notched squeegee at a rate of 60 ft² /gallon (1.0 m² /L). Place the epoxy to permit a continuous operation by applying the second mix immediately behind the first mix.
2. Begin the aggregate broadcast immediately, but stop to maintain a wet edge. Broadcast aggregate to complete saturation (approximately 1.1 lb/ft² (5.4 kg/m²)). If wet spots develop, immediately broadcast additional aggregate until a dry surface is reestablished.
3. Apply the second coat in the same manner described above at a rate of 40–60 ft² /gal. The maximum recoat window is 24 hours.

Bridge Decks

1. Spread the mixed Sikalastic®-350 onto the substrate with a notched squeegee at a rate of 40 ft² /gal (1.0 m² /L) or 2.5 gallons per 100 ft². Place the epoxy to permit a continuous operation by applying the second mix immediately behind the first mix.
2. Begin the aggregate broadcast immediately, but stop to maintain a wet edge. Broadcast aggregate to complete saturation (approximately 1.1 lb/ft² (5.4 kg/m²)). If wet spots develop, immediately broadcast additional aggregate until a dry surface is reestablished.
3. Apply the second coat in the same matter but at a rate of 20 ft² /gal (.05 m² /L) or 80 mils. The maximum recoat window is 24 hours.

Epoxy Mortar

1. Mix the two components of Sikalastic®-350 using the recommended procedures under the Mixing section.
2. Slowly add up to five parts by volume of oven-dried sand to one part of mixed epoxy.
3. For larger applications, a paddle-type (mortar) mixer may be used. However, the A and B components must first be mixed together using a slow-speed drill as outlined previously.
4. Prime the area to receive the epoxy mortar using neat resin (parts A and B mixed but with no aggregate). Some applications, e.g., paving dams, will require forming to prevent the material from slumping into the

- joint.
- Place the epoxy mortar into the repair area and level with a trowel or float. Excess working of the surface will bring resin to the top, which will create a slick finish when cured. To prevent this, broadcast aggregate to refusal onto leveled surface.
 - Allow time for sufficient curing before removing forms, if applicable.
 - When using the Sikalastic®-350 as a binder in this method, the mortar should be placed at no more than 1½" maximum depth.
 - Allow a minimum cure time of 6 hrs at 70°F (21°C). for Sikalastic®-350 before allowing vehicular traffic.

Aggregate

An angular-shaped silica or basalt aggregate may be used. The aggregate shall be an angular-shaped silica with Mohs scale hardness of 7 or greater or basalt with a hardness of 6 or greater. The alternate aggregate must be clean, dry (less than 0.2% moisture), and conform to the following gradation.

PERCENT, BY WEIGHT, PASSING IN INDICATED U.S. STANDARD-SIEVE SERIES

Coarse Aggregate

Sieve #	4	8	16	30
% Passing	100	30-75	0-5	0-1

CLEANING OF TOOLS

Cleanup tools with xylene immediately after use.

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.**

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html> or by calling 1-800-933-7452.

Sika Corporation

201 Polito Avenue
 Lyndhurst, NJ 07071
 Phone: +1-800-933-7452
 Fax: +1-201-933-6225
usa.sika.com



Product Data Sheet

Sikalastic®-350
 June 2024, Version 01.01
 02070640100000079

Sikalastic-350-en-US-(06-2024)-1-1.pdf

