

# SYSTEM DATA SHEET

# Sikalastic® Vehicular Traffic 1500

POLYURETHANE WATERPROOFING, TRAFFIC-BEARING MEMBRANE SYSTEMS FOR VEHICULAR AND PEDESTRIAN AREAS.

# PRODUCT DESCRIPTION

Sikalastic® Vehicular Traffic 1500 is a waterproofing system consisting of:

- Sikalastic® M 200, a low VOC, one-component, moisture-curing polyurethane
- Sikalastic® TC 225, a low VOC, one-component aliphatic moisture-curing polyurethane

Note: Sikalastic® TC 225 Tint Base is intended for pedestrian use only and is not suitable for vehicular traffic.

For projects specifying primer, please consult a Sika Representative.

# **USES**

Sikalastic® Vehicular Traffic 1500 may only be used by experienced professionals.

- Stadiums
- Parking Garages
- Commercial Construction
- Building and Restoration
- Plywood Decks

# **CHARACTERISTICS / ADVANTAGES**

**BUILDING TRUST** 

- Primer coat not typically required which helps to reduce labor and material costs
- Waterproof to protect concrete from freeze/thaw damage; protects occupied areas below from water damage
- Excellent chloride resistance provides protection against chloride intrusion; extends the life of reinforcing steel
- Seamless elastomeric membrane offers excellent durability and superior abrasion resistance, has no seams that may result in leaks
- Provides skid resistance to increase safety and offers excellent durability and superior abrasion resistance
- Repairable and recoatable to extend the useful life of the system

# **APPROVALS / STANDARDS**

- UL 790 Class A Fire Rating
- ASTM C 957
- ASTM E 108
- ASTM E 84
- CSA S413

# SYSTEM INFORMATION

System Structure	<ul> <li>Sikalastic® M 200</li> <li>Sikalastic® TC 225</li> </ul>
Composition	Sikalastic® Vehicular Traffic 1500 is a moisture-curing polyurethane system.
Color	For color options, please refer to the corresponding Product Data Sheets

# System Data Sheet

Sikalastic® Vehicular Traffic 1500 December 2024, Version 01.03 020812900000000151 **Test Results** 

Allow curing time of 72 hours before vehicular use and 48 hours before pedestrian use. Extend the curing time in cool-weather conditions.

# **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**

- Sikaflex® HY 100 and Sikaflex® HY150 should not be used in conjunction with this urethane deck coating system due to potential for curing issues.
- If vapor drive is present or suspected, please consult with your local Sika representative prior to system application.
- Concrete should have a minimum compressive strength of 3,000 psi (20.7 MPa) and be cured for a minimum of 28 days.
- Do not apply to concrete that is out-gassing
- Be sure to allow for movement in the deck by the proper design and use of expansion and control joints.
- When applying sealants, use backing materials according to industry standards.
- Do not apply when substrate temperatures are over 110 °F (32 °C) or under 40 °F (4 °C).
- When applying Sikalastic® Vehicular Traffic 1500 at interior or contained spaces, provide adequate ventilation with a minimum of six air changes per hour.
- When adequate ventilation for use of Sikalastic® Vehicular Traffic 1500 cannot be maintained, consider the use of Sikalastic® Vehicular Traffic 2500 coating system.
- Be certain that all aggregate not properly encapsulated is thoroughly removed.
- On steep ramps in excess of 15%, contact your local Sika representative.
- Substrate temperature must be more than 5 degrees above dew point during application and cure.
- Sikalastic® TC 225 Tint Base is intended for pedestrian use only and is not suitable for vehicular traffic.
- Do not apply Sikalastic® Vehicular Traffic 1500 to concrete slabs on grade, unvented metal pan decks and split slab applications with a membrane between slabs.
- Select the proper amount of aggregate to promote slip resistance.
- The best method to ensure average wet film thickness is the use of a grid system. Divide the surface area to be coated into grids and calculate the square footage of each. For example, one pail of Sikalastic® M 200 applied at 55–60 ft²/gal should cover approximately 275–300 sq ft or a minimum grid of 16 x 16 ft at 25 wet mils. The wet film thickness can also be verified with a wet film thickness gauge.

Verify coverage via site mockup.

- Pre-stripe to level out recessed sealant joints (less than 1" [25 mm]) for optimal aesthetic appearance.
- Be certain that all aggregate not properly encapsulated is thoroughly removed.
- Sikalastic<sup>®</sup> Vehicular Traffic 1500 is not suitable for use where chained or metal-studded tires will be used.
- Proper application is the responsability of the user.
   Field visits by Sika personnel are for the purpuse of making technical recommendation only and not for supervising or providing quality control on the jobsite.
- CAD & PDF deck coatings details are available for download from our website; Sika Customer Service can direct you to the site.

# **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

# Concrete

- 1. 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- 3 (as described in ICRI document 03732.) For balconies and other pedestrian areas with limited space or access for shot-blasting, alternative mechanical methods can be used to achieve the recommended surface profile.
- 2. 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 the aggregate slurry mix. Please refer to the Sikalastic®-350 product data sheet for proper application techniques.
- 3. All units must be applied within the specified pot life.

# Surface Pre-Striping and Detailing



- 1. For non-moving joints and cracks less than 1/16" (1.6 mm) wide, apply 25 wet mils (0.6 mm) prestriping of Sikalastic® M 200. Sikalastic® M 200 must be applied to fill and overlap the joint or crack 3" (76 mm) on each side. Feather the edges.
- 2. Dynamic cracks and joints over 1/16" (1.6 mm) wide must be routed to a minimum of %" by %" (6 by 6 mm) and cleaned. Install bond breaker tape to prevent adhesion to bottom of joint. Prime joint faces only with Sika® Primer-173 and fill with Sikaflex® SL1, NP1. For joints deeper than %" (6 mm), use appropriate backer rod. For cracks, sealant should be flush with the adjacent surface. For expansion joints, sealant should be slightly concave.Once the sealant is cured the lines should be prestriped with base coat Sikalastic® M 200, overlap the joint 3" (76 mm) on each side.
- 3. Sealed joints 1" (25 mm) wide or less can be coated over with the Sikalastic® Traffic system. Expansion joints exceeding 1" (25 mm) wide, including the primary wide expansion-joint system, are not to be coated so they can perform independently of the deck coating system.
- 4. Where the coating system will be terminated and no wall, joint or other appropriate break exists, cut a ¼" x ¼" (6 x 6 mm) keyway into the concrete. Fill and coat keyway during application of Sikalastic® M 200.
- 5. Form a sealant cant into the corner at the junction of all horizontal and vertical surfaces (wall sections, curbs, columns) by priming with Sika® Primer-173 and applying a 1" (25 mm) wide bead of Sikaflex® NP 1. Tool to form a 45° cant. Apply masking tape to the vertical surfaces 4–5" (102–127 mm) above the sealant cant to provide a clean termination of the vertical detail coat. After the sealant has cured, apply 25 wet mils (0.64 mm) of Sikalastic® M 200 over the cured cant up to the masking tape and 4" (102 mm) onto deck surface.
- intersections, a reinforcing fabric is required. After the sealant cant bead is applied and cured, apply 25 wet mils of Sikalastic® M 200 over the sealant and embed Sikalastic® Fleece-996 reinforcing

6. In locations of high movement such as wall and slab

#### **Uncoated Metal Surfaces**

fabric into the wet detail coat.

1. 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 and prime immediately with Sika® Primer-173. Provide appropriate cant with Sikaflex® NP1/NP2. Apply a detail coat of 25 wet mils of Sikalastic® M 200 over the

primed metal and sealant.

#### Plywood

- 1. All plywood must be smooth-faced, APA-stamped and exterior grade tongue and groove. Construction must conform to code, but plywood must not be less than 23/32" (20 mm) thick. Plywood spacing and deck construction must follow APA guidelines.
- 2. Surfaces must be free of contaminants. Priming is not necessary on clean, dry plywood.
- 3. All seams must be caulked with Sikaflex® NP 1 or Sikaflex® NP 2 sealants. Pre-stripe 4–6" (102–152 mm) wide with 25 wet mils (0.64 mm) of Sikalastic® M 200. Reinforce all seams between plywood sheets and between flashing and the plywood deck by embedding Sikalastic® Fleece-996 Reinforcing Fabric into the prestriping.

#### **MIXING**

Please refer to the specific PDS for Mixing instructions.

#### APPLICATION

# **PRIMER**

NOTE: When primer is required on a job, contact your local Sika representative.

# SIKALASTIC® M 200

- 1. All preparatory work must be completed before application begins. Be certain the substrate is clean, dry, stable and properly profiled. Sealants and pre-striping should be properly cured. Apply the base, mid and finish coats with a properly sized squeegee to arrive at the required mil thicknesses.
- 2. Apply Sikalastic® M 200 at 25 wet mils thick (0.64 mm) using a proper notched squeegee to entire deck surface, and back roll, overcoating the properly prepared cracks, joints and flashings. For sloped areas, use slopegrade Sikalastic® M 200. Do not coat expansion joints over 1" (25 mm) wide. Slope grade product should be used on a slope up to 15%.
- 3. Allow curing time of overnight (16-hour minimum). Extend the curing time in cool or dry weather conditions. The surface of Sikalastic® M 200 should have a slight tack. If the coating has been exposed for a prolonged period, consult Technical Service for recommendations.

#### **APPLICATION METHODS OF SYSTEMS**

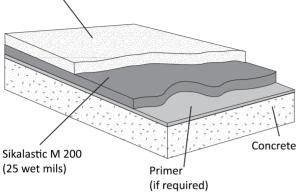
Sikalastic® Vehicular Traffic 1500 can be installed in several configurations, depending upon the degree of traffic to which the system is exposed. In areas of



extreme traffic (turning lanes, pay booths, entrances and exits), apply the Extra Heavy-Duty Traffic System. The following summary briefly describes each configuration. All coverage rates are approximate.

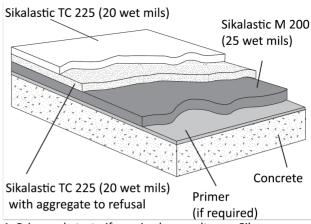
# LIGHT- TO MEDIUM- DUTY TRAFFIC SYSTEM

Sikalastic TC 225 (25 wet mils) with aggregate backrolled into wet top coat



- 1. Prime substrate if required; consult your Sika Representative
- 2. Apply 25 (0.64 mm) wet mils of Sikalastic® M 200 using a proper notched squeegee at 55–60 ft²/gal (1.35–1.47 m²/L). Immediately backroll to level base coat. Allow to cure overnight.
- 3. Apply 25 wet mils (0.64 mm) Sikalastic® TC 225 using a proper notched squeegee at 55–60 ft²/gal (1.35–1.47 m²/L). Immediately backroll to level Sikalastic® TC 225 material.
- 4. While the coating is still wet, broadcast aggregate 16/30 or equivalent rounded silica sand at 15-25 lbs/100 ft²/gal (0.75-1.25 kg/m²), then backroll into the coating to fully encapsulate.
- 5. When installing the Sikalastic® TC 225 Tint Base, a second coat may be required for proper hiding. A mock-up should be performed to address any aesthetic expectations.

# **HEAVY-DUTY TRAFFIC SYSTEM**



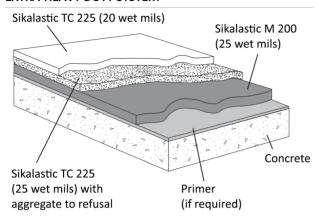
- 1. Prime substrate if required; consult your Sika Representative
- 2. Apply 25 (0.64 mm) wet mils of Sikalastic<sup>®</sup> M 200 or using a proper notched squeegee at 55–60 ft<sup>2</sup>/gal (1.35–1.47 m2/L). Immediately backroll to level base coat. Allow to cure overnight
- 3. Apply 20 wet mils (0.51 mm) Sikalastic® TC 225 using a notched squeegee at 75–80 ft²/gal (1.83–1.97 m²/L). Immediately backroll to level Sikalastic® TC 225. The next step, #4, can utilize either method described in 4A or 4B. Sikalastic® TC 225 Tint Base is NOT intended for vehicular systems.
- 4. AGGREGATE
- 4A. AGGREGATE TO REFUSAL METHOD Immediately broadcast aggregate 16/30 or equivalent rounded silica sand into the wet coating at the rate of 20-35 lbs/100 ft<sup>2</sup> (1.0-1.75 kg/m<sup>2</sup>). Immediately after the aggregate broadcast and while the coating is still wet, blow any excess aggregate via a portable blower forward into the wet coating. Do not over-apply aggregate: it is acceptable to have localized wet spots in the aggregate surface after completion of this method. This process requires coordination between all of the members in the work crew. The blower operator. wearing clean spiked shoes, should blow the excess aggregate forward toward the freshly applied and backrolled topcoat. In this method, the coating should not accept additional sand, minimal excess aggregate is on the surface, less aggregate is used, and the textured appearance should be fairly uniform.
- 4B. BROADCAST AND BACKROLL METHOD Immediately broadcast aggregate 16/30 or equivalent rounded silica sand into the wet coating and backroll to encapsulate the aggregate. Evenly broadcast aggregate at the rate of 15–20 lbs/100 ft² (0.75–1.0 kg/m²). Allow



to cure overnight.

5. Ensure there is no moisture on the surface of the aggregate/membrane before application of topcoat. Remove all loose aggregate, then apply 20 wet mils using a flat squeegee at 75–80 ft²/gal (1.84–1.96 m²/L). Immediately backroll to level Sikalastic® TC 225.
6. For additional slip resistance, immediately broadcast aggregate 16/30 or equivalent rounded silica sand at a rate of 3–5 lbs/100 ft² (0.15–0.25 kg/m²) and backroll to encapsulate.

# **EXTRA-HEAVY DUTY SYSTEM**



- 1. Prime substrate if required; consult your Sika Representative
- 2. Apply 25 (0.64 mm) wet mils of Sikalastic® M 200 using a proper notched squeegee at 55–60 ft²/gal (1.35–1.47 m²/L). Immediately backroll to level base coat. Allow to cure overnight.
- 3. Apply 25 wet mils (0.64 mm) Sikalastic® TC 225 or using a properly notched squeegee at the rate of 55–60 ft²/gal (1.35–1.47 m²/L). Immediately backroll to evenly level topcoat. The next step, #4, can utilize either method described in 4A or 4B. Sikalastic® TC 225 Tint Base is NOT intended for vehicular systems.

  4. AGGREGATE
- 4A. AGGREGATE TO REFUSAL METHOD Immediately broadcast aggregate 16/30 or equivalent rounded silica sand into the wet coating at the rate of 20–35 lbs/100 ft² (1.0–1.75 kg/m²). Immediately after the aggregate broadcast and while the coating is still wet, blow any excess aggregate via a portable blower forward into the wet coating. Do not over-apply aggregate; it is acceptable to have localized wet spots in the aggregate surface after completion of this method. This process requires coordination between all of the members in the work crew. The blower operator,

wearing clean spiked shoes, should blow the excess aggregate forward toward the freshly applied and backrolled topcoat. In this method, the coating should not accept additional sand, minimal excess aggregate is on the surface, less aggregate is used and the textured appearance should be fairly uniform

- 4B. BROADCAST AND BACKROLL METHOD Immediately broadcast aggregate 16/30 or equivalent rounded silica sand into the wet coating and backroll to encapsulate the aggregate. Evenly broadcast aggregate at the rate of 15–25 lbs/100 ft $^2$  (0.75–1.25 kg/m $^2$ ). Allow to cure overnight.
- 5. Ensure there is no moisture on the surface of the aggregate/membrane before application of topcoat. Remove all loose aggregate, then apply 20 wet mils using a flat squeegee at 75–80 ft²/gal (1.84–1.96 m²/L). Immediately backroll to level Sikalastic® TC 225.
- 6. For additional slip resistance, immediately broadcast aggregate 16/30 or equivalent rounded silica sand at a rate of 3–7 lbs/ 100 ft² (0.15–0.25 kg/m²) and backroll to encapsulate.

IMPORTANT NOTE: All coverage rates are approximate and may vary due to the application technique used. Coverage rates are affected by substrate texture, choice and distribution of aggregate, intermediate coat aggregate load and environmental conditions. Application methods and conditions are not under the control of Sika. Ensure that an adequate amount of aggregate is utilized to achieve desired slip resistance.

#### **MOCKUP**

- 1. Provide mockup of at least 100 ft<sup>2</sup> (9.3 m<sup>2</sup>) to include surface profile, sealant joint, crack, flashing and juncture details and allow for evaluation of slip resistance and appearance.
- 2. Install mockup with specified coating types and with other components noted.
- 3. Locate where directed by architect.
- 4. Mockup may remain as part of work if acceptable to architect.

#### **CLEANING OF TOOLS**

Clean all tools and equipment immediately after use with SikaSwell 990 or xylene. Cured material must be removed mechanically.



# **MAINTENANCE**

MAINTENANCE

See Sikalastic® Traffic maintenance technical bulletin. Regular cleaning and maintenance will prolong the life of all polymer coatings systems, enhance their appearance and reduce any tendency to retain dirt.

**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

# Sika Corporation

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



System Data Sheet
Sikalastic® Vehicular Traffic 1500
December 2024, Version 01.03
020812900000000151

https://usa.sika.com/en/group/SikaCorp/termsandconditions.html or by calling 1-800-933-7452.

Sikalastic Vehicular Traffic 1500-en-US-(12-2024)-1-3.pdf

