BUILDING TRUST

SYSTEM DATA SHEET

Sikalastic® Vehicular Traffic 2500

HIGH-SOLIDS POLYURETHANE WATERPROOFING, TRAFFIC-BEARING MEMBRANE SYSTEMS FOR VEHICULAR AREAS

PRODUCT DESCRIPTION

Sikalastic® Vehicular Traffic 2500 is a fluid-applied polyurethane waterproofing system using a fast-setting, two-component reactive curing mechanism. It has very low odor and is VOC compliant.

Sikalastic® Vehicular Traffic 2500 is composed of:
- Sikalastic® M 270 NP, a two-component, fast-curing polyurethane base coat
- Sikalastic® TC 275 – a two-component fast curing aromatic polyurethane top coat
- Sikalastic® TC 295 – a high performance, two-component, aliphatic, polyaspartic-modified, high solids, polyurethane waterproofing coating

USES

Sikalastic® Vehicular Traffic 2500 may only be used by experienced professionals.

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

CHARACTERISTICS / ADVANTAGES

- Two-component system provides faster setting times, even in cooler climates, to help reduce facility downtime
- Low odor/high solids allow Sikalastic® Vehicular Traffic 2500 to be used over or near inhabited structures; Non-flammable and solvent-free
- Seamless waterproof membrane helps protect concrete from freeze/thaw damage; protects occupied spaces below from water damage and has no seams that may result in leaks
- Excellent chemical and chloride resistance helps protect against common parking deck chemicals including gasoline, diesel fuel, oil, alcohol, ethylene glycol, de-icing salt, bleach and cleaning agents as well as chloride intrusion
- Provides skid resistance to increase safety and offers excellent durability and superior abrasion resistance

APPROVALS / STANDARDS

- CSA S413
- ASTM C 957

SYSTEM INFORMATION

System Structure	▪ Sikalastic® M 270 NP ▪ Sikalastic® TC 275 ▪ Sikalastic® TC 295
Composition	100% Solids
Color	For color options, please refer to the corresponding Product Data Sheets

TECHNICAL INFORMATION

Abrasion Resistance	CS-17 Wheel, 1,000 g load, 1,000 cycles Sikalastic® M 270 NP / TC 275	100	ASTM D 4060
	CS-17 Wheel, 1,000 g load, 1,000 cycles Sikalastic® M 270 NP / TC 275 / TC 295	47	ASTM D 4060

APPLICATION INFORMATION

Drying Time	Allow curing time of 24 hours before vehicular and 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® HY 150 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.
- Sikalastic® M 270 NP and TC 275 or TC 295 have very short working times (20 min ±5) (at 70 ˚F 50% RH). Once the material has been mixed, the coating must be poured onto the surface and applied immediately.
- Sikalastic® TC 275 will discolor if exposed to UV light. Where UV resistance is required, the application of Sikalastic® TC 295 is recommended.
- Minimum application temperature is 40 °F (4 °C).
- If areas of inadequate slip resistance exist, an additional top coat back rolled with aggregate is required.
- Do not apply to concrete that is outgassing.
- Warm temperatures will shorten working time; plan work accordingly.
- Concrete should have a minimum compressive strength of 3,000 psi (21 MPa) and be cured for a minimum of 28 days.
- Do not apply Sikalastic® Vehicular Traffic 2500 to concrete slabs on grade, unvented metal pan decks or split slab applications with a waterproofing membrane between slabs. Contact Sika Technical Services.
- Be sure to allow for movement in the deck by the proper design and use of expansion and control joints.
- Select the proper type and amount of aggregate to achieve desired slip resistance.
- Contact Technical Service when substrates are over 90 °F (32 °C) or under 40 °F (4 °C) or when applying to decks containing between slab membranes.
- The best method to ensure the proper wet film thickness is the use of a grid system. Divide the surface to be coated into grids and calculate the square footage of each. Refer to the coverage chart to determine the quantity of coating needed for each grid to arrive at the required mil thicknesses. For example, one pail of Sikalastic® M 270 NP should cover approximately 255–280 ft2 or a minimum grid of 16 x 16 ft at 25 wet mils. Verify via site mockup.
- Avoid application when inclement weather is present or imminent.
- Do not apply to damp, wet, or contaminated surfaces.
- Do not subject to ponding water or continuous immersion.
- On grade, lightweight concrete, asphalt pavement, or insulated split slab applications, or applications where chained or studded tires may be used, must not be coated with Sikalastic Traffic Systems without Sika technical review. Contact Sika Technical Services or Product Engineering
- Unvented metal pan decks or decks containing a between-slab membrane requires further technical evaluation and priming with a moisture tolerant primer - contact Sika regarding recommendations.
- 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 jobsite.
- CAD & PDF deck coatings details are available for download from our website, Sika Customer Support can direct you to the site.
- On steep ramps in excess of 15%, contact your local Sika representative. Do not use self-leveling grade product on slopes greater than 15%. Do not coat expansion joints over 1" (25 mm) wide.

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 fastturn repairs are required, Sikalastic®-350 can be used to repair patches up to 1.5" in depth when used in 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 270 NP. Sikalastic® M 270 NP 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 ¼" by ¼" (6 by 6 mm) and cleaned. Install bond breaker tape to prevent adhesion to bottom of joint. When required, prime all joint faces only with Sika® Primer-173. Fill joints deeper than ¼" (6 mm) with appropriate backer rod and Sikaflex® Self-Leveling or Non-Sag Sealants. For cracks, sealant should be flush with the adjacent surface. For expansion joints, sealant should be slightly concave. After the sealant has cured, apply 25–30 wet mils (0.64–0.77 mm) of Sikalastic® M 270 NP pre-stripping over the cured sealant, 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. 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® Sealant. 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 270 NP over the cured cant up to the masking tape and 4" (102 mm) onto deck surface.
5. Where the coating system will be terminated and no wall, joint, or other appropriate break exists, cut a ¼" by ¼" (6 by 6 mm) keyway into the concrete. Fill and coat keyway during application of Sikalastic® M 270 NP.
6. In locations of high movement, a reinforcing fabric is required. After the sealant cant bead is applied and cured, apply 25 wet mils of Sikalastic® M 270 NP over the sealant and embed Sikalastic® Fleece-996 or Sika Flexitape reinforcing fabric into the wet detail coat.

Uncoated Metal Surfaces

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® sealants to eliminate 90° angles.

Plywood

1. All plywood must be smooth-faced, APA-stamped, and exterior grade tongue and groove plywood. Construction must conform to code, but plywood must not be less than 23⁄32" (18 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® Sealants. Prestripe 4–6" (102–152 mm) wide with 25 wet mils (0.6 mm) of Base Coat. Reinforce all seams between plywood sheets and between flashing and the plywood deck by embedding Sikalastic® Fleece-996 or Sika Flexitape into the pre-striping.

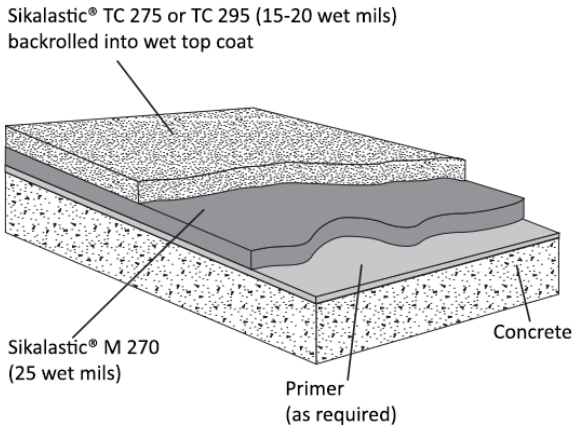
MIXING

Please refer to the specific PDS for Mixing instructions.

APPLICATION

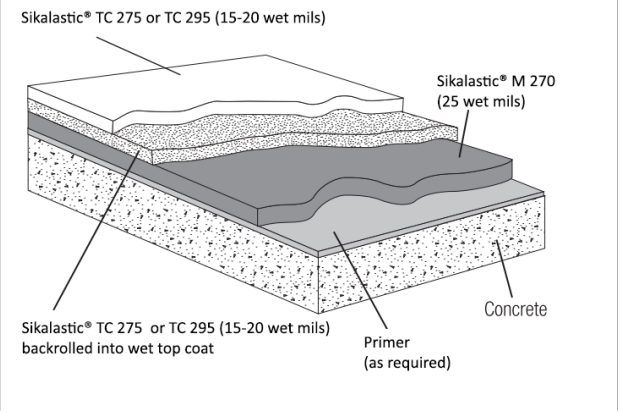
Sikalastic® Vehicular Traffic 2500 can be installed in several configurations, depending upon the degree of traffic to which the system is exposed. In areas of extreme traffic (turning lanes, pay booths, entrances and exits), apply the Extra Heavy-Duty Traffic System. The following summary briefly describes each configuration. All coverage rates are approximate.

LIGHT-MEDIUM TRAFFIC AND PARKING STALLS



1. Prime substrate if required, see Sikalastic® M 270 NP Technical Data Sheet for suitable primers
2. Apply 25 wet mils (0.64 mm) of Sikalastic® M 270 NP with proper notched squeegee at the rate of approximately 55–60 ft² /gal (1.35–1.47 m² /L). Allow base coat to cure 3–4 hours.
3. Apply 15–20 wet mils (0.38–0.51 mm) of Sikalastic® TC 275 / TC 295 at the rate of 80–100 ft² /gal (1.96–2.45 m2 /L).
4. BROADCAST AND BACKROLL -- Immediately broadcast aggregate 16–30 mesh or equivalent, rounded silica sand at the rate of 15–20 lbs/100 ft2 (0.75–1.0 kg/m2) into Sikalastic® TC 275 / TC 295 and backroll to encapsulate.
5. Allow minimum curing time of 24–48 hours before allowing vehicular traffic onto the coating.

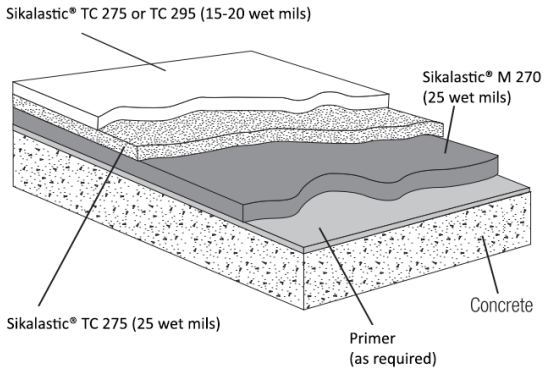
HEAVY-DUTY TRAFFIC SYSTEM



1. Prime substrate if required, see Sikalastic® M 270 NP Technical Data Sheet for suitable primers
2. Apply 25 wet mils (0.64 mm) of Sikalastic® M 270 NP with proper notched squeegee at the rate of approximately 55–60 ft² /gal (1.35–1.47 m² /L). Allow base coat to cure 3–4 hours.
3. Apply 12–20 wet mils (0.30–0.51 mm) of Sikalastic® TC 275 / TC 295 intermediate topcoat using a properly notched squeegee at the rate of approximately 80–130 ft² /gal (1.96–3.19 m²/L). Immediately back roll to evenly level Top Coat. The next step # 4, can utilize either method describe in 4A or 4B.
4. AGGREGATE
4A. AGGREGATE TO REFUSAL METHOD: Immediately broadcast aggregate 16–30 mesh or equivalent, rounded silica sand into the wet coating at the rate of 20–30 lbs per 100 ft² (1.0–1.5 kg/m2). Immediately after the aggregate is broadcast and while the coating is still wet, blow any excess aggregate via a portable blower forward into the wet coating. Do not overapply aggregate; it is acceptable to have localized wet spots in the aggregate surface after completion of this method. This process requires coordination between all members in the work crew. The blower operator, wearing clean spiked shoes, should blow the excess aggregate forward towards 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 mesh 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/100ft2 (0.75–1.00 kg/m²).
5. Remove all excess or loose aggregate by sweeping or vacuuming
6. Ensure there is no moisture on the surface of the aggregate/membrane before application of topcoat. Apply 15–25 wet mils (0.38–0.64 mm) of Sikalastic® TC275 / 295 at the rate of 60–100 ft² /gal

(1.47–2.21 m² /L) using a flat squeegee. Immediately back roll to evenly level topcoat.
7. Immediately broadcast aggregate 16/30 or equivalent at the rate of 3–5 lbs/100 ft² (0.15–0.25 kg/m²). Lightly backroll into top coat.
8. Allow minimum curing time of 24–48 hours before allowing vehicular traffic onto the coating. Existing environmental conditions affect the allowable time period.

EXTRA HEAVY TRAFFIC SYSTEM



1. Prime substrate if required, see Sikalastic® M 270 NP Technical Data Sheet for suitable primers
2. Apply 25 wet mils (0.64 mm) of Sikalastic® M 270 NP with a proper notched squeegee at the rate of approximately 55–60 ft² /gal (1.35–1.47 m² /L). Immediately backroll to level base coat. Allow base coat to cure 3–4 hours.
3. Apply 25 wet mils (6.4 mm) of Sikalastic® TC 275 / TC 295 intermediate topcoat using a properly notched squeegee at the rate of approximately 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
4. AGGREGATE
4A. AGGREGATE TO REFUSAL METHOD: Immediately broadcast aggregate 16-30 mesh 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 members in the work crew. The blower operator, wearing clean spiked shoes, should blow the excess aggregate forward towards 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 mesh 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 ft² /gal (0.75–1.25 kg/m²).
5. Remove all excess or loose aggregate by sweeping or vacuuming.
6. Ensure there is no moisture on the surface of the aggregate/membrane before application of topcoat. Apply 15–25 wet mils (0.38–0.64 mm) of Sikalastic® TC275 / 295 at the rate of 60–100 ft² /gal (1.46–2.21 m²/L) using a flat squeegee. Immediately backroll to evenly level topcoat.
7. Immediately broadcast 16/30 or equivalent at the rate of 3–5 lbs/100 ft² (0.15–0.25 kg/m²). Lightly backroll into top coat.
8. Allow minimum curing time of 24–48 hours before allowing vehicular traffic onto the coating. Existing environmental conditions affect the allowable time period.

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 aggregate load and environmental conditions and application methods and are not under the control of Sika. Ensure that an adequate amount of aggregate is utilized to achieve required slip resistance. Exterior applications must utilize Sikalastic® TC 295 at the specified coverage rate of 15–20 wet mils.

MOCKUP

1. Provide mockup of at least 100 ft² (9.3 m²) 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.**

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