BUILDING TRUST

SYSTEM DATA SHEET

Sikalastic® Vehicular Traffic 2850

HYBRID POLYURETHANE-METHYL METHACRYLATE WATERPROOFING, TRAFFIC-BEARING MEMBRANE SYSTEM

PRODUCT DESCRIPTION

Sikalastic® Vehicular Traffic 2850 is a fluid-applied, hybrid polyurethane-methyl methacrylate waterproofing system. It allows for fast turnaround time while maintaining durability.

Sikalastic® Vehicular Traffic 2850 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 299FS – a solvent-free, two-component, 100% reactive methyl methacrylate (MMA) resin
- Sikalastic® 918FS - a powder hardener that initiates the MMA cure
- Sikafloor PGM 155 Pronto - powder pigment

USES

Sikalastic® Vehicular Traffic 2850 may only be used by experienced professionals.

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

CHARACTERISTICS / ADVANTAGES

- Two-component system utilizes flexible polyurethane and world-class MMA technologies
- Hybrid system provides waterproofing capabilities as well as faster setting times, even in cooler climates, to help reduce downtime
- High strength with excellent bonding capabilities to a variety of concrete substrates
- 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 299 FS
Color	For color options, please refer to the corresponding Product Data Sheets

APPLICATION INFORMATION

Test Results	After top coat, allow an additional 2–3 hours before opening to vehicular traffic. 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

FOR BEST PERFORMANCE

- Sikaflex® HY100 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.
- Sikalastic® M 270 NP, TC 275 and TC 299 FS have very short working times (approximately 15 minutes) (at 70 °F 50% RH). Once the material has been mixed, the coating must be poured on the surface and applied immediately.
- Minimum application temperature is 40 °F (4 °C) for polyurethane materials.
- If areas of inadequate slip resistance exist, an additional top coat back rolled with aggregate is required. (after cure)
- 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 2850 to concrete slabs on grade, unvented metal pan decks or split slab applications with a waterproofing membrane between slabs. Contact Sika Technical Services for more information.
- 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.
- Avoid application when inclement weather is present or imminent.
- Do not apply to damp, wet, or contaminated surfaces.
- Not suitable for use where chained or metalstudded tires will be used.
- 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, 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.

NOTES

- Sikalastic® Vehicular Traffic 2850 is a multiple component system that utilizes a methylmethacrylate (MMA) resin. It is critical that the instructions in the Safety Data Sheet and on the product label for every component of the system be read, understood and followed. MMA resins are flammable liquids in their uncured state. Smoking, open flames or sparks should not be permitted during the handling of this product. Explosion safe ventilation must be used during the application to minimize vapor collection in the installation area and to improve the overall air quality for the crew.
- MMA resins have a discernible odor. This smell makes people aware of the presence of MMA. The material has an extremely low odor threshold of 83ppb (parts per billion) which dissipates upon curing (approximately 45 minutes to 1 hour). This low odor threshold can create concerns when working in areas where the public can be exposed to the odor.
- This odor, when below permissible exposure limits, does not pose a hazard. It is the responsibility of the applicator to insure proper ventilation is established on site to avoid potential odor concerns as well as communicate product expectations to tenants or the surrounding public.
- In cases where the general public may be affected, an exhaust system will need to be set up. This needs to be planned ahead of time in order to make certain that the proper equipment will be accessible on site. Many projects will require the “tenting off” of certain areas.

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 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. Prime joint faces only with Sika® Primer-173 and fill with Sikaflex® SL 1™, NP1™. For joints deeper than ¼" (6 mm), use appropriate backer rod. 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® 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 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. 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 270 NP over the cured cant up to the masking tape and 4" (102 mm) onto deck surface.
7. In locations of high movement such as wall and slab intersections, 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 reinforcing fabric into the wet detail coat.

Uncoated Metal Surfaces

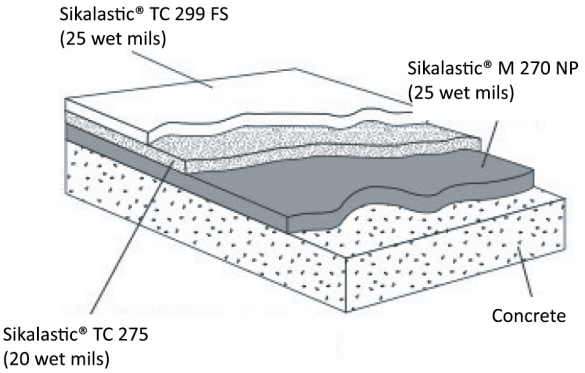
1. Remove dust, debris and any other contaminants from vent, drain pipe and post penetrations, reglets and other metal surfaces. Clean surfaces to near white per SSPC-NACE2 and prime immediately with Sika® Primer-173. Provide appropriate cant with Sikaflex® NP 1 or Sikaflex® NP 2 sealants to eliminate 90° angles.

MIXING

Please refer to the specific PDS for Mixing instructions. For Sikalatic® TC 299 FS MMA Sikalastic® 918 FS is required to cure, please refer to the PDS for Mixing and dosage instructions.

APPLICATION

Heavy-Duty Traffic System



1. Apply 25 wet mils (0.64 mm) of Sikalastic® M 270 NP with proper notched squeegee at the rate of approximately 60 ft² /gal (1.47 m²/L). Allow base coat to cure 3-4 hours.
2. Apply 20 wet mils (0.30-0.51 mm) of Sikalastic® TC 275 intermediate topcoat using a properly notched squeegee at the rate of approximately 80 ft² /gal (1.47 m ²/L). Immediately back roll to evenly level Top Coat.
3. AGGREGATE TO REFUSAL METHOD Immediately broadcast aggregate 16-30 mesh, 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 overlap 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.
4. Allow to cure 4-6 hours or until there is no moisture on the surface of the aggregate/membrane. Remove all excess or loose aggregate by sweeping or vacuuming before application of the topcoat. Apply the Sikalastic® TC 299 FS immediately after mixing by pouring directly onto the primed and cured deck surface. Distribute by means of heavy nap, solvent-grade roller, brush or squeegee to tired thickness, at the rate of 25 wet mills or 60 ft²/ gal (1.47 m²/L).
5. Top coat will cure in one hour. Wait 3 hours before opening to traffic. Existing environmental conditions effect 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.

MOCK-UP

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 tools with Sikafloor 100 CLN Pronto, an MMA solvent. Other solvents such as Xylene or acetone may also be used. Collect and dispose of all site waste.

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 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