BUILDING TRUST

SYSTEM DATA SHEET

Sikalastic® Vehicular Traffic 2900

FAST CURING METHYL METHACRYLATE / POLYURETHANE WATERPROOFING, TRAFFIC-BEARING MEMBRANE SYSTEM FOR VEHICULAR AREAS

PRODUCT DESCRIPTION

Sikalastic® Vehicular Traffic 2900 is a fluid-applied polyurethane-modified methyl methacrylate waterproofing system. The rapid cure characteristic of the system allows for full system cure within a single day – minimizing facility down time. Sikalastic® Vehicular Traffic 2900 bridges cracks at low temperatures and can be opened to traffic in just one hour after final application.

USES

Sikalastic® Vehicular Traffic 2900 may only be used by experienced professionals.

- Stadiums
- Parking Garages
- Plaza Decks
- Loading Docks
- Garbage Rooms
- Commercial Construction
- Building and Restoration

CHARACTERISTICS / ADVANTAGES

- Blend of polyurethane and methyl methacrylate technologies provides extreme durability and abrasion resistance while maintaining crack-bridging properties
- Rapid cure allows for quick installation with minimal facility downtime
- Low temperature cure extends application season
- Seamless, impervious coating that is easy to clean and maintain
- Flexible system that withstands temperature swings

APPROVALS / STANDARDS

- CSA S413
- ASTM C957

SYSTEM INFORMATION

System Structure

Sikalastic® Vehicular Traffic 2900 is composed of:

- Sikalastic® P 280 FS – an MMA solvent-free, two-component, 100% reactive, low viscosity primer
- Sikalastic® P 281 FS - an MMA solvent-free, two component, 100% reactive, high viscosity low VOC primer
- Sikalastic® M 290 FS – a polyurethane-modified methyl methacrylate (PMMA) waterproofing base coat
- Sikalastic® TC 297 FS – an MMA solvent-free, two-component, 100% reactive intermediate coat
- Sikalastic® TC 299 FS – an MMA solvent-free, two-component, 100%

reactive pigmentable top coat
- Sikafloor® PGM 155 Pronto – a powder pigment
- Sikalastic®-918 FS – a powder hardener
- Sikalastic®-908 FS – a primer additive

Composition	100% Solids	(ASTM D 1259)
Color	For color options, please refer to the corresponding Product Data Sheets	

APPLICATION INFORMATION

Drying Time

Curing Time
Most of the components of the Sikalastic® Vehicular Traffic 2900 system fully cure within one hour when properly installed. As an exception, Sikalastic® M 290 FS will cure within one to one and a half hours.

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

- If vapor drive is present or suspected, please consult with your local Sika representative prior to system application.
- Not for use in areas exposed to strong solvents(consult Sika Technical Service).
- Protect or remove food items prior to application to avoid any possible contamination.
- Proper airflow is critical to curing MMA materials. The use of fans is mandatory where airflow is restricted.
- Minimum application temperature is 30 °F (-1 °C).
- 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 2900 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 30 °F (-1 °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.
- Avoid application when inclement weather is present or imminent.
- Do not apply to damp, wet, or contaminated surfaces.
- Not suitable for use where chained, metal-studded tires, or metal helicopter skids will be used.
- Proper application is the responsibility of the user. Field visits by 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 yourlocal representative. Do not use self-leveling grade product on slopes greater than 15%. Do not coat over expansion joints.

NOTES

- Sikalastic® Vehicular Traffic 2900 is designed to have all components installed on the same day. If the system cannot be completed within the same day and the Primer, Base Coat or Wear Coat is left exposed overnight, please contact Technical Services for the appropriate surface preparation requirements before proceeding with the installation.
- Sikalastic® Vehicular Traffic 2900 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 CSP3 (as described in ICRI document 310.2R - 2013.) 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 SikaEmaco 6000 refer to the product data sheet for specific instructions. When time permits, SikaEmaco 1060, 1060DR or 1060EX may be used for repair purposes. Wait 24 hours before applying Sikalastic® Vehicular Traffic 2900.
- Prime with Sikalastic® P 281FS/ Sikalastic®-908 FS before applying SikaEmaco 6000. Measure 3 quarts of resin and 1 quart of Sikalastic® 908 FS into pail and add proper amount of powder hardener. See mixing chart below. Mix with drill mixer for 30 seconds or until the powder hardener is completely dissolved.
- Apply primer at approximately 100 ft^2 (9.3 m^2) per mixed gallon.
- Measure, add, and mix the SikaEmaco 6000 Resin, Powder Component, and necessary aggregate (if required) in the proportions recommended on the product data sheet. Use mixture to repair any damaged concrete, or to slope any areas as needed.
- Once cured, material must be re-primed before topping system is applied.
- Proceed with application as usual.
- All units must be 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 6" pre-stripe with Sikalastic® P 281FS/ Sikalastic®-908 FS or Sikalastic® P 281 FS /Sikalastic®-908 FS using a short-nap roller, must be applied to fill and overlap the joint or crack 3" (76 mm) on each side. Just before application of Sikalastic® P 281FS/ Sikalastic®-908 FS or Sikalastic® P 281 FS /Sikalastic®-908 FS, remove all dust, dirt and contaminants. Allow Primer to dry tack-free. On the same day, apply a 4" pre-stripe with 25 mils of Sikalastic® M 290 FS. Sikalastic® M 290 FS must be applied to fill and overlap the joint or crack 2" (51 mm) on each side. Feather the edges.
NOTE: For non-moving joints and cracks, prime the crack before applying Sikalastic® M 290 FS at 25 mils using a notched trowel - for faster detailing.
2. Dynamic cracks and joints over 1⁄16" (1.6 mm) wide must be routed to a minimum of 1/4 by 1/4" (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 2 or Sikaflex® NP 2. For joints deeper than¼" (6 mm), use appropriate backer rod. For cracks, sealant should be flush with the adjacent surface. For expansion joints, sealant should be slightly concave.
3. Sealed joints 1" (25 mm) wide or less can be coatedover with the Sikalastic® Traffic system. NOTE: SYSTEM IS NOT TO BE APPLIED ON PLYWOOD. 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 2. 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, prime with Sikalastic® P 281FS/ Sikalastic® 908 FS or Sikalastic® P 281 FS /Sikalastic® 908 FS at 100 SF/gallon. Apply 25 wet mils (0.64 mm) of Sikalastic® M 290 FS over the cured cant up to the masking tape and 4" (102 mm) onto deck surface.
NOTE: For a non-moving can't bead, Sikafloor -100 PAS Pronto can be used for rapid cure, refer to the product data sheet for specific instructions.
5. Where the coating system will be terminated and no wall, joint, or other appropriate break exists, cut a 1/8 by 1/8" (3 by 3 mm) keyway into the concrete. Fill and coat keyway during application of Sikalastic® M 290 FS.

MIXING

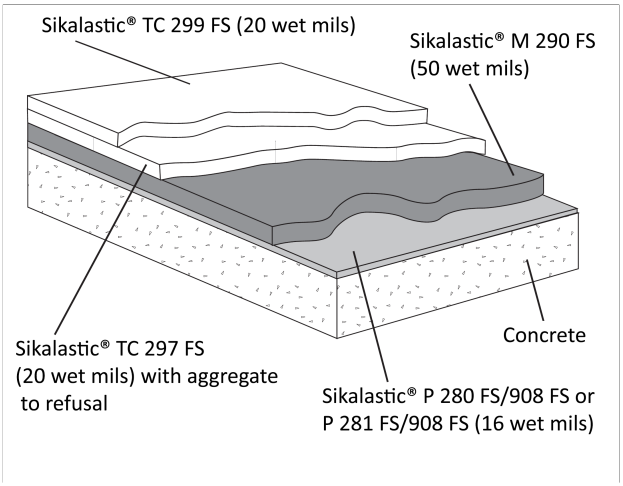
Please refer to the specific PDS for Mixing instructions and Sikalastic®-918 FS (Powder hardener) dosage.

Sikalastic®-918 FS is required to cure all components

APPLICATION

The Sikalastic® Vehicular Traffic 2900 is a multiple component system that utilizes a methyl-methacrylate (MMA) resin. It is critical that the instructions listed 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 the product. Explosion safe ventilation must be used during the application to minimize vapor collection in the installation area and to improve overall air quality for the crew. All foodstuffs must be removed during installation of the system.

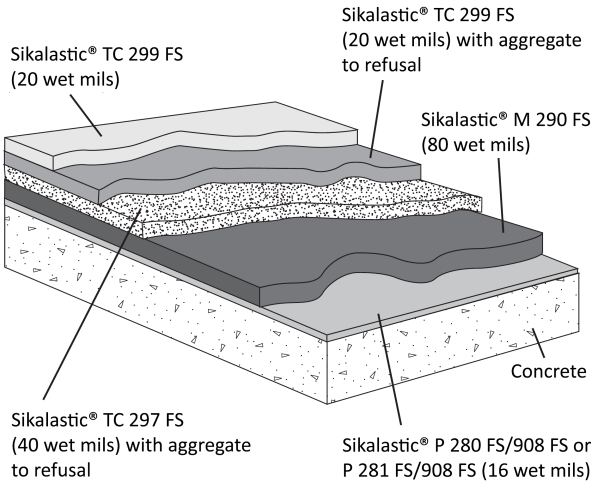
Heavy-Duty System



Heavy-Duty Traffic System

1. Apply the properly mixed Sikalastic® P 280 FS/Sikalastic®-908 FS or Sikalastic® P 281 FS/Sikalastic®-908 FS resin to the properly repaired concrete,for recoat application only use Sikalastic® P 281 FS/Sikalastic®-908 FS as a primer. Apply at approximately 100 ft² (9.3 m²) per mixed gallon or about 16 mils. Allow primer to cure tack-free to an even, satin-like gloss and re-prime any dry spots.
2. Apply the properly mixed Sikalastic® M 290 FS at 32 ft² (3 m²) per gallon or 50 mils, using a notched tool (or trowel). Material may not be completely tack-free upon cure. Backroll the Sikalastic® M 290 FSS only if necessary, to aid in leveling. If performed, backroll must be done immediately.
3. Apply the properly mixed Sikalastic® TC 297 FS at 80 ft² (7.4 m²) per gallon, at 20 wet mils, using a squeegee and backroll method.
4. Immediately broadcast with the appropriate well-graded 16–30 mesh aggregate into the wet coating to refusal at the rate of 20–30 lbs per 100 ft² (1.0–1.5 kg/m²). Remove excess aggregate after cure. NOTE: Larger and angular aggregates can be used for a more aggressive texture. This will impact coverage rate of Sikalastic® TC 299 FS.
5. Apply the properly mixed Sikalastic® TC 299 FS at 80 ft² (7.4 m²) per gallon, Apply at 20 wet mils using squeegee and backroll method. All components of the Sikalastic® Vehicular Traffic 2900 system fully cure in approximately one hour when properly installed. Note: Aggregate selected must be well graded with minimum fines. Fines can inhibit wax formation and proper curing.

Extra Heavy-Duty System



Extra Heavy-Duty Traffic System

1. Apply the properly mixed Sikalastic® P 280 FS/Sikalastic®-908 FS or Sikalastic® P 281 FS/Sikalastic®-908 FS resin to the properly repaired concrete, for recoat application only use Sikalastic® P 281 FS/Sikalastic®-908 FS as a primer. Apply at approximately 100 ft² (9.3 m²) per mixed gallon or about 16 mils. Allow primer to cure tack-free to an even, satin-like gloss and re-prime any dry spots.
2. Apply the properly mixed Sikalastic® M 290 FS at 20 ft² (1.9 m²) per gallon or 80 mils, using a notched tool (or trowel). Material may not be completely tack-free upon cure. Backroll the Sikalastic® M 290 FS only if necessary, to aid in leveling. If performed, backroll must be done immediately.
3. Apply the properly mixed Sikalastic® TC 297 FS at 40 ft² (3.7 m²) per gallon, apply at 40 wet mils using a squeegee and backroll method.
4. Immediately broadcast with the appropriate well-graded 16–30 mesh aggregate into the wet coating to refusal at the rate of 20–30 lbs per 100 ft² (1.0–1.5 kg/m²). Remove excess aggregate after cure. NOTE: Larger and angular aggregates can be used for a more aggressive texture. This will impact coverage rate of Sikalastic® TC 299 FS .
5. Apply the properly mixed Sikalastic® TC 299 FS at 80 ft² (7.4 m²) per gallon, Apply at a 20 wet mils thickness using a squeegee and backroll method.
6. Immediately broadcast with the appropriate well graded 16–30 mesh aggregate into the wet coating to refusal at the rate of 20–30 lbs per 100 ft² (1.0–1.5 kg/m²). Remove excess aggregate after cure. NOTE: Larger and angular aggregates can be used for a more aggressive texture. This will impact coverage rate of Sikalastic® TC 299 FS. Note: Aggregate selected must be well graded with minimum fines. Fines can inhibit wax formation and proper curing.
7. Apply the properly mixed Sikalastic® TC 299 FS at 80 ft2 (7.4 m²) per gallon, rolling on at a 20 mil thickness using a squeegee.
8. All components of the Sikalastic® Vehicular Traffic 2900 system fully cure in approximately one hour when properly installed.

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.

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