BUILDING TRUST

SYSTEM DATA SHEET

Sikalastic®-720/745 AL Traffic System

TWO-COMPONENT, FAST-CURING, ELASTOMERIC, POLYURETHANE TRAFFIC BEARING MEMBRANE SYSTEM FOR VEHICULAR AND PEDESTRIAN TRAFFIC

PRODUCT DESCRIPTION

Sikalastic®-720/745 AL Traffic System is a fluid-applied, two-component, chemically cured, elastomeric polyurethane traffic coating system. Intended for pedestrian or vehicular traffic, Sikalastic®-720/745 AL Traffic System consists of a waterproofing base coat with a polyurethane wearing surface.

Sikalastic®-720/745 AL Traffic System is composed of:
- Sikalastic® 720 Base, a two-component, aromatic, fast-curing polyurethane base coat
- Sikalastic® 745 AL – a two-component, aliphatic, high solids, polyurethane top coat

USES

Sikalastic®-720/745 AL Traffic System may only be used by experienced professionals.

- Multi-story parking garages
- Parking decks and ramps
- Foot bridges and walkways
- Mechanical rooms
- Stadiums and arena
- Plaza and rooftop decks
- Balconies

CHARACTERISTICS / ADVANTAGES

- Low odor and fast turnaround
- Excellent crack-bridging properties and flexibility, even at low temperatures
- Excellent wear resistance
- Resistant to water and de-icing salts
- Alkaline resistant
- UV resistant

APPROVALS / STANDARDS

- Meets ASTM C957 "Standard Specification for High-Solids Content, Cold Liquid-Applied Elastomeric Waterproofing Membrane with Integral Wearing Surface"
- Sikalastic 720/745/745 Class A fire rating (ASTM E108, non-combustable substrates)

MIAMI-DADE COUNTY APPROVED

SYSTEM INFORMATION

Systems

System Structure

System Guide	Pedestrian Traffic	Heavy Pedestrian/ Light Vehicular	Heavy Vehicular Traffic - Seed and Lock	Heavy Vehicular Traffic - Seed and backroll
Primer	Use appropriate Sika primer*	Use appropriate Sika primer*	Use appropriate Sika primer*	Use appropriate Sika primer*
720 Detail Coat	23 mils wet/dry	23 mils wet/dry	23 mils wet/dry	23 mils wet/dry
720 Base Coat	23 mils wet/dry 70 sf/gal.	23 mils wet/dry 70 sf/gal.	23 mils wet/dry 70 sf/gal.	23 mils wet/dry 70 sf/gal.
745 AL Wear Coat	12 mils wet/dry 133 sf/gal.	18 mils wet/dry 90 sf/gal.	14 mils wet/dry 115 sf/gal.	16 mils wet/dry 100 sf/gal.
Aggregate	10-20 lbs/100 sf seeded/backrolled	10-20 lbs/100 sf seeded/backrolled	40-60 lbs/100 sf seeded to refusal	10-20 lbs/100 sf seeded/backrolled
745 AL Top Coat			18 mils wet/dry 90 sf/gal.	16 mils wet/dry 80 sf/gal.
Aggregate				10-20 lbs/100 sf seeded/ backrolled
Total Thickness	**35 mils dry** (excluding aggregate)	**41 mils dry** (excluding aggregate)	**55 mils dry** (excluding aggregate)	**55 mils dry** (excluding aggregate)

*Per substrate and environmental conditions. Consult Sika for primer recommendations, including recoats and high moisture content substrates.

NOTE: Coverage rates provided are optimal and are not guaranteed - coverage rates will vary depending on temperature, surface roughness and porosity, aggregate selection and embedment, and application technique.

Volatile organic compound (VOC) content

See individual Product Safety Data Sheet

TECHNICAL INFORMATION

Shore Hardness	80 +/- 5	(ASTM D-2240, Shore A) 75 °F (24 °C) 50% RH
Tensile Strength	2500 +/- 100 psi	(ASTM D-412) 75 °F (24 °C) 50% RH
Elongation at Break	800 +/- 50 %	(ASTM D-412) 75 °F (24 °C) 50% RH
Tear Strength	300 +/- 25 pli	(Die C, ASTM D-624) 75 °F (24 °C) 50% RH
Chemical Resistance	Resistant to de-icing salts, and alkaline concrete and cementitious mortars/tile adhesives.	

APPLICATION INFORMATION

Coverage	70 ft²/gal. at 23 wet mils (23 dry mils)	
Pot Life	**720 Base**	**745 AL**
	10–15 minutes	20–30 minutes

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

- To avoid dew point conditions during application, relative humidity must be no more than 95 % and substrate temperature must be at least 5 °F (3 °C) above measured dew point temperatures.
- Maximum moisture content of concrete substrate by weight when measured with a Tramex CME is 4%. If higher, see primer requirements for proper application; consult Sika for primer recommendations.
- Minimum ambient and substrate temperature during application and curing of material is 40 °F (4 °C); maximum is 90 °F (32 °C). Frequent monitoring of ambient and substrate temperature should always be done when applying polyurethane coatings. Note that low temperatures and low humidity will slow down the cure, and high temperatures and high humidity will accelerate it.
- Do not store materials outdoors exposed to sunlight for prolonged periods.
- Do not thin with solvents.
- Minimum age of concrete must be 21–28 days, depending on curing and drying conditions.
- Any repairs required to achieve a level surface must be performed prior to application (consult a Sika representative for guidance on various Sika product solutions). Surface irregularities may reflect through the cured system.
- Do not apply to a porous or damp surface where moisture vapor transmission will occur during application and cure.
- Substrate must be dry prior to application. Do not apply to a frosted, wet, or damp surface. Do not proceed if rain is imminent within 8–12 hours of application. Allow sufficient time for the substrate to dry after rain or inclement weather, as there is the potential for bonding problems.
- When applying over existing coatings, compatibility and adhesion testing is recommended.
- On-grade, lightweight concrete, asphalt pavement, and applications where chained or studded tires may be used should not be coated with Sikalastic® traffic systems.
- Unvented metal pan decks or decks containing between-slab membranes require further technical evaluation and priming with a moisture-blocking primer - contact Sika regarding recommendations.
- Waterproofing applications under overburden, including concrete pavement, asphalt pavement, and tile in a cementitious setting bed, require further technical evaluation - contact Sika regarding recommendations.
- Do not subject to continuous immersion.
- Sikalastic® 720 is not UV stable and must be top-coated or protected by a separate wearing course.
- Primer, base coats, and intermediate coats must be kept clean and recoated within their respective, review

the individual product sheet.
- Mockups to verify application methods and substrate conditions as well as desired skid resistance and aesthetics are highly recommended.

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

Surface must be clean, dry, and sound with an open texture. Remove dust, laitance, grease, curing compounds, bond-inhibiting impregnations, waxes, and any other contaminants. All projections, rough spots, etc., must be removed to achieve a level surface prior to the application.

Concrete - Must be cleaned and prepared to achieve a laitance and contaminant-free, open-textured surface by blast cleaning or equivalent mechanical means. The desired surface texture is CSP 3 - 4 per ICRI Guidelines. In addition, the substrate surface must be thoroughly cleaned by blowing/vacuuming to remove all particulates that may interfere with coat bonding.

Plywood – Must be clean and smooth, APA and exterior grade, not less than ½" thick, and spaced and supported according to APA guidelines. Joints should be sealed with appropriate Sikaflex® sealant and detailed; may need embedded fabric reinforcement.

Metal - Metal must be in sound condition. The surface should be free of all visible oil, grease, dust, dirt, mill scale, rust, coating, oxides, corrosion products, and other foreign matter. Be aware of dew point and check it before every application on a metal surface.
- **Ferrous Metals:** Must be prepared to SSPC-SP6/NACE 3. For areas where SSPC-SP6/NACE 3 is prohibited or not feasible, substrate can be thoroughly cleaned by grinding or other power tools per SSPC-SP11.
- **Non-Ferrous Metals:** Prepare to a bright metal surface. Wire brushing can be used for soft metals such as copper or lead.
- **Galvanized Steel:** White rust must be removed from galvanized steel, with care taken not to damage or remove the galvanizing.
- **Stainless Steel:** Must be mechanically abraded or ground to create an appropriate anchor profile.

Existing Coatings - Should be cleaned and mechanically abraded to provide a contaminant-free, open-textured surface. Followed by a solvent wipe or mop, as allowed by state and local regulations. After solvent flashes off, proceed with approved primer for existing coating.

DETAILING

For cracks less than 1/16" width: Apply a 23 mil detail coat of a Sikalastic® Base Coat, extending 2" on either side and centered over the crack.

For cracks 1/16" width or greater and less than 1" width: Must be routed to at least ¼" by ¼", and sealed with an appropriate Sikaflex® sealant, installed per sealant Product Data Sheet, and coated with a 23 mil detail coat of a Sikalastic® Base Coat, extending 2" on either side and centered over the crack. Non-moving cracks can be filled with compatible rigid repair materials.
NOTE: Cracks may indicate a structural issue and should be addressed by a structural engineer or appropriate design professional. For joints 1/16" or greater and up to 1" width: Joints should be sealed with the appropriate Sikaflex® sealant, installed per sealant Product Data Sheet, and coated with a 23 mil detail coat of a Sikalastic® Base Coat, extending 2" on either side and centered over the crack.

For joints greater than 1" width: Should be treated as expansion joints and brought up through the system and/or use Emseal Expansion Joint. For additional questions, please contact Sika Technical Services.

Fabric Reinforcement: An optional 3" or 6" wide Sikalastic Flexitape Heavy fabric strip may be embedded within the base coat. Flexitape width shall be chosen such that a minimum of 1" tape is embedded on either side of the crack/joint. Apply additional coating as required to fully embed the Flexitape in the coating.

Panelized Joints: Panelized joints up to 1.5" wide, that are restrained across the joint and without differential movement, may be sealed the Sikalastic Traffic System, including the detail coat, and applied over the joint. The traffic system applied over the panelized joint should accommodate movement characteristics comparable to those of the joint sealant used.

NOTE: Panelized joints that experience movement within the panelized joint or are over 1.5" wide may cause deterioration of the waterproofing system, in which case, the joints should be treated as expansion joints and brought up through the Sikalastic Traffic System and sealed with Sikaflex sealant. For guidance, please contact Sika Technical Services.

PRIMING

Primer Selection - Primer is required for all applications of Sikalastic®-720/745 AL Traffic System. For applications over concrete, the primer used will depend on the moisture level of the concrete. Measure the moisture content of concrete substrate with a Tramex CME or CMExpert type concrete moisture meter.

Sikalastic® Primer – For concrete decks with a maximum moisture content of 4 % by weight, existing polyurethane coatings, apply Sikalastic® Primer with a

flat squeegee or phenolic resin core roller at approximately 300 sf/gal. Work primer well into the substrate to ensure adequate penetration and sealing. Apply evenly without puddling. Sikalastic® Primer is not suitable for metal substrates. Refer to a separate primer data sheet for additional information.

Sikadur®-22 Lo-Mod FS- For concrete with a maximum moisture content of 4 % by weight, plywood decks, and existing polyurethane coatings, apply a single coat application of Sikadur®-22 Lo-Mod FS with a flat squeegee or roller at approximately 10 mils at 160 sf/gal. Apply evenly without puddling. Allow primer to cure until tack-free, typically 2-4 hours (at 75°F (24°C) 50 % R.H.). Sikadur®-22 Lo-Mod FS should be overcoated within 36 hours after tack-free. Refer to a separate product data sheet for additional information.

Sikalastic® FTP LoVOC Primer - For plywood decks, concrete with a maximum moisture content of 5 % by weight, apply a single coat application of Sikalastic® FTP LoVOC Primer with a flat squeegee or roller at approximately 175 sf/gal. For concrete decks with a maximum moisture content of 6% by weight, apply two applications of Sikalastic® FTP LoVOC Primer with a flat squeegee or phenolic resin roller at approximately 175 - 220 sf/gal per application. Work primer well into the substrate to ensure adequate penetration and sealing. Apply evenly without puddling. Refer to separate primer data sheet for additional information.

Sikalastic® 100 VB - For concrete with a maximum moisture content of 5 % by weight, apply Sikalastic® 100 VB with a flat squeegee or roller at approximately 160 sf/gal to achieve 10 mils. For concrete decks with a maximum moisture content of 6% by weight or applications, apply two applications of Sikalastic® 100 VB with a flat squeegee or phenolic resin roller at approximately 160 sf/gal to achieve 10 mils per application. Work primer well into the substrate to ensure adequate penetration and sealing, avoiding puddling. For applications as a moisture barrier and additional information, refer to separate primer data sheet.

Sikalastic® EP Primer/Sealer- For Wood (timber, plywood) and Metal (aluminum, galvanized, cast iron, copper, lead, brass, stainless steel, steel, zinc). Apply by brush or phenolic resin core roller at the recommended rate,100-250 sf/gal, depending on the substrate. Correct amount of primer will saturate the substrate and leave a slight film on the substrate top surface. Apply evenly without puddling. Refer to the separate primer data sheet for additional information.

Sikadur®-22 Lo-Mod LT- For cold weather applications on concrete with a maximum moisture content of 4 % by weight and existing polyurethane coatings, apply a single coat application of Sikadur®-22 Lo-Mod LT with a flat squeegee or roller at approximately 160 sf/gal. Apply evenly without puddling. Allow primer to cure until tack-free, typically 2-4 hours (at 50°F (10°C) 50 % R. H). Sikadur®-22 Lo-Mod LT should be overcoated within 36 hours after tack-free. Refer to a separate product data sheet for additional information.

Sikadur®-57 Lo-Mod LV- For concrete with a maximum moisture content of 4 % by weight, apply a single coat application of Sikadur®-57 Lo-Mod LV with a flat squeegee or roller at approximately 125-150 sf/gal. Apply evenly without puddling. Refer to a separate product data sheet for additional information.

APPLICATION

Base Coat

Premix Sikalastic® 720 Base Part A and Part B material (typically 30 seconds) using a low-speed (400–600 rpm) drill with a mechanical mixer (Jiffy) at slow speed to obtain uniform color, making sure to scrape the solids from the bottom and sides of the pail. Pour Part B into Part A slowly and while mixing, scrape the sides of the container. Mix the combined material thoroughly until a homogenous mixture and uniform color is obtained (typically 3 minutes). Use care not to allow the entrapment of air into the mixture. Apply at the recommended coverage rate (see System Guide) using a 3/16” notched squeegee or trowel and back roll using a phenolic resin core roller. Extend base coat over entire area, including previously detailed cracks and joints. Allow coating to cure a minimum of 3–4 hours at 70°F and 50% RH or until tack-free before top coating.

Top Coats

Premix Sikalastic® 745 AL Part A using a low-speed (400–600 rpm) drill with mechanical mixer (Jiffy) at slow speed to obtain uniform color, making sure to scrape the solids from the bottom and sides of the pail. Add Part B and continue mixing until a homogenous mixture and color is obtained (typically 3 minutes). Use care not to

allow the entrapment of air into the mixture. Apply at the recommended coverage rate (see System Guide) using a 3/16” notched squeegee or trowel, or phenolic resin core roller, and back roll. Apply aggregate evenly distributed at the appropriate rate immediately into the wet coating and back roll if required (see System Guide). Allow coating to cure a minimum of 3–4 hours at 70 °F and 50 % RH or until tack-free between coats, and a minimum of 36 hours before opening to vehicular traffic.

Aggregate

Use clean, rounded, oven-dried, quartz sand with a minimum gradation of 16–30 or 12–20 mesh for vehicular traffic and 20–40 mesh for pedestrian traffic, and a minimum hardness of 6.5 per the Moh’s scale. It should be supplied in pre-packaged bags and free of metallic or other impurities. Seeding of aggregate means and even, light broadcast short of to refusal. Any loose aggregate must be removed prior to re-coating. Back roll aggregate only where indicated.

Recoat Windows

In the event of an unforeseen rain event or delays beyond the stated recoat window referenced in each product’s current PDS, observe the following.

Product	Recoat Window	Required Surface Preparation After Recoat Window is Exceeded
Sikalastic® Primer	Tack-free to 72 hours	Abrade and reprime
Sikalastic® FTP Lo-VOC	Tack-free to 24 hours	Abrade and reprime
Sikadur® 22 Lo-Mod Fast-Set	Tack-free to 36 hours	Abrade and reprime
Sikalastic® 100 VB	Tack-free to 36 hours	Abrade and reprime
Sikalastic® 720	Tack-free to 24 hours	Clean, solvent wipe+recoat primer
Sikalastic® 745 AL	Tack-free to 24 hours	Abrade, clean, solvent wipe+recoat primer

Notes:

1. Abrasion of epoxy-based materials is intended to achieve an open, porous surface and to remove any amine blush that may interfere with bonding.
2. Abrasion of polyurethane-based materials is intended to achieve an open, porous surface.
3. Cleaning is intended to remove dirt, debris, contaminants, and residue from mechanical surface preparation methods.
4. Recommended solvents include high-quality xylene and acetone. Handling and use of all solvents must be done in accordance with the manufacturer’s warnings and instructions for use.

Removal

Remove liquid resin immediately with dry cloth. Once cured, resin can only be removed by mechanical means.

MAINTENANCE

Clean with non-sudsing detergent and water and inspect regularly for mechanical damage. Snow removal equipment must have shoes, rubber tips or small skis to prevent ruptures. The use of metal blades without protection is not recommended. Damaged areas should be repaired promptly. Remove delaminated coating back to well adhered material and reinstall patch according to procedures described above. Do not use asphalt or tar modified products. Consult a Sika representative for recommendations on top coat or wearing surface restoration.

OTHER RESTRICTIONS

See Legal Disclaimer.

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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