

SYSTEM DATA SHEET

Sikalastic®-715 LoVOC Traffic System

Single component, single product, low VOC, elastomeric, crack-bridging, waterproofing traffic system

PRODUCT DESCRIPTION

Sikalastic®-715 LoVOC Traffic System is a single component, single product, aromatic, low VOC, moisture cured, elastomeric polyurethane coating system designed for use as a waterproofing membrane for pedestrian and vehicular traffic bearing surfaces.

Booster provides fast-cure performance similar to two-component products.

System components are:

Sikalastic® Primer (see separate data sheet)

Sikalastic® FTP Lo-VOC primer (see separate data sheet)

Sikalastic® PF Lo-VOC primer (see separate data sheet)

Sikalastic® MT primer (moisture-tolerant primer - see separate data sheet)

Sikalastic® 715 Top Lo-VOC one-component aromatic polyurethane base and top coat with Booster (suitable for UV exposure)

USES

Sikalastic®-715 LoVOC Traffic System may only be used by experienced professionals.

Sikalastic®-715 LoVOC Traffic System is suitable for use on structurally sound concrete, cementitious or plywood surfaces exposed to vehicular or pedestrian traffic.

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

CHARACTERISTICS / ADVANTAGES

- Fast turnaround with Booster
- Excellent crack-bridging properties and flexibility, even at low temperatures
- Outstanding resistance to abrasion and wear
- Impervious to water and deicing salts
- Range of standard colors

SYSTEM INFORMATION

| System Structure | System Guide | Pedestrian Traffic | Heavy Pedestrian/ Light Vehicular Seed and Backroll** | Heavy Vehicular Traffic - Seed and Lock | Heavy Vehicular Traffic - Seed and Backroll |
|------------------------------|--|---|--|--|--|
| Primer | Sikalastic Primer 300 sf/gal.* | Sikalastic Primer 300 sf/gal.* | Sikalastic Primer 300 sf/gal.* | Sikalastic Primer 300 sf/gal.* | Sikalastic Primer 300 sf/gal.* |
| 710 Lo-VOC Detail Coat | 26 mils wet | 26 mils wet | 26 mils wet | 26 mils wet | 26 mils wet |
| 710 Lo-VOC Base Coat | 26 mils wet (23 mils dry) 61 sf/gal. | 26 mils wet (23 mils dry) 61 sf/gal. | 26 mils wet (23 mils dry) 61 sf/gal. | 26 mils wet (23 mils dry) 61 sf/gal. | 26 mils wet (23 mils dry) 61 sf/gal. |
| 715 Top Lo-VOC | 11 mils wet (10 mils dry) 141 sf/gal | 23 mils wet (20 mils dry) 70 sf/gal (see NOTE) | 23 mils wet (20 mils dry) 70 sf/gal (see NOTE) | 18 mils wet (16 mils dry) 88 sf/gal | 18 mils wet (16 mils dry) 88 sf/gal |
| Aggregate | 5-10 lbs/100 sf seeded/backrolled | 15-20 lbs/100 sf seeded/backrolled | 15-20 lbs/100 sf seeded/backrolled | 20- 40 lbs/100 sf seeded | 15-20 lbs/100 sf seeded/backrolled |
| 715 Top Lo-VOC | - | 16 mils wet (12 mils dry) 100 sf/gal | 16 mils wet (12 mils dry) 100 sf/gal | 18 mils wet (16 mils dry) 88 sf/gal | 18 mils wet (16 mils dry) 88 sf/gal |
| Aggregate | - | - | - | - | 15-20 lbs/100 sf seeded/backrolled |
| Total Thickness | 33 mils dry (excluding aggregate) | 43 mils dry (excluding aggregate) | 43 mils dry (excluding aggregate) | 55 mils dry (excluding aggregate) | 55 mils dry (excluding aggregate) |

*Consult Sika for other primer options for recover 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.

| | | | |
|---|--|---|------------------|
| Colour | Sikalastic® 715 Top Lo-VOC: Gray, Charcoal and Tan | | |
| Volatile organic compound (VOC) content | <u>715 Lo-VOC w/o Booster</u> 96 g/L | <u>715 Lo-VOC w/ Booster</u> 100 g/L | (ASTM D-2369-81) |

TECHNICAL INFORMATION

| | | | |
|------------------|---|--|---|
| Shore A Hardness | <u>715 Lo-VOC w/o Booster</u> 85 ± 5 | <u>715 Lo-VOC w/ Booster</u> 80 ± 5 | (ASTM D-2240) 75 °F (24 °C) 50 % RH |
|------------------|---|--|---|

| | | | |
|---------------------|-------------------------------|------------------------------|---|
| Tensile Strength | 715 Lo-VOC w/o Booster | 715 Lo-VOC w/ Booster | (ASTM D-412) 75 °F (24 °C) 50 % RH |
| | 3400 ± 300 psi | 3400 ± 300 psi | |
| Tear Strength | 715 Lo-VOC w/o Booster | 715 Lo-VOC w/ Booster | (Die C, ASTM D-624) 75 °F (24 °C) 50 % RH |
| | 350 ± 50 pli | 350 ± 50 pli | |
| Elongation at Break | 715 Lo-VOC w/o Booster | 715 Lo-VOC w/ Booster | (ASTM D-412) 75 °F (24 °C) 50 % RH |
| | 450 ± 50 % | 450 ± 50 % | |

APPLICATION INFORMATION

| | |
|----------|---|
| Coverage | Coverage rates provided in System Structure are intended to achieve required wet film thickness under optimal conditions. Additional material may be required depending on substrate surface roughness and porosity, material and substrate temperatures, and other site-dependent factors. This will result in a lower coverage rate. See Sikalastic® Aliphatic Decorative Top Coats data sheet for decorative quartz/flake systems. |
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PRODUCT INFORMATION

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|-------------------------|--|-----------------------------|---|
| Packaging | 715 Top Lo-VOC: 4.75 gal. (net) pails, 50 gal. (net) drums 715 Top Lo-VOC Booster: 1 quart cans (4 cans per carton) | | |
| Shelf Life | 1 year in original, unopened containers | | |
| Storage Conditions | Store dry at 40–95 °F (4–35 °C). Condition material to 65–85 °F (18–30 °C) before using. | | |
| Solid content by volume | 715 Lo-VOC w/o Booster | 715 Lo-VOC w/Booster | (ASTM D-2697) 75 °F (24 °C) 50 % RH |
| | 89 % | 86 % | |
| Viscosity | 715 Lo-VOC w/o Booster | 715 Lo-VOC w/Booster | 75 °F (24 °C) 50 % RH |
| | 4000 ± 2000 cps | 4000 ± 2000 cps | |

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. should be dressed off to achieve a level surface prior to application.

Concrete - Should be cleaned and prepared to achieve a laitance and contaminant free, open textured surface by blast cleaning or equivalent mechanical means (CSP 3-4 per ICRI guidelines). Route out all cracks and joints as part of surface preparation.

Plywood - Should be clean and smooth, APA and exterior grade, not less than 1/2" thick, and spaced and supported according to APA guidelines. Seams should be sealed with Sikaflex 2c or 1a and detailed and may need embedded fabric reinforcement.

Metal - Should be thoroughly cleaned by grinding or blast cleaning to near white metal (SSPC SPS-10).

APPLICATION

Priming

Primer Selection - Determine maximum moisture content of concrete substrate by weight with a Tramex CME or CMExpert type concrete moisture meter.

Sikalastic® Primer – For concrete decks with a maximum moisture content of 4 % by weight, and for plywood decks, apply Sikalastic® Primer with a flat squeegee or phenolic resin core roller at approximately 300 sf/gal. and work well into the substrate to ensure adequate penetration and sealing, and puddles are avoided.

Sikalastic® FTP Primer – For concrete decks with a maximum moisture content of 4 % by weight, and for plywood decks, apply Sikalastic® FTP Primer with a flat squeegee or phenolic resin core roller at approximately 300 sf/gal. and work well into the substrate to ensure adequate penetration and sealing, and puddles are avoided

Sikalastic® FTP Lo-VOC Primer - For exterior exposed concrete decks with a max moisture content of 4 % by weight, interior protected concrete decks with a maximum moisture content of 5 % by weight, and plywood decks, apply Sikalastic® FTP Lo-VOC Primer with a flat squeegee or phenolic resin core roller at approximately 300 sf/gal. and work well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. For exterior exposed concrete decks with a maximum moisture content of 5 % by weight, two applications of Sikalastic® FTP Lo-VOC Primer are required. Sikalastic® FTP Lo-VOC Primer is not suitable for metal substrates. Refer to separate primer data sheet for additional information.

Sikalastic® PF Lo-VOC Primer - For concrete and plywood decks with a porous or rough surface, and for metal flanges and penetrations, use Sikalastic® PF Lo-VOC Primer. For exterior exposed concrete decks with a maximum moisture content of 4 % by weight, interior protected concrete decks with a maximum moisture content of 5 % by weight, and plywood decks, apply Sikalastic® PF Lo-VOC Primer with a flat squeegee or phenolic resin core roller at approximately 200 sf/gal. and work well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. For exterior exposed concrete decks with a maximum moisture content of 5 % by weight, two applications of Sikalastic® PF Lo-VOC Primer are required. Refer to separate primer data sheet for additional information.

Sikalastic® MT Primer - For concrete with a maximum moisture content of 5 % by weight, and for metal flanges and penetrations, apply Sikalastic® MT 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® MT Primer with a flat squeegee or phenolic resin roller at approximately 175 sf/gal per application. Work primer well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Refer to separate primer data sheet for additional information.

Sikalastic® Recoat Primer – For existing polyurethane coatings, incidental exposed concrete deck areas, and as an interlaminar primer, apply Sikalastic® Recoat Primer with a flat squeegee or phenolic resin core roller at approximately 300 sf/gal. and work will into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Sikalastic® Recoat Primer is not suitable for metal substrates. Refer to separate primer data sheet for additional information.

Detailing

Non-structural cracks up to 1/16 inch - Apply a detail coat of Sikalastic® 715 Lo-VOC Top with Sikalastic® 715 Lo-VOC Booster at 26 wet mils, 4" wide, centered over the crack. Allow to become tack free before overcoating.

Cracks and joints over 1/16 up to 1 inch – Seal First – Seal previously routed cracks and joints with Sika sealant (see Sealant Guide), and allow to skin over and cure for 24 hours min. Alternatively, seal previously routed cracks and joints with 150 LM and allow to skin over and cure for 1 hour min. Apply Sikalastic® Primer over the entire deck, including sealed cracks and joints, and allow to become tack free. Apply a detail coat of Sikalastic® 715 Lo-VOC Top with Sikalastic® 715 Lo-VOC Booster at 26 wet mils, 4" wide, centered over the crack. Allow to become tack free before overcoating.

Cracks and joints over 1/16 up to 1 inch – Prime First – Apply Sikalastic Primer over the entire deck, including previously routed cracks and joints, and allow to become tack free. Seal cracks and joints with Sika sealant (see Sealant Guide) and allow to skin over and cure for 24 hours min. Apply a detail coat of Sikalastic® 715 Lo-VOC Top with Sikalastic 715 Lo-VOC Booster at 26 wet mils, 4" wide, centered over the crack. Allow to become tack free before overcoating.

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.

Joints over 1 inch - Should be treated as expansion joints and brought up through the Sikalastic Traffic System and sealed with Sika sealant (see Sealant Guide).

Panelized Joints - Panelized joints that are restrained across the joint and without differential movement may be sealed and the deck coating, including detail coat, applied over the joint.

NOTE: movement within panelized joints may cause deterioration of the aggregated wear coat, in which case the joints should be treated as expansion joints and brought up through the Sikalastic® Traffic System and sealed with Sika sealant (see Sealant Guide).

Base Coat

Thoroughly mix Sikalastic® 715 Top Lo-VOC using a low speed (400–600 rpm) drill with mechanical mixer (Jiffy) at slow speed until a homogenous mixture and color is obtained. Add Sikalastic® 715 Top Lo-VOC Booster into premixed coating and continue mixing until 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 1/4" notched squeegee or trowel and backroll using a phenolic resin core roller. Extend base coat over entire area including previously detailed cracks and control joints. Allow coating to cure a minimum of 6 hours at 70 °F and 50 % RH or until tack free before top coating.

Top Coats

Thoroughly mix Sikalastic® 715 Top Lo-VOC using a low speed (400–600 rpm) drill with mechanical mixer (Jiffy) at slow speed until a homogenous mixture and color is obtained. Add Sikalastic® 715 Top Lo-VOC Booster (if required) into premixed coating and continue mixing until homogenous mixture and color is obtained (typically 3 minutes). Add a maximum of 1 quart to 4.75 gallons (or 1:19 ratio) and only to material that will be applied in the next hour. 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 backroll. Apply aggregate evenly

distributed at the appropriate rate immediately into wet coating and backroll if required (see System Guide). Allow coating to cure a minimum of 16 hours (6 hours with Booster) 70 degrees F and 50 % RH or until tack free between coats, and a minimum of 72 hours (36 hours with Booster) before opening to vehicular traffic.

Aggregate

Use clean, rounded, oven dried quartz sand with a minimum gradation of 16-30 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 recoating. Backroll aggregate only where indicated.

Boosters

Sikalastic® 715 Top Lo-VOC Booster may be added to Sikalastic® 715 Lo-VOC Top in order to speed cure time. The use of Sikalastic® 715 Top Lo-VOC Booster is required for all Sikalastic® 715 Top Lo-VOC applications exceeding 19 wet mils including use as Base Coat. Mix thoroughly prior to application. Add a maximum of 1 quart to 4.75 gallons (or 1:19 ratio) and only to material that will be applied within 45 minutes typical.

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 | Heavily abrade and reprime |
| Sikalastic® FTP | Tack-free to 48 hours | Heavily abrade and reprime |
| Sikalastic® FTP Lo-VOC | Tack-free to 16 hours | Heavily abrade and reprime |
| Sikalastic® PF Lo-VOC | Tack-free to 16 hours | Heavily abrade and reprime |
| Sikalastic® MT | Tack-free to 48 hours | Heavily abrade and reprime |
| Sikalastic® Recoat | Tack-free to 12 hours | Heavily abrade and reprime |
| Sikalastic® Recoat with 700 ACL Accelerator | Tack-free to 6 hours | Heavily abrade and reprime |
| Sikalastic® 715 Top Lo-VOC | Tack-free to 48 hours | Clean and solvent wipe <u>or</u> Clean and recoat primer |
| Sikalastic® 715 Top Lo-VOC with 715 Top Lo-VOC Booster | 6-24 hours | Clean and solvent wipe <u>or</u> Clean and recoat primer |

Notes:

1. Heavy 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.

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 temperature.
- Maximum moisture content of concrete substrate by weight when measured with a Tramex CME or CMExpert type concrete moisture meter: 4 % for Sikalastic® FTP Primer; 4% for exterior exposed decks with one application of Sikalastic® FTP Lo-VOC Primer or Sikalastic® PF Lo-VOC Primer; 5% for exterior exposed decks with two applications of Sikalastic® FTP Lo-VOC Primer or Sikalastic® PF Lo-VOC Primer; 5 % for interior protected decks with one application of Sikalastic® FTP Lo-VOC Primer or Sikalastic® PF Lo-VOC Primer; 5 % for exterior and interior decks with one application of Sikalastic® MT Primer; 6 % for exterior and interior decks with two applications of Sikalastic® MT Primer. (see separate Primer product data sheets).
- Minimum ambient and substrate temperature during application and curing of material is 40 °F (4 °C); maximum is 95 °F (35 °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.
- Coating materials will become more viscous at lower application temperatures and be more difficult to spread, which may affect yield.
- Do not store materials outdoors directly exposed to sunlight and moisture. Cover and protect materials with breathable type covers such as canvas tarpaulins to allow venting and protection from weather and moisture. Observe temperature storage and conditioning requirements.
- Do not thin with solvents.
- Use properly graded, oven dried aggregates only.
- 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 product solutions). Surface irregularities may reflect through the cured system.
- Precautions should be taken to prevent vapors and/or odors from entering the building/structure, including but not limited to turning off and sealing air intake vents and through-wall air conditioners, and other means of vapor/odor ingress during application and cure.
- 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.
- Opening prior to final cure may result in loss of aggregate, or permanent staining and subsequent premature failure.
- Vehicle fluids and some high performance tires can stain the coating. Fluid spills should be removed promptly as the coating can in some cases be damaged from prolonged exposure.
- On grade, lightweight concrete, asphalt pavement, or insulated split slab applications, or applications where chained or studded tires may be used should not be coated with Sikalastic® Traffic Systems.
- Unvented metal pan decks or decks containing a between-slab membrane require further technical evaluation and priming with a moisture-tolerant primer - contact Sika regarding recommendations.
- Do not subject to continuous immersion.
- Sikalastic® 715 Top Lo-VOC is UV resistant, but will chalk, fade or discolor over time when exposed to UV and under certain artificial lighting conditions. Sikalastic® 736 AL Lo-VOC aliphatic top coat provides superior color and gloss retention.
- Base and intermediate coats must be kept clean and re-coated within 48 hours, or 24 hours if Boosters are used.
- Mockups to verify application methods and substrate conditions as well as desired skid resistance and aesthetics are highly recommended.

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.

OTHER RESTRICTIONS

See Legal Disclaimer.

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

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System Data Sheet
Sikalastic®-715 LoVOC Traffic System
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at 1-800-424-9300, International 703-527-3887.

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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