

PRODUCT DATA SHEET

Edition 12.2018/v1 CSC Master Format™ 07 18 00 TRAFFIC COATINGS

Sikalastic®-710 NP

SINGLE-COMPONENT, ELASTOMERIC, PRIMERLESS WATERPROOFING BASE COAT

| Description | Sikalastic®-710 NP is a single-component, primerless, aromatic, moisture-cured, elastomeric polyurethane membrane intended for use as the waterproofing base coat for pedestrian and vehicular traffic bearing applications. | | |
|--------------|--|--|--|
| Where to Use | ■ Foot bridges and walkways ■ Balconies | | |
| | | | |
| | Parking decks and ramps | | |
| | Multi-storey parking garages | | |
| Advantages | Single-part material, reducing mixing needs and increasing productivity. | | |
| | Excellent crack-bridging properties reducing material needs. | | |
| | Remains flexible, even at low temperatures, for service in cold weather climate. | | |
| | Primer not required for typical applications for an economical and fast-track application. | | |
| | Impervious to water and to common chemicals providing protection against deicing salts and incidental vehicle fluids | | |
| | Compliant with SWRI Deck Coatings standard. | | |
| | Technical Data | | |
| | Packaging | 18.9 L (5 US gal.) pails, 189 L (50 US gal.) drums | |
| | Colour | Medium Gray | |
| | Yield Shelf Life | 1.2 m²/L (50 ft²/US gal.) at 32 mils wet film thickness (23 mils dry). 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. 12 months in its original, unopened container. Store dry at temperatures between 4 and 35 °C (40 and 95 °F) and condition material for a minimum of 24 hours between 18 and 30 °C (65 and 85 °F) before using. | |
| | Properties at 23 °C (73 °F) and 50 % R.H. | | |
| | Solids Content ASTM D 2697 | 71 % | |
| | Viscosity | 6500 ± 3000 cps | |
| | Tensile Strength ASTM D412 | 4.5 MPa (650 psi) | |
| | Elongation at Break ASTM D412 | 375 % | |
| | Tear Resistance ASTM D624 (Die C) | 29.7 N/mm (170 pli) | |
| | Shore A Hardness ASTM D2240 | 55 | |
| | Waiting / Recoat Times | 16 hours in normal conditions or until tack-free | |
| | VOC Content | 240 g/L | |
| | Chemical Resistance Product properties are typically averages, obt preparation, application, curing and test metho | Resistant to de-icing salts. Consult Sika Canada for more information. Tained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, ds. | |

HOW TO USE

Surface Preparation

All projections, rough spots, etc., should be dressed off to achieve a level surface prior to the application.

Concrete - The concrete surface must be clean and sound. Remove any dust, laitance, grease, oil, dirt, curing agents, impregnations, wax, foreign matter, coatings and bond inhibiting material from the surface by appropriate mechanical means, in order to achieve a profile equivalent to ICRI / CSP 3 - 4 for decks and ICRI / CSP 1 - 3 for walls. The compressive strength of the concrete substrate should be at least 20 MPa (2900 psi) at 28 days and at least 1.5 MPa (218 psi) in tension at the time of application of Sikalastic®-710 NP.

Plywood - Should be clean and smooth, CANPLY compliant and exterior grade, not less than 12 mm (0.5 in) thick, spaced and supported according to CANPLY guidelines. Joints should be sealed with Sikaflex®-2c or Sikaflex®-1a and detailed, and may need to embed fabric reinforcement.

Metal - Any contamination, such as exisiting coatings, wax, oils, grease, dust, rust other foreing matters and chemical contaminants need to be removed. All metal surfaces should be thoroughly cleaned by grinding or blasting method to eliminate any contamination. Steel surfaces shall be prepared in accordance to achieve a near white finish in accordance to SSPC-SP10 standard.

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Priming

Even though Sikalastic®-710 NP does not generally require a primer, the use of a primer can be necessary upon jobsite and substrate conditions

Prior to installation, it is recommended to measure maximum moisture content of concrete substrate by weight with a Tramex CME or CMExpert type concrete moisture meter.

Primer Selection:

Sikalastic®-120 FS Primer - For applications where an adhesion promoting, pore sealing primer is required on concrete or wood surfaces where a fast turn around time is required, apply one coat at a rate of 4 to 5 m²/L (160 to 200 ft²/US gal.) at 8-10 mils wet film thickness. Refer to the Product Data Sheet for additional information.

Sika® MT Primer - For concrete with a maximum moisture content between 4 and 5 % by weight, and for metal flanges and penetrations, apply Sika® MT Primer with a flat squeegee or roller at a rate of 4 to 5 m²/L (160 to 200 ft²/US gal.) at 8 - 10 mils wet film thickness. For concrete decks with a maximum moisture content between 5 and 6 % by weight apply two (2) applications of Sika® MT Primer with a flat squeegee or phenolic resin roller at a rate of 4 to 5 m²/L (160 to 200 ft²/US gal) at 8 - 10 mils wet film thickness. Work primer well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Refer to the Product Data Sheet for additional information.

Sikalastic® Recoat Primer - For existing polyurethane coatings, incidental exposed concrete deck areas, and as an interlaminate primer, apply Sikalastic® Recoat Primer with a flat squeegee or phenolic resin core roller at approximately 7.4 m²/L (300 ft²/ US gal.) at 5 mils wet film thickness and work well into the substrate to ensure adequate penetration and sealing, and puddles are avoided. Sikalastic® Recoat Primer is not suitable for metal substrates. Refer to the Product Data Sheet for additional information.

Detailing

Non-structural cracks up to 1.5 mm (1/16 in) - Apply a detail coat of Sikalastic®-710 NP at a rate of 1.2 m²/L (50 ft²/US gal.) at 32 mils wet (0.8 mm), 100 mm (4 in) wide, centered over the crack. Allow to become tack-free before overcoating.

Cracks and joints from 1.5 up to 25 mm (1/16 up to 1 in) - Seal previously routed cracks and joints with Sika® Sealant (see Sealant Guide below) and allow to skin over and let cure for a minimum of 24 hours. If required, apply a Sikalastic® primer over the entire deck, including sealed cracks and joints, and allow to become tack-free. Apply a detail coat of Sikalastic®-710 NP at a rate of 1.2 m²/L (50 ft²/US gal.) at 32 mils wet (0.8 mm), 100 mm (4 in) wide, centered over the crack. Allow to become tack-free before overcoating.

Fabric Reinforcement - An optional 75 mm (3 in) or 150 mm (6 in) wide Sikalastic® Flexitape Heavy fabric (nylon) strips may be embedded within the base coat. The fabric width shall be chosen such that a minimum of 25 mm (1 in) of the fabric tape is embedded on either side of the crack or joint. Apply additional coating as required to fully embed Sikalastic® Flexitape Heavy in the coating.

Joints over 25 mm (1 in) - Should be considered as expansion joints and brought up through the Sikalastic® Traffic System and sealed with an appropriate Sika® sealant (see Sealant Guide below).

| SEALANT NAME | CRACKS SEALANT SELECTION AND CURE TIME BEFORE PRIMING | EXPANSION JOINTS - SEALANT SELECTION | | |
|--|---|---|--|--|
| Sikaflex®-1a | Not recommended | Not recommended | | |
| Sikaflex®-1c SL | Not recommended | YES, see data sheet | | |
| Sikaflex®-2c NS EZ Mix | Not recommended | YES, see data sheet | | |
| Sikaflex®-2c NS TG | Not recommended | YES, see data sheet | | |
| Sikaflex®-2c SL | Not recommended | YES, see data sheet | | |
| SikaHyflex®-150 LM | 1 h minimum | Not recommended | | |
| Note: Select sealant upon project and application requirements | | | | |
| Note: Material and curing conditions @ 24 °C and 50 % R.H. | | | | |

Mixing

Mix Sikalastic®-710 NP to ensure uniform colour and consistency, typically one (1) to two (2) minutes at low-speed (300 to 450 rpm), using a drill fitted with an *Exomixer®* or *Jiffy* type paddle suited to the volume of the mixing container. Keep the mixing paddle immersed constantly in the material to avoid introducing or entrapping air while mixing.

Application

Apply at the recommended coverage rate using a notched squeegee or trowel, and backroll using a phenolic resin core roller. Extend base coat over the entire area including previously detailed cracks and joints. Allow coating to cure a minimum of 16 hours at 23 °C (73 °F) and 50 % R.H. or until tack-free before top coating.



Clean Up

Wash soiled hands and skin thoroughly in hot, soapy water or use Sika® Hand Cleaner. Uncured material can be removed with Sika® Urethane Thinner and Cleaner. Cured material can only be removed mechanically.

Limitations

- For optimal results, Sikalastic® systems are best installed by skilled and experienced applicators. Consult Sika Canada for advice and recommendations
- Moisture content of concrete substrate must be ≤ 6 % by mass (p.b.w. part by weight) as measured with a Tramex® CME/CMExpert type concrete moisture meter on mechanically prepared surface according to this product data sheet (preparation to ICRI/CSP 3 - 4, based on ICRI 310.2 guidelines). If moisture content of concrete substrate is > 6 % by mass, use Sikafloor®-81 EpoCem®CA on horizontal surfaces and Sikagard®-75 EpoCem®CA on walls and overhead.
- If moisture content of concrete substrate is between 5 and 6 % by mass, prime substrate with two (2) applications of Sika® MT Primer (refer to product data sheet for application details). If moisture content of concrete substrate is between 4 and 5 % by mass with one (1) application of Sika® MT Primer (consult product data sheet). If moisture content of concrete substrate is under 4 % by mass, no priming is required.
- Substrate temperature must be 3 ° C (5.5 °F) above the measured dew point.
- Minimum/maximum ambient and substrate temperature during application and cure: 4 to 35 °C (40 to 95 °F). 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.
- Maximum relative humidity during application and cure is 95 %.
- Do not apply to a porous or damp surface where moisture vapour transmission will occur during application and cure.
- The compressive strength of the concrete substrate must have reached at least 20 MPa (2900 psi). Concrete age must be between 21 and 28 days, depending on curing and drying conditions.
- Substrate must be dry prior to the application. Do not apply to frost, wet or damp surfaces. 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 to avoid potential for bonding problems.
- Repairs required to achieve a level surface must be carried out prior to the application (consult Sika Canada for material recommendations). Surface irregularities may reflect through the cured system.
- When applying over existing coatings, compatibility and adhesion testing is necessary and it should be recognized that the existing coating will determine the long-term adhesion and thus durability of any material applied onto such.
- Do not store materials outdoors or exposed to sunlight for prolonged periods.
- Do not hand mix or thin with solvents: mechanical mix only and only dilute where advised to do so by Sika Canada.
- Thicknesses of materials shown are minimum recommended for guideline purposes. If greater thicknesses are required, please contact Sika Canada.
- Sikalastic®-710 NP is not UV- stable and cannot be left as the wearing surface and must be top coated with Sikalastic®-735 AL or other compatible UV resistant material.
- Use properly graded, oven-dried, metal and impurity-free aggregates only.
- Opening prior to the final cure may result in loss of aggregate, or permanent staining and subsequent premature failures.
- Vehicle fluids and some high-performance tires can stain the membrane; fluid spills should be removed promptly, as the coating, in some cases, can be damaged from prolonged exposure.
- Not suitable for on-grade, unvented metal pan, split/sandwich slab and buried membrane conditions as well as lightweight concrete and asphalt. Also not suitable where chained or studded tires may be used.
- Do not apply onto substrates subject to hydrostatic pressure or subject to continuous immersion.
- When using a primer, refer to individual primer product data sheet for recoating time recommendations.
- As with all coatings, jobsite trials are highly recommended to verify substrate conditions and application methods, establish acceptable workmanship, identify consumption, coverage and the desired skid resistance and ensure that the standard of finish and aesthetics are agreed upon.

Health and Safety Information

For information and advice on the safe handling, storage and disposal of chemical products, users should refer to the most recent SAFETY DATA SHEET containing physical, ecological, toxicological and other safety-related data.

KEEP OUT OF REACH OF CHILDREN FOR INDUSTRIAL USE ONLY

The Information, and in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions, within their shelflife. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any recommendations, or from any other advice offered. The information contained herein does not relieve the user of the products from testing them for the intended application and purpose. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request or may be downloaded from our website at: www.sika.ca

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