



**PRODUCT DATA SHEET**

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TRAFFIC COATINGS

# Sikalastic® Resoflex

## ELASTOMERIC AND UV RESISTANT, POLYURETHANE-BASED BALCONY AND WALKWAY WATERPROOFING SYSTEM

<b>Description</b>	A unique coating system specifically engineered to protect reinforced concrete structures subject to light to moderate traffic. It consists of a crack-bridging, waterproof, two-component, high solids, polyurethane coating containing factory added, synthetic aggregates.
<b>Where to Use</b>	As a deck coating to waterproof and protect concrete structures such as: <ul style="list-style-type: none"> <li>▪ Stadiums and arenas.</li> <li>▪ Balconies and terraces.</li> <li>▪ Footbridges and stairways.</li> </ul>
<b>Advantages</b>	<ul style="list-style-type: none"> <li>▪ Cost-effective and easy to apply.</li> <li>▪ Long pot life for extended application time.</li> <li>▪ Waterproof and weather resistant.</li> <li>▪ Elastomeric and crack bridging.</li> <li>▪ Outstanding UV resistance and non-yellowing.</li> <li>▪ Abrasion resistant.</li> <li>▪ Synthetic aggregates are coloured to match the coating and are added in the factory.</li> <li>▪ The synthetic aggregates rise to the surface of the coating to create a comfortable, slip-resistant, easy to walk on surface.</li> </ul>

**Technical Data**

<b>Packaging</b>	5.67 L (1.5 US gal.) unit
<b>Colour</b>	RAL 7004 Signal Grey, RAL 7046 Telegrey 2 and RAL 1001 Beige
<b>Yield</b>	1.4 m <sup>2</sup> /L – 7.9 m <sup>2</sup> /unit (57 ft <sup>2</sup> /US gal. – 86 ft <sup>2</sup> /unit.), 28 mils w.f.t. / 24 mils d.f.t.
<b>Shelf Life</b>	Typically one (1) coat is required, though on higher absorbency substrates additional coats may be required. Actual coverage rates and material consumption will depend upon porosity and profile of the substrate. Test areas are recommended to establish correct coverage rates. 12 months in original container under proper storage conditions. Store dry at temperatures between 5 and 32 °C (41 -and89 °F). Condition product to temperatures between 18 and 30 °C (65 -and86 °F) before use.
<b>Mix Ratio</b>	A:B= 5:1 by volume
<b>Properties at 23 °C (73 °F) and 50 % R.H.</b>	
<b>Solids Content</b>	
By volume	Approx. 85 %
By weight	Approx. 88 %
<b>Pot Life, 250 g (8.8 oz)</b>	Approx. 75 minutes
<b>Curing Time</b>	
Tack-free	16 hours
Full cure	16 hours, If still tacky, wash with water
<i>Drying times will vary according to air and substrate temperature and humidity.</i>	
<b>Tensile Resistance ASTM D638, Type IV</b>	4.1 MPa (595 psi)
<b>Elongation at Break ASTM D638, Type IV</b>	250 % +
<b>Tear strength ASTM D624</b>	
Die C	17.8 N/mm (101.6 lb/in)
<b>Abrasion Resistance ASTM D4060</b>	
Taber Abraser, CS-17 and H-22 Wheels/ 1000 g (2.2 lb)/1000 cycles	97 mg (CS-17) 316 mg (H-22)*
* Standard 28 MPa concrete exhibits 3.872 mg loss when tested as per this procedure.	
<b>Bond Strength ASTM D4541</b>	
On primed concrete	2.2 MPa (320 psi) Concrete failure
<b>Water Vapour Transmission and Permeance ASTM E96</b>	
Water method	0.3 g/h/m <sup>2</sup> 1.56 perm (89.5 ng/P/s/m <sup>2</sup> )
<b>Static Coefficient of Friction ASTM C1028</b>	
Dry surface	0.82
Wet surface	0.65
<b>VOC Content</b>	143 g/L
<b>Chemical Resistance</b>	Consult Sika Canada

*Product properties are typically averages, obtained under laboratory conditions. Reasonable variations can be expected on-site due to local factors, including environment, preparation, application, curing and test methods.*

## HOW TO USE

### Surface Preparation

**General:** Surfaces must be clean, dry and sound, with a suitable surface profile. Remove all dust, laitance, grease, oils, tar, asphalt and bitumen, curing compounds, bond inhibiting impregnations, waxes, and any other contaminants. All projections, rough spots, etc. should be ground off to achieve a level surface prior to applying the system.

**Concrete:** Should be cleaned and prepared to achieve a laitance and contaminant free, open surface profile by blast cleaning or equivalent mechanical means, to achieve a profile equivalent to ICRI / CSP 2 - 3. Surface defects should be repaired with an appropriate Sika® repair material before beginning Primer installation.

**Plywood:** Should be clean a smooth, of an APA and exterior grade, not less than 13 mm (1/2 in) thick, and spaced and supported in accordance with APA guidelines. Seams should be sealed with Sikaflex®-2c or Sikaflex®-1a and may require embedded fabric reinforcement.

### Priming

**Concrete and Plywood:** Use either Sika® MT Primer or Sikalastic®-120 FS Primer at all times. (see separate Product Data Sheets). Prior to application, measure and confirm substrate moisture content, ambient relative humidity, ambient and surface temperature and dew point. Confirm that a moisture vapour transmission does not exist prior to beginning the installation. During installation, confirm and record above values at least once every three (3) hours, or more frequently whenever conditions change (e.g. ambient temperature rise/fall, relative humidity increase/decrease, etc.).

Apply primer by squeegee at the rate of 4 - 5 m<sup>2</sup> / L (160 - 200 ft<sup>2</sup>/US gal.) and back roll to ensure a uniform 8 - 10 mils wet film thickness. Where a second coat is required, wait until first coat is tack-free and apply a second coat of the primer using the same technique and at the same coverage rate as the first coat. Ensure that the second application is free of pinholes and holidays and provides uniform and complete coverage of the entire concrete substrate.

### Mixing

Pre-mix each component of Sika® Resoflex separately. Empty component B into the component A pail. Mix the combined components for at least three (3) minutes, using a low-speed drill (300 - 450 rpm) to minimize entrapping air. Use an *Exomixer*® type mixing paddle (recommended model) suited to the volume of the mixing container. During the mixing operation, scrape down the sides and bottom of the container with a flat or straight edge trowel at least once, to ensure complete mixing. When completely mixed, the material should be uniform in colour and consistency.

### Application

Apply to primed surface with with notched squeegee at a rate of 1.4 m<sup>2</sup> /L (57 ft<sup>2</sup>/US gallon) and backroll with a 12 mm (½ in) nap roller to achieve 27 mils wet film thickness. A 450 mm (18 in) wide roller provides the best results.

**Important :** Make sure to uniformly disperse the synthetic aggregates once the product is applied to the surface in order to provide a slip-resistant texture.

### Clean Up

Clean all tools and equipment immediately with Sika® Urethane Thinner and Cleaner. Once cured, product can only be removed manually or mechanically. Wash hands and skin thoroughly with hot soapy water or use Sika® Hand Cleaner towels.

### Limitations

- Minimum/maximum ambient and substrate temperature (during application and cure): 5 / 32 °C (41 / 90 °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.
- Substrate temperature must be at least 3 °C (5.5 °F) above measured dew point temperature.
- Moisture content of the substrate must be < 4 % by weight when coating is applied or use Sikafloor®-81 EpoCem®CA.
- Do not apply to a porous or damp surface where moisture vapour transmission will occur during application and cure.
- Minimum age of concrete must be 21 - 28 days, depending on curing and drying conditions.
- Substrate must be dry prior to application. Do not apply to frosted, wet or damp surfaces. Do not proceed if rain is imminent within 8 - 12 hours of application. Allow sufficient time for 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 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 recommended.
- Do not store materials outdoors or exposed to sunlight for prolonged periods.

### 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](http://www.sika.ca)

#### SIKA CANADA INC.

**Head Office**  
601, avenue Delmar  
Pointe-Claire, Quebec  
H9R 4A9

**Other locations**  
Toronto  
Edmonton  
Vancouver

**1-800-933-SIKA**  
**[www.sika.ca](http://www.sika.ca)**

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