

## PRODUCT DATA SHEET

# Sikalastic®-680 RT

Anti root 1-part polyurethane modified bitumen liquid applied membrane for roof waterproofing

### DESCRIPTION

Sikalastic®-680 RT is a 1-part, polyurethane modified bitumen, elastomeric, liquid applied membrane for roof waterproofing and other waterproofing applications. It has anti-root properties for preventing plant roots damaging the applied membrane.

### USES

Designed for the following waterproofing applications:

- Flat and sloping roof structures
- External balcony and terrace decks
- Roof gardens
- Retaining walls and basements
- Planter boxes
- Coating cracked non-ferrous roof valleys and flashings

### CHARACTERISTICS / ADVANTAGES

- Protects against root penetration
- Seamless
- Good adhesion on concrete, render and brick masonry
- Moisture curing
- Good elongation at break
- Good impact resistance
- Flexible
- High solid content
- Easy to apply by paint brush, trowel or roller
- Quick drying
- Suitable substrates: concrete, cementitious, brickwork, ceramic tiles, metal, plaster, plasterboard, wood, bituminous membranes, bitumen and asphalt.

### PRODUCT INFORMATION

<b>Chemical Base</b>	Polyurethane modified bitumen and additives
<b>Packaging</b>	20 kg container Refer to current price list for packaging variations
<b>Colour</b>	Black
<b>Shelf Life</b>	6 months from date of production
<b>Storage Conditions</b>	Product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +5 °C and +35 °C. Always refer to packaging.
<b>Density</b>	1.20 ± 0.10 kg/L
<b>Solid Content</b>	85 ± 2 %
<b>Viscosity</b>	> 5000 mPa·s

## TECHNICAL INFORMATION

Shore A Hardness	~35 (after two weeks)	
Tensile Strength	~1.5 N/mm <sup>2</sup>	(ASTM D412:06a - 2013)
Elongation at Break	> 500 %	(ASTM D412:06a - 2013)
Adhesion in Peel	> 1.0 N/mm <sup>2</sup>	(ASTM D4541:02)
Resistance to Static Puncture	860 mm (drop height)	
Resistance to Root Penetration	Yes	
Water Vapour Transimission	16 – 24 g/m <sup>2</sup> /24 hours	
Service Temperature	-10 °C min. / +45 °C max.	

## SYSTEM INFORMATION

### System Structure

### System

**Important:** To reduce blistering and increase adhesion durability, use Sika® Igoflex® P-10 as a primer.

Layer	Product	Consumption
Primer	Sika® Igoflex® P-10	0.35–0.50 kg/m <sup>2</sup>
Base coat	Sikalastic®-680 RT	~0.6 kg/m <sup>2</sup>
Top coat	Sikalastic®-680 RT	~0.6 kg/m <sup>2</sup>

These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.

Dry film thickness	0.50 – 0.95 mm
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## APPLICATION INFORMATION

Ambient Air Temperature	+5 °C min / +45 °C max.
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Relative Air Humidity	80 % max.
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Substrate Temperature	+5 °C min. / +45 °C max.
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Substrate Moisture Content	≤ 3 % parts by weight. The following test methods can be used: Sika®-Tramex meter, CM-measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).
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Waiting Time / Overcoating	Sikalastic®-680 RT on Sikalastic®-680 RT	
	<b>Substrate Temperature</b>	<b>Minimum</b> <b>Maximum</b>
	+20 °C	6 hours                      10 hours

Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

Drying Time	~48 hours at ~20 °C Allow 3 days (+25 °C / 75 % r.h) before flood testing on treated area. Time is approximate and will be affected by substrate, film thickness and changing ambient conditions particularly temperature and relative humidity.
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## BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

## FURTHER DOCUMENTS

- Sika Method Statement: Bituminous Liquid Applied Membranes

## LIMITATIONS

- Do not use as trafficable top coat
- Do not apply directly to wet or very damp surfaces
- Do not thin with water or other solvents
- Do not apply when rain is imminent
- Ensure adequate ventilation during application

## ECOLOGY, HEALTH AND SAFETY

For information and advice on the safe handling, storage and disposal of chemical products, users shall refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

## APPLICATION INSTRUCTIONS

### EQUIPMENT

Select the most appropriate equipment for all applications required for the project:

- Selection of Paint brush's
- Trowel
- Roller

### SUBSTRATE PREPARATION

Suitable substrates: concrete, cementitious, brickwork, ceramic tiles, metal, plaster, plasterboard, wood, bituminous membranes, bitumen and asphalt.

- The substrate must be uniform, clean, dry or slightly damp, free from dust, loose material, surface contamination, existing coatings, oil, grease and other materials, which could reduce adhesion of the coating.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product preferably by industrial vacuuming equipment.
- Fill cracks exceeding 1 mm in width with a synthetic fabric matting (i.e. glass fibre).

### APPLICATION

**Important:** Strictly follow installation procedures as defined in method statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

**Important:** Before application, confirm substrate moisture content, relative air humidity, substrate and air temperatures.

**Important:** For damp substrates (not fully cured), apply a moisture barrier coat before application of Sikalastic®-680 RT.

**Important :** Reference must be made to the Sika Method Statement: Bituminous Liquid Applied Membranes.

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### Product Data Sheet

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September 2021, Version 01.02

020915793000000004

**Important:** If Sikalastic®-680 RT needs to be applied at a height above 500 mm from the roof / floor level (i.e. upstands, walls etc). Cover the substrate with a render incorporating a wire mesh before applying Sikalastic®-680 RT.

Note: Always start the application with the detailing (i.e. corners, upstands, joints etc)

### Primer

1. Apply Sika® Igoflex® P-10 onto the prepared substrate by short-pile roller.
2. Back roll in two directions at right angles to each other. Ensure a continuous, pore free coat covers the substrate.
3. Confirm waiting / overcoating time is achieved before applying base coat. Refer to Product Data Sheet.

### Base coat

1. Apply product onto the prepared substrate (with or without reinforcement) using a paint brush, trowel or short-pile roller.
2. Confirm waiting / overcoating time is achieved before applying top coat.

### Top coat

1. Apply product at right angles to the base coat application direction using a paint brush, trowel or short-pile roller.

### CLEANING OF TOOLS

Clean all tools and application equipment with water immediately after use. Hardened material can be removed with Sika® Colma - Cleaner.

## LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

## LEGAL NOTES

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 in accordance with Sika's recommendations. 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 written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. 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.

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