

**Product Data Sheet**

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 Sikalastic®-901 (Ever Coat SP-100)

## Sikalastic® -901 (Ever Coat SP-100)

### Spray applied waterproofing membrane

<b>Product Description</b>	Sikalastic®-901 is a two part, elastic, crack-bridging, rapid-curing polyurethane membrane. Sikalastic®-901 is for machine application only.	
<b>Uses</b>	<ul style="list-style-type: none"> <li>■ For use as a waterproofing membrane for roofs in both new construction and refurbishment projects with an additional top coat for UV-protection</li> <li>■ For cost efficient life cycle extension of failing roofs</li> <li>■ To be combined with unique vapour transmitting system for water vapour release and substrate movement absorption</li> </ul>	
<b>Characteristics / Advantages</b>	<ul style="list-style-type: none"> <li>■ Excellent crack-bridging properties</li> <li>■ Highly elastic waterproofing membrane</li> <li>■ For roofs with complex shapes</li> <li>■ Forms a seamless waterproofing layer over existing roof installation</li> <li>■ Fast curing (application with 2-part hot spray equipment)</li> </ul>	
<b>Tests</b>		
<b>Approval / Standards</b>	JIS A 6021	
<b>External Supervision</b>		
<b>Product Data</b>		
<b>Form</b>		
<b>Appearance / Colour</b>	Resin -Part A: Hardener -Part B: Grey No.12 (~RAL 7011) or unpigmented (yellowish)	Slightly yellow transparent liquid clear / brownish
<b>Packaging</b>	Part A: Part B:	200 kg drum, 175 kg drum,
	Sika Toner PU:	15kg tin
<b>Storage</b>		
<b>Storage Conditions/ Shelf-Life</b>	Part A: Part B:	12 months 12 months

From date of production if stored properly in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5°C and + 30°C.



## Technical Data

<b>Chemical Base</b>	Polyurethane
<b>Density</b>	Part A: ~ 1.07 kg/litre Part B: ~ 1.03 kg/litre Mixed resin: ~ 1.0 kg/litre (Grey) Sika Toner PU ~ 1.25 kg/litre
	All density values at +23°C
<b>Curing Speed / Rate</b>	Cup Gel Test: Gel time (25°C) starts after ~ 20 seconds.
<b>Solid Content</b>	> 99%
<b>Viscosity</b>	Part A: 600 ~800 mPas Part B: 350~550 mPas
<b>Layer Thickness</b>	Minimum 2 mm
<b>Mechanical / Physical Properties</b>	
<b>Tensile Strength</b>	8.82 N/mm <sup>2</sup> (28 days / +23°C) (JIS K6251)
<b>Elongation at Break</b>	600% (28 days / +23°C) (JIS K6251)
<b>Tear Strength</b>	44.1 N/mm <sup>2</sup> (28 days / +23°C) (JIS K6252)
<b>Shore A Hardness</b>	73 (28 days / +23°C) (JIS K6253)
<b>Resistance</b>	
<b>Chemical Resistance</b>	Contact Technical Service for specific recommendations.
<b>Thermal Resistance</b>	The elastic properties are maintained at temperatures as low as -20°C.

## System Information

### System Structure

#### **Quick Spray Roofing System on Concrete:**

Layer thickness: ~ 2 mm  
Primer: 1 x Sika® Primer PW-F,

Waterproofing: 1 x Sikalastic®-901  
Toner/Pigment paste: (1 x Sika® Toner PU)  
Top coat: 1 x Sikalastic®-ExcelTop High Reflection

#### **Quick Spray Roofing System on Metal:**

Layer thickness: ~ 2 mm  
Primer: 1 x Sika® Primer PW-F,

Waterproofing: 1 x Sikalastic®-901  
Toner/Pigment paste: (1 x Sika® Toner PU)  
Top coat: 1 x Sikalastic®-ExcelTop High Reflection

#### **Quick Spray Roofing System on Asphalt:**

Layer thickness: ~ 2 mm  
Primer: no primer  
Sheet: 1 x Sika® Lance-Lock Sheet\*  
Waterproofing: 1 x Sikalastic®-901  
Toner/Pigment paste: (1 x Sika® Toner PU)  
Top coat: 1 x Sikalastic®-ExcelTop High Reflection

\* fixing of Sika® Lance-Lock sheet using Sika® T Roof Anchor 40, Sika® T Roof Anchor 70 and/or, Sika® Alumisus 40 Anchor. For taping of joints use Sika® Joint Tape TM and corners use Sika® Lance Cant N30 and/or Sika® Lance Cant N30. For vapour transmission use Sika® T Roof Anchor 40



## Application Details

### Consumption / Dosage

Coating System	Product	Consumption
Bonding bridge (when exceeding the max. waiting time, e.g. overlaps)	1x Sika® Sokan Primer-J (Between Sikalastic®-901 and Sikalastic®-901/Sikalastic® ExcelTop High Reflection)	~ 0.15 kg/m <sup>2</sup>
Quick Spray Roofing System on Concrete	1 x Sika® Primer PW-F,	~ 0.2 kg/m <sup>2</sup>
	1 x Sikalastic®-901  (1 x Sika® Toner PU)	~ 2.00 kg/m <sup>2</sup> /mm
	1 x Sikalastic®-ExcelTop High Reflection	~ 0.2 kg/m <sup>2</sup>
Quick Spray Roofing System on Metal	1 x Sika® Primer PW-F,	~ 0.2 kg/m <sup>2</sup>
	1 x Sikalastic®-901  (1 x Sika® Toner PU)	~2.00 kg/m <sup>2</sup> /mm
	1 x Sikalastic®-ExcelTop High Reflection	~ 0.2 kg/m <sup>2</sup>
Quick Spray Roofing System on Asphalt	1 x Sika® Lance-Lock Sheet*, Sika T-Roof Anchors 40 or 70	~ 1.05m 2.6 pcs/m <sup>2</sup>
	1 x Sikalastic®-901  (1 x Sika® Toner PU)	~ 2.0 kg/m <sup>2</sup>
	1 x Sikalastic® -ExcelTop High Reflection	~ 0.2 kg/m <sup>2</sup>

\*pls. refer to the corresponding PDS for exact details about the installation of the Sika® Lance-Lock Sheet incl. anchors, joint tape, corners and vapour transmission pipe.

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

### Substrate Quality

The concrete substrate must be sound and of sufficient compressive strength (minimum 25 N/mm<sup>2</sup>) with a minimum pull off strength of 1.5N/mm<sup>2</sup>.

The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc.

If in doubt, apply a test area first.



## Substrate Preparation

### *Cementitious substrates:*

Concrete substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and achieve an open textured surface.

Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed.

Repairs to the substrate, filling of blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor<sup>®</sup>, SikaDur<sup>®</sup> and SikaGard<sup>®</sup> range of materials.

The concrete or screed substrate has to be primed or levelled in order to achieve an even surface.

High spots must be removed by e.g. grinding.

All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.

### *Metals:*

Steelwork is ideally prepared to Sa 21/2 (Swedish Standard SIS 05 : 5900 = 2nd quality BS4232 = S.S.P.C. grade SP10) OR as indicated by the blasting specification which may be of a higher standard. Where blasting is not permitted, clean metal preparation by pin hammer etc is acceptable.

Non-ferrous metals are prepared as follows. Remove any deposits of dust and oxidation and abrade to bright metal. Wire brushing can be used for soft metal such as lead. The surface must be clean and free from grease which, if present, must be removed with a proprietary solution. Wash with detergent, rinse and dry.

## Application Conditions / Limitations

**Substrate Temperature** +5°C min. / +60°C max.

**Ambient Temperature** +5°C min. / +60°C max.

**Substrate Moisture Content** ≤ 4% pbw moisture content.  
Test method: Sika<sup>®</sup>-Tramex meter, CM -measurement or Oven-dry-method.  
No rising moisture according to ASTM (Polyethylene-sheet)

**Relative Ait Humidity** 85% RH max.

**Dew Point** Beware of condensation!

The substrate and uncured coating must be at least 3°C above dew point to reduce the risk of condensation or blooming of the membrane finish.

## Application Instructions

**Mixing** Part A : Part B = 53.3 : 46.7 (by weight)  
Part A : Part B = 50 : 50 (by volume)

Dose and mix with suitable two-part spray equipment.  
Both components must be heated up. A Comp. +62°C, B Comp. +53°C.  
The accuracy of mixing and dosage must be controlled regularly with the equipment.

## Application Method / Tools

Prior to application, confirm substrate moisture content, r.h and dew point.

### *Primer:*

Prime prepared concrete with Sika<sup>®</sup> Primer PW-F or Sika<sup>®</sup> US Urethane Primer. The primer should not just be rolled or poured. In order to avoid the formation of pinholes, the primer must be applied into the concrete surface, if necessary in two applications.

### *Waterproofing:*

Spray apply with suitable two-part hot spray equipment e.g. DFX-70S  
Control the layer thickness during application using a thickness gauge.

### *Bonding bridge (intermediate) :*

Uniformly spread Sika Sokan Primer-J using a short pile (12 mm) nylon roller or by spray.



**Cleaning of Tools**

Clean all tools and application equipment with Thinner C immediately after use. Hardened and/or cured material can only be removed mechanically.

**Waiting Time / Over coating**

Before applying Sikalastic® -901 on Sika® Primer PW-F allow:

Substrate temperature	Minimum	Maximum
+10°C	2 hours	8 hours <sup>1)</sup>
+20°C	1 hours	
+30°C	0.5 hours	
+45°C	0.5 hours	

Before applying Sikalastic® -901 on Sika® US Urethane Primer allow:

Substrate temperature	Minimum	Maximum
+10°C	2 hours	8 hours <sup>1)</sup>
+20°C	1 hours	
+30°C	0.5 hours	
+45°C	0.5 hours	

Before applying Sikalastic® -901 on Sikalastic® -901 allow:

Substrate temperature	Minimum	Maximum
+10°C	-	3 hours <sup>2)</sup>
+20°C		2 hours <sup>2)</sup>
+30°C		2 hours <sup>2)</sup>
+45°C		1 hour <sup>2)</sup>

Before applying Sikalastic® -901 on Sika® Sokan Primer-J allow:

(Dyflex has primer range for between layers - The Brand name is Sokan Primer-J)

Substrate temperature	Minimum	Maximum
+10°C	3 hours	6 hours <sup>3)</sup>
+20°C	2 hours	4 hours <sup>3)</sup>
+30°C	1 hour	2 hours <sup>3)</sup>
+45°C	40 minutes	1 hour <sup>3)</sup>

Before applying Sikalastic® ExcelTop High Reflection on Sikalastic® -901 allow:

Substrate temperature	Minimum	Maximum
+10°C	90 minutes	3 hours <sup>2)</sup>
+20°C	60 minutes	2 hours <sup>2)</sup>
+30°C	30 minutes	2 hours <sup>2)</sup>
+45°C	20 minutes	1 hour <sup>2)</sup>

<sup>1)</sup> Assuming that any dirt has been carefully removed and contamination is avoided.

<sup>2)</sup> If the max. waiting time is exceeded then Sika® Sokan Primer -J must be applied as a bonding bridge.

<sup>3)</sup> If the max. waiting time is exceeded then Sika® Sokan Primer -J must be applied. Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.



**Notes on Application / Limitations**

This product may only be used by experienced professionals.

Application is by using 2-part hot spray equipment only.

Temperature of the substrate during application and curing: min. +5°C.

Sikalastic® -901 is not UV light resistant and changes colour under UV exposure. However, the performance and technical properties are not affected providing the exposure is max. 4 weeks. Areas which are permanently exposed to UV light radiation, must be overcoated with a suitable protective coating such as Sikalastic® ExcelTop High Reflection. In wet areas or climatic zones with a permanent air humidity of > 80%, in combination with a permanent air temperature of > +30°C, the adhesion promoter Sika Sokan Primer-J must be used.

Please note that Sikalastic® -901 is not suitable for applications with permanent water load.

Please note: always apply a test area first.

**Curing Details**

**Applied Product ready for Use**

Temperature	Rain resistant after	Ready for foot <sup>1)</sup> traffic (carefully)
+10°C	~ 5 minutes	~ 90 minutes
+20°C		~ 60 minutes
+30°C		~ 30 minutes
+45°C		~ 20 minutes

Note:

<sup>1)</sup> Only for inspection or for application of the next layer.

Times are approximate and will be affected by changing ambient conditions.

**Value Base**

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.

**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.

**Health and Safety Information**

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

**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 product 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.



**PT. Sika Indonesia**  
 Jl. Raya Cibinong- Bekasi km. 20  
 Limusunggal- Cileungsi  
 BOGOR 16820 - Indonesia  
 Tel. +62 21 8230025  
 Fax +62 21 8230026  
 Website : idn.sika.com  
 e-mail: sikacare@id.sika.com

Gresik :  
 Jln. KIG Raya Utara Kav 3/4, Kawasan Industri Gresik, Roomo,  
 Manyar Gresik - 61151  
 Tel : 031-3951633; Fax : 031-3991632  
 Medan :  
 Jl. Serbaguna (Simp. Jalan Veteran), Kompleks Pergudangan Brayon  
 Trade Center No. 34, Medan 20239  
 Tel : (061) 844 6697, 844 6997 ; Fax : (061) 844 6698

