

# PRODUCT DATA SHEET

## Sikalastic®-632 R

SINGLE COMPONENT, LIQUID APPLIED, RAPID CURE, PURE POLYURETHANE ROOF WATERPROOFING MEMBRANE

### DESCRIPTION

Sikalastic®-632 R is a rapid cure, one component, moisture-triggered, pure polyurethane, liquid applied membrane based on unique *i-Cure*® technology

### USES

Exposed or concealed waterproofing membrane on flat or pitched roofs both for new construction and refurbishment of old roofs.

### CHARACTERISTICS / ADVANTAGES

- 1 component pure polyurethane
- 1 material for horizontal / vertical areas
- 1 hour early rain resistant
- UV resistant
- High solid content
- Root penetration resistant

### PRODUCT INFORMATION

<b>Chemical base</b>	One component moisture triggered pure polyurethane
<b>Packaging</b>	21 kg pails
<b>Colour</b>	Light grey
<b>Shelf life</b>	6 months from the date of production
<b>Storage conditions</b>	Store in dry condition in original, unopened and undamaged packaging at temperature between +10 °C and +30 °C.
<b>Density</b>	~1.40 kg/l (EN ISO 1183-1)
<b>Solid content by weight</b>	90 % (+23 °C / 50 % r.h.)
<b>Solid content by volume</b>	82.3 % (+23 °C / 50 % r.h.)

### TECHNICAL INFORMATION

<b>Tensile Strength</b>	4.0 MPa (ASTM D412)
<b>Elongation at Break</b>	600 % (ASTM D412)
<b>Tear Strength</b>	≥ 15 N/mm (ASTM D624)
<b>Crack Bridging Ability</b>	2 mm (no cracks) (ASTM C836)
<b>Resistance to Root Penetration</b>	Pass (DIN 4062)

## SYSTEMS

### System Structure

#### Substrate Priming

##### Substrate

Concrete / Cementitious Substrate

Asphalt / Bituminous Sheet

Metal - Ferrous or galvanised metals, lead, copper, aluminium, brass or stainless steel

Any other substrate

##### Primer

Sikalastic® U-Primer

Normally not required \*

Sikalastic® Metal Primer

Contact Sika Technical Service team

\* Color change to cured Sikalastic®-632 R may occur

#### Build-up

##### Coating System

Min. 2 x Sikalastic®-632 R \*

Total consumption \*\* : 1.05–2.10 kg/m<sup>2</sup>

##### Reinforced System

1 x Sikalastic®-632 R fully reinforced with Sikalastic® Fleece or Sika® Reemat

1 x Sikalastic®-632 R

Total consumption \*\* : 1.75–2.45 kg/m<sup>2</sup>

\* local reinforcement is recommended with Sikalastic® Fleece, Sika® Reemat, Sika® Flexitape and/or Sika® Flexistrip in areas with high movement, irregular substrate or to bridge cracks, joints and seams on the substrate.

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

### Dry film thickness

#### Coating System

0.6–1.2 mm

#### Reinforced System

1.1–1.5 mm (including reinforcement)

## APPLICATION INFORMATION

### Ambient Air Temperature

+10 °C min. / +40 °C max.

### Relative Air Humidity

85 % r.h. max.

### Substrate Temperature

+10 °C min. / +60 °C max.

### Dew Point

Beware of condensation!

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

### Substrate Moisture Content

< 4 % pbw moisture content. Test method: Sika®-Tramex meter, CM – measurement or oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).

### Substrate Pre-Treatment

#### Concrete / Cementitious Substrate

New concrete should be cured for at least 28 days and should have a pull off strength  $\geq 1.0$  N/mm<sup>2</sup> (supported by test on site). Inspect the concrete, including upstands, all areas should be hammer tested. Concrete must be suitably finished by wood float or steel pan. The surface finish must be uniform and free from defects such as laitance, voids or honeycombing. Mortar joints must be sound and preferably flush pointed. Ensure all ceramic tiles are sound and securely fastened (adhesion strength  $\geq 1.0$  N/mm<sup>2</sup>), replacing obviously broken or missing sections.

#### Asphalt / Bituminous Sheet

Volatiles and organics oils in the sheets can cause bleeding and slight non-detrimental staining. The asphalt must be carefully assessed for moisture and/or air entrapment, grade and surface finish prior to any coating works being carried out.

## Pot Life

Sikalastic®-632 R is designed for rapid curing, therefore the material will react with the humidity of the air. Skin formation in the pail starts within 1 hour of opening the pail in hot climate conditions.

## Waiting Time / Overcoating

Before applying Sikalastic®-632 R on Sikalastic®-632 R allow:

Ambient conditions	Minimum waiting time	Maximum waiting time *
+20 °C / 55 % r.h.	6 hours	2 days
+30 °C / 85 % r.h.	3 hours	2 days

Note: times are approximate and will be affected by the layer thickness, the substrate temperature.

\* after 2 days the surface must be cleaned and primed prior to the application of another layer of Sikalastic®-632 R.

## Drying time

Ambient conditions	Rain resistant *	Touch dry	Full cure
+20 °C / 55 % r.h.	2 hours	2 hours	6 hours
+30 °C / 85 % r.h.	1 hour	1 hour	3 hours

\* In case of early rain superficial surface damage has to be expected without affecting the integrity of the coating.

Note: The initial surface tackiness of the cured Sikalastic®-632 R will disappear within 2 weeks of application.

## APPLICATION INSTRUCTIONS

### SUBSTRATE PREPARATION

#### Concrete Cementitious Substrate

Cementitious or mineral based substrates must be prepared mechanically using abrasive blast cleaning or scarifying equipment to remove cement laitance and to achieve an open textured surface. Loose friable material and weak concrete must be completely removed and surface defects such as blowholes and voids must be fully exposed. High spots must be removed by e.g. grinding.

Repairs to the substrate, filling of joints, blowholes/voids and surface levelling must be carried out using appropriate products from the Sikaflex®, Sikafloor®, Sikadur® and Sikagard® range of materials. Outgassing is a naturally occurring phenomenon of concrete that can produce pinholes in subsequently applied coatings. Primer will be used on porous concrete and cementitious substrates to block outgassing avoiding pin holing.

#### Asphalt / Bituminous Sheet

Power wash as required. All major cracks should be sealed to allow continuity of the Sikalastic®-632 R system. Asphalt must be carefully assessed for moisture and/ or air entrapment, grade and surface finish prior to any coating works being carried out. Treat blisters by star cutting and removing any underlying water. Allow to dry and re-adhere using torch.

#### Any other substrate

For any other substrate to be waterproofed with Sikalastic®-632 R please contact Sika Technical Service team for assessment and substrate preparation proposal.

### APPLICATION

Prior the application of Sikalastic®-632 R the priming coat if used must have cured tack-free. For the waiting time / overcoating please refer to the PDS of the relevant primer. Damageable areas (handrails, etc) have to be protected with tape or plastic wrapping. Application can be done with a soft bristle brush, or with a solvent resistant, "non-shedding" synthetic nylon roller. Contact Sika Technical Service team for application using airless spray.

#### Detailing

Always begin the installation with the details prior to the installation of the horizontal areas. Follow same process as reinforced system.

#### Coating System

Apply the first layer of Sikalastic®-632 R maintaining a wet edge to ensure a seamless membrane. Once the first layer has cured enough (see overcoating time window) apply the second layer of Sikalastic®-632 R.

#### Reinforced System

Apply the first layer of Sikalastic®-632 R maintaining a wet edge to ensure a seamless membrane. Roll-in the reinforcement Sika Reemat or Sikalastic® Fleece and overlap by minimum 5 cm. The roller may require only a little bit of extra material to keep wetted but no further significant material is added at this stage. Once the first layer has cured enough (see overcoating time window) apply the second layer of Sikalastic®-632 R.

### 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.

## LIMITATIONS

- Do not apply Sikalastic®-632 R on substrates with rising moisture.
- Do not dilute Sikalastic®-632 R with any solvent.
- Sikalastic®-632 R is not suitable for permanent water immersion
- Ponding water test can be conducted on Sikalastic®-632 R after 24 hours, within maximum test duration of 48 hours. After 48 hours water needs to be removed.
- On substrates likely to exhibit outgassing, apply during falling ambient and substrate temperatures. If applied during rising temperatures “pin holing” may occur from rising air.
- Do not use Sikalastic®-632 R for indoor applications. Do not apply Sikalastic®-632 R close to the air intake vent of running air conditioning unit.
- Volatile bituminous materials may stain and or soften when overcoated with Sikalastic®-632 R. Low melting point bituminous materials may need priming.
- Whilst Sikalastic®-632 R is resistant to most commonly encountered atmospheric pollutants, proprietary cleaning solutions and environmental spoilage. Contact Sika Technical Service team in case of specific chemical resistance requirements.

## 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.

## 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.

## 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 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 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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