

# PRODUCT DATA SHEET

## Sikalastic®-632 R

### POLYURETHANE 1-PART RAPID CURE LIQUID APPLIED MEMBRANE FOR ROOF WATERPROOFING

#### DESCRIPTION

Sikalastic®-632 R is a polyurethane, 1-part, rapid cure, cold-applied, moisture cured, crack-bridging, liquid applied membrane. Provides a seamless, chemical resistant, durable waterproofing solution for flat or sloping roofs, external balcony and terrace decks.

#### USES

Sikalastic®-632 R may only be used by experienced professionals.

Waterproofing:

- Flat and sloping roof structures
- External balcony and terrace decks
- New construction and refurbishment projects
- Applied typically to cementitious, bituminous, brick, asbestos cement, metal, tiled substrates
- Roofs with numerous details such as penetrations, drains, roof lights and complex geometry
- Failing roofs to extend service life
- Underneath bonded tiles on balcony and terrace decks

#### CHARACTERISTICS / ADVANTAGES

- Resistant to root penetration
- Rapid curing
- 1-part, cold applied
- Resistant to chemical exposure
- No mixing, ready to use
- Seamless
- Moisture triggered chemistry (MTC)
- Moves with normal thermal movement
- Reinforced system provides waterproofing complex detailing of roof or deck penetrations
- Rain resistant almost immediately on application
- Vapour permeable, allows substrate to breathe

#### PRODUCT INFORMATION

|                    |                       |
|--------------------|-----------------------|
| <b>Composition</b> | Aromatic polyurethane |
|--------------------|-----------------------|

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Sikalastic®-632 R

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|   |   |                                   |
|---|---|-----------------------------------|
| Packaging                               | 21 kg container   |                                   |
| Colour                                  | Light grey  |                                   |
| Shelf life                              | 9 months from date of production  |                                   |
| Storage conditions                      | Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +10 °C and +30 °C. Always refer to packaging. |                                   |
| Density                                 | ~1,40 kg/l<br>Value at +23 °C   | (EN ISO 1183-1)                   |
| Solid content by weight                 | ~90 % (+23 °C / 50 % r.h.)  |                                   |
| Solid content by volume                 | ~82 % (+23 °C / 50 % r.h.)  |                                   |
| Volatile organic compound (VOC) content | ≤ 150 g/L   | (ASTM D2369-98 / USEPA Method 24) |

## TECHNICAL INFORMATION

|                                |   |                |
|--------------------------------|---|----------------|
| Shore D Hardness               | ~62   | (ASTM C836-03) |
| Tensile Strength               | ~4,0 MPa  | (ASTM D412)    |
| Elongation at Break            | ~600 %  | (ASTM D412)    |
| Tear Strength                  | ≥ 15 N/mm   | (ASTM D624)    |
| Crack Bridging Ability         | 2 mm (no cracks)  | (ASTM C836)    |
| Resistance to Root Penetration | Pass  | (DIN 4062)     |
| Water Vapour Transmission      | 32,6 g/(m <sup>2</sup> ·24 h)   | (ASTM E96/96M) |
| Water Absorption               | 0,643 (perms)   | (ASTM E96/96M) |
| Chemical Resistance            | Resistant to many chemicals. Contact Sika Technical Service for additional information. |                |
| Service Temperature            | -35 °C min. / +80 °C max.   |                |

## SYSTEMS

|                    |   |                             |                          |
|--------------------|---|-----------------------------|--------------------------|
| System Structure   | Sikalastic®-632 R is part of the following roof waterproofing and coating systems.<br>Reference must be made to the following System Data Sheets: |                             |                          |
|                    | <b>Roof Waterproofing systems</b>   | <b>Roof Coating systems</b> |                          |
|                    | SikaRoof® MTC-05 UV AP  | SikaRoof® Pro -1 AP         |                          |
|                    | SikaRoof® MTC-08 UV AP  | SikaRoof® Pro -3 AP         |                          |
|                    | SikaRoof® MTC-10 UV AP  |                             |                          |
|                    | Consumption of Sikalastic®-632 R base coats within the systems:   |                             |                          |
|                    | <b>System</b>   | <b>1st base coat</b>        | <b>2nd base coat</b>     |
|                    | SikaRoof® MTC-05 UV AP  | ≥ 1,05 kg/m <sup>2</sup>    | ≥ 0,70 kg/m <sup>2</sup> |
|                    | SikaRoof® MTC-08 UV AP  | ≥ 1,05 kg/m <sup>2</sup>    | ≥ 1,05 kg/m <sup>2</sup> |
|                    | SikaRoof® MTC-10 UV AP  | ≥ 1,40 kg/m <sup>2</sup>    | ≥ 1,05 kg/m <sup>2</sup> |
|                    | SikaRoof® Pro -1 AP   | ≥ 1,05 kg/m <sup>2</sup>    | ≥ 1,70 kg/m <sup>2</sup> |
|                    | SikaRoof® Pro -3 AP   | ≥ 1,05 kg/m <sup>2</sup>    | ≥ 1,05 kg/m <sup>2</sup> |
| Dry film thickness | Refer to the individual System Data Sheet   |                             |                          |

## APPLICATION INFORMATION

|                                   |  |  |                  |
|-----------------------------------|--|--|------------------|
| <b>Ambient Air Temperature</b>    | +10 °C min. / +40 °C max.  |  |                  |
| <b>Relative Air Humidity</b>      | 5 % min / 85 % max.  |  |                  |
| <b>Substrate Temperature</b>      | +5 °C min. / +60 °C max.   |  |                  |
| <b>Dew Point</b>                  | Beware of condensation.<br>The substrate and uncured applied membrane must be at least +3 °C above dew point to reduce the risk of condensation or blooming on the membrane finish.  |  |                  |
| <b>Substrate Moisture Content</b> | Refer to Product Data Sheet of the appropriate primer  |  |                  |
| <b>Substrate Pre-Treatment</b>    | Reference must be made to the Sika® Method Statement: Sikalastic®-632 R.   |  |                  |
|                                   | <b>Substrate</b>   | <b>Primer</b>  |                  |
|                                   | Cementitious including concrete slabs  | Sikalastic® Primer C / Sikalastic® U primer / Sikafloor®-161 |                  |
|                                   | Brick and Stone  | Sikalastic® Primer C / Sikalastic® U primer / Sikafloor®-161 |                  |
|                                   | Ceramic tiles (unglazed)   | Sikalastic® Primer C / Sikalastic® U primer / Sikafloor®-161 |                  |
|                                   | Bituminous coatings (aged) / Bituminous felt (aged)  | Sikalastic® Metal Primer                                     |                  |
|                                   | Metals *   | Sikalastic® Metal Primer                                     |                  |
|                                   | Existing SikaRoof® MTC System  | Sika® Reactivation Primer                                    |                  |
|                                   | Wooden substrates**  | Sikalastic® Primer C / Sika® Bonding Primer.                 |                  |
|                                   | * Ferrous or galvanised metals, lead, copper, aluminium, brass or stainless steel; Factory coated metal sheeting must be tested for adhesion before proceeding   |  |                  |
|                                   | ** Timber based roof decks require a complete layer of Sikalastic® Carrier   |  |                  |
| <b>Pot Life</b>                   | Product will cure rapidly in high temperatures combined with high air humidity. Skin formation starts after ~1 hour (+20 °C / 50 % r.h.).  |  |                  |
| <b>Waiting Time / Overcoating</b> | <b>Ambient temperature</b>   | <b>Relative humidity</b>                                     | <b>Minimum</b>   |
|                                   | +10 °C   | 50 %   | ~12 hours        |
|                                   | +20 °C   | 50 %   | ~6 hours         |
|                                   | +30 °C   | 50 %   | ~3 hours         |
|                                   | Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity. If the overcoating time exceeds 2 days, the surface must be cleaned and primed with Sika® Reactivation Primer before continuing.   |  |                  |
| <b>Drying time</b>                | <b>Ambient conditions</b>  | <b>Rain resistant *</b>                                      | <b>Touch dry</b> |
|                                   | +20 °C / 55 % r.h.   | 2 hours  | 2 hours          |
|                                   | +30 °C / 85 % r.h.   | 1 hour   | 1 hour           |
|                                   |  |  | <b>Full cure</b> |
|                                   |  |  | 6 hours          |
|                                   |  |  | 3 hours          |
|                                   | * Be aware the impact of heavy rain or rain showers can physically damage the wet applied membrane.<br>The initial surface tackiness of the cured Sikalastic®-632 R will disappear within 2 weeks of application.<br>Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity. |  |                  |

## APPLICATION INSTRUCTIONS

### EQUIPMENT

Select the most appropriate equipment required for

the project:

#### Application

- Brush: Soft bristle brush
- Roller: Solvent resistant, "non-fuzzy" roller
- Airless spray: Pressure: 200–250 bar, nozzle dia: 0,38 mm–0,53 mm, angle: 50°–80°

For more detailed information refer to the Sika Method Statement: Sikalastic®-632 R

## SUBSTRATE PREPARATION

Suitable substrates: Cementitious, brick, stone, aged bituminous coatings and felts, metals\*, asbestos cement, ceramic tiles (unglazed), wood.

\*Ferrous or galvanised metals, lead, copper, aluminium, brass or stainless steel, factory coated metal.

Reference must be made to the Sika® Method Statement: Sikalastic®-632 R

## MIXING

Mixing is not required, however if the product has separated, stir gently by manual or mechanical equipment thoroughly to achieve a uniform colour. Stirring gently will minimise air entrainment.

## APPLICATION

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

Reference must be made to the Sika® Method Statement: Sikalastic®-632 R for full application details.

## CLEANING OF EQUIPMENT

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

## FURTHER INFORMATION

- Sika® Method Statement: Sikalastic®-632 R
- Sika® System Data Sheet: SikaRoof® MTC-05 UV AP
- Sika® System Data Sheet: SikaRoof® MTC-08 UV AP
- Sika® System Data Sheet: SikaRoof® MTC-10 UV AP
- Sika® System Data Sheet: SikaRoof® Pro-1 AP
- Sika® System Data Sheet: SikaRoof® Pro-3 AP

## IMPORTANT CONSIDERATIONS

Installation work must only be carried out by Sika® trained and approved contractors, experienced in this type of application.

- Do not apply on substrates with rising moisture.
- Not suitable for permanent water immersion.
- On substrates likely to exhibit outgassing, apply during falling ambient and substrate temperature. If applied during rising temperatures “pin holing” may occur from rising vapour. Sikalastic® Primer may assist with reducing or eliminating this effect.
- Do not dilute the system products with any diluents.
- Do not use for indoor applications.
- Switch off the air intake vent of a running air conditioning unit when installing the system.
- Do not apply Sikalastic®-632 R directly onto insulation boards. Use Sikalastic® Carrier between Insulation board and roof system.
- Do not apply over volatile bituminous materials as these may stain / soften below the roof system.
- Areas with high movement, irregular substrates, or

timber based roof decks require a complete layer of Sikalastic® Carrier applied before application of roof membrane system.

- Do not apply different basecoats on the same job-site. Always work with the same product.
- If applied indoors, ensure the application area has good ventilation.
- Do not use grit salt and/or other de-icing agents between coats of Sikalastic®-632 R as this may affect the cure and inter-coat adhesion of the product.
- Sikalastic®-632 R is resistant to most commonly encountered atmospheric pollutants, proprietary cleaning solutions and environmental conditions within the service temperature limits. The suitability of the product for use in applications with increased chemical resistance requirements must first be established.
- When product is exposed to direct sunlight, there may be some discolouration and colour variation, this has no influence on the function and performance of the coating. If the colour needs to be refreshed, apply a coat of Sikalastic® U-coating.
- Incompatible with some silicones products.
- Aromatic Polyurethanes chalk under UV exposure and this effect is influenced by the type of country or region climate. Waterproofing life expectancy is increased with system thickness.

## BASIS OF PRODUCT DATA

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

## LOCAL RESTRICTIONS

Note that as a result of specific local regulations the declared data and recommended uses for this product may vary from country to country. Consult the local Product Data Sheet for the exact product data and uses.

## 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.

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## 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.

