

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

APPROVALS / STANDARDS

- Analysis of Paint USEPA Method 24, Sikalastic®-632 R, Material Lab, Test report No. 172075EN171253(1)
- Hardness, Weight loss, Nonvolatile ASTM C 836-03, Sikalastic®-632 R, SGS Korea, Test report No. CMT2017-1028
- Initial Surface Absorption BS 1881 : Part 208, Sikalastic®-632 R, Department of Science Service Thailand, Test report No. 0307/681
- Root Resistance DIN 4062, Sikalastic®-632 R, kiwa, Test report No. P 10565a-E
- Tensile ASTM D 412 - 06a, Sikalastic®-632 R, SGS Korea, Test report No. CMT2018-2265
- Water Vapour Transmission and Permeance ASTM E96/96M, Sikalastic®-632 R, Korean Testing & Research Institute, Test report No. TAK-2018-121232

PRODUCT INFORMATION

Chemical Base	Aromatic polyurethane	
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 . Always refer to packaging.	
Density	~1,40 kg/l 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 A 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 Transimission	32,6 g/(m ² ·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.	

SYSTEM INFORMATION

System Structure Sikalastic®-632 R is part of the following roof waterproofing and coating systems.
Reference must be made to the following System Data Sheets:

Roof Waterproofing System

SikaRoof®MTC-10 UV AP

System	1st base coat	2nd base coat
SikaRoof® MTC-0UV AP	≥1,40 kg/m ²	≥1,05 kg/m ²

Dry film thickness Refer to the individual System Data Sheet

APPLICATION INFORMATION

Ambient Air Temperature	+10 °C min. / +40 °C max.
Relative Air Humidity	5 % min / 85 % max.
Substrate Temperature	+5 °C min. / +60 °C max.

Dew Point

Beware of condensation.

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.

Substrate Moisture Content

Refer to Product Data Sheet of the appropriate primer

Substrate Pre-Treatment

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

Substrate	Primer
Cementitious including concrete slabs	Sikafloor®-156 / Sikafloor®-161
Brick and Stone	Sikafloor®-156 / Sikafloor®-161
Ceramic tiles (unglazed)	Sikafloor®-156 / Sikafloor®-161
Bituminous coatings (aged) / Bituminous felt (aged)	Sikalastic® Metal Primer
Metals *	Sikalastic® Metal Primer
Existing SikaRoof® MTC System	Sika® Reactivation Primer
Wooden substrates**	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

Pot Life

Product will cure rapidly in high temperatures combined with high air humidity. Skin formation starts after ~1 hour (+20 °C / 50 % r.h.).

Waiting Time / Overcoating

Ambient temperature	Relative humidity	Minimum
+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.

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

* Be aware the impact of heavy rain or rain showers can physically damage the wet applied membrane.

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

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

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.

LIMITATIONS

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.

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 (MSDS) containing physical, ecological, toxicological and other safety-related data.

VOC DATA

The maximum content of Sikalastic®-632 R is 147 g/L VOC for the ready to use product.

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.

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. It may be necessary to adapt the above disclaimer to specific local laws and regulations. Any changes to this disclaimer may only be implemented with permission of Sika® Corporate Legal in Baar.

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Product Data Sheet

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