

PRODUCT DATA SHEET

Sikalastic®-632

RAPID CURE, LOW ODOUR, PURE POLYURETHANE, LIQUID APPLIED
ROOF WATERPROOFING MEMBRANE

DESCRIPTION

Sikalastic®-632 is a rapid cure, one component, cold applied, moisture-triggered, aliphatic-aromatic pure polyurethane membrane based on unique i-Cure® technology.

USES

- Waterproofing membrane on exposed flat and pitched roofs both for new construction and refurbishment of old roofs.
- Adheres to various substrates including concrete, cementitious substrates and bitumen sheets

CHARACTERISTICS / ADVANTAGES

- Pure polyurethane
- One hour rain resistant
- One material for horizontal and vertical surfaces (1st and 2nd layer)

- 1-component cold applied
- UV resistant
- High solid content
- > 600 % Elongation
- Low VOC and Low odour
- Ponding water test after 24 hours

APPROVAL / STANDARDS

External fire performance according to BS EN13501:2007 +A1:2009: Euroclass E
Chemical resistance ASTM D1308-02 (2013) section 7.3: 10%HCl, 10% H₂SO₄
Water vapor transmission according to ASTM E96/E96-13: procedure A and Water absorption according to ASTM D570-98 (2010)
Crack-bridging performance according to ASTM C836/C836M (ADM/CE/002:2012).
Complies with REACH Regulation (EC) No 1907/2006.
Complies with LEED VOC limit requirements (<250g/L).

PRODUCT INFORMATION

Chemical Base	One component, moisture triggered aliphatic-aromatic pure polyurethane
Packaging	25 kg pails with sealed aluminum inner liner
Appearance / Colour	Thixotropic liquid / Standard grey (RAL 7038) and dark grey (RAL 7043)
Shelf Life	6 months from the date of production is achieved when stored in accordance with the above recommendations, in original, unopened and undamaged, sealed aluminium inner liner in dry conditions
Storage Conditions	Store in dry conditions at temperature between +10°C and +30°C.
Density	~1.35 kg/L
Solid Content	~95 % by weight (+23°C/50%r.h.)
Flash Point	80 °C (closed cup method)

TECHNICAL INFORMATION

	Membrane System	Reinforced System**)	
Tensile Strength	4 N/mm ²	8 M/mm ²	(ASTM D412)
Elongation at Break	600 %	45 %	(ASTM D412)
Tear Strength	14.5 N/mm	NA	(ASTM D624)
Crack-bridging *)	2 mm (no cracks)	2 mm (no cracks)	(ASTM C836)
Pull-Off Strength	<1.5 N/mm ²	<1.5 N/mm ²	(ASTM D4541)
VOC	<250 g/L	<250 g/L	(ASTM D2369)

*) on concrete blocks

***) with sikalastic fleece-120

SYSTEM INFORMATION

System Structure	Build-UPS		
	Roof Waterproofing System	Membrane System	Reinforced System
Substrate		Sound new concrete/ cementitious substrate	Sound, existing bitumen sheet membranes and existing concrete/ Cementitious Substrates
Primer		Refer to relevant section below	
Build-up		Sikalastic®-632 applied in 2 layers, reinforced for Detailing with Sikalastic Fleece-120 or Sika® Reemat Premium	Sikalastic®-632 applied in 1 layer, reinforced with Sikalastic® Fleece- 120 and sealed with 1 layer of Sikalastic®- 632.
Dry Film Thickness (DFT)		~1.2 mm	~1.8 mm
Total Consumption *)		1 st layer: 1 x 0.9 kg/m ² 2 nd layer: 1 x 0.9 kg/m ²	1 st layer: 1 x 1.2 kg/m ² 2 nd layer: 1 x 1.2 kg/m ²

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

APPLICATION INFORMATION

Consumption	Substrate	Primer	Consumption
	Concrete/ Cementitious Substrate	Sikafloor®-161 HC	~0.30 kg/m ²
	Asphalt / Bituminous Sheet	Normally not required *)	NA
	Any other substrate	Contact Sika Technical Service team	
	*) color change to cured Sikalastic®-632 may occur		
Substrate Temperature	Min. +10 °C; Max. +60 °C		
Ambient Temperature	Min. +10 °C; Max. +50 °C		
Substrate Moisture Content	< 4.5% pbw moisture content. Test method: Sika®-Tramex meter, CM – measurement or oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).		

Ambient Moisture Content	Max. 85 % r.h.			
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.			
Pot Life	Sikalastic®-632 is designed for rapid curing, therefore the material will react with the humidity of the air. Skin formation in the pail starts approx. 1 hour in hot climate conditions.			
Curing Time	Ambient Condition	Rain resistant*)	Touch Dry	Full Cure
	+20°C / 55% r.h.	1 hour	2 hours	6 hours
	+30°C / 85% r.h.	1 hour	1 hour	3 hours
Overcoating Time	Ambient Condition	Min. waiting time	Max. Waiting Time	
	+20°C / 55% r.h.	4 hours	2 days	
	+30°C / 85% r.h.	2 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				

APPLICATION INSTRUCTIONS

SUBSTRATE QUALITY

Concrete / Cementitious Substrate

New concrete should be cured for at least 28 days and should have a pull off strength ≥ 1.5 N/mm² (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 ≥ 1.0 N/mm²), 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.

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 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 please contact Sika Technical Service team for assessment and substrate preparation proposal.

APPLICATION

Prior the application of Sikalastic®-632 the priming coat if used must have cured tack-free. For the waiting time / overcoating please refer to the PDS of the appropriate primer. Damageable areas (handrails, etc) have to be protected with tape or plastic wrapping.

Detailing

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

Membrane System

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

Reinforced System

Apply the first layer of Sikalastic®-632 maintaining a wet edge to ensure a seamless membrane. Roll-in the reinforcement Sikalastic® Fleece-120 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 further down overcoating time window) apply the second layer of Sikalastic®-632.

APPLICATION TOOLS

By brush: with a soft bristle brush

By roller: with a solvent resistant, “non-shedding” synthetic nylon roller

By airless spray: contact Sika Technical Service team

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 on substrates with rising moisture.
- Do not dilute Sikalastic®-632 with any solvent.
- Sikalastic®-632 is not suitable for permanent water immersion (i.e pools) and inverted roof structures. Ponding water test can be conducted on Sikalastic®-632 after 24 hours, within maximum test duration of 48hrs. 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 apply close to the air intake vent of running air conditioning unit.
- Use strips of e.g. SikaFleece® 120, in order to cover joints, connections or overlaps of stable substrates. Contact Sika Technical Service team for details.
- Only the fully reinforced system is suitable on top of existing asphalt/bitumen sheet roofs and for light maintenance foot traffic.
- Whilst Sikalastic®-632 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 declared data and recommended uses for this product may vary from country to country. Please 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.

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.

PT. Sika Indonesia

Jl. Raya Cibinong-Bekasi km.20.

Cileungsi, Bogor 16820 - Indonesia

Tel. +62 21 8230025

Fax. +62 21 8230026

Website: idn.sika.com

email: sikacare@id.sika.com



PRODUCT DATA SHEET

Sikalastic®-632

February 2017

020915205000000022