BUILDING TRUST

BUILDING PRODUCT INFORMATION SHEET

Sikalastic®-631

1-part low odour polyurethane liquid applied base coat for the SikaRoof® i-Cure system

DESCRIPTION

Sikalastic®-631 is a 1-part, low odour, cold-applied, elastic, polyurethane base coat. It incorporates Sika's unique i-Cure technology and is part of the SikaRoof® i-Cure systems.

USES

The product can be used for the following roof waterproofing applications:

- A base coat for SikaRoof®-15/-18/-22 i-Cure systems
- Flat and sloping fully exposed roof structures
- New construction and refurbishment projects
- Horizontal and vertical detailing around penetrations, drains, roof lights and complex geometries
- Failing roofs to extend the service life
- Sensitive areas requiring low odour

The product can be used on the following substrates:

- Fibre cement
- Bitumen sheet membranes
- Bituminous coatings
- Bricks
- Concrete
- Ferrous metals
- Paints / Coatings
- Stone
- Ceramic tiles
- Wood

Please note:

- The product is not suitable for permanent water immersion.
- The Product is not suitable for detailing works on single ply membranes.
- The Product may only be used for exterior applications.

FEATURES

- The quick overcoating time provides early resistance to rain damage
- The low odour characteristics makes it suitable for odour sensitive projects
- A maintenance coat is easily applied when needed without the requirement to remove previous coats
- 1-Part ready to use
- Cold applied – requires no heat or flame
- High solid content
- Can be reinforced with Sika® Reemat Premium
- Resistant to many common environmental influences
- Easily detailed around complex geometries
- Applied by roller

LIMITATIONS OF USE

The installation of Sarnafil Membrane systems is complex and limited to Sika approved applicators only. The Sika technical literature should be referred to in all instances for the correct application procedures nzl.sika.com

APPROVALS / CERTIFICATES

- Odournet – Report Number SIKA15A_roof_01_LW
- CE Marking and Declaration of Performance to European Technical Assessment ETA-14/0177, based on ETAG 005 Part 1 and Part 6 – Liquid applied roof waterproofing kits. Part 1: General. Part 6: Specific stipulations for Kits based on Polyurethane
- Water Vapour Transmission Properties according to BS EN 1931:2000, Flexible Sheets for Waterproofing, Method B for Plastic or Rubber sheets

- External fire performance: Broof (t1)(t4) as part of SikaRoof® i-Cure systems
- Reaction to fire according to EN 13501-1: Euroclass E as part of SikaRoof® i-Cure systems

PRODUCT INFORMATION

Product identifier	Sikalastic®-631
Place of manufacture	Overseas
Composition	1-part, aromatic polyurethane
Packaging	15 l metal containers
Shelf life	12 months from date of production
Storage conditions	Product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +0 °C and +25 °C. Always refer to packaging.
Colour	Oxide red (~RAL 3011)
Density	~1.45 kg/l approx. (+23 °C)
Solid content by mass	~83.2 % (+23 °C / 50 % r.h.)
Solid content by volume	~78.0 % (+23 °C / 50 % r.h.)

APPLICATION INFORMATION

Ambient air temperature	+5 °C min. / +35 °C max.
Relative air humidity	20 % r.h. min. / 85 % r.h. 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 temperature	+5 °C min. / +60 °C max.
Substrate moisture content	The Product can be applied on substrates with a moisture content of ≤ 4 %. The substrate must be visibly dry with no standing water. The following test methods can be used to determine the substrate moisture content: ■ Sika®-Tramex meter ■ CM-measurement ■ Oven-dry-method
Pot Life	~30 minutes (+20 °C / 50 % r.h.) ■ The product is formulated for fast curing. ■ Material in opened containers must be applied immediately. ■ Pot life will decrease at higher temperatures and increase at lower temperatures.
Waiting time to overcoating	Ambient conditions / Minimum waiting time +5 °C / 50 % r.h. — ~14 hours +10 °C / 50 % r.h. — ~6–8 hours +20 °C / 50 % r.h. — ~3–4 hours +30 °C / 50 % r.h. — ~3 hours Note:After four days, the surface must be cleaned and primed with Sika® Reactivation Primer before applying subsequent coats. Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity.
Applied product ready for use	Refer to System Data Sheets of SikaRoof® i-Cure systems

SUBSTRATE PREPARATION

Refer to the System Data Sheets of SikaRoof® i-Cure systems

IMPORTANT

The supporting structure must be of sufficient structural strength to support the new and existing layers of the roof build-up. The complete roof system including existing layers must be designed and secured against wind uplift loadings.

General

- Tensile adhesion strength of the substrate must be a minimum of 1.5 N/mm^2. If necessary, verify this by applying a test area first.
- Substrates must be free of standing water (no puddles), clean and free of all contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.
- All dust, loose and friable material must be completely removed from all surfaces before application of the product and associated system products, preferably by industrial vacuuming equipment.
- To confirm adequate surface preparation and Sikalastic®-631 adhesion, carry out a small trial before full application together with adhesion tests as required.

Asbestos cement roof panels

1. The roof panels must be in good structural condition, firmly bonded or mechanically fixed.
2. Replace or fix any defective or loose panels.
3. Thoroughly clean the surface in accordance with techniques that comply with local asbestos regulations and allow to dry if a wet technique is used.
4. Remove dust by industrial vacuuming equipment.
5. Any work involving asbestos must be in accordance with WorkSafe New Zealand's Approved Code Of Practice - Management and Removal of Asbestos

Bitumen sheet membranes

IMPORTANT

Always use a fully reinforced system over bitumen sheet membranes.

1. Make sure the bituminous felt is firmly bonded or mechanically fixed to the substrate and does not contain any badly degraded areas.
2. Remove completely or repair any degraded or missing sections.
3. Volatile bitumen must be sealed with Sikalastic® Metal Primer before applying coating system.
4. Remove loose granules/debris before continuing with installation process.

Bituminous coatings

IMPORTANT

Always use a fully reinforced system over bituminous coatings.

IMPORTANT

Old existing coatings which are not fully bonded to substrate must be removed.

1. Bituminous, volatile mastic or old coal tar coatings must be sound, firmly bonded, rigid and with a tack free surface.
2. Remove any loose layers.
3. Thoroughly clean with soap and water and allow to dry.
4. Apply Sikalastic® Metal Primer over the complete coating.

Brick and stone

1. Brick, stone and mortar joints must be sound and preferably flush finished.
2. Replace loose bricks, stone and mortar.
3. Apply strips or sections of Sika® reinforcement over mortar joints.
4. Thoroughly clean the surface by power washing and allow to dry.

Concrete

1. Substrate must be sound with a minimum tensile adhesion strength of 1.5 N/mm^2, clean, dry and free of all contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.
2. New concrete must be cured for at least 28 days and have a tensile strength > 1.5 N/mm^2.
3. Substrates must be prepared mechanically using suitable substrate preparation equipment to remove cement laitance and achieve an open textured gripping surface profile suitable for the product thickness.
4. High spots can be removed by grinding.
5. Weak cementitious substrates must be removed and surface defects such as blow holes and voids must be fully exposed.
6. Repairs to the substrate, filling of joints, blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, Sikadur® and Sikagard® range of materials. Products must be cured before applying Sikalastic®-631.

Ferrous metals

1. Metals and existing coatings must be in a sound surface condition.
2. Abrade surfaces to remove any rust and loose coatings.
3. Bare metal must achieve a bright, rust-free finish.
4. Prepare substrate mechanically using suitable abrading, grinding, rotating wire brush or other similar equipment.
5. Apply Sikalastic® Metal Primer to optimise adhesion and protect metal from corrosion.
6. Apply strips or sections of Sika® reinforcement over joints and fixings.

Paints / Coatings

IMPORTANT

Old existing coatings which are not fully bonded to substrate must be removed.

1. The existing paint / coating must be sound and firmly bonded to the substrate.
2. Remove any oxidised or loose layers.
3. Prepare substrate mechanically using suitable abrading, grinding, rotating wire brush or other similar equipment.

4. Thoroughly clean the surface by power washing and allow to dry.

Unglazed ceramic tiles

1. Make sure all tiles are securely fixed.
2. Replace or fix any broken, loose or missing tiles.
3. Thoroughly clean the surface by power washing and allow to dry.

Wood

1. Wood and wood-based panel roof decks must be in good structural condition and firmly fixed.
2. Replace or fix any defective or loose panels.
3. Make sure that any nail or screw heads that are protruding above the surface of the top of the deck are hammered or screwed below the surface.
4. Remove any sharp protrusions from the surface.
5. Prepare substrate mechanically using suitable wood abrading equipment.
6. Remove dust by industrial vacuuming equipment.
7. Apply Sika® Bonding Primer or Sika® Concrete Primer to entire timber surface, including upstands.
8. Centre and apply Sikalastic®-100 SA Tape to timber panel joints.

TECHNICAL INFORMATION

Tensile strength	Unreinforced	Reinforced	(EN ISO 527-3)
	~5.6 N/mm²	~16.1 N/mm²	
Tensile strain at break	Unreinforced	Reinforced	(EN ISO 527-3)
	~320 %	~16 %	
Service temperature	-30 °C to +90 °C		

SYSTEM INFORMATION

System structure	Refer to the System Data Sheets of SikaRoof® i-Cure systems
System performance	Refer to the System Data Sheets of SikaRoof® i-Cure systems

MANUFACTURER AND IMPORTER INFORMATION

Manufacturer information	Address	Sika Limited - United Kingdom Watchmead, Welwyn Garden City, Hertfordshire AL71BQ, England
Importer information	Address	Sika (NZ) Limited 85-91 Patiki Road Avondale, Auckland 1026 New Zealand
	Phone number	0800 745 269
	Website	https://nzl.sika.com/
	Email address	info@nz.sika.com
	NZBN	9429000018791

BUILDING CODE INFORMATION

Building Code clauses	B2 Durability: Performance clause B2.3.1 - (b) 15 years E2 External Moisture: Performance clauses E2.3.1, E2.3.2 and E2.3.6 F2 Hazardous Building Materials: Performance clause F2.3.1
Building Code compliance statements	Performance B2.3.1 (b) 15 years: The BRANZ appraisal for this product states that, in their opinion, it achieves this durability requirement, when installed and maintained in accordance with the BRANZ Appraisal and relevant Sika technical literature. nzl.sika.com. According to Sika's "Service Improvement" records, maintained within its ISO9001:2015 Quality Management System, this product has performed successfully since it was introduced in 2022.

Performance E2.3.1, E2.3.2 and E2.3.6: The BRANZ Appraisal for this product nzl.sika.com states that it will meet the E2.3.1, E2.3.2 and E2.3.6 weathertightness requirements when installed by a trained Sika applicator in accordance with the BRANZ Appraisal and all relevant Sika technical literature nzl.sika.com

Performance F2.3.1. The BRANZ Appraisal for this product nzl.sika.com states that, in their opinion, it meets this requirement and does not present a health hazard to people. Refer to the product safety data sheet nzl.sika.com for further information if required

BASIS OF PRODUCT DATA

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

IMPORTANT CONSIDERATIONS

- Do not apply on substrates with rising moisture.
- In opened containers, the material will form a film after 30 minutes
- Do not apply on porous substrates where significant moisture vapour transmission (out-gassing) will occur during application. Applying Sikalastic® Primer may assist with reducing or eliminating this effect.
- Do not apply close to running air conditioning unit intake vents. Switch off units and seal intakes before applying.
- Do not apply Product directly on Sikalastic® Insulation boards. Use Sikalastic® Carrier between Sikalastic® Insulation board and Product.
- Volatile bituminous materials may stain and or soften the Product.
- Areas with high movement, irregular substrates, or timber-based roof decks require flexible reinforcement at joints with use of Sikalastic®-100 SA Tape or Sika® Flexitape Heavy.
- Do not apply cementitious materials (e.g. tile mortar) directly onto the Product.

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.

APPLICATION INSTRUCTIONS

DESIGN REQUIREMENTS

Roofs and decks must be designed and constructed to shed precipitated moisture and take account of snowfalls in snow prone areas. Refer to NZS3604 and E2/AS1 for further information.

Timber framing systems must comply with NZS3604, or where specific engineering design is used, must be of at least the equivalent stiffness requirements of NSZ 3604

Decks using Sarnafil membrane systems must be protected with either tiles or timber decking resting on Sika approved pedestal supports

All roofs and decks must be designed to have falls that are in accordance with E2/AS1 - 8.5 Membrane Roofs and Decks clause 8.5.1. Allowance for deflection and settlement of the roof substrate mut be considered, to ensure falls are maintained and water ponding on the membrane is avoided.

Separation or protection from heat sources such as fireplaces, flues, chimneys, etc must be provided to Sarnafil membrane systems. Refer to Part 7 of NZ Building Code Acceptable Solutions C/AS1 and C/AS2, and Verification Method C/VM1 for approved separation methods.

EQUIPMENT

Application equipment

- Fleece roller
- Squeegee
- Brush

MIXING

IMPORTANT

Do not dilute with solvent or water.

Note: Mixing is not required, however if the product has separated, stir gently by manual or mechanical equipment thoroughly to achieve a uniform colour.

- Sikalastic®-631 is supplied ready for use.

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.

Note:Protect areas adjacent to the application from splashes with tape or plastic wrapping.

Note:Confirm waiting / overcoating times of any previous coats, is achieved before applying subsequent coats. (Refer to waiting / overcoating time in Application Information)

Note:Confirm product application conditions: substrate moisture content, substrate, air and product temperatures, relative humidity and dew point (Refer to Application information).

Note:Always begin application with detailing (i.e. corners, upstands, joints etc) before installation of the main horizontal surfaces.

Reinforced coating system

Primer (If required)

IMPORTANT

Make sure the primer on the substrate is continuous and pore free.

Note:Refer to individual primer Product Data Sheet.

1. Pour the stirred/mixed primer onto the prepared substrate.
2. Apply the product evenly over the surface with a brush or fleece roller.
3. Back roll the surface in two directions at right angles with a fleece roller.
4. The primer must be continuous, pore free and to the required surface finish.

Base coat

1. Pour the stirred product onto the substrate. The consumption is specified in the System Data Sheets of SikaRoof® i-Cure systems.
2. Apply the product evenly over the surface with a brush, fleece roller or a squeegee.

Reinforcement

IMPORTANT

Make sure reinforcement overlaps are greater than 50 mm.

Note:It is recommended to work 1.0 m at a time, lengthways, applying the 1st coat and embedding the reinforcement.

1. Lay Sika® Reemat Premium onto the wet base coat.
2. Use a short pile roller to roll over the reinforcement and resin several times.
3. The reinforcement fibres must be fully encapsulated within the resin.
4. Protect product from heavy rain or rain showers until dry to prevent surface damage.

Top coat (Sikalastic®-641 TC)

1. Pour the stirred product onto the substrate. The consumption is specified in the System Data Sheets of SikaRoof® i-Cure systems.
2. Apply the product evenly over the surface with a brush, fleece roller or a squeegee.
3. Back roll the surface in two directions at right angles with a fleece roller.
4. Avoid going back to re-work areas that are partially dried as this may damage the surface finish.
5. The coating must be continuous, pore free and to the required surface finish.

CLEANING OF EQUIPMENT

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

MAINTENANCE REQUIREMENTS

If the membrane is damaged it must be repaired as soon as any such damage occurs. Contact Sika NZ for advice on 0800 SIKANZ

The membrane system must be checked annually (or sooner if required), for damage, rubbish, outlet blockages or coating deterioration. All debris must be removed and blockages cleared. Any damage identified must be repaired immediately. Contact Sika NZ for advice on 0800 SIKANZ

For membrane cleaning requirements refer to the "SikaRoof i-Cure - Technical Document - Maintenance Requirements" available at nzl.sika.com

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.

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.

The building product/building product line is not subject to warning or ban under section 26 of the Building Act 2004.

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