BUILDING TRUST

SYSTEM DATA SHEET

SikaRoof® i-Cure-18

Low odour UV-stable polyurethane liquid applied roof waterproofing system – 1,8 mm

PRODUCT DESCRIPTION

SikaRoof® i-Cure-18 is a low odour, cold-applied, fabric reinforced, polyurethane liquid applied membrane roof waterproofing system. The system is highly elastic and UV-stable which provides a durable waterproofing solution. It incorporates Sika's unique i-Cure technology.

USES

SikaRoof® i-Cure-18 installation works to be carried out only by Sika Approved Contractors. Please observe information given by Product Data Sheets.

The product can be used for the following roof waterproofing applications:
- New construction and refurbishment projects
- Roofs with numerous details such as penetrations, drains, roof lights and complex geometry
- Failing roofs to extend the service life
- Cool and solar roofs when used in combination with Sikalastic®-641 TC (~ RAL 9016)
- Sensitive areas requiring low odour

The product can be used on the following substrates:
- Aluminium
- Brass
- Bitumen sheet membranes
- Bituminous coatings
- Bricks
- Cementitious
- Concrete slabs
- Copper
- Existing Sikalastic® MTC System
- Galvanised steel
- Lead
- Ferrous metals
- Paints/Coatings
- Single ply polymeric sheeting
- Stainless steel
- Stone
- Unglazed ceramic tiles
- Wood

Please note:
- The System may only be used for exterior applications.
- The product is not suitable for permanent water immersion.

CHARACTERISTICS / ADVANTAGES

- The low odour characteristics makes the system suitable for odour sensitive projects
- The fast curing provides early resistance to rain damage almost immediately on application
- A maintenance coat is easily applied when needed without the requirement to remove previous coats
- Thickness: ~1,8 mm
- Cold applied - requires no heat or flame
- Seamless finish
- Easily detailed around complex geometries
- Reinforced with Sika® Reemat Premium
- Good crack-bridging ability at low temperatures
- Retains flexibility at low temperatures
- Good adhesion to many substrates
- Vapour permeable
- Resistant to many common environmental influences

APPROVALS / STANDARDS

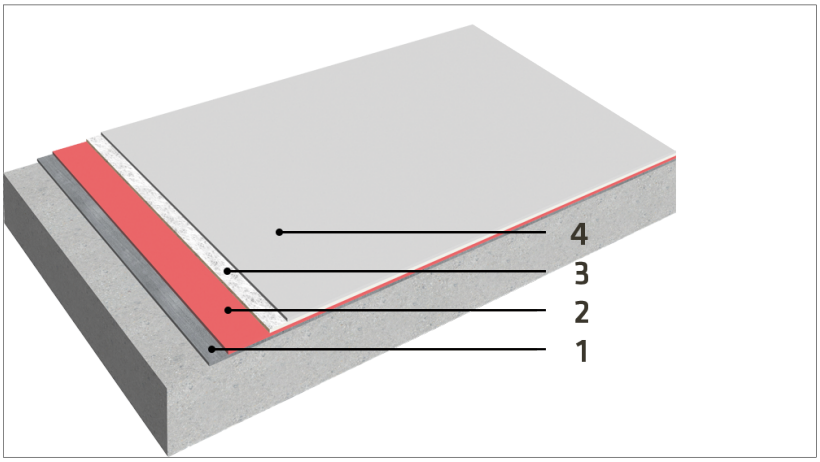
- CE Marking and Declaration of Performance to European Technical Assessment ETA-14/0177, based on ETAG 005 Part 1 and Part 6 — Liquid applied roof waterproofing kits. Part 1: General. Part 6: Specific stipulations for Kits based on Polyurethane
- Fire testing EN 13501, Sikalastic®-641, Sikalastic®-631, Exova, Report No. WF 406986, WF 406987
- Fire Testing EN 13501-5, Sikalastic®-641, Sikalastic®-631, BRE, Report No.Q100348-1002 Issue 1 Q100348-1005 Issue 2
- Fire Testing BS 476, Sikalastic®-641, Sikalastic®-631, BRE, Report No.Q100348-1000 Issue 1, Q100348-1003 Issue 2
- Fire testing BS EN ISO 11925-2, Sikalastic®-641,

Sikalastic®-631, Exova, Report No. 405551, 405552
- Fire Testing CEN/TS 118, Sikalastic®-641, Sikalastic®-631, BRE, Report No.Q100348-1001 Issue 1, Q100348-1004 Issue 2
- Annual QA sensory testing EN 13725, Sikalastic®-641, Sikalastic®-631, olfasense, Report No. SIKA21A0_01
- Water Vapour Transmission EN 1931, SikaRoof® i-Cure-18, 4ward, Report No. 2166

SYSTEM INFORMATION

System Structure

SikaRoof® i-Cure-18



Layer	Product	Consumption
1. Primer	Depends on type of substrate	Refer to individual Product Data Sheet
2. Base coat	Sikalastic®-631 BC	≥ 1,0 l/m² (≥ 1,4 kg/m²)
3. Reinforcement	Sika® Reemat Premium	-
4. Top coat	Sikalastic®-641 TC	≥ 1,1 l/m² (≥ 1,6 kg/m²)

IMPORTANT
The system structure layers as described in table must not be changed.
Note:These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level, wastage or any other variations. Apply product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.

Composition

Aromatic & aliphatic polyurethanes

Colour

Sikalastic®-631 BC: Oxide Red (~RAL 3011)
Sikalastic®-641 TC: Slate Grey (~RAL 7015), Shale Grey (~RAL 8500), Cloud Grey (~RAL7045), Traffic White (~RAL 9016).
Other colours available upon request.

Dry film thickness

~1,8 mm

TECHNICAL INFORMATION

Tensile Strength	~10,2 N/mm²	(EN ISO 527-3)
Tear Strength	~25,5 N/mm	(EN ISO 6383-1:2004)
Elongation at Break	~33 %	(EN ISO 527-3)
Chemical Resistance	Sikalastic®-641 TC provides the chemical resistance. Refer to Product Data Sheet.	
Solar Reflectance Index	≥ 108	(ASTM 1980-11)

	Value refers to the initial (properly cured, non-weathered) condition of Sikalastic®-641 TC white (~RAL 9016).
Service Temperature	-20 °C min. / +90 °C max.

APPLICATION INFORMATION

Ambient Air Temperature	+5 °C min. / +35 °C max.
Relative Air Humidity	20 % min. / 85 % max.
Dew Point	Beware of condensation. The substrate and uncured applied layers 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
Waiting Time / Overcoating	Sikalastic®-641 TC on Sikalastic®-631 BC: **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. – ~4 hours +30 °C / 50 % r.h. – ~3 hours Note:After four days the surface of Sikalastic®-631 BC must be cleaned and primed with Sika® Reactivation Primer before applying Sikalastic®-641 TC. Note:Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.
Applied Product Ready for Use	**Ambient conditions** / **Rain resistant** / **Touch dry** / **Full cure** +5 °C / 50 % r.h. – ~1 hour – ~10–12 hours – ~24 hours +10 °C / 50 % r.h. – ~1 hour – ~6–8 hours – ~18–24 hours +20 °C / 50 % r.h. – ~1 hour – ~4–6 hours – ~12–18 hours +30 °C / 50 % r.h. – ~1 hour – ~3–5 hours – ~8–12 hours Note:After application, the product must be protected from heavy rain or rain showers until dry to prevent surface damage. Note:Application at higher than recommended film thicknesses may result in a prolonged “soft” texture to the coating. This will eventually cure. Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

VALUE BASE

All technical data stated in this 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.
- 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 dilute the system products with any diluents. 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 layers.
- 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 cementitious products (e.g. tile mortar) directly onto the system.

ECOLOGY, HEALTH AND SAFETY

Local safety regulations must be observed and it advisable to wear PPI when working with this product with particular attention paid to cutting and handling. Transportation Class: The product is not classified as hazardous good for transport. Disposal: The material is recyclable. Disposal must be according to local regulations. Please contact your local Sika sales organisation for more information.

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.

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