

SYSTEM DATA SHEET

SikaRoof® MTC-05 UV AP

POLYURETHANE UV-RESISTANT LIQUID APPLIED ROOF WATERPROOFING SYSTEM

DESCRIPTION

SikaRoof® MTC-05 UV AP is a polyurethane based, coloured, cold applied liquid, seamless, crack-bridging, UV resistant, low maintenance roof waterproofing system. Surface finish: Smooth gloss. Thickness ~1,2 mm.

USES

- Roof waterproofing for new construction and refurbishment projects
- Flat or sloping roofs exposed to UV radiation and low dirt retention requirements
- Roofs with numerous details such as penetrations, drains, roof lights and complex geometry
- Service life extension of old roofs
- Reflective roof coating to enhance energy efficiency (White color)

CHARACTERISTICS / ADVANTAGES

- Resistant to UV exposure
- Easily detailed around complex geometries
- Good colour and gloss retention
- Cold applied - requires no heat or flame
- Seamless
- Fast curing
- Good crack-bridging properties at low temperatures
- Easily recoated when needed - no removal required
- Good adhesion to most substrates
- Vapour permeable
- Resistant to most atmospheric conditions

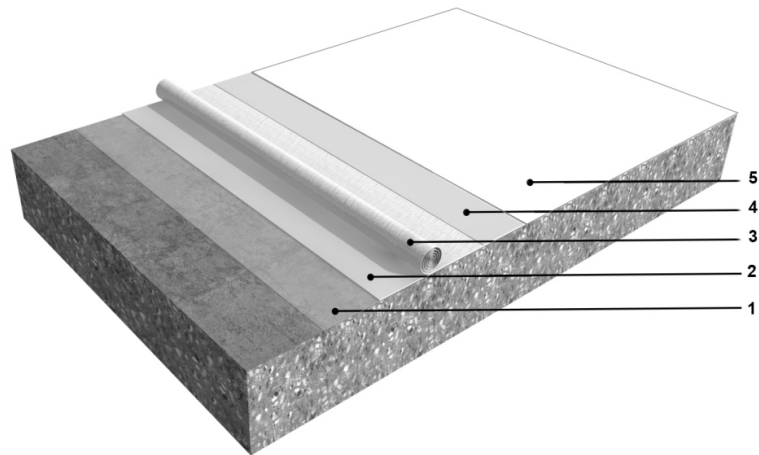
APPROVALS / CERTIFICATES

- Analysis of Paint USEPA Method 24 VOC content, Sikalastic®-632 R, Sikalastic® U-Primer, Material Lab, Test reports No.172075EN171253, 172075EN171253(1)
- Elongation, Tensile Strength, Tear Strength, Durometer Hardness A tests ASTM D412-06a, Sikalastic®-632 R, Korea Testing & Research Institute, Test report TAJ-003445
- 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

SYSTEMS

System Structure

SikaRoof® MTC-05 UV AP



Layer	Product	Consumption
1. Primer	Sikalastic® U-Primer	~0,25–0,50 kg/m ²
2. First base coat	Sikalastic®-632 R	≥ 1,05 kg/m ²
3. Reinforcement	Sikalastic® Fleece 80	1 m ²
4. Second base coat	Sikalastic®-632 R	≥ 0,70 kg/m ²
5. Top coat	Sikalastic® U-Coating	≥ 0,20 kg/m ²

Consumptions referred in the system are valid only with the Sikalastic® Fleece 80.

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

Composition	Aromatic and aliphatic polyurethane types
Colour	Available in many colours based on the top coat
Dry film thickness	~1,2 mm

TECHNICAL INFORMATION

Tensile Strength	~4,0 N/mm ²	(ASTM D412-06a)
Elongation at Break	~600 %	(ASTM D412)
Tear Strength	≥ 15 N/mm	(ASTM D624)
Solar Reflectance Index	108	(ASTM E 1980)

All values related to the reflectance/emittance properties provided in this Product Data Sheet refer to the initial (properly cured, non-weathered) status of the product Sikalastic®-U Coating (White color)

Service Temperature	-25 °C min. / +80 °C max.
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APPLICATION INFORMATION

Ambient Air Temperature	+5 °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 roof material must be at least +3 °C above dew point to reduce the risk of condensation on the roof finish during curing.
Substrate Moisture Content	≤ 4 % parts by weight Test method: Sika®-Tramex meter. No rising moisture according to ASTM (Polyethylene-sheet).

Substrate Pre-Treatment

Substrate primers:

<u>Substrate</u>	<u>Primer</u>
Cementitious substrates	Sikalastic® U primer
Brick and Stone	Sikalastic® U primer
Ceramic tiles (unglazed) and concrete slabs	Sikalastic® U primer
Bituminous coatings (aged) / Bituminous felt (aged)***	Sikalastic® Metal Primer / Sikalastic® U primer
Metals *	Sikalastic® Metal Primer
Existing SikaRoof® MTC System	Sikalastic® U primer

* Ferrous or galvanised metals, lead, copper, aluminium, brass or stainless steel; Factory coated metal sheeting must be adhesion tested before proceeding

*** Sikalastic® U primer and Sikalastic® Metal Primer limit the migration of volatile bitumen

PRODUCT INFORMATION

Packaging	Refer to the individual Product Data Sheets
Shelf life	Refer to the individual Product Data Sheets
Storage conditions	Refer to the individual Product Data Sheets

FURTHER INFORMATION

- Sika® Method Statement: Individual Products
- Individual Product Data Sheets within the roofing system
- Sika® roofing primer chart

IMPORTANT CONSIDERATIONS

- 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 air.
- 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 SikaRoof® MTC-05 UV AP directly onto insulation boards.
- Do not apply over volatile bituminous materials as these may stain / soften below the roof system.
- Do not apply different basecoats on the same job-site. Always work with the same product.

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 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.

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 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.

Sika (Thailand) Limited

700/37 Moo 5 Amata City Chonburi
Industrial Estate, T. Klong Tamhru
A. Muang, Chonburi 20000, Thailand
Tel : +66 3810 9500
E-mail : sikathai@th.sika.com
Website: tha.sika.com



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