

PRODUCT DATA SHEET

Sikalastic®-621 TC

Single component saturating and top coat resin for Sikalastic® RoofPro roofing systems

PRODUCT DESCRIPTION

Sikalastic®-621 TC is a cold applied, highly elastic, aliphatic, single component, moisture triggered polyurethane resin designed for easy application as part of Sikalastic®-601/621 RoofPro roofing systems.

USES

Sikalastic®-621 TC may only be used by experienced professionals.

- Top coat resin for Sikalastic® RoofPro 10, 15 & 20 year systems reinforced with Sika Reemat.
- Embedment resin for Sikalastic® RoofPro 25 year systems reinforced with Sika Reemat.
- Saturating resin for Sikalastic® RoofPro 15, 20 and 25 year systems reinforced with Sika Fleece.
- Typically applied in Sikalastic® RoofPro Direct, Recover, Built-Up, Inverted, and Vegetate systems for both new construction and refurbishment

CHARACTERISTICS / ADVANTAGES

- Proven technology - over 30 year track record
- One component – no mixing, easy and ready to use
- UV resistant - Highly reflective (RAL9016) and resistant to yellowing
- Cold applied - requires no heat or flame
- Seamless roof waterproofing membrane
- Compatible with Sika® Reemat Premium - easy to detail
- Fast curing - free from resin damage almost immediately on application
- High elastic and crack-bridging - retains flexibility even at low temperatures
- High root resistance
- Easily re-coated when needed - no stripping required

- Good adhesion to most substrates- see primer chart
- Vapour permeable - allows substrate to breathe
- Strong resistance to common atmospheric chemicals

APPROVALS / STANDARDS

As part of Sikalastic®-601/621 RoofPRO Roofing System:

- FM Approval Standard 4470 for Class 1 Roof Covers
- ASTM E-108-00 Spread of Flame meets Class A at a slope of 1 in 12
- Simulated wind uplift pull testing meets up to Class 1-990
- Simulated hail damage testing meets rating of SH - Severe Hail
- Miami-Dade County NOA for Roof Systems over Concrete and Steel Decks
- USGBC LEED rating: Conforms to LEED SS Credit 7.2 for Heat Island Effect - Roof with SRI ≥ 78
- Meets ASTM D7311-07: Standard Specification for Liquid-Applied, Single-Pack, Moisture-Triggered, Aliphatic Polyurethane Roofing Membrane.

PRODUCT INFORMATION

Chemical Base	One-component, moisture-triggered aliphatic polyurethane	
Packaging	5 gal. (19 L) metal pail	
Color	White (RAL 9016), Pearl Gray, Steel Gray, Mushroom, Copper Green; custom colors available with minimum order.	
Shelf Life	9 months from date of production	
Storage Conditions	Store dry between 35 °F and 77 °F (2–25 °C). Condition material to 50–77 °F (10–25 °C) before using for ease of application	
Density	~12 lb./gal. (~1.44 kg/l) (73 °F, 23 °C)	
Solid content by volume	81 %	(ASTM D-2697)
Volatile organic compound (VOC) content	183 g/l	(ASTM D-2369-81)

TECHNICAL INFORMATION

Tensile Strength	Please refer to Sikalastic®-601/621 System Data Sheet	(ASTM D-751)
Elongation at Break	Please refer to Sikalastic®-601/621 System Data Sheet	(ASTM D-751)
Tear Strength	Please refer to Sikalastic®-601/621 System Data Sheet	(ASTM D-751)
Resistance to Static Puncture	Please refer to Sikalastic®-601/621 System Data Sheet	(ASTM D-5602)
External Fire Performance	Class A	(ASTM E 108)
Chemical Resistance	Strong resistance to a wide range of reagents including paraffin, petrol, fuel oil, white spirit, acid rain, detergents and moderate solutions of acids and alkalis. Some low molecular weight alcohols can soften the material. Contact Sika technical service for specific information.	
Solar Reflectance	0.87*	(ASTM C-1549) *All values refer to the initial (properly cured, non-weathered) status of Sikalastic®-621 TC white (RAL 9016).
Solar Reflectance Index	≥ 108*	(ASTM 1980) *All values refer to the initial (properly cured, non-weathered) status of Sikalastic®-621 TC white (RAL 9016).
Service Temperature	-22 °F (30 °C) min. / 176 °F (80 °C) max.	

SYSTEM INFORMATION

System Structure	Please refer to Sikalastic®-601/621 System Data Sheet
System Performance	Please refer to Sikalastic®-601/621 System Data Sheet

APPLICATION INFORMATION

Coverage	Sika Reemat	Sika Fleece
	80 sf/gal.–20 mils wet film thickness	25 sf/gal.–65 mils wet film thickness
	53 sf/gal.–30 mils wet film thickness	20 sf/gal.–80 mils wet film thickness
	45 sf/gal.–35 mils wet film thickness	16 sf/gal.–100 mils wet film thickness
	35 sf/gal.–45 mils wet film thickness	
Ambient Air Temperature	41 °F (5 °C) min. / 95 °F (35 °C) max.	

Relative Air Humidity	80 % R.H. max.			
Substrate Temperature	41 °F (5 °C) min. / 140 °F (60 °C) max.			
Dew Point	Beware of condensation. The substrate and uncured coating must be ≥ 5 °F (3 °C) above dew point.			
Substrate Moisture Content	≤4 % pbw moisture content. Test method: Sika®-Tramex meter No rising moisture according to ASTM (Polyethylene-sheet).			
Pot Life	Sikalastic®-621 TC is designed for fast curing. High temperatures combined with high air humidity will increase the curing process. Thus, material in opened containers should be applied immediately. In opened containers, the material will form a film after 1 hour approx. (68 °F, 20 °C / 50 % R.H.).			
Waiting / Recoat Times	Ambient conditions	Minimum waiting time overcoating		
	+40 °F / 50 % r.h.	14 hours		
	+50 °F / 50 % r.h.	6 hours		
	+70 °F / 50 % r.h.	5 hours		
	*After 7 days the surface must be cleaned and primed with Sika® Reactivation Primer before continuing. 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
	+40 °F / 50 % r.h.	10 min.	12 hours	24 hours
	+50 °F / 50 % r.h.	10 min.	6 hours	18–24 hours
	+70 °F / 50 % r.h.	10 min.	4 hours	12–18 hours
	Note: Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.			

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

All substrate surfaces shall be clean, dry and sound. Acceptable substrates include: sound concrete and cementitious screed, metals, wood, modified bitumen, mineralized felt, EPDM, hypalon, TPO, sprayed polyurethane foam, brick and stone, slate and tile, and existing liquid applied membranes. Reference separate System Data Sheet for specific surface preparation requirements.

Primer

Apply primer of a type suitable for the substrate. Allow primer to cure completely before applying Sikalastic®-621 TC resin. Reference separate System Data Sheet for specific primer recommendations.

MIXING

No mixing necessary

APPLICATION

Sika Reemat - Base Resin

Apply Sikalastic®-621 TC resin to the primed substrate surface by means of 1/2" (12.7 mm) nap phenolic resin core roller or brush at the specified application rate to achieve a uniform and consistent wet mil thickness (reference separate System Data Sheet). Material can also be squeegee or spray applied, in which case it should also be backrolled. Apply Sika Reemat into the wet embedment resin and roll the scrim to achieve full saturation and embedment. Reemat shall be cut to conform to substrate transitions and flashing conditions, with a typical 2" (50.8 mm) reinforcement overlap. Resin shall saturate the Reemat from below. Apply additional Sikalastic®-621 TC resin as required to ensure full scrim embedment. Allow to cure completely before applying subsequent resin layers.

Sika Reemat - Intermediate and Top Resin

Apply Sikalastic®-621 TC resin to the cured Sikalastic®/Reemat base layer by means of 1/2" (12.7 mm) nap phenolic resin core roller or brush at the specified application rate to achieve a uniform and consistent wet mil thickness (reference separate System Data Sheet). Material can also be squeegee or spray applied, in which case it should also be backrolled. Allow

to cure completely before applying any subsequent resin layer, if specified.

Sika Fleece

Apply Sikalastic®-621 TC resin to the primed substrate surface by means of 1/2" (12.7 mm) nap phenolic resin core roller or brush to achieve a uniform and consistent thickness, applying approximately 2/3 of the resin required to achieve the specified application rate (reference separate System Data Sheet). Apply Sika Fleece into the wet embedment resin and roll the fleece to achieve partial saturation and full embedment. Fleece shall be cut to conform to substrate transitions and flashing conditions, with typical 3" (76.2 mm) side and 6" (152.4 mm) end reinforcement overlaps. Resin shall saturate the Fleece from below. Apply remaining 1/3 of the specified resin quantity to ensure full fleece saturation and an even resin application.

CLEANING OF TOOLS

Clean all tools and application equipment with appropriate solvent immediately after use. Hardened and/or cured material can only be removed mechanically

LIMITATIONS

- Minimum age of concrete must be 28 days depending on curing and drying conditions.
- Do not thin with solvents.
- Do not store materials outdoors directly exposed to sunlight and moisture. Cover and protect material with breathable type covers such as canvas tarpaulins to allow venting and protection from weather and moisture. Observe temperature storage and conditioning requirements.
- Do not apply to substrate surfaces where moisture vapor transmission will occur during application and cure. This condition may be checked using ASTM D 4263 (Polyethylene sheet method).
- Substrate must be dry prior to application. Do not apply to a frosted, wet or damp surface. Allow sufficient time for the substrate to dry after rain or inclement weather, as there is the potential for bonding problems.
- On substrates likely to exhibit outgassing apply during falling ambient and substrate temperature. If applied during rising temperature pinholing or blistering may occur.
- Do not use for indoor applications unless sufficient air flow and ventilation are provided to prevent odors

- and/or vapors from leaving the immediate work area.
- Precautions should be taken to prevent odors and/or vapors from entering the building/structure, including but not limited to turning off and sealing air intake vents or other means of ingress for odors and/or vapors into the building/structure during product application and cure.
- For areas with direct exposure to heavy or frequent foot traffic, an additional wear coat protection with slip resistant aggregate is required. Opening to traffic prior to cure may result in loss of aggregate or permanent staining and subsequent premature failure.
- Do not apply cementitious products, such as tile mortar directly onto Sikalastic®-621 TC. See Sikalastic®-624 WP or Sikalastic®-644 Lo VOC Product Data Sheet.
- Any repairs required to achieve a level surface must be performed prior to application (consult a Sika representative for guidance on various product solutions). Surface irregularities may reflect through the cured system.
- When applying over existing coatings or membranes compatibility and adhesion testing and subsequent approval by Technical Services is required.
- Opening to traffic prior to cure may result in loss of aggregate or permanent staining and subsequent premature failure.
- On grade concrete decks should not be covered with Sikalastic® RoofPro membrane systems.
- Unvented metal pan, split/sandwich slab with encapsulated membrane and/or insulation, cinder fill decks, and lightweight insulating concrete deck overlays should not be covered with Sikalastic® RoofPro systems without additional deck evaluation and subsequent approval by Technical Services.
- Do not subject to continuous immersion, i.e., fountains, ponds, pools, or interior of tanks.
- Not recommended for use over ceramic tile.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

or by calling 1-800-933-7452.

LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended use and assumes all risks. User's and/or buyer's sole remedy shall be limited to the purchase price or replacement of this product exclusive of any labor costs. **NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. SIKA SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.**

Sale of SIKA products are subject to the Terms and Conditions of Sale which are available at <https://usa.sika.com/en/group/SikaCorp/termsandconditions.html>

Sika Corporation

201 Polito Avenue
Lyndhurst, NJ 07071
Phone: +1-800-933-7452
Fax: +1-201-933-6225
usa.sika.com

Sika Sarnafil

100 Dan Road
Canton, MA 02021
Phone: +1 800-451-2504
Fax: +1 781-828-5365
usa.sika.com/sarnafil
webmaster.sarnafil@us.sika.com

Sika Mexicana S.A. de C.V.

Carretera Libre Celaya Km. 8.5
Fracc. Industrial Balvanera
Corregidora, Queretaro
C.P. 76920
Phone: 52 442 2385800
Fax: 52 442 2250537



Product Data Sheet

Sikalastic®-621 TC
May 2018, Version 04.01
020915205000000007

Sikalastic-621TC-en-US-(05-2018)-4-1.pdf

