BUILDING TRUST

PRODUCT DATA SHEET

Sikalastic®-625 N

High-performance, liquid-applied polyurethane waterproofing membrane

PRODUCT DESCRIPTION

Sikalastic®-625 N is a 1-part, reinforced, cold applied, liquid polyurethane membrane. It provides a flexible, seamless waterproofing solution using Sika's unique i-Cure technology.

USES

Sikalastic®-625 N is used for:
- New construction and refurbishment projects
- Unreinforced waterproofing of profiled metal roofs
- Reinforced waterproofing of flat and pitched roof structures, communal walkways, podium decks and roof terraces exposed to pedestrian traffic
- Roofs with numerous details such as penetrations, drains, roof lights and complex geometry

Sikalastic®-625 N is used on the following substrates:
- Concrete and cementitious substrates
- Bituminous felt and coatings
- Brick
- Natural stone
- Fibre cement
- Metal
- Wood
- Unglazed ceramic tiles

Please note:
- The Product may only be used by experienced professionals.
- The Product may only be used for exterior applications.

CHARACTERISTICS / ADVANTAGES

- 1-part ready to use
- Low maintenance
- Seamless
- Easy to apply
- Applied by brush, roller, or airless spray
- Resistant to foot traffic
- Permeable to water vapour
- Very good resistance to permanent UV exposure
- Good flexibility at low temperatures
- Easily detailed around complex geometries
- Cold applied - requires no heat or flame
- Moisture-triggered technology develops early rain resistance
- Low temperature application > +2 °C

APPROVALS / STANDARDS

- European Technical Assessment ETA-20/1023 2020-12-20
- Fire Testing EN 13501-1, Sikalastic®-625 N, Warringtonfire, Report No.WF 418126
- CE marking and declaration of performance based on European Technical Assessment ETA-20/1023. ETA issued on the basis of EAD 030350-00-0402 Liquid applied roof waterproofing kits.

PRODUCT INFORMATION

Chemical Base	Elastomeric aliphatic polyurethane
Packaging	15 L container Refer to the current price list for available packaging variations.
Shelf Life	12 months from date of production

Storage Conditions	The Product must be stored in original, unopened and undamaged sealed packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to packaging. Refer to the current Safety Data Sheet for information on safe handling and storage.

Colour	Cured colour	Light Grey (~RAL 7035), White (~RAL 9016), Slate Grey (~RAL 7015)

Density	1.26 kg/l	(EN ISO 2811-1)
Solid content by mass	77 %	(EN ISO 3251)
Solid content by volume	71 %	(EN ISO 3251)

TECHNICAL INFORMATION

Tensile Strength	Reinforced	13 MPa	(EN ISO 527-2)
	Unreinforced	6 MPa	
Elongation at Break	Cured 7 days at +23 °C, reinforced	30 %	(EN ISO 527-3)
	Cured 7 days at +23 °C, unreinforced	450 %	
Tear Strength	26 N/mm		(EN ISO 527-3)
Solar Reflectance	Initial	0.87	(ASTM C1549)
Thermal Emittance	Initial	0.88	(ASTM C1371-15)
Solar Reflectance Index	Initial (Convective coefficient, medium wind)	110	(ASTM E1980)
External Fire Performance	B_{roof} (T1) B_{roof} (T4)		(CEN/TS 1187)
Reaction to Fire	Class E		(EN 13501-1)

SYSTEM INFORMATION

System Structure

Layer	Product
Primer	Dependent on the substrate
Base layer	Sikalastic®-625 N
Reinforcement	Sika® Reemat Premium
Top coat	Sikalastic®-625 N

Dry film thickness

WATERPROOFING KIT FOR ALL FLAT ROOFING TYPES
~ 1.5 mm DFT
The categorisation of levels of performance in accordance with EAD-030350-00-0402 are:

Categorisation	Value
Working life	W3
Climatic zones	M and S
Imposed loads	P3 to P4
Roof slope	S1 to S4
Lowest surface temperature	TL4
Highest surface temperature	TH4

WATERPROOFING KIT FOR ALL METAL ROOFING TYPES
~ 0.7 mm DFT
The categorisation of levels of performance in accordance with EAD-030350-00-0402 are:

Categorisation	Value
Working life	W2
Climatic zones	M and S
Imposed loads	P3
Roof slope	S1 to S4
Lowest surface temperature	TL3
Highest surface temperature	TH3

APPLICATION INFORMATION

Consumption

15 YEAR REINFORCED ROOF WATERPROOFING

Layer	Product	Consumption
Primer	Dependent on the substrate	Refer to PDS of the respective Primer
Base	Sikalastic®-625 N	1.0 l/m²
Reinforcement	Sika® Reemat Premium	-
Top coat	Sikalastic®-625 N	0.75 l/m²

20 YEAR REINFORCED ROOF WATERPROOFING

Layer	Product	Consumption
Primer	Dependent on the substrate	Refer to PDS of the respective Primer
Base layer	Sikalastic®-625 N	1.0 l/m²
Reinforcement	Sika® Reemat Premium	-
Top coat	Sikalastic®-625 N	1.0 l/m²

10 YEAR LOCALLY REINFORCED ROOF WATERPROOFING

Use reinforcement in localised areas for all joints, areas subject to differential movement, guttering or drainage channels and for repairs to the membrane.

Layer	Product	Consumption
Primer	Dependent on the substrate	Refer to PDS of the respective Primer
Reinforcement	Sika® Joint Tape	Flash Coat
Base layer	Sikalastic®-625 N	0.5 l/m²
Top coat	Sikalastic®-625 N	0.5 l/m²

15 YEAR LOCALLY REINFORCED ROOF WATERPROOFING

Layer	Product	Consumption
Primer	Dependent on the substrate	Refer to PDS of the respective Primer
Reinforcement	Sika® Joint Tape	Flash Coat
Base layer	Sikalastic®-625 N	0.75 l/m²
Top coat	Sikalastic®-625 N	0.75 l/m²

20 YEAR LOCALLY REINFORCED ROOF WATERPROOFING

Refer to system data sheet SikaRoof® PU-20 iCure for system details
Note: Consumption data is theoretical and does 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.

Product Temperature

Maximum	+30 °C
Minimum	+2 °C

Ambient Air Temperature

Maximum	+30 °C
Minimum	+2 °C

Relative Air Humidity	Maximum	85 %
	Minimum	20 %
Dew Point	Beware of condensation. Substrate temperature during application must be at least +3 °C above dew point.	
Substrate Temperature	Maximum	+30 °C
	Minimum	+2 °C

Substrate Moisture Content

Substrate	Test method	Moisture content
Cementitious substrates	Calcium carbide method (CM-method)	≤ 4 %

No rising moisture (ASTM D4263, polyethylene sheet)
The substrate must be visibly dry with no standing water.

Pot Life	+20 °C	1-2 hours

Applied Product Ready for Use

Ambient conditions	Rain resistant	Touch dry	Full cure
+2 °C / 50 % r.h.	12 hours	20 hours	> 24 hours
+10 °C / 50 % r.h.	9 hours	15 hours	24 hours
+20 °C / 50 % r.h.	6 hours	10 hours	18 hours
+30 °C / 50 % r.h.	4 hours	6 hours	14 hours

Note: Times are approximate and will be affected by changing ambient conditions, particularly temperature and relative humidity.

VALUE BASE

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.

ECOLOGY, HEALTH AND SAFETY

User must read the most recent corresponding Safety Data Sheets (SDS) before using any products. The SDS provides information and advice on the safe handling, storage and disposal of chemical products and contains physical, ecological, toxicological and other safety-related data.

APPLICATION INSTRUCTIONS

EQUIPMENT

Select the most appropriate equipment for all applications required for the project.
SUBSTRATE PREPARATION EQUIPMENT
- Grinding equipment
- Manual or mechanical wire brushes
- High-pressure power washer
- Industrial vacuuming equipment

For other types of preparation equipment, contact Sika Technical Services.
MIXING EQUIPMENT
- Electric single-paddle mixer (300 to 400 rpm)

APPLICATION EQUIPMENT
- Brush
- Fleece roller
- Airless spray equipment

SUBSTRATE PREPARATION

Penetrations and structural joints
Note: Additional Sika Joint Sealing Solutions must be used for connections around penetrations and for construction joints.
SYSTEM DESIGN
Consider the following when designing the system:
- The supporting structure must be of sufficient structural strength to support all new and existing layers of the system build-up.
- If used as a roof system, the complete system must be designed to withstand and be secured against wind uplift loadings.

GENERAL
- The tensile adhesion strength of concrete substrates must be a minimum of 1.5 N/mm². 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 adhesion of the Product , carry out a small trial before full application together with adhesion tests as required.
- Where ancillary products are mentioned, refer to the relevant Product Data Sheet.

BRICK MASONRY OR NATURAL 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.
5. Prime the prepared surface with Sika® Concrete Primer or Sika® Bonding Primer. Refer to Product Data Sheet.

CONCRETE OR CEMENTITIOUS SCREEDS

1. Substrate must be sound with a minimum tensile adhesion strength of 1.5 N/mm², 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/mm².
3. IMPORTANT The final texture of the substrate must be open-textured and gripping. Prepare cementitious substrates mechanically using abrasive blast cleaning, planing or scarifying equipment to remove cement laitance.
4. Remove weak concrete and fully expose defects such as blow holes and voids. Note Suitable methods for surface preparation are high-pressure water jetting or abrasive blast cleaning. If using other pre-treatments such as scarifying and milling, subsequently use water jetting or blast cleaning to eliminate the remaining structural faults, remove cement laitance, and achieve an open and sound textured surface.
5. Repair and fill blow holes and voids using appropriate products from the SikaTop®, Sika MonoTop®, Sikafloor®, Sikadur® and Sikagard® range of materials.
6. Before applying coatings, remove high spots by grinding.
7. Remove dust by industrial vacuuming equipment.
8. Prime the prepared surface with Sika® Concrete Primer or Sika® Bonding Primer. Refer to Product Data Sheet.

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.
7. Prime the prepared surface with Sikalastic® Metal Primer. Refer to Product Data Sheet.

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.
4. Prime the prepared surface with Sika® Concrete Primer or Sika® Bonding Primer. Refer to Product Data Sheet.

WOOD

1. Wood and wood-based panel roof decks must be in good structural condition, firmly bonded or mechanically fixed.
2. Replace or fix any defective or loose panels.
3. Hammer or screw any protruding nail or screw heads below the surface of the top deck.
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 Sikalastic® Carrier to the full surface of the wood-based deck. For localised exposed sections prime with Sika® Concrete Primer or Sika® Bonding Primer Refer to Product Data Sheet.

BITUMINOUS FELT AND COATINGS

1. Thoroughly clean the surface by power washing and allow to dry.
2. Prime the prepared surface with Sikalastic® Metal Primer. Refer to Product Data Sheet.

EXISTING

1. Thoroughly clean the surface by power washing and allow to dry.
2. Prime the prepared surface with Sika® Reactivation Primer. Refer to Product Data Sheet.

MIXING

IMPORTANT
Do not dilute with solvent or water.
The Product is supplied ready to use.

1. Prior to application mix for at least 2 minutes using an electric single-paddle mixer (300 to 400 rpm) until the liquid and all coloured pigment has achieved a uniform colour.

APPLICATION

IMPORTANT
Strictly follow installation procedures
Strictly follow installation procedures as defined in Method Statements, application manuals and working instructions which must always be adjusted to the actual site conditions.
IMPORTANT
Protect from rain
After application, protect the Product from heavy rain or rain showers until dry to prevent surface damage.
IMPORTANT
No application on rising moisture
Do not apply on substrates with rising moisture.
IMPORTANT
Failure of reinforcement overlaps
To ensure a watertight seal is maintained all reinforcement overlaps must be to a minimum dimension.

1. Ensure side overlaps are greater than 100 mm and end overlaps are greater than 200 mm.

COATING

1. Always begin application with detailing (corners, upstands, joints) before installation of the main horizontal surfaces.
2. Apply the first layer of the Product evenly over the surface with a brush, roller or airless spray equipment. Note For consumption details, see Application Information.
3. Back-roll the surface in two directions at right angles with a fleece roller. Note Maintain a "wet edge" during application to achieve a seamless finish.
4. For a reinforced membrane lay the Sika® Reinforcement onto the wet base coat. Note The reinforcement fibres must be fully encapsulated within the base coat.
5. Apply a second layer of the Product evenly over the surface with a brush, roller or airless spray equipment. Note For consumption details, see Application Information.
6. Back-roll the surface in two directions at right angles with a fleece roller. Note Maintain a "wet edge" during application to achieve a seamless finish.
7. The coating must be continuous, pore free and to the required surface finish.

CLEANING OF TOOLS

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

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.

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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