

## **BUILDING TRUST**

## PRODUCT DATA SHEET

# Sikalastic®-625 N

High-performance, liquid-applied polyurethane waterproofing membrane

## **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
- FPO or PVC membranes

#### Please note:

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

## **FEATURES**

- One-part ready to use
- Low maintenance
- Seamless
- Easy to apply
- Applied by brush, roller, or airless spray
- Resistant to foot traffic
- Good water vapour permeability
- 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

## **CERTIFICATES AND TEST REPORTS**

- 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

| Composition   | Elastomeric aliphatic polyure | Elastomeric aliphatic polyurethane    |  |  |
|---|-------------------------------|---------------------------------------|--|--|
| Packaging   | One Part Container            | 15 L container                        |  |  |
| Refer to the current price list for available package |                               | t for available packaging variations. |  |  |

#### PRODUCT DATA SHEET

**Sikalastic®-625 N**October 2024, Version 04.01
020915205000000057

| Colour                    | Cured colour   |                 | (~RAL 7035), White (~RAL<br>te Grey (~RAL 7015) |
|---------------------------|--|-----------------|---|
| 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 the packaging.  Refer to the current Safety Data Sheet for information on safe handling and storage. |                 |   |
| 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<br>Unreinforced   | 13 MPa<br>6 MPa | (EN ISO 527-2)                                  |
| Tensile strain at break   | Cured 7 days at +23 °C, re-<br>inforced<br>Cured 7 days at +23 °C, un-<br>reinforced   |                 | (EN ISO 527-3)                                  |
| Tear strength             | 26 N/mm  |                 | (EN ISO 527-3)                                  |
| External fire performance | B <sub>roof</sub> (T1)<br>B <sub>roof</sub> (T4)   |                 | (CEN/TS 1187)                                   |
| Reaction to fire          | Class E  |                 | (EN 13501-1)                                    |
| Chemical resistance       | Laboratory-defined resistance to many individual chemicals. Before proceeding, contact Sika Technical Service for specific information.  |                 |   |
| Solar reflectance         | Initial  | 0.87            | (ASTM C1549)                                    |
| Thermal emittance         | Initial  | 0.88            | (ASTM C1371)                                    |
| Solar reflectance index   | Initial<br>(Convective coefficient,<br>medium wind)  | 110             | (ASTM E1980)                                    |
| SYSTEM INFORMATION        |  |                 |   |
| System structure          | Layer Primer Base layer Reinforcement  | Sikalastic®     | t on the substrate<br>-625 N<br>nat Premium     |

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



#### 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

 $\sim$  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                   |  |
| Imposed loads<br>Roof slope<br>Lowest surface temperature | P3<br>S1 to S4<br>TL3 |  |

## APPLICATION INFORMATION

| Consum |  |
|--------|--|
|        |  |

#### REINFORCED ROOF WATERPROOFING

| Layer         | Product               | Consumption             |  |
|---------------|-----------------------|-------------------------|--|
| Primer        | Dependent on the sub- | Refer to PDS of the re- |  |
|               | strate                | spective Primer         |  |
| Base layer    | Sikalastic®-625 N     | 1.0 l/m <sup>2</sup>    |  |
| Reinforcement | Sika® Reemat Premium  | -                       |  |
| Top coat      | Sikalastic®-625 N     | 1.0 l/m <sup>2</sup>    |  |

## 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 sub- | Refer to PDS of the re- |
|                                | strate                | spective Primer         |
| Base layer                     | Sikalastic®-625 N     | 0.5 l/m <sup>2</sup>    |
| Reinforcement (where required) | Sika® Reemat Premium  | -                       |
| Top coat                       | Sikalastic®-625 N     | 0.5 l/m <sup>2</sup>    |

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 the Product to a test area to calculate the exact consumption for the specific substrate conditions and proposed application equipment.

|                         | розей аррисаціон едагр |        |  |
|-------------------------|------------------------|--------|--|
| Material temperature    | Maximum                | +30 °C |  |
|                         | Minimum                | +2 °C  |  |
| Ambient air temperature | Maximum                | +30 °C |  |
|                         | Minimum                | +2 °C  |  |
| Relative air humidity   | Maximum                | 85 %   |  |
|                         | Minimum                | 20 %   |  |



Sikalastic®-625 N

October 2024, Version 04.01 020915205000000057



|                               | be at least +3 °C above dew point.                  |                |           |                  |
|-------------------------------|---|----------------|-----------|------------------|
| Substrate temperature         | Maximum   |                | +30 °C    |                  |
|                               | Minimum   |                | +2 °C     |                  |
| Substrate moisture content    | Substrate   | Test meth      | nod       | Moisture content |
|                               | Cementitious substrates                             |                | ≤ 4 %     |                  |
|                               | No rising moisture (ASTM D4263, polyethylene sheet) |                |           |                  |
| Pot Life                      | +20 °C  |                | 1-2 hours |                  |
| Applied product ready for use | Ambient condi-<br>tions                             | 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         |

#### **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.

## **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

#### **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/mm<sup>2</sup>. If necessary, verify this by applying a test area first.
- Substrates must be free of standing water (no puddles), and 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.
- Apply strips or sections of Sika® reinforcement over mortar joints.
- 4. Thoroughly clean the surface by power washing and allow to dry.
- Prime the prepared surface with Sika® Concrete Primer or Sika® Bonding Primer. Refer to Product Data Sheet.

#### CONCRETE OR CEMENTITIOUS SCREEDS

- 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/mm<sup>2</sup>.
- 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.
- 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.
- 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.
- Apply Sikalastic® Metal Primer to optimise adhesion and protect metal from corrosion.
- 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.
- Prime the prepared surface with Sika® Concrete Primer or Sika® Bonding Primer. Refer to Product Data Sheet.

#### WOOD

- 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.
- 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**

- 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.

#### EXISTING FPO OR PVC ROOFING MEMBRANES

Contact Sika Technical Services for additional information.

#### **MIXING**

#### **IMPORTANT**

Do not dilute with solvent or water.

The Product is supplied ready to use.

 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**

- Always begin application with detailing (corners, upstands, joints) before installation of the main horizontal surfaces.
- 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.
- 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.
- 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.
- 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 EQUIPMENT**

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 declared data for this product may vary from country to country. Please consult the local Product Data Sheet for the exact product data.

## **LEGAL NOTES**

Any information or suggestions for use concerning Sika's products, which we either in writing or orally have given buyers or end-users of the product, have been given in good faith based on our own experiences and based on approved praxis and the technological and scientific knowledge on the time of giving such suggestions and information, which are given without any type of guarantees, and which do not lead to any further responsibility from Sika Danmark A/S, besides what is stated in the sales agreement in question. The buyer or end-user should themselves investigate or otherwise make sure, that our products are suitable for the use in question and further make sure that the products are kept and used correct and in agreement with the published rules and considering the actual conditions in order to avoid damages or less satisfactory results. Any order is accepted and any deliverance is affected according to the general terms of sales and delivery from Sika Danmark A/S, which are considered known and accepted, and which could be handed out when asked for. Our catalogues are not up-dated automatically. The present product data sheet is only for use in Denmark. Values stated in the present product data sheet should be seen as recommended, unless stated otherwise.

Sika Danmark A/S

Hirsemarken 5 3520 Farum TIf. +45 48 18 85 85 www.sika.dk







PRODUCT DATA SHEET
Sikalastic®-625 N
October 2024, Version 04.01
020915205000000057

