BUILDING TRUST

PRODUCT DATA SHEET

Sikalastic®-625

POLYURETHANE LIQUID APPLIED REINFORCED MEMBRANE FOR ROOF WATERPROOFING

PRODUCT DESCRIPTION

Sikalastic®-625 is a 1-part polyurethane, reinforced, cold-applied liquid membrane. It provides a flexible, seamless, low maintenance, durable, smooth waterproof finish. The product is suitable for hot and cold climates.

USES

- Roof waterproofing for new construction and refurbishment projects
- Waterproofing of flat and pitched roof structures, communal walkways, podium decks and roof terraces
- Waterproofing structures with numerous details such as penetrations, drains, roof lights and complex geometry
- Waterproofing existing substrates of concrete, bituminous felt and coatings, brick, stone, asbestos cement, wood, asphalt etc.
- Only for exterior use

CHARACTERISTICS / ADVANTAGES

- Thickness: ~1,50 mm.
- Low maintenance
- Seamless
- 1-Part ready to use
- Cold applied - requires no heat or flame
- Low temperature application > 2 °C
- Easy and quick application by spray, brush or roller
- Economic – provides a cost efficient life cycle extension of failing roofs
- Water vapour permeable
- Retains flexibility at low temperatures
- Moisture triggered technology develops early rain resistance
- Elastic properties – tolerant of thermal movement
- Impact and tear resistant

APPROVALS / STANDARDS

- CE Marking and Declaration of Performance to ETA 13/0788
- European Technical Assessment ETA 13/0788 based on ETAG 005 Part 1 and 6 - Liquid-applied roof waterproofing using kits based on polyurethane
- External Fire Exposure EN 13501-5:2005, Sikalastic®-625, Exova, Test report No. 328461
- Reaction to Fire EN 13501-5:2007 + A1:2009, Sikalastic®-625, Exova, Classification report No. 328458
- Roof Coverings Exposed to External Fire EN 13501-5:2005 + A1: 2009, Sikalastic®-625, Exova, Classification report No. 323631

PRODUCT INFORMATION

Chemical Base	Aliphatic polyurethane
Packaging	15 L container Refer to current price list for packaging variations.
Colour	White (~RAL 9016), Light Grey (~RAL 7035), Cement Grey (~RAL 7042), Pebble Grey (~RAL 7032), Slate Grey (~RAL 7015)

Shelf Life	9 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 +0 °C and +25 °C. Always refer to packaging.	
Density	~1,32 kg/l (at 20 °C)	(EN ISO 2811-1)
Solid content by weight	~78,9 % (+23 °C / 50 % r.h.)	(EN ISO 3251)
Solid content by volume	~70,9 % (+23 °C / 50 % r.h.)	(EN ISO 3251)

TECHNICAL INFORMATION

Tensile Strength	>16 N/mm²	(ISO 527-1/3)
Tear Strength	~20 N/mm	(ISO 527-1/3)
External Fire Performance	Broof (t1); Broof (t4) Euroclass E	(ENV 1187) (EN13501-1)
Chemical Resistance	Resistant to mild acids, alkalis, detergents and some solvents. Contact Sika Technical Services for additional information.	
Service Temperature	-30 °C min. / +80 °C max.	

SYSTEM INFORMATION

System Structure

Reinforced Roof Waterproofing
Sikalastic®-625 is applied in one coat reinforced with Sika® Reemat Premium and sealed with a final top coat of Sikalastic®-625.

Layer	Product	Consumption
1. Primer	Refer to substrate pretreatment	Refer to the primer Product Data Sheet
2. Base coat	Sikalastic®-625	~1,0 l/m²
3. Reinforcement	Sika® Reemat Premium	-
4. Top coat	Sikalastic®-625	~1,0 l/m²

Consumption depends on the roughness and absorbency of the substrate. These figures are theoretical and do not allow for any additional material due to surface porosity, surface profile, variations in level or wastage etc.
The build-up in the table corresponds to a reinforced waterproofing kit for flat roof application.

Dry film thickness	1,5 mm	(ETA waterproofing kit)
System Performance	W3 / M / P3 / S1-S4 / TL3 - TH3	(ETAG 005)

APPLICATION INFORMATION

Ambient Air Temperature	+2 °C min. / +30 °C max.
Relative Air Humidity	20 % min. / 85 % max.
Substrate Temperature	+2 °C min. / +30 °C max.
Dew Point	Beware of condensation. The substrate and uncured applied product must be at least +3 °C above dew point to reduce the risk of condensation or blooming on the surface of the applied product. Metal surfaces will be more prone to temperature fluctuations occurring and wind chill effects.
Substrate Moisture Content	≤4 % parts by weight. Test method: Sika®-Tramex meter No rising moisture according to ASTM (Polyethylene-sheet).

Substrate Pre-Treatment

Substrate	Primer
Cementitious	Sika® Concrete Primer Sika® Bonding Primer
Brick and Stone	Sika® Concrete Primer Sika® Bonding Primer
Ceramic tiles (unglazed), and concrete slabs	Sika® Concrete Primer Sika® Bonding Primer
Metals Ferrous or galvanised metals, lead, copper, aluminium, brass or stainless steel	Sikalastic® Metal Primer
Bituminous felt	Sikalastic® Metal Primer
Wood	Timber based roof decks require a complete layer of Sikalastic® Carrier. For small exposed timber sections use Sika® Concrete Primer or Sika Bonding Primer.
Paints	Subject to adhesion and compatibility tests
Existing Sikalastic®-625 System	Sika® Reactivation Primer

For consumption rates and waiting time / overcoating, refer to the individual Product Data Sheet of the appropriate cleaner and primer. Other substrates must be tested for their compatibility. To ensure compatibility, carry out preliminary trials.

Pot Life

~1–2 hours
The material in opened containers must be applied before a surface skin occurs.
Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

Waiting Time / Overcoating

~48 hours
For longer periods up to 14 days, the surface must be reactivated with Sika Reactivation Primer.

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

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

APPLICATION INSTRUCTIONS

SUBSTRATE PREPARATION

General
All dust, loose and friable material must be completely removed from all surfaces before application of the product and associated system products, preferably by vacuum extraction equipment.
To confirm adequate surface preparation and Sikalastic®-625 adhesion, carry out a preliminary trial before full application together with adhesion tests as required.
Concrete and Cementitious substrates
Substrate must be structurally sound, clean, dry and free of all contaminants such as dirt, oil, grease, coatings, laitance, surface treatments and loose friable material.
New concrete should be cured for at least 28 days.
Substrates must be prepared mechanically using suitable substrate preparation equipment to remove cement laitance and achieve an open textured gripping surface profile suitable for the product thickness.
High spots can be removed by grinding.
Weak cementitious substrates must be removed and surface defects such as blow holes and voids must be fully exposed.
Repairs to the substrate, filling of joints, blowholes/voids and surface levelling must be carried out using appropriate products from the Sikafloor®, Sikadur® and Sikagard® range of materials. Products must be cured before applying Sikalastic®-625.
Brick and stone
Thoroughly clean by power wash and allow to dry.
Where there is a risk of algal re-growth on absorbent surfaces use Sika Biowash. Refer to the individual Product Data Sheet. Repair any spalling, flaking or other damage and replace any missing jointing.
Asphalt
Thoroughly clean by power wash and allow to dry. All major cracks should be sealed to allow continuity of the Sikalastic®-625 system. Asphalt must be carefully assessed for moisture and/ or air entrapment, grade and surface finish prior to any coating works being car-

ried out. Any priming requirement must also be considered.

Bituminous felt

Felt must be firmly adhered or mechanically fixed. Thoroughly clean by power wash and allow to dry. Treat blisters by star cutting and removing any underlying water. Allow to dry and re-adhere using Decostik® SP. Badly degraded areas should be replaced with Carrier Membrane bonded with Decostik® SP.

Single ply

Various types of single ply sheeting can be coated. Contact Sika Technical Services for additional information.

Bituminous coatings

Bituminous, volatile mastic or old coal tar coatings must be rigid and without a sticky surface. Remove loose, degraded and tacky coatings.

Metals

Ferrous metals must be in a sound surface condition. Surfaces must be clean, free from rust, oil, grease, existing loose or degraded coatings etc. Prepare surfaces to a bright metal finish using suitable preparation techniques taking into account environmental conditions.

Non-ferrous metals must be in a sound surface condition. Remove any deposits of dust and oxidation and abrade to a bright metal finish. Wire brushing can be used for soft metals such as lead. Surfaces must be clean, free from oil and grease, which, if present, must be removed with a proprietary de-greasing solution. Then wash with detergent, rinse and dry.

Wood

Wood and wood based panel roof decks must be in good structural condition, firmly adhered or mechanically fixed.

Wood based decks require a complete layer of Carrier Membrane SA before the application of the chosen Sikalastic®-625 system. The substrate must then be treated as a felt roof. Small timber protrusions must be flattened by locally planing or sanding to provide a smooth surface.

Paints/Coatings

Remove loose or degraded coatings by suitable preparation techniques to provide a feathered firm adhering edge. Remaining coatings can be overcoated if soundly adhered. Ensure the surface is clean and free from oil, grease etc.

Existing Sikalastic®-625 system

Clean the membrane surface using a power wash at ~14 N/mm² (2000 psi) including detergent then rinse thoroughly and allow to dry.

MIXING

Sikalastic®-625 is supplied ready for use. Before application, mix for a minimum of 1 minute using mixing paddle and drill or other suitable equipment to mix the liquid and all the coloured pigment until a uniform colour has been achieved. Over mixing must be avoided to minimise air entrainment.

APPLICATION

Strictly follow installation procedures as defined in method statements, application manuals and working instructions which must always be adjusted to the actual site conditions.

General

Always begin application with detailing before installation of the main horizontal surfaces.

Primer

Pour the appropriate mixed primer onto the prepared substrate and apply by brush or appropriate roller. Ensure a continuous, pore free coat covers the substrate. Confirm primer waiting /overcoating time has been achieved before applying successive products. Refer to individual primer Product Data Sheet.

Base coat

Pour mixed Sikalastic®-625 onto prepared substrate the same width as the Sika® Reemat Premium and apply evenly by brush (soft nylon or bristle brush) or roller (short pile mohair roller) at the required consumption rate in 2 directions at right angles to each other. Alternatively spray Sikalastic®-625 with suitable equipment.

Reinforcement

Roll in the Sika® Reemat Premium reinforcement whilst Sikalastic®-625 is still wet ensuring there are no bubbles or creases in the reinforcement. Reinforcement overlaps must be a minimum of 50 mm. Recommendation is to work 1,0 m at a time lengthways applying 1st coat and embedding reinforcement.

Top coat

Pour mixed Sikalastic®-625 onto the applied reinforcement layer and apply evenly by brush or short piled roller at the required consumption rate in 2 directions at right angles to each other. Confirm overcoating times before application. Alternatively spray Sikalastic®-625 with suitable equipment.

Ensure each application / coat is clean and dry before applying next coat.

CLEANING OF TOOLS

Clean all tools and application equipment with cellulose thinners or xylene immediately after use. Hardened material can only be removed mechanically.

LIMITATIONS

- Do not use Sikalastic®-625 for indoor applications.
- Application of Sikalastic®-625 in confined spaces must be undertaken in accordance with the Material Safety Data Sheet recommendations.
- Do not apply close to air intake vents of running air conditioning units unless they have been switched off or isolated as vapour may be drawn into the building.
- All areas requiring corrosion protection must be applied over an appropriate metal primer that has been applied directly to bright metal.
- All joints, areas subject to differential movement, guttering and drainage channels and repairs, must be treated with the reinforcement.
- Adhesion suitability must be verified by carrying out preliminary trials before full application together with adhesion tests as required.
- The application of the system must be approached as one operation. Work in advance so the application stages can be completed within the overcoating

times. Finish the coating system completely before progressing to the next area.
- Application of the system stages must be completed within the overcoating times otherwise the system performance maybe compromised.
- After application, Sikalastic®-625 must be protected from heavy rain or rain showers until dry to prevent surface damage.
- Application at higher than recommended film thicknesses may result in a prolonged “soft” texture to the coating. This will eventually cure.

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.

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.

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.

DIRECTIVE 2004/42/CE - LIMITATION OF EMISSIONS OF VOC

According to the EU Directive 2004/42/CE, the maximum allowed content of VOC (product category IIA / i type sb) is 500 g/l (Limits 2010) for the ready to use product.The maximum content of Sikalastic®-625 is < 500 g/l VOC for the ready to use product.

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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