BUILDING TRUST

PRODUCT DATA SHEET

Sikalastic® D-15 RoofPro Advanced

High performance polyurethane liquid applied waterproofing membrane

PRODUCT DESCRIPTION

Sikalastic® D-15 RoofPro Advanced is a 1-part polyurethane, reinforced, cold-applied liquid membrane. It provides a flexible, seamless waterproofing solution using Sika's unique i-Cure technology.

USES

Designed for the following waterproofing applications:
- Roof waterproofing for new construction and refurbishment projects
- Unreinforced waterproofing system for profiled metal roofs
- Reinforced waterproofing of flat and pitched roof structures
- 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, metal, wood, unglazed ceramic tiles
- For exterior use only

Sikalastic® D-15 RoofPro Advanced may only be used by experienced professionals.

CHARACTERISTICS / ADVANTAGES

- 1-Part ready to use
- Low maintenance
- Seamless
- Easy and quick application by brush, roller or spray
- Suitable for trafficable areas
- Vapour permeable
- Good UV resistance and colour stability
- Retains flexibility at low temperatures
- Cold applied - requires no heat or flame
- Moisture triggered technology develops early rain resistance
- Good elastic properties
- Low temperature application > +2 °C

APPROVALS / STANDARDS

- British Board of Agrement (BBA) certified (No. 21/5863)
- UK Technical Assessment (No. UKTA-0836-23/6853)
- Declaration of Performance No. 55578297

PRODUCT INFORMATION

Chemical Base	Elastomeric aliphatic polyurethane	
Packaging	15 Litre tin	
Colour	Light Grey (RAL 7035), Slate Grey (RAL 7015)	
Shelf Life	12 months from date of production	
Storage Conditions	The product must be stored in original, unopened and undamaged packaging in dry conditions at temperatures between +5 °C and +30 °C. Always refer to packaging.	
Density	~1,26 kg/l	(EN ISO 2811-1)
Solid content by mass	~77 % (+23 °C / 50 % r.h.)	(EN ISO 3251)

Solid content by volume	~71 % (+23 °C / 50 % r.h.)		(EN ISO 3251)
Tensile Strength	Reinforced Unreinforced	~13 N/mm2 ~6 N/mm2	(ISO 527-1/3)
Tear Strength	~26 N/mm		(ISO 527-1/3)
Reaction to Fire	Euroclass E		(EN13501-1)
Chemical Resistance	Resistant to many chemicals. Contact Sika Technical Services for additional information.		
Thermal Resistance	-20 °C to +80 °C		
Solar Reflectance	Initial: 0,87		
Thermal Emittance	Initial: 0,88		
Solar Reflectance Index	Initial: 110		
Service Temperature	-20 °C min. / +80 °C max.		
Ambient Air Temperature	+2 °C min. / +30 °C max.		
Relative Air Humidity	20 % min. / 85 % 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 Temperature	+2 °C min. / +30 °C max.		
Substrate Moisture Content	≤ 4% parts by weight The following test methods can be used to determine the substrate moisture content: ▪ Sika®-Tramex meter ▪ No rising moisture must be present according to ASTM (Polyethylenesheet).		

Substrate Pre-Treatment

Substrate	Primer
Cementitious substrates	Sika® Concrete Primer LO or Sika® Bonding Primer
Brick and Stone	Not required
Ceramic tiles (unglazed), and concrete slabs	Sika® Concrete Primer LO or Sika® Bonding Primer
Asphalt	Not required, subject to surface assessment tests
Bituminous felt	Not required, only fully reinforced systems
Single Ply	Adhesion to single ply may vary according to type, age etc. Adhesion test required
Bituminous Coating	Not required
Metals Ferrous or galvanised metals, lead, copper, aluminium, brass or stainless steel	Sikalastic® Metal Primer N or Sika® Primer 207
Wooden substrates	Timber based roof decks require a complete layer of Sikalastic® Carrier. For small exposed timber sections, use Sika® Concrete Primer LO or Sika® Bonding Primer
Paints	Subject to adhesion and compatibility tests
Existing Sika Liquid Plastics System	Sika® Reactivation Primer

For the consumption rates and waiting time / overcoating you should refer to the PDS of the appropriate cleaner and primer. Other substrates must be tested for their compatibility. If in doubt, apply a test area first.

Pot Life

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

Applied Product Ready for Use

Important: The impact of heavy rain or rain showers can physically mark or damage the membrane in its liquid state.
Note: Application at higher than recommended film thicknesses may result in a prolonged “soft” feel to the coating. This will eventually cure and harden.
Note: Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

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

System Structure

Note: For detailed reinforcement information refer to the Sika Method Statement: Sikalastic® D-15 RoofPro Advanced
Note: These figures are theoretical and do not include for any additional material required due to surface porosity, surface profile, variations in level and wastage etc.

Flat Roof Waterproofing Only - 15 year system

The build-up in the table corresponds to a reinforced waterproofing kit for flat and pitched roofs.

Layer	Product	Consumption
1. Primer	Depending on Substrate	Refer to the primer Product Data Sheet
2. Base Coat	Sikalastic® D-15 RoofPro Advanced	~1,0 l/m²
3. Reinforcement	Sika® Reemat Preemium	-
4. Top Coat	Sikalastic® D-15 RoofPro Advanced	~0,75 l/m²
Gutter System		
1. Primer	Depending on the substrate	Refer to the primer Product Data Sheet
2. Base Coat	Sikalastic® D-15 RoofPro Advanced	~1,0 l/m²
3. Reinforcement	Sika® Reemat Preemium	-
4. Top Coat	Sikalastic® D-15 RoofPro Advanced	~1,0 l/m²

Flat Roof Waterproofing Only - 20 year system

The build-up in the table corresponds to a reinforced waterproofing kit for flat and pitched roofs.

Layer	Product	Consumption
1. Primer	Depending on Substrate	Refer to the primer Product Data Sheet
2. Base Coat	Sikalastic® D-15 RoofPro Advanced	~1,0 l/m²
3. Reinforcement	Sika® Reemat Preemium	-
4. Top Coat	Sikalastic® D-15 RoofPro Advanced	~1,0 l/m²
Gutter System		
1. Primer	Depending on the substrate	Refer to the primer Product Data Sheet
2. Base Coat	Sikalastic® D-15 RoofPro Advanced	~1,25 l/m²
3. Reinforcement	Sika® Reemat Preemium	-
4. Top Coat	Sikalastic® D-15 RoofPro Advanced	~1,0 l/m²

Dry film thickness	ETA-20/0073 waterproofing kit for all flat roof types	~1,5 mm
	ETA-20/0073 waterproofing kit for all metal roof types	~0,7 mm
System Performance	ETA-20/0073 waterproofing kit for all flat roof types	W3 / M and S / P3-P4 / S1-S4 / TL4 – TH4
	ETA-20/0073 waterproofing kit for all metal roof types	W2 / M and S / P3 / S1-S4 / TL3 - TH3

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.

FURTHER DOCUMENTS

Installation work must only be carried out by Sika trained and approved contractors, experienced in this type of application.

- Do not use for indoor applications.
- Do not apply on substrates with rising moisture or are not stable.Do not dilute with any solvent.
- Do not apply near to running air intakes of air conditioning units. Switch off units and seal intakes before applying.
- All areas requiring an anticorrosive protection system must be applied directly to a prepared bright metal finish.

LIMITATIONS

Application Types:
Sikalastic® D-15 RoofPro Advanced is supported in the following applications:

- Warm and Uninsulated build-ups (Exposed)
- Warm Buried Build-ups (inc extensive green roof systems or pavers)

Warm buried systems must be installed in accordance with BS 6229:20128 Flat Roofs with Continuously Supported Coverings - Code of Proactive and must be incorporate a design fall of 1:40 to achieve a minimum finished fall of 1:80. In addition, all waterproofing membranes should incorporate a suitable protection layer to prevent damaged caused by the installation of ballast material inc pavers. Any application outside of those stated above is not supported by Sika. This includes all inverted/buried application where the membrane is applied directly to prepared/primed substrate.

Other Limitations:

- Do not apply Sikalastic® D-15 RoofPro Advanced on substrates with rising moisture.
- Do not use Sikalastic® D-15 RoofPro Advanced for indoor applications.
- Do not dilute Sikalastic® D-15 RoofPro Advanced with any solvent.
- On substrates likely to exhibit out-gassing, apply during falling ambient and substrate temperature. If applied during rising temperatures “pin holing” may occur from rising air.
- Do not apply near to running air intakes of air conditioning units. Switch off units and seal intakes before applying.
- Do not apply Sikalastic® D-15 RoofPro Advanced directly on Sika® Insulation boards. Instead use a Sika® Carrier between Sika® Insulation board and Sikalastic® D-15 RoofPro Advanced.
- Volatile bituminous materials may stain and or soften below the coating.
- Low melting point bituminous materials may need priming – using a darker shade also helps hide any staining from the volatiles.
- Areas with high movement, irregular substrates, or timber based roof decks require a complete layer of Sikalastic® Carrier.

ECOLOGY, HEALTH AND SAFETY

EQUIPMENT

Select the most appropriate equipment required for the project:

Substrate preparation equipment

- Abrasive blast cleaning / planing / scarifying or grinding equipment.
- Manual or mechanical wire brushes
- High pressure power washer

For other types of preparation equipment, contact Sika Technical Services

Mixing Equipment

- Electric single paddle mixer (300–400 rpm) with spiral paddle
- For other types of preparation equipment, contact Sika Technical Services

Application Equipment

- Brush
- Roller
- Airless spray

SUBSTRATE PREPARATION

- The supporting structure must be of sufficient structural strength to apply all new and existing layers of the roof build-up. Complete roof system must be designed and secured against wind uplift loadings.
- Suitable substrates: Cementitious, concrete, bituminous felt and coatings, brick, stone, asbestos cement, metal, wood, unglazed ceramic tiles

General

All contamination such as dust, loose and friable material that could affect final finish or reduce adhesion, must be completely removed from all surfaces before application of the product or subsequent products, preferably by industrial vacuuming equipment.

MIXING

- Sikalastic® D-15 RoofPro Advanced is supplied ready for use.
- Before application, mix for at least 2 minutes or until the liquid and all the coloured pigment have achieved a uniform colour.

APPLICATION

Asbestos & Profiled Metal Roof Sheets - Localised Reinforcement for Roof Areas Only

Sheet End Laps

Prepare and prime the corrugate roof sheet as appropriate. Apply 6" (152.4mm) wide of Sika® Joint Tape SA to prepared substrate.

Remove 4–6” (10.2–15.2 cm) of release liner from underside of the Sika Joint Tape SA and position the tape centrally across the lap joint of the top and bottom sheet, and pressing firmly into place.

Continue to remove release liner, whilst moving across the lap joint.

Be careful to follow the profile of the metal sheet and ensure full and even contact.

Ensure that the tape overlaps any end lap fixings by at least 25mm. Where this cannot be achieved, a separate piece of 3” (76.2mm) should be used to reinforce each fixing.

Once in-place, always apply additional pressure to the surface to fully activate the bonding process, compress any creases and remove any trapped air. Use a hard roller for best results.

Side Laps

Apply 6" (152.4mm) wide Sika® Joint Tape SA to the prepared substrate.

Remove 4–6” (10.2–15.2 cm) of release liner from the underside of the Sika® Joint Tape SA.

Position the tape centrally across the joint, and press into place. Continue to remove release liner, whilst moving down the joint and pressing firmly onto the substrate surface.

Ensure that the tape overlaps any side lap fixings by at least 25mm. Where this cannot be achieved, a separate piece of 3” (76.2mm) should be used to reinforce each fixing.

Once in-place, always apply additional pressure to the surface to fully activate the bonding process, compress any creases and remove any trapped air. Use a hard roller for best results.

Tape Embedment: In any application, a light coat of Sikalastic® D-15 RoofPro Advanced must be applied to the surface and edges of Sika Joint Tape SA® and allowed to cure. The purpose of this is to waterproof the surface of the tape and ensure that the surface of the fabric is fully embedded in the main coating. This can be applied using a roller or brush.

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

Gutter Joints - Metal Gutters - Bolted Joints/Fixings

Bridge each bolt head/fixing with Sika Flexistrip (minimum 50mm squares) by first removing the backing paper and applying light pressure to the patch edges to fix.

Encapsulate each fixing/joint detail using Sika Reemat Premium patches, cut to requirements and bedded in Sikalastic® D-15 RoofPro Advanced applied at a minimum wet film thickness of 1000 microns. Allow to dry before continuing with the overall waterproofing.

Apply the fully reinforced system through the metal gutter as specified.

Gutter Joints - Metal Gutters - Bond Break

Introduce a 'bond break' at each gutter joint by first laying 50mm (minimum width) low tack de-bonding tape centred on the joint.

Apply a 'stripe' coat (200mm wide) of Sikalastic® D-15 RoofPro Advanced to each seam/joint at a minimum wet film thickness of 1000 microns and whilst wet, Sika Flexitape Heavy (150mm) using a loaded brush to obliterate the tape.

Allow to dry before continuing with the top coats.

CLEANING OF TOOLS

Clean all tools and application equipment with Thinner C or xylene immediately after use. Hardened material can only be removed mechanically or with a proprietary paint stripper.

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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