BUILDING TRUST

PRODUCT DATA SHEET

Sikalastic®-598

1-part liquid applied membrane for wall and roof waterproofing

DESCRIPTION

Sikalastic®-598 is a 1-part, PU-modified, water based, elastic, cold applied liquid membrane that can be applied directly from the container. It provides a seamless, smooth waterproof finish which is resistant to UV exposure and has elastic properties. It is fast drying for increased productivity and early resistance to rain damage.

USES

- Flat and sloping fully exposed roof structures
- New construction and refurbishment projects
- Waterproofing of external walls
- Waterproofing and renovation of old roof tiles
- Roofs with numerous details such as penetrations, drains, roof lights and complex geometry

The product can be used on the following substrates:

- Concrete and cementitious substrates
- Brick
- Metal
- Clay tiles
- Unglazed ceramic tiles
- Bitumen sheet membranes
- Bituminous coatings

CHARACTERISTICS / ADVANTAGES

- Early resistance to rain damage
- Fast application increases productivity and reduces installation time
- Applied by brush or roller
- The high build properties allow application over uneven substrates
- Good crack-bridging properties
- Reinforced option available for high tensile strength requirements
- Cold applied - requires no heat or flame
- Resistant to permanent UV exposure

APPROVALS / STANDARDS

IMPORTANT: **Product does not meet legal requirements of EU Construction Products Regulation**
Pursuant to Article 4 (1) of Regulation (EU) No 305/2011 (Construction Products Regulation) the manufacturer must draw up a Declaration of Performance when placing a product on the market which is covered by a harmonised standard (hEN) or conforms to a European Technical Assessment (ETA) which has been issued for it. This product is covered by a hEN or conforms to an ETA and no Declaration of Performance is existing for it.

PRODUCT INFORMATION

Chemical Base	PU-Modified Acrylic
Packaging	20 L ready to mix containers Refer to current price list for packaging variations
Shelf Life	12 months
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.

Colour	Standard colours: white & grey Other colours on request. Applied colours selected from colour charts will be approximate. For colour matching, apply colour sample and confirm selected colour under real lighting conditions. When product is exposed to direct sunlight, there may be some discolouration and colour variation, this has no influence on the function and performance of the product finish.	
Density	1.27 ± 0.05 kg/l (+23 °C)	(ISO 2811-1)
Solid content by weight	65 % (+23 °C / 50 % r.h.)	
Solid content by volume	49 % (+23 °C / 50 % r.h.)	

TECHNICAL INFORMATION

Shore A Hardness	> 60	(ASTM D2240:15)
Tensile Strength	4 N/mm²	(ASTM D412-16)
Elongation at Break	400 %	(ASTM D412-16)
Crack Bridging Ability	Unreinforced No crack at 2 mm crack width No crack after 10 cycles of opening and closing to 1 mm crack width	(ASTM C836:2011)

SYSTEM INFORMATION

System Structure

IMPORTANT
A fully reinforced system must always be used over bituminous felt and coatings.
A partially reinforced system must always be used in areas of high movement, irregular substrates or to bridge cracks, joints and seams on the substrate.

Roof coating

Layer	Product	Consumption
Primer	Depending on the substrate	Refer to Product Data Sheet
1st coat	Sikalastic®-598	~0.5 L/m²
2nd coat	Sikalastic®-598	~0.5 L/m²

Reinforced roof waterproofing

Layer	Product	Consumption
Primer	Depending on the substrate	Refer to Product Data Sheet
1st coat	Sikalastic®-598	~0.5 L/m²
Reinforcement	Sika® Reemat Premium or Sikalastic® Fleece-80	1 m²
2nd coat	Sikalastic®-598	~0.5 L/m²
3rd coat	Sikalastic®-598	~0.5 L/m²

These figures are theoretical and do 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.

APPLICATION INFORMATION

Product Temperature	+5 °C min. / +40 °C max.
Ambient Air Temperature	+5 °C min. / +40 °C max.

Relative Air Humidity	80 % maximum
Dew Point	Beware of condensation. The substrate and uncured applied roof material must be at least +3 °C above dew point to reduce the risk of condensation on the surface finish.
Substrate Temperature	+5 °C min. / +40 °C max. Minimum +3 °C above dew point
Substrate Moisture Content	≤ 6 % parts by weight. The substrate must be visibly dry with no standing moisture. The following test methods can be used: Sika®-Tramex meter, CM-measurement or Oven-dry-method. No rising moisture according to ASTM (Polyethylene-sheet).
Waiting Time / Overcoating	Apply one coat at a time, allowing an interval of 2 to 4 hours between coats, depending on the coating thickness. Times are approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.
Applied Product Ready for Use	~24 hours Time is approximate and will be affected by changing ambient conditions particularly temperature and relative humidity.

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.

LIMITATIONS

- After application, the product must be protected from heavy rain or rain showers until dry to prevent surface damage.
- Do not apply on substrates with rising moisture.
- Ensure product is totally dry and the surface is without pinholes before applying successive coats.
- Remove surface water between coating applications.
- Reinforcement (partial or total) must be used over dynamic cracks and joints.
- Always confirm waiting /overcoating times have been achieved before applying successive coats of products.
- Always begin with detailing applications before full waterproofing application of the horizontal surfaces.
- Do not apply to substrates where significant moisture vapour transmission (out-gassing) will occur during application. This effect may be reduced if Sikalastic®-598 is applied on a falling substrate temperature.

ECOLOGY

APPLICATION INSTRUCTIONS

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 or double paddle mixer (300–400 rpm) with spiral paddle

For other types of mixing equipment, contact Sika Technical Services

Application Equipment
- Brush: Soft bristle
- Roller: Solvent resistant

SUBSTRATE PREPARATION

IMPORTANT
The supporting structure must be of sufficient structural strength to support the new and existing layers of the roof build-up. The complete roof system including existing layers must be designed and secured against wind uplift loadings.

General
- Substrates must be free of all contaminants such as dirt, oil, grease and loose friable material.
- 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 Product adhesion, carry out a small trial before full application together with adhesion tests as required.

Cementitious substrates

- 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.
- New concrete must be cured for at least 28 days and have a tensile strength > 1.5 N/mm².
- 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®-598.
- Use Sikalastic® U-Primer or Sikalastic-500 Acrylic Primer

Bitumen sheet membranes

IMPORTANT

Always use a fully reinforced system over bitumen sheet membranes.

- Make sure the bituminous felt is firmly bonded or mechanically fixed to the substrate and does not contain any badly degraded areas.
- Remove completely or repair any degraded or missing sections.

Treat surfaces as detailed below.

Surface treatment

- Mineral granules and talc finish: Remove loose granules and apply Sikalastic® Metal Primer or similar (e.g. Sikalastic U-Primer) over the complete membrane.
- Polyethylene foil finish: Warm foil finish by lightly gas torching.
- Texflamina finish: Must be new.

Bituminous coatings

IMPORTANT

Always use a fully reinforced system over bituminous coatings.

IMPORTANT

Old existing coatings which are not fully bonded to substrate must be removed.

- Bituminous, volatile mastic or old coal tar coatings must be sound, firmly bonded, rigid and with a tack free surface.
- Remove any loose layers.
- Thoroughly clean with detergent and water and allow to dry.
- Apply Sikalastic® Metal Primer or similar (e.g. Sikalastic U-Primer) over the complete coating.

Brick and stone

- Mortar joints must be sound and preferably flush pointed.
- Replace loose bricks, stone and mortar.
- Apply strips or sections of Sika® reinforcement over mortar joints.
- Thoroughly clean the surface by power washing and allow to dry.

Unglazed ceramic tiles

- Ensure all tiles are securely fixed.
- Replace any broken, loose or missing sections.
- Power wash the surface.

Clay tiles

- Make sure all tiles are securely fixed.
- Replace or fix any broken, loose or missing tiles.
- Thoroughly clean the surface by power washing and allow to dry.

Metal

- Metals and existing coatings must be in a sound surface condition.
- Abrade surfaces to remove any rust and loose coatings.
- Bare metal must achieve a bright rust-free finish.
- 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.

Paints/Coatings

IMPORTANT

Old existing coatings which are not fully bonded to substrate must be removed.

- The existing paint / coating must be sound and firmly bonded to the substrate.
- Remove any oxidised or loose layers.
- Prepare substrate mechanically using suitable abrading, grinding, rotating wire brush or other similar equipment.
- Thoroughly clean the surface by power washing and allow to dry.

Existing Sikalastic®-598
IMPORTANT
Old existing membranes which are not fully bonded to substrate must be removed.
- The existing Product must be sound and firmly bonded to the substrate.
- Remove completely or repair any deteriorated or missing sections.
- Roughen the surface by lightly abrading using light abrasive manual tools or mechanical equipment.
- Depending on the type of membrane, a solvent wipe may also be required. Contact Sika Technical Services for additional information.
- Remove dust by industrial vacuuming equipment.

MIXING

IMPORTANT
Avoid over-mixing to minimise air entrainment.
Note: Use an electric single or double paddle mixer (300–400 rpm) with spiral paddle for mixing.
- Product is supplied ready for use.
- Before application, mix for at least 1 minute or until the liquid and all the coloured pigment has achieved a uniform colour.

APPLICATION

INSTALLATION PROCEDURE
Reference must be made to further documentation where applicable, such as relevant method statement, application manual and installation or working instructions.
IMPORTANT
Confirm waiting /overcoating times are achieved before applying subsequent coats / products.
Primer
IMPORTANT
Do not apply on substrates that are unstable.
IMPORTANT
Do not apply on substrates with rising moisture.
Equipment:
- Fleece roller
- Brush

Confirm product application conditions: substrate moisture content, substrate, air and product temperatures, relative humidity and dew point (Refer to Application information).
1. Pour the mixed Product onto the surface. The consumption is specified in the individual primer product data sheet Application Information.
2. Apply the Product evenly over the surface with a brush or fleece roller.
3. Back roll the surface in two directions at right angles with a fleece roller.

Result: The primer must be continuous and pore free.

ROOF COATING
Equipment:
- Fleece roller
- Brush

1st coat
Confirm waiting / overcoating time of previous coat is achieved before applying subsequent coats. (Refer to waiting / overcoating times in Application Information)
Before application, confirm substrate moisture content, substrate and air temperatures.
Always begin application with detailing (i.e. corners, upstands, joints etc) before installation of the main horizontal surfaces.
1. Pour the mixed Product onto the substrate. The consumption is specified in Application Information.
2. Apply the Product with one of the tools specified in Equipment.
3. Back roll the surface in two directions at right angles with a fleece roller. Important: Avoid going back to re-work areas that are partially dried as this may damage the surface finish.

Result: The coating must be continuous and pore free.
2nd coat
Confirm waiting / overcoating time of previous coat is achieved before applying subsequent coats. (Refer to waiting / overcoating times in Application Information)
Before application, confirm substrate moisture content, substrate and air temperatures.
Always begin application with detailing (i.e. corners, upstands, joints etc) before installation of the main horizontal surfaces.
1. Pour the mixed Product onto the substrate. The consumption is specified in Application Information.
2. Apply the Product with one of the tools specified in Equipment.
3. Back roll the surface in two directions at right angles with a fleece roller. Important: Avoid going back to re-work areas that are partially dried as this may damage the surface finish

Result: The coating must be continuous and pore free.
ROOF WATERPROOFING
Reinforced waterproof membrane
Equipment:
- Fleece roller
- Brush

1st coat
Confirm waiting / overcoating time of previous coat is achieved before applying subsequent coats. (Refer to waiting / overcoating times in Application Information).
Before application, confirm substrate moisture content, substrate and air temperatures.

Always begin application with detailing (i.e. corners, upstands, joints etc) before installation of the main horizontal surfaces.

1. Pour the mixed Product onto the substrate. The consumption is specified in Application Information.
2. Apply the Product with one of the tools specified in Equipment.
3. Back roll the surface in two directions at right angles with a fleece roller. Important: Avoid going back to re-work areas that are partially dried as this may damage the surface finish

Result: The coating must be continuous and pore free.

Reinforcement application

1. It is recommended to work 1.0 m at a time lengthways applying the 1st coat and embedding the reinforcement.
2. Make sure reinforcement overlaps are greater than 50 mm.
3. Lay the reinforcement onto the wet 1st coat
4. Use a short pile roller to roll over the reinforcement and resin

Result: The reinforcement fibres must be fully encapsulated within the resin.

2nd coat

Confirm waiting / overcoating time of previous coat is achieved before applying subsequent coats. (Refer to waiting / overcoating times in Application Information).

Before application, confirm substrate moisture content, substrate and air temperatures.

Always begin application with detailing (i.e. corners, upstands, joints etc) before installation of the main horizontal surfaces.

1. Pour the mixed Product onto the substrate. The consumption is specified in Application Information.
2. Apply the Product with one of the tools specified in Equipment.
3. Back roll the surface in two directions at right angles with a fleece roller.
   IMPORTANT
   Avoid going back to re-work areas that are partially dried as this may damage the surface finish

Result: The coating must be continuous and pore free.

3rd coat

Confirm waiting / overcoating time of previous coat is achieved before applying subsequent coats. (Refer to waiting / overcoating times in Application Information).

Before application, confirm substrate moisture content, substrate and air temperatures.

Always begin application with detailing (i.e. corners, upstands, joints etc) before installation of the main horizontal surfaces.

1. Pour the mixed Product onto the substrate. The consumption is specified in Application Information.
2. Apply the Product with one of the tools specified in Equipment.
3. Back roll the surface in two directions at right angles with a fleece roller.
   IMPORTANT
   Avoid going back to re-work areas that are partially dried as this may damage the surface finish

Result: The coating must be continuous and pore free.

CLEANING OF TOOLS

Clean all tools and application equipment with 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

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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