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Agrément Certificate
95/3098
Product Sheet 6 Issue 1

SOPREMA SBS MODIFIED BITUMEN MEMBRANES

SOPRATORCH SL 600 ROOF WATERPROOFING MEMBRANE

This Agrément Certificate Product Sheet(1) relates to Sopratorch SL 600 Roof Waterproofing Membrane, for use as loose-laid and ballasted roof waterproofing on flat and protected zero fall roofs, or fully bonded built-up flat roof waterproofing with protected zero falls, fully or partially bonded waterproofing for flat and pitched roofs with limited access and blue roof specifications, in combination with a storm water attenuation system(2).

(1) Hereinafter referred to as 'Certificate'.
(2) The storm water attenuation system is outside the scope of this Certificate.

The assessment includes

Product factors:

- compliance with Building Regulations
- compliance with additional regulatory or non-regulatory information where applicable
- evaluation against technical specifications
- assessment criteria and technical investigations
- uses and design considerations

Process factors:

- compliance with Scheme requirements
- installation, delivery, handling and storage
- production and quality controls
- maintenance and repair

Ongoing contractual Scheme elements†:

- regular assessment of production
- formal 3-yearly review

KEY FACTORS ASSESSED

Section 1. Mechanical resistance and stability
Section 2. Safety in case of fire
Section 3. Hygiene, health and the environment
Section 4. Safety and accessibility in use
Section 5. Protection against noise
Section 6. Energy economy and heat retention
Section 7. Sustainable use of natural resources
Section 8. Durability

The BBA has awarded this Certificate to the company named above for the product described herein. This product has been assessed by the BBA as being fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of issue: 5 July 2023

Hardy Giesler
Chief Executive Officer

Certificate amended on 14 August 2023 to correct product name in Fire Annex

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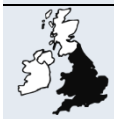
SUMMARY OF ASSESSMENT AND COMPLIANCE

This section provides a summary of the assessment conclusions; readers should refer to the later sections of this Certificate for information about the assessments carried out.

Compliance with Regulations

Having assessed the key factors, the opinion of the BBA is that Sopratorch SL 600 Roof Waterproofing Membrane, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations:



The Building Regulations 2010 (England and Wales) (as amended)

Requirement:	**B4(1)**	**External fire spread**
Comment:		The product is restricted by this Requirement in some circumstances. See section 2 of this Certificate.
Requirement:	**B4(2)**	**External fire spread**
Comment:		On a suitable substructure, the product may enable a roof to be unrestricted under this Requirement. See section 2 of this Certificate.
Requirement:	**C2(b)**	**Resistance to moisture**
Comment:		The product, including joints, will enable a roof to satisfy this Requirement. See section 3 of this Certificate.
Regulation:	**7(1)**	**Materials and workmanship**
Comment:		The product is acceptable. See sections 8 and 9 of this Certificate.

The Building (Scotland) Regulations 2004 (as amended)

Regulation:	**8(1)(2)**	**Fitness and durability of materials and workmanship**
Comment:		The use of the product satisfies the requirements of this Regulation. See sections 8 and 9 of this Certificate.
Regulation:	**9**	**Building standards applicable to construction**
Standard:	2.6	Spread to neighbouring buildings
Standard:	2.7	Spread on external walls
Comment:		The product is restricted under clauses 2.6.4 (1)(2) and 2.7.2(1)(2) of these Standards in some circumstances. See section 2 of this Certificate.
Standard:	2.8	Spread from neighbouring buildings
Comment:		The product, when applied to a suitable substructure, may enable a roof to be unrestricted under clause 2.8.1(1)(2) of this Standard. See section 2 of this Certificate.
Standard:	3.10	Precipitation
Comment:		The use of the product, including joints, will enable a roof to satisfy the requirements of this Standard, with reference to clauses 3.10.1 and 3.10.7(1). See section 3 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The product can contribute to satisfying the relevant requirements of Regulation 9, Standards 1 to 6, and therefore will contribute to a construction meeting a bronze level of sustainability as defined in this Standard.

Regulation:	**12**	**Building standards applicable to conversions**
Comment:		Comments in relation to the product under Regulation 9, Standards 1 to 6, also apply to this Regulation, with reference to clause 0.12.1[(1)(2)] and Schedule 6[(1)(2)]. (1) Technical Handbook (Domestic). (2) Technical Handbook (Non-Domestic).

The Building Regulations (Northern Ireland) 2012 (as amended)

Regulation:	**23(1)(a)(i) (iii)(b)(i)**	**Fitness of materials and workmanship**
Comment:		The product is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**28(b)**	**Resistance to moisture and weather**
Comment:		The product, including joints, can satisfy the requirements of this Regulation. See section 3 of this Certificate.
Regulation:	**36(a)**	**External fire spread**
Comment:		The product is restricted by this Regulation in some circumstances. See section 2 of this Certificate.
Regulation:	**36(b)**	**External fire spread**
Comment:		On a suitable substructure, the use of the product may enable a roof to be unrestricted under the requirements of this Regulation. See section 2 of this Certificate.

Additional Information

NHBC Standards 2023

In the opinion of the BBA, Sopratorch SL 600 Roof Waterproofing Membrane, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapter 7.1 *Flat roofs, terraces and balconies*.

In addition, in the opinion of the BBA, the product, when installed and used in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards for Conversions and Renovations*, taking account of other relevant guidance within the chapter and the suitability of the substrate to receive the product.

The NHBC Standards do not cover the refurbishment of existing roofs.

Fulfilment of Requirements

The BBA has judged Sopratorch SL 600 Roof Waterproofing Membrane to be satisfactory for use as a reinforced modified bitumen waterproofing membrane as described in this Certificate. The product has been assessed for use as loose laid and ballasted roof waterproofing on flat and protected zero fall roofs, or fully or partially bonded built-up roof waterproofing on flat and pitched roofs with limited access and blue roof specifications, in combination with a storm water attenuation system.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the product under assessment. Sopratorch SL 600 Roof Waterproofing Membrane is a styrene-butadiene-styrene (SBS) modified bitumen membrane with a composite polyester reinforcement (glass mat and non-woven polyester). The upper surface is finished with black granules. The lower surface is protected by a macro-perforated thermofusible film.

The product has the nominal characteristics given in Table 1.

Table 1 Nominal characteristics of Sopratorch SL 600 Roof Waterproofing Membrane

Characteristic (unit)	Value
Thickness (mm)	5.0
Roll width (m)	1.0
Roll length (m)	8.0
Roll weight (kg)	47
Upper surface finish	Granules
Lower surface finish	Macro-perforated thermofusible film

Ancillary Items

The following ancillary items can be used with the product and have been assessed with the product:

Underlayers

- Ventiglass SBS 3 TF — a partially bonded SBS modified bitumen membrane with a glass fibre reinforcement. The upper surface is finished with talcum or sand and the lower surface has torch-activated SBS stripes alternated with non-stick stripes protected by a thermofusible film
- Ventirock SBS 3 TF — a partially bonded SBS modified bitumen membrane with non-woven polyester reinforcement. The upper surface is finished with talcum or sand, and the lower surface has torch-activated SBS stripes alternated with non-stick stripes, protected by a thermofusible film
- Soprarock SBS P3 TF — a fully bonded SBS modified bitumen membrane with a composite polyester reinforcement (glass mat and non-woven polyester). The upper surface is finished with talcum/sand and the lower surface is protected by a thermofusible film
- Elastophene Flam 25 AR — a fully bonded SBS modified bitumen membrane with glass fibre reinforcement. The upper surface is finished with slate and the lower surface is protected by a thermofusible film
- Sopralene Flam 180 TF — a fully bonded SBS modified bitumen membrane with a non-woven polyester reinforcement. The upper surface is finished with talcum or sand and the lower surface is protected by a thermofusible film
- Sopralene Flam 250 TF — a fully bonded SBS modified bitumen membrane with a non-woven polyester reinforcement. The upper surface is finished with talcum or sand. The lower surface is protected by thermofusible film
- Sopralene Flam Venti 250 TF — a partially bonded SBS modified bitumen membrane with a non-woven polyester reinforcement. The upper surface is finished with talcum or sand and the selvedge is protected by polypropylene film. The lower surface has thermofusible bitumen stripes alternated with non-stick stripes, protected by a thermofusible film
- Soprastick Venti FF — a self-adhesive SBS modified bitumen membrane with a composite polyester reinforcement (glass mat and non-woven polyester). The upper surface is finished with a thermofusible film, and the lower surface has alternating non-stick stripes and self-adhesive stripes, protected by a silicone release sheet
- Soprastick — a self-adhesive SBS modified bitumen membrane with a composite polyester reinforcement (glass mat and non-woven polyester). The upper surface is protected by a thermofusible film, and the lower surface is protected by a silicone release film. The membrane has a duo selvedge, part self-adhesive, part welding
- Ventiglass PB 3 TF — a partially bonded polymer modified bitumen membrane with a glass fibre reinforcement. The upper surface is finished with talcum or sand and the lower surface has torch-activated SBS stripes alternated with non-stick stripes, protected by a thermofusible film
- Soprarock Global SBS 30 TF — a fully bonded SBS modified bitumen membrane with a composite polyester reinforcement (glass mat and non-woven polyester). The upper surface is finished with talcum or sand and the lower surface is protected by a thermofusible film
- Sopravent SLP 300 SF — a partially bonded SBS modified bitumen membrane with a composite polyester reinforcement (glass mat and non-woven polyester). The upper surface is finished with talcum or sand and the lower surface torch-activated SBS stripes alternated with non-stick stripes, protected by a thermofusible film

Air and vapour control layers (AVCL)

- Sopravap Stick C15 — a self-adhesive SBS modified bitumen membrane with polyester reinforcement. The upper surface is finished with talcum/sand. The lower surface has a self-adhesive finish that is protected by a silicone release sheet
- Sopravap Stick A15 — a self-adhesive SBS modified bitumen membrane with a composite aluminium reinforcement (polyester and aluminium). The upper surface is finished with talcum or sand. The lower surface has a self-adhesive finish that is protected by a silicone release sheet
- Sopravap Stick S16 — a self-adhesive SBS modified bitumen membrane with a composite glass grid polyester / glass fleece reinforcement. The upper surface is finished with fine sand. The lower surface has a self-adhesive finish that is protected by a silicone release sheet
- Soprabase SLP 300 SF — a fully bonded SBS modified bitumen membrane with composite polyester reinforcement (glass mat and non-woven polyester). The upper surface is finished with talcum or sand and the lower surface is protected by a thermofusible film
- Soprabase SLV 200 SF — a fully bonded SBS modified bitumen membrane with a glass fibre reinforcement. The upper surface is finished with talcum or sand and the lower surface is protected by a thermofusible film
- Sopravap Global PB A30 TF — a fully bonded polymer modified bitumen membrane with an aluminium reinforcement. The upper surface is finished with talcum or sand and the lower surface is protected by a thermofusible film

Vapour barriers

- Sopravap EVA 35 — an SBS modified bitumen membrane with a composite aluminium and a glass fibre reinforcement. The upper surface is finished with talcum/sand, and the lower surface is protected by a thermofusible film
- Sopravap PB Alu 3 TF — a polymer modified bitumen membrane with an aluminium reinforcement. The upper surface is finished with talcum or sand, and the lower surface is protected by a thermofusible film
- Sopravap Stick Alu S16 — a self-adhesive modified bitumen membrane with a composite glass grid/aluminium reinforcement. The upper surface has a sand finish and the lower surface is protected by a silicone release sheet
- Sopravap Alu Activa 2 — an SBS modified bitumen membrane with a composite aluminium reinforcement (polyester and aluminium. SBS lanes alternated with non-stick lanes protected with a thermofusible film are laid out on the upper and lower surfaces of the membrane
- Sopravap Stick Alu KSD — an SBS modified bitumen with a composite aluminium reinforcement (polyester and aluminium) also acting as the upper surface protection. The lower surface is protected by a silicone release film

Primers

- Elastocol 500 — cold applied bitumen primer composed of elastomeric bitumen and volatile solvents, for the preparation of substrates, such as concrete, metal or wood
- Aquadere — cold applied bitumen emulsion primer (solvent free), used to increase adherence for bitumen-based waterproofing membranes
- Sopradere Quick — cold-applied fast drying bitumen emulsion primer composed of bitumen, volatile solvents and adhesive additives, for the preparation of substrates such as concrete, metal or wood
- Elastocol 600 — cold-applied bitumen primer composed of elastomeric bitumen and volatile solvents for self-adhesive, bitumen-based waterproofing sheets

Protection boards

- Sopraboard — a mechanically fixed rigid cover board, consisting of a mineral-reinforced bitumen core reinforced on both sides with a fibreglass fleece. To be used when fully bonded SBS modified bitumen membranes are to be applied on top. When used under the partially bonded and self-adhesive membrane Soprastick Venti FF, the board should be primed with Elastocol 600

The Certificate holder recommends the following ancillary items for use with the product, but these materials have not been assessed by the BBA and are outside the scope of this Certificate:

- Soprajoint — a flexible SBS elastomeric bitumen waterproofing strip, for use in expansion joints
- Alsan Flashing (Jardin) — a bitumen-polyurethane resin, for use in upstands
- Easy Torch — an SBS modified bitumen membrane. The upper surface has a sand/talcum finish, and the lower surface is protected by a thermofusible film
- Sopravap 3 in 1 — a two-component, polyurethane-based AVCL
- Alsan 770 and Alsan 770TX — PMMA-based liquid-applied roof waterproofing resins
- insulation boards — rigid polyisocyanurate (PIR) foam boards
- Coltack Evolution CA or Coltack Evolution 750 — a single-component polyurethane spray-applied adhesive, for bonding insulation boards to the substrate
- Soprabond 525 — a single-component polyurethane liquid applied adhesive for bonding insulation boards to the substrate.

Applications

The product is intended for use in the following specifications:

- fully or partially bonded waterproofing, for flat or pitched roofs with limited access
- fully bonded built-up waterproofing for protected zero falls with limited access
- loose-laid and ballasted waterproofing for protected zero fall or flat roofs with limited access
- blue roof specifications for zero fall or flat roofs in combination with a storm water attenuation system.

Definitions for product and applications inspected

The following terms are defined for the purpose of this Certificate as:

- limited access roof — a roof subjected only to pedestrian traffic for maintenance of the roof covering, cleaning of gutters, etc
- flat roof — a roof having a minimum finished fall of 1:80
- zero fall roofs — a roof having a minimum finished fall between 0 and 1:80
- pitched roof — a roof having a fall in excess of 1:6
- blue roof — flat (including zero fall) roofs, designed to allow controlled attenuation of rain fall during heavy and storm events, as part of sustainable urban drainage systems (SUDS).

Product assessment – key factors

The product was assessed for the following key factors, and the outcomes of the assessments are shown below. Conclusions relating to the Building Regulations apply to the whole of the UK unless otherwise stated.

1 Mechanical resistance and stability

Not applicable.

2 Safety in case of fire

Data were assessed for the following characteristics.

2.1 External fire spread

2.1.1 When tested in accordance with CEN/TS 1187 : 2012, Test 4 and classified to EN 13501-5 : 2016(1) the systems as included in Fire Annex B of this Certificate achieved B_{ROOF}(t4).

(1) Individual reports are available from the Certificate holder.

2.1.2 On the basis of data assessed, the systems listed above will be unrestricted by the documents supporting the national Building Regulations with respect to proximity to a boundary. Restrictions may apply at junctions with compartment walls.

2.1.3 The product, when used in protected specifications, including an appropriate inorganic covering listed in the Annex of Commission Decision 2000/553/EC, can also be considered to be unrestricted with respect to a boundary under the national Building Regulations.

2.1.4 In Wales and Northern Ireland, when used for flat roofs using a substrate designated in the supporting documents with the surface finishes listed below, the roof is also deemed to be unrestricted with respect to a boundary:

- bitumen-bedded stone chippings covering the whole surface to a depth of not less than 12.5 mm
- bitumen-bedded tiles of a non-combustible material
- sand and cement screed
- macadam.

2.1.5 The designation and permissible areas of use of other specifications should be confirmed by reference to the requirements of the documents supporting the national Building Regulations.

2.2 Reaction to fire

2.2.1 The Certificate holder has not declared a reaction to fire classification for Sopratorch SL 600 Roof Waterproofing Membrane.

2.2.2 On the basis of data assessed, systems incorporating Sopratorch SL 600 Roof Waterproofing Membrane will be restricted in use under the documents supporting the national Building Regulations in some cases.

2.2.3 In England, the product, when used in pitches greater than 70°, excluding upstands, must not be used less than 1 m from a boundary, or on residential buildings more than 11 m in height or on other buildings more than 18 m in height. Restrictions apply on assembly and recreation buildings. These constructions should also be included in calculations of unprotected area.

2.2.4 In Wales, the product, when used in roof pitches greater than 70°, excluding upstands, must not be used less than 1 m from a boundary, or on other buildings more than 18 m in height or, in some cases, on assembly and recreation buildings. These constructions should also be included in calculations of unprotected area.

2.2.5 In Scotland and Northern Ireland, for systems incorporating the product in pitches greater than 70°, excluding upstands, that do not achieve the minimum Class E reaction to fire classification to BS EN 13501-1: 2018, designers must seek guidance on the proposed use of the system from the relevant Building Control Body.

3 Hygiene, health and the environment

Data were assessed for the following characteristics.

3.1 Weathertightness

3.1.1 Results of weathertightness tests are given in Table 2.

Table 2 Weathertightness

Product assessed	Assessment method	Requirement	Result
Sopratorch SL 600	Watertightness to EN 1928 : 2000	No leakage after 24 hours	Pass
Sopratorch SL 600	Peel resistance of joints to EN 12316-1 : 2000	≥ 100 N·(50 mm)$^{-1}$	Pass
Sopratorch SL 600	Tensile shear strength of joints to EN 12317-1 : 2000	≥ 500 N	Pass
Sopratorch SL 600	Peel from substrate to MOAT 64 : 4.3.3 : 2001	≥ 25 N·(50 mm)$^{-1}$	
- concrete substrate			Pass
- wood substrate			Pass
- aluminium substrate			Pass
Sopratorch SL 600 using Elastocol 600 primer	Peel from substrate to MOAT 64 : 4.3.3 : 2001	≥ 25 N·(50 mm)$^{-1}$	
- concrete substrate			Pass
- wood substrate			Pass
- aluminium substrate			Pass
- PUR insulation substrate			Pass

3.1.2 On the basis of data assessed, Sopratorch SL 600 Roof Waterproofing Membrane, including joints, when completely sealed and consolidated, will adequately resist the passage of moisture to the inside of the building and so satisfy the requirements of the national Building Regulations.

3.1.3 On the basis of data assessed, the adhesion of bonded systems is sufficient to resist the effects of wind suction, thermal cycling or other minor structural movements likely to occur in service and remain weathertight.

3.1.3 Where the product is bonded to insulation boards, the resistance to wind uplift will be dependent on the cohesive strength of the insulation and the method by which it is secured to the roof deck. This must be taken into account when selecting a suitable insulation material.

3.2 Resistance to mechanical damage

3.2.1 Results of resistance to mechanical damage tests are given in Table 3.

Table 3 Mechanical resistance results

Product assessed	Assessment method	Requirement	Result
Sopratorch SL 600	Dynamic indentation to EN 12691 : 2018 Method B (EPS)	Value achieved	I_{10}
Sopratorch SL 600	Static indentation to EN 12730 : 2015 Method A (EPS)	Value achieved	L_{20}
Sopratorch SL 600	Static indentation to EN 12730 : 2015 Method B (concrete)	Value achieved	L_{20}
Sopratorch SL 600	Tear strength to EN 12310-1 : 1999 longitudinal direction transverse direction	≥ 50 N	 Pass Pass
Sopratorch SL 600	Tensile strength to EN 12311-1 : 1999 longitudinal direction	Value achieved	1100 N· (50 mm)$^{-1}$
Sopratorch SL 600	Tensile strength to EN 12311-1 : 1999 transverse direction	Value achieved	800 N· (50 mm)$^{-1}$
Sopratorch SL 600	Elongation to EN 12311-1 : 1999 longitudinal direction	45% ± 15%	 Pass
Sopratorch SL 600	Elongation to EN 12311-1 : 1999 transverse direction	45% ± 15%	 Pass
Sopratorch SL 600	Tear strength to EN 12310-1 : 1999 longitudinal direction transverse direction	 ≥ 50 N ≥ 150 N	 Pass Pass

3.2.2 On the basis of data assessed, Sopratorch SL 600 Roof Waterproofing Membrane can accept, without damage, the limited foot traffic and light concentrated loads associated with installation and maintenance and the effects of minor movement likely to occur in practice while remaining weathertight.

3.2.3 Where traffic in excess of the examples given in section 3.2.2 is envisaged, such as for maintenance of lift equipment, a walkway must be provided (for example, using concrete slabs supported on bearing pads). Reasonable care must be taken to avoid puncture by sharp objects or concentrated loads.

4 Safety and accessibility in use

Not applicable.

5 Protection against noise

Not applicable.

6 Energy economy and heat retention

Not applicable.

7 Sustainable use of natural resources

Not applicable.

8 Durability

8.1 The potential mechanisms for degradation and the known performance characteristics of the materials in this product were assessed.

8.2 Specific test data were assessed as given in Table 4

Table 4 Results of durability tests

Products assessed	Assessment method	Requirement	Result
Sopratorch SL 600	Low temperature flexibility to EN 1109 : 1999 – control	≤ -15°C	Pass
Sopratorch SL 600	Heat aged for 180 days at 70°C	≤ 0°C	Pass
Sopratorch SL 600 - concrete substrate - wood substrate - aluminium substrate	Peel from substrate to MOAT 64: 4.3.3: 2001 Heat aged for 28 days at 80°C	≥ 25 N·(50 mm)$^{-1}$	 Pass Pass Pass
Sopratorch SL 600 using Elastocol 600 primer - concrete substrate - wood substrate - aluminium substrate - PUR insulation substrate	Peel from substrate to MOAT 64: 4.3.3: 2001 Heat aged for 28 days at 80°C	≥ 25 N·(50 mm)$^{-1}$	 Pass Pass Pass Pass
Sopratorch SL 600	Heat resistance to EN 1110 : 1999 control Heat aged for 180 days at 70°C	≥ 100°C ≥ 90°C	Pass Pass
Sopratorch SL 600	Peel resistance of joints to EN 12316-1 : 2000 heat aged for 28 days at 80°C	≤ 20% change	Pass
Sopratorch SL 600	Dimensional stability to EN 1107-1 : 1999 longitudinal direction	± 0.5%	Pass

8.3 Service life

8.4.1 Under normal service conditions, the product will have a life of at least 30 years, provided it is designed, installed and maintained in accordance with this Certificate and the Certificate holder's instructions.

8.4.2 Localised loss of the mineral surfacing may occur, after some years, in areas where complex detailing of the roof design is incorporated.

PROCESS ASSESSMENT

Information provided by the Certificate holder was assessed for the following factors:

9 Design, installation, workmanship and maintenance

9.1 Design

9.1.1 The design process was assessed and the following requirements apply in order to satisfy the performance assessed in this Certificate.

9.1.2 Decks to which the product is to be applied must comply with the relevant requirements of BS 6229 : 2018, BS 8000-0 : 2014, BS 8000-4 : 1989 and BS 8217 : 2005, and where appropriate, *NHBC standards* 2023, Chapter 7.1.

9.1.3 For design purposes of flat roofs, twice the minimum finished fall must be assumed, unless a detailed analysis of the roof is available, including overall and local deflection, direction of falls.

9.1.4 Structural decks to which the product is to be applied must be suitable to transmit the dead and imposed loads experienced in service. Allowance needs to be made for loading deflections to ensure that the free drainage of water is maintained.

9.1.5 Imposed loads, dead loading and wind loads must be calculated by a suitably experienced and competent individual in accordance with BS EN 1991-1-1 : 2002, BS EN 1991-1-3 : 2003 and BS EN 1991-1-4 : 2005, and their UK National Annexes.

9.1.6 The resistance to wind uplift for warm roofs will be dependent on the cohesive strength of the insulation and the method by which it is secured to the roof deck. This must be taken into account when selecting a suitable insulation material.

9.1.7 The ballast requirements for loose-laid systems must be calculated by a suitably experienced and competent individual in accordance with the relevant parts of BS EN 1991-1-4 : 2005 and its UK National Annex. The product must always be ballasted with a minimum depth of 50 mm of aggregate.

9.1.8 In areas of high-wind exposure, the Certificate holder's advice must be sought on ballast requirements, although such advice is outside the scope of this Certificate. Alternatively, concrete slabs on suitable supports can be used.

9.1.9 The ballast on protected roofs must be of a type that will not be removed or become delocalised owing to wind scour experienced on the roof.

9.1.10 The drainage systems for zero fall roofs must be correctly designed, and the following points must be addressed:

- provision made for access for maintenance purposes
- it is particularly important to identify the correct drainage points, to ensure that drainage is sufficient and effective in accordance with the relevant clauses of BS 6229 : 2018.

9.1.11 Insulation materials to be used in conjunction with the product must be in accordance with the Certificate holder's instructions and be either:

- as described in the relevant clauses of BS 6229:2018, or
- the subject of a current BBA Certificate and used in accordance with, and within the limitations of, that Certificate.

9.2 Installation

9.2.1 Installation instructions provided by the Certificate holder were assessed and judged to be appropriate and adequate.

9.2.2 Installation must be carried out in accordance with this Certificate, the Certificate holder's instructions and the relevant clauses of BS 6229 : 2018, BS 8000-0 : 2014, BS 8000-4 : 1989 and BS 8217 : 2005. A summary of instructions and guidance is provided in Annex A of this Certificate.

9.2.3 Deck substrates must be sound, dry, clean and free from sharp projections such as nail heads and concrete nibs.

9.2.4 Installation should not be carried out during inclement weather (eg rain, fog or snow). When the temperature is below 5°C, suitable precautions against surface condensation must be taken.

9.2.5 At falls in excess of 1:11, precautions against slippage, and requirements for mechanical fixings as required by BS 8217 : 2005, must be observed.

9.2.6 If the roof is likely to be subjected to uncontrolled pedestrian access, the substructure must satisfy the requirements of BS 8217 : 2005, and one of the surface finishes referred to in clause 6.12 of the Code must be used.

9.2.7 When using the product on roofs with limited access, further surface protection is not required.

9.2.8 Bonding is achieved by melting the lower surface, and by torching and pressing the membrane down. Care must be taken not to overheat the coating.

9.2.9 An underlay must be installed over the substrate prior to the installation of the product.

9.2.10 Side laps for both membranes must be a minimum of 70 mm and edge laps 100 mm. A bead of molten material must exude from all laps to indicate a satisfactory seal.

9.2.11 Sopratorch SL 600 Roof Waterproofin Membrane is then fully torch bonded directly on to the underlay. All laps must be offset by at least 300 mm in relation to the joints in the first layer.

9.2.12 For additional information for partially bonded and loose-laid and ballasted installation methods, see Annex A.

9.2.13 The NHBC requires that Sopratorch SL 600 Roof Waterproofing Membrane, once installed, is inspected in accordance with *NHBC Standards* 2023 Chapter 7.1, Clause 7.1.12, including undergoing an appropriate integrity test, where required. Any damage to the product assessed in this Certificate must be repaired in accordance with section 9.4 of this Certificate and reinspected, in order to maintain the product's performance.

9.3 Workmanship

Practicability of installation was assessed on the basis of the Certificate holder's information and BS 8217 : 2005. To achieve the performance described in this Certificate, the product must only be installed by contractors who have been trained and approved by the Certificate holder.

9.4 Maintenance and repair

9.4.1 Ongoing satisfactory performance of the product in use requires that they are suitably maintained. The guidance provided by the Certificate holder was assessed by the BBA and found to be appropriate and adequate.

9.4.2 The following requirements apply in order to satisfy the performance assessed in this Certificate:

9.4.2.1 The product must be the subject of six-monthly inspections and maintenance in accordance with the recommendations of BS 6229 : 2018, Chapter 7, and the Certificate holder's own maintenance requirements, where relevant, to ensure continued satisfactory performance.

9.4.2.2 In the event of damage, the product can be effectively repaired after cleaning, with pieces of the membranes torch welded to the damaged area in accordance with the Certificate holder's instructions.

10 Manufacture

10.1 The production processes for the product have been assessed, and provide assurance that the quality controls are satisfactory according to the following factors:

10.1.1 The manufacturer has provided documented information on the materials, processes, testing and control factors.

10.1.2 The quality control operated over batches of incoming materials has been assessed and deemed appropriate and adequate.

10.1.3 The quality control procedures and product testing to be undertaken have been assessed and deemed appropriate and adequate.

10.1.4 The process for management of non-conformities has been assessed and deemed appropriate and adequate.

10.1.5 An audit of each production location was undertaken, and it was confirmed that the production process was in accordance with the documented process, and that equipment has been properly tested and calibrated.

†10.1.6 The BBA has undertaken to review the above activities on a regular basis, through a surveillance process, to verify and reassure that the specifications and quality control operated by the manufacturer are being maintained.

11 Delivery and site handling

11.1 The Certificate holder stated that the product is delivered to site in packaging bearing the product name and production code. The rolls are packed on pallets and wrapped in polythene.

11.2 Delivery and site handing must be performed in accordance with the Certificate holder's instructions and this Certificate, including:

11.2.1 Rolls must be stored upright on the selvedge end, on a clean, smooth, level surface and kept under cover.

ANNEX A – SUPPLEMENTARY INFORMATION †

Supporting information in this Annex is relevant to the product but has not formed part of the material assessed for the Certificate.

Construction (Design and Management) Regulations 2015
Construction (Design and Management) Regulations (Northern Ireland) 2016

Information in this Certificate may assist the client, designer (including Principal Designer) and contractor (including Principal Contractor) to address their obligations under these Regulations.

CLP Regulations

The Certificate holder has taken the responsibility of classifying and labelling the product under the *GB CLP Regulation* and *CLP Regulation (EC) No 1272/2008 - classification, labelling and packaging of substances and mixtures*. Users must refer to the relevant Safety Data Sheet(s).

Management Systems Certification for production

The management system of the manufacturer has been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 by the British Board of Agrément (Certificate 18/Q060).

UKCA marking

The Certificate holder has taken the responsibility of UKCA marking the product in accordance with Designated Standard EN 13707 : 2013.

CE marking

The Certificate holder has taken the responsibility of CE marking the product in accordance with harmonised Standard EN 13707 : 2013.

Additional information on installation

Design

A.1 Guidance on the design of blue roofs is available in the *NFRC Technical Guidance Note for the construction and design of Blue Roofs – Roofs and podiums with controlled temporary water attenuation*.

Installation

Partially bonded applications

A.2 A layer of Sopralene Flam Venti 250 TF, Ventiglass SBS 3 TF or Ventirock SBS 3 TF, Ventiglass PB 3 TF or Sopravent SLP 300 SF is partially torch welded onto the substrate and act as the underlay in the system. Alternatively, Soprastick Venti FF is partially bonded to the substrate.

Loose-laid and ballasted

A.3 A separating layer is loose-laid over the substrate, with free overlapping by at least 100 mm, and fully secured around the perimeter and upstands for a minimum of 450 mm.

A.4 An underlay is loose-laid with laps as described in section 9.2.10.

A.5 A minimum 50 mm depth of aggregate should be loaded onto the roof covering. Where roofs are likely to be subjected to uncontrolled pedestrian traffic, a concrete tile finish should be used.

A.6 Where concrete tiles are used, the waterproof system is first covered by a layer of sand into which the tiles are set. A separating layer may be used in place of the sand.

Bibliography

BS 6229 : 2018 *Flat roofs with continuously supported flexible waterproof coverings — Code of practice*

BS 8000-0 : 2014 *Workmanship on construction sites — Introduction and general principles*
BS 8000-4 : 1989 *Workmanship on building sites — Code of practice for waterproofing*

BS 8217 : 2005 *Reinforced bitumen membranes for roofing — Code of practice*

BS EN 1991-1-1 : 2002 *Eurocode 1 – Actions on structures – General actions – Densities, self-weight, imposed loads for buildings*
NA to BS EN 1991-1-1 : 2002 UK National Annex to *Eurocode 1 – Actions on structures – General actions – Densities, self-weight, imposed loads for buildings*
BS EN 1991-1-3 : 2003 + A1:2015 *Eurocode 1 – Actions on structures – General actions – Snow loads*
NA + A2 : 18 to BS EN 1991-1-3 : 2003 + A1 : 2015 *Eurocode 1 – Actions on structures – General actions – Snow loads*
BS EN 1991-1-4 : 2005 + A1 : 2010 *Eurocode 1 — Actions on structures — General actions — Wind actions*
NA *to BS EN* 1991-1-4 : 2005 + A1 : 2010 *UK National Annex to Eurocode 1 — Actions on structures — General actions — Wind actions*

BS EN 13501-1 : 2018 *Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests*

EN 1107-1 : 1999 *Flexible sheets for waterproofing — Part 1: Bitumen sheets for roof waterproofing — Determination of dimensional stability*

EN 1109 : 1999 *Flexible sheets for waterproofing — Bitumen sheets for roof waterproofing — Determination of flexibility at low temperature*

EN 1110 : 1999 *Flexible sheets for waterproofing — Bitumen sheets for roof waterproofing — Determination of flow resistance at elevated temperature*

EN 1928 : 2000 *Flexible sheets for waterproofing — Bitumen, plastic and rubber sheets for roof waterproofing — Determination of watertightness*

EN 12310-1 : 1999 *Flexible sheets for waterproofing — Part 1: Bitumen sheets for waterproofing - Determination of resistance to tearing (nail shank)*

EN 12311-1 : 1999 *Flexible sheets for waterproofing - Part 1: Bitumen sheets for roof waterproofing — Determination of tensile properties*

EN 12316-1 : 2000 *Flexible sheets for waterproofing — Bitumen, plastic and rubber sheets for waterproofing — Determination of watertightness*

EN 12317-1 : 2000 *Flexible sheets for waterproofing — Bitumen sheets for roof waterproofing — Determination of shear resistance of joints*

EN 12691 : 2018 *Flexible sheets for waterproofing — Bitumen, plastic and rubber sheets for roof waterproofing — Determination of resistance to impact*

EN 12730 : 2015 *Flexible sheets for waterproofing — Bitumen, plastic and rubber sheets for roof waterproofing — Determination of resistance to static loading*

EN 13501-5 : 2016 *Fire classification of construction products and building elements — Classification using data from external fire exposure to roof tests*

EN 13707 : 2013 *Flexible sheets for waterproofing — Reinforced bitumen sheets for roof waterproofing — Definitions and characteristics*

EN ISO 9001 : 2015 *Quality management systems — Requirements* CEN/TS 1187 : 2012 *Test methods for external fire exposure to roofs EN 13501-5 : 2016 Fire classification of construction products and building elements — Classification using data from external fire exposure to roofs tests*

MOAT 64 : 2001 *UEAtc Technical Guide for the Assessment of Roof Waterproofing Systems made of Reinforced APP or SBS Polymer Modified Bitumen Sheets*

Conditions

1 This Certificate:

- relates only to the product that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page – no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them
- is valid only within the UK
- has to be read, considered and used as a whole document – it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- is subject to English Law.

2 Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by the BBA at the date of issue or reissue of this Certificate.

3 This Certificate will be displayed on the BBA website, and the Certificate Holder is entitled to use the Certificate and Certificate logo, provided that the product and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:

- are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.

5 In issuing this Certificate the BBA is not responsible and is excluded from any liability to any company, firm, organisation or person, for any matters arising directly or indirectly from:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product or any other product
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product
- actual installations of the product, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product, including its manufacture, supply, installation, use, maintenance and removal
- any claims by the manufacturer relating to UKCA marking and CE marking.

6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product which is contained or referred to in this Certificate is the minimum required to be met when the product is manufactured, supplied, installed, used, maintained and removed. It does not purport in any way to restate the requirements of the Health and Safety at Work etc. Act 1974, or of any other statutory, common law or other duty which may exist at the date of issue or reissue of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care.

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Certificate 95/3098 Product Sheet 6 – Fire Annex B – Fire Data for Sopratorch SL 600 Roof Waterproofing Membranes

SUBSTRATE	PRIMER	VAPOUR BARRIER	INSULATION* LAYER 1	INSULATION* LAYER 2 (Optional)	SEPARATION LAYER	BASE SHEET	TOP LAYER	SYSTEMS
Wood Particle Board (Density: 680 kg·m^{-3}; thickness ≥ 16 mm) or Trapezoidal profiled Steel deck 106/750 (thickness ≥ 0.75 mm) or Non-combustible board (Density: 1850 kg·m^{-3} ; thickness ≥ 8 mm)	-	• No vapour control layer Or • PE vapour control layer (Reaction to fire F or better) LOOSE LAID	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED	-	• SOPRABOARD 3.2 mm thickness MECHANICALLY FASTENED	• Soprarock SBS P3 TF Or • Soprarock Global SBS 30 TORCHED	• Sopratorch SL 600 Waterproofing membrane TORCHED	Systems A1 and A2
	-	• No vapour control layer Or • PE vapour control layer (Reaction to fire F or better) LOOSE LAID	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED				Systems A1 and A2
	• Sopradere Quick Or • Aquadere	All SBS AVCL with RTF E OR ASE SLP 300 SF BASE SLV 200 SF RAVAP GLOBAL PB A30 TF TORCHED	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**	-				Systems A3
	• Sopradere Quick Or • Aquadere	All SBS AVCL with RTF E OR ASE SLP300 SF ASE SLV 200 SF AP GLOBAL PB A30 TF TORCHED	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**				Systems A3
	• Elastocol 600	All SBS AVCL with RTF E OR SOPRAVAP STICK A15 SELF ADHERED	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**	-				Systems A4
	• Elastocol 600	All SBS AVCL with RTF E OR SOPRAVAP STICK A15 SELF ADHERED	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**				Systems A4

Systems B							
SUBSTRATE	**PRIMER**	**VAPOUR BARRIER**	**INSULATION* LAYER 1**	**INSULATION* LAYER 2 (Optional)**	**BASE SHEET**	**TOP LAYER**	**SYSTEMS**
		• No vapour control layer Or • PE vapour control layer (Reaction to fire F or better) LOOSE LAID	• Sopratherm T Or • Sopratherm F • Sopratherm G 40-140 mm thickness MECHANICALLY FASTENED	• Sopratherm T 40-140 mm thickness MECHANICALLY FASTENED			Systems B1 &B2
	• Sopradere Quick Or • Aquadere	All SBS AVCL with RTF E OR • SOPRABASE SLP300 SF • SOPRABASE SLV 200 SF • SOPRAVAP GLOBAL PB A30 TF TORCHED	• Sopratherm T 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**	-			Systems B3
	• Sopradere Quick Or • Aquadere	All SBS AVCL with RTF E OR • SOPRABASE SLP300 SF • SOPRABASE SLV 200 SF • SOPRAVAP GLOBAL PB A30 TF TORCHED	• Sopratherm T Or • Sopratherm F • Sopratherm G 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**	• Sopratherm T 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**	• Ventirock SBS 3 TF • Ventiglass PB 3 TF PARTIALLY TORCHED	• Sopratorch SL 600 TORCHED	Systems B3
	• Elastocol 600	All SBS AVCL with RTF E OR SOPRAVAP STICK A15 SELF ADHERED	• Sopratherm T 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**				Systems B4
	• Elastocol 600	All SBS AVCL with RTF E OR SOPRAVAP STICK A15 SELF ADHERED	• Sopratherm T Or • Sopratherm F • Sopratherm G 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**	• Sopratherm T 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**			Systems B4

Systems C								
SUBSTRATE	**PRIMER**	**VAPOUR BARRIER**	**INSULATION* LAYER 1**	**INSULATION* LAYER 2 (Optional)**	**BASE SHEET**	**TOP LAYER**	**SYSTEMS**	
Wood Particle Board (Density: 680 kg/m³ ; thickness ≥ 16 mm) or Trapezoidal profiled Steel deck 106/750 (Thickness ≥ 0.75 mm) or Non-combustible board (Density: 1850 kg/m³ ; thickness ≥ 8 mm)	-	• No vapour control layer Or • PE vapour control layer (Reaction to fire F or better) LOOSE LAID	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED	-	• SopraStick Venti FF SELF-ADHERED (fully or partially)	• Sopratorch SL 600 TORCHED	Systems C1&C2	
	-	• No vapour control layer Or • PE vapour control layer (Reaction to fire F or better) LOOSE LAID	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED			Systems C1&C2	
	• Sopradere Quick Or • Aquadere	All SBS AVCL with RTF E OR • SOPRABASE SLP 300 SF • SOPRABASE SLV 200 SF • SOPRAVAP GLOBAL PB A30 TF TORCHED	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**	-			Systems C3	
	• Sopradere Quick Or • Aquadere	All SBS AVCL with RTF E OR • SOPRABASE SLP 300 SF • SOPRABASE SLV 200 SF • SOPRAVAP GLOBAL PB A30 TF TORCHED	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**			Systems C3	
	• Elastocol 600	All SBS AVCL with RTF E or better SOPRAVAP STICK A15 SELF ADHERED	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**				Systems C4	
	• Elastocol 600	All SBS AVCL with RTF E or better SOPRAVAP STICK A15 SELF ADHERED	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**	• Sopratherm G or • Sopratherm F 40-140 mm thickness MECHANICALLY FASTENED/ ADHERED**			Systems C4	

*Insulation is outside the scope

**Adhered with Soprabond 525 or Coltack Evolution CA or Coltack Evolution 750

Note:
Systems A, B and C are determined by different base sheets and their fixing method. The number after the systems determines the type of vapour barrier used (or not used) and its fixing method. Further details of the system definitions can be obtained from the Certificate holder.

System A	Base sheets x - fixing method 1
System B	Base sheets y - fixing method 2
System C	Base sheets z - fixing method 3

System A1	NO VAPOUR CONTROL LAYER
System A2	PE VAPOUR CONTROL LAYER - fixing method 1
System A3	BITUMINOUS VCL - fixing method 2
System A4	BITUMINOUS VCL - fixing method 3