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Agrément Certificate

95/3098

Product Sheet 4

SOPREMA SBS MODIFIED BITUMEN MEMBRANES

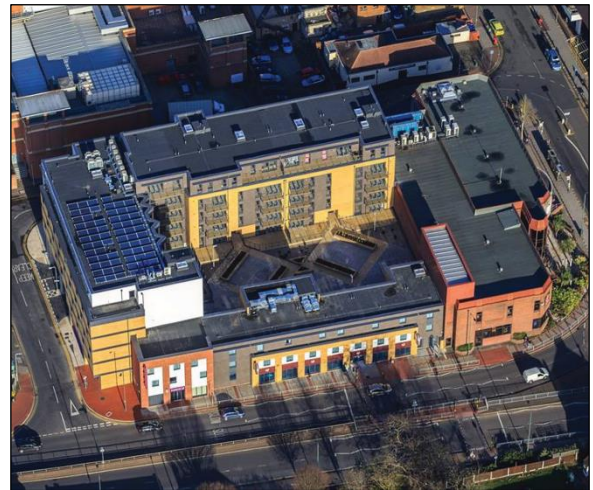
SOPRALENE OPTIMA ROOF WATERPROOFING MEMBRANES

This Agrément Certificate Product Sheet⁽¹⁾ relates to Sopralene Optima Roof Waterproofing Membranes, for use as loose-laid and ballasted roof waterproofing on flat roofs, or fully or partially bonded built-up roof waterproofing on flat, zero fall and pitched roofs with limited access.

(1) Hereinafter referred to as 'Certificate'.

CERTIFICATION INCLUDES:

- factors relating to compliance with Building Regulations where applicable
- factors relating to additional non-regulatory information where applicable
- independently verified technical specification
- assessment criteria and technical investigations
- design considerations
- installation guidance
- regular surveillance of production
- formal three-yearly review.



KEY FACTORS ASSESSED

Weather-tightness — the membranes will resist the passage of moisture into the building (see section 6).

Properties in relation to fire — the membranes can enable a roof to be unrestricted under the national Building Regulations (see section 7).

Resistance to wind uplift — the membranes will resist the effects of any likely wind suction acting on the roof (see section 8).

Resistance to foot traffic — the membranes will accept the limited foot traffic and loads associated with installation and maintenance (see section 9).

Durability — under normal service conditions, the membranes will provide a durable roof waterproofing with a service life in excess of 30 years (see section 11).



The BBA has awarded this Certificate to the company named above for the products described herein. These products have been assessed by the BBA as being fit for their intended use provided they are installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Third issue: 22 November 2017

John Albon – Head of Approvals
Construction Products

Originally certificated on 10 February 2014

Claire Curtis-Thomas
Chief Executive

The BBA is a UKAS accredited certification body – Number 113.

The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk
Readers are advised to check the validity and latest issue number of this Agrément Certificate by either referring to the BBA website or contacting the BBA direct.

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Regulations

In the opinion of the BBA, Sopralene Optima Roof Waterproofing Membranes, 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 presence of a UK map indicates that the subject is related to the Building Regulations in the region or regions of the UK depicted):



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

Requirement:	B4(2)	External fire spread
Comment:		On suitable substructures the use of the membranes can enable a roof to be unrestricted under this Requirement. See section 7 of this Certificate.
Requirement:	C2(b)	Resistance to moisture
Comment:		The membranes, including joints, will enable a roof to satisfy this Requirement. See section 6.1 of this Certificate.
Regulation:	7	Materials and workmanship
Comment:		The products are acceptable. See section 11.1 and the <i>Installation</i> part of this Certificate.



The Building (Scotland) Regulations 2004 (as amended)

Regulation:	8(1)(2)	Durability, workmanship and fitness of materials
Comment:		The use of the products satisfies the requirements of this Regulation. See sections 10.1 and 11.1 and the <i>Installation</i> part of this Certificate.
Regulation:	9	Building standards applicable to construction
Standard:	2.8	Spread from neighbouring building
Comment:		The membranes, when applied to a suitable substructure, are regarded as having low vulnerability under clause 2.8.1 ⁽¹⁾⁽²⁾ of this Standard. See sections 7.1, 7.2 and 7.4 of this Certificate.
Standard:	3.10	Precipitation
Comment:		The membranes, including joints, will enable a roof to satisfy the requirements of this Standard, with reference to clauses 3.10.1 ⁽¹⁾⁽²⁾ and 3.10.7 ⁽¹⁾⁽²⁾ . See section 6.1 of this Certificate.
Standard:	7.1(a)(b)	Statement of sustainability
Comment:		The products can contribute to meeting 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 products 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(a)(i)	Fitness of materials and workmanship
Comment:	(iii)(b)(i)	The products are acceptable. See section 11.1 and the <i>Installation</i> part of this Certificate.
Regulation:	28(b)	Resistance to moisture and weather
Comment:		The membranes, including joints, will enable a roof to satisfy the requirements of this Regulation. See section 6.1 of this Certificate.

Regulation:	36(b)	External fire spread
Comment:	On suitable substructures the use of the products can be unrestricted by the requirements of this Regulation. See section 7 of this 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.

See sections: 1 *Description* (1.2) and 3 *Delivery and site handling* (3.3) of this Certificate.

Additional Information

NHBC Standards 2017

In the opinion of the BBA, Sopralene Optima Roof Waterproofing Membranes, 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 and balconies*.

CE marking

The Certificate holder has taken the responsibility of CE marking the products in accordance with harmonised European Standard EN 13707 : 2013. An asterisk (*) appearing in this Certificate indicates that data shown are given in the manufacturer's Declaration of Performance.

Technical Specification

1 Description

1.1 Sopralene Optima Roof Waterproofing Membranes comprise:

- Sopralene Optima C3 GMF — SBS modified bitumen membrane with a composite polyester reinforcement. The upper surface is finished with granules. The selvedge is protected by a polypropylene film and the lower surface by a macro-perforated thermofusible film
- Sopralene Optima C3 AMF — SBS modified bitumen membrane with a composite polyester reinforcement. The upper surface is finished with slate. The selvedge is protected by a polypropylene film and the lower surface by a macro-perforated thermofusible film.

1.2 The products are manufactured to the nominal dimensions given in Table 1 and the physical properties given in Table 2.

Table 1 Nominal dimensions of Sopralene Optima Roof Waterproofing Membranes

Dimension (unit)	Sopralene Optima C3 GMF	Sopralene Optima C3 AMF
Thickness (mm)	5.0	4.7
Width (m)	1.0	1.0
Length (m)	8.0	8.0
Roll weight (kg)	45	42

Table 2 Nominal physical properties of Sopralene Optima Roof Waterproofing Membranes

Characteristic (unit)	Sopralene Optima C3 GMF	Sopralene Optima C3 AMF
Tensile strength (N per 50 mm)		
longitudinal	1300	1300
transverse	1000	1000
Elongation at break (%)		
longitudinal	45	45
transverse	45	45
Low temperature flexibility (°C)	-30	-30
Heat resistance (°C)	110	110

1.3 The following membranes can be used in conjunction with Sopralene Optima Membranes:

Underlayers

- Ventiglass SBS 3 TF — SBS modified bitumen membrane with a glassfibre reinforcement. The upper surface is finished with talcum or sand and the lower surface has thermofusible bitumen stripes alternated with non-stick stripes protected by a thermofusible film
- Ventirock SBS 3 TF — SBS modified bitumen membrane with non-woven polyester reinforcement. The upper surface is finished with talcum or sand, and the lower surface has thermofusible bitumen stripes alternated with non-stick stripes, protected by a thermofusible film
- Soprarock SBS P3 TF — SBS modified bitumen membrane with a composite polyester reinforcement. The upper surface is finished with talcum/sand and the lower surface is protected by a thermofusible film
- Elastophene Flam 25 AR — SBS modified bitumen membrane with glassfibre reinforcement. The upper surface is finished with slate and the lower surface is protected by a thermofusible film
- Sopralene Flam 180 TF — 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 — 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 — 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 — SBS modified self-adhesive bitumen membrane with a composite polyester reinforcement. 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 — SBS modified self-adhesive bitumen membrane with a composite polyester reinforcement. 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

Vapour control layer (VCL)

- Sopravap Stick C15 — self-adhesive SBS modified bitumen membrane with polyester reinforcement. The upper surface is finished with talcum/sand

Vapour barriers

- Sopravap EVA 35 — SBS modified bitumen membrane with a composite aluminium and a fiberglass reinforcement. The upper surface is finished with talcum/sand, and the lower surface is protected by a thermofusible film
- Sopravap BB Alu 3 TF — 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 — 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 — SBS modified bitumen membrane with a composite aluminium reinforcement. The upper and lower surfaces are provided with SBS lanes alternated with non-stick lanes, protected with a thermofusible film
- Sopravap Alu KSD — SBS modified bitumen with a composite aluminium reinforcement also acting as the upper surface protection. The lower surface is protected by a silicone release film.

1.4 Elastocol 500, Aquadere, Sopradere Quick and Elastocol 600 are cold-applied bitumen primers for the preparation of substrates.

1.5 Other products which may be used with Sopralene Optima Roof Waterproofing Membranes, but which are outside the scope of this Certificate, include:

- Soprajoint — flexible SBS elastomeric bitumen waterproofing strip, for use in expansion joints
- Alsan Flashing (Jardin) — bitumen-polyurethane resin, for use in upstands
- Easy Torch — 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 — two-component, polyurethane-based VCL
- Alsan 770 and Alsan 770TX — PMMA-based liquid-applied roof waterproofing resins.

2 Manufacture

2.1 The membranes are manufactured by saturating the reinforcement and coating with SBS modified bitumen. The finished products are surfaced with thermofusible polyethylene film, sand or slate as appropriate. The sheets are then cooled, trimmed and reeled.

2.2 As part of the assessment and ongoing surveillance of product quality, the BBA has:

- agreed with the manufacturer the quality control procedures and product testing to be undertaken
- assessed and agreed the quality control operated over batches of incoming materials
- monitored the production process and verified that it is in accordance with the documented process
- evaluated the process for management of nonconformities
- checked that equipment has been properly tested and calibrated
- undertaken to carry out the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

2.3 The management system of Soprema NV has been assessed and registered as meeting the requirements of EN ISO 9001 : 2008 and EN ISO 14001 : 2004 by BSI (Certificates FM593574 and EMS 593575 respectively).

3 Delivery and site handling

3.1 The products are delivered to site in rolls wrapped in polythene, on pallets. The roll labels bear the names of the products and the manufacturing company, and in some cases will include the BBA logo incorporating the number of this Certificate.

3.2 Individual rolls must be stored upright on the selvedge end, on a clean, smooth, level surface and kept under cover.

3.3 The Certificate holder has taken the responsibility of classifying and labelling the primers under the *CLP Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures*. Users must refer to the relevant Safety Data Sheets.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on Sopralene Optima Roof Waterproofing Membranes.

Design Considerations

4 Use

4.1 Sopralene Optima Roof Waterproofing Membranes are satisfactory for use as loose-laid and ballasted waterproofing, or fully or partially bonded waterproofing for flat, zero fall or pitched roofs with limited access, as part of a built-up specification and, where necessary, in conjunction with appropriate reinforced bitumen membranes to BS 8747 : 2007.

4.2 The membranes are suitable for use, where appropriate, as an exposed cap sheet or in detail work.

4.3 Limited access roofs are defined for the purpose of this Certificate as those subjected only to pedestrian traffic for maintenance of the roof covering and cleaning of gutters, etc. Where traffic in excess of this is envisaged, additional protection to the membrane must be provided (see section 13.4).

4.4 Flat roofs are defined for the purpose of this Certificate as those having a minimum finished fall of 1:80. For design purposes, twice the minimum finished fall should be assumed, unless a detailed analysis of the roof is available, including overall and local deflection, direction of falls, etc. Pitched roofs are defined for the purpose of this Certificate as those having a fall greater than 1:6.

4.5 Zero fall roofs are defined for the purpose of this Certificate as those having a finished fall which can vary between 0° and 0.7°. Reference should also be made to the appropriate clauses in *Liquid Roofing and Waterproofing Association (LRWA) Note 7 – Specifier Guidance for Flat Roof Falls*.

4.6 Decks to which the products are to be applied must comply with the relevant requirements of BS 6229 : 2003, BS 8217 : 2005 and, where appropriate, *NHBC Standards 2017*, Chapter 7.1.

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

- as described in the relevant clauses of BS 8217 : 2005, or
- the subject of a current BBA Certificate and used in accordance with that Certificate.

4.8 On zero fall roofs, it is particularly important to identify the correct drainage points to ensure that the drainage provided is effective.

5 Practicability of installation

Installation is designed to be carried out by installers who have been trained and approved by the Certificate holder.

6 Weathertightness



6.1 The membranes, including joints, when completely sealed and consolidated, will adequately resist the passage of moisture into the building and enable a roof to comply with the requirements of the national Building Regulations.

6.2 The membranes are impervious to water and will achieve a weathertight roof capable of accepting minor structural movement.

7 Properties in relation to fire



7.1 When tested in accordance with CEN/TS 1187 : 2012, Test 4, a system comprising a 17.5 mm thick plywood deck, one layer of Sopralene Optima GmF C3 FR and one layer of Elastophene Flam 25 AR as a fully torch-bonded cap sheet is classified as $B_{ROOF}(t4)$ in accordance with EN 13501-5 : 2005.

7.2 The membranes, when used in protected specifications including an inorganic covering listed in the Annex of Commission Decision 2000/553/EC, can be considered to be unrestricted under the national Building Regulations.



7.3 When used on flat roofs with one of the surface finishes defined in Part iii of Table A5 of Appendix A of The Building Regulations (England and Wales), or Technical Booklet E, Table 4.6, Part IV of The Building Regulations (Northern Ireland), and listed below, the roof is deemed to be of classification $B_{ROOF}(t4)$:

- 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, or macadam.



7.4 The designation of other specifications should be confirmed by:

England and Wales — test or assessment in accordance with Approved Document B, Appendix A, clause 1

Scotland — test to conform to Mandatory Standard 2.8, clause 2.8.1

Northern Ireland — test or assessment by a UKAS-accredited laboratory, or an independent consultant with appropriate experience.

8 Resistance to wind uplift

8.1 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.

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

8.3 The ballast requirements for loose-laid systems must be calculated in accordance with the relevant parts of BS EN 1991-1-4 : 2005 and its UK National Annex. The membranes must always be ballasted with a minimum depth of 50 mm of aggregate. In areas of high-wind exposure, the Certificate holder's advice should be sought. Alternatively, concrete slabs on suitable supports can be used.

9 Resistance to foot traffic

The membranes can accept the limited foot traffic and light concentrated loads associated with installation and maintenance. Reasonable care should be taken, however, to avoid puncture by sharp objects or concentrated loads. Where traffic in excess of this is envisaged, such as for maintenance of lift equipment, additional protection to the membrane in accordance with the Certificate holder's instructions must be provided.

10 Maintenance



10.1 Roofs must be the subject of annual inspections and maintenance to ensure continued performance.

10.2 Maintenance should include checks and operations to ensure that, where applicable:

- adequate ballast is in place and evenly distributed over the membrane
- protection layers are in good condition
- exposed membranes are free from the build-up of silt, unwanted vegetation and other debris.

10.3 Where damage has occurred, it should be repaired in accordance with section 15 and the Certificate holder's instructions.

11 Durability



11.1 Under normal conditions, the membranes will have a service life in excess of 30 years.

11.2 With the slate surfaced membrane, some localised loss of the slate surfacing may occur over time in areas where complex detailing of the roof design is incorporated.

12 Reuse and recyclability

The products comprise bitumen and polyester, which can be recycled.

13 General

13.1 Installation of Sopralene Optima Roof Waterproofing Membranes must be carried out in accordance with the relevant clauses of BS 8000-0 : 2014, BS 8000-4 : 1989 and BS 8217 : 2005, the Certificate holder's instructions and this Certificate.

13.2 Substrates to which the membranes are to be applied must be sound, dry, clean and free from sharp projections such as nail heads and concrete nibs.

13.3 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.

13.4 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 appropriate surface finishes referred to in clause 6.12 of the Code must be used.

13.5 At falls in excess of 1:11, the provision for mechanical fixings as required by BS 8217 : 2005 should be observed.

13.6 On completion of the roof, the sand-finished membrane, when used as a top layer, may have a surface finish applied in accordance with BS 8217 : 2005, clause 8.19. Surface finishes in the Code of Practice include:

- stone aggregate in dressing compound
- precast concrete paving slabs
- proprietary tiles on bonding compound.

13.7 When using the mineral surface finished membrane on roofs with limited access, further surface protection is not required.

14 Procedure

Fully bonded applications

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

14.2 Side laps should 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.

14.3 A second layer of waterproofing is then fully torch bonded directly on to the first layer. The laps should be offset by at least 300 mm in relation to the joints in the first layer.

Partially bonded applications

14.4 A layer of Sopralene Flam Venti 250 TF, Ventiglass SBS 3 TF or Ventirock SBS 3 TF is partially torch welded onto the substrate. Alternatively, Soprastick Venti FF is partially bonded to the substrate.

14.5 Side laps should 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.

14.6 A second layer of waterproofing is then fully torch bonded directly on to the first layer. The laps should be offset by at least 300 mm in relation to the joints in the first layer.

Loose-laid and ballasted

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

14.8 A first layer of waterproofing is loose-laid. Side laps should 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.

14.9 A second layer of waterproofing is fully torch bonded directly on to the first layer. The lap should be offset as described in section 14.3.

14.10 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.

14.11 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.

15 Repair

In the event of damage, the sheets can be effectively repaired after cleaning, with pieces of the membranes torch welded to the damaged area.

Technical Investigations

16 Tests

16.1 Tests were carried out and the results assessed to determine:

- dimensions
- dimensional stability
- tensile strength and elongation
- resistance to nail tear
- low-temperature flexibility
- flow resistance
- heat ageing followed by low-temperature flexibility and flow resistance.

16.2 Testing on joints was carried out on membranes using the same coating mass as Sopralene Optima Roof Waterproofing Membranes:

- tensile strength of joints (control and after 180 day at 60°C water exposure)
- peel resistance of joints (control and after 180 day at 60°C water exposure)
- resistance to air leakage at joints (control and after 180 day at 60°C water exposure).

17 Investigations

17.1 The manufacturing process was evaluated, including the methods adopted for quality control, and details were obtained of the quality and composition of the materials used.

17.2 An evaluation was made of reports of fire tests.

17.3 Data in UBAtc Certificate 06/1557 were evaluated in the context of UK roofing practice and Building Regulations.

Bibliography

BS 6229 : 2003 *Flat roofs with continuously supported 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 8747 : 2007 *Reinforced bitumen membranes (RBMs) for roofing — Guide to selection and specification*

BS EN 1991-1-4 : 2005 + A1 : 2010 *Eurocode 1 — Actions on structures — General actions — Wind actions*

NA to 6229BS EN 1991-1-4 : 2005 + A1 : 2010 UK National Annex to *Eurocode 1 — Actions on structures — General actions — Wind actions*

CEN/TS 1187 : 2012 *Test methods for external fire exposure to roofs*

EN 13501-5 : 2005 + A1 : 2009 *Fire classification of construction products and building elements — Classification using data from external fire exposure to roofs tests*

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

EN ISO 9001 : 2008 *Quality management systems — Requirements*

EN ISO 14001 : 2004 *Environmental management systems — Requirements with guidance for use*

18 Conditions

18.1 This Certificate:

- relates only to the product/system 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 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.

18.2 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.

18.3 This Certificate will remain valid for an unlimited period provided that the product/system 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.

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

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

18.6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product/system which is contained or referred to in this Certificate is the minimum required to be met when the product/system 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.