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Agrément Certificate 24/7219

Product Sheet 4 Issue 1

SUREBOND BITUMINOUS ROOFING MEMBRANES

SUREBOND TO SYSTEM

This Agrément Certificate Product Sheet⁽¹⁾ relates to the SureBond TO System, consisting of torch-on polymer APP modified bitumen waterproofing membranes and air and vapour control layers, for use in new and existing buildings as built-up roofing systems on pitched, flat and protected roofs, and podia, with limited access or pedestrian access and with suitable protection.

(1) Hereinafter referred to as 'Certificate'.

The assessment includes

Product factors:

- compliance with Building Regulations
- compliance with additional regulatory or nonregulatory 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 system described herein. This system 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: 16 August 2024

Hardy Giesler Chief Executive Officer

This BBA Agrément Certificate is issued under the BBA's Inspection Body accreditation to ISO/IEC 17020. Sections marked with † are not issued under accreditation.

The BBA is a UKAS accredited Inspection Body (No. 4345), Certification Body (No. 0113) and Testing Laboratory (No. 0357).

Readers MUST check that this is the latest issue of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.

The Certificate should be read in full as it may be misleading to read clauses in isolation.

Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.

British Board of Agrément

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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 the SureBond TO System, 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 system 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 system may enable a roof to be unrestricted under this

Requirement. See section 2 of this Certificate.

Requirement:

C2(b) Resistance to moisture

Comment:

The system, including joints, will enable a roof to satisfy this Requirement. See section 3

of this Certificate.

Requirement: C2(c)

C2(c) Resistance to moisture

Comment:

The system, including joints, can contribute to a roof to satisfying this Requirement. See

section 3 of this Certificate.

Regulation: Comment:

on: 7(1)

.) Materials and workmanship

The system is acceptable. See sections 8 and 9 of this Certificate.



Comment:

The Building (Scotland) Regulations 2004 (as amended)

Regulation:

8(1)(2)

Fitness and durability of materials and workmanship

The use of the system satisfies this Regulation. See sections 8 and 9 of this Certificate.

Regulation:

9 2.8 Building standards - construction

Standard:

Spread from neighbouring buildings

Comment:

The system, when applied to a suitable substructure, may enable a roof to be unrestricted

by this Standard with reference to clause $2.8.1^{(1)(2)}$. See section 2 of this Certificate.

Standard:

3.10 Precipitation

Comment:

The system, including joints, will enable a roof to satisfy this Standard, with reference to

clauses $3.10.1^{(1)(2)}$ and $3.10.7^{(1)(2)}$. See section 3 of this Certificate.

Standard:

7.1(a)

Statement of sustainability

Comment:

The system 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.

Standard:

3.15 Condensation

Comment:

The system will enable a roof to satisfy this Standard, with reference to clauses 3.15.1⁽¹⁾,

 $3.15.3^{(1)}$, $3.15.5^{(1)}$ and $3.15.6^{(1)}$. See section 3 of this Certificate.

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Regulation: 12 Building standards - conversion

Comment: Comments in relation to the system 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) Fitness of materials and workmanship

Comment: (iii)(b)(i) The system can satisfy this Regulation. See sections 8 and 9 of this Certificate.

Regulation: 28(b) Resistance to moisture and weather

Comment: The system can satisfy of this Regulation. See section 3 of this Certificate.

Regulation: 29 Condensation

Comment: The system can contribute to a roof satisfying this Regulation. See section 3 of this

Certificate.

Regulation: 36(a) External fire spread

Comment: The system 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 system may enable a roof to be unrestricted under this

Regulation. See section 2 of this Certificate.

Additional Information

NHBC Standards 2024

In the opinion of the BBA, the SureBond TO System, 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 system, 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 system.

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

Fulfilment of Requirements

The BBA has judged the SureBond TO System to be satisfactory for use as described in this Certificate. The system has been assessed as a fully bonded, multilayer layer waterproofing system, for use in new and existing buildings as built-up roofing systems on pitched, flat and protected roofs, and podia, with limited access or pedestrian access and with suitable protection.

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ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the system under assessment. The SureBond TO System consists of:

- SureBond TO Cap Sheet an atactic polypropylene (APP) modified bitumen membrane with a stabilised polyester reinforcement and mineral finish in various colours
- SureBond TO Underlayer a polyester reinforced, APP modified bitumen base layer, with a sanded upper face and a thermofusible film underside
- SureBond TO Vapour Barrier a polyester reinforced, torch-on, SBS modified bitumen vapour barrier with an aluminium core, with a polyethylene film on the underside and a sanded upper surface
- SureBond SA Vapour Barrier a polyester reinforced, self-adhesive, SBS modified bitumen vapour barrier with an aluminium core, with a polyethylene film on the underside and mineral micro granules on the upper surface
- Euroroof Spray SA Primer a solvent-based primer.

The system components have the nominal characteristics given in Table 1.

Table 1 Nominal characteristics				
Characteristic (unit)	SureBond TO	SureBond TO	SureBond SA Vapour	SureBond TO Vapour
	Cap Sheet	Underlay	Barrier	Barrier
Thickness (mm)	4.0	3.0	2.0	3.0
Width (m)	1.0	1.0	1.0	1.0
Length (m)	7.5	10.0	15.0	10.0
Mass per unit area (kg·m²)	5.1	3.5	2.3	3.7
Weight per roll (kg)	38	35	40	37

Ancillary Items

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

- SureBond SA Venting Underlay
- SureBond SA Underlay
- SureBond TO Vapour Barrier
- Euroroof Bitumen Primer
- Euroroof SA Primer
- Euroroof SA Spraybond Primer
- Monoscreed a curing screed
- V-Therm VIP a vacuum insulated panel
- Harmer AV a range of metal roof outlets
- Alumasc Multi-fix Dual Density Mineral Wool thermal insulation
- Alumasc C-Glass
- Alumasc GTF PIR Insulation Boards
- Alumasc BGT PIR Insulation Boards
- Euroroof PU Insulation Adhesive
- Skyline a polyester powder coated aluminium coping, soffit and fascia system
- Modulock a raised adjustable pedestal system for paving and decking (non-combustible version available).

The system is intended for use in fully bonded flat or pitched roofs with limited access, as part of a built-up specification and, where necessary, in conjunction with appropriate reinforced bitumen membranes.

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Definitions for products and applications inspected

The following terms have been 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
- pedestrian access roof a roof that is not subjected to vehicular traffic
- flat roof a roof having a minimum finished fall of 1:80
- pitched roof a roof having a fall in excess of 1:6.

Product assessment – key factors

The system was assessed for the following key factors, and the outcome of the assessment is 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 to CEN/TS 1187 : 2012, Test 4 and classified to EN 13501-5 : 2016, the products given in Table 2 of this Certificate achieved B_{ROOF}(t4) for slopes below 10°.

Table 2 Tested s	systems					
Layer	System 1	System 2	System 3	System 4	System 5	System 6
Substrate		18 mm OSB (density 600 kg·m³)(1)				
Air and vapour		SureBond SA Vapour Barrier ⁽¹⁾				
control layer						
(AVCL)						
Adhesive		Euroroof PU Insulation Adhesive ⁽¹⁾				
Insulation	Alumasc GTF PIR insulation (30 mm) ⁽¹⁾		Alumasc BGT PIR	Alumasc GTF	Alumasc GTF PIR	Alumasc GTF PIR
			insulation	PIR insulation	insulation	insulation
	•	•	(30 mm) ⁽¹⁾	(100 mm) ⁽¹⁾	(50+100 mm) ⁽¹⁾	(100+100 mm) ⁽¹⁾
Underlayer	SureBond SA		SureBond TO Underlayer			
	\Underlayer (2)					
Cap Sheet	1		SureBond	TO Cap Sheet		

⁽¹⁾ These components are outside the scope of this Certificate.

- 2.1.2 On the basis of data assessed, the systems listed in Table 2 will be unrestricted by the documents supporting the national Building Regulations with respect to proximity to a relevant boundary. Restrictions may apply at junctions with compartment walls.
- 2.1.3 A roof incorporating the system will be similarly unrestricted under the national Building Regulations in protected or inverted roof specifications, including an inorganic covering listed in the Annex of Commission Decision 2000/553/EC.

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⁽²⁾ Approved within Product Sheet 3 of this Certificate.

- 2.1.4 In Wales and Northern Ireland, when used on flat roofs using a substrate designated in the supporting documents with the surface finishes listed below, the roof will be similarly unrestricted:
- 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 classification and permissible areas of use of other specifications must 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 the systems to BS EN 13501-1: 2018.
- 2.2.2 The system will be restricted in use under the documents supporting the national Building Regulations in some cases.
- 2.2.3 In England, the system, when used in pitches greater than 70°, excluding upstands, must not be used less than 1 m from a relevant 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 must also be included in calculations of unprotected area.
- 2.2.4 In Wales, the system, when used in pitches greater than 70°, excluding upstands, must not be used less than 1 m from a relevant boundary, or on other buildings more than 18 m in height. Restrictions apply on assembly and recreation buildings. These constructions must also be included in calculations of unprotected area.
- 2.2.5 In Northern Ireland, for system used on walls or on roofs with 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.
- 2.2.6 In Scotland, the use of the system is unrestricted with respect to building height and proximity to a relevant boundary. However, restrictions on the overall construction may apply, depending on the reaction to fire classification achieved by the build-up, which must be established on a case-by-case basis

3 Hygiene, health and the environment

Data were assessed for the following characteristics.

3.1 Weathertightness

3.1.1 The Results of weathertightness tests are given in Table 3.

Table 3 Weathertightness resu	ults		
Product assessed	Assessment method	Requirement	Result
			(Mean)
SureBond TO Underlayer	Watertightness to EN 1928: 2000	No leakage	Pass
	10 kPa		
SureBond SA Vapour Barrier	Resistance to Peel from Support	≥25 N·(50 mm) ⁻¹	Pass
SureBond TO Vapour Barrier	(concrete) to MOAT 64		Pass
SureBond SA Vapour Barrier	Water vapour diffusion - equivalent	Value achieved	21165 m
SureBond TO Vapour Barrier	air layer thickness		1789 m
	BS EN 1931 : 2000		
SureBond SA AVCL:	Wind uplift to	Value achieved	4 kPa
Plywood, SA spray primer,	MOAT 64 : 2001		
SA AVCL			

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- 3.1.2 On the basis of data assessed, the system, including joints, when completely sealed and consolidated, will adequately resist the passage of moisture to the inside of a building and so satisfy the requirements of the national Building Regulations.
- 3.1.3 The adhesion of the bonded system is sufficient to resist the effects of wind suction, elevated temperature and thermal shock conditions likely to occur in practice and remain weathertight.

3.2 Resistance to mechanical damage

3.2.1 Results of resistance to mechanical damage tests are given in Table 4.

Product assessed	Assessment method	Requirement	Result
SureBond TO	Tensile strength to NEN 12311-1 : 2000	Value achieved	
Underlayer	Longitudinal		480 N·(50 mm) ⁻¹
ondenayer	Transverse		370 N·(50 mm) ⁻¹
	Transverse		370 14 (30 11111)
S	Langitudinal direction		305 N·(50 mm) ⁻¹
SureBond SA Vapour Barrier	Longitudinal direction		195 N·(50 mm) ⁻¹
	Transverse direction		195 (111111)
	Langitudinal direction		320 N·(50 mm) ⁻¹
SureBond TO Vapour Barrier	Longitudinal direction		195 N·(50 mm) ⁻¹
	Transverse direction		193 14.(30 111111)
SureBond TO	Elongation	Value achieved	
Underlayer	to NEN 12311-1 : 2000		
	Longitudinal		26 %
	Transverse		38 %
SureBond SA Vapour Barrier	Longitudinal direction		3 %
	Transverse direction		30 %
SureBond TO Vapour Barrier	Longitudinal direction		3 %
	Transverse direction		30 %
SureBond TO Cap Sheet	Dynamic indentation to EOTA TR-006 : 2004	Value achieved	
plus SureBond TO			
Underlayer			
- on aluminium			I_3
- on expanded polystyrene			l ₃
(EPS) insulation			
SureBond TO	Static indentation to EN 12730 : 2015	Value achieved	
Cap Sheet			
plus SureBond TO			
Underlayer			
- on concrete			20 kg
- on EPS insulation			15 kg
SureBond TO Cap Sheet	Low temperature flexibility	≤ -5°C	Pass
Surebond to cap sheet	to BS EN 1109 : 2013	3-5 C	1 033
SureBond TO Underlay	to B3 EN 1103 . 2013		Pass
Sulebolid TO Officeriay			rass
SureBond SA Vapour Barrier			Pass
SureBond TO Vapour Barrier			
	Designation to topying / noil should to	> 1FO N	Pass
SureBond SA Vapour Barrier	Resistance to tearing (nail shank) to NEN 12310-1 : 1999	≥ 150 N	
	Longitudinal direction		Pass
	Transverse direction		Pass
	Transverse an ection		1 033
SureBond TO Vapour Barrier	Longitudinal direction		Pass
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- 3.2.2 The tensile strength and elongation of the SureBond TO Cap Sheet was assessed using test data from a representative related product.
- 3.2.3 On the basis of data assessed, the system can accept, without damage, the foot traffic and light concentrated loads associated with installation and maintenance and the effects of minor movement likely to occur in practice.
- 3.2.4 Where traffic in excess of the examples given in section 3.2.3 is envisaged, such as for maintenance of lift equipment, a walkway must be provided. 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 the system were assessed.
- 8.2 Specific test data were assessed as given in Table 5.

Table 5 Durability tests			
Product assessed	Assessment method	Requirement	Result
SureBond TO Cap Sheet	Low temperature flexibility to	≤ 0°C and a maximum	Pass
SureBond SA Vapour Barrier	BS EN 1109 : 2013	deviation of 15°C to the initial	Pass
	Heat aged for 200 days at 70°C	flexibility at low temperature	
SureBond TO Underlayer	Determination of dimensional stability to	≤ 0.5%	Pass
	EN 1107-1 : 2000		
SureBond TO Cap Sheet	Resistance to slippage at 45 degrees to	≤ 2 mm	Pass
	MOAT 64 : 2001		
SureBond TO Cap Sheet	Heat resistance to EN 1110: 2010		
	Control	≥ 110°C	Pass
	Heat aged for 200 days at 70°C	≥ 90°C	Pass
	(tested at 90°C)		
SureBond SA Vapour Barrier	Resistance to Peel from Support	Aged samples should be	Pass
	(concrete) to MOAT 64	within 50% of the control and	
	Heat aged 28 days at 80°C	≥25 N·(50 mm) ⁻¹	

8.3 Service life

- 8.3.1 Under normal service conditions, the system will have a life of at least 25 Years, provided it is designed, installed and maintained in accordance with this Certificate and the Certificate holder's instructions.
- 8.3.2 Localised loss of the mineral surfacing may occur, after some years, in areas where complex detailing of the roof design is incorporated.

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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 by the BBA, and the following requirements apply in order to satisfy the performance assessed in this Certificate.
- 9.1.2 Decks to which the system is to be applied must comply with the relevant requirements of BS 6229 : 2018, BS 8217 : 2005 and, where appropriate, *NHBC Standards* 2024, Chapter 7.1.
- 9.1.3 For design purposes of flat roofs, twice the minimum finished fall must be assumed, unless a detailed structural analysis of the roof is available, including overall and local deflection, and direction of falls.
- 9.1.4 Structural decks to which the system 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 Bulk material must not be stored on one area of the roof prior to installation, to ensure that localised overloading does not occur.
- 9.1.6 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.
- 9.1.7 The substructure must satisfy the requirements of the relevant clauses of BS 8217 : 2005, and one of the surface finishes described in clause 6.12 of the Code of Practice must be used.
- 9.1.8 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.
- 9.1.9 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 Insulation materials to be used in conjunction with the system 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 be used in accordance with, and within the limitations of, that Certificate.

9.2 <u>Installation</u>

- 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 and the Certificate holder's instructions, and the relevant clauses of BS 8000-0 : 2014, BS 8000-4 : 1989 and BS 8217 : 2005.
- 9.2.3 Deck surfaces must be sound, dry and clean, and free from sharp projections such as nail heads and concrete
- 9.2.4 The system is laid in conditions normal to roofing work and must not be laid in rain, snow or heavy fog. If the temperature is below 5°C, suitable precautions must be taken against the formation of condensation on the substrate.

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- 9.2.5 At falls in excess of 5° (1:11), precautions against slippage, and requirements for mechanical fixing as required by BS 8217 : 2005, must be observed.
- 9.2.6 The SureBond SA Vapour Barrier is installed with 75mm side and 150mm end laps, by removing the release film and firmly pressure rolling the surface to achieve a continuous bond across the full width of the membrane. Ensure that the membrane is accurately aligned, including overlaps, before removing the release film, and that it does not move as the film is removed.
- 9.2.7 The main field sheet should be pressure rolled with a weighted roller to ensure full contact of the membranes; the addition of hot air may be required to achieve full adhesion in colder conditions.
- 9.2.8 The side laps (75mm) and head laps (150mm) must be hot air welded and pressure rolled with a long or medium handled 15kg roller. All laps must have a visible bleed of bitumen.
- 9.2.9 The SureBond TO Vapour Barrier is installed with 100 mm side and 150mm end laps by melting the lower surface by torching and pressing the product down. Care must be taken not to overheat the coating.
- 9.2.10 The system must always be installed with end laps staggered by approximately a quarter of its length from the previous sheet and in such a manner that no counter-seams are made in the direction of outlets.
- 9.2.11 The corners of membrane sheet to be laid under the next sheet must be cut at a 45° angle (100 x 100 mm).
- 9.2.12 The second layer of membrane must be applied astride and over the first one, always in the same direction, and approximately a quarter of its length from the previous sheet.
- 9.2.13 SureBond TO Underlay must be applied to the substrate with a propane gas torch. The entire surface must be heated, making sure that the compound forms a liquid mass in front of the roll to ensure that it saturates any superficial porosity.
- 9.2.14 The vertical membrane sheet must overlap the horizontal one by at least 100mm, prior to heating it with a gas torch and squeezing with a trowel to ensure that a bead of compound appears from underneath.
- 9.2.15 The height of the vertical details must be equivalent or superior to the finished surface by at least 150 mm.
- 9.2.16 Repeat sections 9.2.6 to 9.2.11 for SureBond TO Cap Sheet.
- 9.2.17 The NHBC requires that the system, once installed, is inspected in accordance with *NHBC Standards* 2024 Chapter 7.1, Clause 7.1.11, and undergoes an appropriate integrity test, where required. Any damage to the system assessed in this Certificate must be repaired in accordance with section 9.4 of this Certificate and reinspected, in order to maintain the system'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 systems 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 system in use requires that it is 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 meet the performance assessed in this Certificate:
- 9.4.2.1 The system must be the subject of six-monthly inspections and maintenance in accordance with the recommendations in BS 6229 : 2018, Chapter 7, and the manufacturer's own maintenance requirements, where relevant, to ensure continued satisfactory performance.
- 9.4.2.2 In the event of damage to the waterproof layer, repairs can be carried out by cleaning the area around the damage and applying a patch of the membrane as described in the Certificate holder's instructions.

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10 Manufacture

- 10.1 The production processes for the system 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.
- † 10.2 The BBA has undertaken to review 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.

11 Delivery and site handling

- 11.1 The Certificate holder stated that the system is delivered to site on pallets shrink wrapped in polythene, bearing the product name and bands bearing the Certificate holder's and product name, roll dimensions, production date, batch number and the Certificate holder's name.
- 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 a clean, level surface and kept dry, away from excessive heat and under cover.

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ANNEX A - SUPPLEMENTARY INFORMATION †

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

<u>Construction (Design and Management) Regulations 2015</u> <u>Construction (Design and Management) Regulations (Northern Ireland) 2016</u>

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 system components 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).

UKCA marking

The Certificate holder has taken the responsibility of UKCA marking the product in accordance with Designated Standard EN 13707: 2004, EN 13969: 2004, EN 14695: 2010.

CE marking

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

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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 1931 : 2000 Flexible sheets for waterproofing. Bitumen, plastic and rubber sheets for roof waterproofing. Determination of water vapour transmission properties

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 + A1 : 2015 UK National Annex to 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 — Classification using data from reaction to fire tests

EN 1107-1 : 2000 Flexible sheets for waterproofing — Determination of dimensional stability — Part 1: Bitumen sheets for roof waterproofing

EN 1109 : 2013 Flexible sheets for waterproofing — Bitumen sheets for roof waterproofing—Determination of flexibility at low temperature

EN 1110 : 2010 Flexible sheets for waterproofing — Bitumen sheets for roof waterproofing — Determination of flow resistance

EN 1928 : 2000 Flexible sheets for waterproofing — bitumen, plastic and rubber sheets for roof waterproofing - determination of watertightness

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 roofs tests

EN 13707 : 2004 + A2 : 2009 Flexible sheets for waterproofing — Reinforced bitumen sheets for roof waterproofing — Definitions and characteristics

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

EN 13969 : 2004 + A1 : 2006 Flexible sheets for waterproofing - Bitumen damp proof sheets including bitumen basement tanking sheets - Definitions and characteristics

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Conditions

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