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Agrément Certificate 24/7219

Product Sheet 3 Issue 1

## **SUREBOND BITUMINOUS ROOFING MEMBRANES**

### **SUREBOND SA SYSTEM**

This Agrément Certificate Product Sheet<sup>(1)</sup> relates to the SureBond SA System, consisting of self-adhesive SBS 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  $\dagger$  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 SA 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:

Comment:

B4(2) External fire spread

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:

7(1) Materials and workmanship

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

Regulation: 9 Building standards - construction

Standard: 2.8 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<sup>(1)(2)</sup>. 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<sup>(1)</sup>,

 $3.15.3^{(1)}$ ,  $3.15.5^{(1)}$  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 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 of this

Regulation. See section 2 of this Certificate.

### **Additional Information**

#### NHBC Standards 2024

In the opinion of the BBA, the SureBond SA 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 SA System to be satisfactory for use as described in this Certificate. The system has been assessed as a self-adhered, multilayer waterproofing system on new and existing buildings. The system is for use on pitched, flat and protected roofs, and podia, with limited access or pedestrian access and with suitable protection.

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## Product description and intended use

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

- SureBond SA Cap Sheet a styrene-butadiene-styrene (SBS) modified bitumen membrane with a stabilised polyester reinforcement and mineral finish in various colours
- SureBond SA Venting Underlay a polyester reinforced, SBS modified bitumen underlayer, with a perforated polypropylene fleece plus a removable silicone film on the underside and PE film on the upper surface
- SureBond SA Underlay a polyester reinforced, SBS modified bitumen underlayer, with a removable silicone film on the underside and PE film on the 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 SA Cap Sheet	SureBond SA Venting Underlay	SureBond SA Underlay	SureBond SA Vapour Barrier
Thickness (mm)	4.2	2.0	2.0	2.0
Width (m)	1.0	1.0	1.0	1.0
Length (m)	8.0	15.0	15.0	15.0
Mass per unit area (kg·m⁻²)	5.2	2.8	2.1	2.3
Weight per roll (kg)	40.8	42.0	37.0	40

### **Ancillary Items**

Euroroof Spraybond Primer, a solvent-based primer, is essential to use with the system and has been assessed with the system.

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 Self-Adhesive Vapour Barrier Membrane
- 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 Foamglas T4 Ready Board Warm Roof Insulation foamed glass thermal insulation
- Alumasc GTF PIR Insulation Boards
- Alumasc BGT PIR Insulation Boards
- Euroroof PU Insulation Adhesive
- Euroroof SA Primer
- Skyline a polyester powder coated aluminium coping, soffit and fascia system
- Modulock a raised adjustable pedestal system for paving and decking.

#### **Applications**

The systems are intended for use in fully or partially 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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#### <u>Definitions for products and applications inspected</u>

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 UNI CEN/TS 1187 : 2012, Test 4 and classified to UNI EN 13501-5 : 2016 the specifications given in Table 2 of this Certificate achieved  $B_{ROOF}(t4)$  for slopes below 10°.

System 1 <sup>(1)</sup>	System 2 <sup>(1)</sup>	
18 mm Plywood <sup>(2)</sup>		
PU adhesive (foamable adhesive) <sup>(2)</sup>		
SureBond SA Vapour Barrier (2 mm thick) <sup>(2)</sup>		
Polyisocyanurate (PIR) foam insulation	Polyisocyanurate (PIR) foam insulation board	
board (Class S) – 30 mm	(Class S) – 260 mm <sup>(2)</sup>	
SureBond SA Underlay (2.0 mm thick)		
SureBond SA Cap Sheet (4.2 mm thick)		
	Polyisocyanurate (PIR) foam insulation board (Class S) – 30 mm  SureBond SA Und	

- (1) Test report No 534.0DC0051/21 535.0DC0051/21 issued by LAPI; available from the Certificate holder on request.
- (2) 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.
- 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.

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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 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 systems 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

 $3.1.1\,$  Results of weathertightness tests are given in Table 3.

Table 3 Weathertightness results			
Product assessed	Assessment method	Requirement	Result
			(Mean)
SureBond SA Vapour Barrier	Resistance to Peel from Support	≥25 N·(50 mm) <sup>-1</sup>	Pass
	(concrete) to MOAT 64		
SureBond SA Vapour Barrier	Water vapour diffusion -	Value achieved	21165 m
	equivalent air layer thickness		
	BS EN 1931 : 2000		
SureBond SA Underlay	Watertightness to	No leakage	Pass
	EN 1928 : 2000 10 kPa		
Built up system:	Resistance to wind uplift to	Value achieved	-3 kPa
Plywood, SA spray primer,	MOAT 64 : 2001		
SureBond SA AVCL, Euroroof insulation			
adhesive, Euroroof PIR Insulation SA			
spray primer, SureBond SA Underlay,			
SureBond SA Cap Sheet			
SureBond SA Vapour Barrier:	Wind uplift to	Value achieved	4 kPa
Plywood, SA spray primer, SA AVCL	MOAT 64 : 2001		
	·	•	•

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.

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3.1.3 The adhesion of the system is sufficient to resist the effects of wind suction, elevated temperature and thermal shock conditions likely to occur in practice.

## 3.2 Resistance to mechanical damage

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

<u> </u>	esults		
Product assessed	Assessment method	Requirement	Result
SureBond SA Cap Sheet	Tensile strength to NEN EN 12311-1: 1999	Value achieved	
	Longitudinal direction		735 N·(50 mm) <sup>-1</sup>
	Transverse direction		530 N·(50 mm) <sup>-1</sup>
SureBond SA Underlay	Longitudinal direction		695 N·(50 mm) <sup>-1</sup>
	Transverse direction		505 N·(50 mm) <sup>-1</sup>
SureBond SA Venting Underlay	Longitudinal direction		745 N·(50 mm) <sup>-1</sup>
3	Transverse direction		520 N·(50 mm) <sup>-1</sup>
SureBond SA Vapour Barrier	Longitudinal direction		305 N·(50 mm)⁻¹
·	Transverse direction		195 N·(50 mm) <sup>-1</sup>
SureBond SA Cap Sheet	Elongation to NEN EN 12311-1: 1999	Value achieved	,
r	Longitudinal direction		42 %
	Transverse direction		46%
SureBond SA Underlay	Longitudinal direction		37 %
,	Transverse direction		46%
SureBond SA Venting Underlay	Longitudinal direction		39 %
,	Transverse direction		45 %
SureBond SA Vapour Barrier	Longitudinal direction		3 %
•	Transverse direction		30 %
SureBond SA Cap Sheet	Dynamic indentation	Value achieved	
plus SA Underlay	to EOTA TR-006 : 2004		
- on aluminium			$I_4$
- on EPS insulation			$I_4$
SureBond SA Cap Sheet	Static indentation	Value achieved	
plus SA Underlay	to EN 12730 : 2015		
- on aluminium			20 kg
- on EPS insulation			20 kg
SureBond SA Cap Sheet	Resistance to tearing to NEN EN 12310-1: 1999	≥ 50 N	
·	Longitudinal direction		Pass
	Transverse direction		Pass
SureBond SA Underlay	Longitudinal direction		Pass
•	Transverse direction		Pass
SureBond SA Venting Underlay	Longitudinal direction		Pass
,	Transverse direction		Pass
SureBond SA Vapour Barrier	Longitudinal direction		Pass
P	Transverse direction		Pass
SureBond SA Cap Sheet	Low temperature flexibility to BS EN 1109 :	≤ - 15°C	Pass
SureBond SA Underlay	2013		Pass
SureBond SA Venting Underlay			Pass
SureBond SA Vapour Barrier			Pass

3.2.2 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.

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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. 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 SA Cap Sheet	Low temp flexibility to BS EN 1109 2013	≤ 0°C and a maximum	Pass
SureBond SA Vapour Barrier	Heat aged for 200 days at 70°C	deviation of 15°C to the initial	Pass
		flexibility at low temperature	
SureBond SA Cap Sheet	Resistance to slippage at 45 degrees to	< 2 mm	Pass
	MOAT 64 : 2001		
SureBond SA Underlay	Determination of dimensional stability to	≤ 0.5 %	Pass
	EN 1107-1 : 2000		
SureBond SA Cap Sheet	Heat resistance to EN 1110: 2010		
	Control	≥ 100°C	Pass
	Heat aged for 200 days at 70°C	≥ 90°C	Pass
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) <sup>-1</sup>	

#### 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 systems 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 nibs.
- 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 substrate must be primed with Euroroof Spraybond Primer.
- 9.2.10 SureBond SA Underlay or SureBond SA Venting Underlay must be installed with 75 mm side and 150 mm 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.
- 9.2.11 The membrane must be accurately aligned, including overlaps, before removing the release film, and must not move as the film is removed.
- 9.2.12 The main field sheet must 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.
- 9.2.13 The side laps and head laps must be hot air welded and pressure rolled with a long or medium handled 15 kg roller.
- 9.2.14 The underlayer must be primed with Euroroof Spraybond Primer prior to installing SureBond SA Cap Sheet.
- 9.2.15 SureBond SA Cap Sheet must be rolled carefully and the membrane installed with 100 mm side and 150 mm 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. Installation of the cap sheet is completed by following sections 9.2.8 and 9.2.10.
- 9.2.16 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.
- 9.2.17 The corners of membrane sheet which will be laid under the next sheet must be cut at a  $45^{\circ}$  angle ( $100 \times 100 \text{ mm}$ ).
- 9.2.18 The upper layer of membrane must be applied astride and over the first one, always in the same direction.
- 9.2.19 The height of the vertical details must be equivalent or superior to the finished surface by at least 150 mm.
- 9.2.20 The NHBC requires that the system, once installed, is inspected in accordance with *NHBC Standards* 2024, Chapter 7.1, Clause 7.1.11, including undergoing 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 system 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.

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- 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.

#### 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 product is delivered to site on pallets shrink wrapped in polythene, bearing the product name and bands bearing the Certificate holder's and product names, roll dimensions, production date and batch number.
- 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> 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 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 8217: 2005 Reinforced bitumen membranes for roofing — 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 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

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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

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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

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

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## **Conditions of Certificate**

### **Conditions**

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