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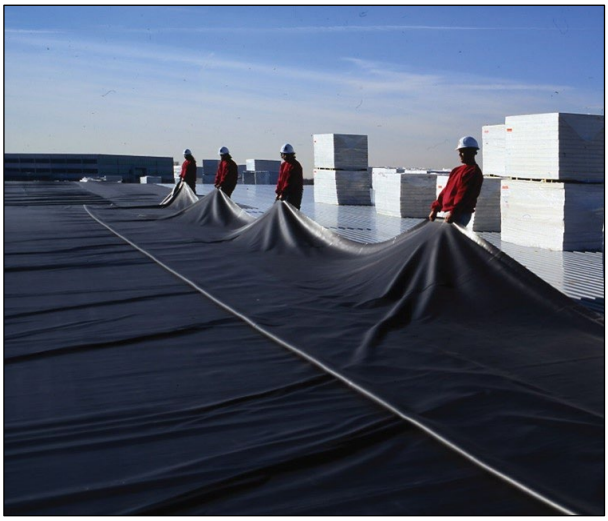
Agrément Certificate
89/2216
Product Sheet 1 Issue 11

ELEVATE ROOF WATERPROOFING MEMBRANES

ELEVATE RUBBERGARD EPDM SYSTEM

This Agrément Certificate Product Sheet(1) relates to the Elevate RubberGard EPDM System, comprising single layer waterproofing membranes, for use on flat or pitched roofs with limited access, in fully adhered, mechanically fastened, loose-laid and ballasted and inverted roof specifications.

(1) Hereinafter referred to as 'Certificate'.



The assessment includes

Product factors:

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

Process factors:

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

Ongoing contractual Scheme elements†:

- regular assessment of production
- formal 3-yearly review

KEY FACTORS ASSESSED

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

The BBA has awarded this Certificate to the company named above for the 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 Eleventh issue: 14 June 2024

Originally certified on 31 March 1989

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.

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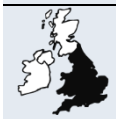
SUMMARY OF ASSESSMENT AND COMPLIANCE

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 Elevate RubberGard EPDM 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 by 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.
Regulation:	**7(1)**	**Materials and workmanship**
Comment:		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(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.
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)(ii) (iii)(iv)(b)(i)**	**Fitness of materials and workmanship**
Comment:		The system is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**28(b)**	**Resistance to moisture and weather**
Comment:		The system, including joints, will enable a roof to satisfy 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 by this Regulation. See section 2 of this Certificate.

Additional Information

NHBC Standards 2024

In the opinion of the BBA, the Elevate RubberGard EPDM 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 Elevate RubberGard EPDM System to be satisfactory for use as roof waterproofing membranes as described in this Certificate. The system has been assessed for use on flat or pitched roofs with limited access, in fully adhered, mechanically fastened, loose-laid and ballasted and inverted roof specifications.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the system under assessment. The Elevate RubberGard EPDM System consists of a non-reinforced black ethylene-propylene-diene terpolymer (EPDM) membrane, RubberGard EPDM LSFR.

The system has the nominal characteristics given in Table 1.

Table 1 Nominal characteristics

Characteristic (unit)	Value	
	RubberGard EPDM LSFR 1.1	RubberGard EPDM LSFR 1.5
Thickness (mm)	1.1	1.5
Roll length (m)	15.25, 30.50, 45.75 and 61.00	
Roll widths (m)	2.28, 3.05, 6.10, 9.15, 12.20 and 15.25	
Mass per unit area ($kg \cdot m^{-2}$)	1.35	1.85

Ancillary Items

The following ancillary items must be used with the system and have been assessed with the system:

- Bonding Adhesive BA-2012 — a solvent-based contact adhesive
- QuickSeam Splice Tape (76 or 152 mm) — a double-sided butyl self-adhesive tape for use in lap joints
- QuickSeam FormFlash — self-adhesive uncured ethylene-propylene-diene-monomer (EPDM) for use as a flashing material, especially where irregular shapes are involved
- Bonding Adhesive BA-2004 (T) — a contact adhesive
- Modular water-based bonding adhesive — a water-based adhesive
- Termination bar — an aluminium bar for terminating the system at upstands of concrete or masonry
- Batten bars — metal strips to mechanically attach the membrane, QuickSeam RMA Strip or QuickSeam RPFS (Reinforced Perimeter Fastening Strip)
- Fasteners — a range of all-purpose and heavy-duty fasteners, type dependent on specification and substrate.

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:

- QuickSeam Flashing — self-adhesive fast curing EPDM strip for use to flash metal edge trim details
- QuickSeam Batten Cover Strip — a self-adhesive semi-cured EPDM strip for use as a sealing tape over fixings
- QuickSeam SA Flashing — self-adhesive cured EPDM strip for use as a flashing material
- QuickSeam Penetration Pocket — a prefabricated pocket for use with Pourable Sealer S-10 at irregular shaped roof penetrations
- QuickPrime Plus Primer — for preparing the system or other compatible substrates to receive QuickSeam products
- Pourable Sealer S-10 — for sealing penetration pocket details
- Splice Wash SW-100 — for cleaning heavily contaminated EPDM surfaces
- Water Block Seal S-20 — butyl-based sealant
- Lap Sealant HS — an EPDM edge sealant for use with cut QuickSeam components
- QuickSeam Walkway Pads — for use in areas of high accessibility
- QuickSeam RMA (Reinforced Mechanically Anchored) Strip — a reinforced EPDM membrane strip for non-penetrating mechanical attachment
- QuickSeam RPFS (Reinforced Perimeter Fastening Strip) — a reinforced EPDM membrane strip for the attachment of membranes at base tie-in details
- QuickSeam Universal Pipe Flashing — a prefabricated pipe boot for flashing circular roof penetrations.

Applications

The system is intended for use as a single-layer waterproofing membrane in the following specifications:

- loose-laid and ballasted waterproofing, mechanically fixed at perimeters and upstands, on flat roofs with limited access
- fully adhered waterproofing, mechanically fixed at perimeters and upstands, on flat and pitched roofs with limited access
- mechanically fixed (using one of three fixing systems) waterproofing, on flat roofs with limited access
- a loose-laid system to the inverted roof concept, mechanically fixed at perimeters and upstands, on flat roofs with limited access.

Definitions for products and applications inspected

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

- limited access roof — a roof subjected only to pedestrian traffic for maintenance of the roof covering, cleaning of gutters, etc
- flat roof — a roof having a minimum finished fall of 1:80
- 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 assessments 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 ENV 1187 : 2002, Test 4 and classified to EN 13501-5 : 2005, the constructions below achieved B_{ROOF}(t4) for slopes below 10°:

- an 18 mm plywood substrate, a mechanically fastened 120 mm glass-faced polyisocyanurate foam insulation board(1), and a layer of Elevate RubberGard EPDM LSFR 1.1 bonded with Elevate Bonding Adhesive BA-2012 (2)
- an 18 mm plywood substrate, a 250 µm polyethylene air and vapour control layer (AVCL)1), a mechanically fastened 100 mm glass-faced polyisocyanurate foam insulation board(1), and a layer of Elevate RubberGard EPDM LSFR 1.1 bonded with Elevate Modular Water-Based Bonding Adhesive(3)
- a 0.7 mm trapezoidal profiled steel deck(4), a 250 µm polyethylene vapour control layer (VCL)(1), a glass-faced 100 mm polyisocyanurate foam insulation board(1), and a layer of Elevate RubberGard EPDM LSFR 1.1 mechanically fastened(4).

(1) These components are outside the scope of this Certificate.
(2) Test report WF21832A and classification report 21832B, issued by Warrington Fire are available from the Certificate holder on request.
(3) Test report WF 327780 and classification report 328652, issued by Warrington Fire are available from the Certificate holder on request.
(4) Test report WF 327799 and classification report 328648, issued by Warrington Fire are available from the Certificate holder on request.

2.1.2 On the basis of data assessed, the constructions described in section 2.1.1 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 When used in conjunction with one of the inorganic coverings listed in the Annex of Commission Decision 2000/553/EC, the system will also be unrestricted with respect to proximity to a relevant boundary under the documents supporting the national Building Regulations.

2.1.4 The classification and permissible areas of use of other specifications must be established 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 declared a reaction to fire classification to EN-13501-1 : 2018 of Class E for the system(1).

(1) Test reports WF 11297A and 13701A and classification reports WF 11297B & 13701B, issued by WarringtonFire, are available from the Certificate holder on request.

2.2.2 On the basis of data assessed, 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 and Northern Ireland, 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 Scotland, the system may be used without restriction in terms of 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 complete system, 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 2.

Table 2 Weathertightness results

Product/system assessed	Assessment method	Requirement	Result
RubberGard EPDM LSFR 1.1 and 1.5	Watertightness to BS EN 1928 : 2000	No leakage after 24 hours exposure 60 kPa pressure	Pass
RubberGard EPDM LSFR 1.1 and 1.5	Water vapour permeability rate to BS 3177 : 1959	Value achieved	0.29 $g \cdot m^{-2}$ day^{-1}
RubberGard EPDM LSFR 1.1 and 1.5	Water vapour resistance rate to BS 3177 : 1959	Value achieved	707 $MN \cdot s \cdot g^{-1}$
RubberGard EPDM LSFR 1.1 and 1.5	Water absorption to MOAT 66 : 2001	≤ 2%	Pass
RubberGard EPDM LSFR 1.1 bonded to an 18 mm wood particle board using Bonding Adhesive BA-2004 / Water Based Bonding Adhesive	Wind uplift to MOAT 27 : 5.1.2 : 1983	Value achieved	9 kPa
RubberGard EPDM LSFR 1.1 bonded to wood particle board using Bonding Adhesive BA-2012	Thermal shock/wind uplift to MOAT 27: 5.1.3 : 1983	Value achieved	7 kPa
RubberGard EPDM LSFR 1.1 bonded using Bonding Adhesive BA-2012 to an 80 mm glass-faced polyisocyanurate insulation mechanically fixed on steel deck	Wind uplift to MOAT 66 : 2001	Value achieved	10 kPa
Quickseam Splice tape	Joint tensile strength to MOAT 46 : 1988 Unaged tested at:		
	23°C	200 $N \cdot (50\ mm)^{-1}$	Pass
	80°C	50 $N \cdot (50\ mm)^{-1}$	Pass
	-20°C	200 $N \cdot (50\ mm)^{-1}$	Pass

3.1.2 The resistance to peeling and resistance to sliding of the system were assessed using test data from a representative related system.

3.1.3 On the basis of data assessed, the system, including joints, when completely sealed and consolidated, will adequately resist the passage of moisture into the inside of a building and so enable a roof to comply with the requirements of the national Building Regulations.

3.1.4 The system will sufficiently resist the effects of wind suction likely to be experienced in the UK (see sections 9.1.6 to 9.1.11).

3.2 Resistance to mechanical damage

3.2.1 The tensile properties, resistance to tearing, resistance to impact and loading, and fatigue properties of the system were assessed using test data of a representative related system.

3.2.2 On the basis of data assessed, the system can accept the limited foot traffic and light concentrated loads associated with installation and maintenance. Reasonable care must be taken to avoid puncture by sharp objects or concentrated loads.

3.2.3 Where traffic in excess of this is envisaged, such as for maintenance of lift equipment, a walkway must be provided (for example, using concrete slabs supported on bearing pads). The advice of the Certificate holder must be sought on the most appropriate method to be used with the amount of traffic involved, but such advice is outside the scope of this Certificate.

3.2.4 Constructions incorporating the system are capable of accepting minor structural movement while remaining weathertight.

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 shown in Table 3.

Table 3 Durability results

Product assessed	Assessment method	Requirement	Result
RubberGard EPDM LSFR 1.1	Dimensional stability (free) to MOAT : 27 : 1983	≤ 0.5%	Pass
RubberGard EPDM LSFR 1.5	Dimensional stability (free) to MOAT : 27 : 1983	≤ 0.5%	Pass
QuickSeam Splice tape	Joint tensile strength to MOAT 66 : 2001 Heat aged at 80°C for 4 weeks, tested at: 23°C	200 N·(50 mm)$^{-1}$	Pass

8.3 Service life

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

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 and 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 or direction of falls etc.

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 must be made for loading deflections to ensure that the free drainage of water is maintained.

9.1.5 Contact with bituminous, coal tar and oil-based products must be avoided as the system is incompatible with lower grades of bitumen. If contact with such products is likely, a separating layer must be interposed before installing the waterproof sheet. Where doubt arises, the advice of the Certificate holder should be sought, but such advice is outside the scope of this Certificate.

9.1.6 Imposed loads, dead loading and wind load specifications 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 resistance to wind uplift of a mechanically fastened waterproofing layer is provided by the fasteners passing through the membrane into the substrate. The number and position of fixings will depend on a number of factors, including:

- wind uplift forces to be restrained
- pull-out strength of fasteners
- tensile properties of the membrane
- appropriate calculation of the safety factors.

9.1.8 The wind uplift forces must be calculated by a suitably experienced and competent individual in accordance with BS EN 1991-1-4 : 2005 and its UK National Annex. On this basis, the number of fixings required should be established using a permissible loads retrieved from full scale wind uplift testing.

9.1.9 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.

9.1.10 When the system is fully adhered to insulation boards, the resistance to wind uplift will be dependent on the cohesive strength of the insulation and the method by which it is secured to the roof deck. This must be taken into account when the insulation material is selected. Faced polyurethane should be mechanically fixed to prevent bowing.

9.1.11 When the system is used in a loose-laid and ballasted systems, the precise ballast requirements must be calculated in accordance with the relevant parts of BS EN 1991-1-4 : 2005. The use of concrete slabs on suitable supports should be considered in areas of high wind exposure, and the advice of the Certificate holder should be sought, but such advice is outside the scope of this Certificate.

9.1.12 The drainage systems for inverted roofs must be correctly designed, and the following points must be addressed:

- provision made for access for maintenance purposes
- additional guidance for inverted roof specifications is given in BBA Information Bulletin No 4 *Inverted roofs – Drainage and U value corrections.*

9.1.13 Insulation materials to be used in conjunction with the system must be in accordance with the Certificate holder's instructions and be:

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

9.2 Installation

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

9.2.2 Installation of the system must be carried out by installers trained and approved by the Certificate holder in accordance with BS 6229: 2018, BS 8000-0 : 2014, BS 8000-4 : 1989, the Certificate holder's instructions and this Certificate.

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

9.2.4 When the system is to be laid over a rough substrate, an appropriate isolating material, cover board or insulation board must be installed first.

9.2.5 Installation must not be carried out during wet weather (eg rain, fog or snow), or when the temperature is below 0°C. Special precautions in accordance with the Certificate holder's instructions must be taken if the system is to be installed at temperatures below 5°C due to the risk of condensation contaminating the bonding adhesive.

9.2.6 The Water-Based Bonding Adhesive must not be applied if there is a possibility of freezing temperatures within 48 hours after application.

9.2.7 The system must be mechanically fixed around perimeters of the roof at 305 mm maximum centres.

9.2.8 The membranes must be unrolled into position and allowed to acclimatise for 30 minutes prior to fixing and/or lap jointing. Care must be taken to avoid ripples or folds in the sheets.

9.2.9 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 must be repaired in accordance with section 9.4 of this Certificate and reinspected, in order to maintain system performance.

9.3 Workmanship

The practicability of installation was assessed by the BBA on the basis of the Certificate holder's instructions and BS 8217 : 2005. To achieve the performance described in this Certificate, installation of the system must be carried out by installers 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 satisfy 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 made in BS 6229 : 2018, Chapter 7 and Certificate holder's own maintenance requirements, where relevant, to ensure continued satisfactory performance.

9.4.2.2 In the event of damage, repairs must be carried out in accordance with 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 system is delivered to site in rolls, each wrapped in a polythene sleeve bearing the system name, thickness, Certificate holder's name and the BBA logo incorporating the number of this Certificate.

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

11.2.1 The membrane is not subject to any particular storage conditions, but the Elevate QuickSeam components must be stored in a clean, dry position and in temperatures between 15 and 25°C.

11.2.2 Elevate RubberGard Bonding Adhesive BA-2012, Elevate RubberGard Bonding Adhesive BA-2004 (T), and Elevate Modular Water-Based Bonding Adhesive must be stored between 15 and 25°C.

11.2.3 Elevate Modular Water-Based Bonding Adhesive must not be allowed to freeze.

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.

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

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

CLP Regulations

The Certificate holder has taken the responsibility of classifying and labelling the 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).

CE marking

The Certificate holder has taken the responsibility of CE marking the system in accordance with harmonised European Standard EN 13956 : 2012.

Management Systems Certification for production

The management system of the manufacturer has been assessed and registered as meeting the requirements of ISO 9001 : 2015 and by Lloyds Register (Certificate 10516231).

Additional information on installation

General

A.1 The guidance given in the 2020 SPRA Single Ply Design Guide (S1/2020) must be followed during installation.

A.2 Sheets may be prefabricated prior to application to reduce the amount of on-site lap jointing. Prefabrication is only suitable for loose-laid and ballasted applications.

A.3 For specific flashing requirements, the advice of the Certificate holder should be sought, but such advice is outside the scope of this Certificate.

Procedure

Loose-laid and ballasted applications

A.4 The membrane is unrolled onto the substrate and mechanically fixed at perimeter bases as described in section A.22 and A.23. The membrane is normally fully adhered at upstands and perimeters. Lap jointing and flashing must be carried out in the manner described in sections A.21 and A.24 to A.26 respectively.

A.5 The system must be covered by at least a 50 mm thickness of 20 to 40 mm grade well-rounded gravel. A protective mat of non-woven polyester fleece (minimum 200 $g \cdot m^{-2}$) should be laid between the membrane and the aggregate. In areas of high wind exposure, paving slabs may be considered for use at a distance of one metre from the perimeter, to avoid damage to the membranes due to wind uplift.

A.6 An alternative method of ballasting is the use of concrete paving, maximum size 600 by 600 mm by 50 mm thick. A non-woven polyester fleece (minimum 200 $g \cdot m^{-2}$) must be laid between the EPDM and the supports.

A.7 When using a loose-laid application, normal account must be taken in the design of the deck of the extra dead load due to the weight of the aggregate.

A.8 When the membrane is to be laid directly onto a concrete deck, a separating layer of a non-woven polyester fleece (minimum 200 $g \cdot m^{-2}$) must first be laid on the deck. This is not required if insulation is to be laid immediately under the membrane. When used as the waterproofing layer in a roof designed to the inverted roof concept, a separating layer of non-woven polyester fleece must be laid between the concrete deck and the system.

Fully adhered applications

A.9 All insulation boards must be attached to the structural deck by adhesive or mechanical fastening (a minimum of four fixings per board) as appropriate to the type and thickness. The method of attachment must be adequate to provide resistance to wind uplift forces as defined in BS EN 1991-1-4 : 2005. When installed over glass fibre, mineral wool-based or polystyrene insulations, a suitable separation layer is either mechanically fastened or adhered over the insulation prior to the application of the waterproofing.

A.10 When used as a fully bonded system, the resistance to wind uplift will be limited by the cohesive strength of the insulation and method of attachment. These factors must be taken into account when selecting the insulation material.

A.11 The fully bonded application must not be used directly onto insulation materials that will be adversely affected by the solvent in the adhesive (eg polystyrene). The width of the system must not exceed 6.1 m for this type of application.

A.12 When used over expansion joints, bridging strips unbonded for a minimum of 150 mm are installed over all joints.

A.13 A layer of Bonding Adhesive BA-2004 (T) or Modular Water-Based Bonding Adhesive is applied to both the substrate and the membrane by means of a roller, at an approximate application rate of 0.8 and 0.5 litres per metre square respectively (the exact rate dependent on the porosity of the substrate). When the adhesive has become touch dry, the membrane is applied to the substrate and rolled to ensure a full bond and that no air has been trapped beneath the membrane.

A.14 Alternatively, a layer of Modular Water-Based Bonding Adhesive is applied to the approved substrate at an application rate of between 1.47 and 2.45 metres square per litre. The membrane is applied to the adhesive while wet and rolled to ensure a full bond and that no air has been trapped beneath the membrane.

A.15 Alternatively, a layer of Bonding Adhesive BA-2012 should be roller- or spray-applied to both the substrate and the membrane at an approximate of 0.3 litres per square metre. When the adhesive has become touch dry, the membrane should be applied to the substrate and compressed with a stiff brush to ensure a full bond and that air has not been trapped beneath the membrane.

Mechanically fixed applications — fixing battens

A.16 The fixings may be waterproofed either within the lap joint of adjacent sheets (batten-in-seam system) or by covering with QuickSeam Batten Cover Strip (150 mm wide) centrally lapped over the batten (mechanically anchored system). Alternatively, QuickSeam RMA Strips are pre-attached to the deck using battens and the membrane is spliced to the strips using QuickPrime Plus.

A.17 Where the batten-in-seam system is used, the lap is a minimum width of 200 mm, of which 70 mm should be between the centre of the Fixing Batten and the exposed edge of the lap.

A.18 Where the mechanically anchored system is used, the lap must be a minimum of 100 mm. The width of the system must not exceed 9.15 m for this type of application.

A.19 Fixing Battens are attached to the substrate by screws passing through the system or the QuickSeam RMA Strip and the batten.

A.20 The membrane is normally fully adhered at penetrations, although mechanical fixing may be used as described in section A.21 and A.22. Lap jointing and flashing must be carried out in the manner described in sections A.21 and A.24 to A.26 respectively.

Details

Seaming procedure — QuickSeam

A.21 The lap joint area must be prepared with QuickPrime Plus Primer (alternatives should not be used). QuickSeam Splice Tape is positioned over the lower sheet's lap area and unrolled, leaving the release paper in place and rolling with a silicone roller. The upper sheet is placed into position and mated to the tape by hand whilst the release paper is removed, and the seam rolled with a silicone roller. Care must be taken to avoid ripples or folds.

Base Tie-In

A.22 At perimeters and upstands, QuickSeam RPFS (Reinforced Perimeter Fastening Strip) is mechanically fastened with a batten bar to the substrate. The field system is bonded to the strip using QuickPrime Plus Primer and continued up the vertical substrate of the wall using Bonding Adhesive BA-2004 (T) or BA-2012.

Alternative Base Tie-In

A.23 Concurrently with the installation of the EPDM membrane, the EPDM flashing is applied. It is lapped and bonded to the horizontal membrane in accordance with section A.22, with a minimum lap of 100 mm.

Flashing

A.24 The flashing is bonded to the vertical surface with the bonding adhesive in accordance with section A.13 and A.15.

A.25 The flashing is mechanically fixed at its upper edge and protected by dressing back to the wall and covering with coping stones, or by the use of counter-flashing.

A.26 For specific flashing requirements, the advice of the Certificate holder should be sought, but such advice is outside the scope of this Certificate.

Bibliography

BS 3177 : 1959 *Method for determining the permeability to water vapour of flexible sheet materials used for packaging*

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 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 EN 1991-1-1 : 2002 *Eurocode 1— Actions on structures - Part 1-1: General actions — Densities, self-weight, imposed loads for buildings*
BS EN 1991-1-3 : 2003 *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 action*
NA to BS EN 1991-1-4 : 2005 + A1 : 2010 *Eurocode 1 — Actions on structures — General actions — Wind action*

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

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

EN 13956 : 2012 *Flexible sheets for waterproofing — Plastic and rubber sheets for roof waterproofing — Definitions and characteristics*

ENV 1187 : 2002 *Test methods for external fire exposure to roofs* ISO 9001 : 2015 *Quality management systems — Requirements*

MOAT 27 : 1983 *General Directive for the Assessment of Roof Waterproofing Systems*

MOAT 46 : 1988 *Special Directives for the Assessment of Roof Waterproofing Systems with Non-reinforced Vulcanized EPDM*

MOAT 66 : 2001 *UEAtc Technical Guide for the Assessment of Non-Reinforced, Reinforced and/or Backed Roof Waterproofing Systems made of EPDM*

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