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Agrément Certificate

22/6060

Product Sheet 1, issue 1

STARFLEX MONO SYSTEMS

STARFLEX MONO ROOF WATERPROOFING SYSTEMS

This Agrément Certificate Product Sheet⁽¹⁾ relates to STARFLEX MONO Roof Waterproofing Systems, for use on new and existing flat and pitched roofs with limited access or pedestrian access, including balconies and terraces.

(1) Hereinafter referred to as 'Certificate'.

CERTIFICATION INCLUDES:

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

KEY FACTORS ASSESSED

Weathertightness — the systems will resist the passage of moisture to the interior of a building (see section 6).

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

Adhesion — the adhesion of the systems is sufficient to resist the effects of any likely wind suction and the effects of thermal or other minor movement likely to occur in practice (see section 8).

Resistance to mechanical damage — the systems will accept, without damage, the limited foot traffic and loads associated with installation, maintenance, pedestrian traffic (anti-slip specification) and minor structural movements occurring in service (see section 9).

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

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

On behalf of the British Board of Agrément

Date of First issue: 16 June 2022

Hardy Giesler
Chief Executive Officer

Certificate amended on 6 July 2022 to update pack sizes in Table 1.

Certificate amended on 24 January 2023 to update name of system component.

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

The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk

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

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Regulations

In the opinion of the BBA, STARFLEX MONO Roof Waterproofing Systems, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations (the presence of a UK map indicates that the subject is related to the Building Regulations in the region or regions of the UK depicted):



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

Requirement:	B4(1)	External fire spread
Comment:	The systems are restricted by this Requirement in some circumstances. See sections 7.3 and 7.7 of this Certificate.	
Requirement:	B4(2)	External fire spread
Comment:	On suitable substructures, the systems may enable a roof to be unrestricted under this Requirement. See sections 7.1, 7.2 and 7.4 of this Certificate.	
Requirement:	C2(b)	Resistance to moisture
Comment:	The systems will enable a roof to satisfy this Requirement. See section 6.1 of this Certificate.	
Regulation:	7(1)	Materials and workmanship
Comment:	The systems are acceptable. See section 11 and the Installation part of this Certificate.	
Regulation:	7(2)	Materials and workmanship
Comment:	Use of the systems on balconies is restricted under this Regulation. See sections 7.3 and 7.5 of this Certificate.	



The Building (Scotland) Regulations 2004 (as amended)

Regulation:	8(1)(2)	Durability, workmanship and fitness of materials
Comment:	The systems can satisfy the requirements of this Regulation. See sections 10.1 and 11 and the <i>Installation</i> part of this Certificate.	
Regulation:	9	Building standards applicable to construction
Standard:	2.2	Separation
Standard:	2.7	Spread on external walls
Comment:	Use of the systems on balconies is restricted under clause 2.2.7 ⁽¹⁾ and 2.7.2 ⁽¹⁾⁽²⁾ of this Standard. See sections 7.3 and 7.6 of this Certificate.	
Standard:	2.6	Spread to neighbouring buildings
Comment:	The systems are restricted under clause 2.6.4 ⁽¹⁾⁽²⁾ of this Standard in some circumstances. See sections 7.3 and 7.8 of this Certificate.	
Standard:	2.8	Spread from neighbouring buildings
Comment:	When applied to a suitable substructure the systems may enable a roof to be unrestricted under clause 2.8.1 ⁽¹⁾⁽²⁾ of this Standard. See sections 7.1, 7.2 and 7.4 of this Certificate.	
Standard:	3.10	Precipitation
Comment:	The use of the systems will enable a roof to satisfy the requirements of this Standard, with reference to clauses 3.10.1 ⁽¹⁾⁽²⁾ and 3.10.7 ⁽¹⁾⁽²⁾ . See section 6.1 of this Certificate.	
Standard:	7.1(a)	Statement of sustainability
Comment:	The systems can contribute to meeting the relevant requirements of Regulation 9, Standards 1 to 6 and therefore will contribute to a construction meeting a bronze level of sustainability as defined in this Standard.	

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



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

Regulation:	23(a)	Fitness of materials and workmanship
Comment:	(b)(i)	The systems are acceptable. See section 11 and the <i>Installation</i> part of this Certificate.
Regulation:	28(b)	Resistance to moisture and weather
Comment:		The systems will enable a roof to satisfy the requirements of this Regulation. See section 6.1 of this Certificate.
Regulation:	36(b)	External fire spread
Comment:		On suitable substructures, the use of the systems may enable a roof to be unrestricted by this Regulation. See sections 7.1, 7.2 and 7.4 of this Certificate.

Construction (Design and Management) Regulations 2015

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

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

See sections: 3 *Delivery and site handling* (sections 3.2 and 3.3) and 4 *General* (section 4.9) of this Certificate.

Additional Information

NHBC Standards 2022

In the opinion of the BBA, STARFLEX MONO Roof Waterproofing Systems, 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*.

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

Technical Specification

1 Description

1.1 The STARFLEX MONO Roof Waterproofing Systems consist of the following components:

- STARFLEX MONO – a single component, moisture curing polyurethane membrane installed by brush, roller or airless spray for exposed applications
- STARFLEX MONO 100 – a single component, moisture curing polyurethane membrane installed by brush, roller or airless spray for protected applications
- STARFLEX ULTRA FR – a single component, moisture curing, thixotropic hybrid polyurethane-polyurea membrane installed by brush, roller or airless spray
- STARFLEX MONO TOP S – a single component, elastic aliphatic polyurethane, UV resistant top coat, installed by brush, roller or airless spray, for use over the other membranes in exposed uses
- STARTEX NW – a 60 g·m⁻² polyester reinforcement for the systems
- STARTEX GM – a 225 g·m⁻² glass reinforcement for the systems
- PRIMER 0230 – a single component, solvent based, moisture curing polyurethane primer for use on concrete and bituminous membrane substrates

- STARCEMENT 5/A – a two-component, water-based, epoxy primer for use on bitumen membranes and porous substrates.

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

- STARTEX CMF – a proprietary self-adhesive carrier membrane, including a glass facing on the top face, used over modular substrates with joints and as separating layer underneath (carrying) STARFLEX waterproofing systems. Also suitable for cracked mineral substrates. Contact the Certificate holder's Technical Services for further advice
- STARTEX CMA – a proprietary self-adhesive carrier membrane used over modular substrates with joints and as separating layer underneath (carrying) STARFLEX waterproofing systems. Also suitable for cracked mineral substrates. Contact the Certificate holder's Technical Services for further advice
- STARTEX TAPE – a self-adhesive reinforcing tape for specific points of weakness such as joints, cracks, protrusions, and junctions and coupling of same or different materials.

1.3 Quartz aggregate (0.5 – 1.0 mm) or emery aggregate (0.25 – 0.5 mm) may be used in conjunction with STARFLEX MONO, STARFLEX ULTRA FR or STARFLEX MONO TOP S to provide an anti-slip surface for pedestrian access areas in accordance with the Certificate holder's instructions, this has not been assessed by the BBA and is outside the scope of this Certificate.

2 Manufacture

2.1 The liquid components are manufactured via a batch-blending process using conventional methods.

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

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

2.3 The management system of the manufacturer has been assessed and registered as meeting the requirements of EN ISO 9001 : 2015 by ICMQ SpA (Certificate 12730).

3 Delivery and site handling

3.1 The components are delivered to site in packaging with labels with the Certificate holder's name, product description, production batch code, product expiry date and, where appropriate, mixing ratio.

3.2 The system components packaging type and size are given in Table 1.

Table 1 Packaging

Component/item	Package type	Size	Shelf life
STARFLEX MONO	metal cans	20 kg or 25 kg	12 months
STARFLEX MONO 100	metal cans	20 kg or 25 kg	12 months
STARFLEX ULTRA FR	metal cans	20 kg or 25 kg	12 months
STARFLEX MONO TOP S	tins	9 kg	12 months
PRIMER 0230	metal cans	0.8 kg and 4 kg	12 months
STARCEMENT 5/A	plastic cans	3 kg and 16 kg	12 months
STARTEX NW	rolls	20 m ² and 100 m ²	
STARTEX GM	rolls	20 m ² , 125 m ² and 200 m ²	

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

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on STARFLEX MONO Roof Waterproofing Systems.

Design Considerations

4 General

4.1 STARFLEX MONO Roof Waterproofing Systems are satisfactory for use on new and existing flat and pitched roofs with limited or pedestrian access, including balconies and terraces.

4.2 STARFLEX MONO 100 must only be used in protected specifications.

4.3 The systems are suitable for use on the following substrates:

- concrete
- reinforced bitumen membranes (including sanded and mineral surfaced bituminous membranes).

4.4 Decks to which the systems are to be applied must comply with the relevant requirements of BS 6229 : 2018 and, where appropriate, *NHBC Standards* 2022, Chapter 7.1.

4.5 For the purpose of this Certificate, limited access is defined as roofs subject only to pedestrian traffic for maintenance of the roof covering, cleaning of gutters, etc. Pedestrian access roofs are defined for the purposes of this Certificate as those not subject to vehicular traffic.

4.6 Flat roofs are defined for the purpose of this Certificate as those having a minimum finished fall of 1:80.

4.7 Pitched roofs are defined for the purpose of this Certificate as those having falls in excess of 1:6.

4.8 For design purposes, twice the minimum finished fall should be assumed, unless a detailed analysis of the roof is available, including overall and local deflection, direction of falls, etc.

4.9 Balconies and terraces, to which the systems are to be applied, must be designed in accordance with BS 8579 : 2020.

4.10 In areas of pedestrian access, appropriate precautions against slip, such as the installation of paviours, should be taken.

4.11 Dead loads, wind loads and imposed 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.

4.12 Insulation materials to be used in conjunction with reinforced bitumen membranes, to which the systems are applied, must be in accordance with the Certificate holder's instructions and must be either:

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

4.1 The NHBC requires that the roof membranes, once installed, be inspected in accordance with of *NHBC Standards* 2022, Chapter 7.1, Clause 7.1.12, including the use of an appropriate integrity test, where required. Any damage to the membrane is repaired in accordance with section 14 of this Certificate and reinspected.

5 Practicability of installation

The systems are only installed by specialist roofing contractors who have been trained and approved by the Certificate holder.

6 Weathertightness



6.1 The systems will adequately resist the passage of moisture to the interior of a building and enable a structure to satisfy the relevant requirements of the national Building Regulations.

6.2 To achieve a weathertight coating it is essential that the application rate is as quoted in the Certificate holder's literature for the systems.

7 Properties in relation to fire



7.1 When classified to EN 13501-5 : 2016 the systems given in Table 2 achieved B_{ROOF}(t4) for slopes below 10° and so, with the exceptions given in sections 7.5 and 7.6, are unrestricted in terms of proximity to a boundary by the documents supporting the national Building Regulations.

Table 2 Systems given B_{ROOF}(t4) classification

Substrate	Base coat	Reinforcement	Top coat	UV protection coat	Report numbers
Fibre cement board 5 mm to 20 mm thick	STARFLEX ULTRA FR applied at a rate of 1.5 kg·m ⁻²	STARTEX GM	STARFLEX ULTRA FR applied at a rate of 1.8 kg·m ⁻²	N/A	19492A and 19492B ⁽¹⁾
Fibre cement board ≥ 8 mm thick	STARFLEX MONO applied at a rate of 2.0 kg·m ⁻²	STARTEX NW or STARTEX GM	STARFLEX MONO applied at a rate of 3.9 kg·m ⁻²	N/A	20553C and 20553D ⁽²⁾
	STARFLEX ULTRA FR applied at a rate of 2.0 kg·m ⁻²		STARFLEX ULTRA FR applied at a rate of 3.9 kg·m ⁻²	N/A	
	STARFLEX ULTRA FR applied at a rate of 1.5 kg·m ⁻²		STARFLEX ULTRA FR applied at a rate of 1.0 kg·m ⁻²	STARFLEX MONO TOP S applied at a rate of 0.3 kg·m ⁻²	
	STARFLEX MONO 100 applied at a rate of 1.5 kg·m ⁻²		STARFLEX MONO 100 applied at a rate of 1.0 kg·m ⁻²	STARFLEX MONO TOP S applied at a rate of 0.3 kg·m ⁻²	

(1) Fire test and classification reports, reference 19492B and 19492A respectively, conducted by Exova Warringtonfire Gent, Reports available from the Certificate holder.

(2) Extended application and classification reports, reference 20553C and 20553D respectively, conducted by Exova Warringtonfire Gent, Reports available from the Certificate holder.



7.2 When used in conjunction with one of the inorganic coverings listed in the Annex of Commission Decision 2000/553/EC, the systems can also be considered to be unrestricted with respect to the proximity to a boundary under the national Building Regulations.



7.3 The Certificate holder has not declared a reaction to fire classification to BS EN 13501-1: 2018.



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



7.5 In England and Wales, the product should not be used on balconies on buildings that have a storey at least 18 m above ground level and contain: one or more dwellings, an institution, a room for residential purposes (excluding any room in a hostel, hotel or boarding house), student accommodation, care homes, sheltered housing, hospitals or dormitories in boarding schools.



7.6 In Scotland, the system should not be used on balconies with a storey more than 11m above the ground.



7.7 In England and Wales, the systems, when used in pitches of greater than 70°, excluding upstands, should not be used on buildings that have a storey at least 18 m above ground level and which contain: one or more dwellings, an institution, a room for residential purposes (excluding any room in a hostel, hotel or boarding house), student accommodation, care homes, sheltered housing, hospitals or dormitories in boarding schools.



7.8 In Scotland, the systems, when used in pitches of greater than 70°, excluding upstands, should not be used on buildings that have a storey at least 11 m above ground level.

8 Adhesion

The adhesion of the systems to the substrates and finishes listed in clause 4.2 is sufficient to resist the effects of any wind suction, elevated temperatures, thermal shock or minor movement likely to occur in practice.

9 Resistance to mechanical damage

9.1 The systems can accept, without damage, the limited foot traffic and light concentrated loads associated with installation, maintenance and pedestrian traffic on defined walkways. However, care must be taken to avoid puncture by sharp objects or concentrated loads.

9.2 The systems when tested, at the minimum application rates, in accordance with EOTA TR006 and EOTA TR007 for dynamic indentation and static indentation on hard and soft substrates achieved the results given in Table 3.

Table 3 Dynamic indentation and static indentation

System	Dynamic indentation	Static indentation
STARFLEX ULTRA FR with STARTEX GM		
– hard substrate	I ₄	L ₄
– soft substrate	I ₃	L ₄
STARFLEX ULTRA FR with STARTEX NW		L ₄
– soft substrate	I ₄	
STARFLEX MONO with STARTEX NW and STARFLEX MONO TOP S		
– hard substrate	I ₄	L ₄
– soft substrate	I ₃	not tested

9.3 The systems are capable of accepting minor structural movement while remaining weathertight.

10 Maintenance



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

10.2 Any damage should be repaired in accordance with section 14 of this Certificate and the Certificate holder's instructions.

11 Durability



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

Installation

12 General

12.1 Installation of STARFLEX MONO Roof Waterproofing Systems must be in accordance with the relevant clauses of BS 8000-0 : 2014, BS 8000-4 : 1989, Liquid Roofing and Waterproofing Association (LRWA) Note 7 – *Specifier Guidance for Flat Roof Falls*, the Certificate holder's instructions and this Certificate.

12.2 All of the system components must be applied when the air and substrate temperatures are greater than 5°C, rising to a maximum air temperature of 35°C. The systems must not be installed in rain, snow, fog or misty conditions.

12.3 Detailing (eg upstands) must be carried out in accordance with the Certificate holder's instructions.

13 Procedure

13.1 Substrates on which the systems are to be applied must be properly prepared in accordance with the Certificate holder's instructions.

13.2 Adhesion to substrates will depend on the condition and cleanness of the substrate. Substrates must be visibly dry, sound and free from loose materials or contamination (eg moss or algae).

13.3 Damaged areas of the substrate (eg blistered membrane) must be removed, replaced or repaired. Substrate defects (eg shallow-bottomed cracks and indentations) are filled in accordance with the Certificate holder's instructions.

13.4 Deck surfaces must be free from sharp projections such as concrete nibs.

13.5 The primers are applied at the coverage rate given in Table 4:

Table 4 Primer application rates

Primer	Application rate (g·m ⁻²)
PRIMER 0230	150
STARCEMENT 5/A	100 to 150 ⁽¹⁾

(1) Primer diluted at a ratio of 1:1 with water.

13.6 Existing bituminous membranes may not require the application of primer. In such cases the advice of the Certificate holder's technical office should be sought.

13.7 Application can be by brush, roller or airless spray. Brush application is normally used for small roof areas and for embedding the reinforcement into the waterproofing.

13.8 When using an airless spray, the wind speed must be such that it does not interfere with the application or cause overspray. No attempt to spray should be made if the wind speed exceeds $6.7 \text{ m}\cdot\text{s}^{-1}$ (15 mph), unless precautions such as the use of wind barriers are taken.

13.9 The systems are applied at the application rates given in Table 5:

Table 5 System build-ups and application rates

Layer	Systems			
	STARFLEX ULTRA FR ⁽¹⁾	STARFLEX MONO ⁽¹⁾	STARFLEX ULTRA FR / STARFLEX MONO TOP S	STARFLEX MONO 100 / STARFLEX MONO TOP S
Base coat	STARFLEX ULTRA FR at $1.50 \text{ kg}\cdot\text{m}^{-2}$ ($1.00 \text{ l}\cdot\text{m}^{-2}$) minimum	STARFLEX MONO at $1.50 \text{ kg}\cdot\text{m}^{-2}$ ($1.00 \text{ l}\cdot\text{m}^{-2}$) minimum	STARFLEX ULTRA FR at $1.50 \text{ kg}\cdot\text{m}^{-2}$ ($1.00 \text{ l}\cdot\text{m}^{-2}$) minimum	STARFLEX MONO 100 at $1.50 \text{ kg}\cdot\text{m}^{-2}$ ($1.00 \text{ l}\cdot\text{m}^{-2}$) minimum
Reinforcement	STARTEX GM or STARTEX NW	STARTEX GM or STARTEX NW	STARTEX GM or STARTEX NW	STARTEX GM or STARTEX NW
Top coat	STARFLEX ULTRA FR at $1.80 \text{ kg}\cdot\text{m}^{-2}$ ($1.20 \text{ l}\cdot\text{m}^{-2}$) minimum	STARFLEX MONO at $1.80 \text{ kg}\cdot\text{m}^{-2}$ ($1.20 \text{ l}\cdot\text{m}^{-2}$) minimum	STARFLEX ULTRA FR at $1.00 \text{ kg}\cdot\text{m}^{-2}$ ($0.65 \text{ l}\cdot\text{m}^{-2}$) minimum	STARFLEX MONO 100 at $1.00 \text{ kg}\cdot\text{m}^{-2}$ ($0.65 \text{ l}\cdot\text{m}^{-2}$) minimum
Protection coat	N/A	N/A	STARFLEX MONO TOP S at $0.30 \text{ kg}\cdot\text{m}^{-2}$ ($0.25 \text{ l}\cdot\text{m}^{-2}$)	STARFLEX MONO TOP S at $0.30 \text{ kg}\cdot\text{m}^{-2}$ ($0.25 \text{ l}\cdot\text{m}^{-2}$)
Finished thickness (mm)	2.2 ⁽²⁾	2.2 ⁽²⁾	1.9	1.9

(1) When the $5.9 \text{ kg}\cdot\text{m}^{-2}$ application rate is used the top coat ($3.9 \text{ kg}\cdot\text{m}^{-2}$) can be applied either in one coat or two coats.

(2) Finished thickness of the $5.9 \text{ kg}\cdot\text{m}^{-2}$ application rate is 3.5 mm.

13.10 The top coats of the systems are either applied wet on wet or as soon as the previous layer has cured allowing trafficking of the surface up to a maximum of seven days. After this period the membrane is cleaned and the surface reactivated by using PRIMER 0230, prior to application.

13.11 If the STARFLEX MONO TOP S UV protection coating is being applied as part of the systems, it is applied a maximum of 24 hours after the application of the second coat of the system.

14 Repair

Should minor damage occur, it can be rectified by cleaning back to unweathered material and appropriate system in accordance with the Certificate holder's instructions to the damaged area.

Technical Investigations

15 Tests

Tests were carried out and the results assessed to determine:

- water vapour transmission
- resistance to water penetration
- tensile strength and elongation
- tensile bond strength
- dynamic indentation
- static indentation
- resistance to fatigue movement
- resistance to crack bridging
- UV ageing for $1200 \text{ MJ}\cdot\text{m}^{-2}$ at 60°C , followed by tensile strength and dynamic indentation
- heat ageing for 240 days at 80°C , followed by tensile strength, dynamic indentation and fatigue cycling
- water exposure for 96 days at 60°C , followed by tensile bond strength and static indentation.

16 Investigations

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

16.2 Data on fire performance were evaluated.

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 8579 : 2020 *Guide to the design of balconies and terraces*

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 to BS EN 1991-1-3 : 2003 + 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 13501-5 : 2016 *Fire classification of construction products and building elements — Classification using data from external fire exposure to roof tests*

EN ISO 9001 : 2015 *Quality management systems — Requirements*

17 Conditions

17.1 This Certificate:

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

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

17.3 This Certificate will remain valid for an unlimited period provided that the product/system and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:

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

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

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

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

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