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Agrément Certificate

20/5753

Product Sheet 2

SEALOFLEX ENDURA WATERPROOFING SYSTEMS

SEALOFLEX ENDURA BALCONY WATERPROOFING SYSTEMS

This Agrément Certificate Product Sheet⁽¹⁾ relates to Sealoflex Endura Balcony Waterproofing Systems, a range of liquid-applied systems for use as waterproofing and surfacing for walkways, balconies and terraces, including inverted roof, green roof, brown roof, roof garden and protected zero fall roof specifications.

(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 structure (see section 6).

Properties in relation to fire — The systems may contribute to a structure being 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 the traffic loads and effects of thermal and other minor movement likely to occur in practice (see section 9).

Resistance to penetration by roots — the system will resist penetration by plant roots and rhizomes (see section 10).

Durability — under normal service conditions, the systems will have a service life in excess of 15 years (see section 12).



The BBA has awarded this Certificate to the company named above for the 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: 10 August 2020

Hardy Giesler
Chief Executive Officer

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, Sealoflex Endura Balcony 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 system, in some circumstances, is restricted by this Requirement. See sections 7.4 of this Certificate.
Requirement:	B4(2)	External fire spread
Comment:		On a suitable substructure, the systems can enable a roof to be unrestricted under this Requirement See sections 7.1 to 7.3 of this Certificate.
Requirement:	C2(b)	Resistance to moisture
Comment:		The systems can satisfy this Requirement. See section 6 of this Certificate.
Regulation:	7(1)	Materials and workmanship
Comment:		The systems are acceptable. See section 12.1 and the <i>Installation</i> part of this Certificate.



The Building (Scotland) Regulations 2004 (as amended)

Regulation:	8(1)(2)	Durability, workmanship and fitness of materials
Comment:		The use of the systems satisfies the requirements of this Regulation. See sections 11.1 and 12.1 and the <i>Installation</i> part of this Certificate.
Regulation:	9	Building standards applicable to construction
Standard:	2.8	Spread from neighbouring buildings
Comment:		The systems, when applied to a suitable substructure can be regarded as having a low vulnerability under clause 2.8.1 ⁽¹⁾⁽²⁾ . See sections 7.1 to 7.3 of this Certificate.
Standard:	3.10	Precipitation
Comment:		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 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)(b)(i)	Fitness of materials and workmanship
Comment:		The systems are acceptable. See section 12.1 and the <i>Installation</i> part of this Certificate.

Regulation:	28(b)	Resistance to moisture and weather
Comment:		The systems can enable a structure to satisfy the requirements of this Regulation. See section 6 of this Certificate.
Regulation:	36(b)	External fire spread
Comment:		On suitable substructures, the use of the systems can enable a structure to be unrestricted under requirements of this Regulation. See sections 7.1 to 7.3 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 section: 3 *Delivery and site handling* (3.2 and 3.3) of this Certificate.

Additional Information

NHBC Standards 2020

NHBC accepts the use of Sealoflex Endura Balcony Waterproofing Systems, provided they are installed, used and maintained in accordance with this Certificate, in relation to *NHBC Standards*, Chapter 7.1 *Flat roofs and balconies*.

The NHBC Standards do not cover the use of the system in the refurbishment of existing waterproofings.

Technical Specification

1 Description

1.1 Sealoflex Endura Balcony Waterproofing Systems are reinforced waterproofing and surfacing systems comprising a waterproofing membrane, wearing course and finish based on liquid-applied polymethylmethacrylate resin.

1.2 The systems comprise the following components:

- Sealoflex Endura Balcony System — Sealoflex Endura Concrete Primer or Sealoflex Endura Asphalt Primer Sealoflex Endura Reinforcing Fabric, Sealoflex Endura Balcony Waterproofing Layer and Sealoflex Endura Balcony Wearing Layer. The system is available with various surfacing options
- Sealoflex Endura Balcony Buried System — Sealoflex Endura Asphalt Primer Sealoflex Endura Reinforcing Fabric, Sealoflex Endura Balcony Waterproofing Layer and optional Sealoflex Endura Balcony Wearing Layer and/or Sealoflex Endura Finish Coat. The system is for use in buried/protected locations.

1.3 Details of individual components used with the systems are:

- Sealoflex Endura Balcony Waterproofing Layer — a liquid-applied, two-component polymethylmethacrylate resin, available in Blue/Grey
- Sealoflex Endura Reinforcing Fabric — a polyester reinforcement fleece with a nominal mass per unit area of $110 \text{ g}\cdot\text{m}^{-2}$
- Sealoflex Endura Balcony Wearing Layer — a liquid-applied, three-component polymethylmethacrylate based coating for use in the wearing layer build-ups, comprising Sealoflex Endura BT Resin, Sealoflex Endura BT Filler and Sealoflex Endura Cat Powder
- Graded aggregates for incorporating into Sealoflex Endura Balcony Wearing Layer to produce a wearing layer, including dried quartz (0.7 — 1.2 mm) and emery (1.0 to 3.0 mm)
- Sealoflex Endura Asphalt Primer — primer for use on asphalt and other bituminous substrates
- Sealoflex Endura Concrete Primer — primer for use on porous substrates such as concrete and cementitious screeds
- Sealoflex Endura Finish Coat — a two-component polymethylmethacrylate based decorative finish available in a range of colours

- Sealoflex Endura Detail Coating — for use at details and for repairs, and the subject of Product Sheet 3 of this Certificate
- Sealoflex Endura Cleaner — cleaner used for cleaning tools, cleaning substrates and the reactivation of the cured Sealoflex Endura Balcony Waterproofing Layer prior to overcoating when work is interrupted for periods in excess of 12 hours.

1.4 Sealoflex Endura Balcony Waterproofing Layer, Sealoflex Endura BT Resin and Sealoflex Endura Detail Coating are available in winter and summer grades, for use where application temperatures are between 0 and 20°C for Sealoflex Endura Balcony Waterproofing Layer (Winter) and Sealoflex Endura BT Resin (Winter), between –5 and 20°C for Sealoflex Endura Detail Coating (Winter), and 10 and 35°C for the Summer grades.

1.5 Other items or components which may be used with the systems, but which are outside the scope of this Certificate, are:

- primers for use on damp concrete surfaces
- primers and pre-treatments for open textured and porous cementitious substrates
- anti-corrosion and etch primers for metals
- compounds for small and large scale filling, levelling and repair
- fibre reinforced detailing resin for complex, less critical and difficult-to-access details.

Details of suitable products/specifications may be obtained from the Certificate holder.

2 Manufacture

2.1 The systems components are manufactured by batch processes.

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.

3 Delivery and site handling

3.1 The components of the systems are delivered to site in packs consisting of liquid base resin and powder catalyst components. The packs bear a label that includes the component's name, health and safety information, and batch number. The components are available in the pack sizes detailed in Table 1.

Table 1 Pack sizes

Component	Pack sizes
Sealoflex Endura Balcony Waterproofing Layer (Summer and Winter grades)	10 kg
Sealoflex Endura Detail Coating (Summer and Winter grades)	10 kg
Sealoflex Endura BT Resin (Summer and Winter grades)	10 kg
Sealoflex Endura BT Filler	23 kg
Sealoflex Endura Cat Powder	100 g
Sealoflex Endura Concrete Primer	10 kg
Sealoflex Endura Asphalt Primer	10 kg
Sealoflex Endura Cleaner	9 litre
Sealoflex Endura Finish Coat	10 kg
Sealoflex Endura Reinforcing Fabric	50 m (length) x 15, 35 or 105 cm (widths) rolls.

3.2 The systems components must be stored in a cool, dry location and protected from freezing temperatures and direct sunlight. When stored in accordance with the manufacturer's instructions they will have a shelf-life of at least six months. Rolls of Sealoflex Endura Reinforcing Fabric must be stored flat in a dry, clean environment and protected from moisture. Sealoflex Endura Cat Powder must be stored at a temperature below 30°C in closed containers, away from sources of ignition and protected from direct sunlight

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

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on Sealoflex Endura Balcony Waterproofing Systems.

Design Considerations

4 General

4.1 Sealoflex Endura Balcony Waterproofing Systems, when applied to a concrete or asphalt surface of a concrete deck designed in accordance with BS EN 1992-1-1 : 2004 and its UK National Annex or equivalent, are satisfactory for use as a combined waterproof/wearing surface for:

- walkways
- balconies
- terraces, including inverted roof, green roof, brown roof, roof garden and protected zero fall.

4.2 Decks to which the systems are to be applied must comply with the relevant requirements of BS 6229 : 2018 and, where appropriate, *NHBC Standards 2020*, Chapter 7.1.

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

- roof garden (intensive) — a roof with a substantial layer of growing medium with planting that can include shrubs and trees, generally accessible to pedestrians
- green roof (extensive) — a roof with a shallow layer of growing medium planted with low-maintenance plants such as mosses, sedums, grasses and some wildflower species
- brown roof — a roof with a growing medium selected to allow indigenous plant species to inhabit the roof over time; no deliberate planting is undertaken.

4.4 For the purpose of this Certificate the systems have a minimum finished fall of 1:80⁽¹⁾.

(1) *NHBC Standards 2020* require a minimum fall of 1:60 for green roofs and roof gardens.

4.5 Zero fall roofs are defined for the purpose of this Certificate as those having a finished fall which can vary between 0 and 1:80⁽¹⁾. Reference should also be made to appropriate clauses in Liquid Roofing and Waterproofing Association (LRWA) Note 7 – *Specifier Guidance for Flat Roof Falls*.

(1) *NHBC Standards 2020* require a minimum fall of 1:60 for green roofs and roof gardens.

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

4.7 Dead loads, wind loading and imposed loads are calculated 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.

4.8 Recommendations for the design of green roof, brown roof and roof garden specifications are available within the latest edition of *The GRO Green Roof Code - Green Roof Code of Best Practice for the UK*.

4.9 The drainage systems for inverted roof, zero fall roof, green roof, brown roof or roof garden specifications must be correctly designed, and the following points should be addressed:

- provision made for access for maintenance purposes
- for zero fall roofs, it is particularly important to identify the correct drainage points, to ensure that drainage is sufficient and effective
- dead loads for green roof, brown roofs and roof gardens can increase if the drains become partially or completely blocked causing waterlogging of the drainage layer
- additional guidance for inverted roof specifications is given in BBA Information Bulletin No 4 *Inverted roofs – Drainage and U value corrections*.

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

- suitable for inverted roof specification use
- 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.

5 Practicability of installation

The systems should only be installed by installers who have been trained and approved by the Certificate holder.

6 Weathertightness



The systems will resist the passage of moisture to the interior of a structure and can accommodate any movement due to cracking permitted by BS EN 1992-1-1 : 2004 and its UK National Annex, without leakage and so enable a structure to satisfy the requirements of the national Building Regulations.

7 Properties in relation to fire



7.1 When tested to DD CEN/TS 1187 : 2012, Test 4, a composite build-up comprising 19 mm thick plywood primed with a synthetic rubber resin, 120 mm thick PIR Insulation board bonded to a vapour control membrane with a two-component PUR adhesive, a 0.6 mm thick bitumen carrier membrane, the Sealoflex Endura Balcony Waterproofing Layer applied at a rate of 3.1 kg·m⁻², including Sealoflex Endura Reinforcing Fabric, was classified in accordance with BS EN 13501-5 : 2005 as European Class B_{ROOF}(t4).

7.2 In the opinion of the BBA, a roof incorporating the systems will be unrestricted under the national Building Regulations in the following circumstances:

- Protected or inverted roof specifications, including an inorganic covering listed in the Annex of Commission Decision 2000/553/EC,
- a roof garden covered with a drainage layer of gravel 100 mm thick and a soil layer 300 mm thick,
- irrigated roof gardens, green roofs and brown roofs.

7.3 The designation of other specifications should be confirmed by reference to the requirements of the documents supporting the national Building Regulations.



7.4 When classified in accordance to EN 13501-1 2007 Sealoflex Endura Balcony achieved a rating of Euroclass E.

7.5 If allowed to dry, plants used may allow the spread of flame across the roof. This must be taken into consideration when selecting suitable plants for the roof. Appropriate planting, irrigation and/or protection must be applied to ensure the overall fire-rating of the roof is not compromised

8 Adhesion

8.1 The adhesion of the systems to concrete and asphalt substrates is sufficient to resist the effects of any wind suction, elevated temperature, thermal shock or structural movement likely to occur in practice. Acceptable adhesion to other substrates must be confirmed by test.

8.2 The soil used in intensive planting should not be of a type that will be removed, or become localised, owing to wind scour on the site.

8.3 It should be recognised that the type of plants used could significantly affect the expected wind loads experienced in service.

9 Resistance to mechanical damage

9.1 The systems can accept, without damage, the foot traffic likely to occur in practice. Where continuous heavy point loading is envisaged additional protection should be considered. The Certificate holder must be consulted for advice.

9.2 Where the systems have to bridge construction or movement joints the Certificate holder must be consulted for approved detail specifications.

9.2 Results of testing for dynamic and static indentation for Sealoflex Endura Balcony Waterproofing Layer, including Sealoflex Endura Reinforcing Fabric, are given in Table 2.

Table 2 Dynamic and static indentation

Test	Result	Method
Dynamic indentation		EOTA TR 006
concrete		
unaged	I ₄	
UV aged ⁽¹⁾ tested at –10°C	I ₄	
heat aged ⁽²⁾ tested at –30°C	I ₄	
steel		
unaged	I ₄	
heat aged ⁽²⁾ tested at –30°C	I ₄	
PU insulation		
unaged	I ₄	
heat aged ⁽²⁾ tested at –30°C	I ₄	
Static indentation		EOTA TR 007
concrete		
unaged	L ₄	
water exposure ⁽³⁾ tested at 90°C	L ₄	
steel		
unaged	L ₄	
water exposure ⁽³⁾ tested at 90°C	L ₄	
PU insulation		
unaged	L ₄	
water exposure ⁽³⁾ tested at 90°C	L ₄	

(1) UV aged using UVA lamps at an exposure of 1000 MJ·m⁻² at 70°C.

(2) Heat aged for 200 days at 80°C.

(3) Water exposure for 180 days at 60°.

10 Resistance to penetration by roots

The systems will resist penetration by plant roots and rhizomes and can be used as waterproofing systems in green roof and roof garden specifications.

11 Maintenance



11.1 Installations of the systems must be subject to a planned maintenance programme to ensure that accumulated debris is cleared and drainage outlets are kept clear, and to check for contamination and damage to the system, eg loss of protective finish and/or colour fade.

11.2 Green roofs, brown roofs and roof gardens must be the subject of regular inspections, particularly in autumn after leaf fall and in spring, to ensure unwanted vegetation and other debris are cleared from the roof and drainage outlets (see section 4.9). Guidance is available within the latest edition of *The GRO Green Roof Code - Green Roof Code of Best Practice for the UK*.

11.3 Washing of the systems may be carried out using water and a mild detergent. Strong alkalis, acids or bleach must not be used. The Certificate holder must be consulted for advice on suitable cleaning products.

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

12 Durability



12.1 Under normal service conditions, the systems will have a service life in excess of 15 years.

12.2 Some colour change to the finish coat may be expected when exposed to UV radiation. The degree of colour change likely to occur will depend on the colour. The Certificate holder should be consulted for more information.

Installation

13 General

13.1 Installation of Sealoflex Endura Balcony Waterproofing Systems must be in accordance with the relevant clauses of Liquid Roofing and Waterproofing Association (LRWA) Note 7 – *Specifier Guidance for Flat Roof Falls* and the Certificate holder's instructions and this Certificate.

13.2 Concrete structures must be designed and built in accordance with the BS EN 1992-1-1 : 2004 and its UK National Annex or equivalent.

13.3 New concrete should be well compacted and finished to a dense, smooth finish without excess laitance, and allowed to cure for a minimum period of 28 days.

13.4 Concrete surfaces must have a minimum compressive strength of 25 N·mm⁻² and be mechanically prepared, eg using enclosed shot blasting, to be free from laitance and other contamination. All residues must be removed by vacuuming.

13.5 Installation must not be carried out during inclement weather, eg rain, fog or snow, and the ambient air and substrate temperature must be between 0 and 35°C and at least 3°C above the dew point.

13.6 Substrates to which the systems are to be applied must be sound, clean, frost free, dry and free from sharp projections. The Certificate holder's advice must be sought with regard to the suitability of the substrate to receive the system, suitable cleaning procedures and the use of a proprietary surface cleaner/HSE approved fungicidal wash where required.

13.7 Previously coated areas must be checked for integrity and adequate adhesion to the substrate. Defects such as cracks, blisters and indentations must be repaired prior to application of the systems in accordance with the Certificate holder's instructions. The Certificate holder must be consulted for suitable repair products.

13.8 Concrete and asphalt surfaces must be primed with Sealoflex Endura Concrete and Sealoflex Endura Asphalt Primer respectively.

13.9 Adhesion checks must be carried out to ensure that the systems are compatible with the existing surfaces. The Certificate holder must be consulted for details of suitable test methods and requirements.

13.10 Detailing, such as at upstands, must be carried out using Sealoflex Endura Detail Coating in accordance with the Certificate holder's instructions. Where use of Sealoflex Endura Detail Coating is not practicable owing to the complexity of a detail, eg at active joints, the Certificate holder must be consulted for an alternative solution.

13.11 All equipment must be cleaned with Sealoflex Endura Cleaner.

14 Procedure

Waterproofing layer

14.1 The Sealoflex Endura Balcony Waterproofing Layer component is mixed thoroughly using a slow speed agitator fitted with a suitable mixing paddle. The required quantity of catalyst is added and stirring is continued until the mixture is lump-free, and in any event for at least two minutes. The amount of catalyst required will depend on the ambient temperature, and the manufacturer's technical data sheet/product label must be consulted for the required amount.

14.2 A layer of the mixed Sealoflex Endura Balcony Waterproofing Layer is applied with a lambswool roller to the clean, prepared and, if required, primed substrate at a minimum application rate of $2.0 \text{ kg}\cdot\text{m}^{-2}$.

14.3 Sealoflex Endura Reinforcing Fabric is rolled and embedded into the wet coating, avoiding creasing and trapped air. Adjacent lengths of the reinforcement must overlap by a minimum of 50 mm (100 mm if left over 12 hours), ensuring that there is sufficient coating to fully encapsulate it. Additional coating is applied if required.

14.4 A second coat of mixed Sealoflex Endura Balcony Waterproofing Layer is applied, wet on wet, by roller at a minimum application rate of $1.0 \text{ kg}\cdot\text{m}^{-2}$.

Wearing/finish Layer

14.5 A number of options are available for the build-up of the wearing/finish layer, depending on the specified system and the end use. The Certificate holder must be consulted for specifications relating to the options under the various systems.

14.6 At each stage the systems should be checked to ensure that it has been applied to achieve the minimum consumption. If a localised area has been applied below the minimum consumption, the affected area must be removed and reinstated to specification.

14.7 If work is interrupted for periods in excess of 12 hours, the cured membrane must be reactivated by wiping with Sealoflex Endura Cleaner. Overcoating must proceed after evaporation of the cleaner has occurred (approximately 20 minutes), but within 60 minutes, otherwise the process must be repeated.

15 Repair

15.1 Areas of damaged systems must be cut back to sound, well-adhering material and cleaned with Sealoflex Endura Cleaner.

15.2 After the cleaner has evaporated, the systems are installed as described in section 14, ensuring that there is at least a 100 mm overlap over the existing sound material.

15.3 A check for adequate adhesion must be carried out once the systems have cured.

16 Tests

Tests were conducted on samples of Sealoflex Endura Balcony Waterproofing Systems to determine:

- resistance to cracking
- resistance to fatigue
- resistance to abrasion
- slip resistance
- resistance to penetration by chloride ions
- water vapour permeability/water vapour diffusion resistance coefficient (μ)
- tensile strength and elongation
- watertightness
- tensile bond strength
- resistance to fatigue
- crack bridging capability
- resistance to dynamic indentation
- resistance to static indentation
- resistance to low temperatures
- resistance to high temperatures
- effect of heat ageing
- effect of exposure to surface water
- effect of exposure to UV-A radiation
- resistance to penetration by roots/rhizomes.

17 Investigations

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

17.2 Data on fire performance were assessed.

17.3 Existing installations were visited to provide additional evidence of the systems' in-service durability.

Bibliography

BS EN 1992-1-1 : 2004 + A1 : 2014 *Eurocode 2 — Design of concrete structures — General rules and rules for buildings*
NA + A2 : 14 to BS EN 1992-1-1 : 2004 + A1 : 2014 UK National Annex to *Eurocode 2 — Design of concrete structures — General rules and rules for buildings*

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

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

EN 13501-1 : 2007 + A1 : 2009 *Fire classification of construction products and building elements — Classification using data from reaction to fire tests*

EOTA TR 006 *Determination of the resistance to dynamic indentation*

EOTA TR 007 *Determination of the resistance to static indentation*

18 Conditions

18.1 This Certificate:

- relates only to the product/system that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page – no other company, firm, organisation or person may hold 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.

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

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

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

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

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

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

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