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**Agrément Certificate**
**19/5636**
Product Sheet 1

# FIBRE-CEMENT WALL BOARDS

## UCO SUPERFLEX

This Agrément Certificate Product Sheet(1) relates to UCO Superflex, a general-purpose fibre-cement board for use internally as wall liner or tilebacker board on non-loadbearing and loadbearing walls, or externally as structural and non-structural sheathing board behind façade rainscreen cladding applied to steel-frame and timber-frame substrate walls, in new and existing buildings.

(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**

**Strength and stability —** when used as a sheathing board, the boards will contribute to the racking resistance of walls (see section 6).

**Performance in relation to fire —** the boards have an A1 reaction to fire classification to BS EN 13501-1 : 2007 (see section 7).

**Resistance to moisture —** the boards have adequate moisture resistance (see section 8).

**Durability —** when used as liner board, the product should have a life equal to the building in which it is installed. For external applications, the product can be expected to have a service life in excess of 30 years (see section 12).

The BBA has awarded this Certificate to the company named above for the product described herein. This product 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 First issue: 4 April 2019

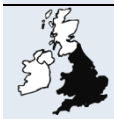
Paul Valentine
Technical Excellence Director

Claire Curtis-Thomas
Chief Executive

*This Certificate was amended on 22 May 2024 as part of a transition of The BBA Agrément Certificate scheme delivered under the BBA's ISO/IEC 17020 accreditation. This Certificate was issued originally under accreditation to ISO/ IEC 17065. Sections marked with the symbol † are not issued under accreditation. Full conversion to the ISO/IEC 17020 format will take place at the next Certificate review. The BBA is a UKAS accredited Inspection Body (No.4345).* ***Readers MUST check the validity of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.*** *Any photographs are for illustrative purposes only, do not constitute advice and must not be relied upon.*

## Regulations

In the opinion of the BBA, UCO Superflex, 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:** | **A1** | **Loading** |
| Comment: | | Boards with a minimum 9 mm thickness have sufficient strength and stiffness to sustain and transmit the design loads to the primary structure without excessive deflection. See sections 6.1 and 6.5 to 6.8 of this Certificate. |
| **Requirement:** | **B2(1)(2)** | **Internal fire spread (linings)** |
| **Requirement:** | **B3(2)(3)(4)** | **Internal fire spread (structure)** |
| Comment: | | The boards can contribute to satisfying this Requirement. See sections 7.1 and 7.2 of this Certificate |
| **Regulation:** | **7** | **Materials and workmanship** |
| **Regulation:** | **7(1)** | **Materials and workmanship (applicable to England only)** |
| Comment: | | The boards are acceptable. See section 12 and the Installation part of this Certificate. |
| **Regulation:** | **7(2)** | **Materials and workmanship (applicable to England only)** |
| Comment: | | The boards are unrestricted by this Regulation. See section 12 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 boards satisfies the requirements of this Regulation. See section 12 and the *Installation* part of this Certificate. |
| **Regulation:** | **9** | **Building standards applicable to construction** |
| Standard: | 1.1(a)(b) | Structure |
| Comment: | | The boards are acceptable, with reference to clause 1.1.1[(1)(2)]. See sections 6.1 and 6.5 to 6.8 of this Certificate. |
| Standard: | 2.4 | Cavities |
| Comment: | | The boards can contribute to satisfying this Standard with respect to clauses 2.4.2[(1)(2)] and 2.4.4[(1)]. See sections 7.1 and 7.2 of this Certificate. |
| Standard: | 2.5 | Internal linings |
| Comment: | | The boards will contribute to an external wall satisfying the requirements of these Standards, with reference to clauses 2.4.1[(1)(2)], 2.4.2[(1)(2)], 2.4.3[(1)], 2.4.4[(1)], 2.4.5[(2)], 2.4.6[(2)], 2.4.7[(1)], 2.4.9[(2)] and 2.5.1[(1)(2)]. See sections 7.1 and 7.2 of this Certificate. |
| Standard: | 7.1(a)(b) | Statement of sustainability |
| Comment: | | The boards can contribute to satisfying the relevant requirements of Regulation 9, Standards 1 to 6, and therefore will contribute to a construction satisfying a bronze level of sustainability as defined in this Standard. |
| **Regulation:** | **12** | **Building standards applicable to conversions** |
| Comment: | | All comments given for the product 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** | **Fitness of materials and workmanship** |
| Comment: | | The boards are acceptable. See section 12 and the *Installation* part of this Certificate. |
| **Regulation:** | **30** | **Stability** |
| Comment: | | The boards are acceptable. See sections 6.1 and 6.5 to 6.8 of this Certificate. |
| **Regulation:** | **34** | **Internal fire spread — linings** |
| **Regulation:** | **35(4)** | **Internal fire spread — structure** |
| Comment: | | The boards are unrestricted by these Regulations. See sections 7.1 and 7.2 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* (3.1 and 3.3) and 14 *General* (14.3 and 14.4) of this Certificate.

# Additional Information

## NHBC Standards 2019

In the opinion of the BBA, UCO Superflex, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Part 6 *Superstructure (excluding roofs)*, Chapters 6.2 *External timber framed walls,* 6.3 *Internal walls* and 6.10 *Light steel framed walls and floors*, and Part 9 *Finishes,* Chapter 9.2 *Wall and ceiling finishes.*

## CE marking

The Certificate holder has taken the responsibility of CE marking the product in accordance with harmonised European Standard BS EN 12467 : 2012. An asterisk (*) appearing in this Certificate indicates that data shown are given in the manufacturer's Declaration of Performance.

# Technical Specification

## 1 Description

1.1 UCO Superflex is a cellulose-fibre cement board comprising ordinary Portland cement, crystalline silica (quartz) and cellulose, which satisfies the requirements of Category A, Class 2 boards to BS EN 12467 : 2012.

1.2 The boards have the following nominal characteristics:

*Table 1 Nominal characteristics*

| | |
|---|---|
| Length (mm) | 2400 |
| Width (mm) | 1200 |
| Thickness (mm) | 6, 7.5, 9(1) and 12 |
| Weight ($kg \cdot m^{-2}$) | 8.3, 10.3, 12.4 and 16.5(2) |
| Mean density ($kg \cdot m^{-3}$) | 1375 |
| Water vapour resistance factor ($\mu$) | 70 |
| Edge | square |
| Colour | light grey |

(1) Minimum 9 mm thick board used in sheathing applications.
(2) The weight of the panels depends on the size.

1.3 The specification of the fixings is as follows:

- stainless steel wing tip screws — 4.8 mm shank diameter, 38 mm length with a 10 mm diameter countersink head screw, used to attach the boards to steel-frame substrate wall at 300 mm centres on board edge and intermediate supports
- stainless steel screws — 4.2 mm shank diameter, 32 mm length with a 10 mm diameter countersink wafer-head screw, for use on timber-frame substrate wall at 300 mm centres on board edge and intermediate supports
- carbon steel C1022 screws — WHX42, 4.2 mm shank diameter, 42 mm length with a 10 mm diameter countersink wafer-head screw, for use on timber-frame substrate wall at 300 mm centres on board edge and intermediate supports

1.4 Components specified for use with the board, but outside the scope of this Certificate, include:

- steel frame — light gauge metal frame with vertical studs at 600 mm maximum centres
- timber frame — timber studs fixed vertically at 600 mm maximum centres
- corner beadings — perforated PVC (for wet) or metal (for dry) applications
- finishes
- ceramic tile adhesive – acrylic based to BS EN 12004-1 : 2017 and BS EN 12004-2 : 2017.

## 2 Manufacture

2.1 The raw materials of ordinary Portland cement, crystalline silica and cellulose are mixed in a controlled process and picked up by the sieve cylinder to form the board prior to autoclaving. Once hardened, the board is finished by cutting and drying, before storage. The boards are manufactured to the specification detailed in BS EN 12467 : 2012.

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 systems of UAC Berhad have been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 by SIRIM QAS (Certificate QMS 00199).

## 3 Delivery and site handling

3.1 The boards are supplied covered with polythene on timber pallets and can be offloaded either by mechanical handling equipment or by manually removing individual boards. Each pallet bears a label including the UAC trademark, load number, product name, product size, board quantity and manufacturer's product certification logo.

3.2 The boards must be stored on a firm, flat and level surface with sufficient support to prevent bowing. Boards should be stored under cover and kept dry prior to fixing. If the boards become wet, they must be sufficiently dry prior to use.

3.3 Manual off-loading of the boards should be carried out by a two-person lift, with care to avoid unnecessary strain and injury.

## Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on UCO Superflex.

## Design Considerations

## 4 Use

4.1 UCO Superflex is for use as structural and non-structural sheathing board on the outer face of the inner leaf of timber- or steel-frame external walls, or as a liner board/tilebacker board to loadbearing and non-loadbearing internal walls and on the inner face of external walls. The boards are supported at 600 mm maximum centres between timber/steel studs.

4.2 The boards satisfy Category A(1) requirements in accordance with BS EN 12467 : 2012.

(1) *'Sheets which are intended for applications where they may be subjected to heat, high moisture and severe frost'*

4.3 The frame to which the boards are fixed must be structurally sound, and designed and constructed in accordance with the requirements of the relevant national Building Regulations and Standards, namely:

- Timber frame: in accordance with BS EN 1995-1-1 : 2004 and preservative treated in accordance with BS EN 351-1 : 2007
- Steel frame: in accordance with BS EN 1993-1-1 : 2005 and BS EN 1993-1-3 : 2006.

4.4 Masonry substrate walls of new buildings should be designed and constructed in accordance with BS EN 1996-1-1 : 2005, BS EN 1996-1-2 : 2005, BS EN 1996-2 : 2006, BS EN 1996-3 : 2006 and PD 6697 : 2010, and with the relevant recommendations of BS 8000-0 : 2014 and BS 8000-3 : 2001.

4.5 Any external finishes/cladding must be such that the cavity behind satisfies the minimum cavity width required by *NHBC Standards* 2019, Chapter 6.9.

## 5 Practicability of installation

The boards are designed to be installed by a competent contractor experienced with this type of product.

## 6 Strength and stability

6.1 When tested in accordance with BS EN 12467 : 2012, 12 mm thickness boards achieved a mean Modulus of Rupture (MOR) of 11.24 MPa, therefore satisfying the Class 2 classification.

6.2 Mechanical resistance tests conducted on a tiled board assembly met the bond strength requirements given in ETAG 004 : 2011, clause 6.1.4.1.2.

6.3 For non-structural sheathing applications, the designer must ensure that the steel frame/timber frame has adequate strength to resists all lateral, and any other, loads on their own. No contribution may be assumed from the boards in this regard.

6.4 A suitably qualified and experienced individual must check the design and method of installation of the boards.

6.5 The wind actions on the wall should be calculated in accordance with BS EN 1991-1-4 : 2005 and its UK National Annex. Special consideration should be given to locations with high wind load coefficients as additional fixings may be necessary. In accordance with BS EN 1990 : 2002, it is recommended that a partial load factor of 1.5 is used to determine the design wind load to be resisted by the system.

6.6 The 9 mm board was tested for dynamic wind load resistance in accordance with ETAG 034 : 2012, Part 1. The design wind load resistance value (given in Table 2, below) was evaluated by applying a global safety factor of 2.0 to the failure value. The mode of failure was by pull-through of screw head through the board. The 12 mm board may be taken to have the same performance.

*Table 2 Design wind load resistance*

| Design wind load resistance | Distance between vertical stud supports | Distance between fixings along studs |
|---|---|---|
| 1.10 kPa | 600 mm | 300 mm at board edge and intermediate studs |

6.7 When evaluated for racking resistance in accordance with BS EN 1995-1-1 : 2004 (following the racking strength and stiffness test(1) in accordance with BS EN 594 : 2011), a timber-frame wall panel(2) with a 9 mm thick UCO Superflex board fixed with nails(3) to the face of the timber frame at 150 mm centres to the perimeter and at 300 mm centres to the internal studs, was found to have a characteristic racking resistance of 2.20 $kN \cdot m^{-1}$.

(1) Racking test carried out on panel with timber-frame of overall dimensions 2400 by 2400 mm.
(2) Studs: timber grade C16, minimum size 38 by 89 mm and spaced at a maximum of 600 mm.
(3) Nails: shaft diameter 3.1 mm, and 90 mm length

6.8 When tested for hard and soft body impacts, the 9 mm thick board supported at 600 mm centres was found suitable for use in the areas defined under Use Categories III and IV in Table 3 of ETAG 034 : 2012, Part 1, which is reproduced (in part) in Table 3, below. The 12 mm board may be taken to have the same performance.

*Table 3 Definition of Use Categories (reproduced from ETAG 034, Part I, 6.4.4. Table 4)*

| Use Category | Description |
|---|---|
| I | A zone readily accessible at ground level to the public and vulnerable to hard body impacts but not subjected to abnormally rough use. |
| II | A zone liable to impacts from thrown or kicked objects, but in public locations where the height of the kit will limit the size of the impact; or at lower levels where access to the building is primarily to those with some incentive to exercise care. |
| III | A zone not likely to be damaged by normal impacts caused by people or by thrown or kicked objects. |
| IV | A zone out of reach from ground level. |

Note: Categories I and II shown for information only and are not suitable for this board.

## 7 Performance in relation to fire

7.1 The reaction to fire classification* for the boards, in accordance with BS EN 13501-1 : 2007, is A1. Designers should refer to BRE Global Fire Test Report No. 292606-2 Issue 1, available from the Certificate holder.

7.2 The boards are classified as 'non-combustible' and are not subject to any restriction on building height or proximity to boundaries.

7.3 Designers should refer to the relevant national Building Regulations and guidance for detailed conditions of use, particularly with regard to requirements for fire performance, cavity barriers and combustibility limitations for materials and components used in the overall wall construction, for example, thermal insulation.

## 8 Resistance to moisture

8.1 When tested for water impermeability in accordance with BS EN 12467 : 2012, no water droplets formed on the lower surface within 24 hours; the boards, therefore, conform to the requirements of Category A boards, as defined in the same Standard.

8.2 External walls must have suitable weather protection on the outside and a ventilated cavity must be provided. The product must be treated as a conventional sheathing board with regard to detailing and damp-proofing at openings, eaves and sole plates, and the fixing of wall ties. Where required by design, the addition of a breather membrane must be in accordance with BS 5250 : 2011.

## 9 Proximity of flues and appliances

When installing the product in close proximity to certain flue pipes or heat-producing appliances, the following provisions of the national Building Regulations must be satisfied:

***England and Wales*** **—** Approved Document J
***Scotland*** **—** Mandatory Standard 3.19, clauses 3.19.1[(1)(2)] to 3.19.4[(1)(2)] and 3.19.8[(1)(2)]

(1) Technical Handbook (Domestic).
(2) Technical Handbook (Non-Domestic).

***Northern Ireland*** — Technical Booklet L.

## 10 Wall-mounted fittings

Wall-mounted fittings (outside the scope of this Certificate) must be fixed through the boards into the steel or timber studs, using suitable fixings. The recommendations of the manufacturer must be followed.

## 11 Maintenance

11.1 As the boards have suitable durability, will normally be confined within the building structure and, in most cases, will be covered with finishes, maintenance is not required.

11.2 Under normal conditions of use, the boards are unlikely to suffer damage, but if damage does occur, the boards should be replaced.

## 12 Durability

The durability of the boards is satisfactory. Provided the boards are used in accordance with this Certificate and the Certificate holder's instructions, and are fixed to satisfactory, stable and durable backgrounds by fully-trained operatives, they will have an estimated service life in excess of 30 years when used in external applications and should have a life equal to the building in which they are installed when used in internal applications

## 13 Re-use and recyclability

The boards can be readily recycled.

# Installation

## 14 General

14.1 UCO Superflex must be installed in accordance with this Certificate and the Certificate holder's instructions.

14.2 Reasonable precautions must be taken to ensure the board is not damaged during installation.

14.3 When cutting the board, power and hand tools should be used with care and in accordance with the Certificate holder's recommendations. Power tools should only be used by individuals who have been instructed and trained to use them safely. Appropriate Personal Protective Equipment (PPE) should be used.

14.4 It is important to observe appropriate health and safety legislation when working on site (that is, using personal protective clothing and equipment). The Certificate holder should be consulted for material safety data sheets and advice. When working in enclosed areas, precautions should be taken to ensure dust levels are controlled in accordance with the current issue of EH40/2005.

## 15 Procedure

15.1 The boards are fixed to the steel/timber studs using the specified screws (see section 1.3) at maximum 300 mm spacing on board end supports and intermediate vertical supports, ensuring that the screws are flush-fitted (that is, not overtightened), and positioned at a minimum of 12 mm from the edges of the boards and a minimum of 50 mm from the corners.

15.2 Once the first board is installed, subsequent boards are installed butt-jointed, ensuring that no gaps are present.

**Wall liner**

15.3 In wall liner applications, the position of fixings should be staggered on adjacent boards. The joint is then masked using perforated paper tape, and flush-jointing compound is applied to give a seamless smooth finish.

**Tiling**

15.4 In wet area lining such as bathrooms, tiles finishes are applied in accordance with the manufacturer's instructions. The joint between the boards and the floor must be protected to prevent water penetrating the adjoining space.

15.5 Tiles should be installed and grouted in accordance with the tile manufacturer's instructions, BS 5385-1 : 2009, BS 5385-3 : 2014, BS 5385-4 : 2015 and conventional good practice.

**Finishes**

15.6 Application of finishes to the boards is outside the scope of this Certificate; the Certificate holder should be consulted regarding suitable finishes.

## 16 Repair

As is good practice, any damaged boards must be replaced.

## 17 Over-cladding/façades

Wall claddings must be fixed through the boards into the structural framing. The over-cladding or façade manufacturer must be consulted for fixing specifications. Any damaged boards must be replaced before fixing the façade.

# Technical Investigations

## 18 Tests

Tests were carried out and the results assessed to determine:

- dimensional stability
- density
- resistance to impact
- water absorption
- resistance to pull-through of fixings
- flexural strength
- water impermeability
- resistance to freeze/thaw cycling
- resistance to heat/rain cycling
- resistance to water soak
- resistance to soak/dry cycling
- resistance to wind loading
- water vapour permeability
- racking strength and stiffness
- bond strength of ceramic tiles to the boards.

## 19 Investigations

19.1 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.

19.2 An assessment was made of test reports relating to the reaction to fire classification of the boards to BS EN 13501-1 : 2007.

## Bibliography


BS 5250 : 2011 + A1 : 2016 *Code of practice for control of condensation in buildings*

BS 5385-1 : 2009 *Wall and floor tiling — Design and installation of ceramic, natural stone and mosaic wall tiling in normal internal conditions — Code of practice*
BS 5385-3 : 2014 *Wall and floor tiling — Design and installation of internal and external ceramic and mosaic floor tiling in normal conditions — Code of practice*
BS 5385-4 : 2015 *Wall and floor tiling — Design and installation of ceramic and mosaic tiling in specific conditions — Code of practice*

BS 8000-0 : 2014 *Workmanship on construction sites — Introduction and general principles*
BS 8000-3 : 2001 *Workmanship on building sites — Code of practice for masonry*

BS EN 351-1 : 2007 *Durability of wood and wood-based products. Preservative-treated solid wood — Classification of preservative penetration and retention*

BS EN 594 : 2011 *Timber structures — Test methods — Racking strength and stiffness of timber frame wall panels*

BS EN 1990 : 2002 + A1 : 2005 *Eurocode — Basis of structural design*

BS EN 1991-1-4 : 2005 *Eurocode 1 : Actions on structures — General actions — Wind actions*

BS EN 1993-1-1 : 2005 *Eurocode 3 : Design of steel structures — General rules and rules for buildings*

BS EN 1993-1-3 : 2006 *Eurocode 3 : Design of steel structures — General rules — Supplementary rules for cold-formed members and sheeting*

BS EN 1995-1-1 : 2004 + A1 : 2008 *Eurocode 5 : Design of timber structures — General*

BS EN 1996-1-1 : 2005 *Eurocode 6. Design of masonry structures — General rules for reinforced and unreinforced masonry structures*

BS EN 1996-1-2 : 2005 *Eurocode 6 : Design of masonry structures — General rules — Structural fire design*
BS EN 1996-2 : 2006 *Eurocode 6 : Design of masonry structures — Design considerations, selection of materials and execution of masonry*
BS EN 1996-3 : 2006 *Eurocode 6 : Design of masonry structures — Simplified calculation methods for unreinforced masonry structures*

BS EN 12004-1 : 2017 *Adhesives for ceramic tiles — Requirements, assessment and verification of constancy of performance, classification and marking*
BS EN 12004-2 : 2017 *Adhesives for ceramic tiles — Test methods*

BS EN 12467 : 2012 *Fibre-cement flat sheets — Product specification and test methods*

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

BS EN ISO 9001 : 2015 *Quality management systems — Requirements*
EH40/2005 Workplace exposure limits - *Containing the list of workplace exposure limits for use with the Control of Substances Hazardous to Health Regulations (as amended)*

ETAG 004 : 2011 Guideline for European Technical Approval of External Thermal Insulation Composite Systems with Rendering

ETAG 034 : 2012 *Guideline for European Technical Approval of Kits for external Wall Claddings Part I : Ventilated cladding kits comprising cladding components and associated fixings*

PD 6697 : 2010 *Recommendations for the design of masonry structures to BS EN 1996-1-1 and BS EN 1996-2*

## Conditions of Certificate

### Conditions

1. This Certificate:

- relates only to the product 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.

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.

3 This Certificate will be displayed on the BBA website, and the Certificate Holder is entitled to use the Certificate and Certificate logo, provided that the product 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.

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

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

6. Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product which is contained or referred to in this Certificate is the minimum required to be met when the product 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.

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