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**Agrément Certificate**

**23/6871**

Product Sheet 1 Issue 1

### ADVANCED CONSTRUCTION SYSTEMS CLADDING PRODUCTS

#### FASTCLAD A2

This Agrément Certificate Product Sheet<sup>(1)</sup> relates to Fastclad A2, a pre-bonded masonry panel secured to timber- or steel-framed buildings, or masonry or concrete buildings. It is for use as a non-structural, weatherproof cladding product externally on walls and soffits, and on internal walls, with height restrictions.

(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 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 issue: 12 May 2023

Hardy Giesler  
Chief Executive Officer

*Certificate amended on 7 February 2024 to extend the service life to 60 years and to include reference to the reaction to fire performance of the reverse face.*

*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.*

#### British Board of Agrément

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## SUMMARY OF ASSESSMENT AND COMPLIANCE

This section provides a summary of the assessment conclusions; readers should refer to the later sections of this Certificate for information about the assessments carried out.

### Compliance with Regulations

Having assessed the key factors, the opinion of the BBA is that Fastclad A2, 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)

<b>Requirement:</b>	<b>A1</b>	<b>Loading</b>
Comment:		The product can contribute to satisfying this Requirement. See section 1 of this Certificate.
<b>Requirement:</b>	<b>B2(1)</b>	<b>Internal fire spread (linings)</b>
Comment:		The product may be restricted by this Requirement. See section 2 of this Certificate.
<b>Requirement:</b>	<b>B3(4)</b>	<b>Internal fire spread (structure)</b>
Comment:		The product can contribute to satisfying this Requirement. See section 2 of this Certificate.
<b>Regulation:</b>	<b>B4(1)</b>	<b>External fire spread</b>
Comment:		The product may be restricted by this Requirement. See section 2 of this Certificate.
<b>Regulation:</b>	<b>C2(b)</b>	<b>Resistance to moisture</b>
Comment:		The product can contribute to satisfying this Requirement. See section 3 of this Certificate.
<b>Regulation:</b>	<b>7(1)</b>	<b>Materials and workmanship</b>
Comment:		The product is acceptable. See sections 8 and 9 of this Certificate.
<b>Regulation:</b>	<b>7(2)</b>	<b>Materials and workmanship</b>
Comment:		The product is restricted by this Regulation. See section 2 of this Certificate.



#### The Building (Scotland) Regulations 2004 (as amended)

<b>Regulation:</b>	<b>8(1)(2)</b>	<b>Fitness and durability of materials and workmanship</b>
Comment:		The product is an acceptable material. See sections 8 and 9 of this Certificate.
<b>Regulation:</b>	<b>8(3)</b>	<b>Fitness and durability of materials and workmanship</b>
Comment:		The product may be restricted by this Regulation. See section 2 of this Certificate.
<b>Regulation:</b>	<b>9</b>	<b>Building standards applicable to construction</b>
Standard:	1.1(a)(b)	Structure
Comment:		The product can contribute to satisfying this Standard, with reference to clause 1.1.1 <sup>(1)(2)</sup> . See section 1 of this Certificate.
Standard:	2.4	Cavities
Comment:		The product can contribute to satisfying this Standard, with reference to clause 2.4.2 <sup>(1)(2)</sup> . See section 2 of this Certificate.
Standard:	2.5	Internal linings
Comment:		The product may be restricted under this Standard, with reference to clause 2.5.1 <sup>(1)(2)</sup> . See section 2 of this Certificate.

Standard:	2.6	Spread to neighbouring buildings.
Standard:	2.7	Spread on external walls
Comment:		The use of the product may be restricted by these Standards, with reference to clauses 2.6.4 <sup>(1)(2)</sup> , 2.6.5 <sup>(1)</sup> , 2.6.6 <sup>(2)</sup> and 2.7.1 <sup>(1)(2)</sup> . See section 2 of this Certificate.
Standard:	3.10	Precipitation
Comment:		The product will contribute to satisfying this Standard, with reference to clauses 3.10.1 <sup>(1)(2)</sup> to 3.10.3 <sup>(1)(2)</sup> . See section 3 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The product 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.
<b>Regulation:</b>	<b>12</b>	<b>Building standards applicable to conversions</b>
Comment:		Comments in relation to the product under Regulation 9, Standards 1 to 6, also apply to this Regulation, with reference to clause 0.12.1 <sup>(1)(2)</sup> and Schedule 6 <sup>(1)(2)</sup> .
		(1) Technical Handbook (Domestic).
		(2) Technical Handbook (Non-Domestic).



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

<b>Regulation:</b>	<b>23(1)(a)(i)(iii)</b>	<b>Fitness of materials and workmanship</b>
Comment:	<b>b(i)</b>	The product is acceptable. See sections 8 and 9 of this Certificate.
<b>Regulation:</b>	<b>23(2)</b>	<b>Fitness of materials and workmanship</b>
Comment:		The product may be restricted by this Regulation. See section 2 of this Certificate.
<b>Regulation:</b>	<b>28(b)</b>	<b>Resistance to moisture and weather</b>
Comment:		The product can contribute to satisfying this Regulation when installed in accordance with section 3 of this Certificate.
<b>Regulation:</b>	<b>30</b>	<b>Stability</b>
Comment:		The product can contribute to satisfying this Regulation. See section 1 of this Certificate.
<b>Regulation:</b>	<b>34(a)(b)</b>	<b>Internal fire spread - Linings</b>
Comment:		The product may be restricted under this Regulation. See section 2 of this Certificate.
<b>Regulation:</b>	<b>35(4)</b>	<b>Internal fire spread - Structure</b>
Comment:		The product can contribute to satisfying this Regulation. See section 2 of this Certificate.
<b>Regulation:</b>	<b>36(a)</b>	<b>External fire spread</b>
Comment:		The product may be restricted by this Regulation. See section 2 of this Certificate.

## Additional Information

### NHBC Standards 2023

In the opinion of the BBA, Fastclad A2, 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*, 6.9 *Curtain walling and cladding* and 6.10 *Light steel framed walls and floors*.

## Fulfilment of Requirements

The BBA has judged Fastclad A2 to be satisfactory for use as described in this Certificate. The product has been assessed as a non-structural, weatherproof cladding product for use externally on walls and soffits, and on internal walls, with height restrictions.

## ASSESSMENT

### Product description and intended use

The Certificate holder provided the following description for the product under assessment. Fastclad A2 is a factory fabricated panel system comprising 13 to 18 mm thick brick slips to BS EN 771-1 : 2011 with F2 Frost Durability and S2 Active Soluble Salt Content, adhesively bonded to cement-bonded particle boards to BS EN 634-1 : 1995 and BS EN 634-2 : 2007 (see Figures 1 and 2 of this Certificate).

The panels provide a decorative cladding for internal and external walls with height restrictions (see section 2). They are screw fixed to stainless steel or galvanized steel-frames or preservative-treated timber battens. The steel should have a minimum specification of S350+Z275 to BS EN 10346 : 2015, but the galvanizing thickness should be increased appropriately to reflect the end-use conditions. For coastal installations, an appropriate grade of stainless steel must be used.

The nominal characteristics of the product are:

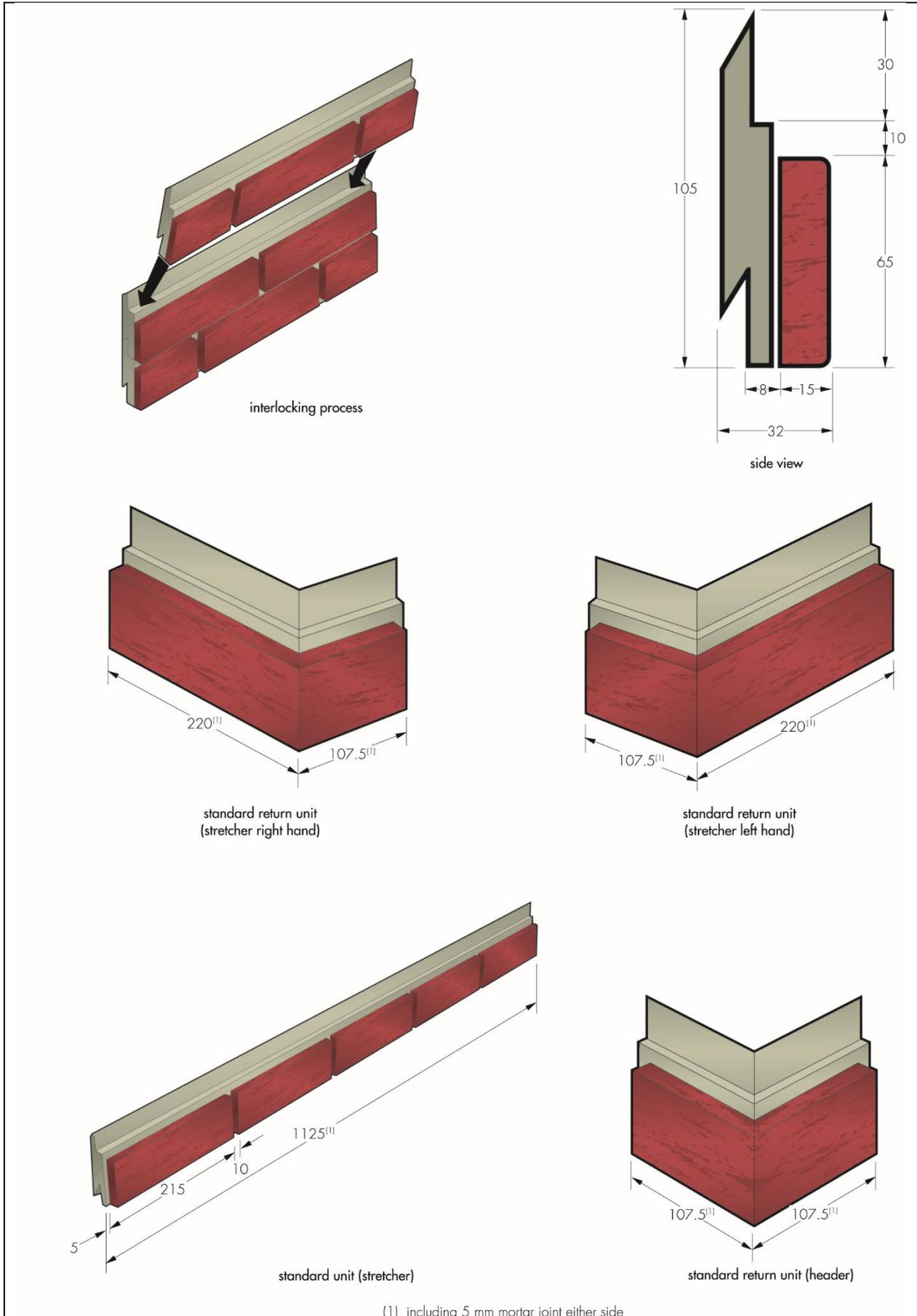
Standard unit (stretcher) (mm)	1125 x 75
Standard unit (header) (mm)	1125 x 75
Standard return unit (stretcher LH) (mm)	220 x 107.5 x 75
Standard return unit (stretcher RH) (mm)	220 x 107.5 x 75
140 mm Fastclad A2 Soldier Unit (mm)	1125 x 150
215 mm Fastclad A2 Soldier Unit (mm)	1125 x 225
Standard return unit (header) (mm)	107.5 x 107.5 x 75
Thermal resistance ( $m^2 \cdot K \cdot W^{-1}$ )	0.09
Water vapour resistance ( $MN \cdot s \cdot g^{-1}$ )	2.3.

The weight of the cladding will vary according to the type and thickness of brick slip used but will not exceed  $53 \text{ kg} \cdot \text{m}^{-2}$  (which equates to an individual brick slip weight of 0.47 kg). The weight of mortar in the pointing (approximately  $5 \text{ kg} \cdot \text{m}^{-2}$ ) should be added to the total when designing the support structure.

Figure 1 Typical installation



Figure 2 Fastclad A2 panel and corner elements (all dimensions in mm)



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

- 0.8 to 1.2 mm stainless steel, or galvanized steel framework to BS EN 10346 : 2015<sup>(2)</sup>
- stainless steel screws for fixing panels to steel framework<sup>(3)</sup>
- 50 x 50 mm timber battens<sup>(1)</sup>
- lime-based pointing mortar
- 4 mm diameter x 50 mm long stainless steel countersunk screws for fixing panels to 50 x 50 mm timber battens.

(1) Timber battens should be a minimum strength grade of C14 as defined in BS EN 338 : 2016, and should be preservative-treated in accordance with BS EN 351-1 : 2007. The fixing of battens to the substrate is outside the scope of this Certificate.

(2) The design and fixing of the sub-frame is outside the scope of this Certificate.

(3) Fixings should be chosen to take into account the properties of the steel sub-frame. In all cases, the pull-out and pull-through loads of the fixings should be sufficient to withstand the design loads appropriate to each structure.

### Applications

Fastclad A2 is satisfactory for use as a weather-resistant, non-structural cladding product, screw steel-framed buildings, or timber or masonry or concrete buildings.

The product can also be used on horizontal (downward facing) surfaces, such as soffits, provided it can be demonstrated by calculation, by a suitably experienced and competent individual, that it is capable of sustaining the loads likely to be experienced in that specific installation. Ventilation slots should be provided at a rate of 1500 mm<sup>2</sup>·m<sup>-2</sup> of surface area, and adequate drainage paths and insect exclusion measures should be provided when designing for downward-facing applications. The Certificate holder can provide further details, but such advice is outside the scope of this Certificate.

The product can be used in a vertical orientation, ie with the support rails or battens running horizontally. In this case, the rails must be perforated or the top of the timber battens must be chamfered backwards at an angle of 15 degrees to shed any water towards the ventilation cavity. The chamfering must be done before the battens are vacuum impregnated with preservative.

The product has not been assessed for use with external wall insulation systems.

## **Product assessment - key factors**

The product was assessed for the following key factors, and the outcomes of the assessments are shown below. Conclusions relating to the Building Regulations apply to the whole of the UK unless otherwise stated.

### **1 Mechanical resistance and stability**

Data were assessed for the following characteristics.

#### **1.1 Strength and stability**

1.1.1 Results of strength and stability tests are given in Table 1.

**Table 1 Strength and stability results**

Product assessed	Assessment method	Requirement	Result
Fastclad A2	Failure bond strength to a BBA Test Method Control	Value achieved	≥0.30 MPa
Fastclad A2	Flexural properties to BS EN ISO 178 : 2019 Flexural Stress	Value achieved	16.77
Fastclad A2	Flexural properties to BS EN ISO 178 : 2019 Flexural Modulus	Value achieved	3177.61 MPa
Fastclad A2	Flexural properties to BS EN ISO 178 : 2019 Displacement at break	Value achieved	1.0 mm
Fastclad A2	Flexural properties to BS EN ISO 178 : 2019 Flexural strain at break	Value achieved	0.87%
Representative related product	MOAT 43 3.3.1 Soft body impact Hard body impact	No effect No damage	Pass Pass

1.1.2 On the basis of the data assessed, the product will have adequate strength to resist the wind loads and impacts likely to occur under normal circumstances.

1.2 The product is satisfactory for use in use Categories I to IV, as shown in Table 2.

**Table 2 Definition of use categories (reproduced from EAD 090062-00-0404 Table G.2)**

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.

## 2 Safety in case of fire

Data were assessed for the following characteristics.

### 2.1 Reaction to fire

2.1.1 The product achieved the reaction to fire classification given in Table 3. This classification may not be achieved by other brick types or other constructions which should therefore be confirmed in accordance with the requirements of the documents supporting the national Building Regulations and any consequent restrictions imposed by those documents, on a case-by-case basis.

**Table 3 Reaction to fire classification**

Classification	Product	Construction	Method/report reference
A2-s1, d0	15 mm Wienerberger (any colour) Slips with lime mortar EA203	80 mm wide, 15 mm deep, 1500 mm long metal rails/40 mm air cavity Any A-s1, d0, or better (excluding paper-faced gypsum plasterboard), substrate, $\geq 9$ mm thick and $\geq 652.5 \text{ kg}\cdot\text{m}^{-3}$	BS EN 13501-1 : 2018 / WF 524130 and WF 524131 <sup>(1)</sup>
A2-s1, d0	Reverse surface facing into a cavity 15 mm Wienerberger (black) brick with lime mortar Ultrascape Regency Range	80 mm x 15 mm metal frame edging/80 mm air cavity Cement particle board, 16 mm thick and 24 $\text{kg}\cdot\text{m}^{-2}$ weight per unit area Joint depth 32.98 mm only Width of vertical joint 1.30 mm only Width of horizontal joint 4 mm only	BS EN 13501-1 : 2018 / 540339 <sup>(1)</sup>

(1) Copies available from the Certificate holder.

2.1.2 The field of application for report references WF 524130 and WF 524131 is given in table 4.

**Table 4 Field of application for report WF 524130**

Product thickness	32 mm $\pm$ 3 mm
Product weight per unit area	53 $\text{kg}\cdot\text{m}^{-2}$ variation arising from brick slip manufacturing tolerance ( $\pm 3$ mm)
Brick type	Clay bricks manufactured to EN 771-1
Brick colour	Any
Brick compressive strength	7 $\text{N}\cdot\text{mm}^{-2}$ to 125 $\text{N}\cdot\text{mm}^{-2}$
Mortar type	Lime mortar (as tested)
Mortar colour	Any
Product composition	No variation allowed
Product construction	No variation allowed

2.1.3 The field of application (report reference 540339) is given in Table 5.

**Table 5 Field of application for report 540339**

Overall thickness	32 mm (No variation allowed)
Overall weight per unit area	53 $\text{kg}\cdot\text{m}^{-2}$ (No variation allowed)
Cement particle board thickness	16 mm (No variation allowed)
Cement particle board weight per unit area	24 $\text{kg}\cdot\text{m}^{-2}$ (No variation allowed)
Epoxy adhesive thickness	0.56 mm (No variation allowed)
Epoxy adhesive application rate	509 $\text{g}\cdot\text{m}^{-2}$ (dry- No variation allowed)
Brick colour	Graphite Black Stock (No variation allowed)
Brick compression strength	7 $\text{N}\cdot\text{mm}^{-2}$
Brick thickness	15 $\pm$ 3 mm (No variation allowed)
Brick weight per unit area	22.1 $\text{kg}\cdot\text{m}^{-3}$ (No variation allowed)
Brick type	Clay bricks manufactured to EN 771-1
Mortar type	Lime mortar
Mortar colour	Black (No variation allowed)
Product construction	No variation allowed
Product composition	No variation allowed

2.1.4 The construction in Table 3 is unrestricted by the documents supporting the national Building Regulations in terms of building height and proximity to a boundary, with the exception of the buildings covered by sections 2.1.6 to 2.1.8.

2.1.5 When used on internal walls, the constructions in Table 3 are also unrestricted by the documents supporting the national Building Regulations, with the exception of the buildings covered by sections 2.1.6 to 2.1.8.

2.1.6 In England and Wales, constructions using timber battens must not be used on buildings that have a storey more than 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 (in Wales only), student accommodation, care homes, sheltered housing, hospitals or dormitories in boarding schools.

2.1.7 In Scotland, when used with timber battens, the product must not be used on buildings that have a storey 11 m or more above ground level and which contain: a dwelling; a building used as a place of assembly, or as a place of entertainment or recreation; a hospital, a residential care building or sheltered housing complex; or a shared multi-occupancy residential building.

2.1.8 In Northern Ireland, when used with timber battens, the product must not be used on any building with a storey 18 m or more above ground level.

2.1.9 Cavity barriers must be placed in accordance with the documents supporting the national Building Regulations and should not impede drainage and ventilation pathways.

2.1.10 Designers must refer to the relevant national Building Regulation guidance for detailed conditions of use, particularly in respect of requirements for substrate fire performance, service penetrations and combustibility limitations for other materials and components used in the overall wall.

## 2.2 Resistance to fire

2.2.1 Where a wall incorporating the product is required to achieve a period of fire resistance, its performance must be confirmed by a suitably qualified and experienced individual or by a test from a suitably accredited laboratory.

### 3 Hygiene, health and the environment

3.1 The product has satisfactory resistance to the passage of moisture. However, unless the supporting wall is known to be watertight, a breather membrane must be installed.

### 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 this product were assessed.

8.2 Results of durability tests are given in Table 5.

*Table 5 Results of durability tests*

Product assessed	Assessment method	Requirement	Result
Fastclad A2	Failure bond strength to a BBA Test Method Heat aged Heated at 60°C for 28 days	No significant deterioration	Pass
Fastclad A2	Failure bond strength to a BBA Test Method Thermal shock 6 hrs at 60°C (20 cycles) followed by 30 minutes of ambient water spray	No significant deterioration	Pass
Fastclad A2	Failure bond strength to a BBA Test Method Freeze/thaw 60 cycles of 8 hours immersion in water at 23 ± 2°C followed by 16 hours at -5°C	No significant deterioration	Pass

#### 8.3 Service life

8.3.1 Under normal service conditions, the product will have a life of at least 60 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, and the following requirements apply in order to satisfy the performance assessed in the Certificate.

9.1.2 Walls incorporating the product must be designed in accordance with the relevant requirements of BS 5250 : 2021.

9.1.3 The wall and the sub-frame to which the cladding is fixed must be structurally sound and constructed in accordance with the requirements of the relevant national Building Regulations and Standards.

9.1.4 The fixings of the panels to the battens must be designed by a suitably experienced and competent individual in accordance with the requirements of this Certificate and the Certificate holder's instructions to ascertain that the product can withstand, without damage or permanent deformation, the design loads determined for each construction, based on Eurocodes.

9.1.5 The product will improve the weather resistance of an existing wall and provide a decorative finish. However, it must be installed only where other routes for moisture penetration have been dealt with separately.

9.1.6 A minimum 15 mm drained and ventilated cavity must be maintained behind the cladding, with a minimum 10 mm wide ventilation and drainage slot at the top and bottom of the vertical air layers, and minimum 1500 mm<sup>2</sup> ventilation slots per m<sup>2</sup> of surface area for horizontal air layers. The cavities are defined as 'well ventilated' in accordance with BS 5250 : 2021. This will also satisfy the NHBC requirements (see *NHBC Standards 2023*, Chapters 6.2 and 6.9) for a minimum 15 mm cavity behind cladding installed over timber- and steel-framed backing walls. Ventilation slots must be designed to avoid water ingress into the cavity.

#### *Wind loading*

9.1.7 Wind loads must be calculated by a suitably experienced and competent individual in accordance with BS EN 1991-1-4 : 2005 and its UK National Annex. The higher-pressure coefficients applicable to corners of buildings must be used.

9.1.8 The panels are capable of transmitting their self-weight and wind load to the structure, but the adequacy of the fixing of the sub-frame to the structural frame or substrate is outside the scope of this Certificate and must be verified by a suitably experienced and competent individual.

### 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 must be carried out in accordance with this Certificate and the Certificate holder's instructions. A summary of instructions and guidance is provided in Annex A of this Certificate.

9.2.3 The detailed guidance found in the documents supporting the national Building Regulations for the provisions that are applicable when the product is installed in close proximity to certain flue pipes and/or heat-producing appliances must be followed.

9.2.4 Panels must be cut on-site using a diamond-tipped angle grinder or masonry saw.

9.2.5 Installation of soffits is as per vertical fixed FastClad A2, but with the following caveats. The FastClad A2 boards must be pushed tight together to ensure maximum interlock and joints may not be opened up to adjust for tolerances. Due consideration must be given to mitigating the risk of water sitting on the rear face of the FastClad boards and 10 x 20 mm drainage slots with insect mesh may be formed in the perp joints in every fourth course, advice should be sought from the Certificate holder, but such advice is outside the scope of this Certificate.

### 9.3 Workmanship

9.3.1 Practicability of installation was assessed by the BBA on the basis of the Certificate holder's information and a site visit to witness an installation. To achieve the performance described in this Certificate, installation of the product must be carried out by cladding contractors provided they have undergone suitable training.

### 9.4 Maintenance and repair

9.4.1 Regular maintenance inspections followed by appropriate remedial action should be made on the installed system. Where damage has been caused by impact, advice should be sought from the Certificate holder, but such advice is outside the scope of this Certificate.

## **10 Manufacture**

10.1 The production processes for the products 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.

† 10.1.6 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**

11.2 The Certificate holder stated that standard panels are delivered to site stacked flat on shrink-wrapped pallets with protective paper between layers. Return (corner) units are shrink-wrapped on pallets. Each pallet of panels carries a label bearing the job number, description, quantity and customer name.

11.2 Pallets of standard panels and corners must not be stacked but should be stored on a flat, accessible space and protected from precipitation and impact damage.

11.3 Panels must be carried vertically and handled with care to avoid damage. Fixings should be protected from damp.

Supporting information in this Annex is relevant to the product 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.

### Additional information on installation

#### **Preliminary work**

A.1 Any loose material must be removed from the substrate and any repairs made.

A.2 Areas of unevenness in the supporting substrate more than 5 mm deep and covering more than 20% of the area of a panel should be filled with dubbing render to ensure adequate support to the panel. Care should also be taken to ensure a flat and uniform appearance to the finished façade.

A.2 Areas of unevenness in the supporting substrate more than 5 mm deep and covering more than 20% of the area of a panel should be filled with dubbing render to ensure adequate support to the panel. Care should also be taken to ensure a flat and uniform appearance to the finished façade.

#### **Procedure**

A.3 The galvanized steel rails, stainless steel rails or 50 by 50 mm timber battens, are fixed vertically plumb and square to the substrate at a maximum of 400 mm centres.

A.4 The first row of panels is fixed to the battens above damp-proof course (DPC) level, making sure that it is level from corner to corner.

A.5 Adjustment should be made to ensure that, if possible, full courses sit under/over windows, doors and openings.

A.6 Starting from one corner, Fastclad A2 corner profile is fixed through the flange using the appropriate fixings for the stud type/location to both faces, ensuring the level is correct.

A.7 Installation can proceed in either direction with Fastclad A2 standard profiles, fixing each profile at every supporting batten and with a minimum of two fixings per profile. It is not normally necessary for each strip to end on a stud as the next course overlaps it, locking it in place. However, additional bracing may be required, for example, around horizontal expansion joints.

A.8 Installation continues from corner to corner, ensuring that courses remain level. The panels should be staggered on each course, relative to the course below, to maximise the rigidity of the system.

A.9 Horizontal and vertical movement joints, to accommodate thermal and moisture movement of Fastclad A2, are required at a maximum of 6 m between vertical joints and maximum 9 m between horizontal joints. In addition, subject to design advice from a qualified Structural Engineer, movement of the building may dictate closer spacing or additional joints.

#### **Finishing**

A.10 Where there is a vertical joint between Fastclad A2 and other cladding materials (including traditional brickwork) or where Fastclad A2 abuts a window or door frame, or a trim, a strip of coloured sealant should be applied to seal the panels, taking care to avoid oversealing any ventilation slots.

A.11 Lime-based pointing mortar is applied in accordance with the manufacturer's instructions. This should not be carried out at temperatures below 5°C, in direct sunlight or at temperatures above 30°C.

## Bibliography

BBA Test Method Determination of bond strength

BS EN ISO 178 : 2019 Plastics - *Determination of flexural properties*

BS EN 338 : 2016 *Structural timber - Strength classes*

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

BS EN 634-1 : 1995 *Cement bonded particleboards - Specification - General requirements*

BS EN 634-2 : 2007 *Cement bonded particleboards - Specification - Requirements for OPC bonded particleboards for use in dry, humid and exterior conditions*

BS EN 771-1 : 2011 + A1 : 2015 *Specification for masonry units - Clay masonry*

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 5250 : 2021 *Management of moisture in buildings. Code of practice*

BS EN 10346 : 2015 Continuous hot-dip coated steel flat products forming. Technical delivery conditions

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

EAD 090062-00-0404 Kits for external wall claddings mechanically fixed

## 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 marking and 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.

**British Board of Agrément**

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