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Agrément Certificate
21/5968
Product Sheet 1 Issue 2

NON-COMBUSTIBLE CAVITY TRAY SYSTEM

KEYFIX NON-COMBUSTIBLE CAVITY TRAYS

This Agrément Certificate Product Sheet(1) relates to Keyfix Non-Combustible Cavity Trays, a range of trays for use in the external walls of masonry or steel-frame constructions, with a brick outer leaf.

(1) Hereinafter referred to as 'Certificate'.

The assessment includes

Product factors:

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

Process factors:

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

Ongoing contractual Scheme elements†:

- regular assessment of production
- formal 3-yearly review

KEY FACTORS ASSESSED

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

The BBA has awarded this Certificate to the company named above for the system described herein. This system has been assessed by the BBA as being fit for its intended use provided it is installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Second issue: 15 December 2025
Originally certified on 4 November 2021

Hardy Giesler
Chief Executive Officer

This BBA Agrément Certificate is issued under the BBA's Inspection Body accreditation to ISO/IEC 17020. Sections marked with † are not issued under accreditation.

The BBA is a UKAS accredited Inspection Body (No. 4345), Certification Body (No. 0113) and Testing Laboratory (No. 0357).

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

The Certificate should be read in full as it may be misleading to read clauses in isolation.

Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.

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SUMMARY OF ASSESSMENT AND COMPLIANCE

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

Compliance with Regulations

Having assessed the key factors, the opinion of the BBA is that Keyfix Non-Combustible Cavity Trays, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations:

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

Requirement:	**A1**	**Loading**
Comment:		The system can contribute to satisfying this Requirement when properly installed. The presence of a damp proof course (DPC), however, can reduce the shear and tensile strength of a wall at that location. See section 1 of this Certificate.
Requirement:	**B4(1)**	**External fire spread**
Comment:		The system is unrestricted under this Requirement. See section 2 of this Certificate.
Requirement:	**C2(b)**	**Resistance to moisture**
Comment:		The system can contribute to satisfying this Requirement. See section 3 of this Certificate.
Regulation:	**7(1)**	**Materials and workmanship**
Comment:		The system is acceptable. See sections 8 and 9 of this Certificate.
Regulation	**7(2)**	**Materials and workmanship**
Comment:		The system is unrestricted by this Regulation. See section 2 of this Certificate

The Building (Scotland) Regulations 2004 (as amended)

Regulation:	**8(1)**	**Fitness and durability of materials and workmanship**
Comment:		The use of the system can contribute to a construction satisfying this Regulation. See sections 8 and 9 of this Certificate.
Regulation:	**9**	**Building standards – construction**
Standard:	1.1(a)(b)	Structure
Comment:		The system can contribute to a construction satisfying this Standard, with reference to clause 1.1.1[(1)(2)]. The presence of a DPC, however, can reduce the shear and tensile strength of a wall at that location. See section 1 of this Certificate.
Standard:	2.6	Spread on external walls
Comment:		The system is unrestricted under this Standard, with reference to clauses 2.6.5[(1)] and 2.6.6[(2)]. See section 2 of this Certificate.
Standard:	3.10	Precipitation
Comment:		The system can contribute to a construction satisfying this Standard, with reference to clauses 3.10.1 and 3.10.4. See section 3 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The system can contribute to satisfying the relevant requirements of Regulation 9, Standards 1 to 6, and therefore will contribute to a construction meeting a bronze level of sustainability as defined in this Standard.

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

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

Regulation:	**23(1)(a)(i) (iii)(b)(i)**	**Fitness of materials and workmanship**
Comment:		The system is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**28(b)**	**Resistance to moisture**
Comment:		The system can contribute to satisfying this Regulation. See section 3 of this Certificate.
Regulation:	**30**	**Stability**
Comment:		The system can contribute to satisfying this Regulation. The presence of a DPC, however, can reduce the shear and tensile strength of a wall at that location. See section 1 of this Certificate.
Regulation:	**36(a)**	**External fire spread**
Comment:		The system is unrestricted by this Regulation. See section 2 of this Certificate.

Additional Information

NHBC Standards 2025

In the opinion of the BBA, Keyfix Non-Combustible Cavity Trays, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapters 6.1 *External masonry walls* and 6.10 *Light steel framed walls and floors*.

The opinion of the BBA does not amount to any endorsement or approval by NHBC and does not in any way guarantee that NHBC will approve such product / system as compliant with the NHBC Technical Requirements and Standards.

Fulfilment of Requirements

The BBA has judged Keyfix Non-Combustible Cavity Trays to be satisfactory for use as described in this Certificate. The system has been assessed as cavity trays for use in the external walls of masonry or steel-frame constructions, with a brick outer leaf.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the system under assessment. Keyfix Non-Combustible Cavity Trays are constructed from 0.5 mm or 0.9 mm thick stainless steel grade 1.4301(1) (or 1.4401(1) for use where enhanced corrosion resistance is required) to BS EN 10028-7 : 2016.

(1) Also known as grades 304 and 316 respectively.

As well as the use of weeps, the system relies on trays or joining pieces with three profiled ribs to enable drainage of excess water through channels to the outside of the external brickwork. No joint sealants are used during the installation of the system.

The standard product range is shown in Table 1.

Table 1 Standard product range

Product Code	Keyfix Cavity Tray	Length of tray
JP	Jointing Piece	230 mm
1BT	1 Brick Tray	222 mm
1.5BT	1.5 Brick Tray	333 mm
2BT	2 Brick Tray	447 mm
2.5BT	2.5 Brick Tray	559 mm
3BT	3 Brick Tray	672 mm
3.5BT	3.5 Brick Tray	784 mm
4BT	4 Brick Tray	897 mm
4.5BT	4.5 Brick Tray	1009 mm
5BT	5 Brick Tray	1122 mm
5.5BT	5.5 Brick Tray	1234 mm
6BT	6 Brick Tray	1347 mm
6.5BT	6.5 Brick Tray	1459 mm
7BT	7 Brick Tray	1572 mm
7.5BT	7.5 Brick Tray	1685 mm
8BT	8 Brick Tray	1797 mm
8.5BT	8.5 Brick Tray	1910 mm
9BT	9 Brick Tray	2022 mm
9.5BT	9.5 Brick Tray	2135 mm
10BT	10 Brick Tray	2247 mm
10.5BT	10.5 Brick Tray	2360 mm
11BT	11 Brick Tray	2472 mm
Product Code	**Keyfix Cavity Tray Corner**	
SL205 x 550RR	Standard External Reveal Corner	205 x 550 mm
RL550 x 205SR	Standard External Reveal Corner	550 x 205 mm
RL550 x 550RR	Standard External Corner	550 x 550 mm
RL450i x i450RR	Standard Internal Corner	450 x 450 mm

The system components are supplied in a variety of styles, as follows:

- with stop-ends at both ends of the tray (see Figure 1)
- with a stop-end at one end of the tray and three profiled drainage ribs at the other end (RH and LH versions available) (see Figure 2).

Joining pieces with three profiled drainage ribs on each end are used to link together two trays with stopends (see Figure 3).

The factory-welded corner units are supplied with three profiled drainage ribs at both ends (see Figure 5).

The factory-welded Corner Pier Unit for shorter lengths of brickwork are supplied in a variety of sizes not exceeding 3000 mm length (see Figure 7).

Figure 1 Tray with stop-ends at both ends

Figure 2 Standard Tray with a stop-end at one end and profiled drainage ribs at the other (also shows the bottom clip before and after fixing)

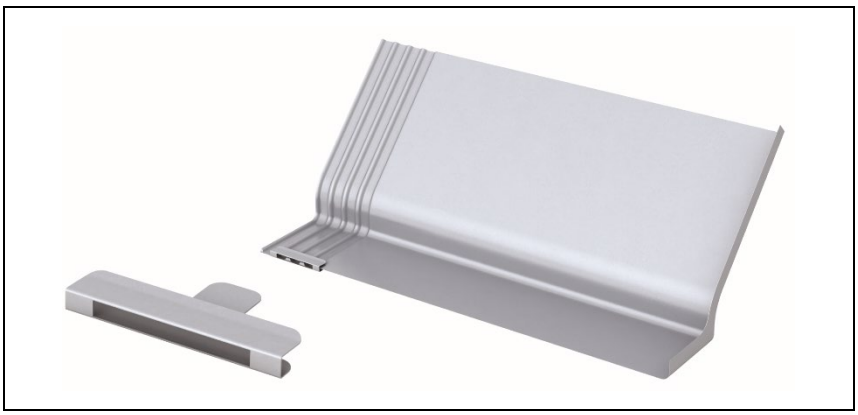


Figure 3 Joining piece

Figure 4 Standard Tray with a stop-end at one end and profiled drainage ribs, jointed with the jointing piece, with upper and lower clips

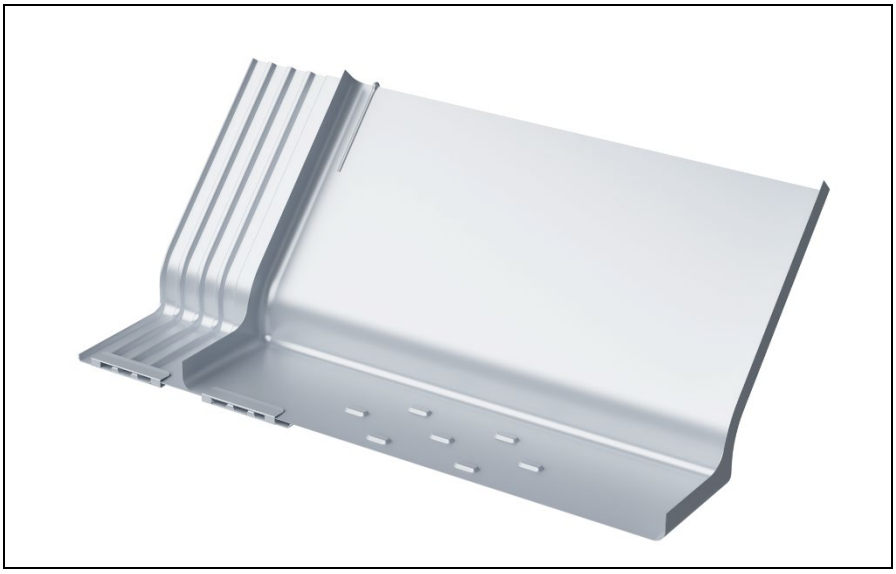


Figure 5 External corner unit with fitted bottom clips

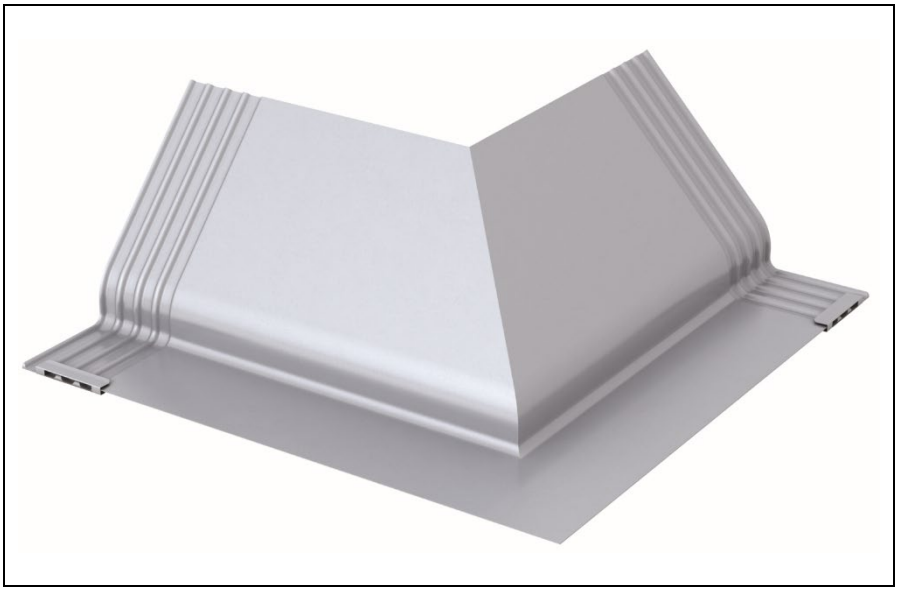


Figure 6 Internal corner unit with fitted bottom clips

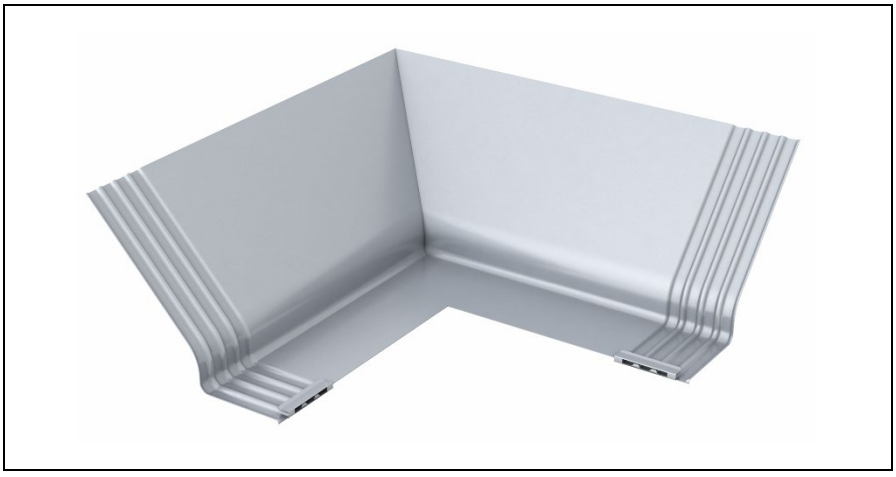
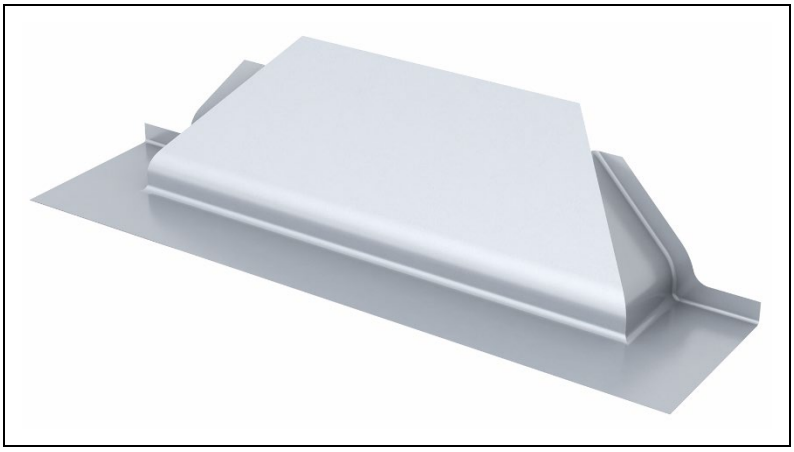


Figure 7 Corner Pier Unit



Ancillary Items

The following ancillary items are essential to use with the system and have been assessed with the system:

- stainless steel weeps are used to channel water from the tray to the outside of the brickwork.
- upper and lower clips to secure the joints between trays. See Figure 4.

Product assessment – key factors

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

1 Mechanical resistance and stability

Data were assessed for the following characteristics.

1.1 Properties in relation to loading

1.1.1 Test data relating to loading are given in Table 1.

Table 1 Product loading(1)

Product assessed	Assessment method	Requirement	Result
Keyfix Non-Combustible Cavity Trays	Characteristic shear strength to BS EN 1052-4 : 2000	Value achieved	0.10 Nmm^{-2}
	Characteristic internal angle of friction to DD86-1 : 1983	Value achieved	21.57°

(1) The test walls in these tests used Sunset Red bricks with a tabulated compressive strength of 69 Nmm^{-2} and a 1:1:6 mortar with a compressive strength of 4.05 Nmm^{-2}.

1.1.2 On the basis of data assessed, the system will not adversely affect the ability of a wall to sustain and transmit compressive loads. However, the presence of a DPC can reduce the shear and tensile (and therefore bending) strengths of a wall.

1.1.3 Keyfix Non-Combustible Cavity Trays and the associated ancillary items, when specified and installed in accordance with this Certificate and generally with the specifications in PD 6697 : 2019, BS EN 1996-1-2 : 2005, BS EN 1996-2 : 2006, BS EN 1996-3 : 2023 and BS 8215 : 1991, are satisfactory for use in external cavity walls of masonry or steel-frame constructions, with a brick outer leaf.

2 Safety in case of fire

Data were assessed for the following characteristics.

2.1 Reaction to fire

The trays have a reaction to fire classification of A1 without the need for testing, as defined by Commission Decision 96/603/EC and their use is unrestricted in terms of height by the documents supporting the national Building Regulations.

3 Hygiene, health and the environment

Data were assessed for the following characteristic.

3.1 Properties in relation to water

3.1.1 The result of an effectiveness of water discharge test is given in Table 2.

Table 2 BBA Method effectiveness of water discharge

Product assessed	Assessment method	Requirement	Result
Keyfix Non-Combustible Cavity Trays	A BBA Method	No water leaks after one hour	Pass

3.1.2 On the basis of data assessed, the Keyfix Non-Combustible Cavity Trays and associated ancillaries (such as corner units and stop ends), when sealed together, provide a continuous barrier against liquid water. Water is typically ejected through weepholes or evaporated from the outer skin.

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

The system comprises steel, which can be recycled.

8 Durability

8.1 The potential mechanisms for degradation and the known performance characteristics of the materials in this system were assessed.

8.2 Service life

Under normal service conditions, the system will remain effective for the life of the building in which it is incorporated, provided it is designed, installed and maintained in accordance with this Certificate and the Certificate holder's instructions.

PROCESS ASSESSMENT

Information provided by the Certificate holder was assessed for the following factors:

9 Design, installation, workmanship and maintenance

9.1 Design

9.1.1 The design process was assessed by the BBA, and the following requirements apply in order to satisfy the performance specified in this Certificate.

9.1.2 Keyfix Non-Combustible Cavity Trays must be installed in accordance with this Certificate, the Certificate holder's instructions, and generally in accordance with PD 6697 : 2019, BS EN 1996-1-1 : 2022, BS EN 1996-2 : 2006, BS EN 1996-3 : 2023 and BS 8215 : 1991.

9.1.2 The system may be installed at a minimum temperature of 5°C in any weather that permits bricklaying. All relevant surfaces must be clean and dry prior to installing the cavity tray units.

9.1.3 The external leaf of the cavity walls must be built from standard brickwork with a minimum thickness of 102.5 mm and maximum thickness of 215 mm.

9.1.4 The trays have a pattern of indentations in the steel where the bricks are placed. These indentations will act as a 'key' to the mortar and improve the bond of the mortar to the steel.

9.1.5 The standard trays are for use with total cavity widths of 160 to 208 mm, ensuring a minimum cavity width coverage of 75% and a minimum upstand height of 150 mm to comply with the national Building Regulations; project-specific cavities greater than 208 mm can be accommodated with bespoke trays. The Certificate holder can advise on suitable non-standard trays for a particular application, but such advice is outside the scope of this Certificate.

9.2 Installation

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

9.2.2 Installation must be carried out in accordance with this Certificate and the Certificate holder's instructions.

9.2.3 Each component has a unique reference number, which can be cross-referenced to the setting-out documents supplied for each job.

9.2.4 Starting at a corner, a half-bed of mortar is placed on the brick course and the first itemised corner unit with its outer edge placed on this bed, set back 10 mm from the outer edge of the brickwork, and pushed down to ensure good contact.

9.2.5 Trays can be bedded into the mortar course and fitted ongoing from the corner unit, depending on the design of each tray.

9.2.6 All joins between trays must be secured by the use of lower and upper clips. To join two trays which each have a stop end, a joining piece must be used to connect the trays together. A lower joining clip is used to secure the overlapping tray to the joining piece and an upper joining clip is used to secure the trays together at the top. This process is repeated for subsequent trays.

9.2.7 If one tray has a stop end and the next tray has profiled drainage channels, then a joining piece is not required; the tray with the stop end must overlap the one with the drainage channels by a minimum of half a brick overlap.

9.2.8 Cavity trays are installed sequentially from the installed corner unit. Each unit is aligned with the outer edge of the brickwork. At the joints between trays, care must be taken to ensure that the drainage channels do not become contaminated with mortar droppings which would impede the drainage of excess water to the external brickwork via the channels.

9.2.9 Providing that all drainage channels are covered by consecutive trays, the trays can be adjusted horizontally in order to achieve brick bond matching. The integral stop ends also provide joint width adjustability of ±3 mm between 7 and 13 mm if required, allowing some flexibility with design lengths.

9.2.10 After installation of the trays on a bed of mortar has been completed, the next course of bricks can be laid and the weeps installed. Weeps must be installed at a minimum distance of 450 mm along the brick course with a minimum of two installed at every corner unit. Mortar droppings must be cleared from the rear of the tray and from the weeps. It is good practice to use a wooden lath behind brickwork to catch mortar droppings, which can be periodically cleaned, raised and repositioned on top of ties as work progresses.

9.2.11 Care must be taken when laying the first brick course on the cavity trays to ensure that the exit holes from the drainage channels do not become obstructed by mortar.

9.3 Workmanship

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 in progress. To achieve the performance described in this Certificate, installation of the system must be carried out by a competent general builder or bricklayer familiar with this type of system.

9.4 Maintenance and repair

As the system is confined within the wall and wall cavity, and have suitable durability (see section 8), maintenance is not required. However, any damage occurring before enclosure must be repaired.

10 Manufacture

10.1 The production processes for the system have been assessed, and provide assurance that the quality controls are satisfactory according to the following factors:

10.1.1 The manufacturer has provided documented information on the materials, processes, testing and control factors.

10.1.2 The quality control operated over batches of incoming materials has been assessed and deemed appropriate and adequate.

10.1.3 The quality control procedures and product testing to be undertaken have been assessed and deemed appropriate and adequate.

10.1.4 The process for management of non-conformities has been assessed and deemed appropriate and adequate.

10.1.5 An audit of each production location was undertaken, and it was confirmed that the production process was in accordance with the documented process, and that equipment has been properly tested and calibrated.

†10.2 The BBA has undertaken to review the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

11 Delivery and site handling

11.1 The Certificate holder stated that the system is delivered to site on pallets, with ancillary items within cardboard boxes. Pallets are wrapped in plastic with address labels and delivery notes attached, along with envelopes containing customer drawings and installation instructions.

11.2 To prevent damage or surface contamination, the pallets must be unloaded by forklift truck and the system must be stored in a secure place in the original packaging until required for use.

†ANNEX A – SUPPLEMENTARY INFORMATION

Supporting information in this Annex is relevant to the system but has not formed part of the material assessed for the Certificate.

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

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

Management Systems Certification for production

The management system of the manufacturer has been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 by the BBA (Certificate 18/Q059).

Additional information on installation

Stainless steel has no effect on, and is unaffected by, materials currently used as A1 fire-rated cavity wall insulants. However, where the trays are not bonded to the inner leaf, they do not form a continuous mechanical barrier, and blown or injected insulation may penetrate from the cavity above to below the trays. This possibility must be considered when an in-situ applied cavity insulation is used.

Bibliography

BS EN 1052-4 : 2000 *Methods of test for masonry – Determination of shear strength including damp proof course*

BS EN 1996-1-1 : 2022 *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 *Design of masonry structures – Design considerations, selection of materials and execution of masonry*

BS EN 1996-3 : 2023 *Eurocode 6 – Design of masonry structures – Simplified circulation methods for unreinforced masonry structures*

BS EN 10028-7 : 2016 *Flat products made of steels for pressure purposes – Stainless steels*

BS 8215 : 1991 *Code of practice for design and installation of damp-proof courses in masonry construction*

BS EN ISO 9001 : 2015 *Quality management systems – Requirements*

DD86-1 : 1983 *Damp-proof courses – Methods of test for flexural bond strength and short term shear strength*

PD 6697 : 2019 *Recommendations for the design of masonry structures to BS EN 1996-1-1 and BS EN 1996-2*

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
- 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
- and any matter arising out of or in connection with it or its subject matter (including non-contractual disputes or claims) is governed by and construed in accordance with the law of England and Wales.
- the courts of England and Wales shall have exclusive jurisdiction to settle any matter arising out of or in connection with this Certificate or its subject matter (including non-contractual disputes or claims).

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.

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