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### Agrément Certificate

21/5862

Product Sheet 1

## IBSTOCK KEVINGTON

### IBSTOCK KEVINGTON HYPERLITE ARCH

This Agrément Certificate Product Sheet<sup>(1)</sup> relates to Ibstock Kevington Hyperlite Arch, comprising cement/wood particle board with an injected core of polyurethane foam, with fired clay brick slips attached with epoxy adhesive, for use as decorative brick slip cladding over openings in buildings subject to height restrictions.

(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

**Resistance to weathering** — the bond between the brick slips and the composite board is durable and stable when subjected to freeze/thaw cycling (see section 6).

**Strength and stability** — the product is suitable for use in locations where there is little possibility of impact or abrasion damage (see section 7).

**Behaviour in relation to fire** — the reaction to fire classification of the product has not been declared to BS EN 13501-1 : 2018 and its use is restricted (see section 8).

**Durability** — provided the product is designed, installed and used in accordance with this Certificate, it will have a service life of at least 60 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 Second issue: 29 June 2021

Originally certificated on 9 March 2021

Hardy Giesler  
Chief Executive Officer

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

*The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at [www.bbacerts.co.uk](http://www.bbacerts.co.uk)*

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

*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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## Regulations

In the opinion of the BBA, Ibstock Kevington Hyperlite Arch, 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)

<b>Requirement:</b>	<b>A1</b>	<b>Loading</b>
Comment:	The product is acceptable for use as set out in sections 7.1 to 7.7 of this Certificate.	
<b>Requirement:</b>	<b>B4(1)</b>	<b>External fire spread</b>
Comment:	The product is restricted by this Requirement. See sections 8.1 to 8.3 of this Certificate.	
<b>Requirement:</b>	<b>C2(c)</b>	<b>Resistance to moisture</b>
Comment:	The product can contribute to satisfying this Requirement. See sections 10.2 and 10.3 of this Certificate.	
<b>Requirement:</b>	<b>L1(a)(i)</b>	<b>Conservation of fuel and power</b>
Comment:	The product can contribute to satisfying this Requirement. See section 9 of this Certificate.	
<b>Regulation:</b>	<b>7(1)</b>	<b>Materials and workmanship</b>
Comment:	The product is acceptable. See section 12 and the <i>Installation</i> part of this Certificate.	
<b>Regulation:</b>	<b>7(2)</b>	<b>Materials and workmanship</b>
Comment:	The product is restricted by this Regulation. See sections 8.1 and 8.3 of this Certificate.	
<b>Regulation:</b>	<b>26</b>	<b>CO<sub>2</sub> emission rates for new buildings</b>
<b>Regulation:</b>	<b>26A</b>	<b>Fabric energy efficiency rates for new dwellings (applicable to England only)</b>
<b>Regulation:</b>	<b>26A</b>	<b>Primary energy consumption rates for new buildings (applicable to Wales only)</b>
<b>Regulation:</b>	<b>26B</b>	<b>Fabric performance values for new dwellings (applicable to Wales only)</b>
Comment:	The product can contribute to satisfying these Regulations. See section 9 of this Certificate.	



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

<b>Regulation:</b>	<b>8(1)</b>	<b>Durability, workmanship and fitness of materials</b>
Comment:	The product is acceptable. See section 12 and the <i>Installation</i> part of this Certificate.	
<b>Regulation:</b>	<b>9</b>	<b>Building standards applicable to construction</b>
Standard:	<b>1.1(a)(b)</b>	<b>Structure</b>
Comment:	The product is acceptable, with reference to clauses 1.1.1 <sup>(1)(2)</sup> and 1.1.2 <sup>(1)(2)</sup> of this Standard. See sections 7.1 to 7.7 of this Certificate.	
Standard:	<b>2.6</b>	<b>Combustibility</b>
Comment:	The product is restricted by this Standard, with reference to clauses 2.6.4 <sup>(1)(2)</sup> , 2.6.5 <sup>(1)</sup> and 2.6.6 <sup>(2)</sup> . See section 8.1 of this Certificate.	
Standard:	<b>2.7</b>	<b>Spread on external walls</b>
Comment:	The product is restricted by this Standard, with reference to clause 2.7.1 <sup>(1)(2)</sup> . See sections 8.1, 8.2, 8.4 and 8.5 of this Certificate.	
Standard:	<b>6.1(b)</b>	<b>Carbon dioxide emissions</b>
Comment:	The product can contribute to satisfying this Standard, with reference to clauses 6.1.1 <sup>(1)</sup> , 6.1.2 <sup>(2)</sup> and 6.1.6 <sup>(1)</sup> . See section 9 of this Certificate.	

Standard:	6.2	Building insulation envelope
Comment:		The product can contribute to satisfying this Standard, with reference to clauses 6.2.3 <sup>(1)</sup> and 6.2.5 <sup>(2)</sup> . See section 9 of this Certificate.
Standard:	7.1(a)(b)	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.
Regulation:	12	<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)

Regulation:	23(a)(i)	<b>Fitness of materials and workmanship</b>
Comment:	(iii)(b)(i)	The product is acceptable. See section 12 and the <i>Installation</i> part of this Certificate.
Regulation:	30	<b>Stability</b>
Comment:		The product is acceptable as set out in sections 7.1 to 7.7 of this Certificate.
Regulation:	36(a)	<b>External fire spread</b>
Comment:		The product is restricted by this Regulation. See sections 8.1 to 8.3 of this Certificate.
Regulation:	39(a)(i)	<b>Conservation measures</b>
Comment:		The product can contribute to satisfying this Regulation. See section 9 of this Certificate.
Regulation:	40(2)	<b>Target carbon dioxide emission rate</b>
Comment:		The product can contribute to satisfying this Regulation. See section 9 of this Certificate.

## Construction (Design and Management) Regulations 2015

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

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

See section: 3 *Delivery and site handling* (3.4 and 3.5) of this Certificate.

## Additional Information

### NHBC Standards 2021

In the opinion of the BBA, Ibstock Kevington Hyperlite Arch, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapter 6.1 *External masonry walls*.

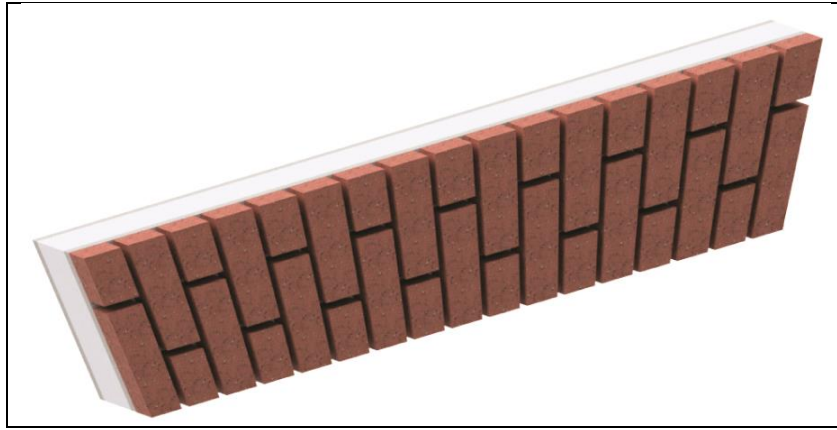
## Technical Specification

### 1 Description

1.1 Ibstock Kevington Hyperlite Arch is made of composite units of cement/wood particle board with an injected core of polyurethane foam, with fired clay brick slips bonded to the cement wood particle board with epoxy (see Figure 1).

1.2 The maximum available continuous length of the product is 2000 mm, with a span of up to 1500 mm and a width of 102 mm. The fair-faced soffit can be in the range of 20 to 30 mm.

*Figure 1 Ibstock Kevington Hyperlite Arch*



1.3 The product consists of the following components (see Figure 2):

**Composite board**

- Cement/wood particle board – combination of 8 mm thick Versapanel manufactured by Euroform and polyurethane foam provided by BASF Group. Versapanel is CE marked in accordance with harmonised standard EN 13986 : 2004.

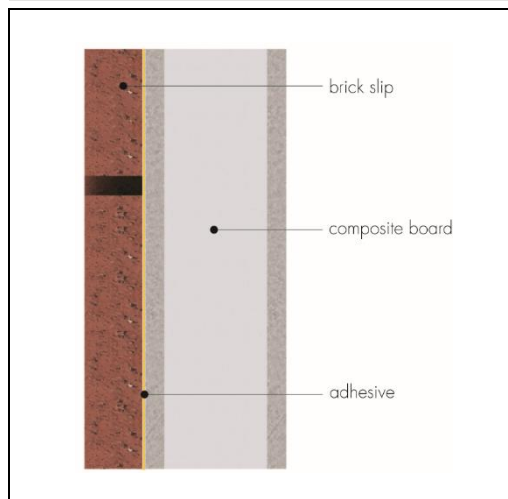
**Adhesive**

- Adhesive – Metolux Metofix 3-1 and Metofix 3-1 GRP, solvent-free, two-component epoxy adhesive (subject of BBA Certificate 12/4893).

**Brick slip**

- Brick slips – 30 mm wide and cut from bricks manufactured in accordance with BS EN 771-1 : 2011 and BS 4729 : 2005.

*Figure 2 Components of Hyperlite Arch*



1.4 Ancillary components specified for use with the product, but outside the scope of this Certificate, include:

- masonry support system
- expansion joint mastic sealant.
- wall ties
- weep vents
- cavity trays
- DPCs.

## 2 Manufacture

2.1 The product is composed of cement/wood particle board, adhesive and brick slips. The product is formed by sandwiching foam between a cement particle board, then brick slips are bonded to the board using epoxy adhesive.

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

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

2.3 The management system of the manufacturer has been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 by Advance Certification (Certificate 01292).

## 3 Delivery and site handling

3.1 The product is delivered to site or to builders' merchants at specified lengths, each carrying a label bearing the Certificate holder's name.

3.2 Reasonable care must be taken during unloading and storage, to avoid impact and abrasion or damage and exposure to contaminants.

3.3 The product must be placed singly on dry level ground; sliding one against any face of another should be avoided. Units should be stored away from passing site traffic and potential splashing or impact damage.

3.4 Where pallets are lifted more than 1 metre above ground level, a safety cage (with adequate dimensions around the pallets) should be used. All personnel must stand well clear when pallets are being lifted or moved. Where appropriate, pallets can be lifted by a fork truck, only using the holes provided in the pallets. Manoeuvring of pallets should be subject to risk assessments and safe operating systems in accordance with current HSE guidance.

3.5 If it is considered necessary to store a pallet above ground level, it should only be placed on a suitably designed staging with guard rails and brick nets of appropriate height to prevent any blocks falling to lower working areas.

## Assessment and Technical Investigations

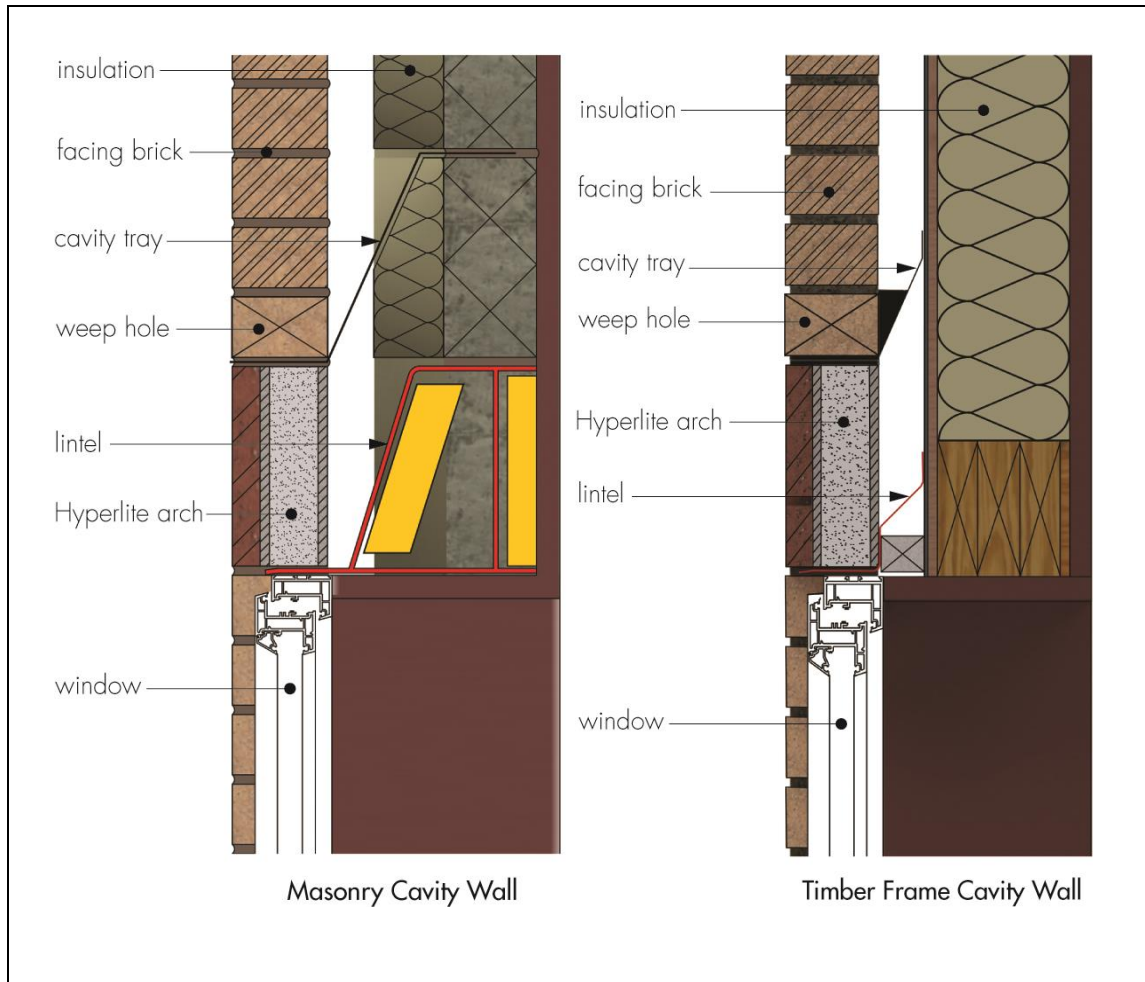
The following is a summary of the assessment and technical investigations carried out on Ibstock Kevington Hyperlite Arch.

## Design Considerations

## 4 Use

4.1 Ibstock Kevington Hyperlite Arch is satisfactory for use as a decorative brick-slip-clad arch over openings in low rise buildings, in conjunction with load bearing stainless steel or galvanized steel cavity lintels (see Figure 3).

**Figure 3 General cross-section of Hyperlite Arch**



4.2 Designers, planners, contractors and/or installers must ensure that the installation of the product is in accordance with the Certificate holder's instructions and this Certificate.

4.3 As with any form of cavity wall construction, where buildings need to comply with *NHBC Standards 2021*, specifiers should observe the requirements of these Standards.

## 5 Practicability of installation

The product is designed to be installed by a competent general builder, or a contractor, experienced with this type of product.

## 6 Resistance to weathering

6.1 The type of facing brick chosen for a particular exposure situation should comply with PD 6697 : 2019, Table 15.

6.2 The bond between the facing brick and composite board is durable and stable when subjected to freeze/thaw cycling.

6.3 The product is suitable for use in all exposure conditions up to 'Very Severe', in accordance with PD 6697 : 2019. Designers must provide a specification for the abutting bricks, mortar type and striking, cavity trays and stop ends appropriate for the exposure zone.



## 7 Strength and stability



7.1 The product has adequate strength and stiffness to sustain its own weight, providing it is installed by an appropriately qualified individual. The product is non-load bearing and must be used in conjunction with load bearing stainless steel or galvanized steel cavity lintels.

7.2 The characteristic wind loads on the product 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 pressure coefficients. In accordance with BS EN 1990 : 2002 and its UK National Annex, a partial factor of 1.5 should be used to determine the design wind load to be resisted by the product.

7.3 An assessment of the structural performance for each building must be carried out by a suitably qualified and experienced individual to confirm that the proposed system provides adequate resistance to design wind loads.

7.4 The characteristic bond resistance between the backing board and brick slip interface for a weathered sample was  $220 \text{ kN}\cdot\text{m}^{-2}$  in accordance with BS EN 1015-12 : 2016. The test report can be requested from the Certificate holder.

7.5 The compressive strength of the product, derived from tests in accordance with BS EN 772-1 : 2011, was  $750 \text{ kN}\cdot\text{m}^{-2}$  for  $1200 \times 70 \times 215 \text{ mm}$  dimensions, and  $720 \text{ kN}\cdot\text{m}^{-2}$  for  $670 \times 70 \times 215$  dimensions. The Certificate holder can provide the test results on request.

7.6 The characteristic flexural strength of the product with  $1250 \times 102 \times 215 \text{ mm}$  dimensions is 3.41 kN, in accordance with BS EN 846-9 : 2016. The detailed test report can be requested from Certificate holder.

7.7 In addition to the requirements specifically referred to in this Certificate, brickwork or blockwork structures in which the product is incorporated must be designed and constructed in accordance with BS EN 1996-1-1 : 2005 and BS EN 1996-1-2 : 2005 and their UK National Annexes, PD 6697 : 2019 and the technical specifications of the national Building Regulations, as appropriate.

### Impact resistance

7.8 Soft and hard body impact tests were carried out and confirmed that the product is suitable for Use Categories II, III and IV as defined in EAD 090062-00-0404 : 2018 table G.2 (see Table 1, below)

*Table 1 Use Categories*

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 system 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.

## 8 Behaviour in relation to fire



8.1 The Certificate holder has not declared a reaction to fire classification for the product to BS EN 13501-1 : 2018.

8.2 With minor exceptions, the product should be included in calculations of unprotected area.



8.3 In England, Wales and Northern Ireland, the product may be used on buildings with no storey 18 m or more above the ground and 1 metre or more from a boundary.



8.4 In Scotland, the product may be used on buildings more than 1 m from a boundary.

8.5 In Scotland, the product should not be used on any building with a storey more than 11 m above the ground, or on any entertainment or assembly building with a total storey area more than 500 m<sup>2</sup>, or on any hospital or residential care building with a total storey area more than 200 m<sup>2</sup>.

8.6 The product was tested under constant heating conditions, at a minimum of 600 °C, and no debonding was recorded for 30 minutes. Designers should refer to the Fire Protection Association fire Test Report No. 102641 for additional details, available from the Certificate holder.

8.7 Designers should refer to the relevant national Building Regulations and guidance for detailed conditions of use, particularly in respect of requirements for substrate fire performance, cavity barriers, service penetrations and combustibility limitations for other materials and components used in the overall wall construction.

## 9 Thermal performance



Lintel junctions incorporating the product can help to limit excessive heat loss and allow use of the psi-values ( $\psi$ -value) shown in Table 2 of this Certificate, in carbon emission rate calculations. For other lintel junction designs, the thermal performance should be numerically analysed in accordance with BS EN 10211 : 2017 and BR 497 : 2016, using the thermal conductivity values below.

- injected PUR foam: 0.030 W·m<sup>-1</sup>·K<sup>-1</sup>
- cement bonded particleboard: 0.23 W·m<sup>-1</sup>·K<sup>-1</sup>
- brick slips: 0.77 W·m<sup>-1</sup>·K<sup>-1</sup>.

Table 2 Junction psi-values

Junction type	Example $\psi$ -value (W·m <sup>-1</sup> ·K <sup>-1</sup> ) <sup>(1)(2)</sup>	Approved $\psi$ -value (W·m <sup>-1</sup> ·K <sup>-1</sup> ) <sup>(2)</sup>	Default $\psi$ -value (W·m <sup>-1</sup> ·K <sup>-1</sup> ) <sup>(3)</sup>
E1 (lintels with perforated base plate)	0.44	0.50	1.0
E2 (other lintels, including other steel lintels)	-	0.30	1.0

(1) Assumes 50 mm window frame, 30 mm frame overlap with cavity, on wall construction: 102.5 mm brickwork, 50 mm vented cavity, 50 mm phenolic insulation ( $\lambda = 0.018$  W·m<sup>-1</sup>·K<sup>-1</sup>), 100 mm concrete blockwork ( $\lambda = 0.162$  W·m<sup>-1</sup>·K<sup>-1</sup>), 2 x 12.5 mm plasterboard ( $\lambda = 0.25$  W·m<sup>-1</sup>·K<sup>-1</sup>).

(2) Lintel design conforms to guidance in the Accredited Construction Details v1.0.

(3) Where a junction detail has not been calculated in accordance with BS EN 10211 : 2017 and BR 497 : 2011 and the construction deviates from that described in footnote (1) and/or (2), above, the default psi-value should be used.

## 10 Condensation

10.1 To limit the risk of condensation, it is essential that the thermal insulation and vapour check continuity is achieved effectively during installation.

### Surface condensation



10.2 Constructions described in Table 2, footnote (1), of this Certificate can achieve a surface temperature factor,  $f_{Rsi}$ , in excess of 0.75 with a plaster finish, and should adequately limit the risk of surface condensation in dwellings, as described in BRE Information Paper IP 1/06. The surface condensation risk of other constructions should be established by numerical modelling in accordance with BRE Information Paper IP 1/06.

10.3 Further guidance on limiting the risk of surface condensation can be found in documents supporting the national Building Regulations.



## 11 Maintenance

11.1 Well-pointed clay brickwork is virtually maintenance free. The brick colour will not fade and the only obvious restoration may be that the joint faces require re-pointing. However, if pointing has been carried out in suitable conditions and the correct mix proportions are used appropriate to the exposure factor, this will not be for many years.

11.2 Water is the most damaging influence on brickwork. Guttering, flashing, leaking downpipes and other detailing must be maintained to prevent localised saturation causing efflorescence, algal growths or associated staining.

11.3 The bond between the brick facings and the panels is durable and does not require maintenance. Should damage to the bonded bricks occur, the damaged section must be removed back to sound substrate and repaired. The Certificate holder should be consulted on the technique to be used.

## 12 Durability



12.1 Provided that the product is designed, installed and used in accordance with this Certificate, it will have a service life of at least 60 years.

12.2 The brick slips will have an equivalent durability to the bricks from which they were cut (see section 1.3).

## 13 Reuse and recyclability

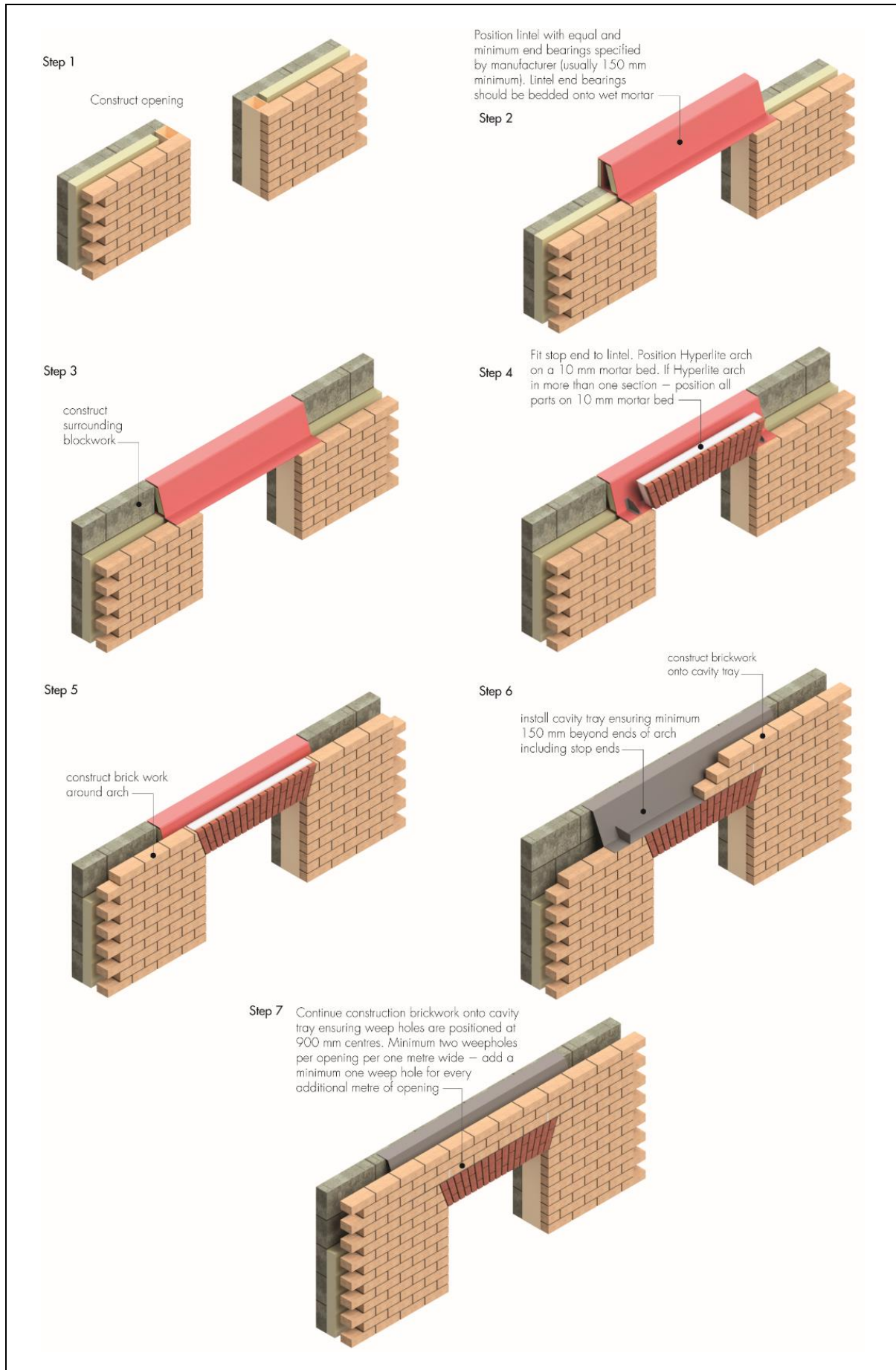
The product contains fired clay, which can be recycled.

## Installation

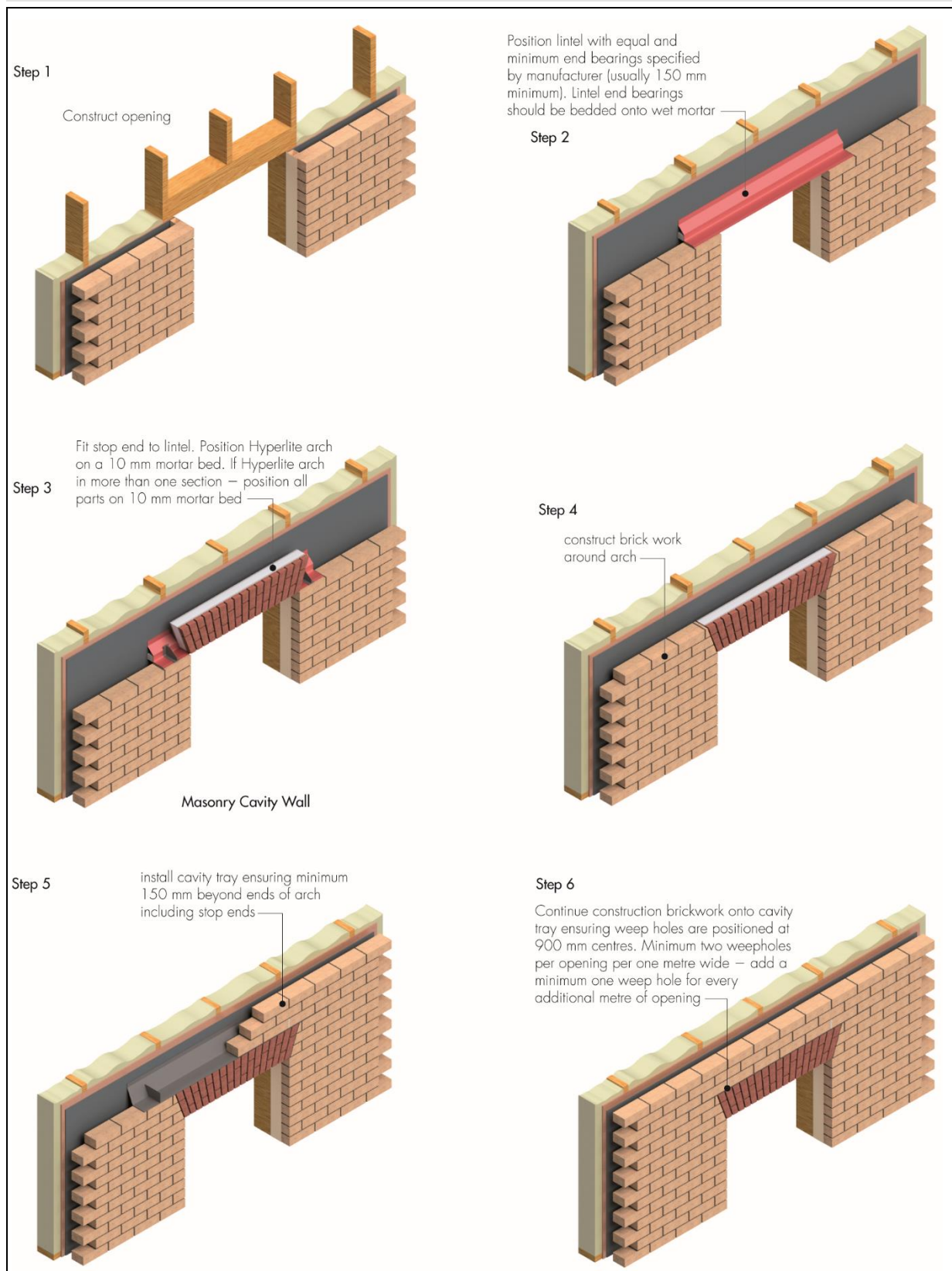
## 14 General

14.1 The product is non-structural and must be supported by a steel cavity lintel; the lintel is placed in position, and levelled using slate packing or stainless steel shims if required. The product is laid on a full bed of mortar, seated central to the opening or, if the product is supplied in more than one section, they should be laid on a fresh bed of mortar, placing the centre-most section of the arch first to ensure correct positioning over the opening. The vertical joint can be buttered with mortar and other units bedded either side. The components should be in place before the adjacent brickwork is constructed around the product. This will allow for the variation in size of the traditional brickwork panels either side of the arch. Stop ends and weep holes are fitted on the lintel at spacings recommended by the Certificate holder – and between sections of the product when appropriate. A cavity tray and stop ends must be placed above the product. Figures 4 and 5 explain the laying order for the product.

**Figure 4 Laying order of Hyperlite Arch in masonry cavity wall**



**Figure 5 Laying order of Hyperlite Arch in timber frame cavity wall**



14.2 Setting out of the product should be done using the face brickwork, and not the backing board. It is expected that, in some cases, the backing board will protrude beyond the edges of the brick slips; in this instance, the brick to brick dimension should be used to gauge spacing, and the joints between the backing board adjusted accordingly, to ensure continuity of joint profile. The quality of workmanship on site should be in accordance with BS 8000-3 : 2020.

14.3 For most situations, M4 mortar (designation iii) is used but in severe exposure locations M6 (designation ii) mortar may be required. Design and technical advice should be sought from the Certificate holder in these cases. The Certificate holder recommends the use of bucket handle joints with the product.

14.4 The perpendicular and bed joints of the backing board should be fully filled with mortar. The depth of the slips should be left free, ready for pointing once the bedding mortar has set sufficiently for the product to remain stable. Immediately after each unit is laid, excess mortar should be struck off from the external face of the unit and the internal face of the board, to keep the cavity free from obstructions.

14.5 A dpc or cavity tray with stop ends must be installed above the product over all openings in external cavity walls and should be in accordance with BS EN 1996-2 : 2006 and PD 6697 : 2019.

14.6 Weep holes must be provided in the outer leaf above the product to drain moisture from the cavity. A minimum of two weep holes should be provided per unit. For fair-faced masonry, weep holes should be provided at each end, and every 900 mm if applicable. Stop ends are included on the supporting lintel and weep holes in the infill brickwork adjacent to the product.

14.7 Precautions must be taken to prevent mortar dropping through the cavity onto the lintels and obstructing the weep holes.

14.8 Wall tie specification and placement should be in accordance with BS EN 1996-2 : 2006 and PD 6697 : 2019 in a cavity wall situation. Where relevant, ties should have a minimum embedment of 50 mm into each leaf. Ties should be level or slightly sloping to the outer leaf. Specification of ties should be to architects' and engineers' requirements.

14.9 Brick slips should be pointed using the same mortar as the rest of the brickwork, but only after removal of the temporary propping and after the full load has been applied to the lintel. Pointing lintel soffits should be conducted using a pointing gun. Pointing should not take place in wet weather or in temperatures below 3°C.

14.10 If the face of the brick slips has been contaminated with mortar smudges or other means, the wall should be pre-wetted with water, and the residue of mortar treated by careful application of a 10% hydrochloric acid solution using a paintbrush. For lighter brick colours, a 5% hydrochloric acid solution is recommended by the Certificate holder. The application of the acid breaks down the cementitious components but, in the solutions suggested, is not damaging to clay bricks. Adjacent features, such as metal windows and the area at the foot of the wall, should be protected from splashing with the chemicals. When vanadium is present, hydrochloric acid-based cleaners must not come into contact with it otherwise a dark stain will result which will become fixed on the surface. Usage of a high-pressure hose is not recommended.

## Technical Investigations

### 15 Tests

Tests were carried out and the results assessed to determine:

- compressive strength
- bond strength after accelerated ageing
- flexural resistance
- fire performance
- soft and hard body impacts.

### 16 Investigations

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

16.2 An assessment was made of data relating to

- thermal performance
- condensation risk analysis
- practicability of installation.

## Bibliography

BRE Information Paper IP 1/06 *Assessing the effects of thermal bridging at junctions and around openings*

BRE Report BR 497 : 2007 *Conventions for calculating linear thermal transmittance and temperature factors*

BS 4729 : 2005 + A1 : 2016 *Clay bricks of special shapes and sizes — Recommendations*

BS 8000-3 : 2020 : *Workmanship on building sites — Code of practice for masonry*

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

BS EN 772-1 : 2011 + A1 : 2015 : *Methods of test for masonry units — Determination of compressive strength*

BS EN 846-9 : 2016 *Methods of test for ancillary components for masonry — Determination of flexural resistance and shear resistance of lintels*

BS EN 1015-12 : 2016 *Methods of test for mortar for masonry — Determination of adhesive strength of hardened rendering and plastering mortars on substrates*

BS EN 1990 : 2002 + A1 : 2005 *Eurocode 1 — Basis of structural design*

NA to BS EN 1990 : 2002 + A1 : 2005 UK National Annex to *Eurocode 1 — Basis of structural design*

BS EN 1991-1-4 : 2005 + A1 : 2010 *Eurocode 1 — Actions on structures — General actions — Wind actions*

NA to BS EN 1991-1-4 : 2005 + A1 : 2010 UK National Annex to *Eurocode 1 — Actions on structures — General actions — Wind actions*

BS EN 1996-1-1 : 2005 + A1 : 2012 *Eurocode 6: Design of masonry structures — General rules for reinforced and unreinforced masonry structures*

NA to BS EN 1996-1-1 : 2005 + A1 : 2012 UK National Annex to *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*

NA to BS EN 1996-1-2 : 2005 UK National Annex to *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 13501-1 : 2018 *Fire classification of construction products and building elements — Classification using data from reaction to fire tests*

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

BS EN ISO 10211 : 2017 *Thermal bridges in building construction — Heat flows and surface temperatures — Detailed calculations*

EAD 090062-00-0404 : 2018 : *Kits for external wall claddings mechanically fixed*

EN 771-5 : 2011 + A1 : 2015 : *Specification for masonry units — Manufactured stone masonry units*

EN 13986 : 2004 + A1 : 2015 *Wood-based panels for use in construction — Characteristics, evaluation of conformity and marking*

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



### 17 Conditions

#### 17.1 This Certificate:

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

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

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

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

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

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

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

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