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Agrément Certificate
01/3816
Product Sheet 4 Issue 4

H + H AIRCRETE BLOCKS AND THIN JOINT SYSTEM

H + H THIN-JOINT SYSTEM

This Agrément Certificate Product Sheet(1) relates to the H + H Thin-Joint System, comprising aircrete blocks (detailed in Product Sheets 1 to 3) bonded on site with a thin layer (2 to 3 mm) of mortar in the construction of masonry walls.

(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 Fourth issue: 15 January 2026
Originally certified on 26 June 2013

Hardy Giesler
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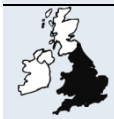
SUMMARY OF ASSESSMENT AND COMPLIANCE

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 the H + H Thin-Joint System, 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**
Requirement:	**A2**	**Ground movement**
Comment:		The system can contribute to satisfying these Requirements. See sections 1 and 9 of this Certificate.
Requirement:	**B2(1)**	**Internal fire spread (linings)**
Comment:		The system is unrestricted by this Requirement. See section 2 of this Certificate.
Requirement:	**B3(1)(2)(3)(a)(4)**	**Internal fire spread (structure)**
Comment:		The system can contribute to a construction satisfying this Requirement. See section 2 of this Certificate.
Requirement:	**B4(1)**	**External fire spread**
Comment:		The system can contribute to a construction satisfying this Requirement. See section 2 of this Certificate.
Requirement:	**C2(a)**	**Resistance to moisture**
Comment:		The system can contribute to satisfying this Requirement. See section 3 of this Certificate.
Requirement:	**C2(b)**	**Resistance to moisture**
Comment:		The system can contribute to satisfying this Requirement. See section 9 of this Certificate.
Requirement:	**C2(c)**	**Resistance to moisture**
Comment:		The system can contribute to limiting the risk of condensation. See section 9 of this Certificate.
Requirement:	**E1**	**Protection against sound from other parts of the building and adjoining buildings**
Comment:		The products in Product Sheets 1, 2 and 3 of this Certificate can contribute to satisfying this Requirement. See section 5 of this Certificate.
Requirement:	**E2(a)**	**Protection against sound within a dwelling-house etc.**
Comment:		The system can satisfy this Requirement. See section 5 of this Certificate.
Requirement:	**L1(a)(i)**	**Conservation of fuel and power**
Comment:		The system can contribute to limiting heat loss through walls. See section 6 of this Certificate.
Regulation:	**7(1)**	**Materials and workmanship**
Comment:		The system is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**7(1)**	**Materials and workmanship**
Comment:		The system is unrestricted by this Regulation. See section 2 of this Certificate.

Regulation:	**25B**	**Nearly zero-energy requirements for new buildings**
Regulation:	**26**	**CO_2 emission rates for new buildings**
Regulation:	**26A**	**Fabric energy efficiency rates for new dwellings (applicable to England only)**
Regulation:	**26A**	**Primary energy rates for new buildings (applicable to Wales only)**
Regulation:	**26B**	**Fabric performance values for new dwellings (applicable to Wales only)**
Regulation:	**26C**	**Target primary energy rates for new buildings (applicable to England only)**
Regulation:	**26C**	**Energy efficiency rating (applicable to Wales only)**
Comment:		The system can contribute to satisfying these Regulations when compensating fabric/service measures are taken. See section 6 of this Certificate.

The Building (Scotland) Regulations 2004 (as amended)

Regulation:	**8(1)**	**Fitness and durability of materials and workmanship**
Comment:		Use of the system satisfies the requirements of this Regulation. See sections 8 and 9 of this Certificate.
Regulation:	**8(3)**	**Fitness and durability of materials and workmanship**
Comment:		The system is unrestricted by this Regulation. See section 2 of this Certificate.
Regulation:	**9**	**Building standards – construction**
Standard:	1.1(a)(b)	Structure
Comment:		The system can contribute to satisfying this Standard, with reference to clauses 1.1.1(1)(2) to 1.1.3(1)(2). See sections 1 and 9 of this Certificate.
Standard:	2.1	Compartmentation
Standard:	2.2	Separation
Standard:	2.3	Structural protection
Standard:	2.4	Cavities
Standard:	2.5	Internal lining
Comment:		The system can contribute to satisfying these Standards, with reference to clauses 2.1.1(2), 2.1.4(2), 2.1.9(2) to 2.1.13(2), 2.1.15(2), 2.2.1(1)(2) to 2.2.5(1)(2), 2.2.7(1)(2), 2.2.8(1), 2.2.10(1), 2.3.1(1)(2) to 2.3.3(1)(2), 2.3.5(1)(2), 2.4.2(1)(2) and 2.5.1(1)(2). See section 2 of this Certificate.
Standard:	2.6	Spread to neighbouring buildings
Comment:		The system can contribute to satisfying this Standard, with reference to clauses 2.6.1(1)(2), 2.6.5(1), 2.6.6(1)(2) and 2.6.7(2). See section 2 of this Certificate.
Standard:	3.4	Moisture from the ground
Comment:		The system can contribute to satisfying this Standard, with reference to clauses 3.4.5(1)(2) and 3.4.7(1)(2). See section 3 of this Certificate.
Standard:	3.10	Precipitation
Comment:		The system can contribute to satisfying this Standard, with reference to clauses 3.10.1(1)(2) to 3.10.3(1)(2). See section 9 of this Certificate.
Standard:	3.15	Condensation
Comment:		The system can contribute to limiting the risk of condensation, with reference to clauses 3.15.1(1)(2), 3.15.4(1)(2) and 3.15.5(1)(2). See sections 3 and 9 of this Certificate.
Standard:	5.1	Noise separation
Comment:		The products in Product Sheets 1, 2 and 3 of this Certificate can satisfy this Standard, with reference to clauses 5.1.1(1)(2) to 5.1.5(1)(2). See section 5 of this Certificate.
Standard:	5.2	Noise reduction between rooms
Comment:		The system can satisfy this Standard, with reference to clauses 5.2.1(1)(2) and 5.2.2(1)(2). See section 5 of this Certificate.

Standard:	6.1(b)(c)	Energy demand
Standard:	6.2	Building insulation envelope
Comment:		The system can contribute to satisfying these Standards, with reference to 6.1.1(1), 6.1.2(1), 6.2.1(1)(2), 6.2.3(1), 6.2.4(2), 6.2.6(1) to 6.2.12(1) and 6.2.7(2) to 6.2.11(2). See section 6 of this Certificate.
Standard:	7.1(a)(b)	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:		All comments given for 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)**	**Fitness of materials and workmanship**
Comment:	**(b)(i)(ii)**	The system is acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**23(2)**	**Fitness of materials and workmanship**
Comment:		The system is unrestricted by this Regulation. See section 2 of this Certificate.
Regulation:	**28(a)(b)**	**Resistance to moisture and weather**
Comment:		The system can contribute to satisfying this Regulation. See sections 3 and 9 of this Certificate.
Regulation:	**29**	**Condensation**
Comment:		The system can contribute to limiting the risk of condensation. See section 9 of this Certificate.
Regulation:	**30(a)(b)**	**Stability**
Comment:		The system can satisfy this Regulation. See sections 1 and 9 of this Certificate.
Regulation:	**35(1)(2)(3)(4)**	**Internal fire spread – structure**
Comment:		The system can contribute to a construction satisfying this Regulation. See section 2 of this Certificate.
Regulation:	**36(a)**	**External fire spread**
Comment:		The system can contribute to a construction satisfying this Regulation. See section 2 of this Certificate.
Regulation:	**39(a)(i)**	**Conservation measures**
Regulation:	**40(2)**	**Target carbon dioxide emissions rate**
Regulation:	**43(B)**	**Nearly zero-energy requirements for new buildings**
Comment:		The system can contribute to satisfying these Regulations. See section 6 of this Certificate.
Regulation:	**49**	**Protection against sound from other parts of the building and adjoining buildings**
Comment:		The products in Product Sheets 1, 2 and 3 of this Certificate can contribute to satisfying this Regulation. See section 5 of this Certificate.
Regulation:	**50(a)**	**Protection against sound within a dwelling or room for residential purposes**
Comment:		The system can contribute to satisfying this Regulation. See section 5 of this Certificate.

Additional Information

NHBC Standards 2026

In the opinion of the BBA, the H + H Thin-Joint System, 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 5.1 *Substructure and ground bearing floors,* 6.1 *External masonry walls* and 6.3 *Internal walls.*

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 the H + H Thin-Joint System to be satisfactory for use as described in this Certificate. The system has been assessed as a jointing system for H + H general purpose aircrete blocks (see Product Sheets 1 to 3 of this Certificate), using a thin layer of mortar complying with BS EN 998-2 : 2016, for use above and below the damp-proof course (DPC) in the construction of loadbearing and non-loadbearing solid internal and external walls, and the inner and outer leaves of cavity walls.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the system under assessment. The H + H Thin-Joint System consists of jointing systems for H + H general purpose aircrete blocks (see Product Sheets 1 to 3 of this Certificate), using a thin layer of mortar complying with BS EN 998-2 : 2016.

The blocks are supplied with the characteristics given in Product Sheets 1 to 3 of this Certificate, Celcon Plus Block and Jumbo Block meet the requirements for thin layer mortar, category A (TLMA) as described in BS EN 771-4 : 2011.

Ancillary Items

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

- attachments and fixings
- bed joint reinforcement
- cavities
- cavity wall ties
- insulation
- membranes
- mortar
- movement joint ties
- vertical movement joints.

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

The blocks were assessed against the requirements of BS EN 771-4 : 2011 and the results are given in Product Sheets 1 to 3 of this Certificate.

2 Safety in case of fire

Data were assessed for the following characteristics.

2.1 Reaction to fire

The blocks were assessed against the requirements of BS EN 13501-1 : 2018 and the results are given in Product Sheets 1 to 3 of this Certificate.

3 Hygiene, health and the environment

Data were assessed for the following characteristics.

3.1 Resistance to freeze/thaw

The blocks were assessed against a BBA Test Method and the results are given in Product Sheets 1 to 3 of this Certificate.

3.2 Resistance to chemicals

3.2.1 The blocks were assessed against the requirements of BRE Special Digest 1 : 2005 and the results are given in Product Sheets 1 to 3 of this Certificate.

3.2.2 In unusual soil and/or groundwater conditions, eg soils contaminated by industrial waste or highly acidic soils, the advice of the Certificate holder must be sought, but such advice is outside the scope of this Certificate.

3.3 Resistance to moisture

The blocks were assessed for moisture movement and the results are given in Product Sheets 1 to 3 of this Certificate.

3.4 Water vapour permeability

The blocks were assessed for water vapour permeability and the results are given in Product Sheets 1 to 3 of this Certificate.

4 Safety and accessibility in use

Not applicable.

5 Protection against noise

Data were assessed for the following characteristic.

5.1 Resistance to airborne sound

The blocks were assessed for resistance to airborne sound transmission and the results are given in Product Sheets 1 to 3 of this Certificate.

6 Energy economy and heat retention

Data were assessed for the following characteristics.

6.1 Thermal conductivity

The blocks were assessed for thermal conductivity and the results are given in Product Sheets 1 to 3 of this Certificate.

6.2 Thermal performance

The blocks were assessed for thermal performance and the results are given in Product Sheets 1 to 3 of this Certificate.

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 the system were assessed.

8.2 Service life

Under normal service conditions, the system will have a life at least equivalent to the structure 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 Walls must be designed and constructed in accordance with BS EN 1996-1-1 : 2005, BS EN 1996-1-2 : 2005, BS EN 1996-2 : 2006 and BS EN 1996-3 : 2006 and their UK National Annexes, and PD 6697 : 2019.

9.1.3 For low-rise buildings, the design of masonry walls must be in accordance with BS 8103-2 : 2013.

9.1.4 The blocks comply with the requirements of BS EN 771-4 : 2011 and must be specified in accordance with BS EN 771-4 : 2011 and BS 6073-2 : 2008. They must only be used in their intended orientation, ie not laid flat, to achieve their full compressive strength.

9.1.5 The maximum depth of horizontal and vertical chases must be in accordance with guidance given in BS EN 1996-1-1 : 2005 and BS EN 1996-1-2 : 2005, and their UK National Annexes.

9.1.6 Cavity barriers must be provided in accordance with the requirements of the documents supporting the national Building Regulations.

9.1.7 Cavity wall ties must be manufactured in accordance with BS EN 845-1 : 2013. Ties must be embedded a minimum of 50 mm into the mortar joints of each leaf. A minimum of 2.5 ties per m^2 must be used, increased to 4.9 ties per m^2 for blocks thinner than 90 mm.

9.1.8 Blocks in the external wall in the zone from the DPC to 150 mm below ground level must not be left exposed, ie the block surface should be covered with a suitable protective finish or, alternatively, suitable clay bricks (Class B Engineering or 'F2') should be used in this zone on the external leaf.

9.1.9 Thin layer mortars, as defined by either BS EN 1996-1-1 : 2005 and its UK National Annex or PD 6697 : 2019, and the characteristic initial shear strength of designed masonry mortars in combination with the system must be in accordance with BS EN 998-2 : 2016. All vertical and horizontal joints must be filled with mortar.

9.1.10 Movement must be accommodated using movement joints or bed joint reinforcement, or a combination of the two. When bed joint reinforcement is intended to contribute towards accommodation of movement, it must be designed and installed strictly in accordance with the Certificate holder's instructions.

9.1.11 Movement joints must be provided in accordance with clause 2.3.4 of BS EN 1996-2 : 2006 and clause NA.2.1 of its UK National Annex, Table NA.1 of PD 6697 : 2019, and the Certificate holder's instructions.

9.1.12 Vertical movement joints and ties must be provided at intervals not exceeding 6 m and within 3 m of corners, and at joints with different block types. Horizontal movement control mesh must be used in bed joints in accordance with the Certificate holder's instructions.

9.1.13 Movement joint ties must be strip-form dowels, manufactured from appropriate materials as set out in PD 6697 : 2019. They are incorporated in the movement joint at 450 mm maximum centres vertically.

9.1.14 The system must not be used in locations with potential of mobile groundwater.

Separating walls

9.1.12 Wall ties should be type A, or an alternative proven not to increase transmission of airborne sound.

9.1.13 Flues and vertical movement joints must not be used, unless permitted by a relevant detail for aircrete blockwork in the Robust Details Ltd Handbook.

9.1.14 Electrical and TV sockets must not be placed on the wall where avoidable, and never within a block length of each other on opposite sides of the wall. Penetration by structural members and services must be avoided; where such penetration is unavoidable, full sealing must be applied at the construction stage. Chases for services should also be minimised and staggered.

9.1.15 Walls must be finished with plasterboard on dabs or plaster to both room faces (this finish need not be carried into the roof space).

Joist hangers

9.1.16 Joist hangers may be used provided that:

9.1.16.1 When designing in accordance with BS EN 1996-1-1 : 2005 and its UK National Annex and/or PD 6697 : 2019, the full effect of the maximum eccentric load at the joist hanger detail is taken into account. It must be assumed that joist hangers are not effectively rigid when calculating the local bearing stress under single hangers; the effective load applied via the hanger must be determined by an acceptable elastic theory.

9.1.16.2 The joist hangers are compatible with aircrete blocks with mean compressive strength of 2.9 $N \cdot mm^{-2}$ or above, dependent on the aircrete block specified. The dimensions used in the design and the manufacture from approximate materials are set out in BS EN 845-1 : 2013 and BS EN 1996-2 : 2006 and its UK National Annex.

External solid walls

9.1.17 The minimum block thicknesses for single-leaf constructions for solid rendered external walls are given in Table 1.

Table 1 Minimum block thickness (mm)(1)

Exposure(2)	Minimum block thickness (mm)
Severe	215
Moderate	190
Sheltered	90

(1) Increased thicknesses may be necessary to meet other requirements such as structural stability, thermal or insulation (see sections 1, 5 and 6 of this Certificate).
(2) Exposure as defined in PD 6697 : 2019.

Surface condensation

9.1.18 Walls will adequately limit the risk of interstitial condensation provided they are designed and constructed in accordance with BS 5250 : 2021, and the relevant guidance.

9.1.19 For buildings in England and Wales, walls will adequately limit the risk of surface condensation when the thermal transmittance (U value) does not exceed 0.7 $W \cdot m^{-2} \cdot K^{-1}$ at any point and the junctions with other elements are designed in accordance with the guidance referred to in section 6 of this Certificate.

9.1.20 For buildings in Scotland, wall constructions will be accepted when the thermal transmittance (U value) does not exceed 1.2 $W \cdot m^{-2} \cdot K^{-1}$ at any point, and the junctions with other elements are designed in accordance with the guidance referred to in BS 5250 : 2021. Further guidance may be obtained from BRE Report BR 262 : 2002 and section 6 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 of the H + H Thin-Joint System must be carried out strictly in accordance with BS 8000-3 : 2020, this Certificate and the Certificate holder's instructions. A summary of instructions and guidance is provided in Annex A.

9.2.3 Rendering and plastering must be carried out in accordance with BS EN 13914-1 : 2016 and BS EN 13914-2 : 2016. The Certificate holder must be consulted regarding suitable finishes and low water vapour permeability renders, but such advice is outside the scope of this Certificate. The moisture condition of the blocks must be considered before the finishes are applied.

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 a contractor, experienced with this type of system.

9.4 Maintenance and repair

As the blocks are generally concealed and have suitable durability, maintenance is not required.

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 mortar is supplied in 25 kg bags and must be stored off the ground in dry, frost-free conditions.

11.2 Delivery and site handing must be performed in accordance with the Certificate holder's instructions and this Certificate. In common with other cementitious products, suitable protective clothing must be worn when handling the dry mortar powder. Contact with the eyes and respiratory system must be avoided. Wet mortar in contact with the skin should be washed off immediately.

†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.

UKCA marking

The Certificate holder has taken the responsibility of UKCA marking the system in accordance with designated Standard BS EN 771-4 : 2011.

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 BSI (Certificate FM 10059).

Additional information on installation

A.1 Supervision and quality of work must be in accordance with BRE Good Building Guide 21 : 1996 and ensure that:

A.2 Installation is in accordance with the hanger manufacturer's instructions.

A.3 The masonry course to carry the hangers is level and the correct height, any adjustments being made before the course is laid.

A.4 The hanger bears directly on a complete block, with the back plate flat against the block.

A.5 The gap between the joist and the back plate does not exceed 6 mm.

A.6 Construction complies with the conditions used in the design and restraint-type hangers are used when specified.

A.7 The blockwork above the hanger is completed and matured before any load is applied to the hanger.

A.8 In external walls containing openings, movement joints may need to be provided at more frequent intervals, or the masonry above and below the opening may need to be reinforced to restrain movement. Particular attention must be paid to long, low horizontal panels of masonry, eg those under windows.

A.9 Coursing must be set out so that bearings are not less than 100 mm in length or the length required by the design calculation, whichever is the greater. Where possible, the masonry must be set out to provide a full block under a bearing. Pressed steel lintels must have a bearing of not less than 150 mm.

A.10 Increased local stresses may be permitted in the masonry provided that the member applying the load is sensibly rigid and of appropriate bearing area, or a suitable spreader is introduced. Design must be in accordance with BS EN 1996-1-1 : 2005 and its UK National Annex.

Installation

A.11 The first course of blocks is bedded in traditional mortar.

A.12 The thin-layer mortar is mixed according to the Certificate holder's instructions. An electric, slow-speed drill with a whisk attachment may be used or the mortar may be hand-mixed in a builder's bucket. Once gauged, the mortar remains workable in normal conditions for up to four hours and should not be re-tempered. It is recommended that the mortar bed should be spread to a thickness of 2-3 mm using a notched trowel (similar to a tiling adhesive trowel), or sledge, ensuring all joints are filled. When applied, the thin-layer mortars will normally set within 10 minutes.

A.13 The dimensional tolerances of the blocks could theoretically result in a mortar joint thickness outside the specified 2-3 mm. However, test and production data indicate a low probability of problems in this respect.

A.14 The inner leaf should lead, with accommodation of movement provided as stated in section 12.2. The blocks may be cut to size using a masonry handsaw.

A.15 It is normally permissible to build the inner leaf to storey height ahead of the outer leaf. However, construction should only proceed where weather and exposure conditions allow. If there is likely to be a significant delay before the outer leaf is built, the inner leaf will require propping and may also require protection from the weather.

A.16 The outer leaf should be laid in accordance with the relevant Codes of Practice. In particular, the use of a cavity batten is recommended to catch mortar droppings. A minimum 50 mm wide cavity must be maintained and cavity wall ties (as described in section 1.3) incorporated at this stage. Helical ties can be hammer-driven into the Aircrete inner leaf at the appropriate mortar joint level of the outer leaf as construction progresses. Alternatively, ties to be face-fixed to the thin-joint blockwork can be anchored through the hole provided in the tie using an expanding nail or similar fixing. Frame-fix ties must be installed correct side up, and placed horizontally or with a slight fall to the outer leaf.

A.17 In addition, extra ties must be located on either side of movement joints and adjacent to window and door openings at 215 mm vertical centres.

A.18 Surface imperfections must be made good.

A.19 The internal surface of the blockwork should be finished in accordance with BS EN 13914-2 : 2016. The blockwork is suitable to receive low-thickness finishes such as textured paint or thin-coat plaster. The effect on other required properties should always be considered. Plaster should be cut at movement joints while wet.

A.20 Other components (such as cavity trays and restraint straps) can be accommodated by appropriate chasing or other methods, as necessary. The advice of the Certificate holder should be sought.

Fixings

A.21 Cut nails or proprietary nails may be used for lightweight fixtures. Screws and plugs, nailable expansion fixings or helical fixings should be used for heavier fixtures. All fixings must penetrate a minimum of 50 mm into the blocks.

A.22 Fixings must be selected and installed in accordance with the fixings manufacturer's instructions, paying particular attention to drilling depth, drill diameter, minimum spacings and minimum edge distance.

Bibliography

BRE Good Building Guide 21 : 1996 *Joist Hangers*

BRE Report BR 262 : 2002 *Thermal performance : avoiding risks*

BRE Special Digest 1 : 2005 *Concrete in aggressive ground*

BS 5250 : 2021 *Management of moisture in buildings — Code of practice*

BS 6073-2 : 2008 *Precase concrete masonry units — Guide for specifying precast concrete masonry units*

BS 8000-3 : 2020 *Workmanship on construction sites — Introduction and general principles*

BS 8103-2 : 2013 *Structural design of low-rise buildings — Code of practice for masonry walls for housing*

BS EN 771-4 : 2011 + A1 : 2015 *Specification for masonry units — Autoclaved aerated concrete masonry units*

BS EN 845-1 : 2013 + A1 : 2016 *Specification for ancillary components for masonry — Wall tiles, tension straps, hangers and brackets*

BS EN 998-2 : 2016 *Specification for mortar for masonry – Masonry mortar*

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 *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 *Eurocode 6 – Design of masonry structures — Design considerations, selection and execution of masonry*
NA to BS EN 1996-2 : 2006 UK National Annex to *Eurocode 6 — Design of masonry structures — Design considerations, selection and execution of masonry*
BS EN 1996-3 : 2006 *Eurocode 6 — Design of masonry structures — Simplified calculation methods for unreinforced masonry structures*
NA +A1 : 2014 to BS EN 1996-3 : 2006 UK National Annex to *Eurocode 6 Design of masonry structures — Simplified calculation methods for unreinforced masonry structures*

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

BS EN 13914-1 : 2016 *Design, preparation and application of external rendering and internal plastering — External rendering*
BS EN 13914-2 : 2016 *Design, preparation and application of external rendering and internal plastering — Design considerations and essential principles for internal plastering*

BS EN ISO 9001 : 2015 + A1 : 2024 *Quality management systems*

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

Conditions of Certificate

Conditions

1 This Certificate:

- relates only to the product that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page – no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them
- 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
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- 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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