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Agrément Certificate
01/3816
Product Sheet 1 Issue 4

H + H AIRCRETE BLOCKS AND THIN JOINT SYSTEM

H + H STANDARD GRADE BLOCKS

This Agrément Certificate Product Sheet(1) relates to H + H Standard Grade Blocks, general purpose, autoclaved aerated concrete (aircrete) building blocks, for use above and below the damp-proof course in the construction of loadbearing and non-loadbearing solid internal and external walls, and inner and outer leaves of cavity 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 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 Fourth issue: 15 January 2026
Originally certified on 26 June 2013

Hardy Giesler
Chief Executive Officer

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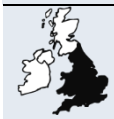
SUMMARY OF ASSESSMENT AND COMPLIANCE

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 H + H Standard Grade Blocks, 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 products can contribute to satisfying these Requirements. See sections 1 and 9 of this Certificate.
Requirement:	**B2(1)**	**Internal fire spread (linings)**
Comment:		The products are unrestricted by this Requirement. See section 2 of this Certificate.
Requirement:	**B3(1)(2)**	**Internal fire spread (structure)**
Comment:	**(3)(a)(4)**	The products can contribute to a construction satisfying this Requirement. See section 2 of this Certificate.
Requirement:	**B4(1)**	**External fire spread**
Comment:		The products can contribute to a construction satisfying this Requirement. See section 2 of this Certificate.
Requirement:	**C2(a)**	**Resistance to moisture**
Comment:		The products can contribute to satisfying this Requirement. See section 3 of this Certificate.
Requirement:	**C2(b)**	**Resistance to moisture**
Comment:		The products can contribute to satisfying this Requirement. See section 9 of this Certificate.
Requirement:	**C2(c)**	**Resistance to moisture**
Comment:		The products 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**
Requirement:	**E2(a)**	**Protection against sound within a dwelling-house etc**
Comment:		The products can satisfy these Requirements. See section 5 of this Certificate.
Requirement:	**L1(a)(i)**	**Conservation of fuel and power**
Comment:		The products can contribute to limiting heat loss through walls. See section 6 of this Certificate.
Regulation:	**7(1)**	**Materials and workmanship**
Comment:		The products are acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**7(1)**	**Materials and workmanship**
Comment:		The products are 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 products 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 products 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 products are unrestricted by this Regulation. See section 2 of this Certificate.
Regulation:	**9**	**Building standards – construction**
Standard:	1.1(a)(b)	Structure
Comment:		The products 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 products 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 products 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 products 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 products 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 products 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 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 products 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 products 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 products 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 products 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)(ii)**	**Fitness of materials and workmanship**
Comment:		The products are acceptable. See sections 8 and 9 of this Certificate.
Regulation:	**23(2)**	**Fitness of materials and workmanship**
Comment:		The products are unrestricted by this Regulation. See section 2 of this Certificate.
Regulation:	**28(a)(b)**	**Resistance to moisture and weather**
Comment:		The products can contribute to satisfying this Regulation. See sections 3 and 9 of this Certificate.
Regulation:	**29**	**Condensation**
Comment:		The products can contribute to limiting the risk of condensation. See section 9 of this Certificate.
Regulation:	**30(a)(b)**	**Stability**
Comment:		The products can satisfy this Regulation. See sections 1 and 9 of this Certificate.
Regulation:	**35(1)(2)(3)(4)**	**Internal fire spread – structure**
Comment:		The products can contribute to a construction satisfying this Regulation. See section 2 of this Certificate.
Regulation:	**36(a)**	**External fire spread**
Comment:		The products 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 products 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 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 products can contribute to satisfying this Regulation. See section 5 of this Certificate.

Additional Information

NHBC Standards 2026

In the opinion of the BBA, H + H Standard Grade Blocks, 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 H + H Standard Grade Blocks to be satisfactory for use as described in this Certificate. The products have been assessed as general purpose, autoclaved aerated concrete (aircrete) building blocks, for use above and below the damp-proof course (DPC) in the construction of loadbearing and non-loadbearing solid internal and external walls, and inner and outer leaves of cavity walls.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the products under assessment. H + H Standard Grade Blocks are general purpose aircrete blocks comprising cement, lime, sand and pulverised fuel ash, with aluminium powder used as an aerating agent.

The products have the nominal characteristics given in Table 1 and the dimensions detailed in Table 2 of this Certificate.

Table 1 Nominal characteristics of blocks

Characteristic (unit)	Value
Gross dry density ($kg \cdot m^{-3}$)	600
Dry density range ($kg \cdot m^{-3}$)	550 to 650
Dimensional tolerances	GPLM / TLMA(1)

(1) For Celcon Plus Blocks and Jumbo Blocks

Table 2 Block dimensions

Product	Face size (mm)	Thickness (mm)
Celcon Blocks	440 x 215	75 to 230(1)
Foundation Blocks	440 x 215, 325 x 215, 630 x 140	215 to 355
Celcon Plus Blocks	630 x 215	100, 140, 215
Jumbo Blocks	630 x 250	100, 140
Coursing Unit	215 x 65	100, 140, 150

(1) A typical weight for a 440 mm by 215 mm by 100 mm block is 7 kg (block weight at typical moisture content when laid).

Ancillary Items

The Certificate holder recommends the following ancillary items for use with the products, 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 products were 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 The products were assessed against the requirements of BS EN 771-4 : 2011 and the results are given in Table 3 of this Certificate.

Table 3 Compressive strength to BS EN 771-4 : 2011

Product assessed	Assessment method	Requirement	Result
H + H Standard Grade Blocks	Mean compressive strength	3.6 $N \cdot mm^{-2}$	Pass
	Minimum individual block compressive strength	2.9 $N \cdot mm^{-2}$	Pass

2 Safety in case of fire

Data were assessed for the following characteristics.

2.1 Reaction to fire

2.1.1 The products have been assessed for reaction to fire and the classification is given in Table 4 of this Certificate.

Table 4 Reaction to fire

Product assessed	Assessment method	Requirement	Result
H + H Standard Grade Blocks	BS EN 13501-1 : 2018	Value achieved	A1

2.1.2 On the basis of the data assessed, the use of the products is unrestricted by the documents supporting the national Building Regulations.

2.2 Resistance to fire

The fire resistance of walls constructed with the products must be determined by a suitably experienced and competent individual by reference to BS EN 1996-1-2 : 2005 and its UK National Annex and BRE Report BR 128 : 1988.

3 Hygiene, health and the environment

Data were assessed for the following characteristics.

3.1 Resistance to freeze/thaw

On the basis of data assessed, the products are resistant to the freeze/thaw conditions likely to occur below the DPC and are suitable for use in situations up to and including MX2.1 as defined in BS EN 1996-2 : 2006 and its UK National Annex. The guidance given in PD 6697 : 2019 must be followed.

3.2 Resistance to chemicals

3.2.1 Based on BRE Special Digest 1 : 2005, the blocks are suitable for use up to Design Sulfate Class DS-4 in soil or groundwater.

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 maximum declared moisture movement of the blocks may be taken as a nominal value of 0.4 $mm \cdot m^{-1}$.

3.4 Water vapour permeability

3.4.1 The water vapour resistance of the products was assessed and the results are given in Table 5 of this Certificate.

Table 5 Water vapour resistance (μ)

Product assessed	Assessment method	Requirement	Result
H + H Standard Grade Blocks	BS EN 1745 : 2020	Declared value (μ)	5(1) / 10(2)

(1) The diffusion behaviour is into the block.
(2) The diffusion behaviour is out of the block.

3.4.2 For the purpose of calculations, the water vapour resistance factor (μ) of the products may be taken as 10 (a resistivity of 50 $MN \cdot s \cdot g^{-1} \cdot m^{-1}$), as given in BS EN ISO 10456 : 2007.

4 Safety and accessibility in use

Not applicable.

5 Protection against noise

5.1 Resistance to airborne sound

5.1.1 Separating walls incorporating the products will satisfy the requirements of the national Building Regulations, without the need for pre-completion testing, when the construction (and associated flanking elements) complies with a relevant detail for aircrete blockwork in the Robust Details Ltd Handbook.

5.1.2 Flanking walls incorporating the products can provide adequate resistance to flanking sound transmission when their construction (and associated separating walls) complies with a relevant detail in the Robust Details Ltd Handbook.

5.1.3 The performance of constructions is subject to pre-completion testing as described in the documents supporting the relevant national Building Regulations.

5.1.4 Internal walls incorporating the products, and meeting the minimum finished mass per unit area requirements in the documents supporting the relevant national Building Regulations, can provide adequate resistance to airborne sound transmission.

6 Energy economy and heat retention

Data were assessed for the following characteristics.

6.1 Thermal conductivity

The thermal conductivity of the products was tested in accordance with BS EN 12664 : 2001 and calculated against the guidance in BS EN 1745 : 2020, BS EN ISO 10456 : 2007 and CIBSE Guide A (2015), and the results are given in Table 6 of this Certificate.

Table 6 Thermal conductivities

Product assessed	Assessment method	Requirement	Result
Dry declared value(1)	BS EN 1745 : 2020		0.13
Protected blockwork			0.15
External blockwork(2)	BS EN ISO 10456 : 2007	Value achieved ($W \cdot m^{-1} \cdot K^{-1}$)	0.16
Below ground level			0.24

(1) $\lambda_{10,dry,}$ ρ = 50 %

(2) Exposed (eg not protected by a cladding system), or below DPC but above ground level.

6.2 Thermal performance

6.2.1 Calculations of the thermal transmittance (U value) of walls must be carried out in accordance with BS EN ISO 6946 : 2017 and BRE Report BR 443 : 2019.

6.2.2 The products can contribute to maintaining the continuity of thermal insulation at junctions between elements and around openings.

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 products were assessed.

8.2 Service life

Under normal service conditions, the products will have a life at least equivalent to the structure in which they are incorporated, provided they are 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 products 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 the 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 Generally, mortar must not be stronger than the products, 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 products must be in accordance with BS EN 998-2 : 2016. All vertical and horizontal joints must be filled with mortar.

9.1.10 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.

9.1.11 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.

9.1.12 The products 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 3.6 $N \cdot mm^{-2}$ or above. The dimensions used in the design and the manufacture from appropriate materials are set out in BS EN 845-1 : 2013 and BS EN 1996-2 : 2006, Annex C, Table C1 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 7.

Table 7 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 performance and sound 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 H + H Standard Grade Blocks must be carried out strictly in accordance with BS 8000-3 : 2020, this Certificate and the Certificate holder's instructions.

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 products must be carried out by a competent general builder, or a contractor, experienced with these types of products.

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 products have been assessed, and provide assurance that the quality controls are satisfactory according to the following factors:

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

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

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

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

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

† 10.2 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 products are supplied shrink-wrapped in standard packs or banded to pallets (to order) suitable for off-loading with mechanical grabs or fork-lift trucks.

11.2 Delivery and site handing must be performed in accordance with the Certificate holder's instructions and this Certificate, including:

11.2.1 The blocks must be stored clear of the ground on a firm, level surface and protected from rain and water from the ground.

11.2.2 The shrink-wrapping should be kept in place until the blocks are required for use.

†ANNEX A – SUPPLEMENTARY INFORMATION

Supporting information in this Annex is relevant to the products 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 products 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 at 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.

Fixings

A.11 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.12 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 128 : 1988 *Guidelines for the construction of fire-resisting structural elements*
BRE Report BR 262 : 2002 *Thermal performance : avoiding risks*
BRE Report BR 443 : 2019 *Conventions for U-value calculations*

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 1745 : 2020 *Masonry and masonry products — Methods for determining thermal products*

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

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