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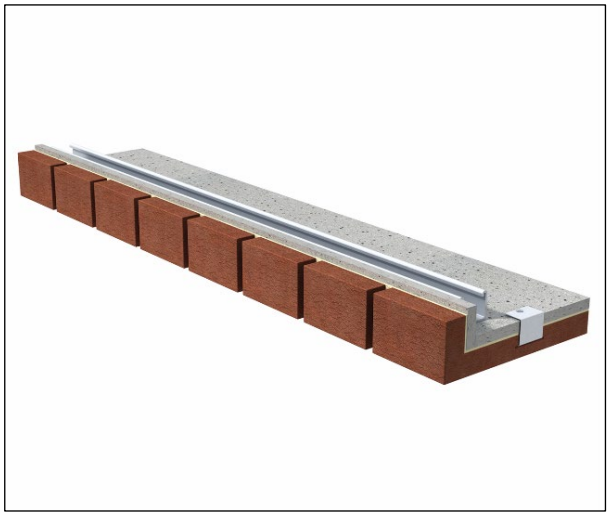
Agrément Certificate
15/5250
Product Sheet 5

IG MASONRY SUPPORT SYSTEMS

IG BRICK ON SOFFIT SYSTEM (B.O.S.S.A1)

This Agrément Certificate Product Sheet(1) relates to the IG Brick On Soffit System (B.O.S.S.A1) comprising calcium silicate boards with mechanically secured and adhesively factory-bonded brick slips, for use in external masonry walls.

(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

Structural performance — the system is non-structural but can support its self-weight and transfer wind actions to the supporting structure (see Tables 1 to 4 and section 6).

Properties in relation to fire — all components of the system are classified as A1 in accordance with BS EN 13501-1 : 2018 and its use is unrestricted in terms of building height or proximity to a boundary (see section 7).

Durability — provided that the system is designed, installed and used in accordance with this Certificate, it will have a service life of at least 60 years (see section 11).

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

On behalf of the British Board of Agrément

Date of Second issue: 26 April 2022

Originally certificated on 4 November 2020

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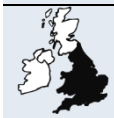
Regulations

In the opinion of the BBA, the IG Brick On Soffit System (B.O.S.S.A1), 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)

Requirement:	**A1**	**Loading**
Comment:		The system is acceptable for use as set out in section 6 of this Certificate.
Requirement:	**B4(1)**	**External fire spread**
Comment:		The system is unrestricted by this Requirement. See Section 7 of this Certificate.
Regulation:	**7(1)**	**Materials and workmanship**
Comment:		The system is acceptable. See section 11 and the *Installation* part of this Certificate.
Regulation:	**7(2)**	**Materials and workmanship**
Comment:		The system is unrestricted by this Regulation. See section 7 of this Certificate.

The Building (Scotland) Regulations 2004 (as amended)

Regulation:	**8(1)(2)**	**Durability, workmanship and fitness of materials**
Comment:		The system is acceptable. See sections 10 and 11 and the *Installation* part of this Certificate.
Regulation:	**9**	**Building standards applicable to construction**
Standard:	1.1(a)(b)	Structure
Comment:		The system is acceptable, with reference to clauses 1.1.1(1)(2) and 1.1.2(1)(2) of this Standard. See section 6 of this Certificate.
Standard:	2.3	Structural protection
Comment:		The system is unrestricted by this Standard, with reference to clause 2.3.2(1)(2). See section 7 of this Certificate.
Standard:	2.6	Spread to neighbouring buildings
Comment:		The system is unrestricted by this Standard, with reference to clauses 2.6.5(1) and 2.6.6(2). See section 7 of this Certificate.
Standard:	2.7	Spread on external walls
Comment:		The system is unrestricted by this Standard, with reference to clauses 2.7.1(1)(2). See section 7 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:		The system can contribute to meeting 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 applicable to conversions**
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(a)(i)**	**Fitness of materials and workmanship**
Comment:	**(iii)(b)(i)**	The system is acceptable. See section 11 and the *Installation* part of this Certificate.
Regulation:	**30**	**Stability**
Comment:		The system is acceptable as set out in section 6 of this Certificate.
Regulation:	**36(a)**	**External fire spread**
Comment:		The system is unrestricted under this Regulation. See section 7 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* (3.3) of this Certificate.

Additional Information

NHBC Standards 2022

In the opinion of the BBA, the IG Brick On Soffit System (B.O.S.S.A1), if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Part 6 *Superstructure (excluding roofs),* Chapter 6.9 *Curtain walling and cladding*.

Technical Specification

1 Description

1.1 The IG Brick On Soffit System (B.O.S.S.A1) is a prefabricated soffit system comprising brick slips adhesively and mechanically bonded to a calcium silicate board carrier to achieve project design requirements (see Figures 1 to 4). A stainless steel channel is designed to fix the calcium silicate board carrier to the underside of the IG Welded Masonry Support System (which is outside the scope of this Certificate).

1.2 The system is available in four standard profiles: BOSS A1 65 x 215 mm with header bond (see Figure 1 and Table 1), BOSS A1 65 x 327 mm with stretcher bond (see Figure 2 and Table 2), BOSS A1 215 x 215 mm half lap bond (see Figure 3 and Table 3) and BOSS A1 215 x 215 mm with soldier bond (see Figure 4 and Table 4).

Figure 1 BOSS A1 65 x 215 mm with header bond (welded masonry support, shims and anchor bolts are outside the scope of this Certificate)

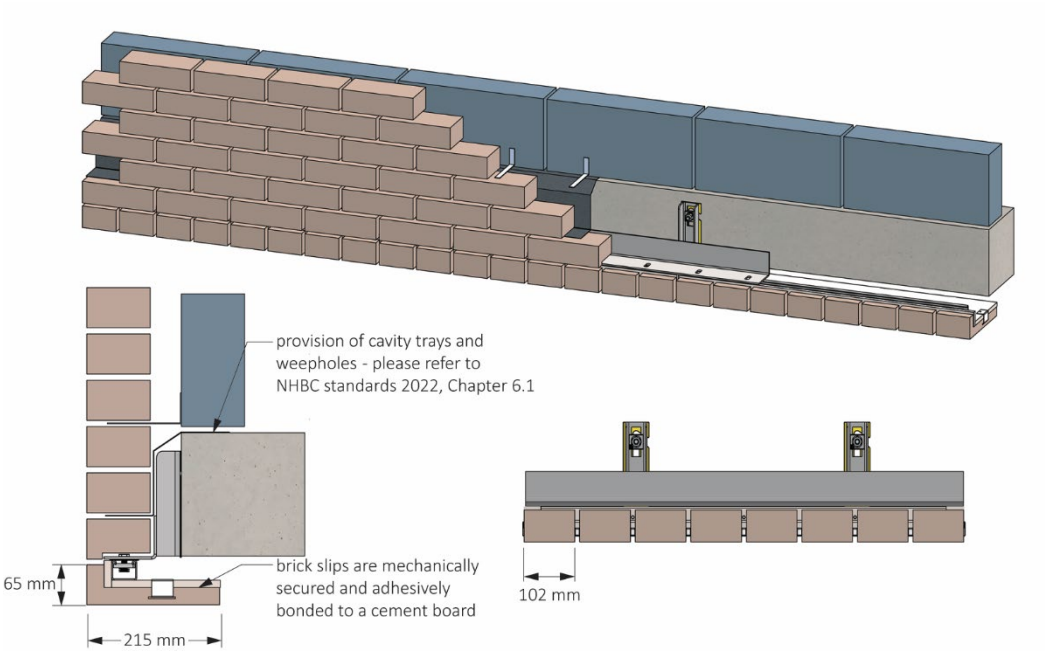


Figure 2 BOSS A1 65 x 327 mm with stretcher bond (welded masonry support, shims and anchor bolts are outside the scope of this Certificate)

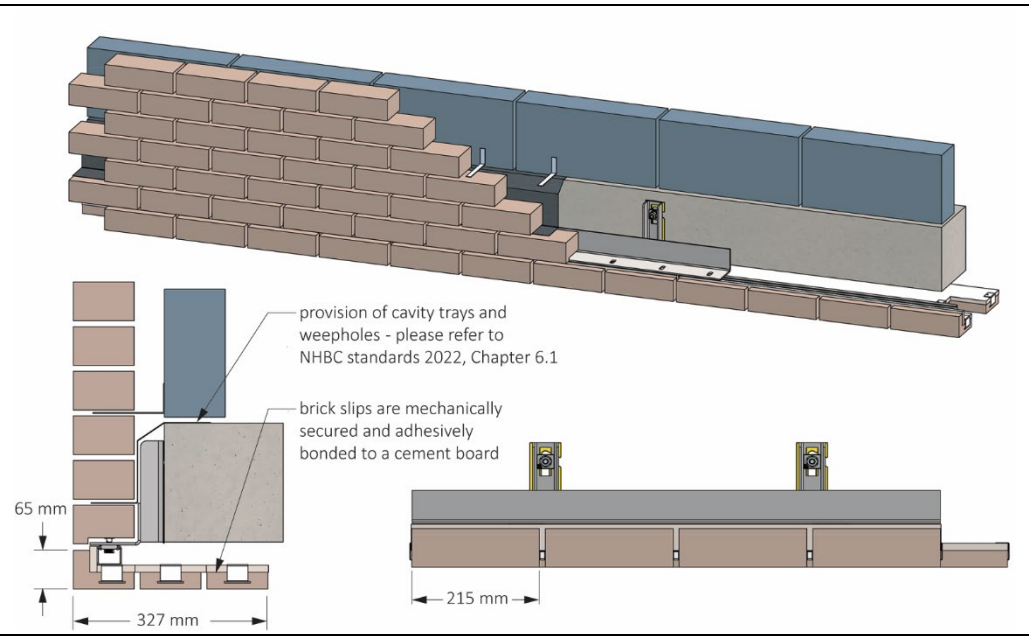


Figure 3 BOSS A1 215 x 215 mm with half lap bond (welded masonry support, shims and anchor bolts are outside the scope of this Certificate)

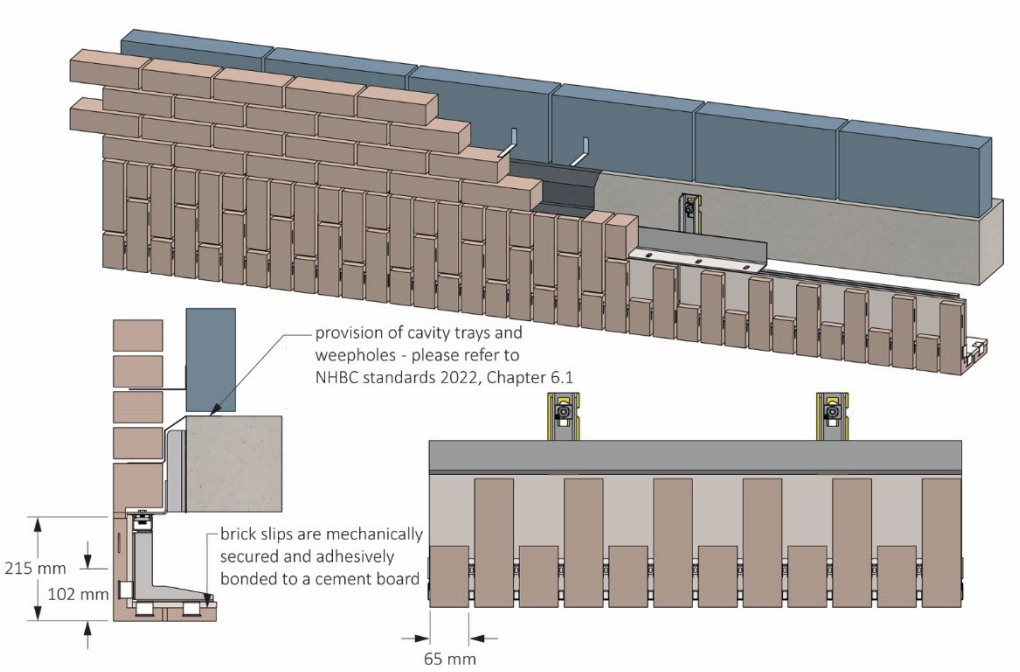


Figure 4 BOSS A1 215 x 215 mm with soldier bond (welded masonry support, shims and anchor bolts are outside the scope of this Certificate)

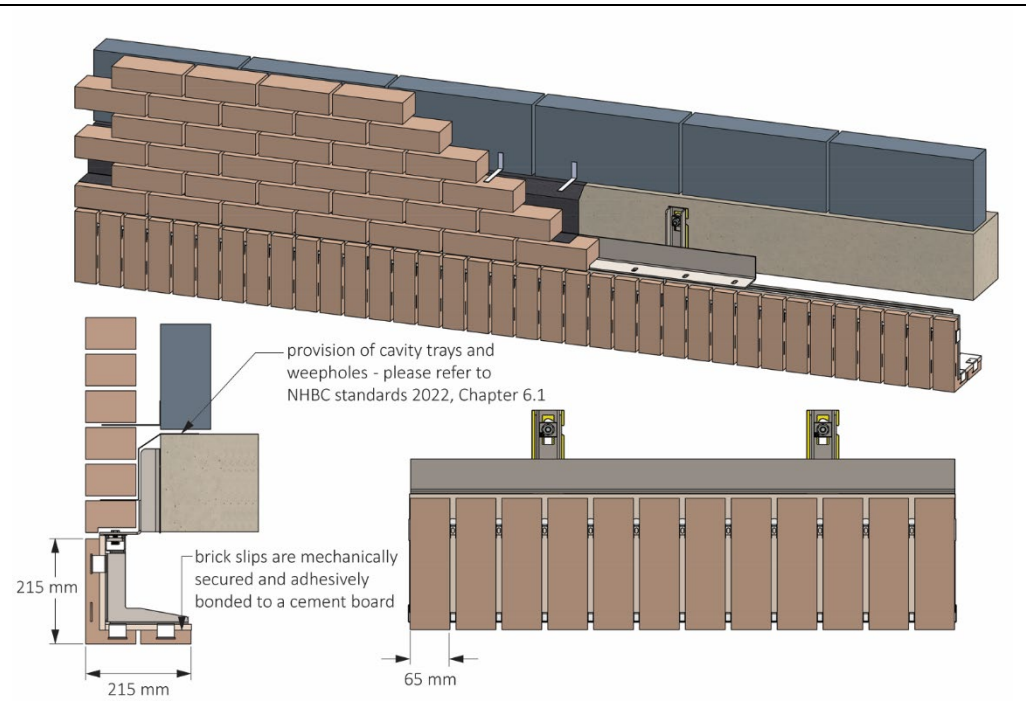


Table 1 BOSS A1 65 x 215 mm with header bond

Length of soffit profile (mm)	890
Height of soffit profile (mm)	65
Width of soffit profile (mm)	215
Thickness of Calcium Silicate board profile (mm)	12
Mass with brick slip (kg·m^{-1})	17.8

Table 2 BOSS A1 65 x 327 mm with stretcher bond	
Length of soffit profile (mm)	890
Height of soffit profile (mm)	65
Width of lintel (mm)	327
Thickness of Calcium Silicate board profile (mm)	12
Mass with brick slip (kg·m^{-1})	23.3

Table 3 BOSS A1 215 x 215 mm with half lap bond	
Length of soffit profile (mm)	890
Height of soffit profile (mm)	215
Width of soffit profile (mm)	215
Thickness of Calcium Silicate board profile (mm)	12
Mass with brick slip (kg·m^{-1})	31.0

Table 4 BOSS A1 215 x 215 mm with soldier bond	
Length of soffit profile (mm)	890
Height of soffit profile (mm)	215
Width of soffit profile (mm)	215
Thickness of Calcium Silicate board profile (mm)	12
Mass with brick slip (kg·m^{-1})	28.7

1.3 The system comprises:

- brick slip façade — created from 25 mm thick brick slips cut from standard brick masonry units to BS EN 771-1 : 2011 or BS EN 771-2 : 2011
- IG Mech-Fix — a 3 mm thick adhesive used to bond the brick slips to the soffit plates
- square drive pan head screw duplex (AISI 318 LN) 4.2 x 9.5 mm, with square socket #2, delta seal coating silver
- calcium silicate boards — the cement board profiles are manufactured from RCM Y-Wall calcium silicate board, subject of BBA Certificate 14/5109, Product Sheet 1
- channel — manufactured using austenitic stainless steel to BS EN 10088-2 : 2014, Grade 304 2B (Grade 1.4301/1.4307 or Grade 1.4301/1.4307 HR) or Grade 316 (Grade 1.4401/1.4404) based on the design specifications for non-aggressive or aggressive environments, respectively. The profiles are fabricated by folding. Grades 304 (1.4301) and 316 (1.4404) are equivalent to R3 and R1 classifications respectively to PD 6697 : 2019.
- mechanical brick slip fixings — manufactured using austenitic stainless steel to BS EN 10088-2 : 2014, Grade 304 2B, unless the environment dictates the use of Grade 316.

1.4 Ancillary items used with the system, but outside the scope of this Certificate, are:

- the IG Welded Masonry Support (WMS) System — comprising brackets, support angles, shims and anchor bolts including stainless steel lock washers. All elements are manufactured in Grade 1.4301 or Grade 1.4401 austenitic stainless steel
- wall ties
- expansion joint mastic sealant — pointing mortar colour matched to the mortar to ensure it blends seamlessly with the surrounding brickwork.

2 Manufacture

2.1 The brick slips are cut from bricks, then factory-fixed using IG Mech-Fix adhesive and mechanically secured to the soffit unit.

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 Keystone Group has been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 and BS EN ISO 14001 : 2015 by the BBA (Certificates 18/Q059, Keystone Group, ISO 9001 : 2015 and 18/E019, Keystone Group, ISO 14001 : 2015).

3 Delivery and site handling

3.1 The system is delivered to site or to builders' merchants at specified lengths, each carrying a label bearing the Certificate holder's name. The BBA logo incorporating the number of this Certificate is marked on each system.

3.2 Reasonable care must be taken during unloading, stacking and storage to avoid damage to the system. A system that has suffered deformation or damage must not be used. Any damage to the brick, calcium silicate board or bond between the brick and calcium silicate board must be assessed by the Certificate holder. Repairs of the bond between the brick and calcium silicate board must only be carried out by the Certificate holder.

3.3 The system must be stored off the ground in such a manner as to avoid the risk of mechanical damage or contamination by corrosive substances.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on the IG Brick On Soffit System (B.O.S.S.A1).

Design Considerations

4 Use

4.1 The IG Brick On Soffit System (B.O.S.S.A1) is satisfactory for use in brickwork and/or blockwork walls in conjunction with the IG Welded Masonry Support System.

4.2 It is important for designers, planners, contractors and/or installers to ensure that the installation of the system is in accordance with the Certificate holder's instructions and the information given in this Certificate.

4.3 The cavity wall construction should be in accordance with the recommendations of PD 6697 : 2019 and where applicable, *NHBC Standards* 2022, particularly in respect of provision of cavity trays with stop ends and weepholes.

5 Practicability of installation

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

6 Structural performance

6.1 The IG Brick On Soffit System (B.O.S.S.A1) has adequate strength and stiffness to sustain its own weight and imposed wind actions, provided the IG Welded Masonry Support System is designed to support the imposed loads and limit the deflections and is installed by an appropriately qualified individual. The system is not designed to take any load other than its own self-weight and wind action and must be separated from the walling above by the expansion joint mastic sealant.

6.2 The characteristic wind loads on the system 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 system. The mechanical fixing of the brick slips is capable of resisting considerably higher loads than the self-weight of the brick slips and the design wind loads expected in the UK normal conditions.

6.3 An assessment of the structural performance for a particular 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 and transfers them through the masonry support system to the structure.

6.4 In addition to the requirements specifically referred to in this Certificate, structures in which the system 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.

7 Properties in relation to fire

All of the system components are classified A1 in accordance with BS EN 13501-1 : 2018(1) and the system is unrestricted in terms of building height and distance to the boundary by the national Building Regulations, provided that it is incorporated in a construction that satisfies the requirements of BS EN 1993-1-2 : 2005 and BS EN 1996-1-2 : 2005, and their UK National Annexes.

(1) IG Mech-fix Efectis test report EFR-19-003390 dated 26 August 2019 for the adhesive, a copy of which is available from the Certificate holder on request. Y-wall calcium silicate board: See BBA Certificate 14/5109. All others classified without testing, in accordance with 96/603/EC.

8 Thermal performance

8.1 A typical example detail containing a similar system, based on the construction detail shown in Figure 2, was analysed numerically to determine the likely hygrothermal performance. In the opinion of the BBA, the current system would achieve a similar performance.

8.2 If designed appropriately, exposed floor junctions with the insulated system can adequately limit excessive heat loss and allow use of the following Ψ values in carbon emissions rate calculations (see Table 5).

Table 5 Linear thermal transmittance, Ψ-values, for the IG Brick On Soffit System (B.O.S.S.A1)

System	Junction type	Example Ψ value(1)(2) ($W \cdot m^{-1} \cdot K^{-1}$)	Default Ψ value(3) ($W \cdot m^{-1} \cdot K^{-1}$)
65 x 327 mm with stretcher bond(4)(5)	E2(6)	0.21	1.0
	E7	0.132(7)	0.14(7)

(1) 150 mm cavity width, comprising 150 mm insulation ($\lambda = 0.040\ W \cdot m^{-1} \cdot K^{-1}$).
(2) Soffit unit assumed to be filled with loose fill insulation with thermal conductivity, $\lambda = 0.040\ W \cdot m^{-1} \cdot K^{-1}$.
(3) Where a junction detail has not been calculated in accordance with BS EN ISO 10211 : 2017 and BRE Report BR 497 : 2007, the default value must be used.
(4) Assumed wall construction: 102.5 mm brickwork ($\lambda = 0.77\ W \cdot m^{-1} \cdot K^{-1}$), 150 mm mineral wool [see footnote (1)] insulation ($\lambda = 0.025\ W \cdot m^{-1} \cdot K^{-1}$), 100 mm blockwork ($\lambda = 0.162\ W \cdot m^{-1} \cdot K^{-1}$, inclusive of 6.7% mortar bridging), 15 mm service cavity ($\lambda = 0.157\ W \cdot m^{-1} \cdot K^{-1}$), 12.5 mm plasterboard ($\lambda = 0.25\ W \cdot m^{-1} \cdot K^{-1}$). Assumed intermediate floor slab: 250 mm dense reinforced concrete slab ($\lambda = 2.5\ W \cdot m^{-1} \cdot K^{-1}$).
(5) External wall beneath slab is inset by 227 mm due to the presence of the soffit unit.
(6) Value split from party floor junction.
(7) Result applied to dwelling above and below slab.

8.3 For other junction details, the linear thermal transmittance and temperature factor should be calculated in accordance with BS EN ISO 10211 : 2017, following the guidance in BRE Report BR 497 : 2016.

9 Condensation risk

9.1 The construction described in Table 5 will achieve a surface temperature factor (f_{Rsi}), in excess of 0.75, which can be compared to the critical temperature factors (f_{CRsi}), in BRE Information Paper IP 1/06 for the relevant building type. The risk of surface condensation is low when the f_{Rsi} is equal to or greater than the f_{CRsi}. The system can therefore contribute to limiting the risk of surface condensation and mould growth in most building types. For other constructions, the temperature factor (f_{Rsi}) must be established by numerical modelling (see section 8.3).

9.2 External soffits can adequately limit the risk of interstitial condensation when they are designed and constructed in accordance with BS 5250 : 2021, including provision of an Air Vapour Control Layer (AVCL) on the warm side of the external wall and a ventilated 50 mm air cavity between the insulation and the soffit unit.

10 Maintenance and repair

10.1 If the brick finish becomes damaged or stained the advice of the Certificate holder should be sought.

10.2 Regular checks should be made on the installed system, including:

- visual inspection of the brick slips for signs of debonding. Dislodged brick slips must be re-fixed using IG Mech-Fix adhesive
- visual inspection of architectural details designed to shed water to confirm that they are performing correctly
- visual inspection to ensure that water is not leaking from external downpipes or gutters; such leakage could penetrate behind the brick slips
- direct jet cleaning of the brick slips should be avoided and if brick slips are stained the advice of the Certificate holder should be sought.

10.3 Damaged areas must be repaired using the appropriate components and procedures detailed in the Certificate holder's installation instructions and the advice of the Certificate holder should be sought.

11 Durability

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

12 Reuse and recyclability

12.1 The stainless steel and steel components can be recycled.

12.2 The brick slips contain fired clay which can be recycled.

Installation

13 General

13.1 Weep-holes should be provided in the outer leaf above the system to drain moisture from the cavity. A minimum of two weep-holes should be provided per system. For fair-faced masonry, weep-holes should be provided at centres not greater than 450 mm.

13.2 Brick slips should be pointed using the same mortar as the rest of the brickwork. Pointing of the system should be conducted using a pointing gun and should not take place in wet weather or in temperatures below 3°C.

14 Procedure

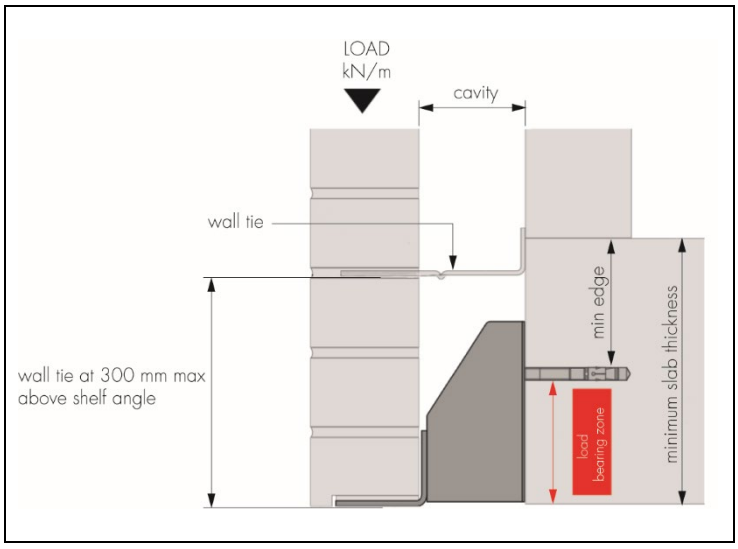
14.1 The IG Brick On Soffit System (B.O.S.S.A1) is typically fixed to the underside of welded masonry support units. Welded masonry support should be supplied by the Certificate holder. The IG Welded Masonry Support System, combined with the system, offers adjustability in all three planes.

Installation of the IG Welded Masonry Support System (outside the scope of this Certificate)

14.2 The IG Welded Masonry Support System must be installed as per the installation instructions and manufacturer's drawings (outside the scope of this Certificate) in the manufacturer's detailed guidelines. The specification of the bolt will be determined by the Certificate holder. The IG Welded Masonry Support System can also be fixed into a cast in channel in the concrete slab. Particular attention must be paid to the load bearing zone for each bracket (see Figure 5). The load bearing zone is the area of the bracket that is in contact with the support structure and will be marked on the manufacturer's drawings. Adhering to these dimensions on site is critical to the performance of the system. The maximum shimming of the IG Welded Masonry Support System should not exceed 12 mm or the outside diameter of the bolt, whichever is less. For the installation of the IG Welded Masonry Support System, only IG Thermal Shims or IG Stainless Steel Shims can be used. Vertical adjustment of +/-15 mm is catered for by the serrated areas at the back of the bracket.

14.3 The serrated lock washer, washer and bolt should be installed to fix the IG Welded Masonry Support System in place. The bolt must not be fully fastened until the IG Welded Masonry Support System is level and in the correct location. The manufacturer's instructions should be followed for the correct torque setting for the bolt, and a calibrated torque wrench should be used.

Figure 5 The IG Welded Masonry Support System



Installation of the IG Brick On Soffit System (B.O.S.S.A1)

14.4 The stainless steel spring nuts should be installed into the channel in the IG Brick On Soffit System (B.O.S.S.A1) unit. There will be a suitable number of slotted holes in the IG Welded Masonry Support System [see Figure 6 (a)]. A minimum of two fixings must be installed per unit.

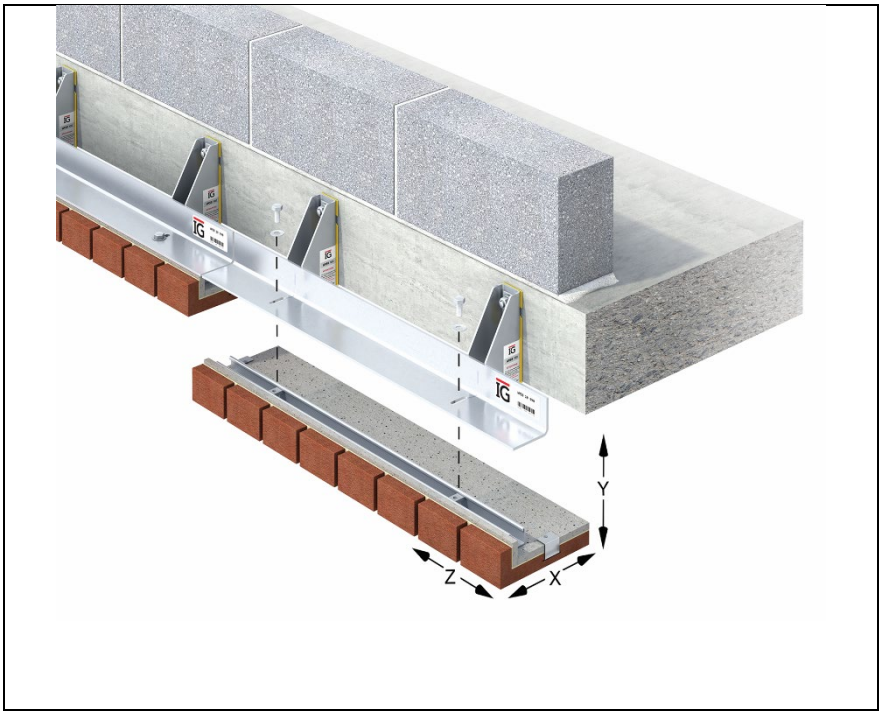
14.5 The IG Brick On Soffit System (B.O.S.S.A1) unit is offered up to the underside of the IG Welded Masonry Support System, aligning the spring nuts with the slotted hole in the angle. An M10 stainless steel nut and washer is placed through the welded masonry support angle, into the spring nut and hand tighten. Once alignment and levels are correct, bolts are torqued to 20 N·m [see Figure 6 (b)].

14.6 Surrounding brickwork is completed with the inclusion of weep holes, wall ties and damp proof course. The IG Brick On Soffit System (B.O.S.S.A1) spring nuts are placed in the channel to align with the slots in the angle, and the system is lifted to the underside of the masonry support angle. The system should continue to be supported through the steps given in sections 14.3 to 14.8 [see Figure 6 (c)].

Figure 6 Installation of the IG Brick On Soffit System (B.O.S.S.A1)

14.7 Lateral adjustment (Z) is achieved by utilizing the channel in the IG Brick On Soffit System (B.O.S.S.A1) unit. The unit can be moved +/-25 mm left or right on the fixed IG Welded Masonry Support System. Vertical adjustment (Y) is achieved by shimming between the unit and the underside of the IG Welded Masonry Support System. Maximum shimming in this location is 6 mm. Horizontal adjustment (X) is achieved by the utilizing slotted hole in the masonry support shelf. Adjustment provided is +/-15 mm (see Figure 7).

Figure 7 Adjustment of the IG Brick On Soffit System (B.O.S.S.A1)



Brickwork

14.8 Once the IG Brick On Soffit System (B.O.S.S.A1) units are installed, brickwork is continued above the IG Welded Masonry Support System. Ideally a pistol or lipped brick should be installed above the IG Welded Masonry Support System to ensure mortar joints are maintained at the same width. Brickwork overhang must not exceed 1/3 of the brick width. The joint between the unit and the brickwork above should be sealed with colour-matched mastic sealant. A minimum masonry bearing of 2/3 on the shelf must be maintained unless otherwise stated by the manufacturer. The installation of wall ties is crucial to the performance of the IG Welded Masonry Support System and the IG Brick On Soffit System (B.O.S.S.A1). Wall ties should be positioned at a maximum horizontal spacing of 450 mm and should be placed within 300 mm above the shelf angle.

Technical Investigations

15 Tests

Tests were carried out on the system and the results assessed to determine:

- bond strength after accelerated ageing
- integrity of the bond at maximum design deflection.

16 Investigations

16.1 An assessment was made of data relating to:

- calculations to establish minimum temperature factors and the Ψ values of typical constructions incorporating the system, undertaken to BRE Information Paper IP 1/06
- durability
- performance of the system in relation to fire
- practicability of installation.
- structural performance of the system

16.2 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.

Bibliography

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

BRE Report BR 497 : 2016 *Conventions for calculating linear thermal transmittance and temperature factors*

BS 5250 : 2021 *Management of moisture in buildings*

BS EN 771-1 : 2011 + A1 : 2015 *Specification for masonry units — Clay masonry units*
BS EN 771-2 : 2011 + A1 : 2015 *Specification for masonry units — Calcium silicate masonry units*

BS EN 1990 : 2002 + A1 : 2005 *Eurocode — 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 1993-1-2 : 2005 *Eurocode 3. Design of steel structures. General rules. Structural fire design*
NA to BS EN 1993-1-2 : 2005 *UK National Annex to Eurocode 3. Design of steel structures. General rules. Structural fire design*

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 10088-2 : 2014 *Stainless steels. Technical delivery conditions for sheet/plate and strip of corrosion resisting steels for general purposes*

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*

BS EN ISO 14001 : 2015 *Environmental management systems — Requirements with guidance for use*

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

Conditions

1. This Certificate:

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

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

3 This Certificate will be displayed on the BBA website, and the Certificate Holder is entitled to use the Certificate and Certificate logo, provided that the product and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:

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

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

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

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