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Agrément Certificate
05/4192
Product Sheet 1 Issue 4

IG LINTELS

IG LINTELS FOR INTERNAL AND EXTERNAL MASONRY AND TIMBER-FRAME WALLS

This Agrément Certificate Product Sheet(1) relates to IG Lintels, galvanized steel lintels for use in internal and external masonry and timber-frame walls to provide support to walls, floors and roofs above window or door openings.

(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 products described herein. These products have been assessed by the BBA as being fit for their intended use provided they are installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of Fourth issue: 31 January 2025
Originally certified 7 January 2005

Hardy Giesler
Chief Executive Officer

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

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

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

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

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

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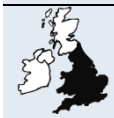
SUMMARY OF ASSESSMENT AND COMPLIANCE

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

Compliance with Regulations

Having assessed the key factors, the opinion of the BBA is that Keystone Lintels for Internal and External Masonry and Timber-frame Walls, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations:



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

Requirement:	**A1**	**Loading**
Comment:		The products can contribute to satisfying this Requirement. See section 1 of this Certificate.
Requirement:	**B3(1)(4)**	**Internal fire spread (structure)**
Comment:		The products can be incorporated in a construction satisfying this Requirement. See section 2 of this Certificate.
Requirement:	**C2(c)**	**Resistance to moisture**
Comment:		The products can be incorporated in a construction satisfying this Requirement. See section 3 of this Certificate.
Requirement:	**L1(a)(i)**	**Conservation of fuel and power**
Comment:		The products can contribute to satisfying this Requirement. 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(2)**	**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 consumption 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. See section 6 of this Certificate.

The Building (Scotland) Regulations 2004 (as amended)

Regulation:	**8(1)(2)**	**Fitness and durability of materials and workmanship**
Comment:		The products are acceptable. 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)	Structure
Comment:	(b)	The products are acceptable, with reference to clauses 1.1.1$^{(1)(2)}$ and 1.1.2$^{(1)(2)}$ of this Standard. See section 1 of this Certificate.

Standard:	2.3	Structural protection
Comment:		The products can be incorporated in a construction satisfying this Standard, with reference to clauses 2.3.1[(1)(2)] and 2.3.3[(1)(2)] and Annexes 2A[(1)], 2B[(1)], 2D[(2)], and 2E[(2)]. See section 2 of this Certificate.
Standard:	2.4	Cavities
Comment:		The system can contribute to satisfying this Standard, with reference to clause 2.4.1[(1)(2)], 2.4.4[(1)], and 2.4.6[(2)]. See section 2 of this Certificate.
Standard:	3.15	Condensation
Comment:		The external wall incorporating the products can contribute to satisfying this Standard, with reference to clauses 3.15.1[(1)(2)], 3.15.4[(1)(2)] and 3.15.5[(1)(2)]. See section 3 of this Certificate.
Standard:	6.1(b)(c)(d)	Energy demand and carbon dioxide emissions
Standard:	6.2	Building insulation envelope
Comment:		The products can contribute to satisfying these Standards, with reference to clauses 6.1.1[(1)], 6.1.2[(2)], 6.2.3[(1)], 6.2.4[(2)], 6.2.9[(1)], 6.2.10[(1)(2)] and 6.2.12[(2)]. See section 6 of this Certificate.
Standard:	7.1(a)	Statement of sustainability
Comment:	(b)	The products 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. In addition, the products can contribute to a construction meeting a higher level of sustainability as defined in this Standard, with reference to clauses 7.1.4[(1)], 7.1.6[(1)(2)], 7.1.7[(1)], 7.1.9[(2)] and 7.1.10[(2)].
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)**	**Fitness of materials and workmanship**
Comment:	**(iii)(b)(i)(ii)**	The products are acceptable. See sections 8 and 9 and Annex A 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:	**30**	**Stability**
Comment:		The products are acceptable. See sections 1 and 9 of this Certificate.
Regulation:	**35(1)(4)**	**Internal fire spread — Structure**
Comment:		The products can be incorporated in 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:	**41**	**Consequential improvements**
Regulation:	**42**	**Change of energy status**
Regulation:	**43(2)(a)**	**Renovation of thermal elements**
Regulation:	**43B**	**Nearly zero-energy requirements for new buildings**
Comment:		The products can contribute to satisfying these Regulations. See section 6 of this Certificate.

Additional Information

NHBC Standards 2025

In the opinion of the BBA, IG Lintels for Internal and External Masonry and Timber-frame Walls, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapters 6.1 *External masonry walls*, 6.2 *External timber framed walls* and 6.3 *Internal walls*.

Fulfilment of Requirements

The BBA has judged IG Lintels for Internal and External Masonry and Timber-frame Walls to be satisfactory for use as described in this Certificate. The products have been assessed as galvanized steel lintels for use in internal and external masonry and timber-frame walls to provide support to walls, floors and roofs above window or door openings.

ASSESSMENT

Product description and intended use

The Certificate holder provided the following description for the product under assessment. IG Lintels for Internal and External Masonry and Timber-frame Walls consist of:

- steel coil or sheet — cut to length to provide blanks from which the lintels are formed by press-braking
- cold formed galvanized steel — grade DX51D + Z600 zinc coating to BS EN 10346 : 2015, with exception of BOX/K and HDBOX/K lintels which are made from either grade DX51D + Z600 and / or + Z275 zinc coating to BS EN 10346 : 2015.

The products have the following characteristics, for the profiles shown in Figures 1 and 2 and Tables 1 to 7:

- lintels are available in a range of lengths from 600 to 6600 mm, in 150 mm increments (see section 1)
  - Type L1/S, L1/S WIL, L1/HD, L5, L6 and L1/E lintels — incorporate cavity insulation inserts into the upstand to fully insulate the lintel, made from expanded polystyrene or mineral wool to a defined density
  - lintels incorporate an indented inner leaf
  - Type L1/S, L1/S WIL, L1/HD, L5, and L1/E lintels include a thermal-break slotted bottom plate fixed with intermittent spot welds or clinched at 150 mm centres
  - Type L6 lintels include a continuous solid bottom plate, welded along the length
- lintels for use with masonry cavity walls preserve the inner leaf continuity and, therefore, allow plastering and the fixing of curtain tracks
- lintels for use with masonry, BOX and HDBOX lintels incorporate plaster keys, providing a suitable substrate for plastering
- timber-frame lintels make use of timber-frame restraint clips (out of the scope of this Certificate).
- cut edges, fillet welds and rivets — treated with an anti-corrosion paint system.

Figure 1 Lintel profiles for masonry cavity walls and eaves lintels

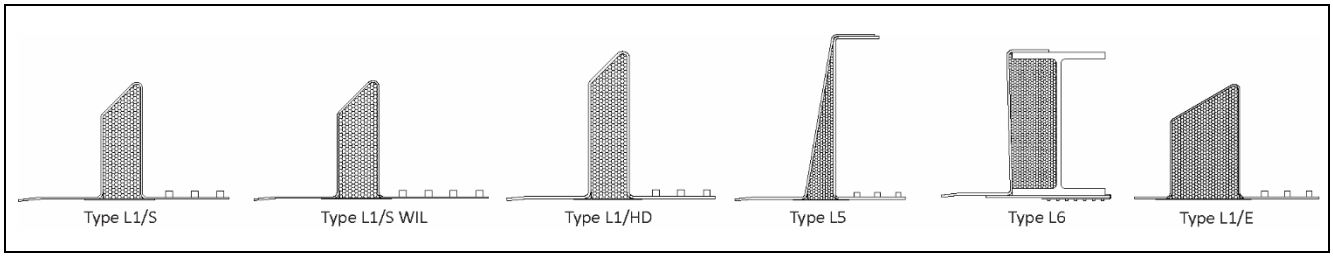
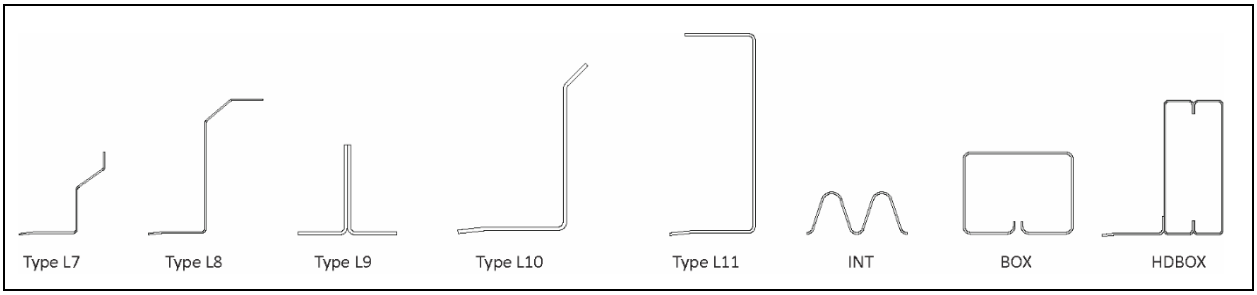


Figure 2 Lintel profiles for single leaf and solid walls, and box lintels



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:

- brick or block masonry units to BS EN 771: 2011, Parts 1 to 6
- bricklaying mortar to BS EN 998-2 : 2016
- timber-frame
- cavity trays
- weep-holes
- plasterwork
- gypsum plasterboard to BS EN 520 : 2004
- wall insulation
- damp proof course, DPC
- stop ends
- timber-frame restraint clips
- timber pinch battens
- wall ties
- zinc rich paint.

Product assessment – key factors

The product was assessed for the following key factors, and the outcomes of the assessments are 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 characteristic.

1.1 Behaviour under loading

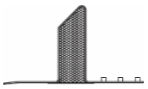
1.1.1 The tabulated safe working loads in Tables 1 to 3 and 5 to 7 have been determined from tests to BS EN 845-2 : 2013 and BS EN 846-9 : 2016 and are the lesser of:

- test failure load divided by 1.6
- test load causing a vertical or horizontal deflection of 1/325 times the effective span.

Table 1 Profiles — Masonry Cavity Walls – Type L1/S lintels

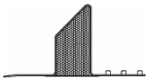
Standard

Type L1/S 50[1] — Lengths, typically in 150 mm increments — (Cavity widths: 50 to 65 mm)



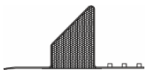
	600-1200	1350-1500	1650-1800	1950-2100	2250-2400	2550-2700	2850-3000	3150-3600	3750-4000	4200	4350-4800
Height of lintel (mm)	79	96	109	134	147	172	172	209	209	210	210
Thickness of lintel (mm)	1.6	1.8	2.0	2.0	2.0	2.0	2.5	2.9	2.9	3.2	3.2
UDL[2a] (kN)	12	14	19	21	21	26	27	27	26	27	25
UDL[2b] (kN)	10	12	16	17	19	22	20	20	19	22	22
Weight (kg·m^{-1})	5.05	6.10	7.13	7.92	8.32	9.11	11.27	14.83	14.83	16.31	16.31

Type L1/S 75[1] — Lengths, typically in 150 mm increments — (Cavity widths: 70 to 85 mm)



	600-1200	1350-1500	1650-1800	1950-2100	2250-2400	2550-3000	3150-3600	3750-4000	4200	4350-4800
Height of lintel (mm)	99	88	105	130	142	168	206	206	207	224
Thickness of lintel (mm)	1.6	1.8	2.0	2.0	2.0	2.5	2.9	2.9	3.2	3.2
UDL[2a] (kN)	12	14	18	21	21	27	27	26	27	27
UDL[2b] (kN)	10	12	14	17	19	22	20	19	22	22
Weight (kg·m^{-1})	5.79	6.22	7.25	8.04	8.44	11.39	14.98	14.98	16.46	17.34

Type L1/S 100[1] — Lengths, typically in 150 mm increments — (Cavity widths: 90 to 105 mm)



	600-1200	1350-1500	1650-1800	1950-2100	2250-2400	2550-2700	2850-3000	3150-3600	3750-4000	4200
Height of lintel (mm)	87	87	107	123	148	161	173	199	199	199
Thickness of lintel (mm)	1.6	1.8	2.0	2.0	2.0	2.5	2.5	2.9	2.9	3.2
UDL[2a] (kN)	12	16	19	21	23	27	27	27	26	27
UDL[2b] (kN)	10	13	16	17	18	22	20	20	19	22
Weight (kg·m^{-1})	5.90	6.57	7.76	8.16	8.95	11.51	12.00	15.13	15.13	16.61

	4350-4800
Height of lintel (mm)	217
Thickness of lintel (mm)	3.2
UDL[2a] (kN)	27
UDL[2b] (kN)	22
Weight (kg·m^{-1})	17.49

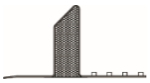
Type L1/S 150[1] — Lengths, typically in 150 mm increments — (Cavity widths: 150 to 165 mm)

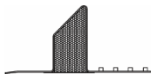
	600-1200	1350-1500	1650-1800	1950-2100	2250-2400	2550-3000	3150-3600	3750-4000	4200-4800
Height of lintel (mm)	86	86	120	120	149	150	175	176	194
Thickness of lintel (mm)	1.8	2.0	2.0	2.0	2.0	2.5	2.5	3.2	3.2
UDL[2a] (kN)	12	15	22	21	25	25	26	26	25
UDL[2b] (kN)	10	13	18	17	20	20	19	19	20
Weight (kg·m^{-1})	7.70	8.47	9.28	9.29	10.09	12.36	13.62	17.06	17.95

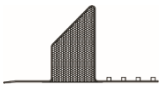
(1) Incorporating an indented inner leaf flange and a slotted 'thermal-break' plate fixed across the cavity with spot welds or clinched at 150 mm centres.

(2) Total uniformly distributed load (UDL):
   a) load ratio 3:1
   b) load ratio 19:1

Table 1 Profiles — Masonry Cavity Walls – Type L1/S lintels (continued)

Type L1/S 50 WIL[1]	Lengths, typically in 150 mm increments							(Cavity widths: 50 to 65 mm)
	600-1500	1650-1800	1950-2100	2250-2400	2550-3000	3150-3600	3750-4200	
								
Height of lintel (mm)	97	109	134	159	172	198	198	
Thickness of lintel (mm)	2.0	2.0	2.0	2.0	2.5	3.2	3.2	
UDL[2a] (kN)	12	15	20	24	28	30	27	
UDL[2b] (kN)	10	13	18	20	21	26	25	
Weight (kg·m^{-1})	7.12	7.53	8.32	9.11	11.76	16.30	16.31	

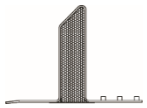
Type L1/S 75 WIL[1]	Lengths, typically in 150 mm increments							(Cavity widths: 70 to 85 mm)
	600-1350	1500-1650	1800	1950-2100	2250-2400	2550-3000	3150-3600	3750-4200
								
Height of lintel (mm)	90	90	105	130	155	168	194	194
Thickness of lintel (mm)	2.0	2.0	2.0	2.0	2.0	2.5	3.2	3.2
UDL[2a] (kN)	12	13	20	19	24	27	30	27
UDL[2b] (kN)	10	11	17	17	20	21	26	25
Weight (kg·m^{-1})	7.23	7.24	7.64	8.43	9.22	11.88	16.45	16.46

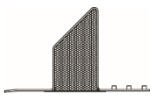
Type L1/S 100 WIL[1]	Lengths, typically in 150 mm increments							(Cavity widths: 90 to 105 mm)
	600-1200	1350-1800	1950-2400	2550-3000	3150-3600	3750-4000	4200	
								
Height of lintel (mm)	95	107	148	173	187	187	187	
Thickness of lintel (mm)	2.0	2.0	2.0	2.5	3.2	3.2	3.2	
UDL[2a] (kN)	13	17	23	24	30	27	24	
UDL[2b] (kN)	11	14	18	18	26	25	19	
Weight (kg·m^{-1})	7.72	8.15	9.34	12.49	16.60	16.61	16.61	

(1) Incorporating an indented inner leaf flange and a slotted 'thermal-break' plate fixed across the cavity with spot welds or clinched at 150 mm centres.

(2) Total uniformly distributed load (UDL):
   a) load ratio 3:1
   b) load ratio 19:1

Table 2 Profiles — Masonry Cavity Walls – Heavy Duty Type L1/HD lintels

Type L1/HD 50[1]	Lengths, typically in 150 mm increments							(Cavity widths: 50 to 65 mm)
	600-1200	1350-1500	1650-2100	2250-2550	2700-3000	3150-3600	3750-4200	
								
Height of lintel (mm)	106	123	173	209	210	210	210	
Thickness of lintel (mm)	2.9	2.9	2.9	2.9	3.2	3.2	3.2	
UDL[2a] (kN)	30	30	40	40	40	35	33	
UDL[2b] (kN)	22	22	35	35	35	32	28	
Weight (kg·m^{-1})	10.04	10.81	13.10	14.82	16.30	16.30	16.31	

Type L1/HD 100[1]	Lengths, typically in 150 mm increments							(Cavity widths: 90 to 105 mm)
	600-1200	1350-1500	1650-2100	2250-2550	2700-3000	3150-3600	3750-4200	
								
Height of lintel (mm)	109	136	161	199	199	199	199	
Thickness of lintel (mm)	2.9	2.9	2.9	2.9	3.2	3.2	3.2	
UDL[2a] (kN)	30	30	40	40	40	35	33	
UDL[2b] (kN)	22	22	35	35	35	32	28	
Weight (kg·m^{-1})	11.07	12.23	13.40	15.11	16.59	16.60	16.61	

(1) Incorporating an indented inner leaf flange and a slotted 'thermal-break' plate fixed across the cavity with spot welds or clinched at 150 mm centres.

(2) Total uniformly distributed load (UDL):
   a) load ratio 3:1
   b) load ratio 19:1.

Table 2 Profiles — Masonry Cavity Walls – Heavy Duty Type L1/HD lintels continued

Type L1/HD 150[1]	Lengths, typically in 150 mm increments					(Cavity widths: 150 to 165 mm)
	600-1500	1650-2100	2250-3000	3150-3600	3750-4000	
Height of lintel (mm)	126	156	180	180	194	
Thickness of lintel (mm)	2.9	2.9	3.2	3.2	3.2	
UDL[2a] (kN)	30	30	35	30	30	
UDL[2b] (kN)	20	22	30	25	26	
Weight (kg·m^{-1})	13.22	14.63	17.04	17.05	17.94	

(1) Incorporating an indented inner leaf flange and a slotted 'thermal-break' plate fixed across the cavity with spot welds or clinched at 150 mm centres.

(2) Total uniformly distributed load (UDL):
   a) load ratio 3:1
   b) load ratio 19:1.

Table 3 Profiles — Masonry Cavity Walls – Extra Heavy Duty Type L5 lintels

Type L5/50[1]	Lengths, typically in 150 mm increments					(Cavity widths: 50 to 65 mm)
	600-1500	1650-2100	2250-3000	3150-4000	4200-4800	
Height of lintel (mm)	234	234	234	234	234	
Thickness of lintel (mm)	2.9	2.9	2.9	3.2	3.2	
UDL[2a] (kN)	-	-	-	-	-	
UDL[2b] (kN)	70	60	50	45	40	
Weight (kg·m^{-1})	18.32	18.34	18.35	19.95	19.95	
Type L5/75[1]	**Lengths, typically in 150 mm increments**					**(Cavity widths: 70 to 85 mm)**
	600-1500	1650-2100	2250-3000	3150-4000	4200-4800	
Height of lintel (mm)	234	234	234	234	234	
Thickness of lintel (mm)	2.9	2.9	2.9	3.2	3.2	
UDL[2a] (kN)	-	-	-	-	-	
UDL[2b] (kN)	70	60	50	45	40	
Weight (kg·m^{-1})	18.46	18.49	18.50	20.35	20.35	
Type L5/100[1]	**Lengths, typically in 150 mm increments**					**(Cavity widths: 90 to 105 mm)**
	600-1500	1650-2100	2250-3000	3150-4000	4200-4800	
Height of lintel (mm)	234	234	234	234	234	
Thickness of lintel (mm)	2.9	2.9	2.9	3.2	3.2	
UDL[2a] (kN)	-	-	-	-	-	
UDL[2b] (kN)	70	60	50	45	40	
Weight (kg·m^{-1})	18.60	18.63	18.65	20.50	20.51	
Type L5/110[1]	**Lengths, typically in 150 mm increments**					**(Cavity widths: 110 to 125 mm)**
	600-1500	1650-2100	2250-3000	3150-4000	4200-4800	
Height of lintel (mm)	234	234	234	234	234	
Thickness of lintel (mm)	2.9	2.9	2.9	3.2	3.2	
UDL[2a] (kN)	-	-	-	-	-	
UDL[2b] (kN)	70	60	50	45	40	
Weight (kg·m^{-1})	18.75	18.78	18.80	20.65	20.66	

(3) Incorporating an indented inner leaf flange and a slotted 'thermal-break' plate fixed across the cavity with spot welds or clinched at 150 mm centres.

(4) Total uniformly distributed load (UDL):
   c) load ratio 3:1
   d) load ratio 19:1.

1.1.2 The tabulated safe working loads in Table 4 have been determined from calculations in line with BS EN 1090-2 : 2018, and BS EN 1993-1-1 : 2022 and its National Annex.

Table 4 Profiles — Masonry Cavity Walls – Extreme Type L6 lintels

Type L6/50[1]	Lengths, typically in 150 mm increments							(Cavity widths: 70 to 85 mm)
	600-3000	3150-4800	5100	5400	5700	6000	6300	6600
Height of lintel (mm)	213	213	213	213	213	213	213	213
Thickness of lintel (mm)	2.9	3.2	3.2	3.2	3.2	3.2	3.2	3.2
UDL (kN)	95	80	70	62	55	50	45	40
Weight (kg·m^{-1})	42.29	43.56	43.56	43.56	43.56	43.56	43.56	43.56

Type L6/75[1]	Lengths, typically in 150 mm increments							(Cavity widths: 70 to 85 mm)
	600-3000	3150-4800	5100	5400	5700	6000	6300	6600
Height of lintel (mm)	213	213	213	213	213	213	213	213
Thickness of lintel (mm)	2.9	3.2	3.2	3.2	3.2	3.2	3.2	3.2
UDL (kN)	95	80	70	62	55	50	45	40
Weight (kg·m^{-1})	42.75	44.07	44.07	44.07	44.07	44.07	44.07	44.07

Type L6/100[1]	Lengths, typically in 150 mm increments							(Cavity widths: 90 to 105 mm)
	600-3000	3150-4800	5100	5400	5700	6000	6300	6600
Height of lintel (mm)	213	213	213	213	213	213	213	213
Thickness of lintel (mm)	2.9	3.2	3.2	3.2	3.2	3.2	3.2	3.2
UDL (kN)	95	80	70	62	55	50	45	40
Weight (kg·m^{-1})	43.20	44.57	44.57	44.57	44.57	44.57	44.57	44.57

(1) Incorporating an indented inner leaf flange and a continuous solid bottom plate, welded along the length.

Table 5 Profiles — Solid wall and single-leaf lintels

Timber frame

Type L7/50 (single leaf)	Lengths, typically in 150 mm increments				
	600-1200	1350-1800	1950-2400	2550-3600	3750-4800
Height of lintel (mm)	110	111	136	187	252
Thickness of lintel (mm)	2.0	2.5	2.5	2.8	3.0
UDL (kN)	4	5	5	9	12
Weight (kg·m^{-1})	3.53	4.42	4.91	6.59	8.60

Type L7/100 (single leaf)	Lengths, typically in 150 mm increments			
	600-1650	1800-2400	2550-3000	3150-4800
Height of lintel (mm)	121	166	197	257
Thickness of lintel (mm)	2.5	2.5	2.9	3.2
UDL (kN)	5	8	9	12
Weight (kg·m^{-1})	5.20	6.08	7.74	10.05

Solid Wall

Type L8/50 (single leaf)	Lengths, typically in 150 mm increments			
	600-1800	1950-2400	2550-3000	3150-4800
Height of lintel (mm)	150	225	225	225
Thickness of lintel (mm)	2.5	2.5	2.9	3.0
UDL (kN)	6	12	10	14
Weight (kg·m^{-1})	6.12	7.65	8.88	9.18

Table 5 Profiles — Solid wall and single-leaf lintels (continued)

L9/SW100	Lengths, typically in 150 mm increments			
	600-1200	1350-1650	1800-2100	2250-2700
				
Height of lintel (mm)	58	88	89	116
Thickness of lintel (mm)	2.5	2.5	2.9	3.2
UDL (kN)	6	8	8	10
Weight (kg·m^{-1})	3.93	5.10	5.92	7.89

L9	Lengths, typically in 150 mm increments			
	600-1200	1350-1650	1800-2100	2250-2700
				
Height of lintel (mm)	58	93	94	117
Thickness of lintel (mm)	2.5	2.5	2.9	3.0
UDL (kN)	6	8	8	10
Weight (kg·m^{-1})	5.89	7.26	8.42	9.80

Type L10	Lengths, typically in 150 mm increments					
	600-900	1050-1200	1350-1500	1650-1800	1950-2250	2400-2700
						
Height of lintel (mm)	55	55	102	102	152	202
Thickness of lintel (mm)	2.0	2.5	2.5	2.9	2.9	2.9
UDL (kN)	2.5	4	5	7	7	8
Weight (kg·m^{-1})	2.36	2.94	3.93	4.55	5.69	6.83

Type L11	Lengths, typically in 150 mm increments			
	600-1800	1950-2400	2550-2700	2850-3000
				
Height of lintel (mm)	150	227	227	227
Thickness of lintel (mm)	2.5	2.5	2.9	3.0
UDL (kN)	16	20	22	22
Weight (kg·m^{-1})	5.89	7.65	8.88	9.18

INT64	Lengths, typically in 150 mm increments
	900-1200
	
Height of lintel (mm)	28
Thickness of lintel (mm)	1.2
UDL (kN)	5
Weight (kg·m^{-1})	1.41

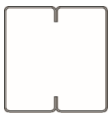
INT100	Lengths, typically in 150 mm increments
	900-1200
	
Height of lintel (mm)	28
Thickness of lintel (mm)	1.2
UDL (kN)	7
Weight (kg·m^{-1})	2.07

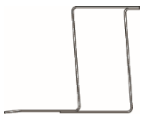
Table 6 Profiles — Box lintels

Standard				
BOX75	Lengths, typically in 150 mm increments			
	600-1200	1350-1650	1800	
				
Height of lintel (mm)	70	70	70	
Thickness of lintel (mm)	1.6	1.6	2.0	
UDL (kN)	15	10	10	
Weight (kg·m^{-1})	3.99	3.99	4.99	

Table 6 Profiles — Box lintels (continued)

BOX100	Lengths, typically in 150 mm increments							
	600-1200	1350-1500	1650-1800	1950-2400	2550-2700	2850-3600	3750-4200	4350-4800
Height of lintel (mm)	70	70	150	150	150	215	215	215
Thickness of lintel (mm)	1.6	2.0	1.6	2.0	2.0	2.5	2.5	2.5
UDL (kN)	15	15	18	25	20	35	30	24
Weight (kg·m^{-1})	3.99	4.99	6.58	8.23	8.23	13.07	13.07	13.07

BOX150	Lengths, typically in 150 mm increments						
	600-1800	1950-2100	2250-2400	2550-2700	2850-3600	3750-4200	4350-4800
Height of lintel (mm)	150	150	150	150	215	215	215
Thickness of lintel (mm)	1.6	2.0	2.0	2.0	2.5	2.5	2.5
UDL (kN)	18	30	25	20	35	30	25
Weight (kg·m^{-1})	8.04	10.05	10.05	10.05	17.00	17.00	17.00

BOX200	Lengths, typically in 150 mm increments						
	600-1800	1950-2100	2250-2400	2550-2700	2850-3600	3750-4200	4350-4800
Height of lintel (mm)	150	150	150	150	215	215	215
Thickness of lintel (mm)	1.6	2.0	2.0	2.0	2.5	2.5	2.5
UDL (kN)	18	30	25	20	35	30	24
Weight (kg·m^{-1})	8.79	9.61	9.61	9.61	14.19	14.19	14.19

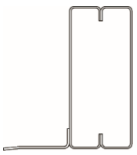
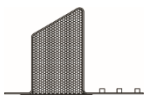
HDBOX200	Lengths, typically in 150 mm increments			
	600-1200	1350-1800	1950-2400	2550-2700
Height of lintel (mm)	150	150	215	215
Thickness of lintel (mm)	2.5	2.5	2.5	2.5
UDL (kN)	40	35	45	40
Weight (kg·m^{-1})	12.83	12.83	15.62	15.62

Table 7 Profiles — Eaves lintels

L1/E100(1)	Lengths, typically in 150 mm increments				(cavity widths: 90 to 125 mm)
	600-1500	1650-2100	2250-2400	2550-2700	
Height of lintel (mm)	107	145	160	161	
Thickness of lintel (mm)	1.8	2	2	2.5	
UDL(2) (kN)	18	20	22	25	
Weight (kg·m^{-1})	6.33	8.16	8.56	10.52	

(1) Incorporating an indented inner leaf flange and a slotted 'thermal-break' plate fixed across the cavity with spot welds or clinched at 150 mm centres.

(2) Total uniformly distributed load (UDL), load ratio from 19:1.

1.1.3 The following limitations apply to the load/span data shown in Tables 1 to 7:

- end support bearing length must be a minimum of 150 mm, with the exception of Table 4, where a minimum of 200 mm is required
- the load ratio between the inner and outer flanges for masonry cavity walls must be a minimum of 3:1 and not exceed 19:1:

$$\text{Load ratio} = \frac{w_1}{w_1 + w_2}$$

where:
w_1 = total load on inner leaf
w_2 = total load on outer leaf
$w_1 + w_2$ = total load on lintel.

1.2 On the basis of data assessed, IG Lintels for Internal and External Masonry and Timber-frame Walls have adequate strength and stiffness to sustain the uniformly distributed working loads and lintel lengths given in Tables 1 to 7, subject to the following conditions:

- to avoid excessive eccentricities of loading, the lintels must only be used with standard masonry units 100 to 150 mm wide, see Table 8
- the defined cavity width, size of masonry unit and eccentricities in Table 8 must not be exceeded
- the specified loads given in Tables 1 to 7 relate to simply supported lintels laterally and torsionally unrestrained. Therefore, there are no requirements for composite action with, or restraint by, adjacent elements of construction with the exception of Tables 4 and 7
- the applied loads are assumed to act uniformly distributed along the length of the lintel
- where part of the loading is applied as concentrated loads, each concentrated load must be supported over a length of lintel of not less than 200 mm. In such cases, the total applied loading must not produce bending moments, shear forces or reactions greater than those produced by the uniformly distributed loads specified in Tables 1 to 7
- design of the wall and opening details, together with appropriate workmanship on site, must ensure that eccentric loading on the products does not exceed the eccentricities given in Table 8.

Table 8 Maximum permissible eccentricities

Lintel type	Maximum allowable masonry width (mm)		Allowable cavity width (mm)	Maximum allowable eccentricity[1] (mm)	
	Block inner leaf	Brick outer leaf		Block inner leaf	Brick outer leaf
L1/S 50, L1/HD 50, L5/50 and L6/50	100	100	50	75	75
	100	100	65[2]	82.5	82.5
L1/S 75, L5/75 and L6/75	100	100	70	85	85
	100	100	85[2]	92.5	92.5
L1/S 100, L1/HD 100, L5/100 and L6/100	100	100	90	95	95
	100	100	105[2]	102.5	102.5
L5/110	100	100	110	105	105
	100	100	125[2]	112.5	112.5
L1/S 150 and L1/HD 150	100	100	150	125	125
	100	100	165[2]	132.5	132.5
L1/S 50 WIL	150	100	50	100	75
	125	100	65[2]	95	82.5
L1/S 75 WIL	150	100	70	110	85
	125	100	85[2]	105	92.5
L1/S 100 WIL	150	100	90	120	95
	125	100	105[2]	115	102.5

(1) Eccentricity: centre of lintel width to centre of leaf.
(2) Maximum width.

2 Safety in case of fire

Data were assessed for the following characteristics.

2.1 Reaction to fire

2.1.1 Galvanized steel profiles have a reaction to fire classification of A1 to BS EN 13501-1 : 2018. The Certificate holder has not declared a reaction to fire classification to BS EN 13501-1 : 2018 for the expanded polystyrene or mineral wool insulation used in the insulated profiles.

2.1.2 On the basis of data assessed, IG Lintels for Internal and External Masonry and Timber-frame Walls will be unrestricted under the documents supporting the national Building Regulations.

2.2 Resistance to fire

A construction incorporating the product achieved the period of fire resistance in terms of load bearing capacity in Table 9.

Table 9 Fire resistance in terms of load bearing capacity

Product	Assessment method / report	Construction	Result
L1/S 100[1][2]	BS EN 1363-1 : 2020[3] Warringtonfire test report WF Report No. 508704/R, Issue No.3[4]	2400 mm opening to brickwork piers. 100 mm single skin external brick leaf. 100 mm cavity, partially filled with 50 mm mineral fibre slab. 100 mm single skin aerated concrete block. 10 mm fully filled mortar joints. No additional finishes.	Minimum 1 hr fire resistance in terms of load bearing capacity

(1) 164 mm high, 2.5 mm thick, 2700 mm long, L1/S 100 lintel with CFC free white polystyrene insulation core.
(2) Supporting an applied load at a 3:1 ratio of 27 kN (20.25 kN to inner leaf, 6.75 kN to outer leaf). 150 mm bearing at each end.
(3) Available from the Certificate holder

2.3 Where a wall incorporating the product, other than shown in Table 9, is required to achieve a period of fire resistance, it's performance should be confirmed by a suitably qualified and experienced individual or by a test from a suitably accredited laboratory.

3 Hygiene, health and the environment

Data were assessed for the following characteristics.

3.1 Condensation

3.1.1 Example constructions shown in Table 11 of this Certificate, were analysed numerically to BS EN ISO 10211 : 2017, BRE IP 1/06 : 2006, and BRE Report BR 497 : 2016 and achieved minimum temperature factors in excess of 0.75.

3.1.2 On the basis of the data assessed, the constructions in Table 11 will adequately limit the risk of surface condensation in buildings of all humidity classes except 'Special Buildings', eg buildings such as laundries, breweries and swimming pools as defined in BS 5250 : 2021.

3.1.3 For other constructions, the risk of surface condensation will be minimal when the minimum temperature factors are not less than the relevant values in BRE IP 1/06.

4 Safety and accessibility in use

Not applicable.

5 Protection against noise

Not applicable.

6 Energy economy and heat retention

Data were assessed for the following characteristics.

6.1 Thermal conductivity

6.1.1 L1/S, L1/S WIL, L1/HD, L5, L6 and L1/E lintels are fully insulated with expanded polystyrene or mineral wool to a defined density and worst-case declared thermal conductivity (λ_D) of 0.039 $W \cdot m^{-1} \cdot K^{-1}$, which is inserted into the upstand.

6.1.2 The equivalent thermal conductivities, λ, for the thermal-break slotted bottom plate have been calculated to BS EN ISO 10211 : 2017, and the results can be found in Table 10. These are based on the thickness of galvanized steel shown with a thermal conductivity, λ, of 50 $W \cdot m^{-1} \cdot K^{-1}$.

Table 10 Bottom plate equivalent thermal conductivities, λ (W·m^{-1}·K^{-1})

Product assessed	Baseplate thickness (mm)	Equivalent thermal conductivity (W·m^{-1}·K^{-1})	Applicable lintels
L1/S 50 lintels	1.0	9.1	L1/S 50, L1/S 50 WIL, L1/HD 50 and L5 50
L1/S 100 lintels	0.8	17.9	L1/S 100, L1/S 100 WIL, L1/HD 100, L5 100, and L1/E100

6.2 Thermal performance

6.2.1 Example constructions shown in Table 11 and Figures 3 to 5 of this Certificate were analysed numerically to BS EN ISO 10211 : 2017 and BRE Report BR 497 : 2016 to determine the linear thermal transmittance, psi value.

Table 11 Calculated Psi values to BS EN ISO 10211 : 2017 and BRE Report BR 497 : 2016 (W·m^{-1}·K^{-1})

Product assessed	Assessment method	Requirement	Result
L1/S 50 (Figure 3)(1)	Psi values to BS EN ISO 10211 : 2017 and BRE Report BR 497 : 2016	Value achieved	0.50 W·m^{-1}·K^{-1}
L1/HD 50 (Figure 3)(2)			0.37 W·m^{-1}·K^{-1}
L1/S 100 (Figure 4)(3)			0.30 W·m^{-1}·K^{-1}
L1/S 100 (Figure 5)(4)			0.26 W·m^{-1}·K^{-1}

(1) With 210 mm high, 3.2 mm thick L1/S 50 lintel, where the door/window is set back at least 34 mm into the cavity, sealed at the front and back against the external wall, and the internal surface of the reveal is covered by at least a 15 mm thickness of lightweight plaster (λ = 0.21 W·m^{-1}·K^{-1}) or material with equivalent thermal resistance. 102.5 mm thick brick external skin (λ = 0.77 W·m^{-1}·K^{-1}), 50 mm full fill cavity insulation (λ = 0.021 W·m^{-1}·K^{-1}), and 100 mm thick dense concrete block internal skin (λ = 1.25 W·m^{-1}·K^{-1}).

(2) With 121 mm high, 2.9 mm thick L1/HD 50 lintel, where the door/window is set back at least 34 mm into the cavity, sealed at the front and back against the external wall, and the internal surface of the reveal and internal skin of blockwork is covered by at least a 15 mm thickness of lightweight plaster (λ = 0.21 W·m^{-1}·K^{-1}) or material with equivalent thermal resistance. 102.5 mm thick brick external skin (λ = 0.77 W·m^{-1}·K^{-1}), 50 mm full fill cavity insulation (λ = 0.040 W·m^{-1}·K^{-1}), and 100 mm thick dense concrete block internal skin (λ = 1.13 W·m^{-1}·K^{-1}).

(3) With 151 mm high, 2.0 mm thick L1/S 100 lintel, where the door/window is set back at least 40 mm into the cavity, sealed at front, and the internal surface of reveal is covered by at least a 15 mm thickness of lightweight plaster (λ = 0.21 W·m^{-1}·K^{-1}) or material with equivalent thermal resistance. Wall u value is 0.28 W·m^{-2}·K^{-1}, based on 102.5 mm thick brick external skin (λ = 0.77 W·m^{-1}·K^{-1}), 100 mm full fill cavity insulation (λ = 0.040 W·m^{-1}·K^{-1}), 100 mm thick aircrete block internal skin (λ = 0.15 W·m^{-1}·K^{-1}) with 15 mm thick internal plaster (λ = 0.21 W·m^{-1}·K^{-1}).

(4) With 151 mm high, 2.0 mm thick L1/S 100 lintel, where the door/window is fully set back over the wall cavity. Wall U value is 0.30 W·m^{-2}·K^{-1}, based on 100 mm thick stone window head (215 mm high, λ = 2.5 W·m^{-1}·K^{-1}) with 102.5 mm thick brick external skin (λ = 0.77 W·m^{-1}·K^{-1}) above, 60 mm clear air cavity (equivalent λ = 0.091 W·m^{-1}·K^{-1}), 40 mm partial fill cavity insulation (λ = 0.023 W·m^{-1}·K^{-1}), 100 mm thick aircrete block internal skin (λ = 0.15 W·m^{-1}·K^{-1}) with air cavity (bridged by continuous plaster dabs, λ = 0.57 W·m^{-1}·K^{-1}, to give an equivalent λ = 0.30 W·m^{-1}·K^{-1}) to internal plasterboard (λ = 0.21 W·m^{-1}·K^{-1}).

Figure 3 Installation detail — L1/S 50 or L1/HD 50 (50 mm full fill cavity)

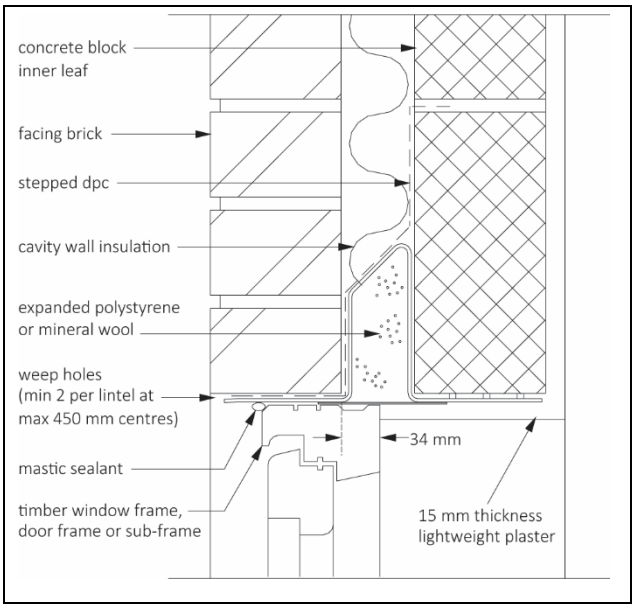


Figure 4 Installation detail — L1/S 100 (100 mm full fill cavity)

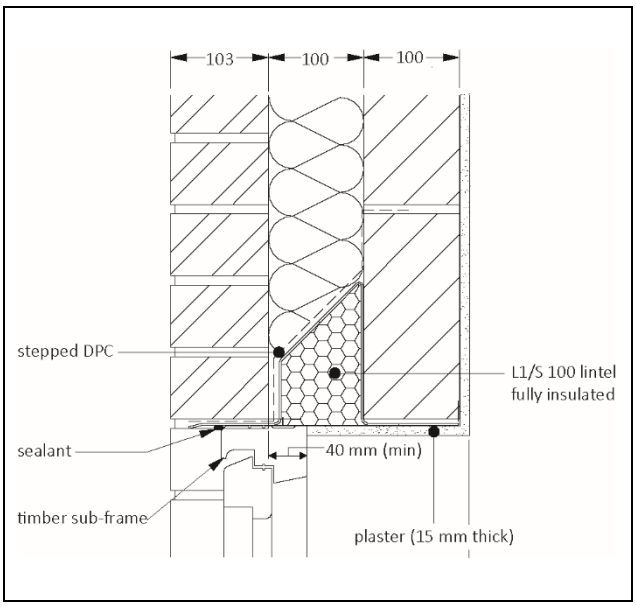
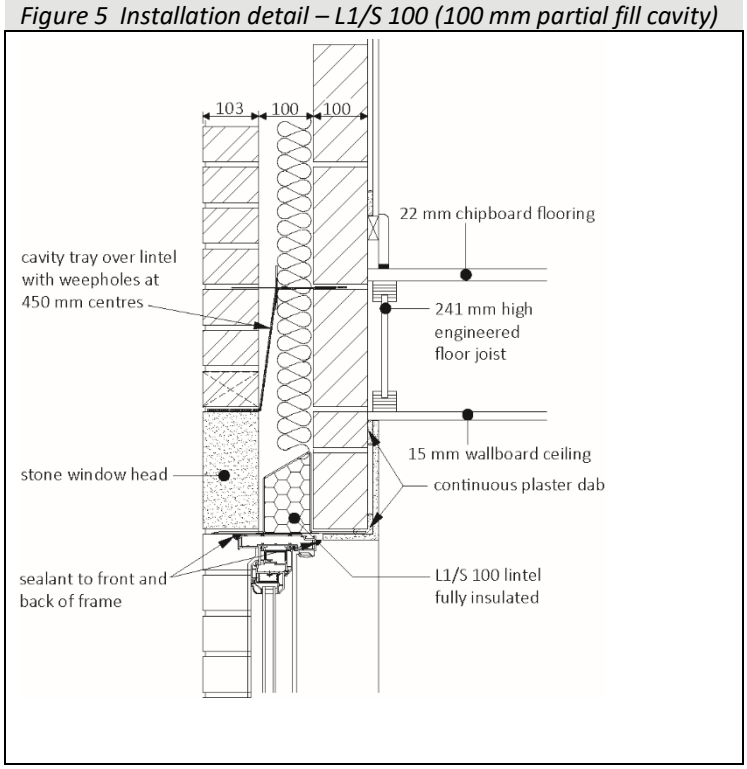


Figure 5 Installation detail – L1/S 100 (100 mm partial fill cavity)



6.2.2 On the basis of data assessed, the calculated values in Tables 10 and 11 can be used in energy and carbon emission rate calculations. The performance of other constructions must be in accordance with the documents supporting the relevant national Building Regulations.

7 Sustainable use of natural resources

The steel and insulation components can be recycled.

8 Durability

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

8.2 The products are suitable for contact with conventional cavity insulation materials and mortar additives, and have adequate protection against corrosion provided that:

8.2.1 The protective zinc is undamaged or minor damage repaired.

8.2.2 The mortar complies with the requirements of BS EN 1996-1-1 : 2022.

8.2.3 The timber door or window frames in contact with the lintels are treated with boron compounds or organic solvent-type preservatives. The risks of corrosion associated with other forms of preservative treatment and with treatment with inorganic flame-retardant salts are described in BRE Digest 301 : 1985.

8.2.4 Contact with, or contamination from, copper, copper-bearing materials or aqueous run-off from copper-bearing materials (including copper, brass or bronze wall ties), is avoided.

8.2.5 Sands from marine sources used in mortars are washed in fresh water to reduce the sodium chloride content to a value of less than 0.1% by weight of dry material.

8.3 Service life

Under normal service conditions, the products will have a life equivalent to the building in which it is incorporated, with a minimum period of 60 years, 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 assessed in this Certificate.

9.1.2 Structures of brickwork or blockwork in which the lintels are incorporated must be designed and constructed to comply with BS EN 1996-1-1 : 2022, BS EN 1996-1-2 : 2024, BS EN 1996-2 : 2024 and BS EN 1996-3 : 2023, and their UK National Annexes, and the national Building Regulations.

9.1.3 Timber structures in which the lintels are incorporated must be designed and constructed to comply with BS EN 1995-1-1 : 2004 and BS EN 1995-1-2 : 2004, and their UK National Annexes, and the national Building Regulations.

9.1.4 Allowance must be made for the movement of the timber-frame structure due to settlement and shrinkage.

9.1.5 Guidance on the assessment of loads on lintels in masonry is given in BS EN 845-2 : 2013 and PD 6697 : 2019. It is the responsibility of the designer to ensure that the applied loads do not exceed the safe working loads given in Tables 1 to 7 of this Certificate.

9.1.6 Eccentric loading on the galvanized steel profile must not exceed the eccentricities given in Table 8.

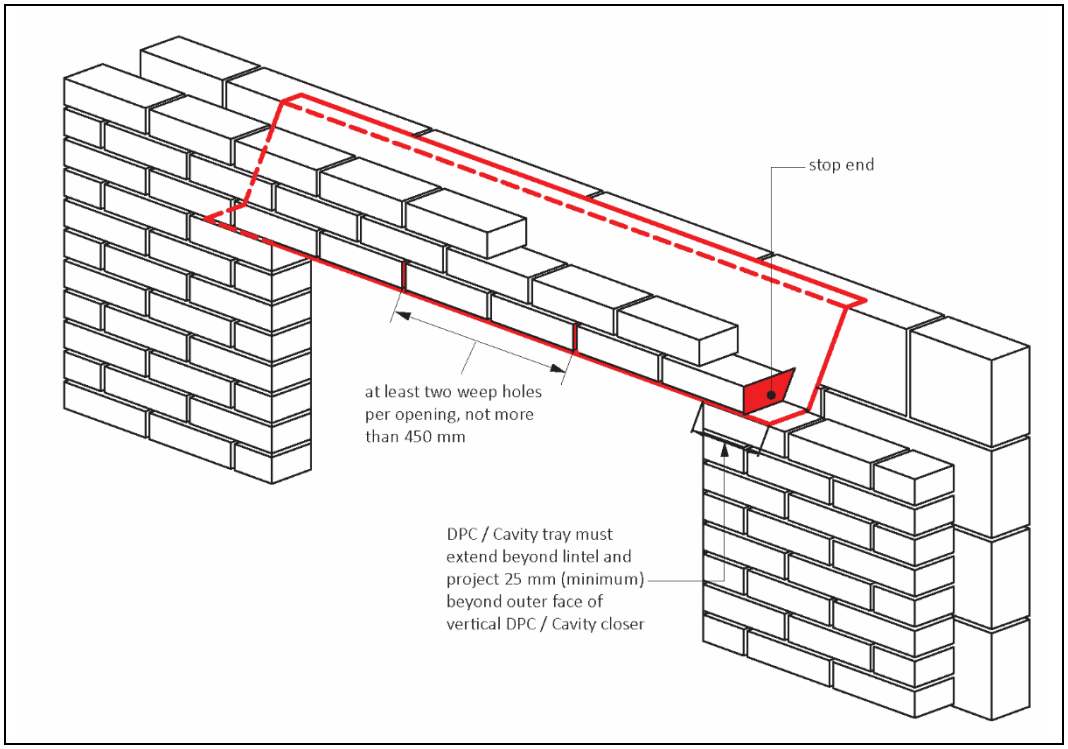
9.1.7 It is essential that walls incorporating the products are rain resistant and show no sign of water ingress. Careful attention must be paid to joints and junctions in and between components and elements.

9.1.8 To comply with *NHBC Standards* 2025 in Scotland, Northern Ireland, Isle of Man, and areas of severe and very severe exposure to driving rain as detailed in BRE BR Report 262 : 2002, separate DPC protection must be provided over the lintels and stop ends and project sufficiently beyond the lintel ends.

9.1.9 A cavity tray over the lintel must be provided under all exposure conditions and installed in accordance with BS 8215 : 1991 and *NHBC Standards* 2025, Chapters 6.1 *External masonry walls* and 6.*2 External timber framed walls*. The installation must incorporate appropriate stop ends to direct moisture out of the cavity.

9.1.10 Weep-holes must be provided in the outer leaf above the lintel and cavity tray to drain moisture from the cavity. A minimum of two weep-holes must be provided per lintel. For fair-faced masonry, weep-holes must be provided at centres not greater than 450 mm. The use of stop ends to the lintel must be considered; where required by *NHBC Standards* 2025, and particularly in areas of severe and very severe exposure to driving rain, and where full-fill cavity insulation is specified (see Figure 6). As per *NHBC Standards* 2025, Chapter 6.11 *Render*, weep-holes are also required in areas of severe and very severe exposure to driving rain where rendering is returned into the window or door head. Weep-holes are not required where the render is not returned.

Figure 6 Typical installation detail — DPC and weep-holes



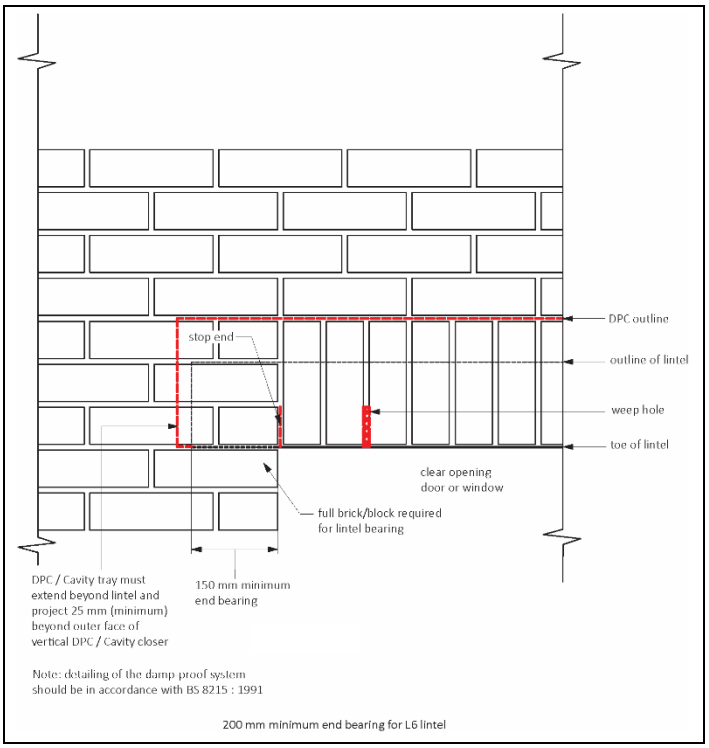
9.2 Installation

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

9.2.2 Installation must be carried out in accordance with this Certificate and the Certificate holder's instructions. A summary of instructions and guidance are provided in Annex A of this Certificate.

9.2.3 Lintels must be installed with at least the minimum end bearing dimensions given in section 1 and illustrated in Figure 7, and be fully bedded on bricklaying mortar on a full-size masonry unit.

Figure 7 Typical installation detail — end bearings

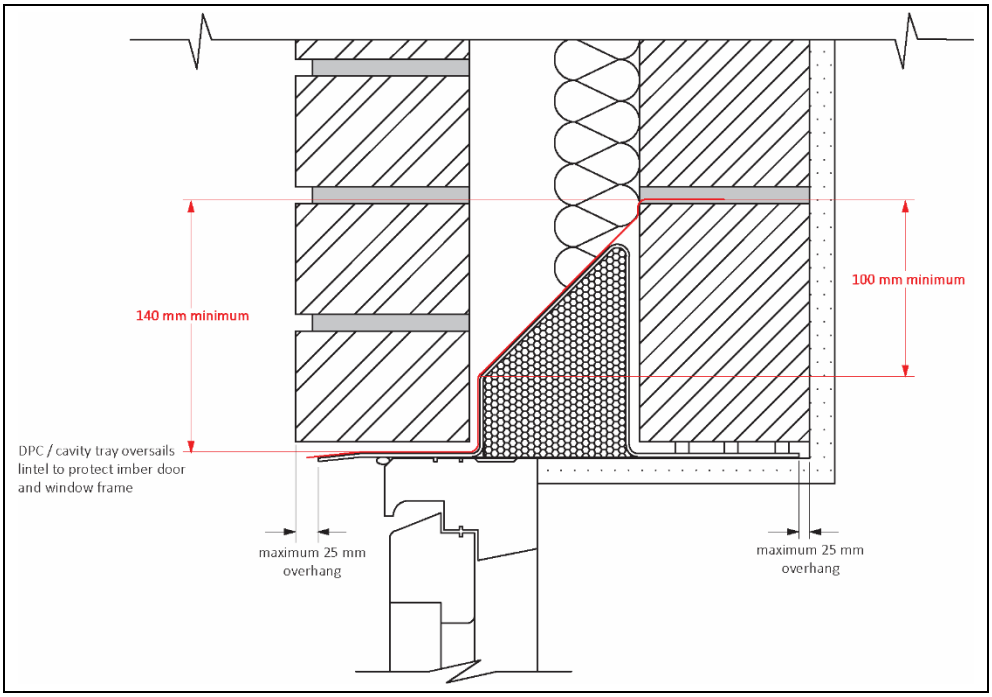


9.2.4 To prevent rotation of timber-frame lintels during the building phase, a timber pinch batten (minimum 300 mm long at midspan) is required.

9.2.5 Timber-frame lintels must be installed with restraining clips at maximum 500 mm centres at the midspan, and maximum 300 mm from the end of the lintel. Timber-frame restraint clips are available from the Certificate holder and must be fixed to the timber-frame structure by 3.3 mm diameter by 50 mm long galvanized nails.

9.2.6 Masonry must not overhang any lintel flange by more than 25 mm (see Figure 8).

Figure 8 Typical installation detail — window/door heads



9.2.7 Point loads must not be applied directly onto lintel flanges. Lintels must have a minimum of 150 mm masonry between the flange and the application level of any form of loading. The Certificate holder must be contacted for guidance if a point load is to be applied above the lintel.

9.2.8 The external lintel flange must project beyond the window/door frame, and it is recommended that a flexible sealing compound is used between the underside of the lintel flange and the frame.

9.3 Workmanship

Practicability of installation was assessed by the BBA on the basis of the Certificate holder's information. 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

The Certificate holder has stated maintenance is not required, but the exposed toe of a lintel may be painted to improve appearance using finishes compatible with the zinc coating. The Certificate holder must be consulted for details of suitable coatings, but such advice is outside of the scope of this Certificate.

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. 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 delivered to site or to builders' merchants in bundles, each carrying a label bearing the Certificate holder's name. The BBA logo incorporating the number of this Certificate is marked on each lintel.

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

11.2.1 Reasonable care must be taken during unloading, stacking and storage to avoid damage to the protective coating. Lintels that have suffered deformation or major damage to the protective coatings must not be used. Minor damage to the galvanized steel coating can be repaired by using the same anti-corrosive paint used for treating cut edges, or zinc-rich paint.

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

11.2.3 The lintels may be handled by site personnel or mechanical lifting devices – care must be taken to ensure any forks, slings or chains do not damage any coatings or finishes.

11.2.4 Except for the longer span lintels, the lintels can generally be lifted and handled by a single operative. Protective gloves must be worn when handling the product.

ANNEX A – SUPPLEMENTARY INFORMATION †

Supporting information in this Annex is relevant to the product 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 EN 845-2 : 2013.

CE marking

The Certificate holder has taken the responsibility of CE marking the products in accordance with harmonised European Standard EN 845-2 : 2013.

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 and BS EN ISO 14001 : 2015 by the British Board of Agrément (Certificates 18/Q059 and 18/E019 respectively).

Additional Information on Installation

A.1 Typical installation details of IG Lintels for Internal and External Masonry and Timber-frame Walls are shown in Figures 3 to 8.

A.2 The inner and outer masonry leaves supported by the lintel must be raised simultaneously to avoid excessive eccentricity of loading, with a maximum height difference of 225 mm (masonry should be laid on a mortar bed and all perpendicular joints should be filled).

A.3 Mortar must be allowed to cure before applying floor or roof loads. Temporary propping beneath a steel lintel is sometimes practised to facilitate speed of construction.

A.4 When installing concrete floor units or other heavy components above a lintel, care should be taken to avoid shock loading, and floor units should not be dragged into position.

A.5 The durability assessment assumes that water does not collect on the lintel; precautions, therefore, must be taken in cavity wall construction to prevent mortar dropping through the cavity and onto the lintels and obstructing the weep holes.

A.6 Installation must be in accordance with the Certificate holder's instructions and this Certificate.

A.7 Detailed guidance on limiting heat loss by air infiltration can be found in BRE Report BR 262 : 2002.

A.8 The risk of interstitial condensation in both the external walling and roofing is greatest when the building is drying out after construction. Guidance on limiting condensation is given in BRE Report BR 262 : 2002.

Bibliography

BRE Digest 301 : 1985 *Corrosion of metals by wood*

BRE Report 262 : 2002 *Thermal Insulation : avoiding risks*

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

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

BS 8215 : 1991 *Design and installation of damp-proof courses in masonry construction*

BS EN 520 : 2004 + A1 : 2009 *Gypsum plasterboards — Definitions, requirements and test methods*

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 771-3 : 2011 + A1 : 2015 *Specification for masonry units — Aggregate concrete masonry units (Dense and lightweight aggregates)*
BS EN 771-4 : 2011 + A1 : 2015 *Specification for masonry units — Autoclaved aerated concrete masonry units*
BS EN 771-5 : 2011 + A1 : 2015 *Specification for masonry units — Manufactured stone masonry units*
BS EN 771-6 : 2011 + A1 : 2015 *Specification for masonry units — Natural stone masonry units*

BS EN 845-2 : 2013 + A1 : 2016 *Specification for ancillary components for masonry : Lintels*
BS EN 846-9 : 2016 *Methods of test for ancillary components for masonry — Determination of flexural resistance and shear resistance of lintels*

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

BS EN 1090-2 : 2018 + A1 : 2024*Execution of steel structures and aluminium structures — Technical requirements for steel structures*
BS EN 1363-1 : 2020 *Fire resistance tests — General requirements*

BS EN 1993-1-1 : 2022 Eurocode 3 *Design of steel structures. General rules and rules for buildings*
NA + A1 : 2014 to BS EN 1993-1-1 : 2005 + A1 : 14 UK National Annex to Eurocode 3 *Design of steel structures — General rules and rules for buildings*

BS EN 1995-1-1 : 2004 + A2 : 2014 Eurocode 5 *Design of timber structures — General Common rules and rules for buildings*
NA to BS EN 1995-1-1 : 2004 + A2 : 2014 UK National Annex to Eurocode 5 *Design of timber structures — General Common rules and rules for buildings*
BS EN 1995-1-2 : 2004 Eurocode 5 *Design of timber structures. General*
NA to BS EN 1995-1-2 : 2004 UK National Annex to Eurocode 5 *Design of timber structures — General*

BS EN 1996-1-1 : 2022 Eurocode 6 *Design of masonry structures — General rules for reinforced and unreinforced masonry structures*
NA to BS EN 1996-1-1 : 2022 UK National Annex to Eurocode 6 *Design of masonry structures — General rules for reinforced and unreinforced masonry structures*
BS EN 1996-1-2 : 2024 Eurocode 6 *Design of masonry structures — General rules — Structural fire design*
NA to BS EN 1996-1-2 : 2024 UK National Annex to Eurocode 6 *Design of masonry structures — General rules — Structural fire design*
BS EN 1996-2 : 2024 Eurocode 6 *Design of masonry structures — Design considerations, selection of materials and execution of masonry*
NA to BS EN 1996-2 : 2006 UK National Annex to Eurocode 6 *Design of masonry structures — Design considerations, selection of materials and execution of masonry*
BS EN 1996-3 : 2023 Eurocode 6 *Design of masonry structures : Simplified 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 10346 : 2015 *Continuously hot-dip coated steel flat products — Technical delivery conditions*

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

BS EN ISO 6946 : 2017 *Building components and building elements. Thermal resistance and thermal transmittance. Calculation methods*

BS EN ISO 9001 : 2015 + A1 : 2024 *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 + A1 : 2024 *Environmental management systems — Requirements for guidance for use*

IP 1/06 : 2006 *Assessing the effects of thermal bridging at junctions and around openings*

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

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