

Tata Steel UK Ltd

Catnic Lintels
Pontypandy Industrial Estate
Caerphilly CF83 3GL

Tel: 029 2033 7900 Fax: 029 2086 7796
e-mail: catnic.sales@tatasteeleurope.com
website: www.catnic.com



Agrément Certificate

91/2638

Product Sheet 3

CATNIC LINTELS

CATNIC TIMBER FRAME LINTELS

This Agrément Certificate Product Sheet⁽¹⁾ relates to Catnic Timber Frame Lintels, comprising coated galvanized or stainless steel profiles for use in timber frame constructions with external solid masonry walls, to provide support to brickwork above window or door openings.

(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 products are suitable for use in walls with openings between 450 and 4500 mm (clear spans) (see section 6).

Behaviour in relation to fire — the products are non-combustible (see section 7).

Thermal performance — junctions incorporating the products can adequately limit heat loss (see section 8).

Condensation risk — the risk of local surface condensation in junctions incorporating the products is acceptable (see section 9).

Corrosion protection — the products will have adequate protection against corrosion (see section 10).

Durability — provided that the products are designed, installed and used in accordance with this Certificate, they will have a service life of at least 60 years taking into account the restrictions based on the materials used (see section 12).

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 Second issue: 3 September 2020

Originally certificated on 5 March 1985

Hardy Giesler
Chief Executive Officer



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

The schedule of the current scope of accreditation for product certification is available in pdf format via the UKAS link on the BBA website at www.bbacerts.co.uk

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

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

British Board of Agrément

Bucknalls Lane
Watford
Herts WD25 9BA

©2020

tel: 01923 665300
clientservices@bbacerts.co.uk
www.bbacerts.co.uk

Regulations

In the opinion of the BBA, Catnic Timber Frame Lintels, 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 products can contribute to satisfying this Requirement. See sections 6.2 to 6.7 of this Certificate.
Requirement:	B3(1)	Internal fire spread (structure)
Comment:		See sections 7.1 and 7.2 of this Certificate.
Requirement:	C2(c)	Resistance to moisture
Comment:		Junctions incorporating the products can contribute to satisfying this Requirement. See sections 9.2 and 9.4 of this Certificate.
Regulation:	7(1)	Materials and workmanship
Comment:		The products are acceptable. See section 12.1 and the <i>Installation</i> part of this Certificate.
Regulation:	7(2)	Materials and workmanship
Comment:		The products are unrestricted by this Regulation. See section 7.1 of this Certificate.



The Building (Scotland) Regulations 2004 (as amended)

Regulation:	8(1)(2)	Durability, workmanship and fitness of materials
Comment:		The products are acceptable. See section 12.1 and the <i>Installation</i> part of this Certificate.
Regulation:	9	Building standards applicable to construction
Standard:	1.1(a)(b)	Structure
Comment:		The products are acceptable, with reference to clauses 1.1.1 ⁽¹⁾⁽²⁾ and 1.1.2 ⁽¹⁾⁽²⁾ of this Standard. See sections 6.2 to 6.7 of this Certificate.
Standard:	2.3	Structural protection
Comment:		See sections 7.1 and 7.2 of this Certificate, with reference to clauses 2.3.1 ⁽¹⁾⁽²⁾ and 2.3.3 ⁽¹⁾⁽²⁾ of this Standard.
Standard:	3.15	Condensation
Comment:		Constructions incorporating the products can satisfy this Standard, with reference to clauses 3.15.1 ⁽¹⁾⁽²⁾ , 3.15.4 ⁽¹⁾⁽²⁾ and 3.15.5 ⁽¹⁾⁽²⁾ . See sections 9.2 and 9.4 of this Certificate.
Regulation:	12	Building standards applicable to conversions
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(a)(i)	Fitness of materials and workmanship
Comment:	(iii)(b)(i)	The products are acceptable. See section 12.1 and the <i>Installation</i> part of this Certificate.

Regulation:	29	Condensation
Comment:		The products can contribute to satisfying this Regulation. See section 9.4 of this Certificate.
Regulation:	30	Stability
Comment:		The products are acceptable. See sections 6.2 to 6.7 of this Certificate.
Regulation:	35(1)	Internal fire spread — Structure
Comment:		See sections 7.1 and 7.2 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 sections: 3 *Delivery and site handling* (3.1 and 3.4) and 14 *General* (14.2) of this Certificate.

Additional Information

NHBC Standards 2020

In the opinion of the BBA, Catnic Timber Frame Lintels, 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* and 6.2 *External timber frame walls*.

CE marking

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

Technical Specification

1 Description

1.1 Catnic Timber Frame Lintels are manufactured from hot-dipped galvanized steel to BS EN 10346 : 2015 with a 275 g·m⁻² zinc coating finished with a black polyester-powder coating 3.5 ± 0.5 µm thick (NN104E – Interpon 610), or stainless steel to BS EN 10088-2 : 2014, with the details shown in Table 1 of this Certificate.

Table 1 Lintel specification

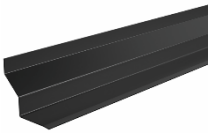
Material	Manufacturing Standard	Grade	Coating type
Hot-dipped galvanized steel ⁽¹⁾	BS EN 10346	DX51D	Z275
		DX51D	Z600
		S250GD	Z600
Stainless steel (304 S15)	BS EN 10088-2	1.4301	–

(1) Minimum yield stress 250 N·mm⁻².

1.2 The lintels are a flush type for standard external solid wall construction in timber frame walls.

1.3 The lintels are manufactured in a range of lengths from 750 to 4800 mm, in 150 mm increments, for cavity widths from 50 to 65 mm, with a 95 mm outer leaf. The lintel profiles are shown in Table 2.

Table 2 Catnic Timber Frame Lintel properties⁽¹⁾

Lintel profiles ⁽²⁾		Lintel type ⁽³⁾	Sheet thickness (mm)	Mass per unit length (kg·m ⁻¹)	Overall height (mm)	Manufactured length (mm)	Clear span (mm)	Minimum end bearing (mm)	Safe working load (kN)
	Outer brick/block width	100	2	3.8	128	750–1200	450–900	150	4
			2.5	4.7	128	1350–1500	1050–1200		5
	Cavity width	50-65	2.5	5.6	183	1650–2400	1350–2100		7
	Dimension A	95	3.1	7.2	183	2550–3000	2250–2700		7
			3.1	8	218	3300–3600	3000–3300		9
	Dimension B	47	3.1	9	256	3900–4800	3600–4500		10

(1) The lintels covered by this Certificate have a current BSI Kitemark License No KM 07234 to BS EN 845-2 : 2013.

(2) All dimensions in mm.

(3) The Certificate holder can give details of lintel type references and availability.

1.4 Other items or components⁽¹⁾ which may be used with the products, but which are outside the scope of this Certificate, are:

- brick or block masonry units⁽¹⁾ to BS EN 771-1 : 2011, BS EN 771-2 : 2011, BS EN 771-3 : 2011, BS EN 771-4 : 2011, BS EN 771-5 : 2011 and BS EN 771-6 : 2011
- bricklaying mortar⁽¹⁾ to BS EN 998-2 : 2016
- gypsum plasterboard⁽¹⁾ to BS EN 520 : 2004
- stop-ends to PD 6697 : 2019
- the timber structure to which the lintel is affixed
- retaining clips – 75 mm x 31 mm x 1.6 mm thickness, hot dipped galvanized sheet steel coil to BS EN 10346 : 2015 of grade DX51D and coated with Z275
- screws – used in retaining clips, 38 mm x No 10 RD/HD sherardized woodscrews
- nails – used in retaining clips, 50 x 3.35 mm diameter plain head galvanized nails.

(1) Details on the products' specifications can be obtained from the Certificate holder.

2 Manufacture

2.1 The products are manufactured from galvanized or stainless steel coil which is slit, perforated if necessary, straightened and cut to length to provide blanks. The lintel profiles are formed from these blanks by press-braking or roll-forming.

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

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

2.3 The management system of the manufacturer has been assessed and registered as meeting the requirements of BS EN ISO 9001 : 2015 by BSI (Certificate FM14913).

3 Delivery and site handling

3.1 The lintels are delivered in bundles or separately, depending on their size and shape, and strapped together with protective wooden supports between each layer. Each lintel carries a barcoded label with the manufacturer's name, website details and logo; lintel type, length and weight; and date of manufacture.

3.2 Reasonable care must be taken during unloading, stacking and storage to avoid damaging the lintels. Any lintels that have suffered deformation or damage to their protective coating must not be used. Minor damage to the coating must be repaired using the same anti-corrosive paint or compatible polyester-resin coating used for treating cut edges, or zinc-rich paint. Cutting must not be undertaken on site.

3.3 The lintels must be stored off the ground to avoid the risk of mechanical damage or contamination by corrosive substances.

3.4 The lintels may be handled by site personnel or mechanical lifting devices, depending on the size and weight of the lintel (see the Certificate holder's brochure). Care must be taken to ensure that any forks, slings or chains do not damage the protective coating.

Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on Catnic Timber Frame Lintels.

Design Considerations

4 Use

4.1 Catnic Timber Frame Lintels are satisfactory for use in timber frame and external masonry cavity wall constructions of brickwork and/or blockwork, to provide support to wall, roof or floor loads (or a combination of these), above window or door openings.

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

4.3 The lintels are lighter than conventional concrete lintels and can be positioned by one or two operatives.

4.4 The galvanized epoxy powder or galvanized polyester-coated steel lintels obviate the need for a separate damp-proof tray at the lintel position.

4.5 The installation of the lintels must incorporate the use of appropriate weep-holes and stop-ends to the lintels, to direct moisture out of the cavity as recommended in PD 6697 : 2019.

5 Practicability of installation

The products are designed to be installed by a competent general builder or a contractor experienced with these types of products.

6 Structural performance

6.1 The lintels⁽¹⁾ have adequate strength and stiffness to sustain the safe working loads given in Table 2, when uniformly distributed, subject to the following conditions:

- the defined cavity width and size of standard masonry units and clear spans is not exceeded and a minimum of 150 mm bearing is provided at each end
- where part of the loading is applied as a concentrated load, each concentrated load must be applied on a length 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 safe working loads (uniformly distributed loads) specified in Table 2.

(1) The specified loads given relate to simply supported lintels, laterally and torsionally unrestrained. Therefore, there are no requirements for composite action with, or restraint by, adjacent elements of the construction.



6.2 The retaining clips are used to restrain rotation of the lintels. The clip design allows for relative vertical movement between the timber inner leaf and the facing brickwork (see section 15.2)

6.3 The shear forces on the lintels must not exceed the shear forces which would be derived using the safe working loads (which are assumed to be uniformly distributed loads) in Table 2.

6.4 In addition to the requirements specifically referred to in this Certificate, structures of brickwork or blockwork in which the lintels are incorporated must be designed and constructed in accordance with BS EN 1996-1-1 : 2005 and BS EN 1996-1-2 : 2005 or BS EN 1996-3 : 2006, and their UK National Annexes, PD 6697 : 2019, and the relevant technical specifications of the national Building Regulations.

6.5 The structural timber framework must be designed and constructed in accordance with BS EN 1995-1-1 : 2004 and BS EN 1995-1-2 : 2004, and their UK National Annexes.

6.6 The load-span data shown in Table 2 is valid only for the safe working loads and the lintel clear spans given. The loads have been derived from tests according to BS EN 846-9 : 2016, supported by calculations, and relate to a maximum allowable deflection of span/325. For other loading conditions, or spans outside this range, the Certificate holder should be consulted.

6.7 To avoid excessive eccentricities of loading, the lintels must only be used with standard masonry units of 100 to 102.5 mm widths.

6.8 Guidance for the assessment of loads on lintels in masonry is given in BS EN 845-2 : 2013. It is the responsibility of the designer to ensure that the applied loads do not exceed the safe working loads given in Table 2 of this Certificate.

7 Behaviour in relation to fire



7.1 Galvanized and stainless steel profiles are 'non-combustible' and are classified as Class A1 in accordance with the national Building Regulations.

7.2 The fire resistance of the wall incorporating the lintels must satisfy the national Building Regulations and should be evaluated by reference to the requirements of the documents supporting the national Building Regulations. An appropriate assessment or test must be carried out by a United Kingdom Accreditation Service (UKAS) accredited laboratory (accredited for the test concerned).

8 Thermal performance

8.1 Typical junctions incorporating the products, based on the construction details shown in Figures 1 and 2, were analysed numerically to determine their likely thermal performance. Junctions in Table 3 can adequately limit excessive heat loss and the Ψ (psi) values shown may be used in SAP and sBEM calculations.

Table 3 Linear thermal transmittance Ψ values ($W \cdot m^{-1} \cdot K^{-1}$)

Lintel product ⁽¹⁾	Properties of the insulation effectiveness	Approved psi-value ⁽¹⁾ ($W \cdot m^{-1} \cdot K^{-1}$)	Default psi-value ⁽²⁾ ($W \cdot m^{-1} \cdot K^{-1}$)
CTF5 (steel thickness ≤ 3.1 mm)	Thermal conductivity of steel: $60 W \cdot m^{-1} \cdot K^{-1}$	0.30	1.0

(1) Approved value may be used when there is a 30 mm overlap of the window frame over the cavity.

(2) Where a junction detail has not been calculated in accordance with BS EN ISO 10211 : 2017 and BRE Report BR 497 : 2016, and the construction deviates from that described in Table 3, the default value should be used.

8.2 For junction details/constructions not described in Table 3, 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. The Certificate holder can provide a detailed Ψ value calculation if required.

Table 4 Hygrothermal data for each lintel type

Element	Lintel design
	No base plate
Lintel material maximum thickness (mm) ⁽¹⁾	3.2
maximum $\lambda_{\text{eff}} 30 \text{ W} \cdot \text{mK}^{(2)}$	No
Some insulation in lintel ⁽²⁾⁽³⁾	Yes
Lintels fully insulated ⁽¹⁾	Yes
window/door frame overlap of min 30 mm ⁽²⁾	Yes
Soffit insulation depending on type of wall insulation used:	
Cavity wall insulation ⁽²⁾⁽³⁾	No
Insulated dry lining ⁽²⁾⁽³⁾	0.34 m ² ·K·W ⁻¹
External wall insulation ⁽¹⁾⁽²⁾	0.5 m ² ·K·W ⁻¹

(1) TSO publication *Limiting thermal bridging and air leakage: Robust construction details for dwellings and similar buildings* TSO 2002.

(2) CLG publication *Accredited Construction Details* CLG 2007.

(3) SBSA publication, *Technical Guide : Accredited Construction Details* (Scotland) 2015.

9 Condensation risk

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

Surface condensation



9.2 Constructions described in section 8.1 can achieve a surface temperature factor (f_{Rsi}) in excess of 0.75 and should adequately limit the risk of surface condensation in dwellings, as defined in BRE Information Paper IP 1/06. The surface condensation risk of other constructions should be established by numerical modelling in accordance with BRE Information Paper IP 1/06.

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

Interstitial condensation



9.4 Under normal domestic conditions, the level of interstitial condensation associated with the products will be low and the risk of any resultant damage minimal.

10 Corrosion protection

The galvanized steel lintels have adequate protection against corrosion, providing:

- the polyester coating protection remains undamaged or minor blemishes are repaired
- the mortar complies with the requirements of BS EN 998-2 : 2016.

11 Maintenance

Maintenance is not required, but the exposed toe of the lintel may be re-painted to improve its appearance, using finishes that are compatible with a polyester coating.

12 Durability



12.1 Providing the lintels are designed and installed in accordance with this Certificate, they will have a service life of at least 60 years, subject to the following conditions:

- lintels comprising zinc-coated steel profiles are limited for use in buildings up to three storeys in height located in areas with non-aggressive environments only, in accordance with PD 6697 : 2019, Table 2, Note 3

- lintels comprising stainless steel profiles grade 304 are limited for use in buildings located in areas with non-aggressive environments only, in accordance with PD 6697 : 2019, Table 2, Note 4
- lintels comprising stainless steel profiles grade 316 are not limited for use in any areas, in accordance with PD 6697 : 2019, Table 2, Note 4
- the galvanized steel profile of the lintel should be protected as described in section 10 of this Certificate.

12.2 The durability of the lintels will not be impaired by contact with conventional mortar admixtures.

12.3 Buildings located in exposed conditions, such as those in coastal areas and those above three storeys, are at greater risk of suffering water ingress. In these situations, it is important that separate dpc and stop-ends are installed.

13 Reuse and recyclability

The steel component can be recycled.

Installation

14 General

14.1 Typical installation details of the products are shown in Figures 1 and 2.

14.2 Except for the longer span lintels, the products can generally be lifted and handled by a single operative. Protective gloves should be worn when handling the lintels.

14.3 The products must be installed with a minimum 150 mm end bearing, and must be fully bedded on bricklaying mortar.

Figure 1 Typical installation details for CTF5 lintels

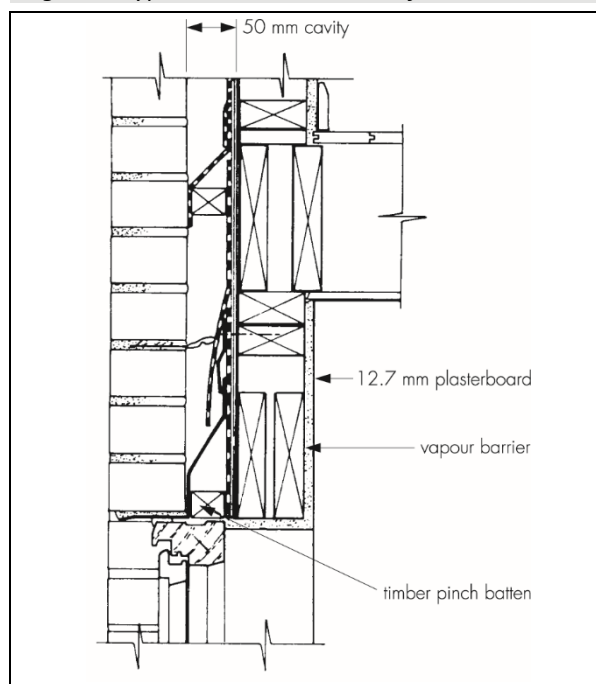
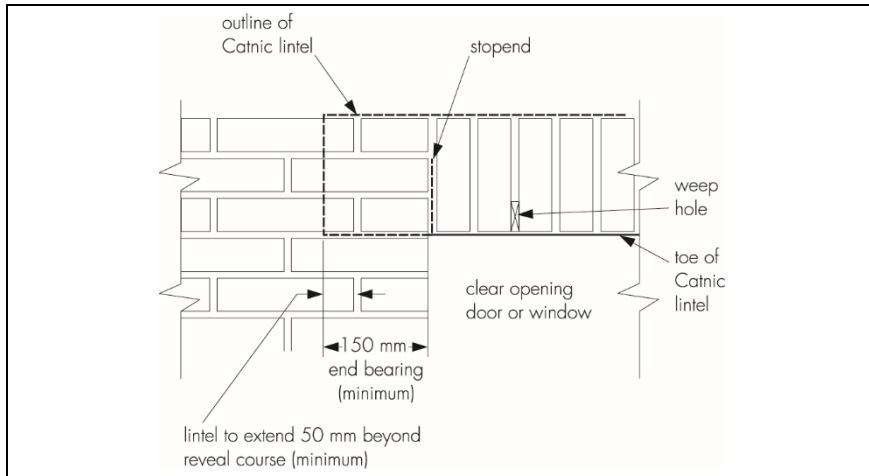


Figure 2 Detail showing minimum end bearing, stop-ends and weep holes



15 Procedure

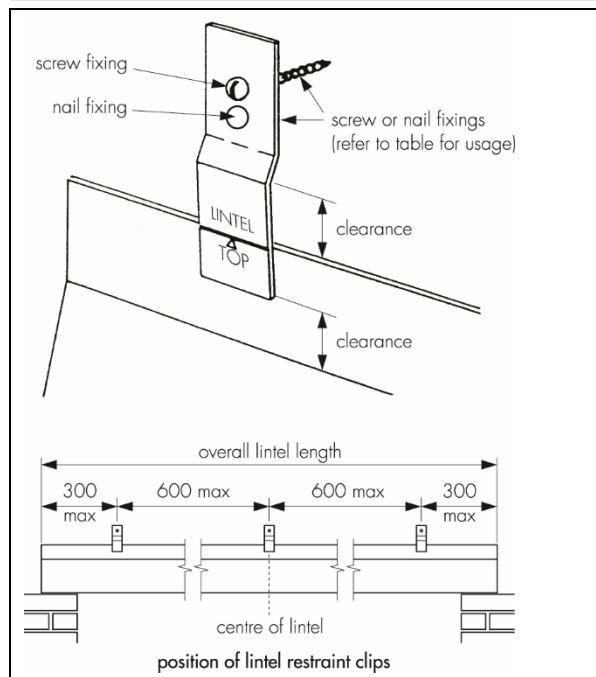
15.1 The lintels must be used in conjunction with a timber frame construction designed and installed in accordance with BS EN 1995-1-1 : 2004 and its UK National Annex.

15.2 The lintels must be restrained by screwing or nailing the clips provided to the timber inner leaf at not more than 600 mm centres (see Table 5 and Figure 3). The clip should be positioned to allow a relative vertical movement of 12 mm for two storeys or 18 mm for three storeys, between the timber lintel and the facing brickwork resulting from timber shrinkage. Alternative guidance relating to this can be found in *NHBC Standards 2020*, Chapter 6.2.

Table 5 Lintel lengths and fixings

Lintel profile	Lintel length (mm)	Clip fixings
CTF5	3900-4800	38 mm x No 10 RD/HD sherardized woodscrews
	750-3600	50 x 3.35 mm diameter plain head galvanized nails

Figure 3 Installation details for retaining clips



15.3 The product must be used with a suitably positioned and sized timber pinch batten (see Figure 1).

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

15.5 Stop-ends should be used on cavity trays and lintels, and are required under all exposure conditions, particularly in areas of severe exposure and where full-fill cavity insulation is specified (see Figure 2). The stop-ends should be applied as recommended in PD 6697 : 2019 (outside the scope of this Certificate).

15.6 Mortar joints in exposed masonry should be weatherstruck in severe exposure zones.

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

15.8 Operations likely to damage the protective coatings or impair the strength of the lintels (for example, cutting, welding or drilling) must not be undertaken. Cleaning of excess mortar must be carried out with a soft material to avoid damaging the coating.

Technical Investigations

16 Tests

Tests were carried out the Catnic Timber Frame Wall Lintels and the results assessed to determine:

- the flexural and shear strength of the lintel in accordance with BS EN 846-9 : 2016
- load-deflection characteristics to BS EN 845-2 : 2013
- thickness and quality of galvanized and polyester resin coatings
- resistance to damage of the polyester resin coatings
- the quality of the spot welding and its effect on the galvanizing.

17 Investigations

17.1 The following investigations were carried out on the products:

- calculations and review of the results of the load-deflection tests to establish structural performance
- suitability of the corrosion protection, including review of results of long-term exposure tests on galvanized steel
- data relating to the effectiveness of the lintels as a damp-proof tray and their effect on the weathertightness of cavity walls
- risk of condensation and thermal transmittance/heat loss through junctions
- minimum temperature factors and Ψ values for typical constructions incorporating the products in accordance with BRE Information Paper IP 1/06
- behaviour in relation to fire
- practicability of installation and durability.

17.2 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*

BR 497 : 2016 *Conventions for Calculating Linear Thermal Transmittance and Temperature Factors*

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 light-weight 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 — Part 9: Determination of flexural resistance and shear resistance of lintels*

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

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 + A1 : 2008 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 — Structural fire design*

NA to BS EN 1995-1-2 : 2004 UK National Annex to *Eurocode 5 — Design of timber structures — General — Structural fire design*

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

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 on masonry structures — General rules — Structural fire design*

NA to BS EN 1996-1-2 : 2005 UK National Annex to *Eurocode 6 — Design of masonry structures — General rules. Structural fire design*

BS EN 1996-3 : 2006 *Eurocode 6 — Design of masonry structures — Simplified calculation methods for unreinforced masonry structures*

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

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

BS EN 10346 : 2015 *Continuously hot-dip coated steel flat products for cold forming — Technical delivery conditions*

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

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

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

18 Conditions

18.1 This Certificate:

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

18.2 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.

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

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

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

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

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

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