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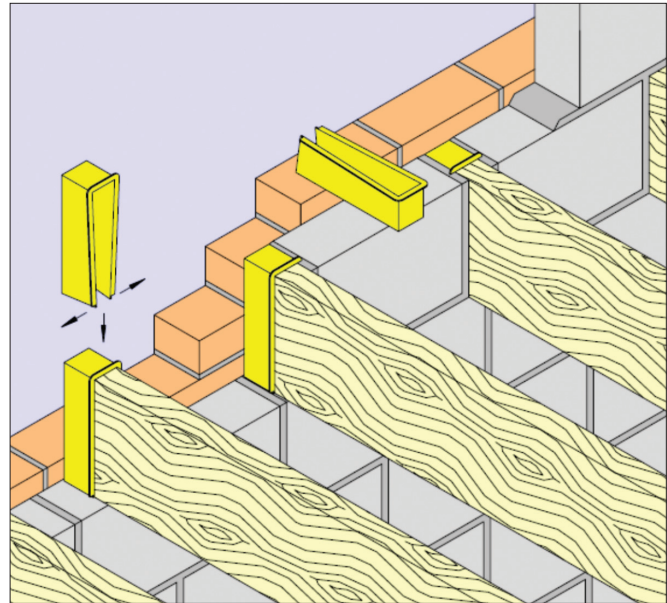
**Agrément Certificate**  
**No 07/4459**

**PRODUCT SHEET 1 — CAPIT JOIST END SEAL****PRODUCT SCOPE AND SUMMARY OF CERTIFICATE**

This Certificate relates to the Capit Joist End Seal, for use in the inner leaf of external masonry cavity walls and in separating cavity walls to limit air leakage associated with built-in solid timber joists.

**THIS CERTIFICATE INCLUDES:**

- factors relating to compliance with UK 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**

**Behaviour in relation to fire** — as the product is of limited area and is not exposed to fire, it need not be taken into account in the fire resistance of the floor (see section 4).

**Air leakage** — the product will limit air leakage between the ceiling void and wall cavity and thereby minimise heat loss (see section 5).

**Sound transmission** — in a separating masonry cavity wall, the product will limit air paths around joists and, therefore, contribute to reducing sound transmission (see section 6).

**Practicability of installation** — installation is straightforward and can be carried out using traditional skills (see section 7).

**Durability** — as the product is protected within the inner leaf of a cavity wall, it will not suffer significant degradation and should last the normal expected life of a building (see section 8).

The BBA has awarded this Agrément Certificate for the Capit Joist End Seal to Capit Building Products Ltd as fit for its intended use provided it is installed, used and maintained as set out in this Agrément Certificate.

On behalf of the British Board of Agrément

Greg Cooper: Chief Executive

Date of First issue: 3 September 2007

*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](http://www.bbacerts.co.uk)*

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

# Regulations

In the opinion of the BBA, the Capit Joist End Seal, if used in accordance with the provisions of this Certificate, will meet, or contribute to meeting, the relevant requirements of the following Building Regulations:



## The Building Regulations 2000 (as amended) (England and Wales)

Requirement:	A1	Loading
Comment:		Providing restraint straps are used as required, the product will not have an adverse effect on wall stability. See sections 3.2 to 3.4 of this Certificate.
Requirement:	B3(1)(2)	Internal fire spread (structure)
Comment:		As the product is not exposed, its use will not affect the fire resistance of the floor or the wall in which the joist is embedded. See sections 4.1 and 4.2 of this Certificate.
Requirement:	E1	Protection against sound from other parts of the building and adjoining buildings
Comment:		By limiting air paths, the product will contribute to meeting this Requirement. See sections 6.1 and 6.2 of this Certificate.
Requirement:	L1(a)(i)	Conservation of fuel and power
Comment:		The product will contribute to reducing unwanted air leakage from the edges of intermediate floors. See sections 5.1 and 5.2 of this Certificate.
Requirement:	Regulation 7	Materials and workmanship
Comment:		The product is an acceptable material. See section 8 of this Certificate.



## The Building (Scotland) Regulations 2004 (as amended)

Regulation:	8	<b>Fitness and durability of materials and workmanship</b>
Regulation:	8(1)	Fitness and durability of materials and workmanship
Comment:		The product can contribute to a construction satisfying this Regulation. See section 8 and the <i>Installation</i> part of this Certificate.
Regulation:	9	<b>Building standards — construction</b>
Standard:	1.1(a)(b)	Structure
Standard:	1.2	Disproportionate collapse
Comment:		Providing restraint straps are used as required, the product will not have an adverse effect on the ability of the structure to satisfy these Standards, with reference to clauses 1.1.1 <sup>(1)(2)</sup> and 1.2.1 <sup>(1)(2)</sup> . See sections 3.2 to 3.4 of this Certificate.
Standard:	2.1	Compartmentation
Comment:		As the product is not exposed, its use will not affect the fire resistance of a combustible compartment floor or wall, with reference to clauses 2.1.1 <sup>(2)</sup> and 2.1.4 <sup>(2)</sup> to 2.1.11 <sup>(2)</sup> . See sections 4.1 and 4.2 of this Certificate.
Standard:	2.2	Separation
Comment:		As the product is not exposed, its use will not affect the fire resistance a floor or wall, with reference to clauses 2.2.1 <sup>(1)(2)</sup> to 2.2.5 <sup>(1)(2)</sup> and 2.2.6 <sup>(2)</sup> to 2.2.8 <sup>(2)</sup> . See sections 4.1 and 4.2 of this Certificate.
Standard:	5.1	Resisting sound transmission to dwellings using appropriate constructions
Comment:		By limiting air paths, the product will contribute to meeting this Standard, with reference to clause 5.1.5 <sup>(2)</sup> . See sections 6.1 and 6.3 of this Certificate.
Standard:	6.2	Building insulation envelope
Comment:		The product will contribute to satisfying this Standard, with reference to clause 6.2.5 <sup>(1)(2)</sup> . See sections 5.1 and 5.2 of this Certificate.
		(1) Technical Handbook (Domestic).
		(2) Technical Handbook (Non-Domestic).



## The Building Regulations (Northern Ireland) 2000 (as amended)

Regulation:	B2	Fitness of materials and workmanship
Comment:		The product is an acceptable material. See section 8 of this Certificate.
Regulation:	D1	Stability
Comment:		Providing restraint straps are used as required, the product will not have an adverse effect on wall stability. See sections 3.2 to 3.4 of this Certificate.
Regulation:	E4	Internal fire spread — Structure
Comment:		As the product is not exposed, its use will not affect the fire resistance of the floor. See sections 4.1 and 4.2 of this Certificate.
Regulation:	F2(a)(i)	Conservation measures
Comment:		The product will contribute to satisfying this Regulation. See sections 5.1 and 5.2 of this Certificate.
Regulation:	G2(1)	Separating walls and separating floors
Comment:		See sections 6.1 and 6.4 of this Certificate.

## Construction (Design and Management) Regulations 2007

## Construction (Design and Management) Regulations (Northern Ireland) 2007

In the opinion of the BBA there is no information in this Certificate which relates to the obligations of the client, CDM co-ordinator, designer and contractors to address their obligations under these Regulations.

# Non-regulatory Information

## NHBC Standards 2007

NHBC accepts the use of the Capit Joist End Seal, when installed and used in accordance with this Certificate, as meeting the requirements of the NHBC Standards, Chapter 6.1 *External masonry walls*, Design standards D12 and D13.

## Zurich Building Guarantee Technical Manual 2007

In the opinion of the BBA, the use of the Capit Joist End Seal, in relation to this Certificate, is not subject to the requirements of this Technical Manual.

## General

This Certificate relates to the Capit Joist End Seal for use in the inner leaf of external masonry cavity walls and in separating cavity walls to limit air leakage associated with built-in solid timber joists.

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

## Technical Specification

### 1 Description

1.1 The Capit Joist End Seal is an injection-moulded polypropylene box with open front and bottom (see Figure 1). The product is available in a range of sizes identified by colour (see Table 1).

Figure 1 Typical Capit Joist End Seal

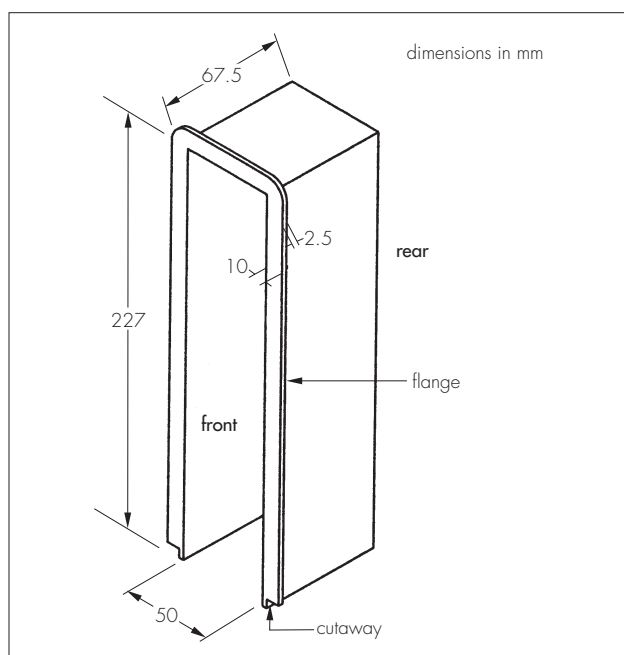


Table 1 Sizes (mm)

Depth	Width	Capit colour
225	38	blue
225	50	yellow
225	63	green
225	75	red
225	100	white

1.2 Quality control includes inspection of incoming test certificates for the polypropylene material and the colouring agent, and regular visual and dimensional checks during manufacture.

### 2 Delivery, storage and site handling

2.1 The product is delivered to site in standard cardboard boxes and bears the product identification and the BBA logo incorporating the number of this Certificate.

2.2 Boxes should be stored away from direct sunlight and excessive heat.

# Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on the Capit Joist End Seal.

## Design Considerations

### 3 Use

3.1 The Capit Joist End Seal is for use in the inner leaf of external masonry cavity walls, and in separating cavity walls, to limit air leakage associated with built-in timber joists.



3.2 The minimum bearing length of the joist on the wall should be 90 mm.

3.3 Restraint straps must be provided as determined by the relevant standard or design code, but the distance between any two restrained joists should not exceed 1.2 m.

3.4 Masonry walls incorporating the product must be at least 100 mm thick and be constructed in accordance with one or more of the following technical specifications:

- BS 5628-1 : 2005 and BS 5628-3 : 2005

- the national Building Regulations:

**England and Wales** — Approved Document A1/2, Section 2C

**Scotland** — Mandatory Standards 1.1 and 1.2, clauses 1.1.1<sup>(1)(2)</sup> and 1.2.1<sup>(1)(2)</sup>

(1) Technical Handbook (Domestic).

(2) Technical Handbook (Non-Domestic).

**Northern Ireland** — Technical Booklet D.

### 4 Behaviour in relation to fire



4.1 As the product, mounted on an internal leaf, is of limited area and is not directly exposed to fire, it need not be taken into account when considering the classification of the fire resistance of the floor.

4.2 Where embedment of joist ends is permitted in a fire-resistant masonry, cavity compartment/separating wall (not in Northern Ireland — see section 6.4), the fire resistance will be unaffected by the incorporation of the product.

### 5 Air leakage



5.1 The product will limit unwanted air leakage between a ceiling void and wall cavity and thereby minimise heat loss by air infiltration, as required by statutory regulations concerning the conservation of fuel and power.

5.2 If compliance with the Accredited Construction Detail No MCHF-02 is required to maintain air barrier continuity and improve air leakage performance, a flexible sealant of low modulus, as defined in BS EN ISO 11600 : 2003, should be applied to the face of the masonry around the joist end seal.

### 6 Sound transmission



6.1 In a separating masonry, cavity wall, the product will limit air paths around joist ends and, therefore, contribute to limiting sound transmission.



6.2 In England and Wales, separating walls are subject to pre-completion testing in accordance with Approved Document E. The product can be used in the Robust Detail for separating walls as referenced in *Robust Details, Part E Resistance to the Passage of Sound, Appendix A*.



6.3 In Scotland, any pre-completion testing undertaken should be in accordance with the guidance given in *The Technical Handbook Domestic Buildings, Section 5 Noise*.



6.4 In Northern Ireland, in accordance with Technical Booklet G, the building of timber joists into separating walls is not permitted. By limiting air paths in separating floors, the product can contribute to satisfying the relevant Regulation.

### 7 Practicability of installation

Installation is straightforward and can be carried out by tradesmen using traditional skills following the procedures and conditions laid down in this Certificate.

## 8 Durability



The product is durable and will not suffer significant degradation when protected within the inner leaf of a cavity wall. The product should last the normal expected life of a building.

## Installation

### 9 General

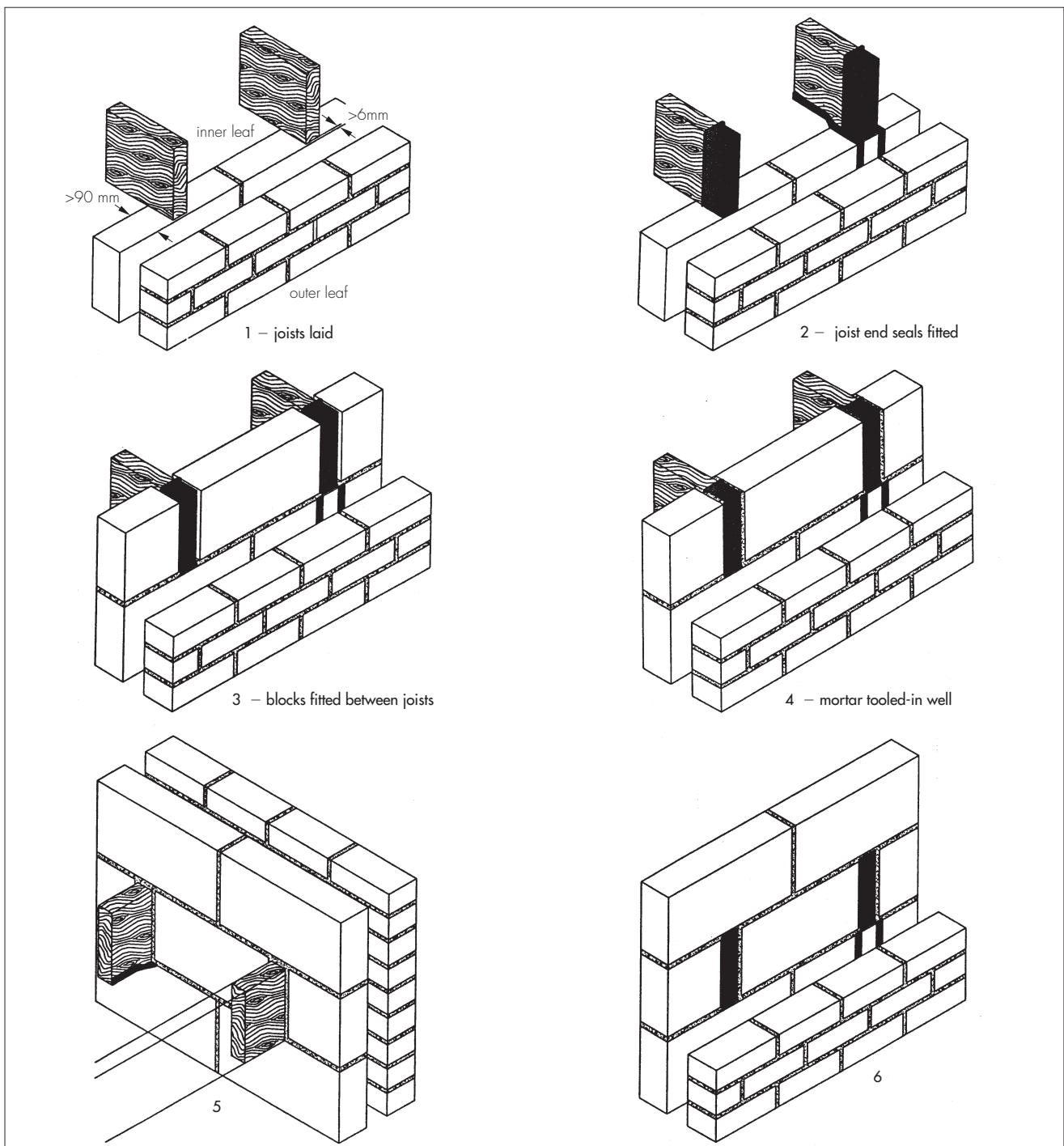
9.1 Throughout the installation of the Capit Joist End Seal, care should be exercised to prevent damage to the product.

9.2 As the product does not provide lateral stability to the joists, temporary bracing should be provided as the work progresses.

### 10 Procedure

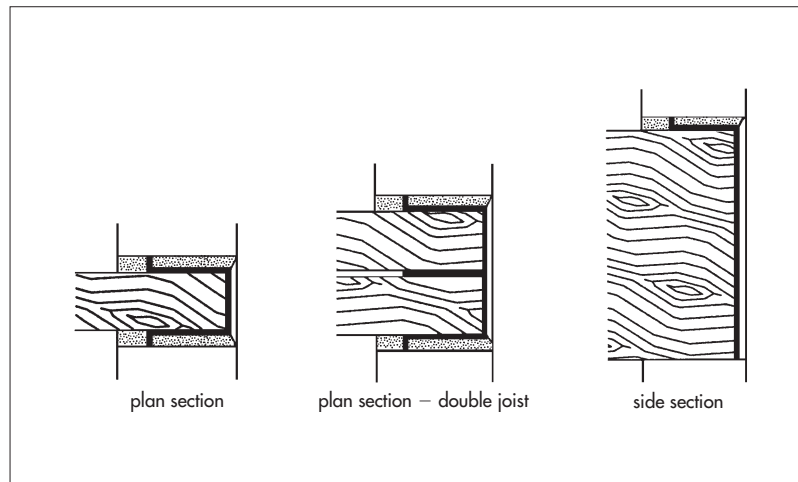
10.1 The joists are laid out ensuring that there is a minimum bearing length of 90 mm on the masonry inner leaf of the wall (see Figure 2).

Figure 2 Installation sequence



10.2 The product is pushed onto the end of each joist (see Figure 3).

Figure 3 Installation details



10.3 Restraint straps should be fitted as required.

10.4 In blockwork walls, blocks are cut square to fit tightly between the joist end seals. Blocks should be cut with a saw and the use of brick infills should be avoided. In brick walls, cut bricks should be turned with uncut edges against the product.

10.5 Any voids within the joist end seal and the wall, or between the embedded end of the joist and the wall, should be filled with mortar. In general, to minimise air leakage, joint filling of the masonry should be of consistently high quality.

10.6 The wall is completed following normal practice, and the surrounding detail added in the conventional manner.

## Technical Investigations

### 11 Investigations

11.1 The practicability of installation was assessed by examination of the product literature.

11.2 A factory visit was made to assess the manufacture and quality control of the product.

11.3 An assessment was made of:

- durability of the polypropylene used in the construction of the product
- airtightness of the product from leakage tests
- reaction to fire of the constituent materials
- the effect of the product on the fire resistance of a separating wall, from tests
- the effect of the product on the sound transmission resistance of a separating wall.

## Bibliography

- BS 5628-1 : 2005 *Code of practice for the use of masonry — Structural use of unreinforced masonry*  
BS 5628-3 : 2005 *Code of practice for the use of masonry — Materials and components, design and workmanship*  
BS EN ISO 11600 : 2003 *Building construction — Jointing products — Classification and requirements for sealants*

## 12 Conditions

12.1 This Certificate:

- relates only to the product/system that is named and described on the front page
- is granted only to the company, firm or person named on the front page — no other company, firm or person may hold or claim any entitlement to this Certificate
- 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.

12.2 References in this Certificate to any Act of Parliament, Statutory Instrument, Directive or Regulation of the European Union, British, European or International Standard, Code of Practice, manufacturers' instructions or similar publication, are references to such publication in the form in which it was current at the date of this Certificate.

12.3 This Certificate will remain valid for an unlimited period provided that the product/system and the manufacture and/or fabrication including all related and relevant 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.

12.4 In granting this Certificate, the BBA is not responsible for:

- 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
- individual installations of the product/system, including the nature, design, methods and workmanship of or related to the installation
- the actual works in which the product/system is installed, used and maintained, including the nature, design, methods and workmanship of such works.

12.5 Any information relating to the manufacture, supply, installation, use and maintenance 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 and maintained. It does not purport in any way to restate the requirements of the Health & Safety at Work etc Act 1974, or of any other statutory, common law or other duty which may exist at the date 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. In granting this Certificate, the BBA does not accept responsibility to any person or body for any loss or damage, including personal injury, arising as a direct or indirect result of the manufacture, supply, installation, use and maintenance of this product/system.

