

## Timloc Building Products Limited

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Agrément Certificate  
**93/2937**  
Product Sheet 1

### TIMLOC CAVITY TRAYS

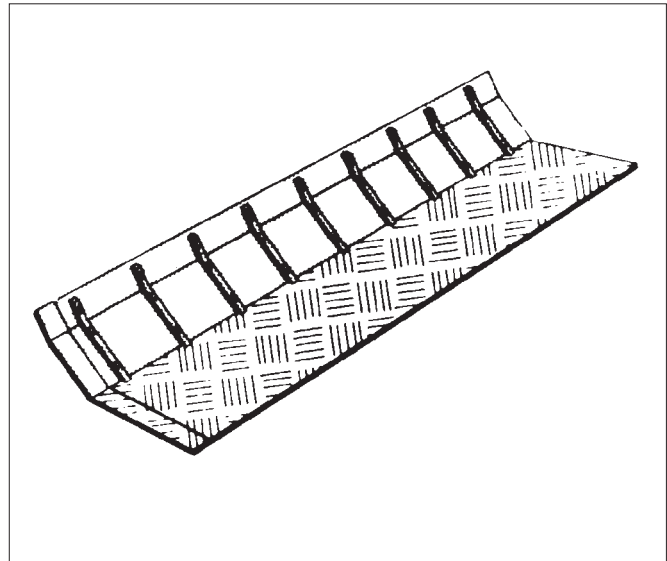
### SYSTEM 2000E CAVITY TRAYS

#### PRODUCT SCOPE AND SUMMARY OF CERTIFICATE

This Certificate relates to System 2000E Cavity Trays, a range of remedial trays used to form a damp-proof course in existing brick cavity walls of between 50 mm and 125 mm cavity width at the horizontal abutment of a pitched roof, a flat roof, above lintels or below sills.

#### AGRÉMENT 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

**Behaviour under load** — the products will not adversely affect the ability of the wall to sustain and transmit compressive loads (see section 5).

**Resistance to passage of water** — the products will provide an effective barrier against liquid water (see section 6).

**Use with cavity wall insulation** — the products are compatible with materials currently used as cavity wall insulation. The trays do not form a continuous barrier therefore blown or injected insulation may penetrate from above or below the trays (see section 7).

**Durability** — under normal service conditions the products will remain effective throughout the lifetime of the building (see section 9).

The BBA has awarded this Agrément 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

A handwritten signature in black ink, appearing to read 'Simon Wroe'.

Simon Wroe  
Head of Approvals — Materials

A handwritten signature in black ink, appearing to read 'Greg Cooper'.

Greg Cooper  
Chief Executive

Date of First issue: 3 November 2009

Originally certificated on 27 August 1993

*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.*

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# Regulations



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

In the opinion of the BBA, the use of System 2000E Cavity Trays in an existing building is not subject to these Regulations, but action to satisfy Requirement C2(a) and Regulation 7 may be necessary for a 'Material change of use' as defined in Regulation 5(a).

Requirement:	A1	Loading
Comment:		The material properties of the products indicate that when properly installed the ability of the wall to sustain and transmit compressive loads will not be adversely affected. The presence of a dpc can reduce the shear and tensile strength of a wall at that point, and the design may need to take account of this. See section 5 of this Certificate.
Requirement:	C2(b)	Resistance to moisture
Comment:		The products when properly installed will prevent water that has penetrated the outer leaf of a cavity wall from reaching the inner leaf or lower parts of the wall. See sections 6.1 and 6.2 of this Certificate.
Requirement:	Regulation 7	Materials and workmanship
Comment:		The products are acceptable. See section 9 and the <i>Installation</i> part of this Certificate.



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

In the opinion of the BBA, the use of System 2000E Cavity Trays, in an existing building is not controlled by these Regulations, but action to satisfy the Regulation and related Mandatory Standards below may be necessary for a 'Conversion' as defined in Regulation 4 of these Regulations.

Regulation:	8(1)	Fitness and durability of materials and workmanship
Comment:		The products can contribute to a construction satisfying this Regulation. See section 9 and the <i>Installation</i> part of this Certificate.
Regulation:	9	Building standards – construction
Standard:	1.1(a)(b)	Structure
Comment:		The products, when properly installed will not adversely affect the ability of the wall to sustain and transmit compressive loads. The presence of a dpc can reduce the shear and tensile strength of a wall at that point, and the design may need to take account of this, with reference to clause 1.1.1 <sup>(1)(2)</sup> . See section 5 of this Certificate.
Standard:	3.10	Precipitation
Comment:		The products can contribute to a construction satisfying this Standard, with reference to clauses 3.10.1 <sup>(1)(2)</sup> and 3.10.4 <sup>(1)(2)</sup> . See sections 6.1 and 6.2 of this Certificate.
Regulation:	12	Building standards – conversions
Comment:		All comments given for these products under Regulation 9, also apply to this Regulation, with reference to clause 0.12.1 <sup>(1)(2)</sup> and Schedule 6 <sup>(1)(2)</sup> . (1) Technical Handbook (Domestic). (2) Technical Handbook (Non-Domestic).



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

In the opinion of the BBA, the use of System 2000E Cavity Trays in an existing building is not controlled by these Regulations, but action to satisfy Regulations B2, B3(2) and C4(a) may be necessary for a 'Material change of use' under Regulation A9.

Regulation:	B2	Fitness of materials and workmanship
Comment:		The products are acceptable. See section 9 and the <i>Installation</i> part of this Certificate.
Regulation:	C4(b)	Resistance to ground moisture and weather
Comment:		The products when properly installed will prevent any water that has penetrated the outer leaf of a cavity wall from reaching the interior or the lower parts of the wall. See sections 6.1 and 6.2 of this Certificate.
Regulation:	D1	Stability
Comment:		The products when properly installed will not adversely affect the ability of the wall to sustain and transmit compressive loads. The presence of a dpc can reduce the shear and tensile strength of a wall at that point, and design may need to take account of this. See section 5 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 under these Regulations.

# Non-regulatory Information

## NHBC Standards 2008

In the opinion of the BBA, the use of System 2000E Cavity Trays, in relation to this Certificate, is not subject to the requirements of these Standards.

## Zurich Building Guarantee Technical Manual 2007

In the opinion of the BBA, System 2000E Cavity Trays, when installed and used in accordance with this Certificate, satisfy the requirements of the *Zurich Building Guarantee Technical Manual*, Section 4 *Superstructure*, Sub-section *External walls – masonry – cavity trays*.

# Technical Specification

## 1 Description

1.1 System 2000E Cavity Trays are vacuum formed from 2 mm medium-density polyethylene with a textured surface. They are not built into the inner leaf, but may be bonded to the inner leaf, if required using a butyl sealing tape.

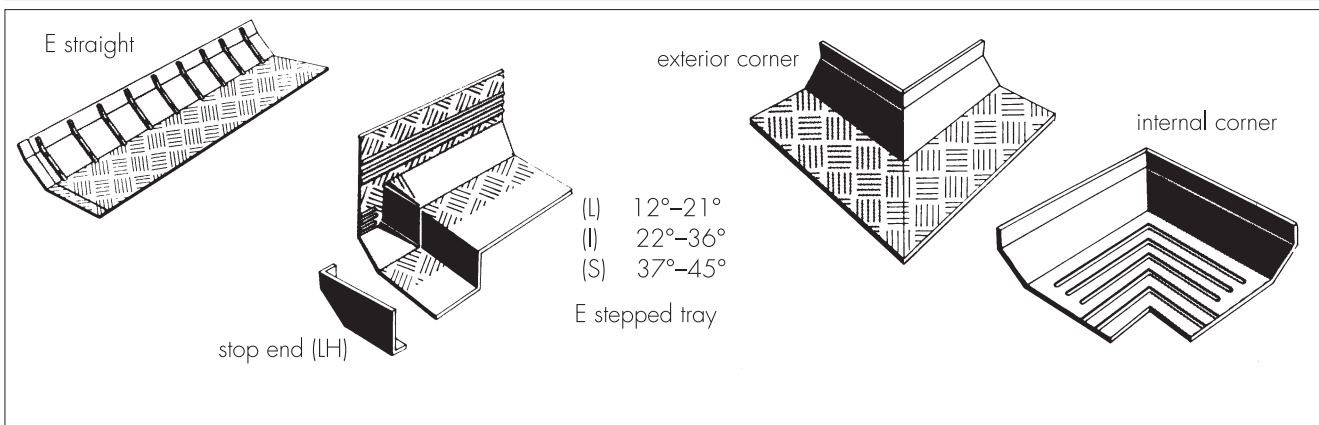
1.2 The cavity tray units are available as shown in Table 1 and Figure 1.

Table 1 Design and dimensions<sup>(1)</sup>

Designation	Cavity width (mm)	Overall length (mm)	Effective length (mm)
Horizontal			
2005E (50)	50–74	460	440
2005E (75)	75–99	460	440
2005E (100)	100–125	460	440
External 90° corner			
2006E (50)	50–74	–	–
2006E (75)	75–99	–	–
2006E (100)	100–125	–	–
Internal 90° corner			
2007E (50)	50–74	–	–
2007E (75)	75–99	–	–
2007E (100)	100–125	–	–

(1) Other sizes can be produced to special order to suit a particular installation.

Figure 1 Examples of trays



1.3 Each tray is fitted with butyl sealing tape, for sealing of all joints between trays.

1.4 A range of ancillary items is available for use with the range of products and includes:

- stop ends — for terminating a tray or run of trays and channelling water from a wall
- ridge change-over unit — for maintaining the continuity of an installation in step and stagger situations
- weeps — for channelling water from a wall
- butyl sealant tape.

1.5 Quality control tests are conducted on the raw materials and on the finished products.

## 2 Delivery and site handling

2.1 The trays, accessories and installation instructions are packed in corrugated cardboard cartons.

2.2 Each pack carries a label bearing the BBA identification mark incorporating the number of this Certificate.

2.3 To prevent damage or surface contamination, they should be stored in a secure place in the original packaging.

## Assessment and Technical Investigations

The following is a summary of the assessment and technical investigations carried out on System 2000E Cavity Trays.

### Design Considerations

## 3 Use

3.1 System 2000E Cavity Trays and accessories, when correctly specified and installed in accordance with this Certificate and with BS 5628-3 : 2005 and BS 8215 : 1991, will provide a satisfactory damp-proof course in existing brick cavity walls of between 50 mm and 125 mm cavity width at the horizontal abutment of a pitched roof, a flat roof, above lintels or below sills.

3.2 The external leaf of the cavity walls should be built from standard brickwork and not exceed a thickness of 102.5 mm.

## 4 Practicability of installation

The products should be installed by a bricklayer, experienced with this type of product.

## 5 Behaviour under load



The products will not adversely affect the ability of a wall to sustain and transmit compressive loads. However, the presence of a dpc can reduce the shear and tensile (and therefore bending) strengths of a wall and the effect of wind and other horizontal or upward forces should be considered at the design stage.

## 6 Resistance to passage of water



6.1 The trays sealed together and to the inner leaf provide a continuous barrier against liquid water, when installed in accordance with this Certificate, BS 5628-3 : 2005 and BS 8215 : 1991.

6.2 Where the trays are not sealed to the inner leaf, although the top edge of the tray may not be in contact, any drips from wall ties will be intercepted by the tray.

## 7 Use with cavity wall insulation

Medium-density polyethylene has no effect on, and is unaffected by, materials currently used as cavity wall insulants. However, where the trays are not bonded to the inner leaf, they do not form a continuous mechanical barrier, and blown or injected insulation may penetrate from the cavity above to below the trays. This possibility must be considered when an in-situ applied cavity insulation is used.

## 8 Maintenance

As the products are confined within the wall and wall cavity and have suitable durability (see section 9), maintenance is not required. However, it must be ensured that damage occurring before enclosure is repaired (see section 1.2).

## 9 Durability



When installed correctly into the cavity, the trays will remain effective for the expected life of the building.

## Installation

### 10 General

10.1 System 2000E Cavity Trays may be installed in any weather that permits bricklaying, but can suffer damage if handled carelessly at freezing temperatures.

10.2 Trays must be laid between even beds of fresh mortar, and any perforations or frogs in adjacent courses should be filled with mortar.

10.3 Weepholes should be provided in the positions described in BS 5628-3 : 2005 and BS 8215 : 1991.

### 11 Procedure

11.1 The required number of bricks for the length of tray to be installed are removed from the required position, 150 mm above the feature.

11.2 A stop end is bonded to the first tray using the integral butyl sealant tape and the tray is laid on an even bed of mortar. The upstand of the tray may be fixed to the inner leaf, if required using a butyl sealing strip.

11.3 The bricks are replaced and the sequence is repeated, sealing all lap joints using the integral butyl strip. The run is terminated by fixing a second stop end in the appropriate position.

11.4 Trays over a lintel must extend at least 100 mm beyond each end of the lintel.

11.5 If flashing is required, the joint below the tray is raked out and the flashing inserted to extend under the tray by a minimum of 25 mm. Wedges are inserted above the tray to ensure good contact between it and the flashing. The joint is repointed and the flashing dressed over the roof surface.

11.6 Flashings may be lead, or any other material covered by, and used in accordance with, a current BBA Certificate.

### 12 Repair

Damaged cavity tray units should be replaced prior to the installation of brick, block or masonry courses above the unit.

## Technical Investigations

### 13 Tests

As part of the assessment leading to the issue of previous Certificates, tests were carried out to determine:

- specific gravity
- melt flow index
- Vicat softening point
- resistance to water penetration
- ease of installation
- impact resistance
- thermal distortion.

### 14 Investigations

14.1 The manufacturing process was examined, including the methods adopted for quality control, and details were obtained of the quality and composition of the materials used.

14.2 Visits were made to sites in progress to assess the practicability of installation.

14.3 User surveys have been carried out to ensure that the products are performing satisfactorily in service.

14.4 A re-examination was made of the data and investigations on which the previous Certificate 89/2229 was based and an assessment was made of the current designs. The original conclusions drawn remain valid.

## Bibliography

BS 5628-3 : 2005 *Code of practice for the use of masonry — Materials and components, design and workmanship*

BS 8215 : 1991 *Code of practice for design and installation of damp-proof courses in masonry construction*

## 15 Conditions

15.1 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.

15.2 Publications and documents referred to in this Certificate are those that the BBA deems to be relevant at the date of issue or re-issue of this Certificate and include any: Act of Parliament; Statutory Instrument; Directive; Regulation; British, European or International Standard; Code of Practice; manufacturers' instructions; or any other publication or document similar or related to the aforementioned.

15.3 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.

15.4 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.

15.5 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.