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Authorised and notified according to Article 10 of the Council Directive (89/106/EEC) of 21 December 1988 on the approximation of laws, regulations and administrative provisions of Member States relating to construction products.



European Technical Approval ETA-03/0014

Second issue*

Trade name:

Cavitytrays Type X/Multicourse trays, Type G, Advantage, and Type E, and Caviweep Type W

Holder of approval:

Cavity Trays Ltd
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Generic type and use of construction product:

Polypropylene cavity trays for use as a damp-proof course in cavity walls with an outer leaf of brickwork or, in timber-framed constructions, with a masonry cladding or skin

Valid from:

19th August 2003
31st August 2008

Validity extended from:

31st August 2008
31st August 2013

This version replaces:

ETA-03/0014 valid from 19th August 2003 to 31st August 2008

Manufacturing plant:

Cavity Trays Ltd
Boundary Avenue
Yeovil
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This European Technical Approval contains:

8 pages including two Annexes which form an integral part of the document



European Organisation for Technical Approvals

I LEGAL BASES AND GENERAL CONDITIONS

1 This European Technical Approval is issued by the British Board of Agrément in accordance with:

- Council Directive 89/106/EEC of 21 December 1988 [Construction Products Directive (CPD)] on the approximation of laws, regulations and administrative provisions of Member States relating to construction products⁽¹⁾, modified by the Council Directive 93/68/EEC of 22 July 1993⁽²⁾.
- UK implementation of CPD Statutory Instruments 1991, No 1620. The Building and Building Construction Products Regulations 1991 — made 15 July 1991, laid before Parliament 22 July 1991, coming into force 27 December 1991, and amended by the Construction Products (Amendment) Regulations 1994 (Statutory Instruments 1994, No 3051).
- Common Procedural Rules for Requesting, Preparing and the Granting of European Technical Approvals set out in the Annex to Commission Decision 94/23/EC⁽³⁾.
- Endorsed Common Understanding of Assessment Procedures (CUAP) 36 (06.04/05) for cavity trays.

2 The British Board of Agrément is authorised to check whether the provisions of this European Technical Approval are met. Checking may take place in the manufacturing plant. Nevertheless, the responsibility for the conformity of the products to the European Technical Approval and for their fitness for the intended use remains with the holder of the European Technical Approval.

3 This European Technical Approval is not to be transferred to manufacturers or agents of manufacturers other than those indicated on page 1, or manufacturing plants other than those indicated on page 1 of this European Technical Approval.

4 This European Technical Approval may be withdrawn by the British Board of Agrément, in particular after information by the Commission on the basis of Article 5(1) of Council Directive 89/106/EEC.

5 Reproduction of this European Technical Approval, including transmission by electronic means, shall be in full. However, partial reproduction can be made with the written consent of the British Board of Agrément. In this case partial

reproduction has to be designated as such. Texts and drawings of advertising brochures shall not contradict or misuse the European Technical Approval.

6 The European Technical Approval is issued by the approval body in its official language. This version should correspond to the version circulated within EOTA. Translations into other languages have to be designated as such.

II SPECIFIC CONDITIONS OF THE EUROPEAN TECHNICAL APPROVAL

1 Definition of product and intended use

1.1 Definition of product

Cavitrays are cavity trays injection moulded from polypropylene copolymer to a uniform thickness. The Cavitray range comprises:

1.1.1 Type X/Multicourse tray — preformed gable abutment cavity trays with integral lead flashing to form a stepped cavity damp-proof course and flashing at the abutment of a pitched roof and cavity wall. The standard Multicourse tray is designed for brickwork with approximately 75 mm courses. Specific types (see Annex 1) include:

- Ridge tray — designed to straddle the ridge and discharge water both left and right
- Catchment tray — comprises an upstand at either end to act as the termination point in the lowest part of the roof abutment. Consequently it is installed with a Type W weep/vent for removing water from the cavity
- Intermediate tray — incorporates an end upstand to allow discharge only down the roof-line to the succeeding tray
- Corner catchment angle tray — used on abutting roofs of the same width and wraps around the corner of the lowest brick course and enables linking with other trays to continue a dpc around a corner. It incorporates a Type W weep/vent for removal of water from the cavity.

The Type X/Multicourse tray product normally incorporates lead flashings of code blue thickness to EN 12588 : 1999, attached to the tray. These flashings are secured with stainless steel stitching. Heavier gauges of lead, or Advantage trays without flashing, are available if required. Catchment trays are available in longer or G lengths (see Annex 1, Table 1).

1.1.2 Type E Cavitray — a preformed abutment cavity tray to form a horizontal damp-proof course in an existing cavity wall at the abutment with a new flat roof or the top edge of a new pitched roof. Each Type E tray is fitted with a central weep/vent for discharging water and an integral

(1) Official Journal of the European Communities No L40, 11.2.1989, p12.

(2) Official Journal of the European Communities No L220, 30.8.1993, p1.

(3) Official Journal of the European Communities No L17, 20.1.1994, p34.

U-clip enabling a watertight joint to adjoining trays. Type E trays are available in four designs (see Annex 1):

- left-hand external angle
- standard straight
- left or right internal angle
- right-hand external angle.

1.2 Intended use

1.2.1 Type X/Multicourse tray (G and Advantage) Cavitrays are intended for use in new construction with Caviweep Type W, to form a stepped damp-proof course at the abutment of a cavity wall (in brick-brick, brick-block construction or timber-frame with a brick cladding with a clear cavity width of from 50 mm to 140 mm) and a pitched roof of minimum pitch 17°.

1.2.2 Type E Cavitrays are intended for use in existing constructions to form a horizontal damp-proof course at the abutment of a cavity wall (in brick-brick, brick-block constructions, or timber-frame with a brick cladding with a clear cavity width of from 50 mm to 140 mm) with a new flat roof, or the top edge of a new pitched roof.

1.3 Intended working life

The provisions made in this ETA are based on an assumed intended working life for the cavity tray of 50 years. The indications given on the working life cannot be interpreted as a guarantee given by the producer, but are to be used as a means for selecting the appropriate product in relation to the expected economically reasonable working life of the works.

2 Characteristics of product and methods of verification

2.1 Characteristics of product

The product is available in the range given in part II, section 1, and has the characteristics listed in Annex 2.

Cavitrays, accessories and installation instructions are packed in cartons which carry a label bearing the manufacturer's and product name.

2.2 Methods of verification

The assessment of fitness for the intended use (see part II, section 1, clause 1.3) with regard to Essential Requirement 2 (Safety in case of fire) and 3 (Hygiene, Health and the Environment) has been made in accordance with EOTA CUAP 36 for Cavity Trays (May 2001) authorised by the EC under Article 9.2 of the Construction Products Directive (CPD).

The characteristics of the product given in Table 2 of Annexes 1 and 2 have been derived from section 4 of CUAP 36.

According to the manufacturer's declaration the Type X/Multicourse tray and Advantage product contains lead sheet, which is subject to an import, trade and production prohibition in Denmark⁽⁴⁾.

3 Evaluation of Conformity and CE marking

3.1 Attestation of Conformity system

The system of Attestation of Conformity applied to this product shall be that laid down in the CPD, Annex III, 2(ii) (referred to as System 3).

3.2 Responsibilities

3.2.1 Tasks for the manufacturer, factory production control

The manufacturer continues to operate a factory production control system. All elements, requirements and provisions adopted by the manufacturer are documented. This ensures the product conforms with this ETA.

The manufacturer shall only use raw materials supplied with the relevant inspection documents as laid down in the prescribed test plan⁽⁵⁾. The raw materials shall be subject to controls and tests by the manufacturer before acceptance. Checks on incoming materials, such as polypropylene, shall include control of the certificates of conformity presented by suppliers (comparison with nominal values).

The manufactured cavity trays are visually checked for defects.

The frequency of controls and checks conducted during production is laid down in the prescribed test plan, taking account of the manufacturing process.

The results of factory production control are recorded and evaluated. The records include at least:

- designation of the product and basic material
- type of control or testing
- date of manufacture of the product and date of testing of the product or basic material
- result of control and testing and, if appropriate, comparison with requirements
- signature of person responsible for factory production control.

(4) Draft Statutory Order from the Ministry of Environment and Energy on Metallic Lead and Chemical Compounds with Lead, Notified December 1998 (notification 98/595/DK).

(5) The test plan is deposited with the British Board of Agrément and contains the required information on the factory production control.

The records shall be kept for at least five years. On request they shall be presented to the British Board of Agrément.

Details of the extent, nature and frequency of testing and controls to be performed within the factory production control shall correspond to the prescribed test plan included in the technical documentation of this European Technical Approval.

3.2.2 Tasks for approved bodies

3.2.2.1 Initial type-testing of the product

For initial type-testing the results of the tests performed as part of the assessment for the European Technical Approval shall be used unless there are changes in the production line or plant. In such cases the necessary type-testing has to be agreed between the British Board of Agrément and the approved body involved.

3.2.2.2 Initial inspection of factory and of factory production control

The results of production control shall be made available on demand from the manufacturer to the British Board of Agrément.

3.3 CE Marking

The CE Marking shall be affixed to each package of cavity trays. The CE symbol shall be accompanied by the following information:

- identification number of the notified body
- name/identification mark of the manufacturer
- indication to clarify the intended use
- last two digits of the year in which the CE Marking was affixed
- number of the European Technical Approval
- reaction to fire class : no performance determined (NPD).

4 Assumptions under which the fitness of the product for the intended use was favourably assessed

4.1 Manufacturing

Cavitrays Type X/Multicourse tray, Type G, Advantage, and Type E, and Caviweep Type W are manufactured in accordance with the provisions of the European Technical Approval using the manufacturing processes as identified in the inspection of the plant by the British Board of Agrément and laid down in the technical documentation.

4.2 Design

The fitness for the respective use for the levels of performance stated in part II, section 1.2, results from national requirements, and the product's history of use in the stated construction types in the United Kingdom.

Cavity trays will not adversely affect the ability of a wall to sustain and transmit compression loads. However, the presence of a damp-proof course 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 in design.

Cavitrays Type X/Multicourse tray (G and Advantage) and E are deemed fit for their intended use provided they are:

- positioned in accordance with the design drawing
- installed correctly (see section 4.3).

4.3 Installation

The fitness for use of the cavity trays can be assumed if they are installed correctly in accordance with the ETA holder's installation instructions and in particular:

- Cavitrays can be installed easily by a competent bricklayer using conventional skills. Cutting or use of adhesives is not required
- trays may be installed in any weather that permits bricklaying
- trays should be laid between even beds of mortar, and any perforations or frogs in adjacent courses should be filled with mortar
- the trays have a rigid upstand with a flexible top edge. Adjustment is possible for cavity gaps of between 50 mm and 140 mm wide.
- precautions are necessary to prevent damage to the trays when the cavities are cleaned and include:
 - (a) use of cavity battens to reduce mortar droppings on the trays,
 - (b) removal of mortar droppings before they harden, using a technique that avoids causing damage to the tray (use of steel rods, for example, should be avoided), and
 - (c) inspection of trays for damage as the work proceeds.

4.4 Responsibility of the manufacturer

It is the responsibility of the manufacturer to ensure that the information on the specific conditions given in part II, sections 1, 2 and 4, is given to those concerned. This information may be made by replicating the respective parts of the European Technical Approval. In addition, all installation data shall be shown clearly on the carton and/or on an enclosed instruction sheet, preferably using illustration(s).

The minimum information required is:

- packaging
- transportation
- storage (in original packaging, away from sources of heat and direct sunlight)
- installation
- safety — conventional national precautions for handling lead flashings must be observed.



On behalf of the British Board of Agrément

Date of Second issue: 7th May 2009



Simon Wroe
Head of Approvals — Materials



Greg Cooper
Chief Executive

**Original ETA issued 19th August 2003. This amended version issued to extend validity and dual use of name from Type X to Type X/Multicourse tray.*

ANNEX 1 PRODUCT DETAILS

1 Cavitrays Type X/Multicourse tray, Type G, and Advantage

The four styles of abutment cavity trays are illustrated in Figures 1 to 4.

Figure 1 Ridge tray

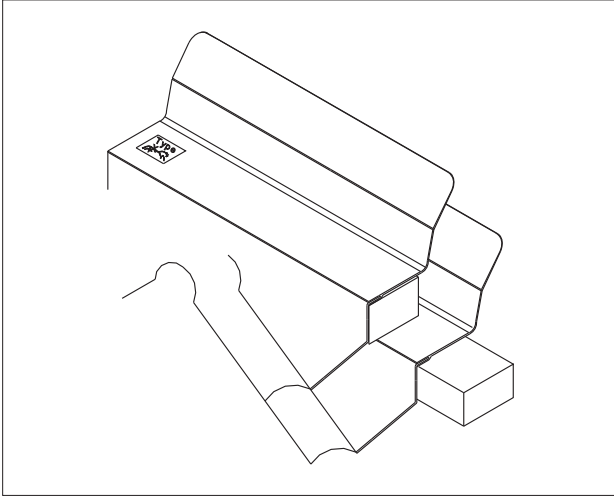


Figure 3 Intermediate tray

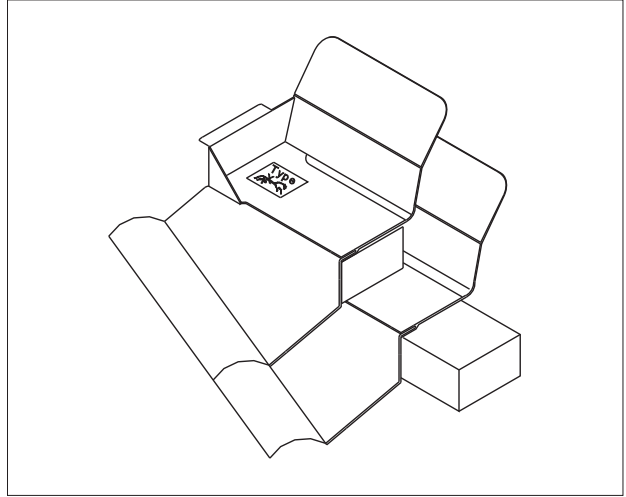


Figure 2 Catchment tray

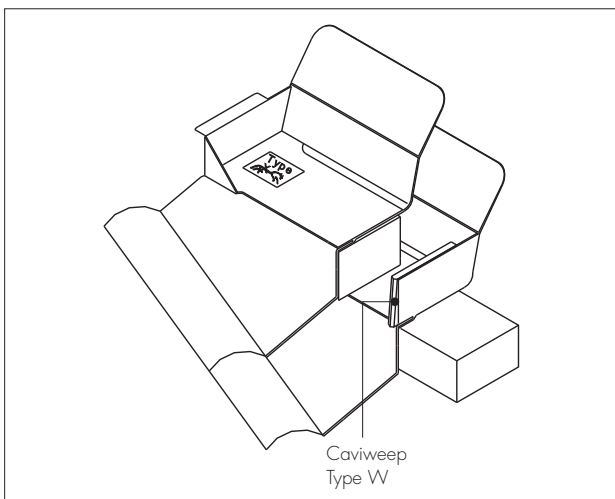
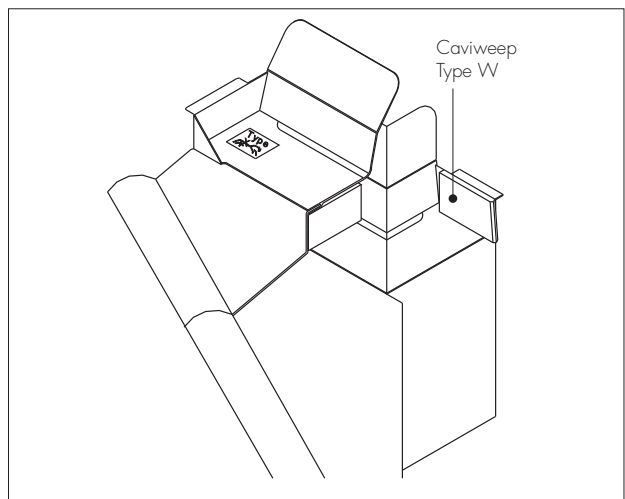


Figure 4 Corner catchment angle tray



Type X/Multicourse tray Cavitrays are available in lengths determined by roof pitch (see Table 1).

Table 1 Type X/Multicourse tray lengths

Roof pitch (°)	Length of tray ⁽¹⁾ (mm)
17 ⁽²⁾ -20	330
21-25	270
26-40	230
>45	180

(1) The catchment style trays may be supplied in longer lengths to accommodate specific applications. They are described as extended catchments or G lengths and their dimensions are clearly identified.

(2) At roof pitches below 17°, tray lengths greater than 330 mm should be used in accordance with the manufacturer's advice.

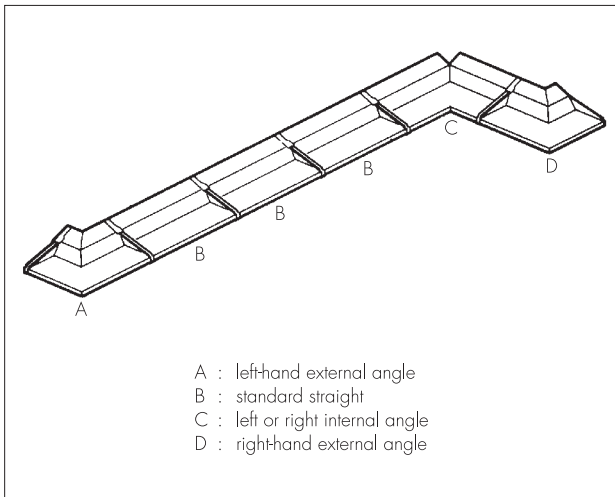
continued

ANNEX 1 PRODUCT DETAILS (continued)

2 Cavitytrays Type E

The four types of Type E cavity trays are illustrated in Figure 5.

Figure 5 Type E cavity tray



The designs and standard sizes of the Type E trays are listed in Table 2.

Table 2 Design and dimensions

Tray design	Standard size ⁽¹⁾ (mm)
left-hand external angle	332 x 220
standard straight	450
left or right internal angle	230 x 117
right-hand external angle	332 x 220

(1) Non-standard angles and sizes can be fabricated to suit a particular installation.

ANNEX 2 CHARACTERISTICS

The following is a summary of the tests conducted on Cavitrays Type X/Multicourse trays (G and Advantage) Type E and Caviweep Type W.

Test	Method	Result
Determination of watertightness	BS EN 1928 : 2000 Method A	All specimens remained watertight throughout the 24-hour exposure period
Adhesion to mortar (maximum load, N)	BBA Method ⁽¹⁾	Multicourse tray 3200 Advantage 2330
Impact resistance	BBA Method ⁽²⁾	Multicourse tray — dented, not cracked at 23°C — severely dented, not cracked at 0°C
		Advantage — dented not cracked at 23°C — cracked at 0°C
Resistance to UVA ageing Weep vent (grey)	BS EN ISO 4892-3 : 2000	1 500 hours — no change

(1) Pull-out resistance of cement:sand mix (1:5 by volume) to cavity tray at 23°C, loading rate 20 mm min⁻¹.

(2) 1.9 kg brick dropped from 0.5 m onto the base of the cavity tray placed on a hard surface.