



CAVITY TRAYS
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CI/SfB | (21.9) Xn6 | (L34)

Protecting the building envelope

Approved National and International Best Practice Build Details

VOLUME 28

CAVITY TRAYS LTD IS THE ONLY UK CAVITY TRAY MANUFACTURER AWARDED EUROPEAN TECHNICAL APPROVAL



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Perform



Certificate No.1172



RIBA Product Selector



NHBC Standards can be satisfied using preformed Cavity Trays Ltd products. Used in accordance with Cavity Trays recommendations, trays meet NHBC recommendations.



CAVITY TRAYS

specialism • experience • service

INNOVATION BUILT ON EXPERIENCE AND TRADITION

We are here to help you

Help in the Office

Our Help Desk is available by email, fax or telephone. We will be delighted to provide input regarding specific build details for both new and existing construction projects. Please do not hesitate to ask – it is part of the Cavity Tray service.

Help with Design

If you cannot identify what you require from our standard range of products and solutions, take advantage of our bespoke service.

Help on Site

Our Technical Managers visit sites to address your on-site requirements. As well as providing guidance regarding the use of Approved Cavitytrays, Technical Managers can assist in finding remedies for existing and potential construction problems.



Take-Off and Scheduling Service

Why not let us appraise your drawings and take-off your requirements? There is no charge for this service.

Peace of Mind

Specify clearly the Cavity Trays of Yeovil name to receive your selected performance products from the longest-established and only UK cavity tray company awarded European Technical Approval. An accompanying performance warranty for the benefit of Architect, Builder and Client accompanies our approved products.

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This index identifies those main products that predominately address the applications / areas listed. Be aware we are able to offer variations and additions and as many products are multi-functional, this index is a guide only and not a definitive list.

Please ask if your specific requirement is not listed.

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Damp Courses Floor Junctions	Combination Edge Insulators, DPC Profiles, ECB, GBPWIS, TFC
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Roof Finishes / Junctions / Accessories	CRSS, ECSC, RBS, VG, Eaves Protector
Loft Hatches Standard & Fire Rated	Downward Hinging, Cavi 60 PC
Floor Duct /Services Entry Points	I, Interruptions - membrane

DAMP-PROOFING

Damp Protection of the Building Envelope

Products and systems are for use in masonry construction designed in accordance with the BS EN series of Eurocodes.

PD 6697:2010 states guidance on structural considerations affecting the selection of DPCs, trays and flashings is given in BS 8215.

However, please be aware of errors in the original BS 8215 relating to stepped and staggered gable abutments, the existence of which have subsequently been acknowledged by British Standards. Importantly, the designs within this section avoid those shortcomings and have been awarded European Technical Approval / LABC product approval.

PD 6697:2010 also makes reference to a DPC within a parapet wall sometimes stepping inwardly and we believe this to be in error as such construction is susceptible to water ingress. Our design for parapet walls avoids this shortcoming and whilst addressing also the structural continuity risk.

Products and systems are subject to a performance undertaking for the benefit of Architect, Builder and Client.

Important

Every building must be designed and constructed in such a way that there will not be a threat to the building or the health of the occupants as a result of moisture from precipitation penetrating to the inner face of the building.

SR Mandatory 3.10

Best Practice

Approved products awarded European Technical Approval incorporate features and risk reduction measures not present on alternate systems. Cavity Trays Ltd is the only UK tray manufacturer awarded international standard ETA.

Specifications

Product name - group	Type B
Cavity widths accommodated	All – width does not affect functionality 2440mm standard lengths
Dimensions	Standard: 130 x 2440mm Insulated: 130 x 2440mm
Bespoke options	Yes
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	N/A
Retrofit applications	Yes
Masonry skin styles	No known limitation
Undulating masonry faces	Compatible
Congruent with other wall elements	For use in single storey applications
Arrested water evacuation	N/A - no horizontal arrestment
Thermal transmission of material	Negligible - 0.15 – 0.17
Material	Polypropylene 0.15-0.1 Mineral rock insulation 0.04 W/(mK) (thermal performance can vary pending extent of compression)
Colour	Black
Extrudes / compresses under load	No
Pack size	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	Can be used to satisfy arrestment
May be used if cavity insulation present?	Yes with compliant insulation types
CAD downloads	Yes
Design considerations	May be used to interrupt the damp path as identified in LABC 12.2.5, fig 9. For horizontal arrestment where a flat roof abuts an existing cavity wall, see type E

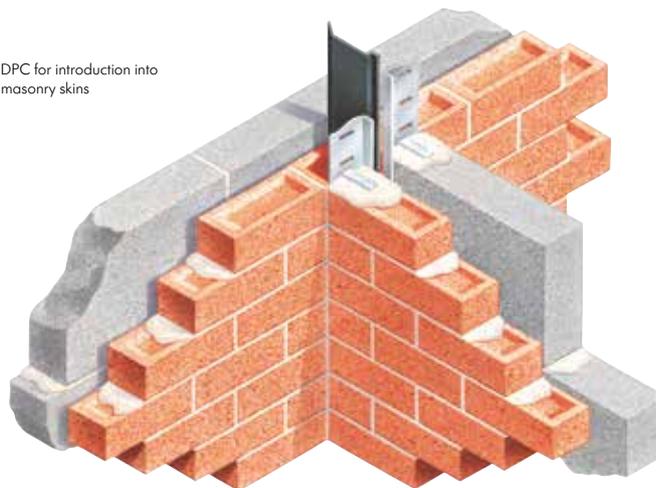
TYPE B

Vertical DPC for introduction into existing masonry skins

- Introduces vertical DPC element
- Suitable for traditional or timber frame construction
- Requires minimal masonry slot cutting to install
- Ensures regulation compliance when using profiles
- Shape suitable for mid-cavity and frame edge positioning

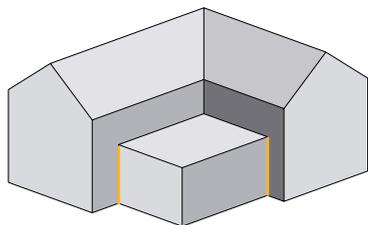


Vertical DPC for introduction into existing masonry skins



Use

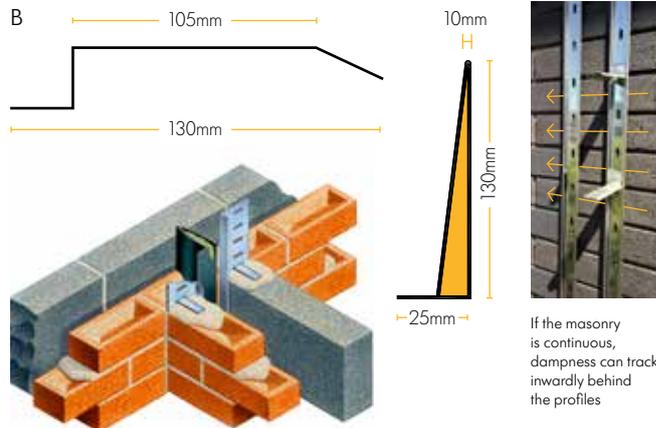
To introduce a vertical DPC element to an existing exterior skin of a cavity wall where its status changes from exterior to interior by virtue of a porch or similar being attached.



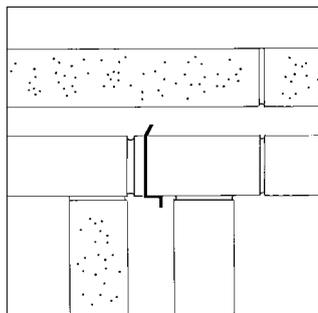
Original exterior wall becomes an interior wall when an extension is constructed. Vertical DPC integrity is required as well as horizontal DPC integrity.

Solution

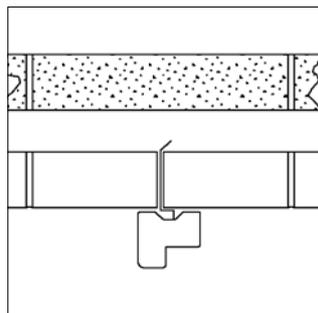
The Type B is a semi-rigid vertical DPC that may be introduced into an existing skin following mechanical cutting of the masonry to provide a vertical slot 4-6mm wide. The Type B establishes a permanent DPC presence isolating the existing skin externally beyond the vertical point it becomes internal. This product is particularly appropriate where the cavity is not maintained at the point a new porch is attached (no T-junction cavity continuity).



If the masonry is continuous, dampness can track inwardly behind the profiles



Type B between leaves of cavity wall.



Type B with door-frame

Insulated Version

A folded rigid DPC version of the Type B with sandwiched compressible insulation is now available. This requires a wider slot of 10mm to be cut in the masonry.

How to Order

State Type B standard or insulated and number of 2440mm lengths required. Bespoke sizes: provide dimensions of profile required.

Designers' Comments

Water soaking into masonry does not discriminate and tracks in all directions. The Building Research Establishment states: 'ensure building attachment vertical DPC is provided'. The Type B Cavitytray cannot act as a continuous cavity at a T junction where a building attaches but it can replicate functionality in preventing wet transmission.

Bill of Quantity / Specification Wording

F30 - Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type B standard / insulated vertical DPC to be inserted into vertical slot cut to interrupt permeation path in existing cavity wall. Build in carefully observing manufacturers' instructions to ensure correct installation. (2440mm lengths). Metres run _____.

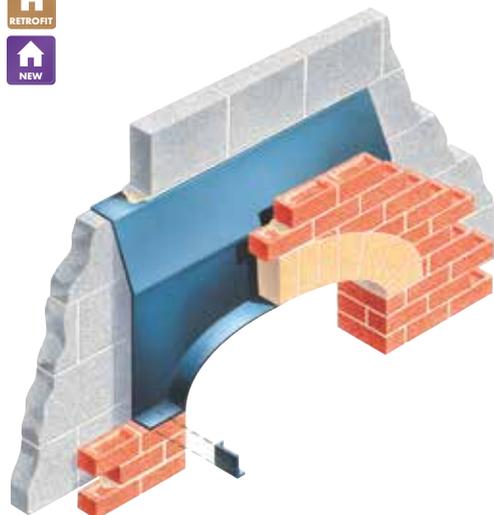
Specifications

Product name - group	Type BA
Cavity widths accommodated	50mm – 300mm cavity
Dimensions	Up to 3000mm o/a in one piece, larger sizes in connecting sections
Size limitations	No limit in connecting sections
Traditional construction compatible	Yes
Timber frame construction compatible	Yes - with cavistrap fixing
New work applications	Yes
Retrofit applications	Possible pending opening style/dimensions
Masonry skin styles	No known limitation
Curved wall on plan applications	Yes possible – see Curved Wall entries
Undulating masonry faces	Compatible
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Via Caviweep choice supplied
Thermal transmission	Negligible - calculated non-conductive
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes
May be used if cavity insulation present?	Does not affect functionality
CAD downloads	Yes
Design considerations	Advise adjacent elevation features to determine whether elevation will benefit arrestment provision

TYPE BA

Moulded DPC Cavitrays Barrier Arch protection for shaped openings

- Available in different arch styles and design
- Provides matching DPC element to arch masonry
- Permits traditional centring use
- Traditional or timber frame construction
- Format can accommodate very wide openings



Two radius / flat arch



Triangular



Semi-circular / Roman arch



Horseshoe / Moorish arch

Use

To protect arch openings of all styles and dimensions.



Where an arched opening has a decorative stone surround, the Type BA is widened so water evacuation via Caviweeps can take place within the adjoining masonry.

Solution

The Type BA Barrier Arch is a ready-moulded DPC shaped to harmonise with traditional arch construction and protect the opening against damp ingress. Offered on a swift bespoke manufacturing basis, arches are available in all styles and dimensions.

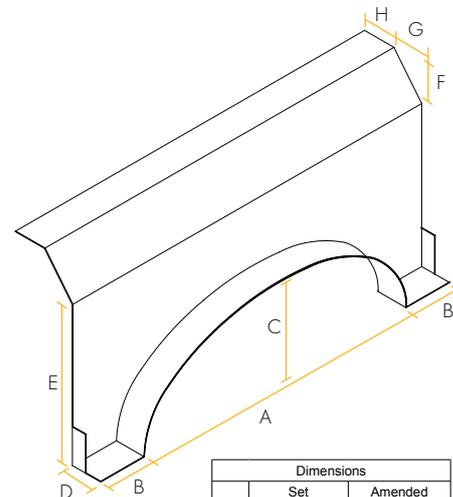
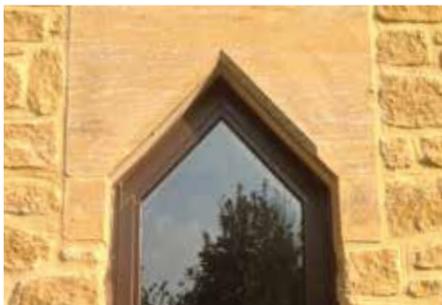
The Type BA barrier arch is incorporated within the cavity wall with its base section positioned on traditional centring or on the curved supporting lintel – whichever is applicable. The top of the Type BA is normally returned into the inner skin where traditional masonry is used, or with some styles a self-supporting option that does not build in is offered.

How to Order

Supply opening details and ideally an accompanying elevation extract with dimensions for immediate attention.

Designers' Comments

There are added complications of damp-proofing the arrangement between inner and outer skins when arch openings of any style are constructed - as originally identified within BS 5628. Conventional DPC cannot readily be sloped outwards and simultaneously curved to follow the radius. The ready-shaped Type BA barrier arch ensures compatibility and functionality.



Dimensions		
	Set Dimensions	Amended Dimensions
A		
B		
C		
D		
E		
F		
G		
H		

Bill of Quantity / Specification Wording

F30 -Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type BA Barrier Arch Cavity Tray to be incorporated within cavity wall over arch openings where formed with traditional centring or shaped lintel. Build in carefully observing manufacturers' instructions to ensure watertight installation. Number and size _____.

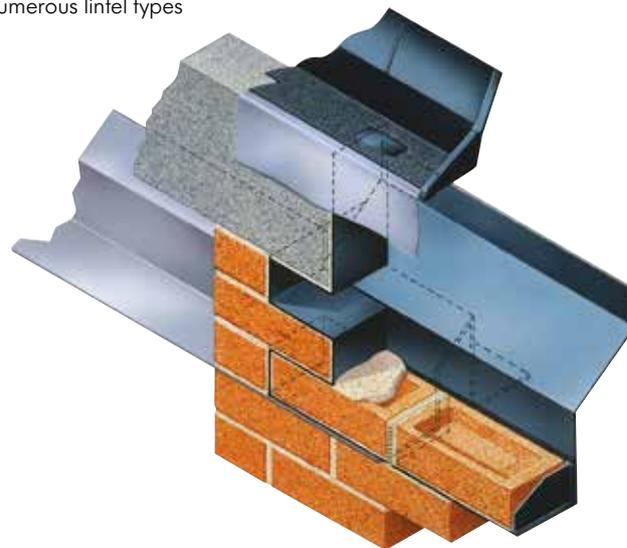
Specifications

Product name - group	Type BWVC Bay Window Vertical Cavity
Cavity widths accommodated	From 50mm up to 400mm
Dimensions	Variable to suit lintel and tray placement up to 6 brickwork courses. The standard size type BWVC suits most applications. Bespoke models available.
Bespoke options	Yes
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	No known limitation
Undulating masonry faces	Compatible
Curved wall on plan applications	Yes
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Via Caviweeps (selection) in perp joints
Thermal transmission of material	Negligible
Material	Petheleyne DPC
Colour	Black
Extrudes / compresses under load	No
Pack size / weight	Varies pending design
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes
May be used if cavity insulation present?	Functionality not affected
CAD downloads	Yes

TYPE BWVC

Bay Window Vertical Cavity

- Ready shaped vertical interfacing
- Prevents horizontal damp ingress
- Not visible once installed
- Traditional and timber frame construction
- Bonding not interrupted
- Suits numerous lintel types



Use the Type BWVC to satisfy the requirements for bay windows identified within NHBC Risk Guide

(revised 08/17 - Technical Extra 15)

Use

To prevent wet external skin masonry at the side of a bay window from conveying dampness inwardly via the unprotected courses separating the higher (bay roof) tray arrestment level from the lower (bay support) lintel level.

Solution

The Type BWVC is a preformed DPC cavitray that vertically connects two levels within the same masonry skin without adversely interrupting bonding or coursing. Its presence prevents horizontal damp transference. It is extensively used in bay window construction where the level of the roof intersection and that of the support lintel spanning the bay is not shared and separating courses exist between them.

Type BWVC units are handed and available to suit brickwork / block work coursings. Units are introduced at each end of the lintel and provide permanent DPC connection upwardly to the cavitray at roof intersection level.

How to Order

Select a Type BWVC to suit your masonry. The standard Type BWVC suits brickwork coursing and will link up to six courses between the base of lintel and base of the roof intersection tray/DPC. Other versions are also available to suit 150mm and 225mm coursing. Use our Help Desk service - We will be pleased to identify the most appropriate Type BWVC to suit your bay construction upon receipt of details

Designers' Comments

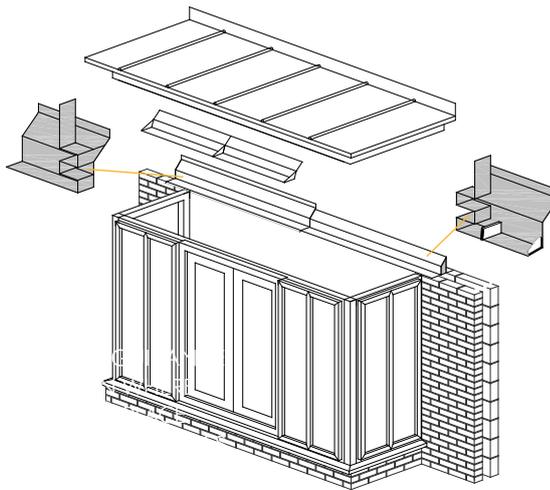
Absorption testing standards do not replicate the severity of rain experienced in the UK. (Example: BS 4315 tests by spraying water on to masonry for one minute at half hourly intervals for 48 hours. This equates to 96 minutes of rain spread over two days with consistent drying periods between each spray). In comparison recent UK weather subjected structures to continuously long periods of wind-accompanied rain saturation and our recommendations to consider such conditions and incorporate vertical arrestment to prevent lateral transference were vindicated. As bay window fascias and facades increase in depth, so does the susceptibility to horizontal wet transference. Product not readily visible once installed.



The greater the distance between lintel level and roof intersection DPC/tray level, the greater the susceptibility to damp permeating horizontally across the bay.



The extensive fascia height means there are a considerable number of masonry courses between the bay support lintel and the higher roof/tray intersection level. To prevent damp permeating between the two it is necessary to incorporate a vertical link whilst maintaining coursing and bond.



Bill of Quantity / Specification Wording

F30 -Clause 370 Preformed Cavity Trays
Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type BWVC Bay Window Vertical Cavitray to be built into exterior skin each side of bay to link lintel with roof intersection level. Build in carefully observing manufacturers' instructions to ensure watertight installation. Number of pairs _____.

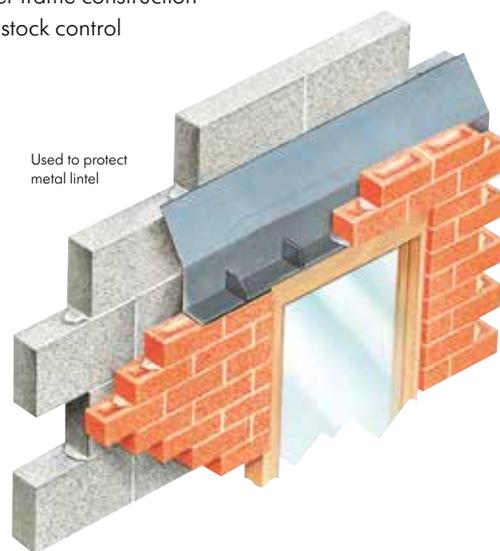
Specifications

Product name - group	Type C
Cavity widths accommodated	From 50mm - Most widths accommodated
Dimensions	All dimensions and shapes variable. Popular profiles illustrated
Bespoke options	Yes
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	See Type E entry
Masonry skin styles	No known limitation
Undulating masonry faces	Compatible
Curved wall on plan applications	Yes – see Curved Wall entries
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Via Caviweeps (selection) in perp joints
Thermal transmission of material	Negligible - 0.15 – 0.17
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size	No minimum
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes can be used to satisfy arrestment
May be used if cavity insulation present?	Functionality not affected
CAD downloads	Yes
Design considerations	Lip projections to opening only with set back over-sailing to ends available as option

TYPE C

Preformed DPC Cavitrays for use with lintels over openings in cavity walls

- Ready-shaped DPC trays for all lintel styles
- Wastage and inaccurate site fabrication eliminated
- Ensures consistent build details and regulation compliance
- Unobstructed cavity compartment area
- Traditional or timber frame construction
- Accurate cost and stock control



Use

To ensure openings in cavity walls are adequately protected against damp penetration and appropriately shaped to harmonise with whatever style of lintel is deployed. To ensure the compatibility of the horizontal protection with any adjacent vertical closing.

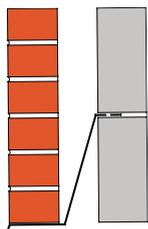
Solution

Type C Cavitytrays are preformed horizontal DPC trays designed to be used with all styles of lintel. Trays provide harmonising yet independent protection against damp. Each tray is manufactured from solid DPC material shaped to suit the lintel styles and lintel arrangements over the opening.

British Standards state "the cavity tray should step down or slope across the cavity not less than 150mm towards the external leaf and, preferably, terminate in a small drip on the face of the wall".

The use of preformed Type C Cavitytrays provides an assured method of compliance.

The Type C is self-supporting. There is no need to build into the inner skin. However, an inner skin return option is available on request. (shown dotted).



Being preformed eliminates the danger of misplacement, sagging and installation deviances associated with conventional roll material. It also means every opening is uniformly addressed, with assured functionality. The necessity to cut and fabricate on site is eliminated, as is the associated wastage. Type C Cavitytrays can be scheduled alongside the lintel schedule, making purchasing and stock control easy.

The shape and dimensions in which Type C Cavitytrays are available is almost unlimited.

The overall length of each tray exceeds the opening dimension and projects into the masonry either side of the opening. The projection is 300mm each side unless otherwise requested. This exceeds the minimum dimension demanded by the NHBC and provides additional shelter and protection of the reveal vertical closing arrangement. It also increases the convenience of perp joint locations to accommodate the obligatory stopend each end of the cavitytray.

Using Type C Cavitytrays

Accompanying Requirements Stopends

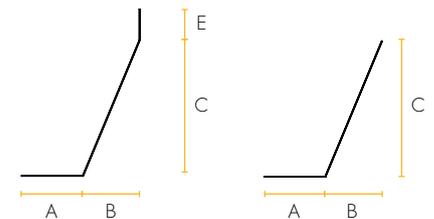
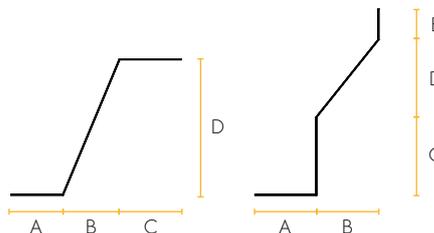
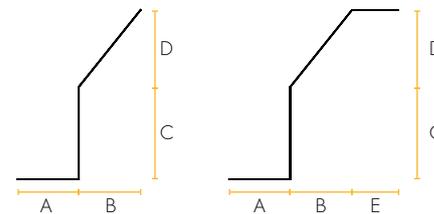
Type L lintel stopends should be applied at each end of the Type C cavitytray. Stopends prevent arrested water from discharging into the cavity. (NHBC 6.1 D6 b). See Type L page entry for details.

Weeps

Caviweeps should be provided to permit arrested water to discharge out of the wall. Two caviweeps minimum per opening is the usual requirement. (NHBC 6.1 D6 b). Caviweeps are located through perp joints. See Caviweep-vent pages for details.

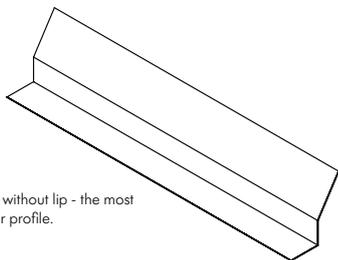
How to Order

Determine appropriate profile and profile dimensions to suit your construction detail. Add 600mm to each opening width (allows 300mm each end) to obtain overall length.

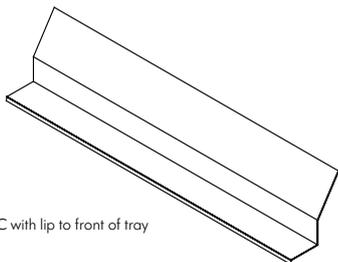


	Dimensions	
	Set Dimensions	Amended Dimensions
A		
B		
C		
D		
E		

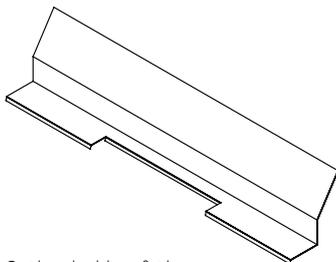
TYPE C (CONTINUED)



Type C without lip - the most popular profile.



Type C with lip to front of tray



Type C with set-back lip to finish along frame head only

NHBC External Masonry Walls 6.1. D6. B that states a tray should provide drip protection to door and window heads. The Type C tray turn-down lip against the frame provides this weathering finish. (in a uniform and consistent manner not possible with soft roll DPC) Cavity tray base extends forward of frame (lip) line – damp arrestment width optimised both sides of opening.



Uniformity and consistency can be difficult to achieve using soft roll DPC but with a preformed Type C Cavity tray the angle and dimensions can be specified and maintained.



Designers' Comments

Self-supporting tray is independent of the inner skin – not affected if courses drift out of level and do not harmonise with each other. Tray extends beyond normal finishing point – providing more shelter and protection of the vertical closing arrangement and guarding against arrested water gravitating around reveal.

Extended ends provide perp joint opportunities to receive stopend.

Bill of Quantity / Specification Wording

F30 - Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Common Opening Cavitytrays to be incorporated over all window and door openings in cavity walls. Profile as selected detail, complete with Type L stopends. Build in carefully observing manufacturers' instructions to ensure watertight installation. _____ Metres run or as per masonry openings schedule.



See Type C video showing typical tray for above a horizontal opening



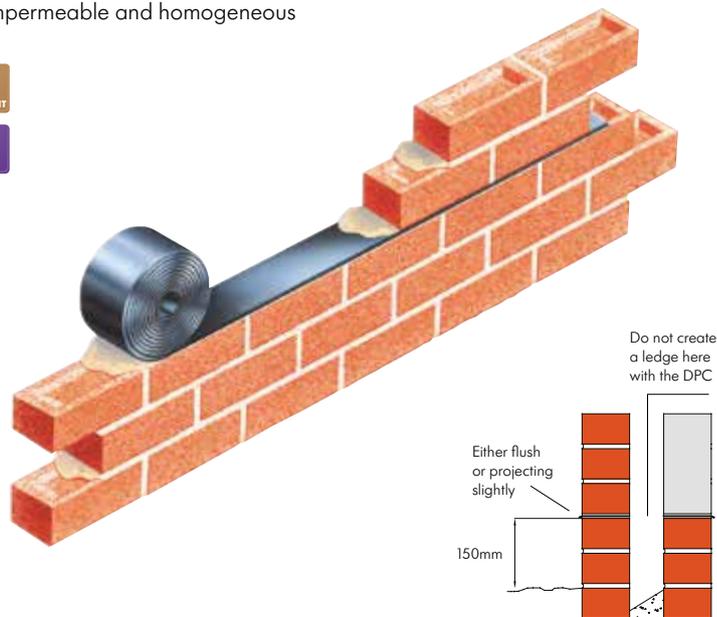
Specifications

Product name - group	Caviroll
Cavity widths accommodated	All – width does not affect functionality
Dimensions in rolls of 30m	100mm x 30m 150mm x 30m 225mm x 30m 300mm x 30m 450mm x 30m 600mm x 30m 900mm x 30m
Traditional construction compatible	Yes most domestic applications
Timber frame construction compatible	Yes most domestic applications
New work applications	New work applications
Retrofit applications	Yes
Masonry skin styles	No known limitation
Undulating masonry faces	Compatible
Congruent with other wall elements	Not suitable if low compressive strength
Material	Polythene
Colour	Black
Extrudes / compresses under load	No
Pack size / weight	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes
May be used if cavity insulation present?	Yes
CAD downloads	No
Design considerations	If horizontal arrestment over lintel is intended, use Type C Cavitray.

CAVIROLL

Premium DPC

- British Standards general purpose roll DPC
- Durable, tough and puncture resistant
- Wide temperature scale flexibility
- Gripgrid surface
- Impermeable and homogeneous



Use

General purpose roll DPC designed to prevent the passage of moisture in brick and block from external sources.

Introduction

Caviroll is a homogeneous polythene roll DPC conforming with the requirements of BS 6515.

Promotes excellent tensile strength, will not extrude under normal load conditions and retains flexibility through a temperature range of -50° to +80° centigrade.

Both sides of Caviroll are embossed with a gripgrid surface to aid adhesion with mortar. Caviroll satisfies the specification requirement within table 1 of PD 6697:2010 for a flexible low density Polythene DPC for use within cavity walls in most domestic build applications.

Installation is recommended to follow the amended Code of Practice CP102:1973 and good practice as identified within BS 5628: part III. Always bed Caviroll DPC on mortar and bed masonry on mortar. Adjoining lengths of DPC should be fully lapped by at least 100mm.



How to Order

State roll width and numbers of rolls required.

Important

BS 6515 refers to the use of Polyethylene DPC as a general purpose horizontal DPC and states it is not suitable for downwards water movement applications. (To arrest downwards water movements within cavity walls see preformed Cavitrays, Caviclocks and Cavilengths and Contaminated Land Cavity Barriers where gas arrestment is also required).

Designers' Comments

DPC manufactured to BS 6515 should not be used where compressive strength is low such as under copings and similar. Always lay on smooth mortar and bed subsequent masonry on mortar. Classified as non-hazardous and is chemically inert.

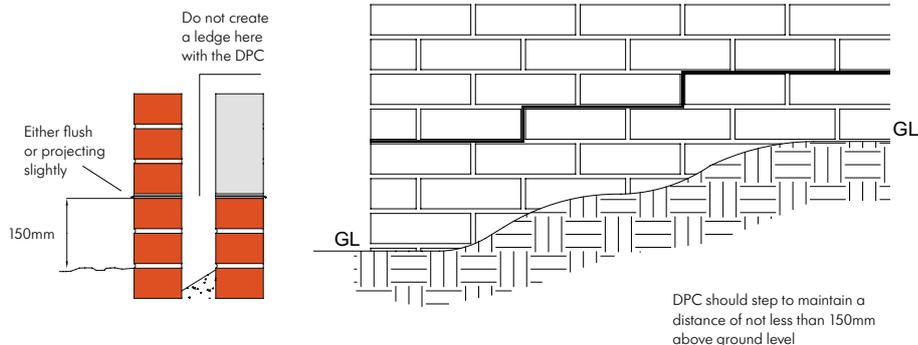
Where strip, trench fill or ground beams are used, there should be a minimum of 225mm clear cavity below the DPC. A minimum distance of 150mm applies in most other applications, conditional on the cavity being able to drain freely (NHBC 4.4.13)

Bill of Quantity / Specification Wording

F30 -Clause 330 Damp Proof Course

**Manufacturer: Cavity Trays Ltd, Yeovil Somerset
BA228HU Tel: 01935 474769**

Type Caviroll Polythene Roll DPC to be laid in both cavity walls skins observing statutory height above ground level.



Specifications

Product name - group	Cavicloak and Cavilength
Cavity widths accommodated	From 50mm up to 400mm
Dimensions	To order – see popular styles illustrated
Bespoke options	Yes
Traditional construction compatible	Yes self-supporting or Cavistrap option
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	No
Masonry skin styles	No known limitation
Undulating masonry faces	Compatible
Curved wall on plan applications	Yes – see Curved Wall entries
Jointing method	Lap 150mm & sealing strip jointing
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Via Caviweeps (selection) in perp joints
Thermal transmission of material	Negligible - 0.15 – 0.17
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes can be used to satisfy arrestment
May be used if cavity insulation present?	Insulation should not affect functionality
CAD downloads	Yes
Design considerations	Curved applications - see separate entry

CAVICLOAKS AND CAVILENGTHS

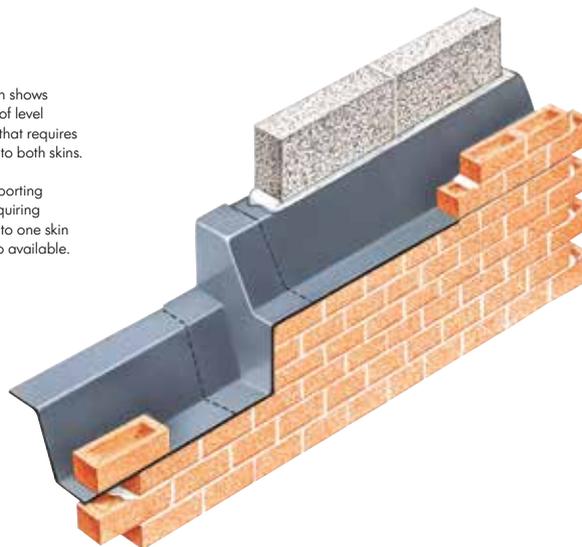
Preformed Damp Courses

- Ready-shaped modular DPC cloaks
- Modular components eliminate site fabrication variances
- Accurate scheduling and stock control
- Upstand termination option (self-supporting or return into inner skin)
- Ready to use - no wastage



*Illustration shows a change of level cavicloak that requires building into both skins.

A self-supporting version requiring building into one skin only is also available.



Use

To provide damp course protection that is shaped three-dimensionally and able to protect and service structural elements, level changes and projections.

Solution

Cavicloaks are preformed moulded DPC units for use in cavity walls for use where uninterrupted protection is required upwardly and inwardly.

Moulded from solid DPC Polypropylene, Cavicloaks are self-supporting and hold to profile. Cavicloaks offer flexibility without sagging or distorting. Accordingly additional support is not required when overlapping joints in standard applications.

Cavilengths are moulded to the same profiles as the Cavicloaks. Supplied in easy to handle lengths that lap and seal, they permit long runs to be swiftly created, benefiting preformed continuity and consistency in shape.

Size

When selecting or ordering Cavicloaks, there is the option of whether the top of the cloak is returned into the inner leaf as illustrated, or terminates against it. It is the choice of the specifier and attention is drawn to the Designers' Comments that highlight the considerations.

Long lengths to run between cloaks supplied in matching profile lengths of 2440mm unless otherwise requested.

Cavicloaks provide a reliable alternative to cutting and fabricating roll DPC on site, reducing time, wastage and easing procurement and stock control.

How to Order

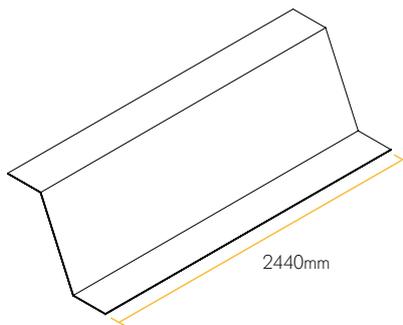
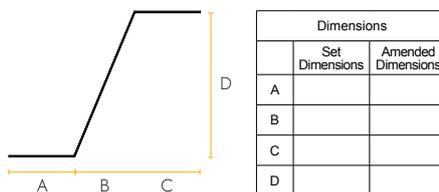
We will take off and schedule your requirements.

Alternatively, complete the Profile Dimension Panel overleaf and state number of Cavilengths required, number of internal and external corners, and number of changes of level. Remember to allow for laps and add to your requirements edging tape / linking strip, join adjacent lengths. See following pages for explanation and jointing options.

Contaminated Land

Where the perimeter wall construction is required to also protect against rising contaminated land gases such as Radon, please refer to the specific Contaminated Land Barriers section within this manual that offers combined gas/DPC solutions with oversite membrane integration.

Preformed Cavicloak Lengths 2440mm (Specify dimensions)



Designers' Comments

When used at ground level, both skins of a cavity wall are level with each other. Building the Cavicloak into the inner skin at this level is the usual choice because a support course is normally at an appropriate height and readily available. As both skins are raised they can drift out of level – especially if each is being built using a different masonry module. In such instances as higher levels of the wall are reached, the specifier may elect for self-supporting Cavicloaks requiring no inner skin support. If intermediate floor levels or similar masonry skin alignment opportunities exist, the specifier commonly has both choices available. Cavicloaks at ground level can dual-function, arresting upwardly (rising) damp and also downwardly moving (wall penetrating) water, thus addressing PD 6697:2010 - recommendations for the design of masonry structures to BS EN 1996-1-1 and BS EN 1996-2. Always provide a water evacuation route (Caviweep) even if the wall is rendered, to comply with 6.2.7.71 of PD 6697:2010 that states rain will penetrate and run down the inside face of a wall rendered externally.

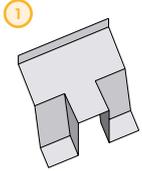
Bill of Quantity / Specification Wording

F30 -Clause 330 Damp Proof Course.

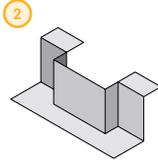
Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Cavicloaks and Cavilengths to be incorporated, lapped and joints sealed in cavity walls to form a continuous protective shaped DPC where shown. Build in carefully observing manufacturers' instructions to ensure watertight installation. _____Metres run. Angles internal _____. Angles external _____.

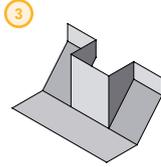
CAVICLOAKS AND CAVILENGTHS (CONTINUED)



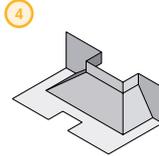
1
Balcony Cloak



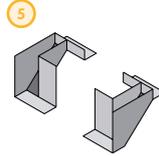
2
Column Cavicloak



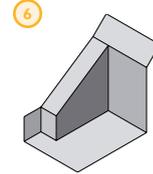
3
Column cloak



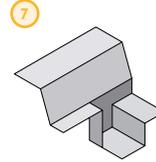
4
Column Cloak



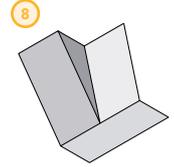
5
Column Cloak
(Supplied in two pieces)



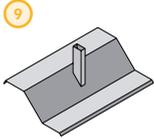
6
Corbel Cloak



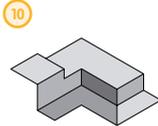
7
Change of Profile /
Change of Direction /
Change of Level CC



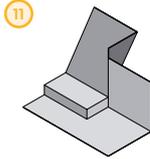
8
Change of Profile Cloak



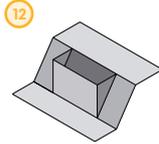
9
Type C/P with pipe
projecting through
cloak



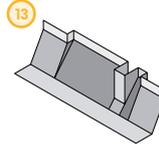
10
Change Profile /
Corner Cloak



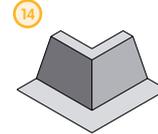
11
Change of Profile /
Intersection Seal



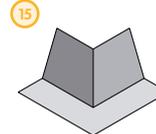
12
Cloak around vertical
vent sleeve



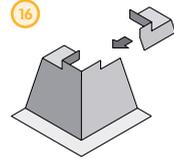
13
Column / Windpost
Cloak



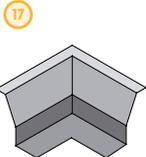
14
External Angle



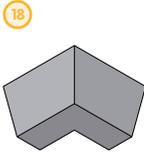
15
External Angle



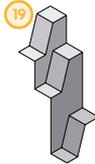
16
External Corner/
Column Cloak



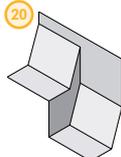
17
Internal Angle



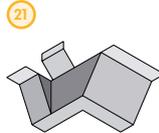
18
Internal Angle



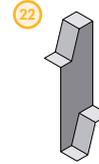
19
Level Change



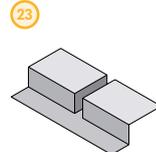
20
Step down cloak
(Small step)



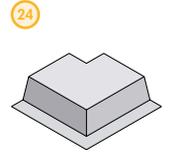
21
Internal Corner /
Column Cloak



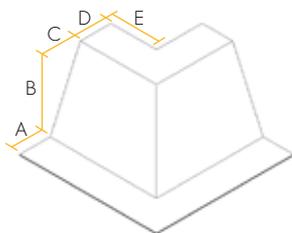
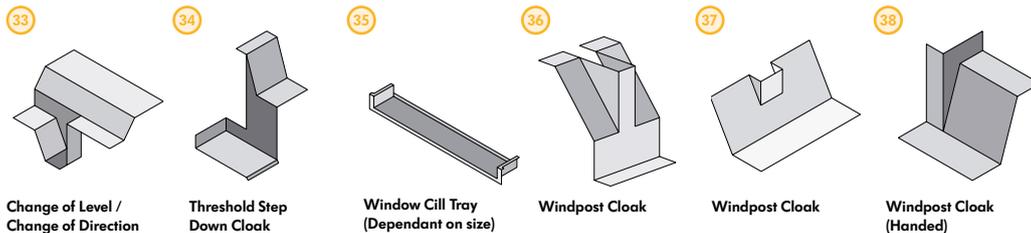
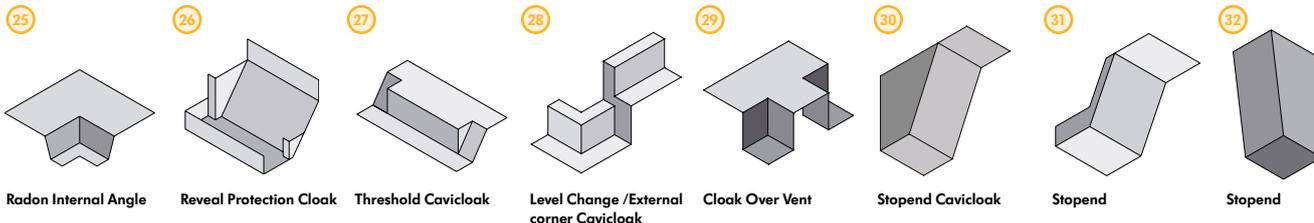
22
Step down
cloak (Large step)
(150mm - 600mm High)



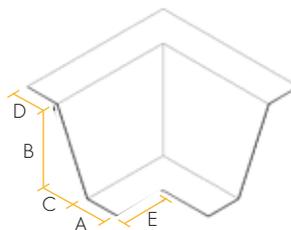
23
Party Wall Link
Cavicloak



24
Radon External Angle



	Dimensions	
	Set Dimensions	Amended Dimensions
A		
B		
C		
D		
E		



	Dimensions	
	Set Dimensions	Amended Dimensions
A		
B		
C		
D		
E		

Telescopic adjustable ventilators (Type TAV) (to ventilate underfloor areas) have been built into the exterior cavity wall prior to bedding of the perimeter Cavicloak. Each ventilator has been extended in height to take advantage of the Cavicloak bedding level coinciding above it and providing protection. This approach removes the necessity to individually protect each ventilator at a lower course level.

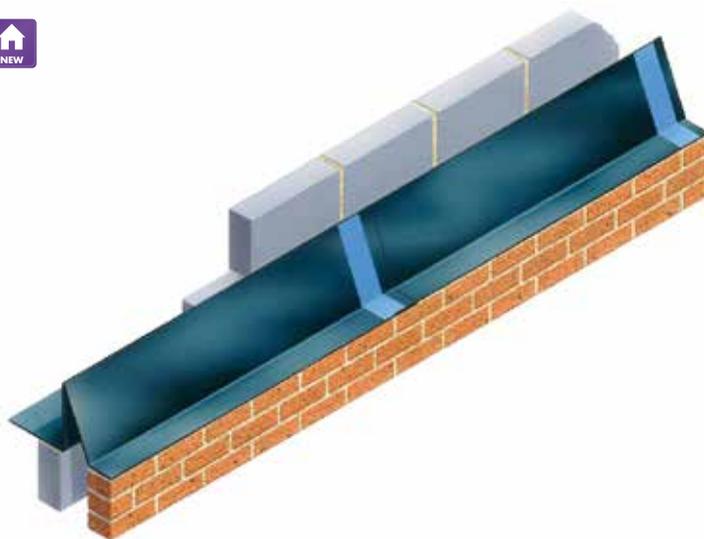
Specifications

Product name - group	Cavicloak Rise and Fall Barrier
Cavity widths accommodated	From 50mm - Most width accommodated
Dimensions	All dimensions and shapes variable.
Bespoke options	Yes
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Masonry skin styles	No known limitation
Undulating masonry faces	Compatible
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Via Caviweeps (selection) in perp joints
Thermal transmission of material	Negligible - 0.15 – 0.17
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size	No minimum
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes can be used to satisfy arrestment
May be used if cavity insulation present?	Functionality not affected
CAD downloads	Yes
Design considerations	Inner skin projection can be extended inwardly to suit various construction configurations

CAVICLOAK RISE AND FALL BARRIER

Preformed self-supporting horizontal DPC

- Self-supporting defined profiles
- Higher level inner skin interruption eliminated
- Easy interfacing with membrane
- Avoids gaps in cavity insulation



Use

To protect against dampness and rising land gases within external cavity walls. Cavicloak Rise and Fall Barrier Profiles differ from conventional cavity barriers as their use eliminates the need to support merging protective mediums at a higher course level within the cavity wall.

Solution

Conventional cavity barriers rise a minimum of 150mm within the cavity and are supported by being built-into the nearest/highest inner skin course.

When the inner skin is constructed of blockwork the course is regularly higher up – so the formation uses additional material. This formation also creates a cumbersome arrangement where the barrier top must be linked with the oversite membrane, a necessary requirement when protecting the building (and its inhabitants) against contaminated land gases such as Radon.

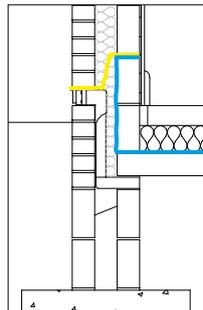
Rise and Fall Barriers are self-supporting and offer the convenience of starting within the outer skin and finishing within (and beyond) the inner skin at the same level. A more easily-managed build sequence and compact protective arrangement is secured. Integration of barrier and oversite membrane is at the lowest possible level.

Rise and Fall Barriers are supplied in long lengths with internal and external angles and a range of stepped links. Once bedded onto both skins and joined utilising sealing capping profiles that straddle abutting sections, raising of the cavity wall may continue. Barriers are usually supplied with the inner skin section projecting 150mm beyond the inner skin internal face. This permits the membrane and barrier to positively integrate.

Important: Overlapping of Rise and Fall Barriers is not possible. Adjoining sections must be butted together and tape linked.

How to Order

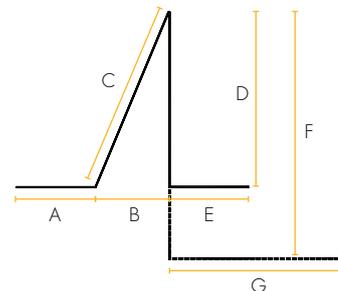
We will be pleased to take-off all your requirements and submit our schedule for approval. Alternatively, determine optimum barrier by adding dimensions to profile shown, and calculate overall run lengths plus internal and external angles, advising also of any stepped units. Allow for capping links.



The design detail and the resultant as-built detail, demonstrating the necessity to rely on support from a convenient inner skin course can result in the arrangement being rather cumbersome.



Inner skin coursing is not interrupted



Dimensions		
	Set Dimensions	Amended Dimensions
A		
B		
C		
D		
E		
F		
G		

Bill of Quantity / Specification Wording

F30 -Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Cavicloak Rise and Fall Barriers to be incorporated into both cavity wall skins at specified level of all external walls and linked with protection across door openings and integrated with oversite membrane to form continuous footprint protection. Build in carefully observing manufacturers' instructions to ensure correct installation. See schedule of lengths/angles, steps, capping links.

Specifications

Product name - group	Edging Tape single sided
Roll width	100mm x 30m
Thickness	1 mm
Colour	Blue

Product name - group	Linking Strip double-sided
Roll width	50mm x 15m
Thickness	1 mm
Colour	Black/brown supplied on a removable release paper

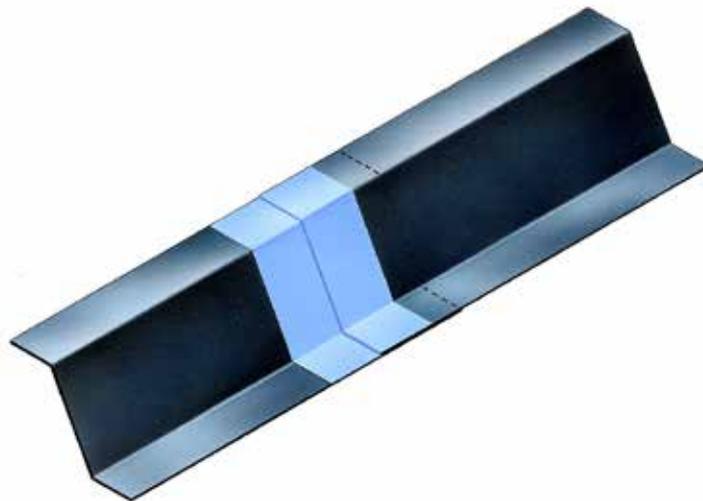


Where a continuous run of cavity tray protects an external wall perimeter feature, joining and sealing may be executed in two different ways.

JOINING AND SEALING OPTIONS

Cavicloaks and Cavilengths

- Profile maintained with lap jointing
- Unaffected by masonry module length
- Suitable with skins of brick, block or stone



Use

Methods of joining Cavicloaks and Cavilengths that do not have interlocking connections. Easy linking options to create uninterrupted long runs.

Solution

Where adjacent Cavicloaks and/or Cavilengths are required to join, there are two options to achieve a continuous linking. Both utilise some form of overlapping procedure plus the addition of a bonding medium in the form of an edge tape or double-sided linking strip.

Lapping Method

Ensuring all surfaces are clean and dry, adjacent profiles should be lapped a minimum of 150mm. 100mm wide Edge tape is then applied to straddle the join in the lapped surfaces, resulting in a 50mm lap onto each Cavilength.

The edge tape has a bonded blue HDPE upper surface under which is a compound adhesive layer that contours and adheres to the lapped surfaces.

Remember to order edge tape when ordering your Cavicloaks and Cavilengths.

Capping Method

An alternative method requires adjoining lengths to abut. A separate profiled moulded capping profile is then applied so it straddles equally both abutting surfaces. A double-sided sealing tape is incorporated between the underside of the capping profile and the upper surfaces of the abutting lengths. All surfaces must be clean and dry prior to any joining being executed.

If selecting this method, when ordering your Cavicloaks and Cavilengths, order also sufficient cappings for every join + accompanying double-sided linking strip.

Always ensure all lengths and cloaks are correctly bedded before proceeding. Edge tape must be pressed firmly and completely into position to achieve solid adherence and must not finish short of any edge.

Designers' Comments

In accordance with British Standard and NHBC/LABC best practice, DPC's and trays should be bedded on mortar. Surfaces must always be clean and dry prior to executing joining in dry conditions.

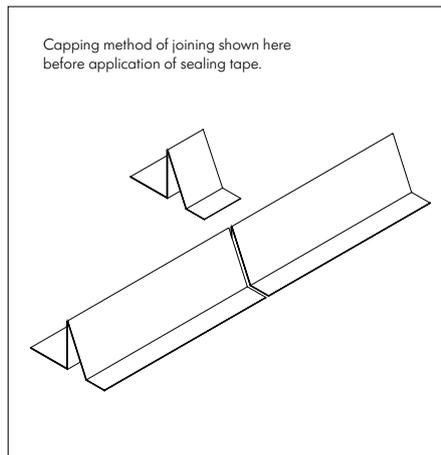
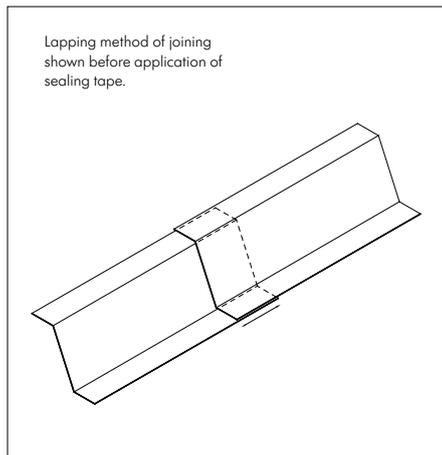
This lapping and sealing method is not required when using specific Cavitytrays within our ranges that incorporate integral moulded end upstands that coincide with masonry perp joints and interlock so the interconnected units form long runs.

Bill of Quantity / Specification Wording

F30 -Clause 330 Damp Proof Course

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Cavicloaks and Cavilengths where incorporated to be lapped and joints seal capped using Edging Tape and Linking Strip observing manufacturers' instructions to ensure watertight installation. Number _____ or metres run _____.



CAVIWEEPS / CAVIVENTS

Caviweeps provide evacuation routes via which water arrested by trays, lintels and DPCs can discharge out of the structure.

Pyramid Weep

(Masonry Bleed Straw)

The Pyramid Weep is a small robust triangular conduit offering discreet and unobtrusive water evacuation. Positioning the Pyramid Weep so it 'peaks' in a perp joint permits it to be used where the bed courses are restricted or smaller than usual. Water and debris wash along its flat base that permits bedding in the lowest possible position for optimum evacuation.



Product name - group	Pyramid Weep
Cavity widths accommodated	All – width does not affect functionality
Dimensions	Size 1: 100mm x 8mm x 8mm Size 2: 240mm x 8mm x 8mm
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	Suits all
Undulating masonry faces	Compatible
Material	PVCU
Colour	Mortar grey
Pack size	Packs of 100 and 500
CFC / ODP	CFC Free / Zero
May be used if cavity insulation present?	Yes with compliant insulation types
CAD downloads	No
Design considerations	Discreet appearance. Position at greater frequency than Perp Weeps. Min 200mm centres for arismet evacuation and as required to bleed / drain features
Bill of Quantity / Specification Wording	F30 Clause 132 Weep holes. Manufacturer Cavity Trays Ltd Yeovil Somerset BA22 8HU. Incorporate Pyramid Weeps within perp joints positioned upon Cavity bases at specified centres

Beak Weep

(Caviweep)

The Beak Weep offers discreet water discharge via a small protruding beak. The flow path is direct to an outlet at the bottom of the beak that provides protection against directly blowing wind. The Beak Weep matches the height of a standard perp joint, but has a reduced front section.



Product name - group	Beak Weep
Cavity widths accommodated	All – width does not affect functionality
Dimensions	Weep: 108mm x 65mm x 8mm Ex duct: 200mm x 65mm x 9mm
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	Suits all
Undulating masonry faces	Compatible
Material	Polyprop
Colour	Translucent
Pack size	Packs of 50
CFC / ODP	CFC Free / Zero
May be used if cavity insulation present?	Yes with compliant insulation types
CAD downloads	No
Design considerations	Suggested centres 450mm. Extension duct available.
Bill of Quantity / Specification Wording	F30 Clause 132 Weep holes. Manufacturer Cavity Trays Ltd Yeovil Somerset BA22 8HU. Incorporate Beak Weeps within perp joints positioned upon Cavity bases at specified centres

Small Weep-Vent

Small Adjustable Telescopic

The Small Adjustable Weepvent offers discreet appearance with a rectangular front discharge outlet and an insect resistant grille. A removable protective flap protects the front face from being contaminated during building-in. The telescopic body of this Weepvent permits it to be lengthened or shortened to suit different masonry thickness / rendered applications.



Product name - group	Small Adjustable Telescopic Weepvent
Cavity widths accommodated	All – width does not affect functionality
Dimensions	93mm x 24mm x 9.5mm Extends additional 70mm max
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	Suits all
Undulating masonry faces	Compatible
Air flow at grille	60mm ² aperture total
Material	Polyprop
Colour	Clear, grey, terracotta, beige, black
Pack size	Packs of 100
CFC / ODP	CFC Free / Zero
May be used if cavity insulation present?	Yes with compliant insulation types
CAD downloads	No
Design considerations	Suggested centres 450mm.
Bill of Quantity / Specification Wording	F30 Clause 132 Weep holes. Manufacturer Cavity Trays Ltd Yeovil Somerset BA22 8HU. Incorporate Small Weep-Vent within perp joints positioned upon Cavity bases at specified centres

Cavivents provide ventilation apertures to permit the cavity to breathe. The specifier may select from a range varying in size, colour and functionality – some are dual function weep-vents.

Type W

Caviweep-Vent

The Type W is a dual-function combined weep and ventilator. It is finished with an inclined insect resistant grille that promotes excellent air flow with the accompanying benefit of internal baffles to arrest wind-driven rain entering. The Type W makes use of positive and negative air pressure to aid functionality. It permits the cavity to breathe and evacuate water from lintels, trays and DPCs.



Type W

Render Cover

Type W Render Cover - Florescent coloured cover clips to front of Type W to provide protection and keep grille free of contamination during rendering or similar works.



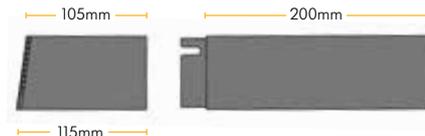
Euroweep-vent

The compact Euroweep-vent provides ventilation to the cavity and an exit route through which water can discharge from trays, lintels and DPCs. Compact size, high air flow rating and minimalist vertical front provide a compromise visually between full perp and small alternatives.



Product name - group	Type W Caviweep-Vent
Cavity widths accommodated	All - width does not affect functionality
Dimensions	Type W - 105mm x 65mm x 9.5mm Ext duct - 200/225mm x 65mm x 10mm
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	Suits all
Undulating masonry faces	Compatible
Air flow at grille	320mm ²
Material	Polyprop
Colour	Grey, black, beige, brown, white, clear & terracotta to merge with wall/mortar
Pack size	Packs of 50
CFC / ODP	CFC Free / Zero
May be used if cavity insulation present?	Yes with compliant insulation types
CAD downloads	Yes
Design considerations	Suggested centres 900mm
Bill of Quantity / Specification Wording	F30 Clause 132 Weep holes. Manufacturer: Cavity Trays Ltd Yeovil Somerset BA22 8HU Incorporate Small Weep-Vent within perp joints positioned upon Cavitytray bases at specified centres

Product name - group	Type W Cover
Dimensions	68 x 10mm
Material	Polypropylene
Colour	Florescent green
Boxed	Packs contain 50 covers



Type W

Extension Duct

Type W Extension Duct - Extension duct for connection to rear of Type W to provide lengthened version to service masonry skins of increased thickness. Can be cut on site if required.

Product name - group	Type W Extension Duct
Dimensions	200/225 x 65 x 10mm
Air flow at grille	320mm ²
Material	Polypropylene
Colour	Grey
Boxed	Packs contain 50 extensions

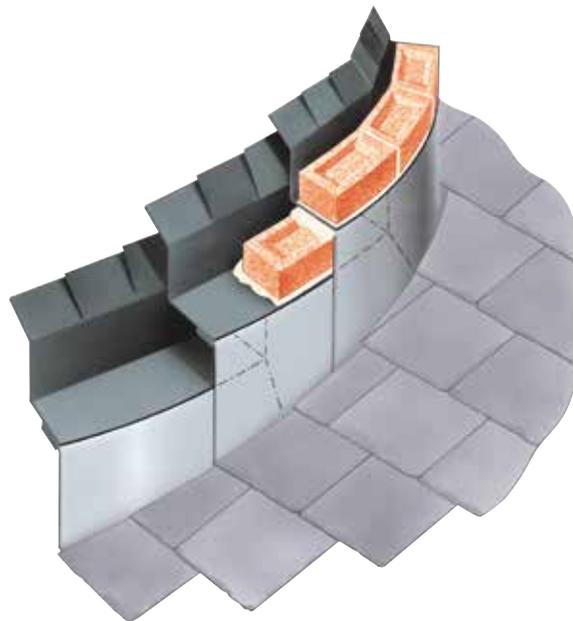
Product name - group	Euroweep-vent
Cavity widths accommodated	All - width does not affect functionality
Dimensions	87mm x 49mm x 9mm
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	Suits all
Undulating masonry faces	Compatible
Air flow at grille	300mm ²
Material	Polyprop
Colour	Grey, black, beige, brown, white, clear & terracotta
Pack size	Packs of 50
CFC / ODP	CFC Free / Zero
Regulation compliance	Yes
May be used if cavity insulation present?	Yes with compliant insulation types
CAD downloads	Yes
Design considerations	Suggested centres 450mm / 675mm
Bill of Quantity / Specification Wording	F30 Clause 132 Weep holes. Manufacturer: Cavity Trays Ltd Yeovil Somerset BA22 8HU Incorporate Euroweep within perp joints positioned upon Cavitytray bases at specified centres

Specifications

Product name - group	Curved Cavitrays
Cavity widths accommodated	From 50mm up to 400mm
Dimensions	Lengths, and dimensions variable
Bespoke options	All manufactured on this basis
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Some options
Masonry skin styles	Subject to evaluation
Undulating masonry faces	Compatible in most instances
Congruent with other wall elements	Identified when evaluated
Arrested water evacuation	Via Caviweeps (selection) in perp joints
Thermal transmission of material	Negligible - 0.15 – 0.17
Material	Polypropylene and Petheleyne DPC
Colour	Black / Grey
Extrudes / compresses under load	No
Pack size / weight	Varies pending design
CFC	CFC Free unless advised
ODP	Zero unless advised
Regulation compliance	Proposals to meet requirements
May be used if cavity insulation present?	Pending proposed design
CAD downloads	Supplied following evaluation

CURVED CAVITRAYS ON PLAN

- Damp-proof trays and flashing in one unit
- Ready to use module Cavitrays on bespoke basis
- Cavity width adjustment ensures compatibility
- Integral stopend and water-check
- Permits easy regulation compliance



Use

Bespoke versions of Cavitray suitable for use in curved masonry and masonry forming structures that are circular or constructed with a face that undulates.

Solution

When a cavity wall is curved on plan, DPC Cavitytrays of matching radii ensure the protection in the bedding course is uniform, flat and uninterrupted. Curved trays within the cavity ensure the cavity compartment is adequately protected and the cavity upstands are able to service the maximum cavity width.



Trays can be supplied concave or convex in the following tray types.

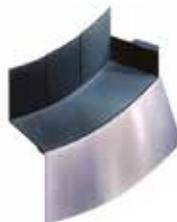
- Curved Window and Door Openings
- Curved Parapets
- Curved Gable Abutments
- Curved Horizontal Abutments
- Curved Arresting Barrier Applications

Designers' Comments

Air tightness of the inner skin is not compromised using trays that require no adjacent skin support. Always consider the effects of pinch points in masonry curves and provide movement opportunity. In curved parapets consider possible accentuated masonry ratcheting. Use of Type P Cavitytray avoids separating upper masonry mass at DPC level in both skins so offers better structural arrangement. If partially insulating a curved cavity, use a medium that can flex to match rather than a rigid material that will flat-plane only.

Type X Cavitytray for Curved Gable Abutments

Where a pitched roof abuts a curved wall, the angle of the roof may remain constant but the actual angle of intersection differs on every course, depending at which point it meets the curved wall. In the example shown the size of every tray is different. The protective arrangement commences with a catchment tray followed by differently sized intermediate trays and finishes with a horizontal ridge tray. Each flashing is proportioned to suit the course encountered. In instances where a pronounced curve might inhibit easy handling, lifting and dressing of attached flashings, the flashings are supplied separately. See pages relating to Type X Cavitytray.



Type Q Cavitytray for Curved Walls requiring Arresting Barriers

Curved Type Q trays eliminate the requirement to provide support from the inside skin. In contrast the use of roll DPC requires support and suffers surplus puckering within the cavity in concave situations and material stretching in convex applications. The curved Type Q can maintain a consistent base and cavity presence. See pages relating to Type Q Cavitytray.



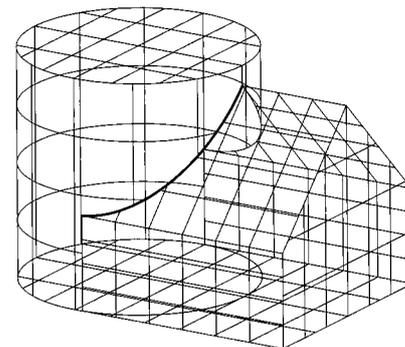
Type G Cavitytray for Curved Horizontal Intersections

Modified versions of the Type G Cavitytray provide protection where horizontal intersections and curved cavity walls meet. The base dimension is commonly widened where the arc and use of rectangular blocks results in the cavity being slightly impinged where ends of blocks meet. See pages relating to Type G Cavitytray.



Type C Cavitytray for Common Openings

Where walls are curved the Cavitytray is supplied to match the arc created by the lintel. Where the curve is very slight and the opening width is not extensive, straight lintels can be considered. In such instances a straight cavitytray can be used with widened ends to provide full DPC coverage where the straight lintel line strikes the masonry arc. See pages relating to Type C Cavitytray.



Despite the angle of the abutting roof being constant, the angle of intersection differs on every course, depending at which point it meets the curved wall.

Bill of Quantity / Specification Wording

F30 - Clause 370 Preformed Cavity Trays.

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

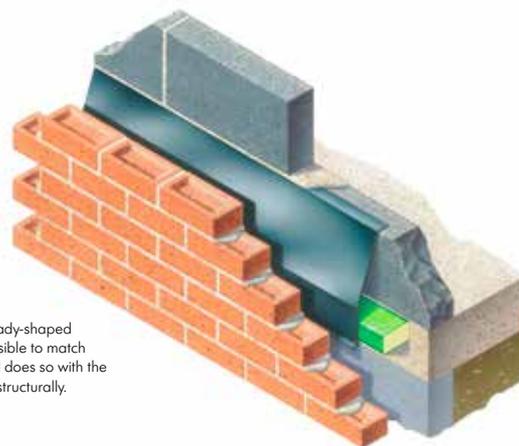
Curved Cavitytray to be incorporated where scheduled within cavity walls. Build in carefully observing manufacturers' instructions to ensure watertight installation. See specialist drawings and schedule.

Specifications

Product name - group	Type CD Cavity Dropcloak
Cavity widths accommodated	From 50mm up to 200mm
Dimensions	2440mm lengths x 150 /200/250/300mm
Bespoke options	Yes
Traditional construction compatible	Yes
Timber frame construction compatible	Yes Cavistrap supported version
New work applications	Yes
Retrofit applications	Some – pending top of wall access
Masonry skin styles	No known limitation
Undulating masonry faces	Compatible
Curved wall on plan applications	Yes – see Curved Wall entries
Jointing method	Lap 150mm & sealing strip jointing
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	N/A deflects to original path
Thermal transmission of material	Negligible - 0.16 average
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes can be used to satisfy arrestment
May be used if cavity insulation present?	Insulation should not affect functionality
CAD downloads	Yes
Design considerations	Non-sheltered, open and dentil eaves closing can still deploy a fire/acoustic cavity barrier as the Type CD can cloak against damp without compromising bonding

TYPE CD

- DPC control independent of external masonry skin
- Uninterrupted structural bonding of outer skin
- Traditional and timber frame compatibility
- Available in all dimensions
- Establishes integral Platt Band & Dentil cavity separation
- Structural integrity of outer skin maintained
- No external leaf witness line damp banding



The Type CD offers ready-shaped protection it is not possible to match using roll material and does so with the gable wall benefiting structurally.

Use

To protect a high level masonry feature that impinges a cavity without weakening or affecting the structural bonding of that feature.

To protect a conventionally shaped acoustic or fire cavity barrier on the top of cavity insulation where it terminates partway up a cavity wall (e.g.: gable end).

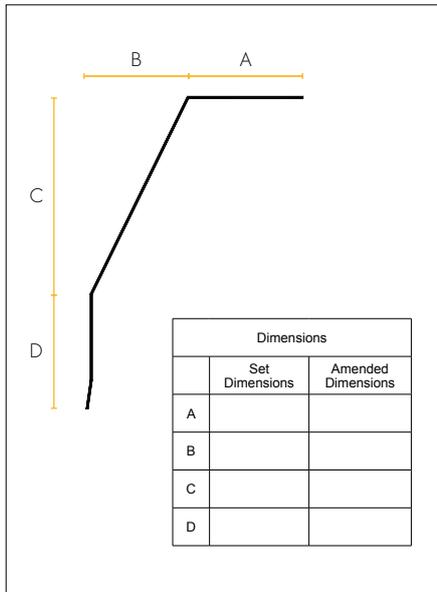
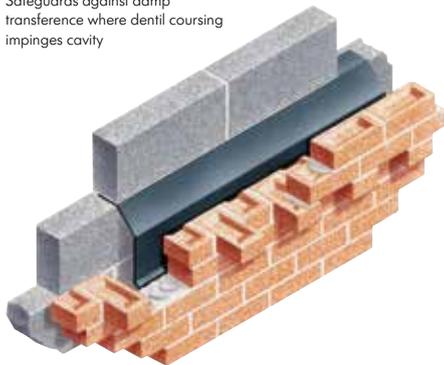
Solution

Type CD Cavity Dropcloaks are preformed DPC barriers that are built into the inner leaf only of a cavity wall. The outer leaf remains uninterrupted. When used across a gable wall in which cavity insulation terminates at plate level, protection of the cavity insulation is provided without the triangle of masonry rising above it (plate to ridge) being isolated and separated structurally from that below it. Continuity of bonding eliminates the weakness created with the conventional approach that sits the entire high-level gable end on what is effectively the equivalent of a slip plane.

The Type CD may also be used to protect where the masonry impinges, horizontally steps or projects into the cavity. Where conventional cavity barriers or stops are deployed, Type CD Dropcloaks can provide protection as identified within Robust Details Part E, but without weakening the outer leaf.

Dropcloaks are available for use in timber frame and traditional construction. A bespoke service operates for non-standard dimensions/requirements.

Safeguards against damp transference where dentil coursing impinges cavity



Leeward suction can cause failure across the gable at its weakest point – where the outer leaf is sitting on a conventional DPC

How to Order

State profile dimensions. Allow 150mm for each length to lap and state total number of 2440mm lengths required.

Designers' Comments

Water penetrating an external skin can discharge off the furthest projection into a cavity. Consider introducing protection where a cavity is partially or fully filled if the inner face of the external skin inside steps inwardly or outwardly between ground and eaves level. Where cavity insulation is present but not installed uninterrupted for the full height of a gable, Dropcloaks can be used to provide protection as identified in PD 6697:2010 6.2.7.7.6 For aesthetic reasons, designers may sometimes include features which lead to increased local exposure of the masonry. As a result, the masonry will be more likely to become very wet or saturated, so increasing the risk of frost damage or disfiguration - 6.2.8.5.1.

Bill of Quantity / Specification Wording

F30 -Clause 330 Damp Proof Course.

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type CD Cavity Dropcloak to build into inner skin and protect cavity insulation top or when cavity is impinged. Build in observing manufacturers' instructions to ensure watertight installation. Metres run _____.

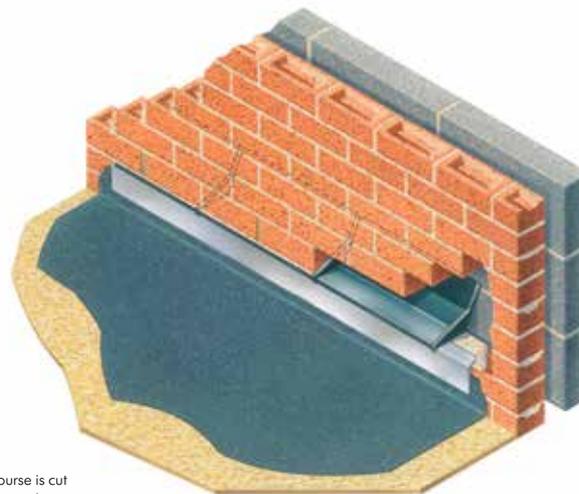
Specifications

Product name - group	Type E
Cavity widths accommodated	From 50mm up to 140mm
Dimensions – brickwork & similar	See guide showing types and locations
Bespoke options	Yes – all dimensions and cavity widths
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	N/A see Type G for new work
Retrofit / Remedial applications	Yes
Masonry skin styles	Trays available for all styles
Undulating / split masonry faces	See Designers' Comments for guide
Curved wall on plan applications	Yes – see Curved Wall entries
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Via Caviweeps (selection) in perp joints
Thermal transmission of material	Negligible - 0.15 – 0.17
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size / weight	Varies pending design
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes can be used to satisfy arrestment
May be used if cavity insulation present?	See Designers' Comments ref type
CAD downloads	Yes

TYPE E

Cavitrays for insertion into an existing wall

- Brick-sized cavitrays permit progressive insertion
- Anticapil interlocking to form long runs
- Cavity widths compatible - upstand adjusts to suit
- Unobstructed cavity compartment area with stand-alone discharge
- Easy compliance with building regulations



Only one course is cut out to accommodate the Type E Cavitrays.

Use

To prevent damp penetrating an original outside wall that has become an inside wall by virtue of an extension being built. To re-establish damp control measures where an original DPC has failed.

Solution

When an extension is added to an existing property built with cavity walls, the status of the original exterior wall changes below the extension roof level. The wall remains exposed to wind-driven rain above the extension roof, and water penetrating it will gravitate and permeate into the extended area, unless measures are taken.

The Type E Cavitytray is a preformed DPC unit approximately two bricks in length. There are upstands at either end of each tray that permit adjoining trays to clip together. Trays are inserted into a cavity wall one at a time. Long runs are thus created with a series of connected but self-contained Type E units. The preformed ends coincide with the masonry perp joints so bonding is normally unchanged.

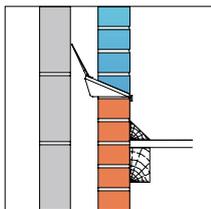
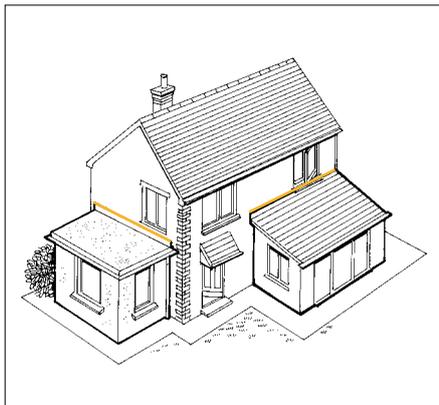
All Type E Cavitytrays also have an extended back cavity upstand, that runs the length of the tray. The upstand is hinged to take up the cavity width encountered from 50mm to 140mm, ensuring compatibility. The front projecting lip of the tray is designed to provide protection of the bedding course against wind-driven rain.

All work can be executed from outside the building, and the inner skin of masonry need not be disturbed. Only one course of masonry need be removed, as the tray hinging format permits it to be introduced within a 75mm aperture. The interconnecting tray end upstands provide positive continuity, eliminating dependence on lapping and sticking. Accordingly the status of the union through the skin and where it spans the cavity is not in doubt.

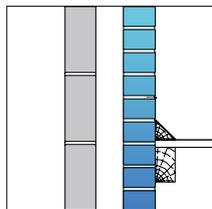
Where Type E Cavitytrays are used above a new roof intersection, it is usual to also incorporate a flashing that provides a flexible connection over the roof finish upstand or similar (see installation procedure).

In situations where the Type E is replacing a failed DPC, a flashing may not be required – it depends on the application. (see following section dealing with remedial and refurbishment work).

The integral stopends of the Type E Cavitytray mean each unit is a self-contained stand-alone DPC unit with its own collection area. Therefore provision must be made to discharge all water arrested by each tray. This is facilitated using a Caviweep incorporated within the perp joint in the centre of each tray. The specifier may select from a range of Caviweep styles and colours to suit the project.



Type E cavitytrays with extended flexible upstands are particularly suitable for non-standard or varying cavities.



Rain penetrates the external skin, which becomes an internal skin below the new roofline.



Universal external angle.
220mm x 220mm.

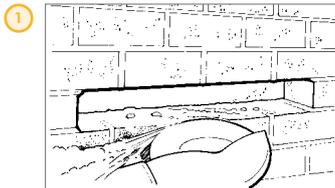
For convenience Type E standard internal and external angles are equally handed. Additional perp joints will therefore occur when bricking back. If handed angles are preferred, please determine header and stretcher positions on each corner and advise when ordering.

Universal internal angle.
120mm x 120mm.

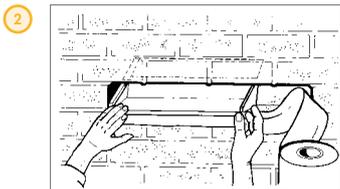
Type of Existing Masonry

Where the masonry skin into which trays are to be inserted is not brickwork, the Type E Cavitytray can be supplied in dimensions to suit. Our bespoke service can accommodate most requirements, including trays with provision for windposts, stanchions, changes of level and set-backs in the finished face line.

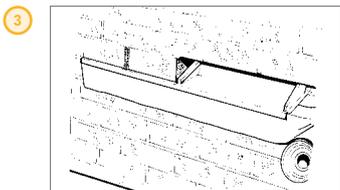
Specifications



Step 1 - Three bricks are removed from the wall forming a 675mm opening (an angle grinder /cutter is ideal for cutting out).



Step 2 - One cavity tray is inserted together with the flashing intended for dressing over the skirting of the roof finish (flashing approx 50mm into wall).



Step 3 - Two bricks are replaced in the wall into the Cavitytray. They are jointed and securely slate pinned, leaving the wall above safe and firm. A Weepvent is incorporated in the middle perp. Two more bricks are removed again forming a three brick space. The flashing is extended and a second Cavitytray inserted. The integral U clip joins the trays, ensuring that no water can penetrate. Two more bricks are inserted and a weephole again formed. There are now two adjoining but completely self-contained Cavitytrays. The method is continued until the required run is completed. (Always bed on mortar. Do not dry bed)



Type E Cavitytrays used without flashing, over an existing opening where the original damp course has failed or has been omitted. The exact course in which the cavitytray is introduced varies depending on the construction detail.

Dual Exposed Elevations

Tray upstands always project upwardly in the cavity. The exception is where an inner skin is also externally exposed and receptive to the weather, as might be encountered in a parapet wall.

In such instances trays either incorporate an additional flap that turns down prior to making contact with the masonry, or should trays be back to back with others in the opposite skin, a clipping arrangement is provided to fulfil the same function. This approach prevents upstand under-tracking. We will be pleased to identify and advise should this requirement arise.

How to Order

State number of standard lengths and angles required.
Non-standard: provide drawing / dimensions.



Designers' Comments

Where masonry with a split or undulating face exists, consider grinding insertion base edge so masonry adopts a straight finish to permit inserted trays and flashing to nestle back evenly and consistently tightly against edge. Where a rendered finish exists, consider whether a deeper tray might be appropriate to accommodate overall skin thickness.

If inserting into an existing wall containing full fill or partial fill insulation, ensure back upstand is positioned to service full width of cavity. If bead insulation is installed, be aware that some early styles were not bonded (loose fill) and will expel when a wall is opened up.

Correct installation of a cavity tray at the junction of an external cavity wall and a conservatory roof will prevent the ingress of water into the conservatory through the existing external wall of the house. Designers and householders should be aware that without a properly installed cavity tray some water ingress may occur in certain locations during severe weather conditions.

See the Building Standards Technical Handbook – Conservatories Guide 2nd edition issued to provide guidance on how to meet the Building Regulations for conservatories built onto existing houses.

Bill of Quantity / Specification Wording

F30 -Clause 370 Preformed Cavity Trays.

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type E horizontal Cavitytray with European Technical Approval to be inserted into existing cavity walls where indicated at extension intersections and/or to remedy damp penetration of masonry etc. Build in carefully observing manufacturers' instructions to ensure watertight installation. Incorporate flashing if applicable. Type E metres run _____. Internal angles _____. External angles _____.



See how Type E Cavitrays are fitted into an existing external skin



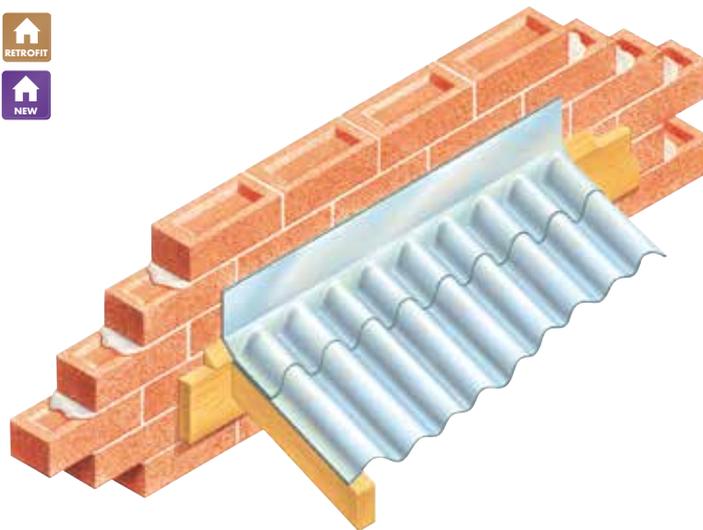
Specifications

Product name - group	Type F Flashing Units
Cavity widths accommodated	N/A fixes against external face
Dimensions –sheet/wall flashings	Std 75mm/3" asbestos profile x 715mm Std 75mm/3" iron profile x 715mm Miniature x 715mm Grecca box profile 76/18mm x 715mm Box profile 16mm x 715mm Box profile 14mm x 715mm Onduline Std (black) x 900mm Onduline U18 (black) x 900mm
Dimensions – ridge flashing	Std 75mm/3" asbestos profile x 700mm
Bespoke options	No
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	Regular brick/block/rendered styles
Undulating masonry faces	Upstand should abut flat surface
Congruent with other wall elements	No known reactions
Material	Black Polypropylene (Onduline only) or UPVC clear self-extinguishing.
Extrudes / compresses under load	N/A
Pack size / weight	Available individually - Also in packs of 50
CFC	CFC Free
ODP	Zero
CAD downloads	No
Design considerations	Cavitrays required over intersection to comply with Building Regulations regarding habitable additions.

TYPE F

PVC Corrugated Flashing for use with PVC Sheeting

- Fills and flashes sheet top with masonry
- Adjusts to suit different roof angles
- Blends with roof finish



Type F standard 3 inch profile.
Type E Cavitrays can be fitted at higher level if required

Use

To flash the intersection between corrugated roof sheets and a masonry skin.

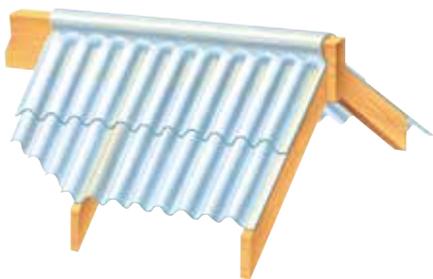
Solution

Malleable flashings require considerable dressing to tightly follow the contours of any roofing sheet. Where the sheet is lightweight UPVC, such dressing is not an option. The alternative approach is to use a ready-moulded Type F Flashing.

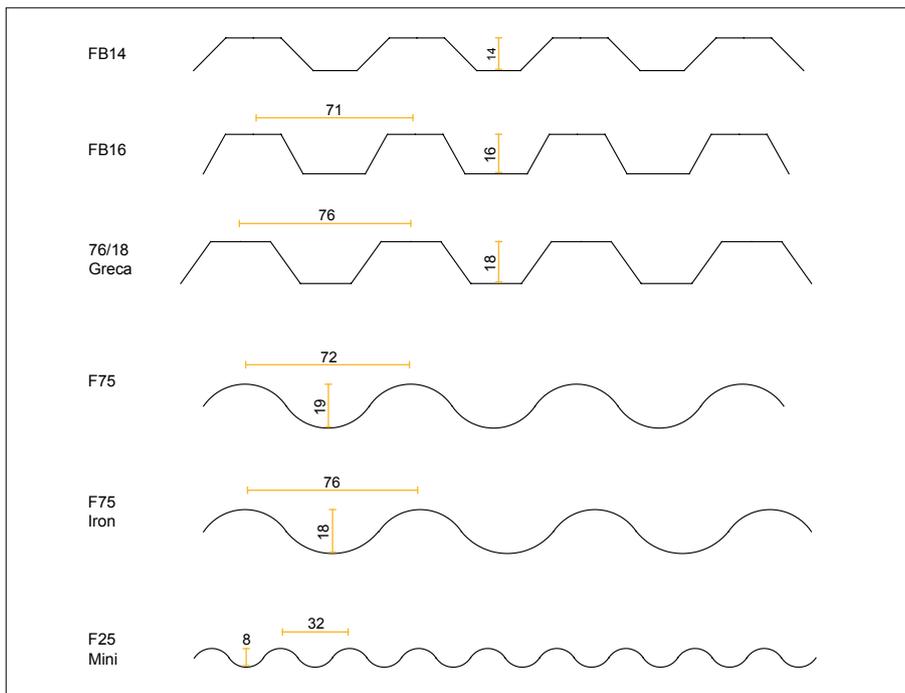
Type F Flashings can be used on porches, lean-to's, outhouses, conservatories or temporary structures having lightweight translucent corrugated sheeting.

Each Type F Flashing has a moulded hinge line between its corrugated half and its flat uprising half that locates against the wall surface. This permits the flashing to be used on roof pitches from 17.5 degrees up to 60 degrees. The flashings are fixed by simply positioning before securing the top of sheet fixings, that then hold both the sheet top and the flashings in place. The Type F fits into the corrugations snugly, whilst the upstand springs to shape vertically against the wall. The upstand can then be finished with a flashing / Cavitytray as required.

Type F Flashings are manufactured in 6 different profiles. A ridge flashing to unite where corrugated sheets meet in an apex is available in the Std 75mm/3" asbestos profile range only.



Ridge Flashing flexes to accommodate varying roof pitches.
Size: 700mm x 3" asbestos profile



How to Order

State number of standard lengths and angles required.

Non-standard: provide drawing / dimensions.

Designers' Comments

All flashings are manufactured of a length slightly shorter than the width of a standard corrugated sheet to reduce likelihood of all overlaps coinciding and contributing to heat discolouration.

Bill of Quantity / Specification Wording

Type F Flashing to corrugated sheeting

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Profile required (state) x metres run (state)
Request liability/conformity document upon completion.

Specifications

Product name - group	Type G
Cavity widths accommodated	From 50mm up to 160mm
Dimensions – lengths	900mm 675mm 450mm Infill lengths to suit
Dimensions – angles	220mm x 220mm universal external 120mm x 120mm universal internal
Dimensions – Type G profile	124mm base x 215mm upstand max
Dimensions – Flashing to front	150mm or 300mm. Other widths available to order
Bespoke options	Yes. Standard product accommodates cavity up to 160mm. Specify flap extension for cavities up to 200mm.
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit / Remedial applications	No – see Type E
Masonry skin styles	Trays available for all styles
Undulating / split masonry faces	See Designers' Comments for guide
Curved wall on plan applications	Yes – see Curved Wall entries
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Via Caviweeps (selection) in perp joints
Thermal transmission of material	Negligible - 0.15 – 0.17

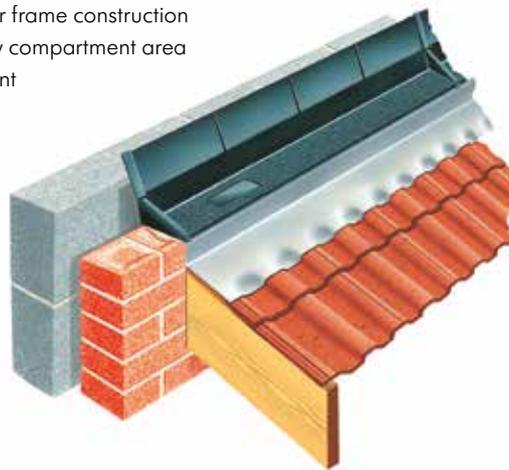
Use

To form a cavity-crossing horizontal DPC within a cavity wall. To overcome joint and support concerns in crossing the cavity. To eliminate the need to build into the inner skin. To ensure the external flashing arrangement servicing a horizontal DPC has a watertight union where it connects.

TYPE G

General purpose Cavitray for changes of level and building off the solid or ringbeam

- Easy and fast building-in with brickwork sized units
- Adjoining lengths interlock
- Adjustable upstand ensures cavity width compatibility
- Traditional or timber frame construction
- Unobstructed cavity compartment area
- Establishes consistent build quality detail



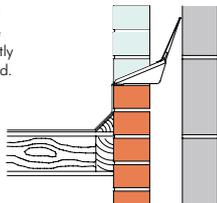
Type G Cavitray is available with an attached lead flashing (example 300mm). In this example the flashing is sufficient to dress directly over the abutting roof tiles.

Solution

The Type G Cavitray is a preformed general purpose DPC cavity tray for use when constructing changes of level and horizontal intersections in new building. Trays are supplied in preformed lengths and preformed angles, all of which have end upstands. Adjoining tray upstands unite and secure together within the perp joint – thus long runs are speedily created.

The back of the Type G Cavitray tray is hinged and self-supports, permitting it to adjust to suit whatever cavity width is encountered from 50mm up to 160mm inclusive. This independence permits the tray to take up the optimum shape and function within the cavity, regardless of the inner skin composition (blockwork or timber or concrete). The inner skin remains unperforated.

Type G cavity tray with lead attached used at a change of level to ensure the horizontal intersection is correctly damp-proofed and weatherproofed.



Type G Cavitytrays are supplied with an attached flashing bonded to the front of the tray (see following pages for Type G unleaded version). Being already attached eliminates the need to rake out the bedding mortar, then deal with the flashing as a separate site operation and return to point-in.

Where cavity trays adjoin, continuity of the flashing is maintained as each flashing extends beyond one end of the tray so it can interface with its neighbour (flashing alternatives are offered and listed on page 95). Rainwater penetrating the external skin is arrested within each tray and discharged out of the structure via Caviweeps located in perp joints towards the centre of each tray. The specifier may select from a range of Caviweep styles and colours to suit the project.

Use of a preformed Cavitytray for new horizontal intersections removes the uncertainties of site cutting, site fabrication and installer deviances.

Flashing Dimensions and Material Options —

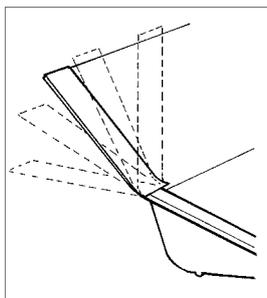
The standard flashing attached to this product is code 4 rolled milled lead flashing. Flashings are offered in two standard widths, 150mm and 300mm -see data panel. Different flashing weights upon request.

Alternatively, if a synthetic flashing is required, Perform synthetic flashing is available as a substitute in the same 150mm and 300mm dimension options. The full specification for Perform is included towards the end of the damp proofing section.

Dual Exposed Elevations —

Tray upstands always project upwardly in the cavity. The exception is where an inner skin is also externally exposed and receptive to the weather, as might be encountered in a parapet wall.

In such instances trays either incorporate an additional flap that turns down prior to making contact with the masonry, or should trays be back to back with others in the opposite skin, a clipping arrangement is provided to fulfil the same function. This approach prevents upstand under-tracking. We will be please to identify and advise should this requirement arise.



Flexible cavity upstand can accommodate the as-built cavity width

How to Order —

Select ideal flashing specification if attached flashing is required. Calculate internal and external angles and distances between divide by 900mm to obtain number of standard Type G lengths and infilling lengths of 675 and 450mm. Non-standard infilling lengths are available to order.

Note: As an alternative to ordering a special length, a separate self-adhesive tray end is available to permit installers to create a specific length. Please note trays with site-applied ends are the responsibility of the installer and are not covered by our performance warranty.

Designers' Comments —

Always check tray adopts optimum profile servicing cavity for unhindered functionality of tray with approved full or partial fill insulation present. When used within a diaphragm wall the dimensions of the Type G Cavitytray normally remain as standard, with tray back running through connecting cross-ribs. Any pooling is thus contained within the base against the exterior skin. See BS 8215 and PD 6697:2010 recommendations for design of masonry structures fulfilled by using the Type G Cavitytray.

Bill of Quantity / Specification Wording —

F30 -Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU
Tel: 01935 474769

Type G horizontal Cavitytray with European Technical Approval to be installed at horizontal abutments on new build intersections / off ring beams etc. Tray to have attached projecting (code 4 lead) or (synthetic) flashing of _____mm girth. Build in carefully observing manufacturers' instructions to ensure watertight installation. Type G metres run _____. Internal angles _____. External angles _____.

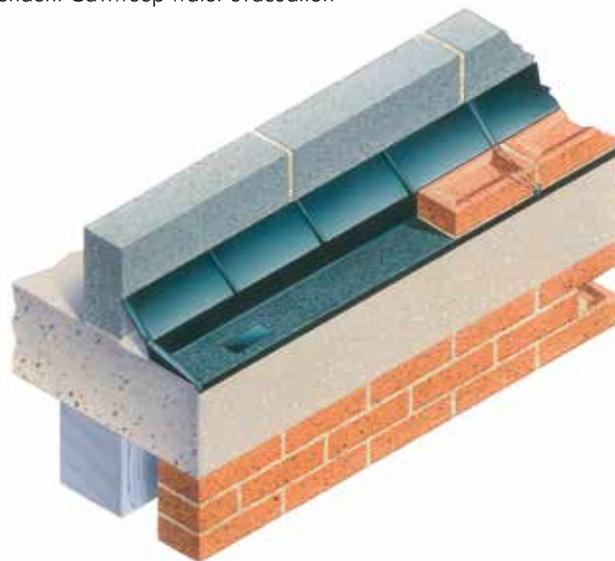
Specifications

Product name - group	Type G
Cavity widths accommodated	From 50mm up to 160mm
Dimensions – lengths	900mm 675mm 450mm Infill lengths to suit
Dimensions – angles	220mm x 220mm universal external 120mm x 120mm universal internal
Dimensions – Type G profile	124mm base x 215mm upstand max
Dimensions – Flashing to front	No flashing attached. Left as site operation if required.
Bespoke options	Yes. Standard product accommodates cavity up to 160mm. Specify flap extension for cavities up to 200mm.
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit / Remedial applications	No – see Type E
Masonry skin styles	Trays available for all styles
Undulating / split masonry faces	See Designers' Comments for guide
Curved wall on plan applications	Yes – see Curved Wall entries
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Via Caviweeps (selection) in perp joints
Thermal transmission of material	Negligible - 0.15 – 0.17

TYPE G - NO FLASHING

Preformed Horizontal Cavitytray without Flashing

- Adjusts to suit cavity width
- Unlipped tray for subsequent site flashing addition
- Lipped tray for edge beam applications
- Lipped bedding course protection
- Inter-connecting units form long runs
- Independent Caviweep water evacuation



Use

Preformed DPC Cavitytray to protect horizontal intersections where flat roof / mono pitch roof or lean-to roofs abut a cavity wall. Also for use to protect where masonry is built off a concrete ring beam.

Solution

The Type G Cavitytray described in the previous pages is also offered without an attached flashing. This permits the Cavitytray to be used in 'building-off-the-solid' applications where an external malleable dressing is not required. Instead the Type G is offered with either:

A projecting lip (where an external presence is sought to protect the bedding course such as encountered with ring-beam applications). Lipped Type G (code G OP2).

or

Un-lipped where no external presence is required. This also gives the installer the option of introducing an independent separate flashing if desired. Unlipped Type G (code G OP4.)

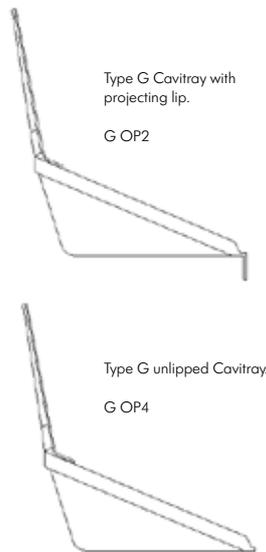
The dimensions and ordering options are identical to those outlined in the previous pages. Tray lengths are dimensioned to accept standard brickwork and blockwork multiples between the integral end upstands. Long runs are swifly formed as tray ends interlock.

This product may be used in traditional and timber frame construction as the cavity upstand is self-supporting and does not require building into the inner leaf. The upstand adjusts to suit cavity widths from 50mm up to 160mm. Water evacuation from Type G Cavitytrays is via Caviweeps and the current NHBC recommendation is two weeps per 900mm tray. (Note: Various Caviweep types and colours are listed on Caviweep pages).

How to Order

Determine number and position of internal and external angles. Measure connecting and infilling runs to determine number of Type G standard lengths of 900, 675 & 450mm. The standard Type G tray lengths are as listed and non-standard lengths are available to order.

Note: As an alternative to ordering a special length, a separate self-adhesive tray end is available to permit installers to create a specific length. Please note trays with site-applied ends are the responsibility of the installer and are not covered by our performance warranty.

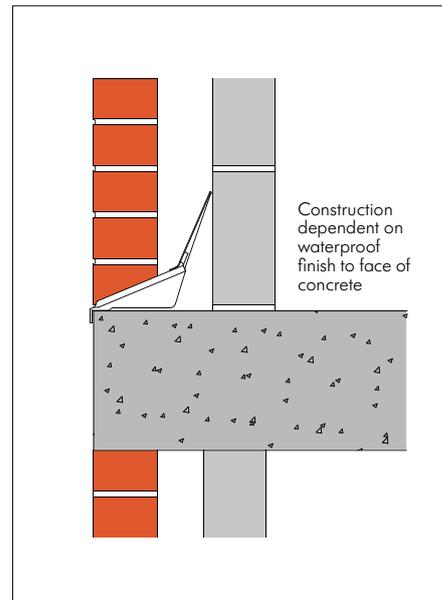


This unlipped version can be supplied with an optional rake-out polystyrene strip. Stipulate if this option is required.

Designers' Comments

Where the lipped version is incorporated with an external wall flat-slab, ring-beam or similar, the purpose of the lip is to provide wet deflection against wind-driven rain reaching the bedding course. Cracking along any bedding course can occur because of the co-efficient of expansion between converging elements. It is also where water gravitating within masonry/cavity collects and reservoirs.

Adequate evacuation of arrested water via Caviweeps should be incorporated. Where a slab edge veneer is to be applied, ensure tray lip can take up its intended position.



Type G Cavitytray used in ringbeam/concrete frame situation. The end upstands terminate against the vertical columns. The protective panolipped lip protects the bedding course.

Bill of Quantity / Specification Wording

F30 -Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type G horizontal Cavitytray with European Technical Approval to be installed at horizontal abutments on new build intersections / off ring beams etc. Build in carefully observing manufacturers' instructions to ensure watertight installation. Type G metres run _____. Internal angles _____. External angles _____.

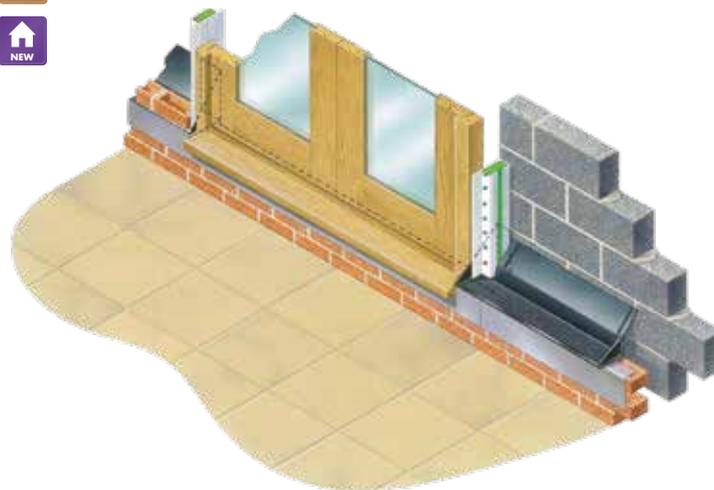
Specifications

Product name - group	Type G Balcony Opening Tray GBOT
Cavity widths accommodated	From 50mm up to 160mm
Dimensions	Lengths, and dimensions varied to suit
Bespoke options	Manufactured on this basis
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Some options
Masonry skin styles	Available for all skin styles
Undulating masonry faces	Compatible in most instances
Congruent with other wall elements	Cavicleosers accommodated
Arrested water evacuation	Via Caviweep(s) per tray
Thermal transmission of material	Negligible - 0.15 – 0.17
Material	Polypropylene and Petheleyne DPC
Colour	Black / Grey
Extrudes / compresses under load	No
Pack size / weight	Varies pending design
CFC	CFC Free
ODP	Zero
Regulation compliance	Permits meeting of requirements
May be used if cavity insulation present?	Functionality unaffected pending type and placement
CAD downloads	Supplied following evaluation
Design considerations	If using a Continuity Cavicleoser the Type GBOT permits any partial fill insulation to be splay cut and the thermal enhancement provided by the cavicleoser core projection to continue into the tray base.

TYPE GBOT

Type G Balcony Opening Tray

- Integrates vertical and horizontal DPC mediums
- Establishes stopends to opening
- Prevents cavicleoser discharging below intersection
- Two format options



Use

Provides interfacing between horizontal cavitray and vertical cavicleoser at opening onto balcony thus preventing closer water gravitating below the critical level of protection. Introduces integral stopend at vulnerable doorframe termination point.

Introduction

An appropriately profiled cavitray is required where a balcony extends outwardly from the face of a building. Where a doorway interrupts any such arrangement, water penetrating in the vicinity of the vertical cavicloser must be prevented from gravitating below threshold level and/or below the horizontal cavitray arrestment level. This applies where a balcony structurally links through the wall interrupting the open cavity, and/or where the area below the balcony is not an open space because it is within the building envelope. The Type GBOT Balcony Opening Tray provides a preformed positive way of linking vertical and horizontal protective mediums.

Solution

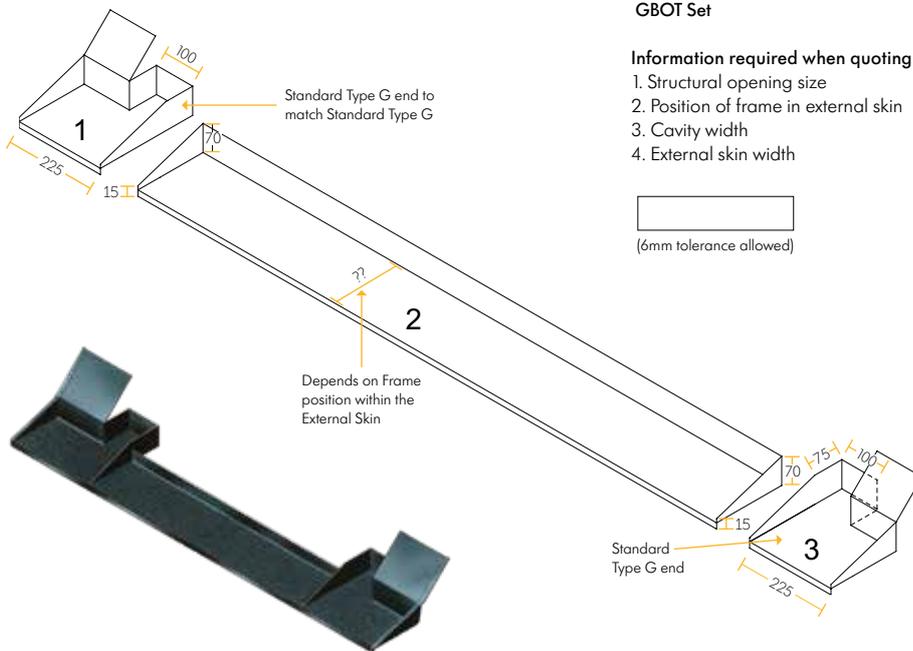
Type GBOT Balcony Opening Trays are normally supplied in three sections. A centre section accommodates the frame sill, and two side sections, each of which receives the reveal vertical closer and extends to provide an integrating link with the adjoining Cavitray horizontal protection.

Water gravitating between the closer anti-capillary fins (demanded by Building Regulations to be on the face of the closers) is arrested before it has opportunity to discharge downwardly and soak into the building.

In those instances where traditional structural reveal closing with a flexible vertical DPC is proposed, the side sections are differently shaped to accommodate the masonry and DPC, with or without accompanying vertical insulation.

How to Order

Provide wall section and plans so optimum arrestment profile can be determined and a schedule submitted prepared. See dimensions panel.



GBOT Set

Information required when quoting:

1. Structural opening size
2. Position of frame in external skin
3. Cavity width
4. External skin width



Designers' Comments

Height of horizontal arrestment must be appropriate for balcony floor level. The access opening requires protection under it in addition to it linking with the adjacent horizontal provision. Water penetration prevention must address the entire balcony junction length. Protection under sill will normally be included with the Type GBOT solution identified as being most appropriate.

Bill of Quantity / Specification Wording

F30 -Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU
Tel: 01935 474769

Type GBOT (Type G compatible Balcony Opening Tray) to be incorporated under sill of exterior doors where building extends beyond sill at lower level. Build in carefully observing manufacturers' instructions to link with adjoining protective Cavitray. State number of openings and structural width _____.

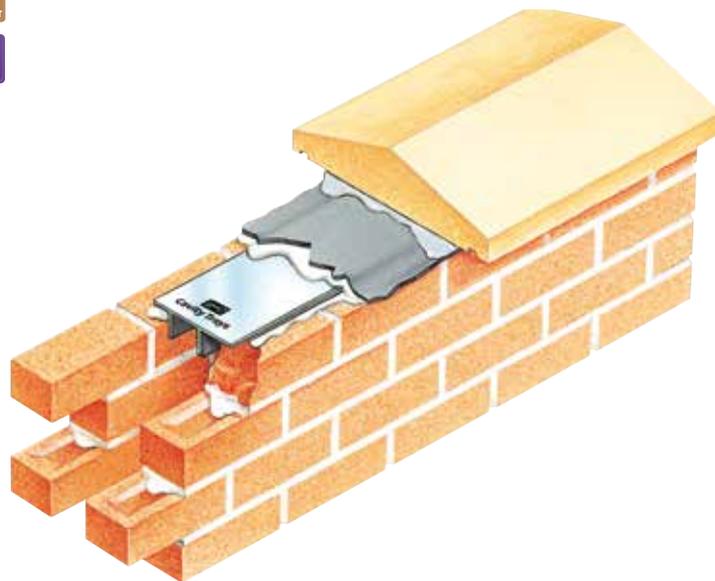
Specifications

Product name - group	Type J
Cavity widths accommodated	All – width does not affect functionality
Dimensions	2400mm standard lengths J1 130mm x 30mm / cavities up to 90mm J2 150mm x 30mm / cavities up to 100mm J3 180mm x 30mm / cavities up to 130mm
Bespoke options	Yes
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	N/A
Retrofit applications	Yes
Masonry skin styles	No known limitation
Undulating masonry faces	Compatible
Congruent with other wall elements	No identified exceptions
Arrested water evacuation	Negligible – DPC projects / drips
Thermal transmission of material	Negligible - 0.15 – 0.17
Material	PVCU
Colour	White
Extrudes / compresses under load	No
Pack size / weight	Individually available
CFC	CFC Free
ODP	Zero
Regulation compliance	Can be used to satisfy
May be used if cavity insulation present?	Yes does not affect functionality
CAD downloads	Yes
Design considerations	Need for parapet tray where wall continues below roof level – see Type P Cavitytray

TYPE J

DPC Support and Closer

- Closes the cavity
- Supports the DPC
- Prevents water pooling under coping
- Satisfies BS 5628 requirement



Use

Closes cavity and provides DPC support where it crosses the cavity under parapet copings.



Solution

The conventional cavity parapet is normally terminated with copings, under which a DPC is bedded. The width of the DPC is required to be sufficient to slightly overhang the width of the parapet masonry. Support of the DPC is required where it crosses the cavity. The Type J Support and Closer is designed for such purposes.

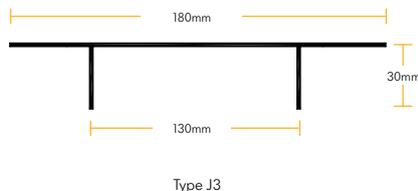
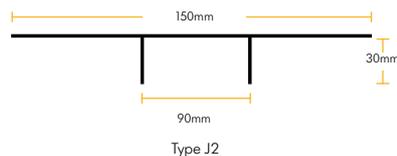
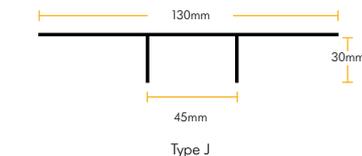
The Type J is manufactured from PVCU. The Type J is bedded on mortar prior to the DPC being laid on mortar across its top. Water permeation via any parapet coping is commonly through fissures and cracks that manifest in the coping joints following seasonal temperature and weather changes. Penetration can also eventually occur through the actual coping itself, and long term waterproofing resistance should not be assumed.

How to Order

State J1, J2 or J3 size and number of lengths required. Bespoke: advise parapet dimensions and coping overall width.

Size

The Type J is supplied in the three profiles shown in lengths of 2400mm. We recommend the installer mitres corners. If your requirement is for a curved Type J, these are offered on a bespoke basis requiring drawings clearly showing radius and dimensions. We will then be pleased to advise.



Type J3 is offered on a bespoke basis. All dimensions are available. Dimensions shown are examples only.

Designers' Comments

Use Type J to satisfy NHBC 6.1-S4 (b) requirement for DPC support continuously under the coping. Incorporate a Type P Cavitray within parapet 150mm above roof level, stepping outwardly. Both products provide a warranted parapet detail. Be aware rain will eventually penetrate fissures that develop between copings / cappings. The new PD 6697:2010 – 6.2.7.7.11 qualifies need for DPC under coping support in all parapets where the masonry coping is jointed.



Bill of Quantity / Specification Wording

F30 -Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU
Tel: 01935 474769

Type J parapet closer & DPC support to be incorporated under copings of parapet cavity walls. Build in carefully observing manufacturers' instructions to ensure consolidated and watertight installation. State Type J size (J1, J2, J3) and metre run.

Specifications

Product name - group	Type K
Cavity widths accommodated	From 50mm to 200mm inclusive
Dimensions - openings	470mm 600mm 630mm 675mm 700mm 750mm 800mm 900mm
Bespoke options	Yes up to 3000mm opening (sectioned)
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes – some applications
Masonry skin styles	No known limitation
Undulating masonry faces	Compatible
Congruent with other wall elements	No known incompatibility
Arrested water evacuation	N/A - see Design Considerations
Thermal transmission of material	Negligible - 0.15 – 0.17
Thermal transmission of insulator	0.034
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size / weight	Varies pending design
CFC	CFC Free
ODP	Zero
Regulation compliance	Satisfies Building Regulations
May be used if cavity insulation present?	Yes with compliant insulation types
CAD downloads	Yes
Design considerations	Caviweep ventilation/ evacuation may be provided at base if required

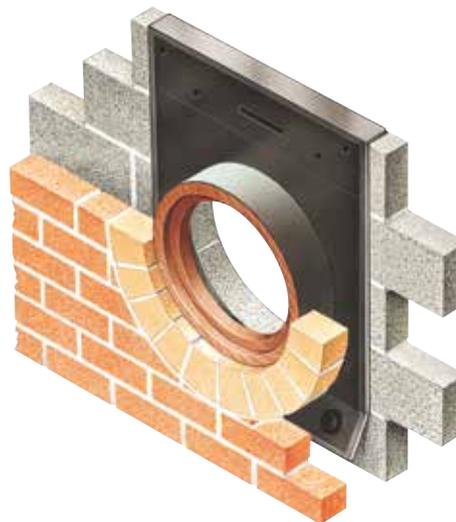
TYPE K

Circular Cavitytray for circular / bullseye openings

- Horizontal and vertical DPC in one unit
- Enveloped 360 degree protection
- Permits continuity of cavity insulation
- Frame position options
- Range of sizes
- Isolates frame edge from damp masonry
- Surround feature masonry not interrupted
- Optional thermal collar



Type K Circular
Cavitytray provides
360° protection.



Use

To correctly damp-proof circular openings.

Solution

The Type K Circular Cavitytray is manufactured from solid DPC and is supplied in one piece ready to receive the circular window. It fits snugly around the frame providing a 360 degree barrier. The circular window is immediately enveloped in a durable Cavitytray thus ensuring correct and thorough protection. The inside skin of the cavity wall and the sides of the circular frame are protected from dampness.

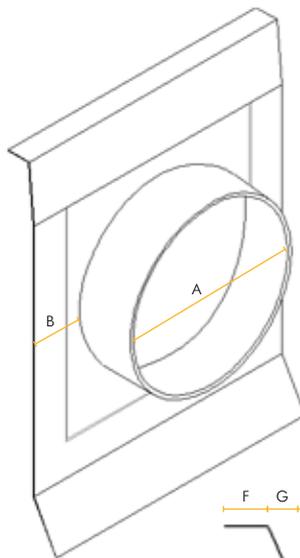
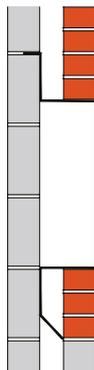
The Type K Circular Cavitytray accommodates numerous cavity widths and numerous frame positions. The Cavitytray travels downwards within the cavity until it passes the bottom of the circular frame. At this point the base projects forward so any arrested water is directed away from the inside skin.

One of the most economical locations for frame placement is mid-cavity. In this position the arrangement can also benefit a circular thermal collar. Manufactured from dimensionally stable polystyrene, the collar establishes a thermal zone around the perimeter of the entire frame.

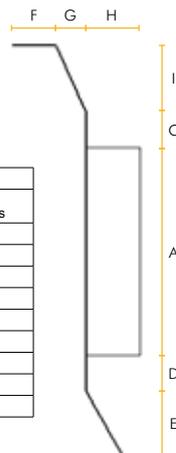
The Type K Circular Cavitytray is available in a range of standard sizes as well as being offered on a bespoke basis.

How to Order

State frame dimension and cavity width and whether accompanying thermal collar is required. See line drawing and dimensions.



Dimensions		
	Set Dimensions	Amended Dimensions
A		
B		
C		
D		
E		
F		
G		
H		
I		



Designers' Comments

PD 6997:2010 refers to the local spell index of a wall and the need to contain provisions for appropriate resistance to rain penetration. The Type K may be used in all locations satisfying 6.2.7.2. (rain penetration) and 6.2.7.3 (categories of exposure to wind-driven rain). Exposures calculated using BS 8104 or based on BRE Report 621 satisfied.

Bill of Quantity / Specification Wording

F30 -Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU
Tel: 01935 474769

Type K Circular Cavitytray to be incorporated with all circular openings within cavity walls. Build in carefully observing manufacturers' instructions to ensure watertight installation. State circular opening size + cavity wall dimensions. Number _____.

Specifications

Product name - group	Type L
Cavity widths accommodated	50mm to 150mm
Dimensions	Type L 90 – up to 100mm cavity Type L Adjustable – up to 150mm cavity
Bespoke options	Yes – for greater skin thicknesses or cavity upstands of unusual height / angle
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	No limitation > 105mm thickness
Undulating masonry faces	Compatible
Congruent with other wall elements	No known reactions
Arrested water evacuation	Use Caviweeps within arrangement
Thermal transmission of material	N/A
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size / weight	Packs of 50
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes
May be used if cavity insulation present?	Yes with compliant insulation types
CAD downloads	Yes
Design considerations	Do not locate Caviweep and Stopend in same perp joint

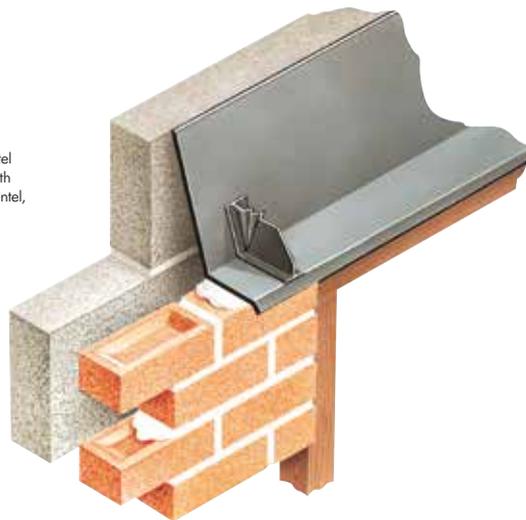
TYPE L

Type LAS Adjustable Stopend and Fixed Stopend

- Adjusts for secure fit
- Ensures consistent and compliant build detail
- Integral bonding strip in base
- Suits wide range of styles and shapes
- Stops water discharge into cavity
- Satisfies NHBC / LABC requirement



The adjustable Type L Lintel Stopends can be used with most popular shapes of lintel, cavity and DPC.



Use

Stopends for application onto lintels, DPCs and Cavitytrays to prevent water discharging off ends into cavity.

Solution

Stopends are manufactured from polypropylene and offered in two standard sizes that suit most popular applications. The base of every stopend incorporates a butyl anchoring strip that secures the stopend in place in the nearest appropriate perp joint, which means the bonding need not be interrupted.

When fitted, discharge of arrested water is directed out of the wall through Caviweeps. The specifier may select from a range of compatible Caviweeps in various colours and style.

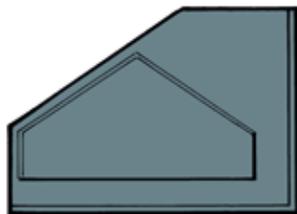
The Type L Stopend is offered in two standard sizes:

The Type L 90 has a 90 degree upstand and is used with lintels, trays and damp courses rising vertically in the cavity.

The Type L Adjustable Stopend has a concertina arrangement and can service a range of sloping upstands and cavity widths. (Guide: cavities 50mm to 100mm where angled rise is 150mm maximum or cavities up to 150mm where angled rise is 225mm.

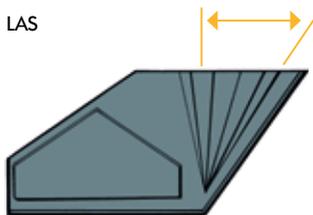


L90



Type L90 This stopend has a 90° upstand and is used with lintels, trays and damp courses rising vertically in the cavity.

LAS



The adjustable Type L can service a wide range of sloping upstands and cavity widths.

Cavities 50mm to 100mm maximum on 150mm upstand rise. Cavities to 150mm on 225mm upstand rise.

Bespoke Stopends

Stopends are available in all shapes and sizes and our tailor-made service can normally manufacture to specific requirements swiftly and deliver using overnight courier.

How to Order

State whether L 90 or L Adjustable Stopend is required x number of boxes containing 50 No.

Bespoke sizes: Provide dimensions of profile required.

Designers' Comments

The Building Research Establishment advises within DAS 98: 'If Stopends are not used on cavity trays or lintels acting as cavity trays, rain water discharge particularly in cavity filled walls may wet the inner leaf, producing dampness of internal walls'. Cavity Trays Ltd identified and developed the merit of incorporating Stopends on DPCs in 1959. The BRE / NHBC issued directives in 1989 and 1994 since when use has grown and Stopends are now a requirement in cavity wall construction.

Bill of Quantity / Specification Wording

F30 Accessories/sundry items for brick/block/stone walling Clause 485

Preformed DPC / Cavity Tray junction cloaks / stop ends

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

CAVITY TRAYS OVER OPENINGS AND OTHER OPEN-ENDED CAVITY BRIDGES

Stopends to be applied at each end of Cavity Trays over lintels and cavity bridges.

Specifications

Product name - group	Lead Fabrications
Coneslate dimensions	400mm x 415mm base Pipe diameter 100mm Pipe height 115mm Select code 3 or code 4 lead weight Roof pitch suitability 20° - 40°
New work applications	Yes
Retrofit applications	Yes
Congruent with other roof elements	No identified incompatibility
Bespoke Fabrications	Yes
Material	Lead to BS EN 12588:2006 Lead weights code 3,4,5,6,7.
Colour	Natural lead grey
Regulation compliance	Yes
CAD downloads	Yes
Design considerations	Lead surface water run-off can mark some finishes – draw attention to material finishes if appropriate

Use

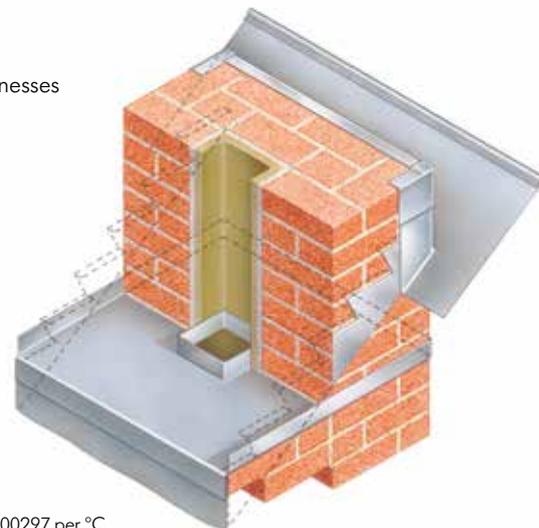
Lead remains one of the most malleable and durable materials for flashings and weather resistant construction connections. Its longevity makes lead an attractive medium where a building life in excess of the sixty years demanded by Eurocode requirements is sought. We manufacture standard and bespoke products using cold rolled milled lead to BS EN 12588:2006.

Cut Sheet Service / Roll Supply Service

Pre-cut sheets and pieces are available. We recommend observance of restricting cut sizes to within the maximum lengths and widths recommended by the Lead Sheet Association. Maximum roll size is 2.4metres x 6 metre. Weights available up to code 8.

LEAD PRODUCTS / SUPPLY

- Standard and bespoke fabrications
- BS EN 12588 material
- Widths to 2400mm (rolls)
- Various lead weights/thicknesses



Atomic weight: 207.2u

Atomic number: 82

Density: 11.34g/cm²

Coefficient of linear expansion: 0.0000297 per °C

Thermal conductivity: 34.76W/m°C

Melting point: 3274 °C

Bespoke Leadwork

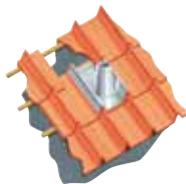
Our bespoke service offers made to measure fabrications in a variety of lead weights. We will be pleased to quote. Fixing block weather caps, head flashings and butterfly crossovers are examples.

Chimney stacks showing lead work



Coneslate

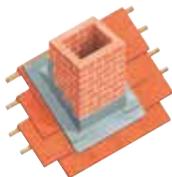
The Coneslate is an improved version of the traditional lead slate used whenever a soil pipe penetrates a pitched roof of tiles, slates or contoured roofing sheets. Its tapered sides permit the Coneslate to service a range of roof/pipe angles rather than being suitable for one pitch only. Example: 30°. Coneslate has a range of $\pm 10^\circ$ so may be used on roof pitches from 20° to 40°. The tapered sides also make stacking storage possible. Suitable for new and retrofit applications the standard base size is 400mm x 405mm with a sleeve height of 415mm to suit a 100mm diameter.



All dimensions can be varied to suit requirements.

Chimney Stack Protection

Stack Packs are offered on a made to measure basis. Front apron, back gutter, side flashings and stack integrity trays at high and low level are supplied observing LSA guidelines.



Roof Outlets

Roof Outlets with variable base dimensions and 90° drop outlets in a variety of diameters are fabricated to order



Thatched Roof Slate

The Thatched Roof Slate is supplied with an elongated collar that extends through the thickness of the thatch permitting a weather tight integration with the soil pipe above the finished roof level.



Timber Studding Window Flashing

Where a window sits within exterior stud walling, the use of a Stud Wall Window Flashing offers several advantages. Supplied as one unit, it eliminates joints at the vulnerable junctions between frame and studwork.



How to Order

Coneslates – state pitch and pipe size and number required. Bespoke: provide drawings/dimensions.

BS EN 12588:2006 Code no	Thickness mm	Weight kg/m ²	Colour Code
3	1.32	14.97	Green
4	1.8	20.41	Blue
5	2.24	25.40	Red
6	2.65	30.05	Black
7	3.15	35.72	White
8	3.55	40.26	Orange

Designers' Comments

When a roof has two different types of metal present, galvanic or bi-metallic corrosion will take place when those metals become damp or wet. One metal will remain relatively protected, whilst the other suffers accelerated corrosion. Flashings around metal roofs are ideally of the same material as the roofing surface, or of a compatible material / product that is accompanied with supporting documentation. When a roof has two different types of metal present, galvanic or bi-metallic corrosion commonly takes place when those metals become damp or wet. The metals higher on the list will sacrifice themselves for metals lower on the list.

- Zinc/Zinc/Aluminium/Aluminium
- Steel
- Lead
- Copper
- Stainless Steel

Thus run off from zinc to copper is tolerable, but not from stainless to zinc.

PD 6697:2010 stipulates lead used for flashings and weatherings must be not less than 1.8mm thick and manufactured to BS EN 12588. This is the standard and minimum thickness used in all our products with options of other lead thicknesses up to code 8 @ 3.55mm.

Bill of Quantity / Specification Wording

F30 Accessories/sundry items for brick/block/stone walling Clause 485

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

SOIL PIPE PENETRATIONS THROUGH PITCH ROOF SURFACES

Coneslate to externally flash and weatherproof around soil pipe.

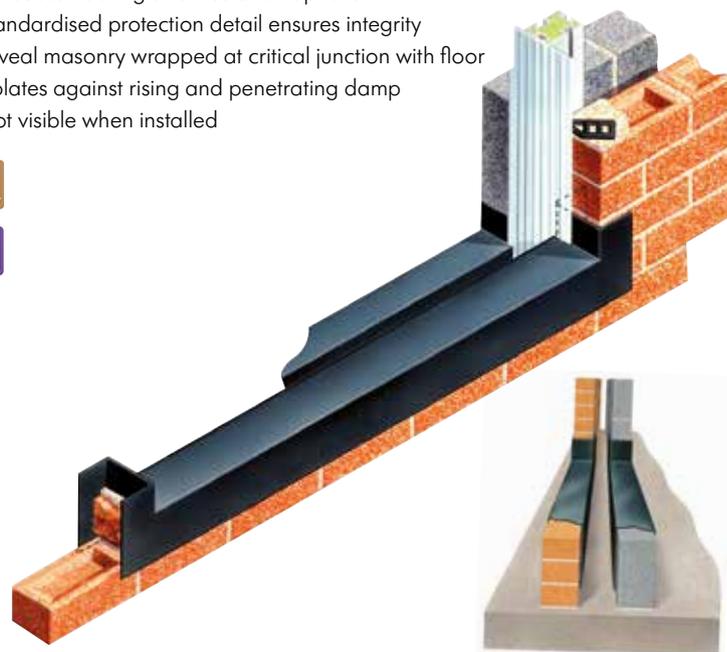
Specifications

Product name - group	Type LTT
Cavity widths accommodated	All – width does not affect functionality
Dimensions	Available to suit all opening dimensions with 105mm thickness masonry skin Other skin thicknesses available
Bespoke options	Yes
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	Split/variable style compatibility limited
Undulating masonry faces	Depends on extent of deviation
Congruent with other wall elements	Designed for Cavicloser accompaniment
Arrested water evacuation	N/A - no horizontal arrestment
Thermal transmission of material	Negligible - 0.15
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size / weight	Varies pending design
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes See Designers' Comments
May be used if cavity insulation present?	Yes with compliant insulation types
CAD downloads	Yes
Design considerations	Insulated sleeve may be introduced between adjacent Type LTTs – see range under Acoustic / Fire Sleeves.

TYPE LTT

Level Threshold Tray (Threshold Isolation Tray)

- Isolates damp masonry
- Easy interfacing of horizontal and vertical arrangements
- Increases flooring and insulation options
- Standardised protection detail ensures integrity
- Reveal masonry wrapped at critical junction with floor
- Isolates against rising and penetrating damp
- Not visible when installed



Use

To protect level thresholds against damp and ensure the adjacent vertical closing and oversite membrane maintain protective integrity at the point of convergence.

Solution

The Type LTT Level Threshold Tray encapsulates the opening masonry exposed to damp penetration or subject to damp infusion. In so doing the transmittance of damp from the exterior skin inwardly or from the skin upwardly is prevented and the flooring arrangement can safely integrate.

The Type LTT is available in a range of sizes to suit the masonry dimensions of all standard openings. A bespoke service operates for non-standard sizes.

When bedded on the exterior skin, the Type LTT acts a threshold DPC and extends downwardly over both faces of the masonry. At either end of the tray the protection rises, and wraps around the reveal faces including into the cavity. The positioning is identical on the inner skin, although the level of placement is commonly lower.

The Type LTT permits flooring, insulation and DPCs / membranes to continue over an inner skin and converge with an exterior skin that itself is isolated from dampness at the point of convergence.

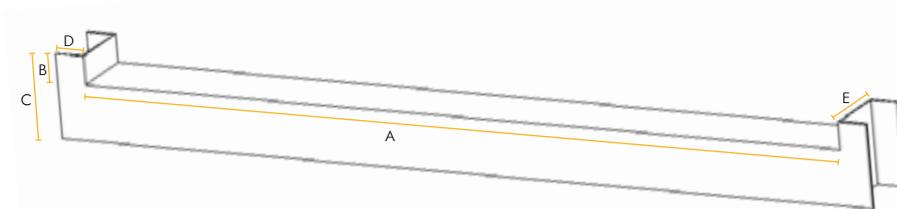
The oversite membrane is able to terminate against the downward projecting face of the Type LTT whilst the vertical closers to each side of the opening positively interface as shown.

On the external face the downward projecting section can be left in place and will be hidden by any close-fining ramp/entry path. The reveal wraps may be trimmed to visually suit. Alternatively the section may be removed, leaving just a small protective bedding lip (as highlighted in BS 5628).

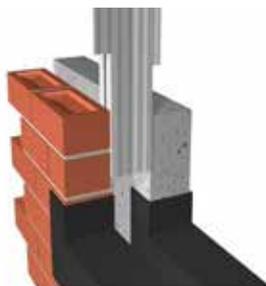
Where the opening is very wide, this product is supplied in two or more interconnecting sections for ease of carriage and installation.

How to Order

Advise masonry to masonry opening dimension + skin thickness. State whether downward projections should be increased in size.



Type LTT trimmed back awaiting ramp



(Notching the closer face permits it to continue downwardly below the Type LTT level, so it terminates below opening level in the usual manner).

Dimensions		
	Set Dimensions	Amended Dimensions
A		
B	75mm	
C	225mm	
D	75mm	
E	105mm	

Designers' Comments

BS 8102 provides a Code of Practice for the protection of below ground structures against water permeation. The Type LTT whilst technically a cavity wall DPC, performs two levels below and above promoting combined protection as highlighted under 6.2.2. An option acoustic/thermal barrier may be incorporated between Type LTT skins to raise the thermal integrity. See Radon section for thresholds with gas control measures.

Bill of Quantity / Specification Wording

F30 Accessories/sundry items for brick/block/stone walling Clause 485

Openings in external cavity walls of building. Bed across threshold prior to introduction of door sill/frame. Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type LTT Level Threshold Tray to suit opening width of _____ and cavity wall dimensions of _____.

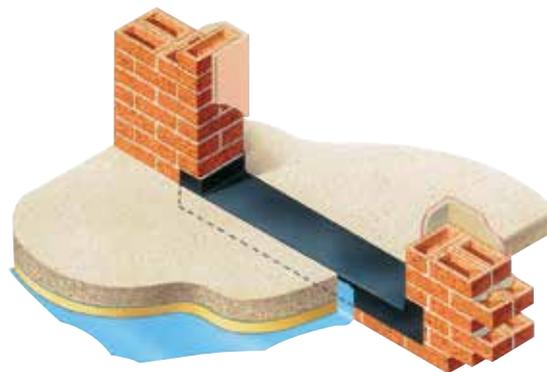
Specifications

Product name - group	Type LTT
Cavity widths accommodated	All – width does not affect functionality
Dimensions	Available to suit all masonry thicknesses and opening dimensions
Bespoke options	Yes
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	Split/variable style compatibility limited
Undulating masonry faces	Depends on extent of deviation
Arrested water evacuation	N/A - no horizontal arrestment
Thermal transmission of material	Negligible - 0.15
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size / weight	Varies pending design
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes See Designers' Comments
May be used if cavity insulation present?	Yes with compliant insulation types
CAD downloads	Yes
Design considerations	Insulated sleeve may be introduced between adjacent Type LTTs – see range under Acoustic / Fire Sleeves. Provides easy way of enveloping and thus establishing a protective separation barrier against damp to walls of non-standard thicknesses

TYPE LTT - REMEDIAL / RETROFIT

Encapsulation DPC when extending building / breaking through new opening

- Introduce the missing protection where exterior wall is broken through
- Reveal upstands wrap and protect
- Guards against rising dampness
- Protects when floor is extended
- Not visible upon completion of works



Use

To encapsulate and isolate an exterior wall at floor level where it is exposed following the breaking through of a new opening in that wall to link into an extension / building attachment.

Also to encapsulate and isolate a solid exterior wall at floor level to permit the interfacing with new building works without damp transference (where a 9 inch (225mm) solid wall is exposed across a new opening).

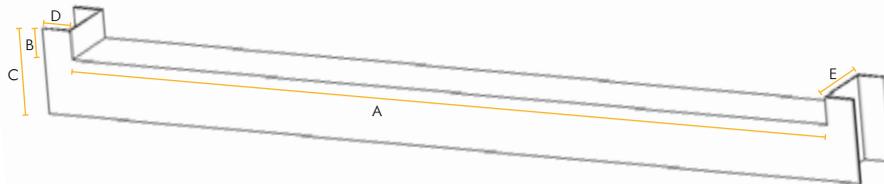
Solution

A variation of the Type LTT Level Threshold Tray described on the previous pages is now available in dimensions to suit alternative wall thicknesses, permitting it to be used in conversion, alteration and extension works of an older property with solid original walls.

Such works often require the complete removal of a traditional 9 ins solid wall from within the building, or the drawing of a new opening through a 9 ins solid external house wall. In both instances the introduction of an isolating tray below floor level provides an effective way of ensuring damp transference is prevented by wall encapsulation. This three-dimensional approach effectively 'gloves' the masonry. The new works may safely interface, despite the damp control effectiveness of the wall being an unknown entity.

How to Order

Complete the dimensions drawing. This product may be supplied in two or more sections where an exceedingly wide opening is required. See data panel for dimension limits.



Dimensions	
A	
B	
C	
D	
E	

Designers' Comments

When breaking through an exterior solid or cavity wall, the original damp course is commonly cut through, exposed or compromised. The Type LTT ensures damp-protection is reintroduced across the opening and the protection rises up and wraps the reveals, recognising weaknesses that otherwise exist as identified in LABC 12.1.3.3 / NHBC 'Making Changes to Your Home' - HB1838 05/16.

BS 8102 refers to physical barrier protection applied within the structure. Where the protective medium is reliant on adherence to the substrate the resultant performance is affected if the substrate surface is unsuitable, unstable or cracks. Using a shaped Type LTT tray that gloves the substrate rather than becomes part of the substrate offers an alternative independent approach.



Bill of Quantity / Specification Wording

F30 Accessories/sundry items for brick/block/stone walling Clause 485

Openings in external solid walls of building and where solid walls removed within building

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type LTT Level Threshold Tray to suit _____ (overall thickness of wall) and opening width of _____.
Number _____.

Specifications

Product name - group	Type M
Cavity widths accommodated	From 50mm up to 160mm
Dimensions	900mm
Bespoke options	Yes
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	See Type E
Masonry skin styles	Trays available for all styles
Undulating / split masonry faces	Usually compatible
Curved wall on plan applications	Yes – see Curved Wall entries
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Via Caviveeps (selection) in perp joints
Thermal transmission of material	Negligible
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size / weight	Individual / 400gms
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes can be used to satisfy arrestment
May be used if cavity insulation present?	Yes
CAD downloads	Yes
Design considerations	Upstand positioned against inner skin provides optimum protection where cavity insulation is present

TYPE M

For use over meter boxes

- Self-supporting upstand adjusts to cavity widths
- Traditional or timber frame construction
- Unobstructed cavity compartment area
- Ensures compliance with guidance standard



Type M Cavitytray for use over meter boxes.



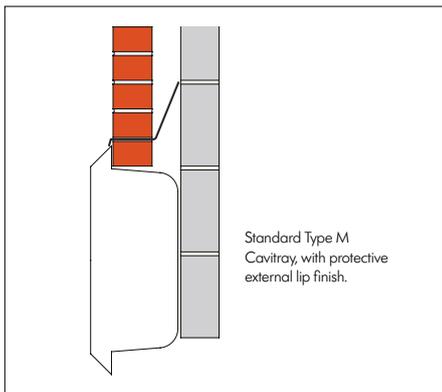
Use

To provide protection against damp where a standard meter box impinges the cavity and services enter.

Solution

The Type M Cavitray provides horizontal protection against damp penetration where a cavity wall accommodates an electricity or gas meter consumer supply unit.

The Type M Cavitray is manufactured from polypropylene and supplied with a hinged cavity upstand that adjusts to protect the cavity width encountered. Water discharge off the ends of the Type M is prevented by integral stopends.



For the stopends to coincide with masonry perp joints may necessitate the tray being slightly off-centre, but it is sufficiently long to ensure cover is maintained, and the tray is not visible once built-in.

Water discharge off the ends of the Type M is prevented by the application of Type L Stopends. Evacuation of water is instead directed through Caviweeps located in perp joints.

The Type M Cavitray does not require building into the inner skin that therefore remains unperforated.

How to Order

State number and size required.

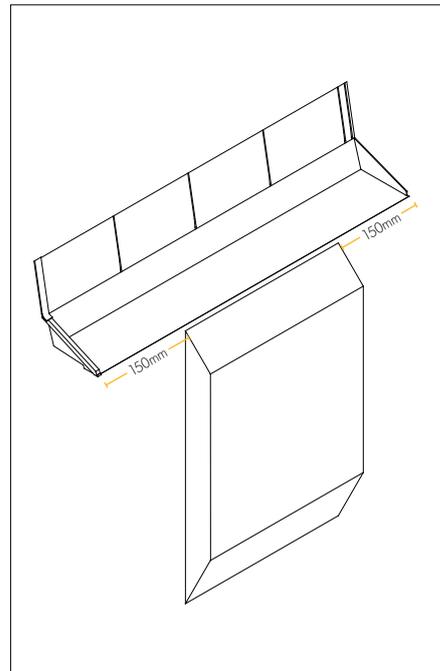


Type M meter box Cavitrays are available to suit standard and non-standard service point boxes. All models permit easy compliance of NHBC 6.1, table 9 and LABC 9.4.1.

Designers' Comments

NHBC Standards have qualified that where a meter box is not protected by a roof at an appropriate level a DPC tray should be provided. This is supported by BS 5628 and PD 6697:2010 that qualify cavity wall design should be based on the assumption that water penetrates the outer leaf of the wall, even if it is rendered.

LABC Technical Manual advises use of cavity trays, weep holes and stop ends (integral on the Type M) to control the build up of water within a cavity where the cavity is bridged by recessed meter boxes LABC 71.3.



Tray extends 150mm beyond each side of a standard meter box

Bill of Quantity / Specification Wording

F30 - Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type M horizontal Cavitray with European Technical Approval to be installed in cavity wall above meter boxes. Build in carefully observing manufacturers' instructions. Type M number _____.

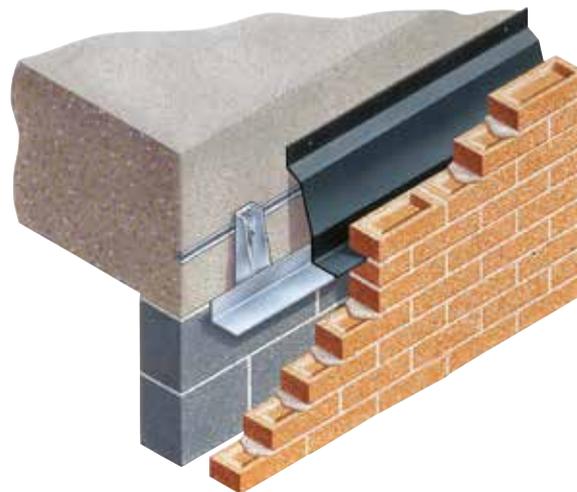
Specifications

Product name - group	Masonry Support Cavitytray System
Cavity widths accommodated	From 50mm up to 150mm
Dimensions	Lengths @ 2440mm Profile dimensions vary to suit support system type and cavity width.
Bespoke options	Yes
Traditional construction compatible	Yes
Timber frame construction compatible	N/A
New work applications	Yes
Retrofit applications	No
Masonry skin styles	Most with pistol or full base on steel
Undulating masonry faces	Compatible
Curved wall on plan applications	Yes – see Curved Wall entries
Congruent with other wall elements	Analysed during bespoke preparation
Arrested water evacuation	Via Caviweeps (selection) in perp joints
Thermal transmission of material	Negligible – 0.15 – 0.17
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size / weight	Varies pending design
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes can be used to satisfy arrestment
May be used if cavity insulation present?	Analysed during bespoke preparation
CAD downloads	Yes

MASONRY SUPPORT

Cavitytray Systems

- Maximises DPC protection against water ingress
- Pre-shaped to match support system
- Consistent shape and build detail
- Clear cavity compartment area



Use

To provide DPC protection where masonry rises off a metal support system.

Solution

When constructing off a masonry support system, the DPC is commonly incorporated at a higher level than is ideal. This is because of the difficulty in bringing together and maintaining a consistently profiled relationship using roll material on steel. The DPC protects, but does not protect to the maximum extent. Water remains able to ingress into the steelwork.

Masonry Support Cavitytrays are semi-rigid DPCs supplied preformed in ready-to-use lengths. They are specifically designed to integrate with whatever masonry support system is being used. Cavitytrays locate onto the steelwork, thus affording full protection. Trays are self-supporting within the cavity and usually secured against the inner skin using accompanying Cavistrap.

Type Z Cavistrap is manufactured from semi-rigid PVCU and is profiled to provide consistent pressure to hold the top of the Masonry Support Tray in place. See Type Z Cavistrap product entry for further details.

Where some types of pistol bricks are used, the base terminates at the steel support edge.

Paradoxically, if building-in the tray several courses higher is considered acceptable because the specific choice of metal support system is appropriately resistant to water tracking, the Cavitytray system can still be deployed at this higher level, and the benefits of promoting a preformed consistent shape used to advantage.

Adjoining lengths and mitred angles are readily linked using sealing strip. Stopends and special fabrications are available to complement the system.

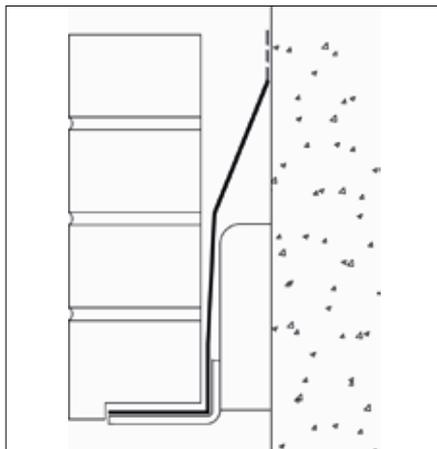
How to Order

Submit drawings for profile and application suitability. Schedules will be prepared. Alternatively state specific profile you require.

Designers' Comments

The Masonry Support Cavitytray was originally jointly developed with Ancon. It was identified the preformed Cavitytray offered parallel running with the angle of the steel support bracket, and this made it possible to maximise the extent of the cavity compartment area without distortion. In comparison, roll material can misshape if brackets deflect at intervals. Water evacuation via Caviweeps provides opportunity to ventilate the cavity – and so doing aids the equalising of the pressure differential in the cavity that in turn influences the masonry receptiveness to water penetration. Compatible Caviweep presence promotes wet masonry to discharge and dry out rather than remain damp. Thus the likelihood of water retention and discolouration banding can be minimised.

The building-in requirements of the masonry support manufacturer must always be adhered to and tying-in observed to ensure a satisfactory securing and anchoring of the external skin.



Bill of Quantity / Specification Wording

Masonry Support Cavitytray System by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769).

For use where external masonry skin rises off masonry supports. Measured run in metres. Request liability/conformity document upon completion.

Specifications

Product name - group	Type P
Cavity widths accommodated	From 50mm up to 175mm
Dimensions	2440 x 25 lip x 110 x 150mm drop Angles 450mm x 450mm Allow 150mm glove lap to join
Bespoke options	Yes - all skin & construction variances
Traditional construction compatible	Yes
Timber frame construction compatible	Modified version
New work applications	Yes
Retrofit applications	Necessitates parapet rebuilding
Masonry skin styles	No known limitation
Undulating / split masonry faces	Yes – but inboard face must be aligned
Curved wall on plan applications	Yes – see Curved Wall entries
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Cross-cavity deflection / gravitation
Thermal transmission of material	Negligible – 0.15 - 0.17
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size / weight	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes can be used to satisfy arrestment
May be used if cavity insulation present?	Functionality not affected
CAD downloads	Yes
Design considerations	Flashing must be able to drop vertically and unhindered. Consider increasing the base and lip dimensions if an alternative flashing style is used.

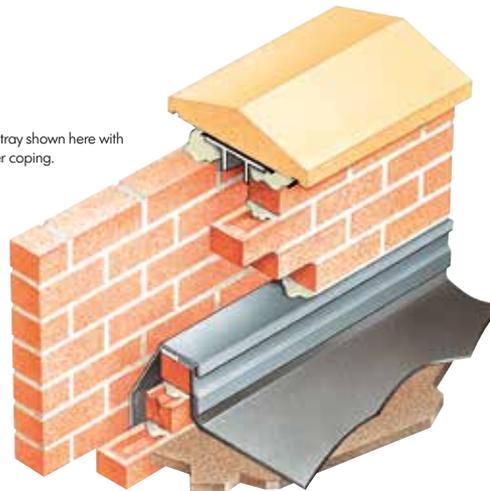
TYPE P

Cavitray for Parapet Walls

- DPC integrity regardless of wind direction
- Enhanced parapet structural stability
- Takes up cavity variances
- Unobstructed cavity compartment area
- Lip protects flashing bedding course
- Outward stepping profile stops under-tracking
- Eliminates course interruption and band banding



Type P Cavitray shown here with Type J under coping.



Use

To provide protection against damp penetration where a parapet wall rises above roof level.

Building Regulation
compliance and
structural continuity
of masonry skin

Solution

Both skins of a parapet wall are outer skins, and accordingly accept moisture. The purpose of the Type P Cavitray is to arrest water penetrating the exposed exterior 'inboard' skin of the parapet before it becomes an internal wall below the roof level. The Type P is a horizontal DPC, manufactured from semi-rigid polypropylene. Supplied in preformed lengths and angles, the Type P permits parapet protection to be consistently established to provide a long service life.

The traditional approach to protecting parapets necessitates a DPC built into one skin crossing the cavity at an angle and being supported in the skin opposite. This weakens the structural arrangement. In contrast the Type P is self-supporting and requires building into one skin only. Accordingly the structural stability of the parapet is enhanced.

Type P Cavitray lengths and angles require bedding in mortar and adjoining sections glove lapped 150mm. A lead flashing positioned as detail under the inboard slip should be incorporated when the Type P is installed.

When the parapet is completed, water originating from the skin adjacent to the roof is directed to converge with water penetrating the parapet's outer skin where it gravitates in the normal manner.

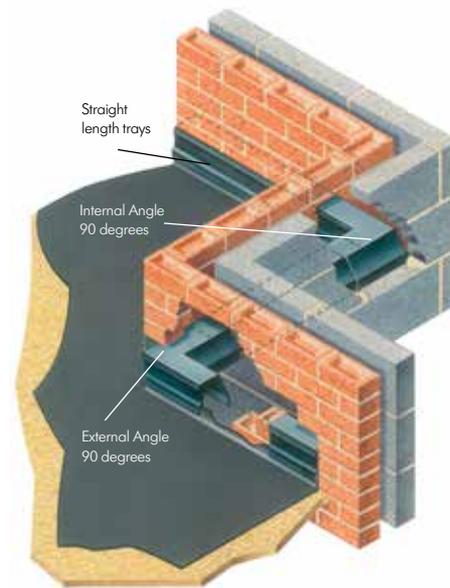
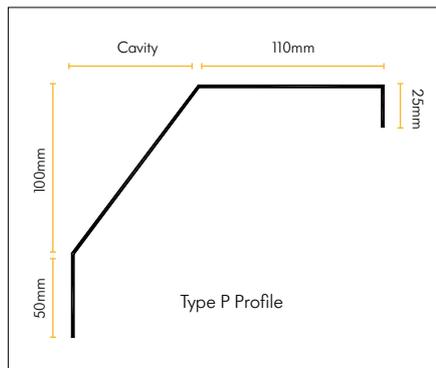
How to Order

State number of lengths and angles allowing for 150mm laps. Alternatively submit drawings for us to schedule.

Designers' Comments

Early British Standards showed the DPC in a parapet stepping inwardly. Cavity Trays Ltd submitted evidence that showed an outward step was safer and eliminated the opportunity for penetrating water to track on the underside of the DPC towards masonry that had become internal. Subsequent Standards were changed and illustrated the profile we advocated.

PD 6697:2010 illustrates the correct outward stepping profile (page 47) but the specification on page 46 contradicts advising stepping 'towards the inner or outer part of the wall'. We suspect it was not intended to suggest both options are appropriate and reference to an inward sloping arrangement should be deleted from PD 6697:2010? An inward-sloping profile can support water under-tracking following settlement along the bedding course and is unacceptable within any parapet.



Bill of Quantity / Specification Wording

F30- Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type P horizontal Cavitray to be installed in all parapet walls at designated height above roof level. Build in carefully incorporating flashing to dress over roof upstand as work proceeds observing manufacturers' instructions to ensure watertight installation. Type P metres run _____. Type P Internal angles _____. Type P External angles _____.

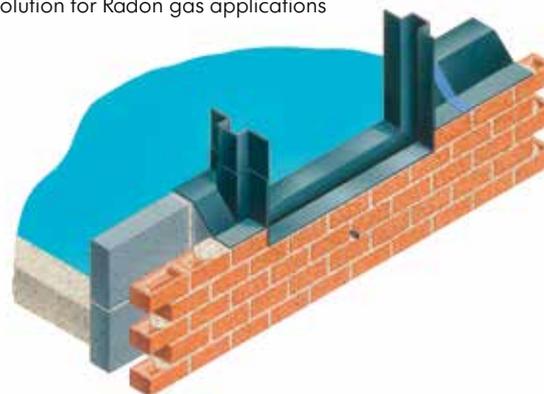
Specifications

Product name - group	Type PAT Protective Adjustable Threshold
Cavity widths accommodated	Cavity widths up to 150mm
Dimensions	All opening widths accommodated
Bespoke options	Yes
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	Split/variable style compatibility limited
Undulating masonry faces	Depends on extent of deviation
Congruent with other wall elements	Designed for Cavicloser accompaniment
Arrested water evacuation	N/A - no horizontal arrestment
Thermal transmission of material	Negligible - 0.15
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size / weight	Varies pending design
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes See Designers' Comments
May be used if cavity insulation present?	Yes with compliant insulation types
CAD downloads	Yes
Design considerations	Side connectors to suit all profiles of cavity barrier. Flexibility - Integration at different levels either side of opening possible should ground and construction levels dictate.

TYPE PAT

Protective Adjustable Threshold

- Contaminated Land Application when integrated with adjoining elements
- Rising gas arrested and controlled
- Downward gravitating water evacuated
- Integrates with reveal Caviclosers
- Ensures uninterrupted dual protection
- Adjusts to construction course levels
- Compatible with numerous wall barrier profiles
- Designed solution for Radon gas applications



Use

Where gas barriers are present within the external walls of a building and the door opening levels punctuate the arrangement, there is a requirement to maintain gas-protection. Commonly door openings are at a different level (access requirements) resulting in additional discontinuity of protective arrangement against rising gas. The Type PAT provides both gas and water protection under and to the sides of every opening and does so in a way that eliminates discontinuity and provides adjustable connection with adjacent barriers.

(this entry to be read in conjunction with section dealing with Radon /contaminated land)

Solution

The Type PAT – Protective Adjustable Threshold – is a three-dimensional DPC unit that is bedded within the external wall opening.

Integration between wall barriers and the Type PAT is achieved using the adjustable side connectors that attach to the Type PAT and slide up and down to the requisite level. The cavity face of each connector has a projecting connection profiled to match that of the external wall DPC/barrier profile. Once in position, all lapping sections are lap-sealed and gas-tape bonded. The footprint membrane is integrated in the usual way to maintain gas-resistant integrity.

The reveal closers (compatible cavicles available) descend into the cavity-projecting sides of the Type PAT, terminating within its channel base in which are located flow-out drainage conduits*. This channel base can additionally accommodate an optional insulating strip if thermal enhancement is sought under the sill.

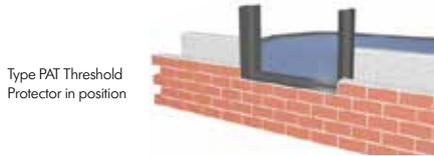
The Type PAT is supplied in one or more connecting sections to suit the structural opening dimensions.

The side connectors are supplied with different projecting profile options to match the wall barrier profile selected by the designer.

*Part C, page 37. 5.32 describes closers having fins, these allow water to discharge at the closer base.

How to Order

We recommend you use our free scheduling service. Alternatively, state structural opening, cavity width & provide wall barrier profile dimensions.



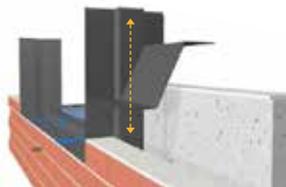
Type PAT Threshold Protector in position



Side Connector with Rise & Fall profile.



Side connector lazy Z profile



Side connector attached to Type PAT ready to link with cavity barrier



Site form barriers amalgamating with structural openings are commonly poorly executed, of questionable gas resistance and permit damp permeation.

Bill of Quantity / Specification wording

F30 -Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU
Tel: 01935 474769

Type PAT Protective Adjustable Threshold to all ground floor openings with adjustable side connectors linking and sealing with cavity gas barriers and oversite membrane integrating with Type PAT to provide continuous protection. Openings number and dimensions _____.

[Protective Adjustable Threshold, Protective Adjustable Cavity Tray, Rise and Fall Cavity Barrier and Rise and Fall Protection Barrier are trade names of Cavity Trays Ltd]

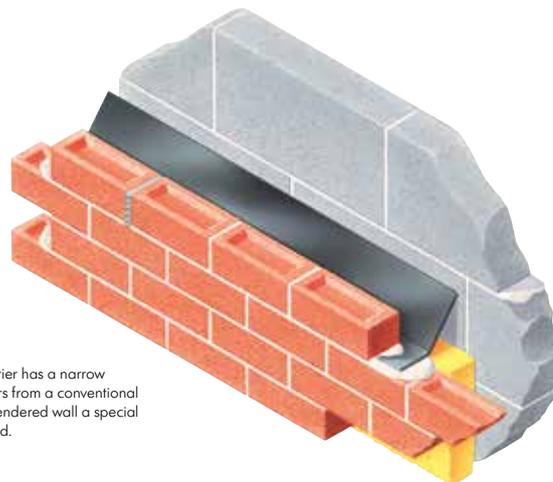
Specifications

Product name - group	Type Q
Cavity widths accommodated	50, 75, 85, 100, 125, 150mm
Dimensions	2440mm x 75mm x 150mm rise
Bespoke options	Yes – base dimensions are variable
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	No – see Type E
Masonry skin styles	No known limitation
Undulating masonry face	Compatible
Curved wall on plan applications	Yes – see Curved Wall entries
Jointing method	150mm glove lap
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Select Caviweeps from range offered
Thermal transmission of material	Negligible
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes
May be used if cavity insulation present?	Insulation should not affect functionality
CAD downloads	Yes
Design considerations	Rendered walls must incorporate evacuation provision - Designers' Comments

TYPE Q

Arresting Barriers

- Traditional or timber frame construction
- Accommodates cavity widths variance
- Rigid profile eliminates sagging or misplacement
- Clear cavity compartment area



The Type Q Arresting Barrier has a narrow base dimension and differs from a conventional horizontal Cavitytray. In a rendered wall a special wider version must be used.

Use

To arrest water-wash within the cavity and thus minimise water penetration impact to specific areas or features.

Solution

The function of Type Q Arresting Barriers is to invisibly arrest and reduce water-wash. The area of wall below barrier level is still damp and receptive to rain penetration, but the accumulation of water gravitating from above is lessened. Influencing and controlling water volumes within a wall in precise locations can stabilise impact and demands on adjacent protective measures.

Type Q Arresting Barriers are manufactured from semi-rigid Polypropylene DPC with a Secutex textured finish. Barriers do not extend through the full depth of a skin but stop short of the external face so there is no visual presence. Barriers are manufactured to suit specific cavity widths but do offer some flexibility to tolerate impingements within the cavity. Barriers are not suitable for use with flashings.

Type Q Arresting Barriers are commonly used in gable ends where the cavity insulation terminates at the adjacent plate level, so protection along the top of the insulation across the gable is necessitated. Arrestment of water prior to mullions, stone or solid features within a cavity wall is recommended to minimise saturation potential, especially if those features introduce and funnel the disbursement opportunities because of piers, arches or opening proximities.

How to Order

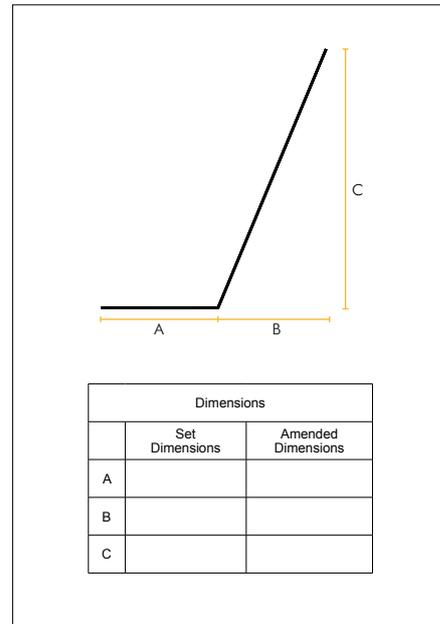
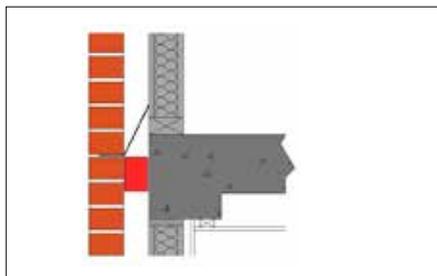
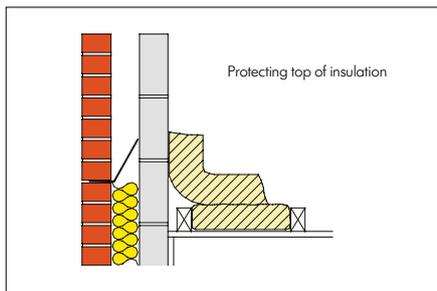
Standard- State cavity width required and number of lengths allowing for 150mm laps.

Advise any requirement for angles.

Bespoke – Advise profile required, dimensions, cavity width and number of lengths, allowing for 150mm laps. Advise any requirement for angles.

Designers' Comments

All externally rendered walls will suffer fissures and cracks as a consequence of expansion and contraction during the lifetime of the structure. Always provide rendered walls in which Arresting Barriers are incorporated with a means for water to escape. Failure to do so can result in water 'banding' and eventual spalling as a consequence of freezing temperatures. See discreet range of Caviweeps that provide functionality with minimal visual impact. Where structures exceed 12 metres in height consider use to introduce equilibrium – BS 5262. 6.2.7.4.2.8. Appropriate damp-proofing measures should be taken where recessed band courses create corresponding intrusions into the cavity – PD6697.



Bill of Quantity / Specification Wording

F30 -Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type Q Arresting Barrier to be installed in cavity at designated height above firestops / where cavity insulation terminates partway up wall. Build in carefully observing manufacturers' instructions to ensure watertight installation. Type Q metres run _____. Type Q Internal angles _____. Type Q External angles _____.

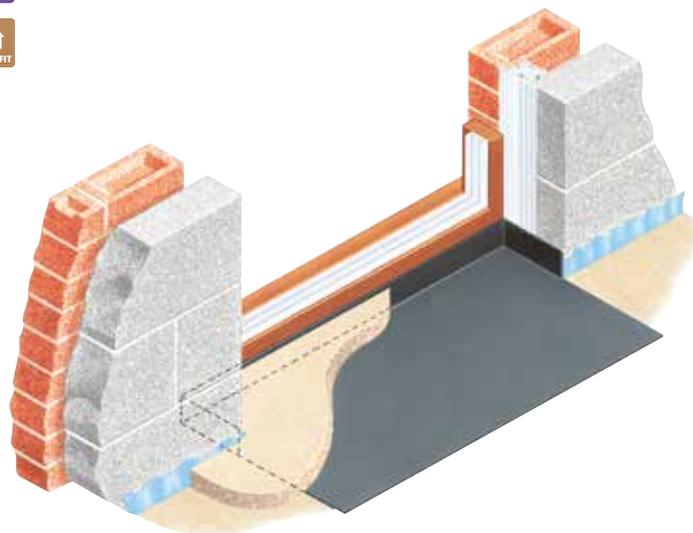
Specifications

Product name - group	Type TST
Dimensions - standard popular widths	910mm, 932mm, 980mm, 1010mm, 1200mm, 1500mm, 1810mm, 2400mm
Dimensions - standard depth – inboard	485mm (can be trimmed)
Dimensions – sill upstand	115mm (can be trimmed)
Dimensions - reveal upstand	175mm (can be trimmed)
Bespoke options	Yes – all sizes can be chosen
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes if access possible
Masonry skin styles	No known limitation – flat finishes
Undulating masonry faces	Reveal faces must be flat
Congruent with other wall elements	Subject to specification check
Arrested water evacuation	None – barrier function only
Thermal transmission of material	Negligible
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	To aid correct status

TYPE TST

Threshold and Sill Overlay Tray

- Standardised ready-shaped solution for openings
- Ensures continuity of oversite membrane protection
- Not susceptible to misplacement or damage



Use

To alleviate damp protection shortfall at door openings where horizontal and vertical DPCs merge.

Solution

The Type TST Tray is a moulded three-sided DPC overlay tray designed for use at door openings. It is positioned on the oversite prior to the laying of the screed. Its function is to ensure the damp external skin masonry and the vertical closing DPCs are isolated from and cannot connect with the screed. The Type TST ensures a protective layer exists against the reveals and the sill.

The base of the Type TST Tray is enveloped under the screed for the full width of the opening and provides an effective extension of the oversite membrane. It addresses localised DPC and membrane misplacement and aids regularisation of damage to these mediums that commonly occurs through foot traffic during the course of construction.

Where sills of low or minimal rise are incorporated, it can be particularly beneficial in establishing a positive interfacing.

The Type TST Tray provides the house builder with a means of constructing every door opening with the damp protection integrity intended and is used by some as a means of quality assurance control.

Designers' Comments

The original BRE investigation of traditional housing identified 955 faults and 11th on the list was missing/faulty damp courses to door sills and thresholds. Textbook methods do not take into account damage that occurs to membranes left protruding especially at door openings and in particular where the vertical element interfaces. The Threshold overlay tray can re-establish the intended arrangement when incorporated at openings and is used by leading house builders as a means of maintaining trouble-free consistency of construction.

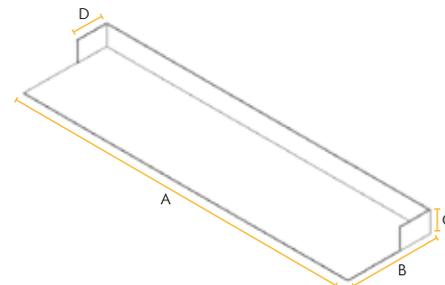
How to Order

State width, depth and return dimensions. Product supplied with 75mm upstand unless otherwise stipulated.



Whilst threshold configurations vary, all share the requirement of having to merge horizontal DPC with vertical closer DPC with oversite membrane. Two predominant weak spots occur:

The corner of the inner leaf where the membrane rises up is commonly cut or split and the merging of vertical DPC/closer where it meets the horizontal DPC at sill level is not watertight.



Dimensions		
	Set Dimensions	Amended Dimensions
A		
B	485mm	
C	115mm	
D	175mm	

Bill of Quantity / Specification Wording

F30 -Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU
Tel: 01935 474769

Type TST Threshold and Sill Overlay Tray to be incorporated at all door openings prior to laying of screed, ensuring integration with adjacent protective elements, observing manufacturers' instructions. TST width _____mm x depth _____mm with _____mm returns x _____mm upstand.

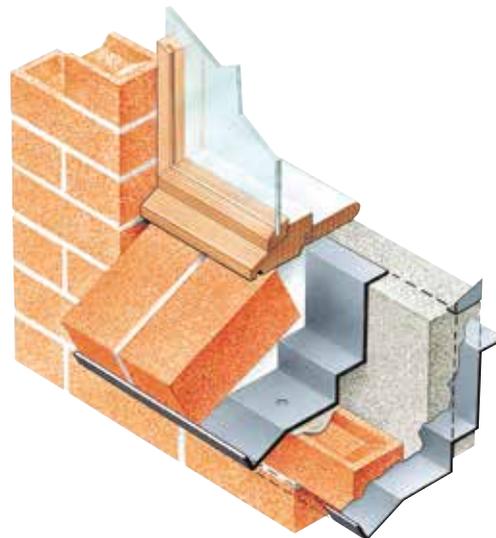
Specifications

Product name - group	Type U
Cavity widths accommodated	From 50mm up to 200mm
Dimensions	To suit to up 2440mm max in one length Glove lap to form longer runs. See examples of most popular profiles
Bespoke options	Yes designs / profile tailored to suit project
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Possible with reconstruction
Masonry skin styles	No known limitation – flat finishes
Undulating masonry faces	Compatible
Curved wall on plan applications	Yes – see Curved Wall entries
Jointing method	Glove lap 150mm if over 2400mm
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Integral transient drainage apertures
Material - thermal insulation	Inskorfoan polystyrene BS 3836. 0.033
Material - Sill	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes can be used to satisfy arrestment
May be used if cavity insulation present?	Does not affect tray placement position
CAD downloads	Yes
Design considerations	Overcomes common failure of sill DPC installation not rising the full height to match sill dimension.

TYPE U

Undersill Tray

- Shaped DPC Cavitray
- Integral sill alignment facility
- Ensures consistent build detail
- Selection of profiles
- Traditional or timber frame construction



Use

To aid masonry sill formation. To protect sills from permeating dampness inwardly.

Solution

The Type U Undersill Tray is a preformed DPC unit that acts as an alignment guide when constructing a sill in brick, tiles or stone and once built-in provides the protection demanded to arrest damp penetration.

The Type U Tray can be moulded in a variety of profiles to suit the style and size of sill required.

Once bedded in position, the sill bricks or tiles can be laid using the profiled tray as an integral guide that is enveloped within the construction. To the front of the tray is a projecting upturned lip to provide accurate tile or brick sill alignment. This lip is detachable once the completed sill mortar has set.

The Type U Tray is designed to permit transient drainage through apertures moulded within its base bedded in the exterior masonry skin. To each end of the tray moulded stopends prevent discharge into the cavity.

Trays are suitable for use in both traditional and timber frame construction. Sill design can accommodate differential movement between inner and outer skins in the form of a horizontal expansion gap as highlighted within NHBC Performance Standards (Such movement can be quite pronounced between masonry and timber frame). Being a link between both structural skins, sill rotation at this point (axis) can thus be addressed, if specifically requested.

A constructed sill will normally terminate in line with the structural opening. Its ability to expand and contract unhindered (compared with building into the adjacent masonry) reduces the likelihood of subsequent cracking occurring. Projection into the adjacent masonry is possible where expansion and contraction extremes are not present.

Sill Angle

The angle (shape) of any tile or brick sill is dictated by the height of the Type U inboard rise. The height can be

selected when ordering, giving the specifier opportunity to choose the most appropriate angle to suit the intended appearance. Please state if you require the standard 40mm rise measurement shown in the profile to be changed. Alternatively, if your requirement is for a bespoke undersill tray profile, please submit dimensioned drawing.

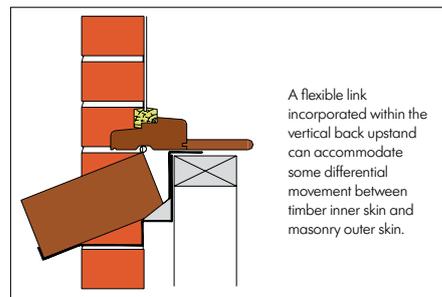
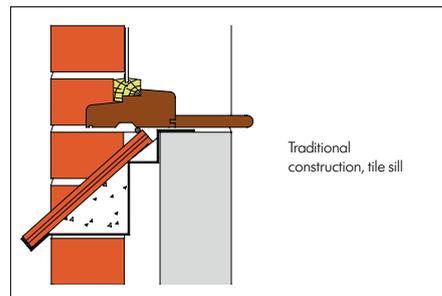
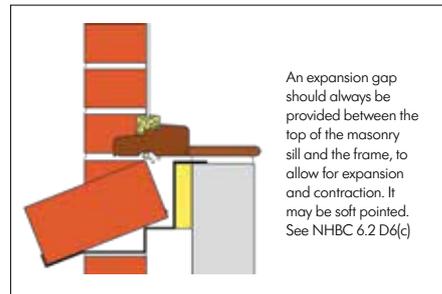
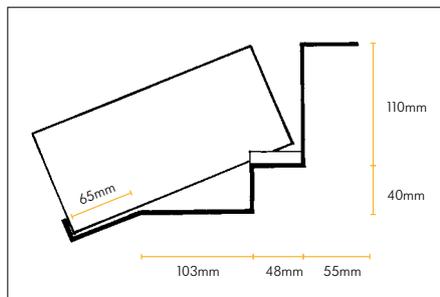
The inboard rise provides support for the back of the sill and then projects horizontally inwardly, rather than continuing parallel with the sill angle. This design permits mortar to infill under the laid sill at the back of the formation.

Sill solidity and strength is increased considerably compared with arrangements that do not accommodate horizontal infilling. (Also anticipates trades may lean ladders against sills during lifetime of structure.)

Timber Frame Construction

A flexible link can be incorporated within the vertical back upstand of the tray adjacent to the face of the timber inner skin. This provides a cushioned rather than a rigid relationship.

The entire front section of the Type U which projects forward of the masonry line may be cut off, once the mortar has cured.



TYPE U (CONTINUED)



The inboard rise dictates a preselected angle of sill when the sill bricks or tiles are bedded against it. Increasing mortar fill under a tiled sill is an alternative option.

How to Order

Popular profiles – State profile, whether sill matches masonry opening width or extends, cavity width, insulation option and lengths required.

Designers' Comments

A brick sill subjected to a 20°C temperature rise will expand by 0.10-0.16mm/m (millimetres per metre). Such thermal movement often results in small fissures or fractures within a sill mortar bonding joint. The benefit of the sill DPC arresting any rainwater which enters the sill detail is paramount.

Permits easy compliance with NHBC 6.1 - S4(d) and 6.2 - D4(a) (Moisture control and insulation). Exposed site classification.

The preformed rigid shape also avoids the common site problem of misplacement of conventional DPC material.

As external skin masonry dries out there is a tendency for it to slightly rise (2.5mm per storey of clay masonry) whereas an internal skin of timber will shrink and move downwards. Always anticipate and make provision for this differential movement. (UKTFA publication advice.)

It is recommended sills do not extend beyond the masonry opening. Terminating against the masonry opening will reduce the effects of differential movement. (NHBC - 6.2C)

Bill of Quantity / Specification Wording

F30 -Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type U Undersill Tray to be incorporated to window openings to act as DPC and receiving formwork into which sills are to be laid. Build in carefully observing manufacturers' instructions. Number and lengths as structural window opening dimensions.



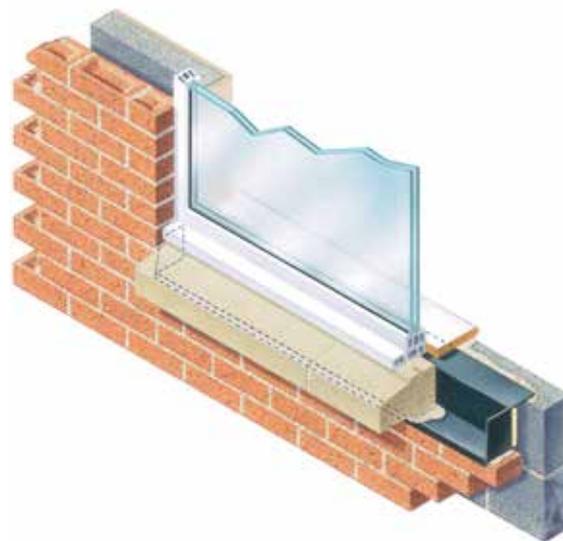
Specifications

Product name - group	Type U Undersill Envelopment Tray
Cavity widths accommodated	From 50mm up to 200mm
Dimensions	To suit to up 2440mm max in one length Glove lap to form longer runs See examples of most popular profiles
Bespoke options	Yes designs / profile tailored to suit project
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Possible with reconstruction
Masonry skin styles	No known limitation – flat finishes
Undulating masonry faces	Compatible
Curved wall on plan applications	Yes – see Curved Wall entries
Jointing method	Glove lap 150mm if over 2400mm
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Integral transient drainage apertures
Material - thermal insulation	Inskorfoan polystyrene BS 3836. 0.033
Material - Sill	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes can be used to satisfy arrestment
May be used if cavity insulation present?	Does not affect tray placement position
CAD downloads	Yes
Design considerations	Overcomes common failure of sill DPC installation not rising the full height to match sill dimension.

TYPE U UNDERSILL ENVELOPMENT TRAY

For use with stone, concrete and jointed solid sills.

- (For site-formed tile and brick sills, see Type U Undersill Tray)
- Prevents damp permeating inwardly
- Integral end upstands
- Integrates with reveal DPC
- Satisfies LABC 74.13
- Satisfies NHBC 6.1, table 9



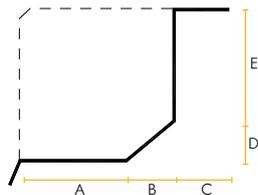
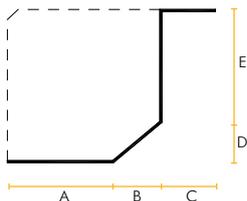
Diploma in
Bricklaying sill detail
City & Guilds (6705-23)
Level 2

Use

To prevent damp ingress inwardly via stone, concrete and jointed solid sills.

Solution

Undersill Envelopment Trays provide the requisite DPC presence in and around stone, concrete and jointed solid sills when incorporated within cavity wall construction. Manufactured from solid polypropylene, trays extend up the back and ends of the sill, and pending the construction detail, return either immediately under or a course below the sill base.



Dimensions		
	Set Dimensions	Amended Dimensions
A		
B		
C		
D		
E		



Protection of jointed sill (NHBC 6.1-S4d)

Envelopment ensures DPC interruption to block damp permeation as defined within NHBC 6.1-S4 d: 'Where a jointed or permeable sill is used (all sills in Northern Ireland and the Isle of Man), a DPC should be placed between the sill and the outer leaf, turned up at the back and ends of the sill.' LABC/Premier Guarantee 7.4.13.

Misplacement and DPC distortion can be eliminated using preformed Envelopment Sills that ensure the protective inclusion is consistent in shape and functionality. The tray end upstands cannot sag like flexible material and permit the reveal closing arrangement to positively integrate.

Envelopment Sills can be supplied incorporating a thermal break bonded to the rear of the cavity upstand. This option can be appropriate where there is no cavity wall insulation present. Envelopment Undersill Trays are supplied to customers dimensions.

How to Order

Cavity Trays will calculate your requirements upon submission of drawings and for your approval advise you what is required before proceeding further. Alternatively we will be pleased to manufacture to clients dimensions/instructions.

Designers' Comments

Envelopment trays can finish flush with the exterior face or project forward of it in the form of a small lip as defined in LABC/Premier Guarantee 7.4.13. State option required.

Where movement provision is required, soft infilling pointing is commonly recommended in a sill bed course and a projecting lip can assist soft pointing location and retention of such pointing – see below.

Forticrete and other cast sill manufacturers sometimes recommend a slip-plane is incorporated with their products to accommodate possible (thermal co-efficient) movement. Where the specialist reconstructed stone sill supplier makes this recommendation, consideration may be given to using a cavitray slip-strip to accompany the Envelopment tray. The slip-strip is laid into the base of the tray and has one textured face and one smooth face to provide the requisite relationship (see Auxiliary products).



Pending sill configuration, Envelopment trays are supplied in one or more integrating lengths.

Bill of Quantity / Specification Wording

F30 -Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type U Envelopment Tray to be incorporated to the back, ends and under jointed cast/stone sills. Build in carefully observing manufacturers' instructions. See window schedule or masonry sill ordering schedule for lengths. State number of openings and structural width _____.

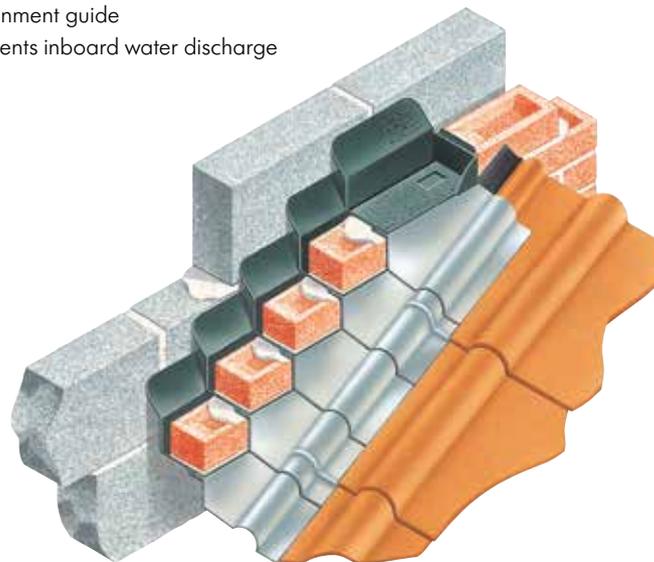
Specifications

Product name - group	Type X for Sloping Abutments
Cavity widths accommodated	50mm up to 160mm (std range)
Pitches accommodated	15 degrees to 70 degrees (std range)
Dimensions	INTERMEDIATE SIZES
	Pitch Tray
	15 - 16 degrees 380mm
	16.5 - 22 degrees 330mm
	22.5 - 26 degrees 270mm
	26.5 - 43 degrees 240mm
	43.5 degrees 180mm
	RIDGE TRAY SIZES
	15 - 20 degrees 900mm x 130mm x 192mm vert
	21 - 25 degrees 750mm x 130mm x 192mm vert
26 - 70 degrees 570mm x 130mm x 192mm vert	
Bespoke options	FLASHINGS
	Short: 75mm min > 280mm
	Long: 225mm min > 330mm
	All dimensions vary pending actual pitch
	ANGLES
	220 x 220 external 120 x 120 internal
	Yes – all heights, depths & widths
	Yes
	Yes
	Yes
Yes	
See Multicourse for non-std sizes	
See Designers' Comments for guide	
Yes – see Curved Wall entries	
No identified incompatibility	
Via Caviweeps (selection) in perp joints	
Negligible	

TYPE X

Cavitray for Gable Abutments

- High performance approved Cavitray for abutments
- Adjusts to cavity width - ensures correct relationship
- Integral anticapil features and integrity strip
- Traditional or timber frame construction
- Clear cavity compartment area - unobstructed flow
- Attached shaped flashing secured in bosem jaw
- Integral alignment guide
- Gusset prevents inboard water discharge



Approved Type X eliminate the most vulnerable point identified in the NHBC Risk Guide HB2852/08/17

Use

To provide the stepped DPC and external weathering flashing where a sloping roof abuts a masonry wall.

Solution

The Type X Cavitytray is a preformed DPC unit with an attached ready-shaped flashing. When laid in every course of a cavity wall external skin against which a sloping roof abuts, trays provide continuous stepped DPC protection running parallel with the slope. Water and dampness in the exposed masonry skin above this stepped arrangement is prevented from gravitating downwardly below it. Thus the masonry skin is wet above the roofline but remains dry where it becomes an internal wall.

The Type X Cavitytray requires building into one skin only and does not interpose the inner leaf. Each tray has a hinged self-supporting cavity upstand that adjusts to suit the cavity width. This facilitates compatibility with the cavity dimension as built - as opposed to the cavity dimension as intended.

The moulded features on every tray aid swift and accurate positioning. The mason is required to set up a chalk line matching the roof pitch and build one tray into every course with its corner on the line. This simplified installation procedure ensures all trays align and are correctly distanced.

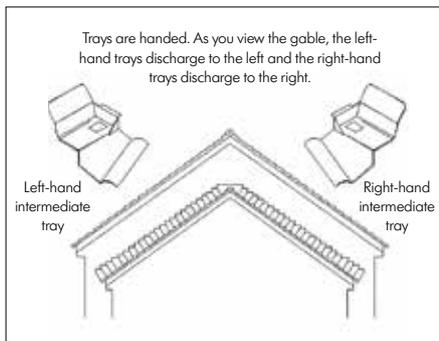
The flashing on every tray is manufactured of lead. Alternatives may be selected from our range including a synthetic flashing. Each flashing is bonded onto the tray and is shaped to suit the roof pitch.

Flashings are simply dressed when the roof finish has been completed. Short flashings are attached where dressing is over a secret gutter or soaker, and long flashings are attached where dressing is directly over a suitably profiled tile.

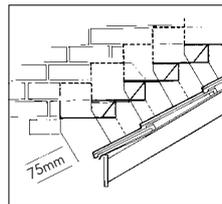
Type X Cavitytrays are suitable for use in both traditional and timber frame construction where the course size is 75mm (standard brickwork coursing).

If you require trays for alternative coursings or trays for masonry of greater thickness, please read the section dealing with multi-course trays. We are able to supply to all construction dimension requirements.

European Technical Approval has been awarded to Cavity Trays Ltd for the Type X Cavitytray and other Cavitytray systems within its range. No other UK manufacturer of trays holds this award.



Standard brickwork courses

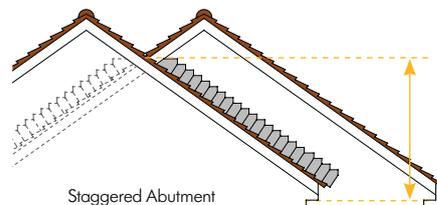
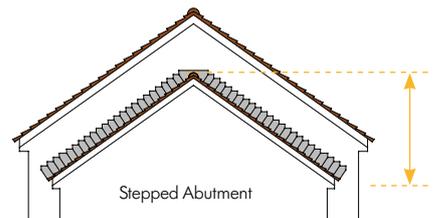
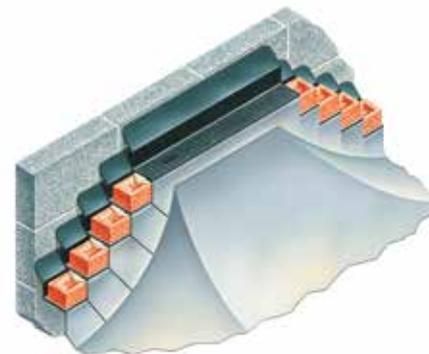


Designers' Comments

The original code of practice 121:101:1951 showed a cavity DPC arrangement with a 75mm upstand. We always considered this far too small an upstand in our experience for new work applications. Eventually the new code of practice revised the upstand height to 150mm, a dimension which is now a regulation standard. However, it is interesting to note that not all manufacturers produce to this stipulated height.

From February 2015, BS 5534 has required roofers to mechanically fix components. The use of mortar only to secure tiles and ridges is no longer acceptable. Flashings adjacent to the fixed tiles at abutments experience the same uplift and wind buffeting extremes as tiles. When you evaluate the site location, topography and determine

its exposure to wind-driven rain, consider also whether it is prudent to also secure the flashings whilst the opportunity to do so easily is available.

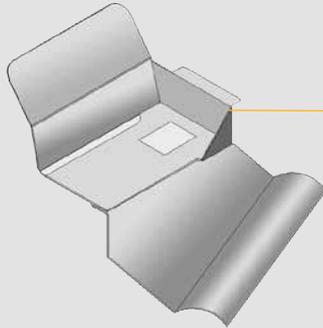


TYPE X (CONTINUED)

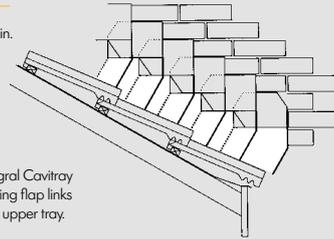
Cavitytray for Gable Abutments

Additional benefit

Unique overlapping flashing arrangement arrests any wind-driven rain.

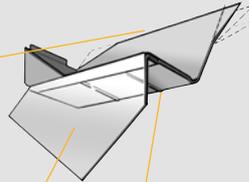


Integral Cavity sealing flap links with upper tray.



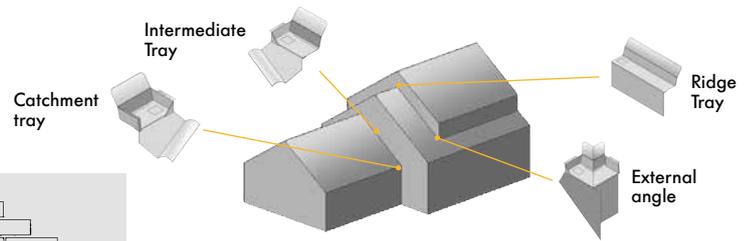
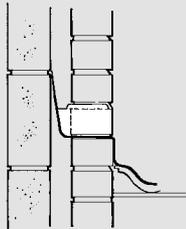
Adjustable cavity upstand accommodates the 'as-built' cavity status.

Corner water-check prevents discharge at this point, a corner gusset stops trays being positioned too far forward or too far back.



Water drip bars eliminate under-base tracking. Correct mortar bedding depth established.

Clear cavity compartment area is unobstructed by troughs, ribs or stiffeners.



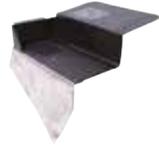
Ridge Tray

This straddles the ridge. It has two open ends and thus allows water to discharge to the left or to the right



Intermediate Tray

Intermediate trays are supplied handed and built into each course up the rake of the roof. Each tray has an end upstand so water can only discharge via the open end of the tray.



Catchment Tray

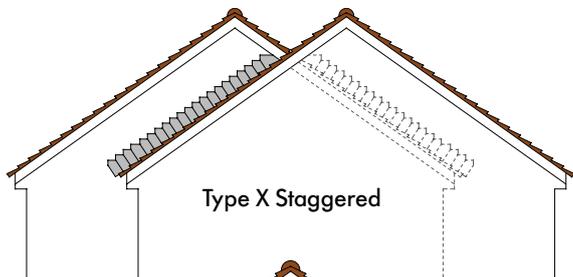
This is similar to an intermediate tray but has upstands to both ends. Its function is to receive water from the intermediate trays and discharge this collected water through a Caviweep supplied with the tray.



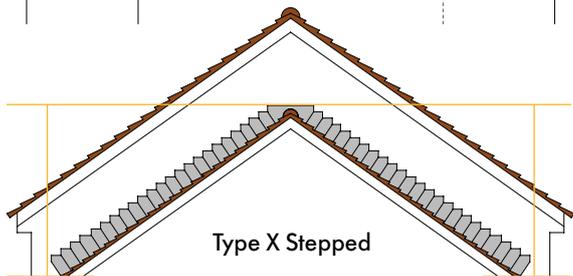
Internal / External Angles

An angle is used instead of a catchment tray if the abutment ends or returns on a corner. An angle may also provide a link with horizontal trays if required.

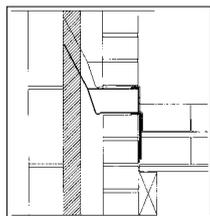




Staggered gable abutments require trays of the same hand. In this staggered example, left-handed trays are required to both slopes. Allow one tray per course

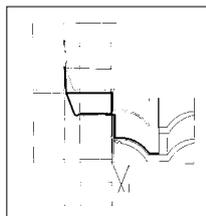


The slope on the left requires left handed trays. The slope on the right requires right handed trays. Allow one tray per course.



Short Leads

Short flashing for dressing over the upstand of a secret gutter or soakers. Whether secret gutter or soaker, it should rise against the masonry face and terminate just under the inboard end of the tray. In this example, partial fill insulation is also present.



Long Leads

Long flashing for dressing directly over roof tiles. This option is appropriate where the tiles are suitably shaped (not flat or minimally undulated).

Calculating Gable Requirements

We offer to take-off and schedule your requirement and invite you to take advantage of our service. Alternatively, you may carry out your own calculations as follows:

Calculate each slope separately.

This slope is a left hand slope and requires left hand trays. Calculate by counting the courses - or measuring the vertical rise and dividing by 75mm. Allow the bottom tray to be a catchment tray or corner tray as applicable. All other trays up the slope will be intermediate trays. A ridge tray finally caps the top of a conventional gable (one ridge tray straddles both slopes).

Then calculate the right hand slope opposite.

Confirm total tray numbers required together with the following: Outer skin type and thickness? Cavity total width and whether any insulation present? Are long flashings or short flashings required?

The attached shaped flashing will be in code 4 lead to BS EN 12588, unless an alternative is specifically requested and printed on any requisition.

How to Order

We offer a free scheduling / design service and will determine your requirements. Alternatively, calculate each slope separately by counting the courses. Allow the bottom tray to be a catchment or corner angle. All other trays will be intermediate trays until you reach the top of the slope. The top tray on a conventional full gable will be a ridge tray. An example of a typical gable is shown above and clearly indicates how the quantities and tray types are determined.

Bill of Quantity / Specification Wording

Approved Type X Gable Abutment Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type X Cavitytrays to suit _____ (state pitch) pitch roof, complete with attached code 4 lead flashings to dress over _____ (state tiles or state upstand of secret gutter or soaker). Standard brickwork coursing (or state otherwise). Cavity size _____. Lay within mortar bed, one per course, up the slope. Specify total number of handed intermediate, ridge, catchment and external angles.

Specifications

Product name - group	Type X for Sloping Abutments
Cavity widths accommodated	50mm up to 160mm (std range)
Pitches accommodated	15 degrees to 70 degrees (std range)
Dimensions	INTERMEDIATE SIZES
	Pitch Tray
	15 - 16 degrees 380mm
	16.5 - 22 degrees 330mm
	22.5 - 26 degrees 270mm
	26.5 - 43 degrees 240mm
	43.5 degrees 180mm
	RIDGE TRAY SIZES
	15 - 20 degrees 900mm x 130mm x 192mm vert
	21 - 25 degrees 750mm x 130mm x 192mm vert
26 - 70 degrees 570mm x 130mm x 192mm vert	
FLASHINGS	
Short: 75mm min > 280mm	
Long: 225mm min > 330mm	
All dimensions vary pending actual pitch	
ANGLES	
220 x 220 external 120 x 120 internal	
Bespoke options	Yes – all heights, depths & widths
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	See Multicourse for non-std sizes
Undulating masonry faces	See Designers' Comments for guide
Curved wall on plan applications	Yes – see Curved Wall entries
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Via Caviweeps (selection) in perp joints
Thermal transmission of material	Negligible

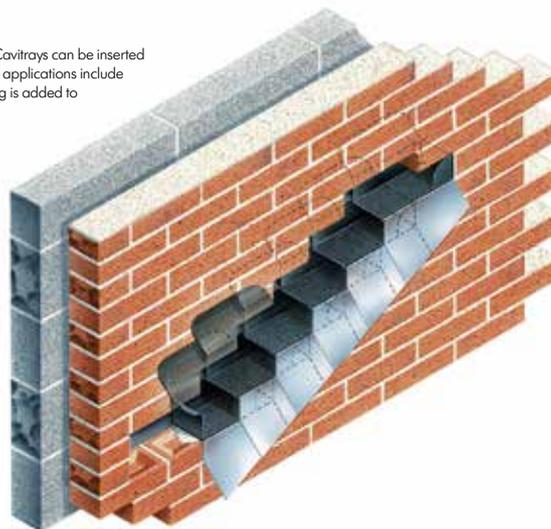
TYPE X

Existing Wall and Remedial Applications

- Fitted from outside, with minimum of masonry removed
- Cavity upstand adjusts to suit the 'as found' cavity width
- Base bars ensure correct mortar bedding depth
- Traditional or timber frame construction
- Attached flashing ready-shaped for dressing



High performance Type X Cavitytrays can be inserted into an existing wall. Typical applications include introduction when a building is added to an existing structure or where the original DPC has failed.



Use

Where a conservatory or extension with a pitched roof is added onto an existing cavity wall structure. Where an existing DPC has failed or has been omitted.

Solution

Where a pitched roof conservatory or extension attaches to an existing cavity wall, flashing the intersection only will not prevent dampness permeating downwardly within that skin. Insertion of Type X Cavitytrays above the new roofline can arrest such dampness and be used to satisfy the Building Regulations.

Insertion entails cutting out masonry on a progressive basis, a distance above the roof of the new structure. Once a few bricks (or equivalent) have been removed, the hinged upstand of the Type X Cavitytray is turned down until it is horizontal. This permits the tray to be inserted into the opening and bedded on mortar. As the tray enters the opening the hinged upstand is allowed to flex upwards. So doing enables it to service the cavity width as encountered. This is repeated in subsequent courses until the top is reached where the last tray to be inserted is normally a ridge tray.

This section should be read in conjunction with the previous pages where the various tray styles and their functions are described. If it is intended to dress the tray flashings over a glazing bar or similar adjacent to the masonry, always ensure it is suitably dimensioned and positioned to act as a weather stop. (Note: some conservatory manufacturers offer an abutment profile that rises to provide this requirement.)



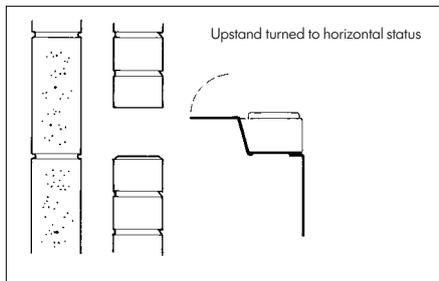
Conservatories and the NHBC

NHBC Standards Extra qualifies: 'Where the conservatory abuts the existing external walls of the house, a stepped cavity tray should be provided above the roof abutment. The tray will need to be linked to a stepped flashing'. Compliance can be achieved using the Type X Cavitytray.



In remedial applications where an existing DPC has failed or been omitted, installation follows the identical procedure.

Trays are available to suit different masonry course heights and thicknesses. If in doubt, contact the help desk at Cavity Trays. We undertake appraisals on site and will be pleased to assist you.



LABC published checklist

'Enclosed porch or conservatory - the flashing must be linked to a cavity tray at all times'

'It is best to use purpose made stepped trays'

Flashing

The flashing supplied already attached to each Cavitytray is normally code 4 cold rolled milled lead. A synthetic flashing with a very similar grey colour to lead is available as an alternative. Called Perform, fuller details and specification can be found within the Auxiliary Products / Restricted Applications section. Always state clearly your choice, and whether the tray is required with a short flashing or a long flashing. (Short flashings dress over secret gutter/soaker upstands and long flashings dress directly over an appropriately shaped tile).

Bill of Quantity / Specification Wording

Approved Type X Existing Wall and Remedial Applications Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type X Cavitytrays with European Technical Approval eliminate the vulnerable points identified in NHBC Risk Guide - Superstructure (revised 08/17)

Specifications

Product name - group	Type X Multicourse
Cavity widths accommodated	50mm to 160mm standard product range. Up to 300mm - bespoke range
Pitches accommodated	15 degrees to 70 degrees (std range)
Tray heights	TRAY HEIGHTS 100mm 125mm 150mm 175mm 200mm 225mm TRAY DEPTH 130mm - 300mm range TRAY LENGTH Varies to suit angle of abutment
Traditional construction compatible	Yes
Timber frame construction compatible	Yes – time frame version offered
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	No identified limitation
Undulating masonry faces	Ideally flashing dressing requires flat surface under
Curved wall on plan applications	Yes
Cavity insulation may be used if present?	Insulation should not affect functionality
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Via accompanying Caviweeps
Material	Trays / weeps / stopends / ties Polypropylene DPC Flashing Lead BS EN 12588 Flashing alternatives Synthetic. Copper
Colour	Black
Extrudes / compresses under load	No
Pack size	No minimum – to order
CFC	CFC free
ODP	Zero
Regulation compliance	Damp-proofing BS EN 845.2:2001
CAD downloads	Yes
Design considerations	Additional catchment may be incorporated within long runs where exterior skin porosity is of concern

TYPE X

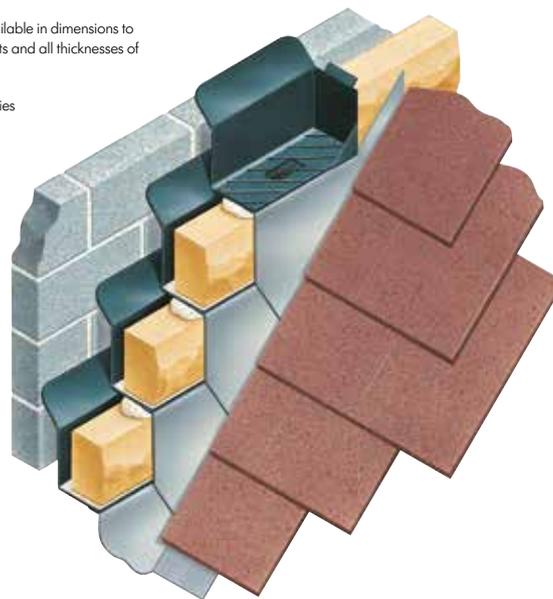
Multi-course and Multi-depth Cavitytrays

- Ready-shaped attached lead flashing
- Traditional or timber frame construction
- Clear cavity compartment area
- Sizes to suit: All course heights, All masonry thicknesses, All cavity widths, All pitches of abutment

Use the Cavity Trays specification, take-off and scheduling **FREE** service

Multicourse cavitytrays are available in dimensions to suit all masonry course heights and all thicknesses of external skin.

The Multicourse tray style varies pending course height and masonry thickness. The illustration is an example of one such style.



Use

Damp arrestment and weathering flashing provision where sloping roofs abut cavity masonry walls.

Type X Multicourse

Cavitrays to suit different masonry dimensions and styles.

Solution

Where different masonry dimensions and/or skin thicknesses are encountered, trays are available from the Multi range to suit. Tray style and functionality is based on the Type X design.

Trays are dimensioned to accommodate the masonry height (coursing) and the masonry depth. The end upstand of every tray (inboard end) rises and integrates with the base of the tray in the course above. A DPC staircase arrangement is created, with connecting treads and connecting risers. Regardless of whether all masonry courses are identical or there is a mixture of courses, all trays connect with each other. The DPC arrangement is unbroken.

If the masonry thickness (exterior skin depth) is greater than the usual standard (105mm nom) the tray is correspondingly enlarged. Should the exterior skin be in a medium such as natural stone built against a backing block, the tray base is proportioned to extend through the combined thickness.



Multicourse Regular Wide Front to Back Dimensions. The natural hamstone is built against a concrete backing block resulting in an external leaf of 250mm thickness beyond which is the cavity. Thus the trays have extended front to back dimensions.



Multi-course Cavitrays installed in 150mm (6inch) steps. In this example trays have been inserted into an existing wall, demonstrating masonry removal is minimal.

Multicourse trays are supplied with attached long or short flashings in code 4 lead unless an alternative material is requested.

How to Order

Height

Clearly state the masonry module height (coursing). This coursing dimension dictates the size of the tray end upstand so it may interface correctly with the next tray in the next course. The most popular coursings are: 75mm, 100mm, 150mm, 225mm. Other dimensions available.

Depth

Clearly state the front to back depth of the masonry you are using. This dimension dictates the size of the tray base. We manufacture the base to be sufficiently proportioned to accommodate the masonry depth and provide a catchment area in accordance with NHBC and LABC guidelines. Remember, if building against a backing block, the it is the combined total depth of backing block + exterior skin that applies.

Cavity

State the cavity width and whether any cavity insulation is present. Identify your construction combination and then apply the applicable dimensions.

All options are based on a free cavity space remaining within the combination, except where Surecav is used and the tray upstand extends within bulbous spacing area. (Surecav recommend use of Cavity Trays of Yeovil products with its systems).

Provide detailed drawings and we will calculate the requirements for you.

Calculate each slope separately following the procedure described on the previous pages. Alternatively, provide detailed drawings and we will calculate the quantities for you.

Flashing

A synthetic flashing is available as an alternative to lead. Details and specification can be found within the Auxiliary Products / Restricted Applications section.

Bill of Quantity / Specification Wording

F30 -Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU
Tel: 01935 474769

Type X Cavitray Multi course/multi depth trays with European Technical Approval to be installed at sloping abutments on new build intersections to suit cavity width of _____mm with external masonry skin course height of _____mm and external masonry skin depth of _____mm. Build in carefully strictly observing manufacturers' instructions to correct placement and watertight installation. _____ Catchment trays. Intermediate trays _____. Ridge trays _____.

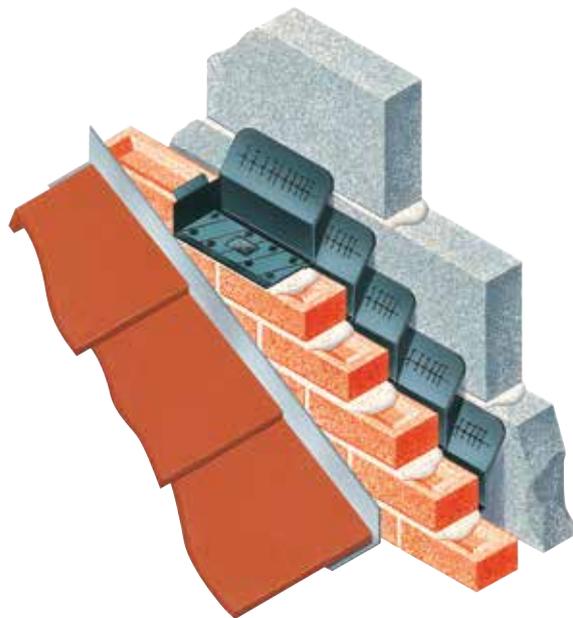
Specifications

Product name - group	Advantage Unleaded Abutment Trays
Cavity widths accommodated	50mm up to 140mm
Pitches accommodated	175 degrees upwards
Dimensions	Intermediate sizes 330mm x 132mm x 192mm vert Ridge tray 600mm x 130mm x 192mm vert Angle External 220mm x 220mm x 192mm vert Angle Internal 120mm x 120mm x 192mm vert Catchment 230mm x 132mm x 192mm vert
Bespoke options	Yes
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit / Remedial applications	Yes
Masonry skin styles	More suited for regular shaped finishes
Undulating masonry faces	Minimal undulations acceptable
Curved wall on plan applications	Yes – see Curved Wall entries
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Via Caviweeps (selection) in perp joints
Thermal transmission of material	Negligible
Colour	Black
Extrudes / compresses under load	No
Pack size	Packs of 50 – also available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes can be used to satisfy arrestment
May be used if cavity insulation present?	See Designers' Comments ref type
CAD downloads	Yes

ADVANTAGE RANGE

Unleaded Gable Abutment Trays

- Standard trays suits pitches from 17.5°
- Cavity width adjustment 50mm to 140mm
- Solid moulded DPC tray with integral stopends
- Clear cavity compartment area



Use

Cavitytray to provide stepped DPC presence within wall only.

Solution

The Advantage Unleaded Gable Abutment Cavitytray is for use by installers who wish to introduce their own flashing medium at a later date. Each unit is moulded from DPC and has a variable cavity upstand.

When trays are built into an exterior skin, provision must be made to receive the flashing to be installed at a later date. This is achieved by raking out the mortar whilst still green, to leave a 25mm minimum recess under the front of the tray.

Advantage trays can be supplied with an optional polystyrene strip under each front edge. This strip provides the installer with soft polystyrene to rake-away rather than mortar. It is preferred by many operatives as it ensures a freely accessible slot is always available.

When flashings are cut and installed, we recommend individual flashings are fitted under each tray and all flashings overlap sufficiently to provide adequate weathering protection.

Trays are designed for use in standard 75mm (brickwork) courses.

How to Order

We offer a free scheduling / design service and will determine your requirements.

Alternatively, calculate each slope separately by counting the courses.

Allow the bottom tray to be an Advantage catchment or corner angle (state internal or external). All other Advantage trays will be intermediate trays until you reach the top of the slope. The top tray on a conventional full gable will be a ridge tray.

The following tray types make up the Advantage range:



Advantage Catchment

Built into the bottom of a slope its function is to collect and discharge water via a Caviweep.



Ridge

This tray straddles the ridge.



Advantage Internal Angle

Advantage Internal Angles are used in place of catchment trays when commencing laying from an internal corner.



Advantage External Angle

Advantage External Angles are used in place of catchments when commencing laying from the corner of a building.



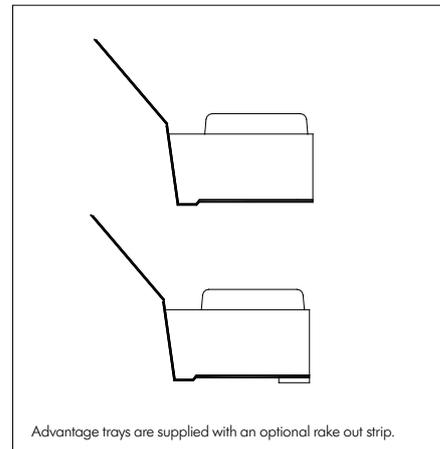
Right hand



Left hand

Advantage Intermediate

These are handed and are built in every course up the rake of the abutting roof.



Advantage trays are supplied with an optional rake out strip.

Designers' Comments

Manufactured to a length of 330mm provides tolerance so tray can be used in a range of roof pitches from 17.5° upwards. Installers are recommended to use individual flashings lapped up the rake as they can provide for greater protection than a running flashing.

Bill of Quantity / Specification Wording

F30 -Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Advantage Cavitytrays to be installed at sloping abutments on new build intersections. Build in carefully strictly observing manufacturers' instructions to correct placement and watertight installation. _____ Catchment trays. Intermediate trays _____. Ridge trays _____.

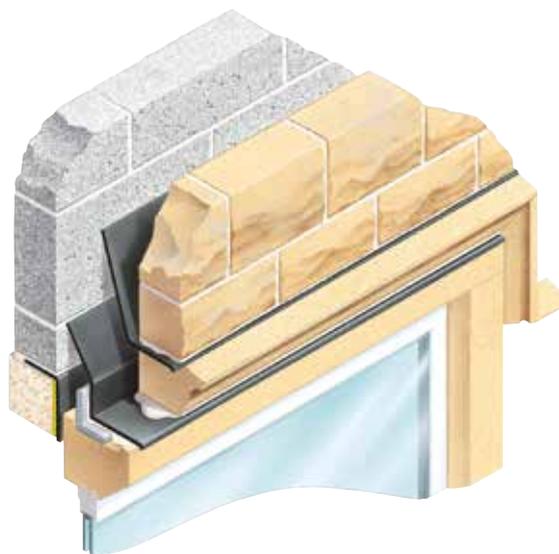
Specifications

Product name - group	Type Y Stone Mullion Assembly Cavitytray
Cavity widths accommodated	Up to 150mm
Dimensions	Tray 1 profile 120mm x 200mm
	Tray 2 profile 105mm x 110mm
	Tray 3 profile 30mm x 125mm
	Dimensions vary pending make / style of mullion.
Bespoke options	Yes
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	Most regular styles
Undulating masonry faces	Normally compatible
Curved wall on plan applications	Some bespoke options offered
Arrested water evacuation	Via discreet Caviweeps in perp joints
Thermal transmission of material	Bonded thermal break optional
Material	Tray Polypropylene DPC
Insulation	Phenolic foam class O
Colour	Black
Extrudes / compresses under load	No
Pack size	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes can be used to satisfy arrestment
May be used if cavity insulation present?	Does not affect functionality
CAD downloads	Yes
Design considerations	Visual lip recommended as it protects bedding course but some specifiers elect to use a non-lipped version so protection is not evident.

TYPE Y

Stone Mullion Assembly Cavitytray

- Preformed for immediate use
- Packaged per opening
- Consistent detail with regulation compliance
- Different cavity widths accommodated



Use

To protect mullion window assembly from damp penetration.

Solution

Manufactured from polypropylene and preformed to shape, a total of three Cavitytrays are required to maintain damp course integrity across the window head of a mullion window assembly.

1. At the highest level bedded on the decorative label-mould (string-course) is the first Cavitytray. Its purpose is to act as an arresting barrier. It receives water from the masonry above and discharges it via Caviweeps positioned at the extended tray ends – well clear of the side mullions.

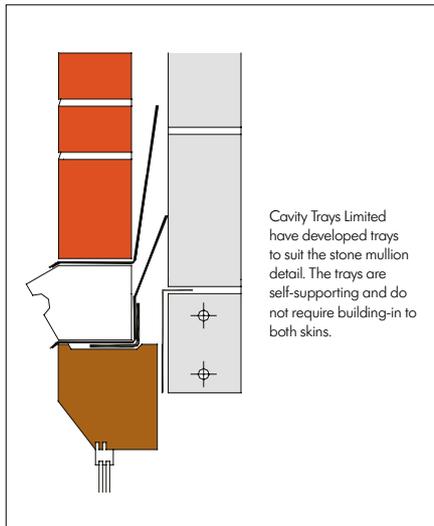
2. The second Cavitytray is shaped to rest and bed into the supporting metal angle that provides the load bearing qualities to the assembly. There is very little cavity water at this level, the majority having been stopped by the first tray.

3. The third Cavitytray provides a vertical barrier between the lintel on the inside skin and the mullion head. This third tray is commonly supplied with an insulation layer bonded to one surface to minimise thermal transmittance at this point of convergence.

Type Y Cavitytray protection is available to suit all styles of stone and reconstructed stone mullions.

How to Order

We will take-off and schedule your requirements and submit for your consideration.



Designers' Comments

Be aware if using reclaimed mullions. The original BS 6073 made no reference to the maximum water absorption requirements of synthetic stone and consequently standards of manufacture and performance varied considerably. BS 1217 introduced limitations and performance improved. Reclaimed mullions can vary considerably in terms of water absorption and corresponding rates of saturation. Where the amount of masonry rising above a mullion is extensive, always consider the potential water penetration volume gravitating downwardly in the cavity.



Bill of Quantity / Specification Wording

F30 -Clause 370 Preformed Cavity Trays

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU
Tel: 01935 474769

Type Y Cavitytray 3-part Assembly be installed at the heads of mullion windows to act as barrier DPC and arrest penetrating water. Build in carefully observing manufacturers' instructions to ensure watertight installation. Number of mullion openings _____.

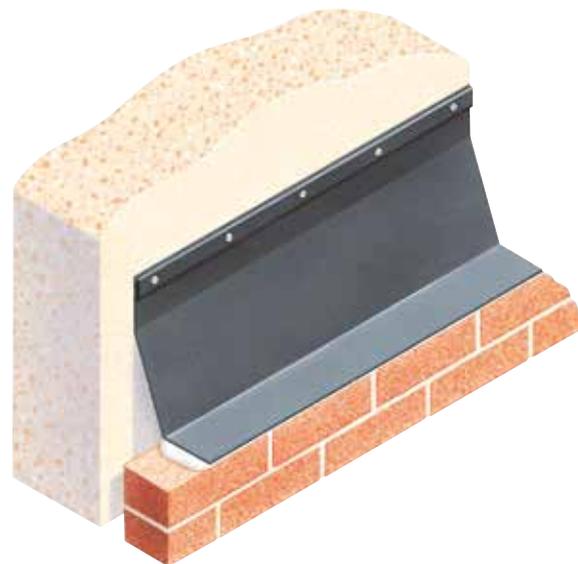
Specifications

Product name - group	Type Z Cavistrap
Cavity widths accommodated	N/A - does not influence
Dimensions	2000mm x 30mm Predrilled 4mm holes @ 150mm centres
Bespoke options	Yes
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit / Remedial applications	Yes
Masonry skin styles	Most regular styles
Undulating / split masonry faces	Normally compatible
Curved wall on plan applications	Yes – use unhindered
Material	PVCU
Colour	Black
Extrudes / compresses under load	No
Pack size	50 x 2000mm lengths
CFC	CFC Free
ODP	Zero
Pack size	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	Aids a compliant construction detail
May be used if cavity insulation present?	Does not affect functionality
CAD downloads	Yes
Design considerations	Cavity conditions can be seasonally humid, consider use of stainless fixings to secure Cavistrap

TYPE Z CAVISTRAP

Strap to secure flexible DPC to inner skin

- Easy to handle and use
- Pre-drilled
- Shape accommodates surface irregularities
- Cost effective method to mechanically secure flexible DPCs



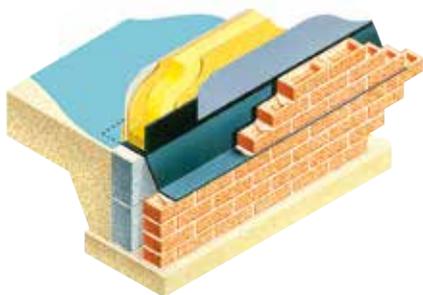
Use

To uniformly hold and secure polymer, bitumen, polythene and flexible DPC mediums in position.

TIMBER FRAME AND SIPS PREFORMED DPC PROFILES

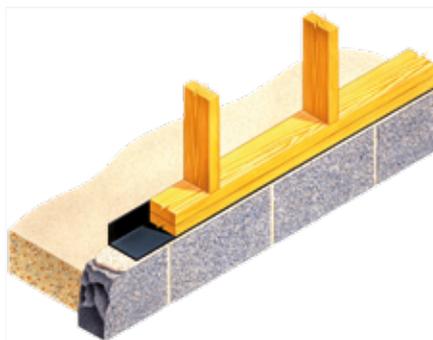
Type TFC

- Moulded dual-purpose construction barrier
- Acts as DPC, gas and Cavity barrier
- Interfaces with oversite membrane
- Utilises Cavibrick gas ventilation and Cavi weep water evacuation
- Preformed for compliant and consistent placement and protection
- All dimensions variable to suit build detail



L Shaped and T shaped Sole Plate

- Moulded DPC protection for use under sole plates
- L and T profile options + corner sections
- Extended inboard for oversite membrane lap joining
- Robust - will not distort or sag
- Fixing through upstand secures but does not compromise plate integrity
- All dimensions variable to suit build detail



Capping profile

- Moulded DPC protection cap
- Protects top of ground floor support wall
- Isolates masonry from timber
- Uprturned U shape envelopes three sides
- Eliminates misplacement associated with roll material
- All dimensions variable to suit build detail



How to Order

Select your profile and dimensions. All profiles are supplied in 2400mm lengths. There is no minimum quantity requirement. If the profile you require is not illustrated, please ask, as a bespoke facility operates and we will endeavour to accommodate your needs and specification.

Ground Bearing Concrete Floor Construction/ Timber Door Sill

- Moulded dual-function DPC profile
- Protection from sill to oversite DPM
- Sill back upstand check
- Permits easy lap on lap sealing with DPM
- Avoids horizontal sagging associated with roll material
- All dimensions variable to suit build detail



Sole Plate Render/ Timber Cladding Detail

- Combination DPC with isolation upstand
- Extends protection to inner face of timber skin
- External lip provides edge for ventilation grid
- Addresses TRADA Timber Frame detail (TFC 5th pages 35 – 2.4)
- Profiled positivity – no sagging
- All dimensions variable to suit build detail



Timber Frame Straight Ventilation Protection

- Wraps sleeve to protect against wet bridging
- Secures against timber frame membrane
- Shields perforated area adjacent to sole plate
- Standard and bespoke dimension choices
- Cavibrick and Cavisleeve compatible
- Eliminates on site fabrication and sealing



Bill of Quantity / Specification Wording

Timber Frame Profile - Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

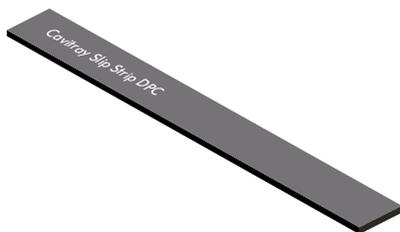
Profile as agreed detail. Bed on mortar in at appropriate level in all exterior walls, observing installation instructions. Ensure inboard section unites and laps with oversite membrane. Incorporate accompanying cavibricks under and caviweeps as installation requirements. Metres run _____. Angles internal _____. Angles external _____. Request liability/conformity document upon completion.

AUXILIARY PRODUCTS AND SPECIALISED APPLICATIONS

Cavitray Slip-Strip

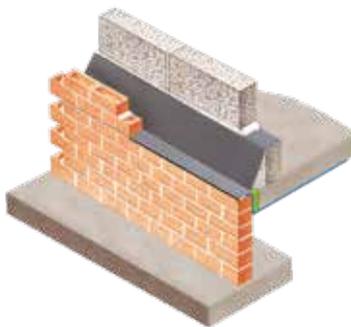
Pre-cut strips of Cavitray compatible rigid DPC 105mm wide supplied in 1200 and 2400mm lengths, with one textured face and one smooth face. Designed to act as slip-plane to accommodate specific movement identified in certain build details, and may be laid into compatible Cavitrays.

Examples: Specialist pre-cast sills requiring movement provision (see Forticrete and others). Also wide garage door openings where NHBC stipulate movement provision under lintels and movement provision at cavity tray level - NHBC 6.1.12, 6.5.5.



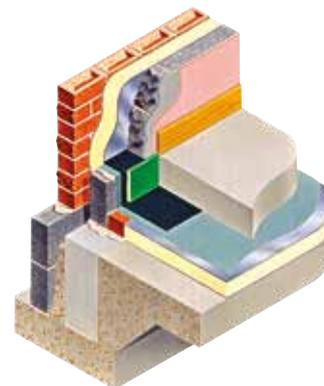
Exempt Conservatory Base Type ECB

Provides sub-structure damp protection where a restricted single skin foundation is used in the construction of an exempt conservatory base. A simplified approach is possible where the foundation depth is not less than 700mm (to avoid frost heave). With profiled lengths, preformed angles and bonding strips to link lapping sections, exempt conservatory installation can benefit an economical and swift build detail.



Combination Edge Insulator Type CEI

Cranked DPC profile provides horizontal DPC presence to cavity wall inner skin and projects inwardly to integrate with floor membrane, permitting easy horizontal lapping and sealing between both mediums. Accompanying edge barrier locates against connecting upstands to provide thermal break.



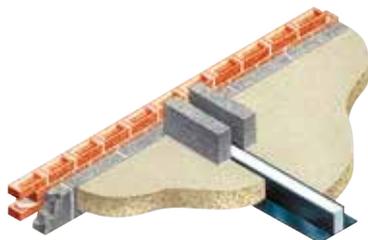
Cavity Widths	n/a
Dimensions	1200mm x 105mm, 2400mm x 105mm
Bespoke option	Non-std strip sizes available
Material	Polypropylene
CFC / ODP	Free / zero

Cavity Widths	75mm to 180mm
Dimensions	300mm x 150/225mm
Bespoke option	Yes
Material	Polypropylene
CFC / ODP	Free / zero

Cavity Widths	All -product not affected
Dimensions	Bespoke product
Material	Polypropylene
CFC / ODP	Free / zero
Insulator	Rock mineral wool

Ground Bearing Party Wall Insulating Section Type GBPWIS

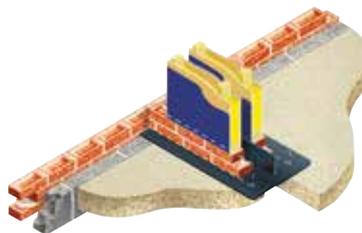
Secured (on the party wall line) between attached properties the preformed DPC profile with a central channel containing insulation acts as integral edge formwork when the concrete slabs are poured and levelled. Following curing, the sandwiched insulation may be removed or left insitu, pending wall detail sought.



Cavity Widths	75mm, 100mm, 125mm, 150mm
Dimensions	All variable
Material	Polypropylene
CFC / ODP	Free / zero
Insulator	Polystyrene BS3836-1986

Party Wall Rising Barrier Type PWRB

An alternative to the NHBC detail showing a shallow channel cast in a shared floor slab between adjoining properties to guard against internal cross-flooding. The PWRB in projecting upwardly rather than descending as a channel, is able to provide greater resistance to water volumes. It can also more readily interface where external cavity wall contaminated land barriers are present. The projection can link over such barriers whereas a lower level channel commonly cannot.



Cavity Widths	n/a
Dimensions	2400mm x 500mm x 150mm
Bespoke option	Yes
Material	Polypropylene
CFC / ODP	Free / zero

Integral Formwork Water Check Profile Type R

When bedded to cap the top of an open cavity wall prior to concrete pouring, the Type R acts as enveloped formwork and a shaped indentation to the underside of the formed slab is created. This acts as throating to guard against water cross-tracking via the slab underside/masonry.



Cavity Widths	Up to 100mm
Dimensions	2400mm x 135mm small 2400mm x 165mm large
Bespoke option	Yes
Material	Polypropylene
CFC / ODP	Free / zero

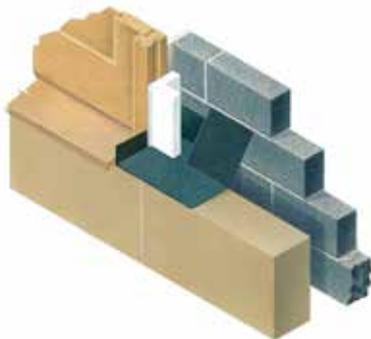
AUXILIARY PRODUCTS AND SPECIALISED APPLICATIONS

Type SC-Link - Stopend and DPC Link

Self-contained unit introduces a stopend to an open-ended outward stepping cavity DPC where it abuts an exterior door within a cavity wall located at an elevated level with building footprint extending under it.

Arrests gravitating water from vertical closer fins so it cannot continue to lower level of building. (closer terminates within it)

May be used to regularise defective terminations against reveal.



Cavity Widths Up to 140mm

Dimensions Variable - state

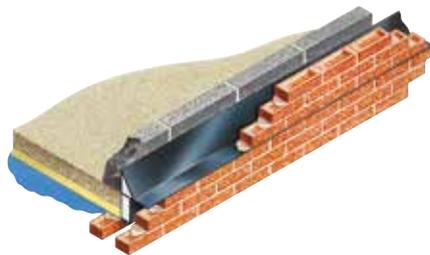
Material Polypropylene

CFC / ODP Free / zero

Cavity Insulated DPC

This insulated cavity wall barrier operates independently of any wall DPC (the position of which is dictated by ground levels). The barrier is built into the outer skin only and terminates within the cavity against the inner leaf. Water is evacuated via Caviweeps, thus reducing ongoing gravitating water within the external masonry skin.

Conceived for where clear cavities are appropriate as part of below-ground waterproofing measures. Should any blown insulation be retrofitted, it can be restricted to above the barrier, preserving lower cavities as unfilled. The integral barrier insulation projects downwardly, aiding thermal continuance around wall/floor level.



Cavity Widths Up to 200mm

Dimensions Variable

Material Polypropylene

CFC / ODP Free / zero

Acoustic Stops and Thermal Barriers

Acoustic Stops and Thermal Barriers are available on a bespoke basis in a wide range of sleeved sizes for introduction into cavities, thresholds, lintel arrangements etc.

Encapsulations will not support vermin and are chemically inert. Select sleeve size that is 15- 20mm wider than cavity size to facilitate correct friction fit.



Cavity Widths Up to 200mm

Dimensions Bespoke profiles in 1.2m or 2.4m lengths

Material Polythene sleeving

Insulation 0.035 mineral rock wool

CFC / ODP Minimal Free/zero

Flashings - Alternative Options

Lead flashing remains the most popular choice to have bonded to our preformed trays. Alternative options are available for projects where compatibility issues or visual characteristics are of concern.

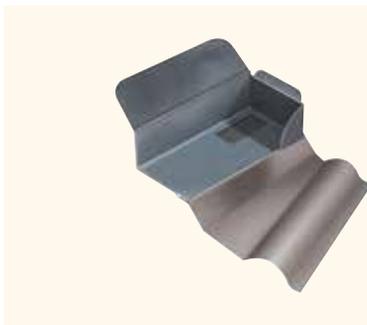


Where an inert flashing medium can help maintain neutral balance in the presence of limestone, magnesium limestone, sandstone and some granites, building design should always consider the flow of water from limestone to other masonry materials and flashing mediums. Where continuity of metal type to match the roof finish ensures most appropriate compatibility and visual continuity (example copper roof with copper flashings).

The synthetic flashing addition to our range is a composite material consisting of aluminium mesh enveloped within silian-modified polymer rubber. It is non-permeable and offers similar malleability to lead flashing. It will hold to shape and once dressed can be additionally secured in place with adhesive if required. Resilient to temperatures between -20° and $+70^{\circ}$. UV and ozone resistant.

IMPORTANT

Where trays are supplied with flashings attached, all flashings will be manufactured from code 4 lead to BS EN 12588 unless otherwise stipulated on the order and will be subject to our full product warranty. Our warranty extends to the tray only where copper, synthetic or aluminium flashings are requested.



Material	Lead
Standard	BS EN 12588
Thickness	1.8mm - code 4
Weight SQ Metre	20.41 kgs/m ²
Colours	Natural
Considerations	Malleable and resilient medium shapes easily and provides long service life. Can be clipped or stuck if required
Rolls Available	All widths up to code 8 available separately



Material	Synthetic Perform
Specification	BBA 09/4681
Thickness	2.1mm
Weight SQ Metre	3.6 kgs/m ²
Colours	Light grey, terracotta, black
Considerations	Resilient with negligible spring and good hold. Can be stuck or clipped if required.
Rolls Available	4m x 150mm, 250mm, 300mm, 450mm, 1250mm

CLOSERS

Thermal Acoustic & Fire-Rated Closers

Vertical & Horizontal Applications

The specifier may select from a wide range of options.

Some closers address the same construction detail, but with a different emphasis. The choice may be refined pending the desired thermal, fire integrity or acoustic level sought. Choice also extends with the provision for expansion and contraction between timber and masonry skins.

Correctly installed caviclosers are designed to prevent ingress of water from an outer skin to an inner skin where vertically integrated, as required for compliance under Building Regulation Part C.

The window or door frame must be set back a minimum of 30mm into the cavity to achieve this and a compatible sealant used to seal around the masonry/frame junction.

The closer face of our Caviclosers have integral fins. These provide an anti-capillary relationship plus conduit drainage, acknowledging Building Regulations Part C, page 37, (5.32) that states fins are required to provide protection in designated exposure zones.

Insulated Caviclosers are designed to minimize cold penetration and heat loss that occurs around unprotected cavities and reveals, as identified within Building Regulations Part L.

Fire-rated Caviclosers are designed to provide a given duration of fire protection as identified within Building Regulation Part B.

Recognizing the objectives for clarity within the Hackitt Report, our fire rated closers continue to be identified with a Cavi prefix in red followed by a number in red denoting the fire integrity rating in minutes;

- **Cavi 60 (1 hour)**
- **Cavi 240 (4 hours)**

The leading edges of pages within this publication relating to fire-rated product pages are additionally printed in red.

The review of SAP 10 and the raising of the default γ -value penalizes developers who do not consider heat-loss through building junctions. Users should consider to what extent every closing detail within the cavity wall integrates and eliminates discontinuity of the insulation elements. (Part L: No easily avoidable gaps such as those around window openings).

Insulation density extracted from manufacturers issued data. Insulation colour may vary. Tie shape (where supplied) varies pending product model. Profile tolerance $\pm 5\%$. Reported fire rating accuracy \pm one minute. Company green objective uses recycled material. Recycled material may result in slight shade variations. Standards subject to variation and uplift without notice.

When describing uses of product, applications may be generalized and users should ensure their intended usage is within intended parameters.

Cavity closers and stops are designed to enhance the thermal and environmental performance of the structure.

This section lists efficient ways in which cavity walls may be closed, Building Regulations, thermal, fire and acoustic requirements, plus the arrestment and isolation of permeating damp, are addressed using our construction solutions.

The specifier may select from a wide range of options. Some closers address the same construction detail, but with a different emphasis. The choice may be refined pending the desired thermal, fire integrity or acoustic level sought. Choice also extends with the provision for expansion and contraction between timber and masonry skins.

If you cannot see what you want or have a bespoke requirement, please contact us.

To contact us, use the email address or any of the other options listed. We look forward to being of service to you and supplying cost effective best practice solutions to protect your projects.

Hygrothermal Behaviour

Products for use in Accredited Construction Details (version 1.0) and Robust Details for jambs and sills that require a path of minimum thermal resistance through the closer.

Weather Resistance

Products act as an effective damp-proof barrier and resist the passage of water towards the inner skin when used in a suitable cavity wall construction.

Structural Stability

Passive functionality in terms of wind-loading resistance permits use of products within all areas of the UK.

Durability

Correctly incorporated within cavity wall construction, products are designed to last the normal expected life of a building.

Performance

In accordance with Building Regulations requiring a minimum thermal resistance path.

Product	Cavity Widths	Insulation	Weather rating	Fire Integrity	Page	Vertical	Acoustic
Bespoke	50 - 200	Polystyrene	To requirement	n/a	100	✓	
Continuity Closer	100	Polystyrene	Severe Very Severe	n/a	102	✓	
Type D	All	Polystyrene	Severe Very Severe	n/a	104	✓	
Type DIP	All	Polystyrene	Severe Very Severe	n/a	106	✓	
Type FWC	50 - 100	Polystyrene	Severe Very Severe	n/a	108	✓	
Quickcloser + Refurbishment Closer	40 - 100	Rock Wool	Severe Very Severe	n/a	110	✓	✓ (part)
Type RFC	50 - 150		Severe n/a	n/a	112		✓
Type WCA	100 - 150	Polystyrene	Severe Very Severe	n/a	114	✓	
Type WCA Maxi	150 - 330	Polystyrene	Severe Very Severe	n/a	116	✓	
Type V	50 - 100	Polystyrene	Severe Very Severe	n/a	118	✓	
Type V170	100-170	Polystyrene	Severe Very Severe	n/a	120	✓	
Sash Frame Insulated DPC	All	Polystyrene	To requirement	n/a	122		
Cavi 60 Type WCA	100 - 150	Rock Wool	Severe Very Severe	60	124	✓	✓
Cavi 60 Type V	100 - 170	Rock Wool	Severe Very Severe	60	126	✓	✓
Cavi 60 SAF Horizontal	100 - 140	Rock Wool	Very Severe	60	128		✓
Cavi 60 SAF Vertical/PWIB	50 - 140	Rock Wool	Very Severe	240	130	✓	✓
Cavi 240 CFS	50 - 90	Rock Wool	Very Severe	240	132		✓
Cavi 60 MWR 200	100 - 200	Rock Wool	Very Severe	60	134		✓

The standard products listed within this section are available to suit a range of construction dimensions and standards. Reference should be made to the data panel under each product illustration from which the relevant requirements should be selected.

Please contact our help desk for all such enquiries and we will forward relevant information.

Specifications

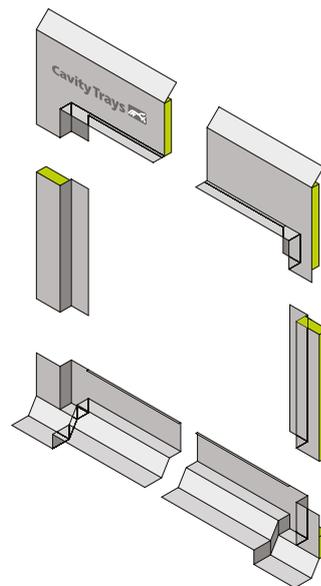
Product name - group	Bespoke Traditional Closing Service
Exposure Rating / Frame Relationship	Up to very severe pending detail
Cavity - Standard Sizes Accommodated	All sizes + solid walls pending detail
Special Cavity Widths Accommodated	Yes pending detail
Straight Reveals	Yes pending detail
Checked + Typical Sash Frame Reveals	Yes pending detail
Product Lengths	2.4m
Acts as Vertical DPC	Yes
Acts as Insulator	Provided where design permits
Permits Different Frame Positions	N/A
Frames Fitted as Work Proceeds or Later	Yes - usually both options pending design
Timber Frame / Traditional Construction	Usually unaffected by inner skin type
Masonry Skin Styles	Subject to sight of detail
Undulating Masonry Face Finishes	Seek advice providing details of material
Acoustic Insulator	No - but available as option in some instances
Fire Rated	No
Vertical and Horizontal Applications	Yes pending detail
Compatible with other Cavity Wall Elements	To be determined upon assessment
Securing Ties Supplied	N/A
Pack Sizes	Individual Lengths
Weight per pack	Varies pending style of profile selected
Material	Pethylene + Inskorfoam or rock wool insulator
Colour	Black
Building Regulations	Yes regulations can be satisfied
NHBC	Yes regulations can be satisfied
'K' Value of Insulation	Normally 0.029W/mK to 0.033W/mK
CFC Free	Yes + zero ODP using standard materials
CAD Drawing Downloads Available	Bespoke available subject to order

BESPOKE TRADITIONAL CLOSING SERVICE

On site and off site preformed solutions

- Traditional and timber frame applications
- Optional integral insulation barrier
- Interlinking continuous protection
- Preformed for uniformity and consistency
- Establishes build quality and build cost controls

New and retrofit solutions
NHBC 6.1.17
compliant



Requirement

Optimising damp protection and thermal benefits when closing openings in cavity walls requiring a bespoke approach.

Solution

Where construction or reconstruction of a property is required to replicate a traditional style, the opportunity exists to eliminate shortcomings or areas in which the damp proofing and thermal qualities are not ideal. It is usually possible to introduce measures that do not affect the aesthetics of the structure but do raise the performance and improve the behaviour of the wall.

Openings in new and existing buildings can be assessed and preformed closing DPCs moulded to aid consistent and accurate construction. At the same time thermal benefits can be introduced where possible.

Both architect and contractor are able to make use of preformed solutions that create the desired detail, thus eliminating problems commonly associated with installer error and misplacement.

To take advantage of the Bespoke Traditional Closing Service, please contact your Area Manager or the help desk at our Yeovil office. (See inside front cover for contact numbers.)

A typical example is when counterweight sash frames replace balanced sash frames in existing buildings with solid or cavity walls. The opportunity arises to introduce additional damp protection and thermal measures. Insulated DPC sections can infill the void that previously accommodated the balance weights, without appearance of the window being affected.

Designers' Comments

Assured consistent detail of build. Fixed cost. Opportunity to enhance specification.



Bespoke preformed insulated DPC surrounds for openings supplied for use on German system building developments



When closing reveals the opportunity exists to maximise thermal retention and consistent protection as the dpc is preformed and not susceptible to distortion or misplacement.



Interlocking preformed Cavitytray DPC protection with integral thermal break integrates with Hamstone surrounds

Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling

180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Bespoke insulated closing DPC's and closers. Build in carefully observing manufacturers' instructions to ensure correct installation.

Specifications

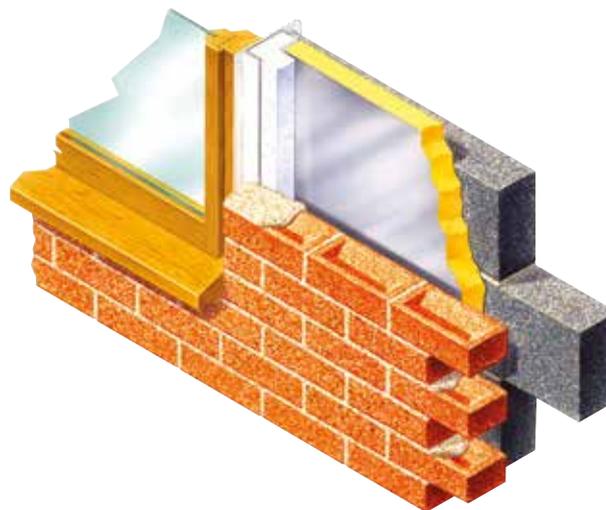
Product name - group	Continuity Closer
Exposure Rating / Frame Relationship	Severe 30mm+ setback. Very severe when checked
Cavity - Standard Sizes Accommodated	100mm only
Special Cavity Widths Accommodated	Yes bespoke closer service offered
Straight Reveals	Yes - build in profile as supplied
Checked Reveals	No - but possible under bespoke service
Product Lengths	2.4m
Acts as Vertical DPC	Yes
Acts as Insulator	Yes
Permits Different Frame Positions	Yes
Frames Fitted as Work Proceeds or Later	Yes - first or second fix options
Timber Frame / Traditional Construction	Both styles accommodated
Masonry Skin Styles	All popular flat faced masonry
Undulating Masonry Face Finishes	Seek advice providing details of material
Fire Rated	No (see Cavi prefixed range for fire rated)
Vertical and Horizontal Applications	Yes - see examples
Compatible with other Cavity Wall Elements	No identified restrictions
Securing Ties Supplied	Option if first fixing
Pack Sizes	x10 lengths
Weight per pack	10.4 kg per pack
Material	PVCU + Polystyrene
Colour	White
Building Regulations	Yes regulations can be satisfied
NHBC / Zurich / Premier Requirements	Yes regulations can be satisfied
'K' Value of Insulation	0.038 - 0.033 choice
CFC Free	Yes + zero ODP
Eco points rating	Low
CAD Drawing Downloads Available	Yes

CONTINUITY CLOSER

Reveal closer that interfaces with cavity insulation

- Blocks heat loss path
- Eliminates thermal spiking
- Acts as vertical DPC
- First and second fix applications

First-fix or
second-fix
options



Requirement

To close a reveal in a cavity wall within which there is partial fill insulation. To provide thermal zoning. To act as a vertical dpc.

Solution

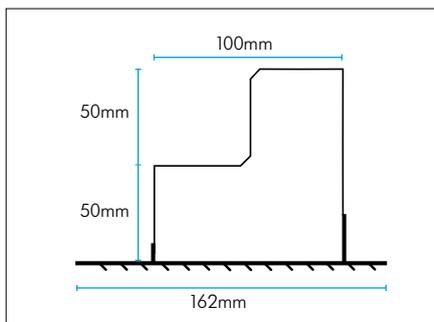
The faceplate of the Continuity Closer spans both masonry skins and provides a rigid finish for reveal finishing of plasterboard on dabs or similar. The insulating core is stepped to close the reveal and interface with the adjacent partial fill cavity insulation. In so doing the Continuity Closer masks the thermal spiking path that should not exist but commonly does in both first fix and second fix closer applications.

With the heat loss path obscured, the construction need not default outside the Building Regulations approved document L1A 5.9 that states there shall be no reasonably avoidable thermal bridges caused by gaps.

Always state the cavity width and thickness of cavity insulation, so the Continuity Closer is supplied with the appropriately sized insulation core.

References

- Building Regulations Document C L1 & L2
- British Standard 5628-3
- BRE Thermal Insulation Avoiding Risks
- Cavity Trays Ltd main manual
- Website: cavitytraystandards.co.uk
- Robust Details
- Scottish Tech Standards Part D
- Building Regulations Scotland – proposals for consultation June 2008
- BS EN ISO 10211: Thermal bridges in building construction



Designers' Comments

Failure through thermal spiking or thermal bypassing is likely to become more recognised as the standards for efficiently insulated structures increases and more completion testing is carried out. Gaps in insulation also support interstitial condensation that is an accompanying risk where insulation is punctuated, inconsistent or absent.

The following demonstrates the effect insulation gaps can have: A typical cavity wall with a low-density outer skin, 100mm cavity with 50mm insulation within and an internal skin of low-density block finished with plasterboard on dabs, can have a u-value of 0.28 W/m²K. The same wall without insulation has a u-value of 0.85 W/m²K. (Calculations based on BS EN ISO 6946 wall procedures).

A cavity wall arrangement with insulation gaps cannot match the thermal integrity of a cavity wall arrangement as intended and contravenes the requirement for uninterrupted thermal insulation as stipulated within the Building Regulations.

Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling
180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Continuity Closer with integrating insulation core to close vertical reveals at window and door openings. Build in carefully observing manufacturers' instructions to ensure correct installation. (2400mm lengths). Metres run _____.

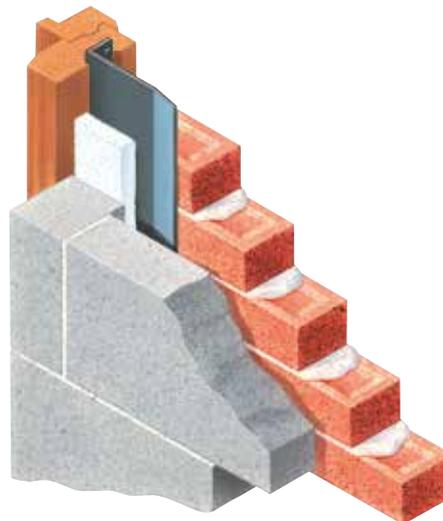
Specifications

Product name - group	Type D Damp-Proof Course - Vertical DPC & Insulator
Exposure Rating	Severe / Very Severe pending profile
Cavity - Standard Sizes Accommodated	Profiles available to suit all cavity dimensions
Special Cavity Widths Accommodated	Yes - all dimensions variable
Straight Reveals	Yes - build in profile as supplied
Checked Reveals	Yes - see illustrated version / style
Product Lengths	2.4m
Acts as Vertical DPC	Yes
Acts as Insulator	Yes
Permits Different Frame Positions	Yes
Frames Fitted as Work Proceeds or Later	Build in when wall is raised
Timber Frame / Traditional Construction	Both styles accommodated
Masonry Skin Styles	All popular flat faced masonry
Undulating Masonry Face Finishes	Seek advice providing details of material
Fire Rated	No (see Cavi prefixed range for fire rated)
Vertical and Horizontal Applications	Vertical. Horizontal versions to order
Compatible with other Cavity Wall Elements	No identified restrictions
Securing Ties Supplied	N/A
Pack Sizes	x10 lengths
Weight per pack	Dependent on profile. Average pack 8kg
Material	Polypropylene DPC + polystyrene inskorkoam
Colour	Black with white insulator
Building Regulations	Yes regulations can be satisfied
NHBC	Yes requirements can be satisfied
'K' Value of Insulation	0.038W/mK
CFC Free	Yes + zero ODP
Possible Composite Thermal Resistance Path	0.89 m ² K/W (25mm) 1.55 m ² K/W (50mm)
CAD Drawing Downloads Available	Yes

TYPE D

Damp-Proof Course

- Vertical damp-proof course
- Vertical insulator
- Robust and self-supporting - cannot sag
- Eliminates danger of mortar bridging
- Conventional build or attach to frame



Requirement

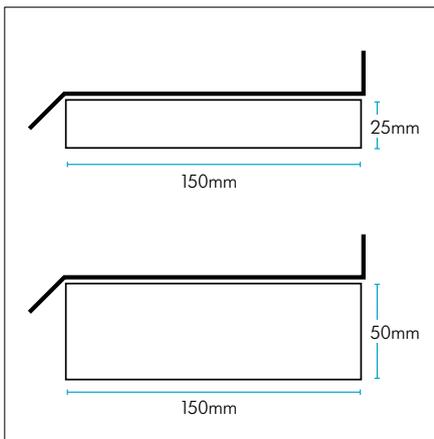
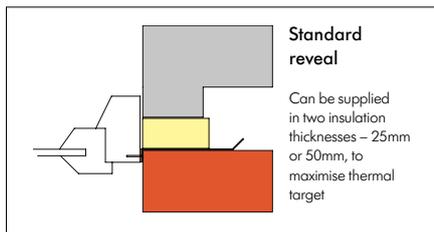
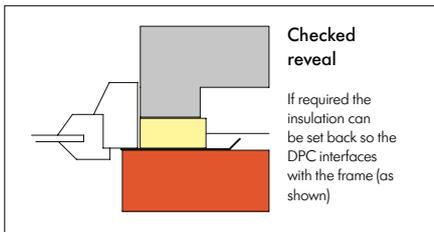
To provide a vertical dpc and thermal break when closing a reveal in the traditional manner by returning the inner masonry skin.

Solution

If the masonry forming the cavity wall reveal is to be returned in the traditional manner, the preformed Type D Damp-Proof Course can be deployed to provide the requisite DPC protection and thermal break now sought to satisfy regulation requirements. Being ready-shaped and available in almost any profile, the Type D introduces consistency of the intended construction detail. Thus distortion or misplacement associated with conventional DPC is eliminated.

References

- Investigating Rainwater Penetration of Modern Buildings (Masonry 129)
- Building Regulations Part L
- British Standard 5628-3
- BRE Thermal Insulation Avoiding Risks
- Website: cavitytraystandards.co.uk
- Robust Details
- Scottish Tech Standards Part D



Designers' Comments

Rigid profile Type D Damp-Proof Course does not sag or distort like roll DPC. This benefits positive positioning and a consistent build detail.

Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling
180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type D / Type DIP Damp Proof Course to vertically close traditionally built reveals at window and door openings. Build in carefully observing manufacturers' instructions to ensure correct installation. (2400mm lengths). Metres run _____.

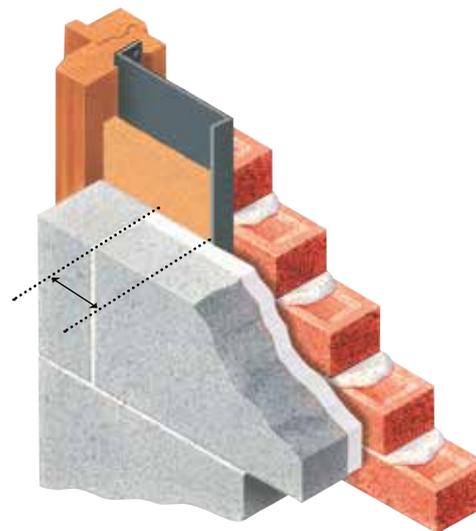
Specifications

Product name - group	Type DIP DPC & Interfacing Insulator
Exposure Rating	Severe / Very Severe pending profile
Cavity - Standard Sizes Accommodated	Profiles available to suit all cavity dimensions
Special Cavity Widths Accommodated	Yes – all dimensions variable
Straight Reveals	Yes - build in profile as supplied
Checked Reveals	Yes - see illustrated version / style
Product Lengths	2.4m
Acts as Vertical DPC	Yes
Acts as Insulator	Yes
Permits Different Frame Positions	Yes
Frames Fitted as Work Proceeds or Later	Build in when wall is raised
Timber Frame / Traditional Construction	Both styles accommodated
Masonry Skin Styles	All popular flat faced masonry
Undulating Masonry Face Finishes	Seek advice providing details of material
Acoustic Insulator	Acoustic insulation option available
Fire Rated	No (see Cavi prefixed range for fire rated)
Vertical and Horizontal Applications	Vertical. Horizontal versions to order
Compatible with other Cavity Wall Elements	No identified restrictions
Securing Ties Supplied	N/A
Pack Sizes	x10 lengths
Weight per pack	Dependent on profile. Average pack 8kg
Material	Polypropylene DPC + polystyrene BS 3836-1986
Colour	Black with tinted white insulator
Building Regulations	Yes regulations can be satisfied
NHBC / Zurich / Premier Requirements	Yes requirements can be satisfied
'K' Value of Insulations	0.033W/mK / 0.038W/mK
CFC Free	Yes + zero ODP
Possible Composite Thermal Resistance Path	0.89 m ² K/W (25mm) 1.55 m ² K/W (50mm)
CAD Drawing Downloads Available	Yes

TYPE DIP

Type D Interfacing Profile

- Vertical damp-proof course
- Thermal break
- Interfaces with cavity insulation
- Eliminates thermal spiking
- Rigid profile ensures consistency of build



Requirement

To provide vertical dpc and thermal break plus integration with partial fill cavity insulation when closing a reveal in the traditional manner.

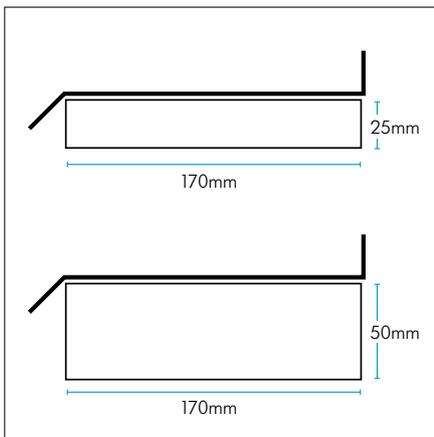
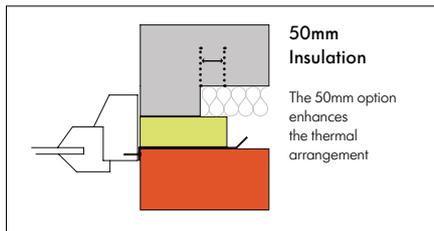
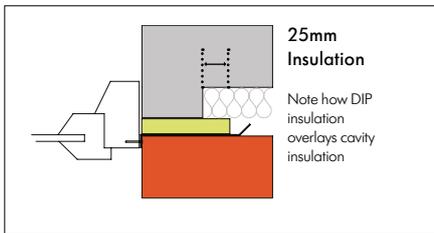
Solution

The Type DIP (Type D Interfacing Profile) is used where the mason is returning block work at the reveal in the traditional manner, and partial fill insulation is present within the cavity. The Type DIP is manufactured of solid DPC to which is bonded insulation.

The DPC profile extends sufficiently into the cavity to permit this insulation to overlay the cavity slab insulation and maximise the thermal arrangement whenever inner and outer skins meet. Different profiles are available for both straight and checked applications to suit structural requirements.

References

- Investigating Rainwater Penetration of Modern Buildings (Masonry 129)
- Building Regulations Part L
- British Standard 5628-3
- BRE Thermal Insulation Avoiding Risks
- Website: cavitytraystandards.co.uk
- Robust Details
- Scottish Tech Standards Part D
- BS EN ISO 6946:1997



Designers' Comments

Type DIP Interfacing Profile permits traditional closing and importantly interfaces with the cavity sheet insulation. This avoids vertical breaks (spiking) that can manifest if the cavity sheet insulation is not accurately and consistently cut up to the reveal. The Type DIP promotes cost effective traditional closing with enhanced thermal status.

Where partial fill insulation is present in the cavity, the Type DIP can project to overlay it. In so doing it covers gaps where the partial fill insulation stops short of the reveal masonry return. Building Regulations L1A, 5.9 states there shall be no reasonably avoidable thermal bridges caused by gaps.

Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling
180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type D / Type DIP Damp Proof Course to vertically close traditionally built reveals at window and door openings. Build in carefully observing manufacturers' instructions to ensure correct installation. (2400mm lengths). Metres run _____.

Specifications

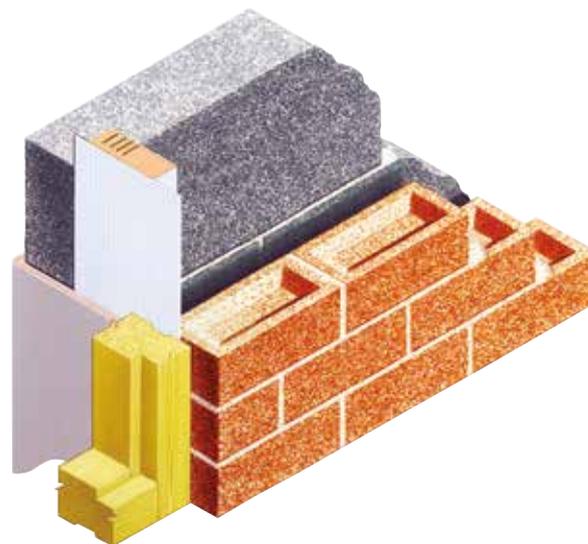
Product name - group	Type FWC Five Width Cavicloser
Exposure Rating	Severe 30+mm setback. Very severe when checked
Cavity - Standard Sizes Accommodated	Suits 50mm, 65mm, 75mm, 85mm & 100mm
Special Cavity Widths Accommodated	Above five dimensions - trim to choice
Straight Reveals	Yes - build in profile as supplied
Checked Reveals	No
Product Lengths	2.4m
Acts as Vertical DPC	Yes
Acts as Insulator	Yes
Permits Different Frame Positions	Yes
Frames Fitted as Work Proceeds or Later	Second fix
Timber Frame / Traditional Construction	Both styles accommodated
Masonry Skin Styles	All popular flat faced masonry
Undulating Masonry Face Finishes	Seek advice providing details of material
Acoustic Qualities	N/A
Fire Rated	No (see Cavi prefixed range for fire rated)
Vertical and Horizontal Applications	Yes - see examples
Compatible with other Cavity Wall Elements	No identified restrictions
Securing Ties Supplied	No - friction fitting + nail fix to block work
Pack Sizes	x10 lengths
Weight per pack	9kg
Material	PVCU + orange polystyrene foam
Colour	White with orange insulation
Building Regulations	Yes regulations can be satisfied
NHBC / Robust Details	Yes requirements can be satisfied
'K' Value of Insulations	0.030W/mK
CFC Free	Yes - zero ODP
CAD Drawing Downloads Available	Yes

TYPE FWC

Five Width Cavicloser

- Acts as a DPC
- Insulates the reveal
- One model provides five size options
- Straight reveal applications

MULTI WIDTH
Trim to size
on site
X5



Requirement

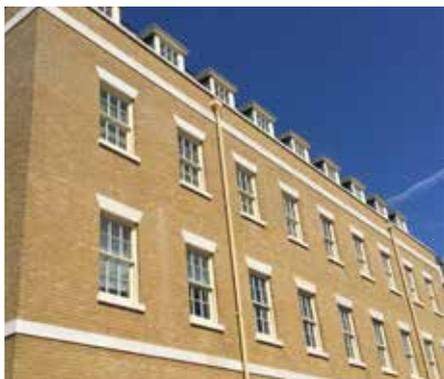
To close a reveal using closer with grooved insulation to suit a variety of cavity widths. Insulates and acts as a dpc.

Solution

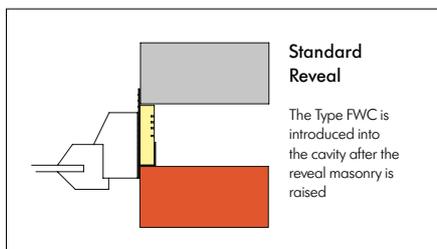
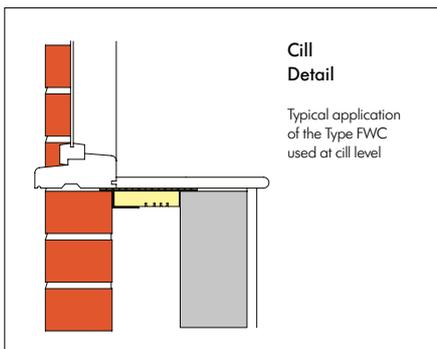
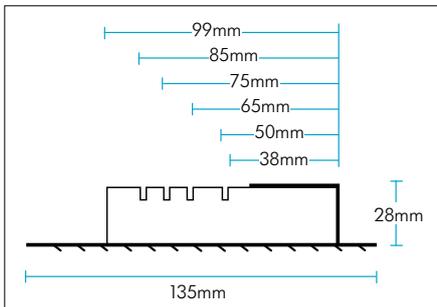
The Type FWC offers the installer flexibility, as grooves in the insulating core denote where the core can be trimmed back to create a cavity closer to suit five different cavity widths. Thus this one model addresses the widths of cavity currently popular.

References

- Building Regulations Part L
- British Standard 5628-3
- BRE Thermal Insulation Avoiding Risks
- Website: cavitytraystandards.co.uk
- Robust Details
- Scottish Tech Standards Part D



Cavity walls closed with Type FWC Cavity Closer. Type C Cavitytrays at lintel level. Discreet Caviweeps located in brickwork beyond surround feature



Designers' Comments

Installer needs only one model to close most popular cavity widths.

Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone
Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU
Tel: 01935 474769

Type FWC five width cavicloser to vertically close reveals at window and door openings. Build in carefully observing manufacturers' instructions to ensure correct installation. Metres run _____.

Specifications

Product name - group	Quickcloser
Exposure Rating	Severe
Cavity - Standard Sizes Accommodated	Insulation shapes from 40mm up to 100mm max
Special Cavity Widths Accommodated	Yes – within above range
Straight Reveals	Yes - build in profile as supplied
Checked Reveals	Yes - Turn section 90° & build in as illustrated
Product Lengths	2.1m and 2.4m
Acts as Vertical DPC	Yes
Acts as Insulator	Yes
Permits Different Frame Positions	Yes
Frames Fitted as Work Proceeds or Later	Yes - first or second fix options possible
Timber Frame / Traditional Construction	Both styles accommodated
Masonry Skin Styles	All popular flat faced masonry
Acoustic Insulator	Yes - reduction by sleeved insulation
Fire Rated	No (see Cavi prefixed range for fire rated)
Vertical and Horizontal Applications	Yes – see examples
Compatible with other Cavity Wall Elements	Retro cavity fill could alter insulation sleeve shape
Securing Ties Supplied	Yes
Pack Sizes	x10 lengths
Weight per pack	2.1m x 10 = 13.5kg, 2.4 x 10 = 15 kg
Material	PVCU + siliconised rock wool insulator
Colour	White + green encapsulation sleeve
Building Regulations	Yes regulations can be satisfied
NHBC / Robust Details	Yes requirements can be satisfied
'K' Value of Insulations	0.035W/mK (varies when compressed)
CFC Free	Yes
CAD Drawing Downloads Available	Yes

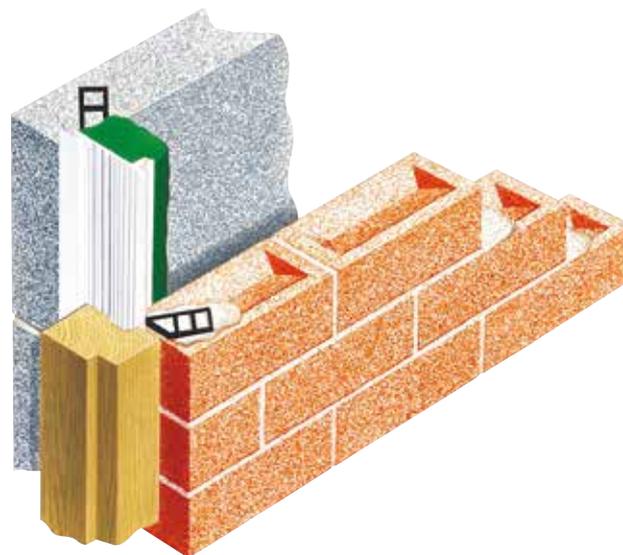
QUICKCLOSER

Vertical closer with flexible insulating core

- Closes the reveal
- Insulates cavities from 40mm to 100mm wide
- Acts as a DPC
- New and existing structure applications
- Integral Fins

SQUEEZABLE

- fits into small cavities encountered when altering old properties



Requirement

To close, insulate and act as a vertical dpc in reveals with cavities of variable width.

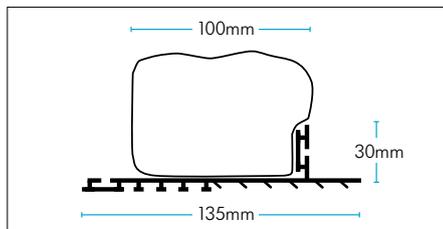
Solution

The Quickcloser is designed for use in refurbishment, upgrading and alteration works of existing properties constructed prior to 1970, when the traditional cavity width was 2 inches (50mm).

The closer features a flexible insulating core consisting of a polythene sleeve enveloping infill of siliconised rock wool insulation. The sleeve is secured to a rigid face-plate that spans the reveal cavity and overlays both inner and outer masonry skins. The sleeve can be shaped to size by the user, permitting its entry into existing narrow and undulating reveal cavities. Wall ties that accompany this closer may be utilised where the proposed works permit. Alternatively, the face-plate may be directly secured to the masonry skins.

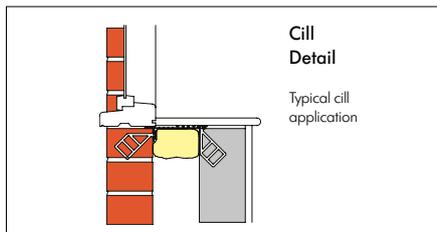
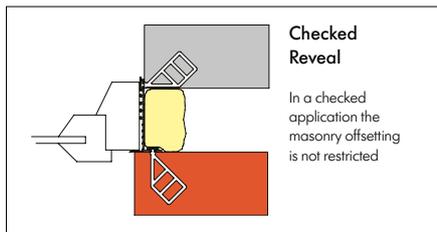
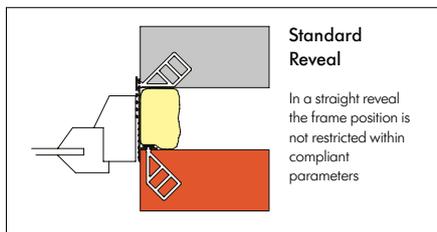
References

- Building Regulations Part L
- British Standard 5628-3
- BRE Thermal Insulation Avoiding Risks
- Website: cavitytraystandards.co.uk
- Robust Details
- Scottish Tech Standards Part D
- Scottish Tech Standards Part D



Refurbishment Applications Type RC Cavity Closers

Please note this Quickcloser design can now fulfil all functions of those products and accordingly has superseded them. Existing specifications calling for superseded models will be offered the latest standard.



Designers' Comments

The installer creates the shape of the closing insulation, which can be helpful if the cavity masonry faces are undulating or inconsistent. Thermal performance will vary pending extent of compression within cavity.

Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling

180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Quickcloser to be introduced into cavities exposed during alteration / improvement works to insulate and close at window and door openings. Build in carefully observing manufacturers' instructions to ensure correct installation. (2.1 and 3.0m lengths). Metres run _____.



Opening ready to receive 2nd fix Quickcloser

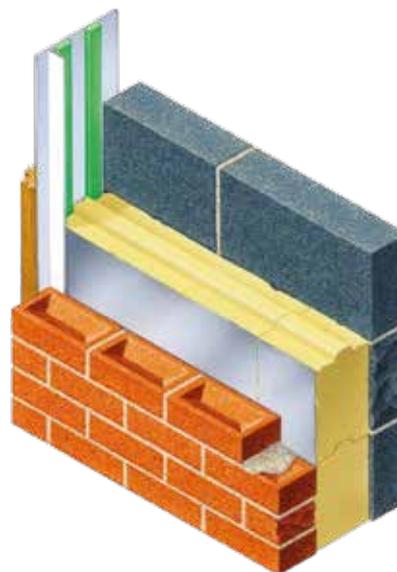
Specifications

Product name - group	Type RFC Reveal Face Closer
Exposure Rating	Severe with set-back frame and Type C cavitray Cavity – Standard Sizes Accommodated: From 50mm up to 150mm
Straight Reveals	Yes
Checked Reveals	No
Product Lengths	2.1m and 3.0m
Acts as Vertical DPC	Yes material not hygroscopic
Acts as Insulator	No function provided by full fill
Permits Different Frame Positions	Yes
Frames Fitted as Work Proceeds or Later	Later - second fix
Timber Frame / Traditional Construction	Both – subject to timber frame differential movement parameters
Masonry Skin Styles	All popular flat faced masonry
Undulating Masonry Face Finishes	Must have smooth vertical face to reveal opening
Acoustic Insulator	Yes - reduction by sleeved insulation
Fire Rated	No
Vertical and Horizontal Applications	Most
Compatible with other Cavity Wall Elements	Using a Type C horizontal Cavitray over the window head is recommended as either side of the structural opening benefits good shelter above the Type RFC
Pack Sizes	x10 lengths
Weight per pack	13kg
Material	PVCU
Colour	White
Manufacturing Standard	BS EN 9001:2008
Building Regulations	Can be satisfied using this approach
NHBC / LABC / Premier Requirements	Yes requirements can be satisfied
Insulation Value	Not applicable, insulation provided by full fill
CFC Free	Yes + zero ODP
CAD Drawing Downloads Available	Yes

TYPE RFC

Reveal Face Closer

- Reveal cavity widths from 50mm – 150mm
- Thermal / Acoustic integral cushioning strip
- Reduces work on site
- Cavity insulation uninterrupted



Requirement

To close reveal face permitting full fill cavity insulation to terminate flush with masonry opening so it runs uninterrupted.

Solution

Where full fill cavity insulation is terminated at the reveal face, the requirement for a conventional closer can be eliminated. Instead the closing and finishing utilises a Reveal Face Closer. The rigid full fill insulation is commonly left protruding into the opening, and once the opening masonry has been completed the excess insulation is vertically sawn off flush with the reveal masonry.

The Reveal Face Closer is then secured to both masonry skins as a second fix operation at an appropriate time in the build programme. Flexible contouring cushioning on the cavity facing side of the Face Closer gently interfaces with the full-fill cavity insulation as the Type RFC is fitted. In so doing it accommodates small undulations and gaps and establishes a thermally and acoustically beneficial infilling connection.

A location moulding ensures the Type RFC aligns and unites with the external skin whilst fins on the reveal face guard against capillary water ingress. The Type RFC provides a rigid finish ready to accommodate subsequent introduction of the window or door frame.

References

- PD EN 6697
- BRE Thermal Insulation Avoiding Risks
- BS EN ISO 10211 Thermal Bridges in building construction
- Building Regulations Part L
- Building Regulations Part C

Designers' Comments

The integrity of the full-fill cavity insulation need not be interrupted and can terminate at the reveal face where the contouring cushioning can aid consolidation against acoustic and thermal performance of the Reveal Face Closer. The calculated thermal performance of the wall up to the opening thus remains unchanged. The Type RFC may be considered for use with popular styles of full-fill cavity insulation terminating with a sawn, rigid modular interlocking or semi-rigid cut fibre finish.

Important

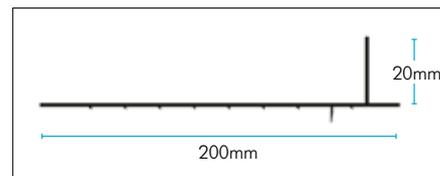
The Type RFC should only be considered for use where full fill cavity insulation of an approved type is present in the cavity and provides the requisite thermal insulation requirements to satisfy applicable regulations.



Full fill modular insulation is commonly out of alignment or finished too far back from the reveal face. Consequently there are gaps (hidden from view) between the insulation and a conventional cavity closer



Leaving the insulation projecting the reveal and cutting it vertically afterwards is an alternative approach.



Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling

180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type RFC to face-close cavity reveals where cavity insulation terminates flush with reveal face at window and door openings. Build in carefully observing manufacturers' instructions to ensure correct installation. (2.1 and 3.0m lengths). Metres run _____.

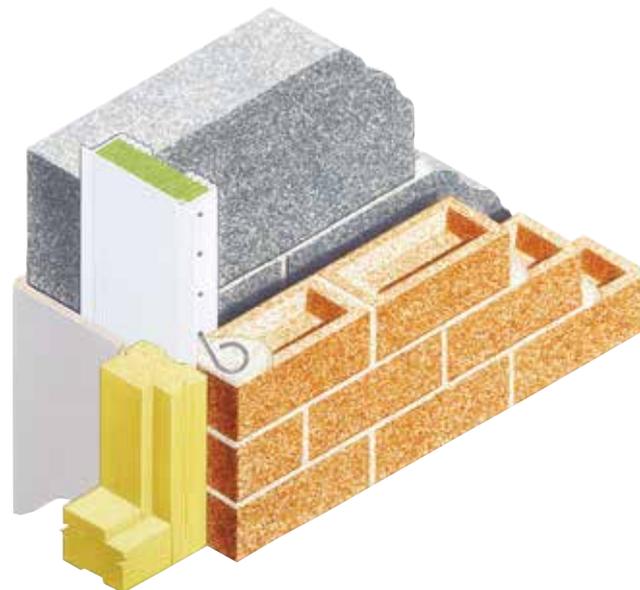
Specifications

Product name - group	Type WCA Cavicloser
Exposure Rating	Severe 30+mm setback. Very severe when checked
Cavity - Standard Sizes Accommodated	From 100mm up to 150mm
Special Cavity Widths Accommodated	Yes - bespoke closer service offered
Straight Reveals	Yes - build in profile as supplied
Checked Reveals	Yes - build in as checked illustration
Product Lengths	2.1m and 3.0m
Acts as Vertical DPC	Yes
Acts as Insulator	Yes
Permits Different Frame Positions	Yes
Frames Fitted as Work Proceeds or Later	Yes - first or second fix options
Timber Frame / Traditional Construction	Both styles *integral movement link
Masonry Skin Styles	All popular flat faced masonry
Undulating Masonry Face Finishes	Seek advice providing details of material
Acoustic Insulator	Yes reduces sound flanking transmission
Fire Rated	No (see Cavi prefixed WCA for fire rated)
Vertical and Horizontal Applications	Yes – see examples
Compatible with other Cavity Wall Elements	No identified restrictions
Securing Ties Supplied	Yes
Pack Sizes	x6 lengths
Weight per pack	2.1m x 6 = 14.5kg, 3.0m x 6 = 21kg.
Material	PVCU + polystyrene inskorfoam
Colour	White
Building Regulations	Yes regulations can be satisfied
NHBC	Yes requirements can be satisfied
'K' Value of Insulations	0.033W/mK / 0.038W/mK as standard
CFC Free	Yes + zero ODP
CAD Drawing Downloads Available	Yes

TYPE WCA

Closer for wide cavity installations

- Closes cavities up to 150mm wide
- Function as vertical DPC
- Insulates reveal
- Permits choice of frame positions
- Micro fins



Requirement

To close reveal and provide dpc and thermal qualities plus movement provision.

Solution

WCA stands for wide cavity applications. The large insulating core promotes excellent thermal qualities. The WCA is available to suit cavities up to 150mm wide and is secured in position using accompanying ties.

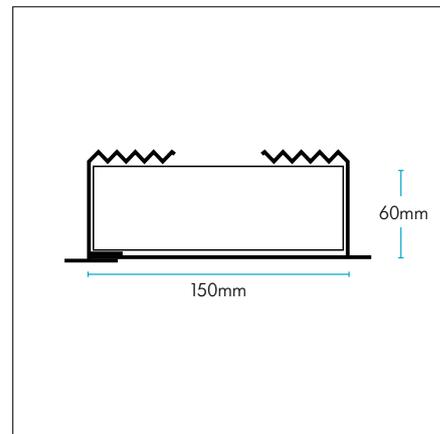
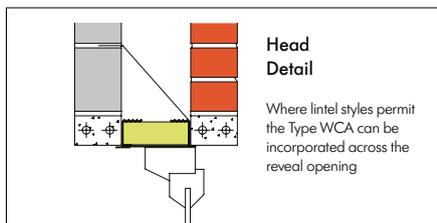
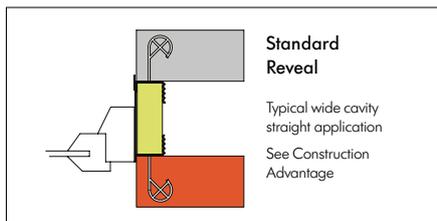
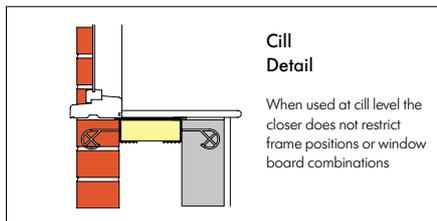
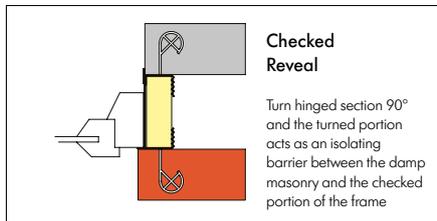
The side of the closer nearest the inner leaf has a friction fit relationship with the rest of the closer body. Thus in timber frame construction the closer can be screwed or nailed to the inner leaf, and the arrangement can benefit expansion and contraction provision.

References

- Investigating Rainwater Penetration of Modern Buildings (Masonry 129)
- Building Regulations Part L
- British Standard 5628-3
- BRE Thermal Insulation Avoiding Risks
- Website: cavitytraystandards.co.uk
- Robust Details
- Scottish Tech Standards Part D

Continuity Advantage Option

An optional extended insulating core (similar to Continuity Closer) can be provided on this product so it can interface with partial fill insulation. Option available only where cavity width is 100mm or more. State clearly if this interfacing option is required.



Designers' Comments

In timber frame applications direct screw fixing to the inner leaf is possible as closer has an integral friction link moulding offering some vertical differential movement provision. See also checked reveal hinge advantage.

Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling
180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type WCA Cavitycloser to all window and door reveals in cavity walls. Build in carefully observing manufacturers' instructions to ensure correct installation. (2.1 and 3.0m lengths). Metres run _____.

Specifications

Product name - group	Type WCA Maxi Range
Exposure Rating	Severe 30+mm setback. Very severe when checked
Cavity - Standard Sizes Accommodated	150mm to 330mm
Special Cavity Widths Accommodated	Yes - bespoke closer service offered
Straight Reveals	Yes - build in profile as supplied
Checked Reveals	Yes - build in as checked illustration
Product Lengths	2.1m, 2.4m and 3.0m standard lengths. Also available cut to customers window sizes.
Acts as Vertical DPC	Yes
Acts as Insulator	Yes
Permits Different Frame Positions	Yes
Frames Fitted as Work Proceeds or Later	Yes - first or second fix options
Timber Frame / Traditional Construction	Both styles accommodated
Masonry Skin Styles	All popular flat faced masonry
Undulating Masonry Face Finishes	Seek advice providing details of material
Acoustic Insulator	Acoustic insulation available to special order
Fire Rated	No (see Cavi prefixed range for fire rated)
Vertical and Horizontal Applications	Some applications
Compatible with other Cavity Wall Elements	No identified restrictions
Securing Ties Supplied	Option if first fixing
Pack Sizes	Available individually
Weight per pack	3.3 kg.
Material	PVCU + polystyrene + foil bubble + petheleyne
Colour	White and black infill face
Building Regulations	Yes regulations can be satisfied
NHBC / Zurich / Premier Requirements	Yes requirements can be satisfied
'K' Value of Insulations	0.038 0.033 option bubble foil 0.125
CFC Free	Yes + zero ODP

TYPE WCA MAXI RANGE

Vertical Closer for wide cavity installations

- Suits cavities from 150mm to 330mm
- Acts as DPC
- Acts as Insulator
- Differential movement provision



Requirement

To close reveal with wider cavity width. To provide dpc and thermal qualities plus movement provision.

Solution

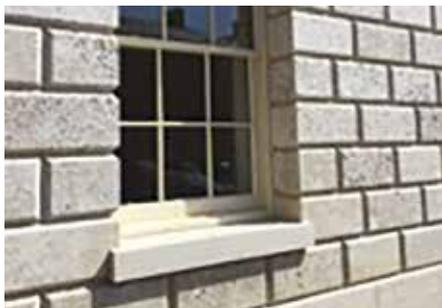
Wide cavity widths up to 330mm are addressed using caviclosers from the Type WCA Maxi range.

All models have enlarged multi-layered insulating cores promoting robustness and thermal contact resistance. The foam core is over layered with a reflective foil on a bubble barrier, with a finishing face of heavy duty low conductivity Petheleyne.

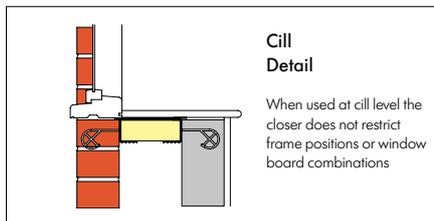
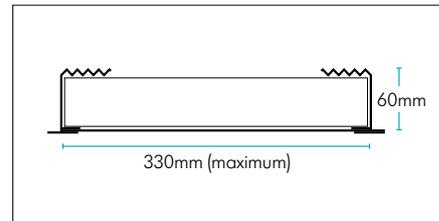
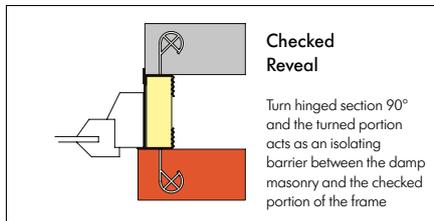
Suitable for use in both straight and checked reveals, the closer sides are independent of each other being friction linked via the insulating core. This arrangement is more accommodating of movement between skins given rotational predisposition increases the wider a cavity becomes.

Continuity Advantage Option

An optional extended insulating core (similar to Continuity Closer) can be provided on this product so it can interface with partial fill insulation. Option available only where cavity width is 100mm or more. State clearly if this interfacing option is required.

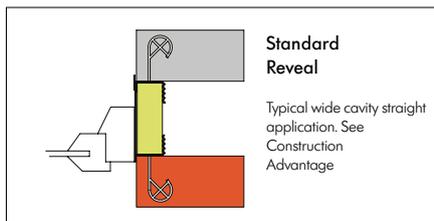


The Type WCA may be used in straight and checked reveals.



Designers' Comments

The reflective foil bubble layer extends around the edge of the closer as well as under the faceplate and in so doing increases the thermal resistance path.



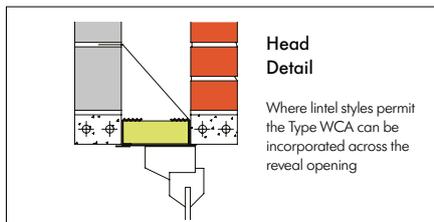
Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling

180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type WCA Cavicloser to all window and door reveals in cavity walls. Build in carefully observing manufacturers' instructions to ensure correct installation. (2.1m, 2.4m and 3.0m lengths). Metres run _____.



Specifications

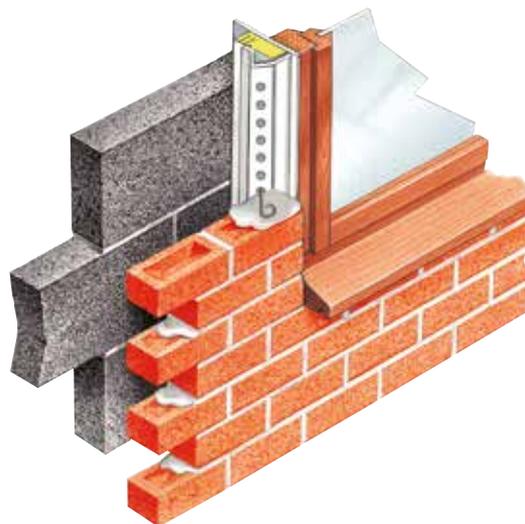
Product name - group	Type V Cavidloser
Exposure Rating	Severe 30+mm setback. Very severe when checked
Cavity - Standard Sizes Accommodated	50mm, 75mm, 100mm
Special Cavity Widths Accommodated	Yes - bespoke closer service offered
Straight Reveals	Yes - build in profile as supplied
Checked Reveals	Yes – turn hinged section 90° prior to use
Product Lengths	2.1m and 3.0m
Acts as Vertical DPC	Yes
Acts as Insulator	Yes
Permits Different Frame Positions	Yes
Frames Fitted as Work Proceeds or Later	Yes - first or second fix options
Timber Frame / Traditional Construction	Both styles accommodated
Masonry Skin Styles	All popular flat faced masonry
Undulating Masonry Face Finishes	Seek advice providing details of material
Fire Rated	No (see Cavi prefixed range for fire rated)
Vertical and Horizontal Applications	Yes – see examples
Compatible with other Cavity Wall Elements	No identified restrictions
Securing Ties Supplied	Yes included within pack
Pack Sizes	x10 lengths
Weight per pack	10kg per 2.1m pack, 14.5kg per 3.0m pack
Material	PVCU + polystyrene
Colour	White
Building Regulations	Yes regulations can be satisfied
NHBC / Zurich / Premier Requirements	Yes requirements can be satisfied
'K' Value of Insulations	0.033W/mK / 0.038W/mK
CFC Free	Yes + zero ODP
Possible Composite Thermal Resistance Path	2.20 m ² K/W (in 75mm cavity)
CAD Drawing Downloads Available	Yes

TYPE V

Contract Closer

- Closes cavity and acts as a DPC
- Insulates the reveal
- Range of cavity widths offered
- Eliminates need to cut and return masonry
- Cost-effective standardised detail
- Anti capillary fins

MULTI WIDTH
Trim to size
on site
X3



Requirement

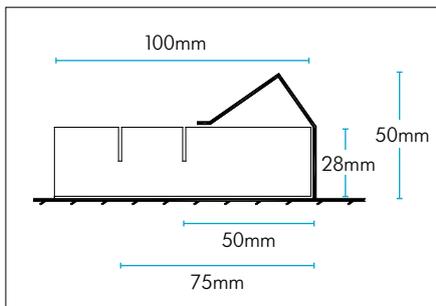
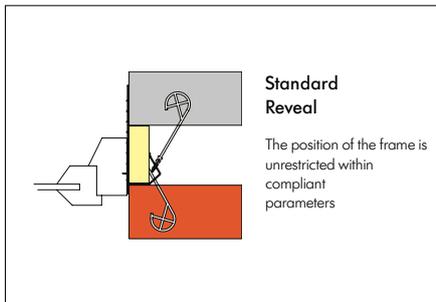
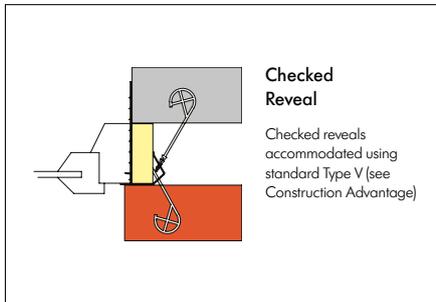
General application closer providing thermal, dpc and closing requirements featuring grooved insulating core offering dimension choices.

Solution

The Type V Closer provides an economical way of closing the cavity wall reveal. It is a one-part model consisting of a ribbed face that spans the cavity and overlays the inner and outer skins of masonry. Secured behind this face is a closed cell insulating core, that projects into the cavity. Slots accommodate ties to secure the closer. Integral anti-capillary mouldings. Frames can be fitted in any compliant position within the reveal depth.

References

- Building Regulations Document C L1 & L2.
- British Standard 5628-3.
- BRE Thermal Insulation Avoiding Risks.
- Cavity Trays Ltd main manual.
- Website: cavitytraystandards.co.uk
- Robust Details
- Scottish Tech Standards Part D
- Building Regulations Scotland – proposals for consultation June 2008.
- BS EN ISO 10211: Thermal bridges in building construction



Designers' Comments

Checked reveals instantly accommodated by turning the hinged section of the closer. The resulting profile also introduces an isolation stop between the damp masonry and the section of the frame in check.

Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling
180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type V Contract Closer to all window and door reveals in cavity walls. Build in carefully observing manufacturers' instructions to ensure correct installation. (2.1m and 3.0m lengths). Metres run _____.



Type V Cavity Closers permit openings in cavity walls to be closed swiftly and economically.

Specifications

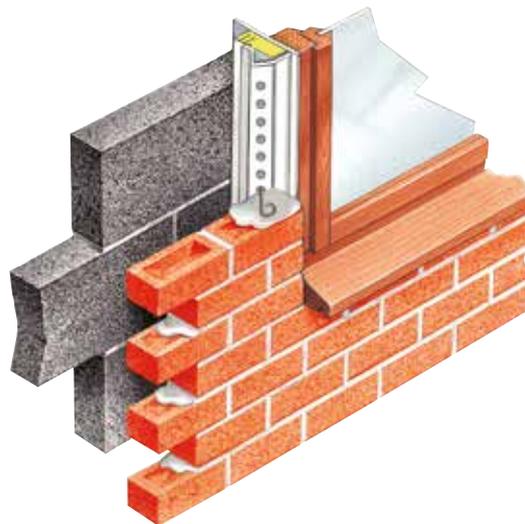
Product name - group	Type V 170
Exposure rating / frame relationship	Severe 30+mm setback. Very severe when checked
Cavity - standard sizes accommodated	100mm to 170mm
Special cavity widths accommodated	Yes bespoke closer service offered
Straight reveals	Yes - build in profile as supplied
Checked reveals	Yes- integral hinge in closer moulding – turn to suit
Product lengths	2.1m, 3.0m
Acts as vertical dp	Yes
Acts as insulator	Yes
Permits different frame positions	Yes
Frames fitted as work proceeds or later	Yes first fix with general second fix options
Timber frame / traditional construction	Both styles accommodated – see Designers' Comments
Masonry skin styles	All popular flat faced masonry
Undulating masonry face finishes	Seek advice providing details of material
Fire rated	See Cavi prefixed range for fire rated alternative
Vertical and horizontal applications	Yes
Compatible with other cavity wall elements	No identified restrictions
Securing ties supplied	Option if first fixing
Pack sizes	x5 lengths normal pack (varies pending width selected)
Weight per pack	10.7 kg per pack – 16.7kg average range
Material	PVCU + polystyrene
Colour	White
Manufacturing standard	BS EN ISO 9001:2008
Building Regulations	Yes regulations can be satisfied
NHBC / Zurich / Premier requirements	Yes requirements can be satisfied
Insulation K value	0.038 – 0.033 choice
CFC free	Yes + zero ODP
CAD drawing downloads available	Yes

TYPE V170 CAVICLOSER

Eight Width Range Contract Closer

- Closes cavity and acts as a DPC
- Cavity range 100mm to 170mm
- Acts as a vertical DPC
- Closes and insulates reveal
- Cost-effective contract closer for wide cavities

MULTI WIDTH
Trim to size
on site
X8



Requirement

To close cavity wall reveal, act as a vertical DPC and introduce a thermal break to window and door openings

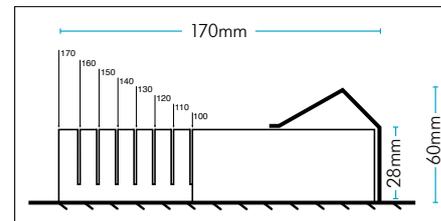
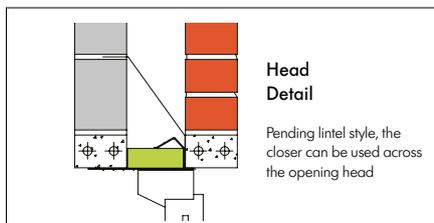
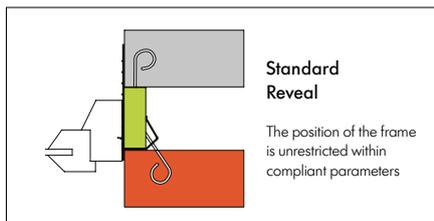
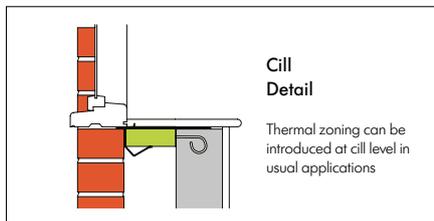
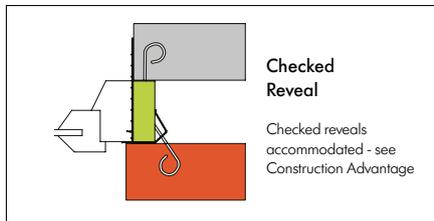
Solution

Based on the Type V design this model is for use in cavities from 100mm to 170mm. The Type V 170 is a one-part closer with a faceplate featuring anti-capillary fins and a frame-interfacing flexible gasket.

The faceplate overlays inner and outer skins between which the insulation core is retained within an integral securing jaw with side moulded apertures that receive the securing ties from both skins. The faceplate and gasket permit a choice of frame positions within compliant parameters making this a versatile contract closer for use in wider cavities.

References

- Building Regulations Document C L1 & L2.
- BRE Thermal Insulation Avoiding Risks
- PD6629:2010
- Scottish Technical Standards Part D
- BS EN ISO 10211: Thermal bridges in building construction
- BS EN ISO 10211: Thermal bridges in building construction



Designers' Comments

This contract closer can be manufactured to suit specific non-standard cavity widths and provides a cost-effective way of addressing the wider cavity. If inner skin is timber-frame, consider differential movement between masonry and timber and determine whether a closer with movement provision such as Type WCA and Type WCA Maxi Range is more appropriate.

Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling

180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type V 170 to all window and door reveals in cavity walls. Build in carefully observing manufacturers' instructions to ensure correct installation. (2.1m and 3.0m lengths). Metres run _____.

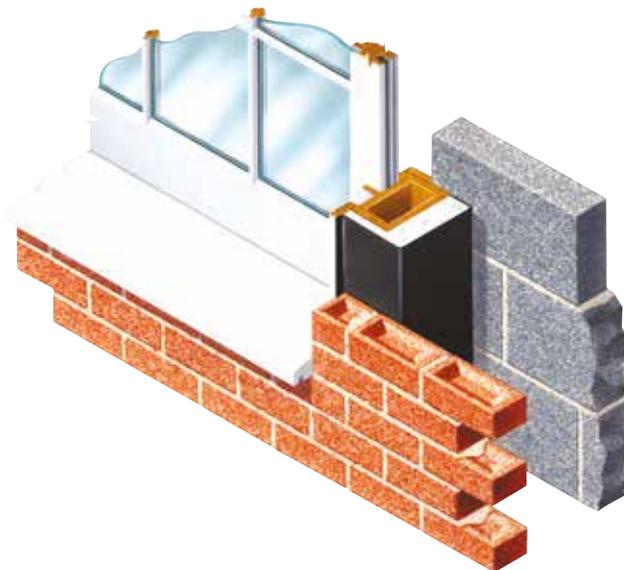
Specifications

Product name - group	Sash Frame Insulated DPC
Cavity widths accommodated	From 50mm up to 200mm
Dimensions	Standard 2400mm lengths Profile variable / bespoke
Bespoke options	All
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	In some instances
Masonry skin styles	Flat surfaced
Undulating masonry faces	No
Curved wall on plan applications	No
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	N/A
Thermal transmission of material	Negligible
Material	Polypropylene DPC Polystyrene + options
Colour	Black
Extrudes / compresses under load	No
Pack size / weight	Varies pending design
CFC	CFC Free
ODP	Zero
Regulation compliance	No adverse affect
May be used if cavity insulation present?	Functionality not affected
CAD downloads	Yes
Profile considerations	Continuity core option pending build detail

SASH FRAME INSULATED DPC

Insulated damp course profiles

- Provides vertical DPC separation
- Reduces heat loss potential
- New and existing structures applications
- Bespoke service



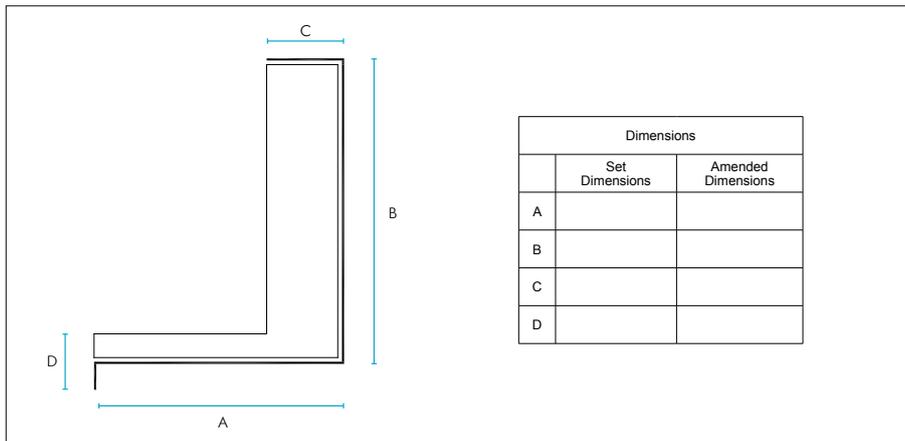
Requirement

Establishes DPC separation between masonry and frame. Introduces thermal break to aid reduction in heat loss from the structure.

Solution

Sash Frame Insulated DPC's provide two functions. They introduce DPC integrity along the line of the masonry check and cavity, guarding against wet transference into the sash box. They also reduce the potential heat loss opportunities, utilising an insulating layer (of a thickness dictated by the available space) bonded to the DPC surface(s).

Sash Frame Insulated DPC's are available to order for traditional counterweight frames and balanced spring frames. In refurbishment applications where a balanced spring frame is replacing a conventional counterweight frame, the opportunity also exists to fully insulate the resultant void. Modified versions are available for use with solid walls where enveloping the frame is desired to improve isolation against.



Determining Requirements

Provide wall section and plan. Profile can be determined and a proposal/cost offered for consideration.



Previously uninsulated frames can benefit thermal upgrading without visual impact



Insulated DPC is not visible in typical sash window re-installation

Designers' Comments

Two changes occur when a typical brick external skin becomes rain saturated. (1) The conductivity of the brick effectively doubles, so the calculated heat loss potential increases compared with conventional calculations. (2) The masonry supports water transference aided by wind pressure and the effects of the pressure differential in and out of the cavity wall. Sash Frame Insulated DPC's act as vertical barriers against these mediums.

Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling
180 Cavity Closers. Manufacturer: Cavity Trays Ltd, Yeovil
Somerset BA22 8HU Tel: 01935 474769

Bespoke Sash Frame Insulated DPC to all replacement window openings prior to installing replacement frames. Build in carefully observing manufacturers' instructions to ensure correct installation. (2400mm lengths). Metres run _____.

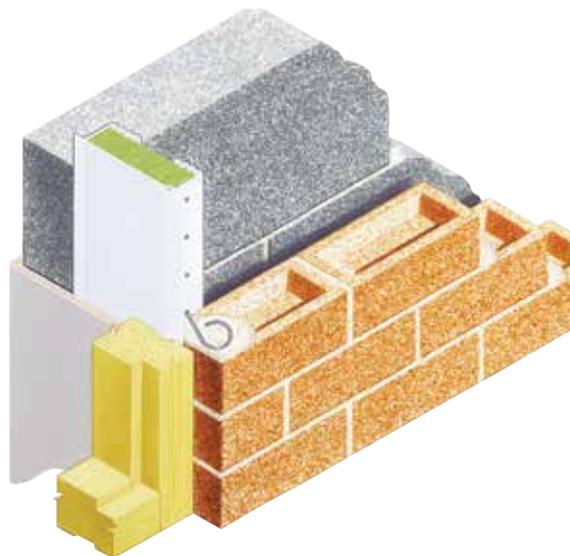
Specifications

Product name - group	Cavi 60 Type WCA Cavicloser
Exposure rating	30+mm setback. Severe Very severe when checked
Cavity - standard sizes accommodated	From 100mm up to 150mm
Special cavity widths accommodated	Yes bespoke closer service offered
Straight reveals	Yes – build in profile as supplied
Checked reveals	Yes – build in as checked illustration
Product lengths	2.1m, 3.0m
Acts as vertical dpc	Yes
Acts as insulator	Yes
Permits different frame positions	Yes
Frames fitted as work proceeds or later	Yes – first or second fix options
Construction	Traditional (masonry only)
Masonry skin styles	All popular flat faced masonry
Undulating masonry face finishes	Seek advice providing details of material
Acoustic insulator	Yes – insulation promotes reduction
Fire rated	Yes – Prefix denotes 60 mins (1 hr) fire rating
Vertical and horizontal applications	Yes – see examples
Compatible with other cavity wall elements	No known restrictions
Securing ties supplied	Yes
Pack sizes	x6 lengths
Weight per pack	2.1m x 6 = 20kg, 3m x 6 = 28.5kg.
Material	PVCU + rock wool insulator + stainless ties
Colour	White
Building Regulations	Yes regulations can be satisfied
NHBC	Yes requirements can be satisfied
'k' value of insulation used	0.035W/mK
CFC free	Yes + zero ODP
CAD drawing downloads available	Yes

CAVI 60 TYPE WCA CAVICLOSER

Type WCA Cavicloser

- 60 minutes fire integrity rated closer
- Acts as a DPC
- Accompanying stainless steel anchoring ties
- For cavity widths up to 150mm
- Micro fins



Requirement

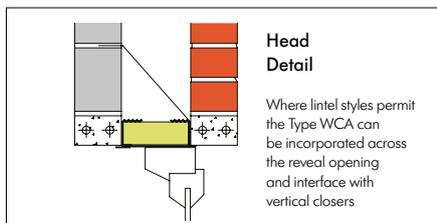
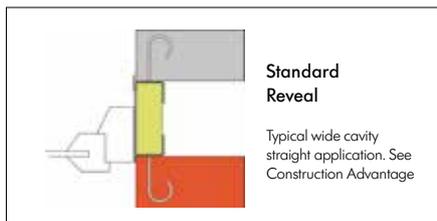
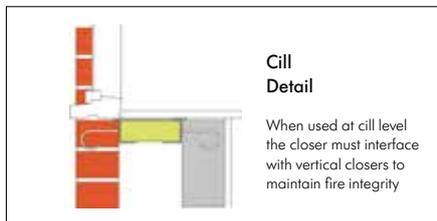
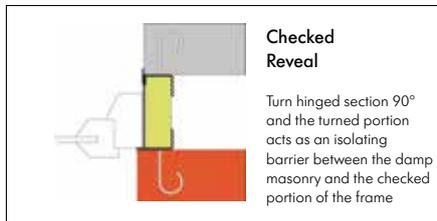
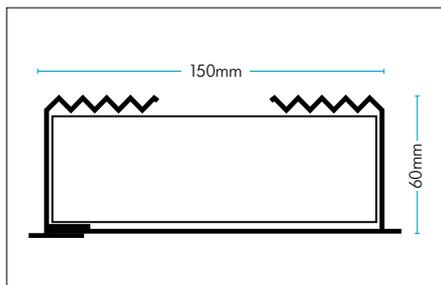
To close a reveal where a two hour fire rating is required in addition to the closing, thermal and dpc qualities.

Solution

With a one hour fire rating and a maximum cavity width accommodated of 150mm, the Cavi 60 Type WCA provides a robust method of closing and protecting wider reveals. The large sound-absorbing insulation core is secured behind the heavy duty ribbed face which permits an unrestricted choice of frame positions within thermally efficient parameters.

References

- BS 476 (fire resistance testing)
- Part E details – resistance to the passage of sound
- Building Regulations Document C L1 & L2
- Scottish Tech Standards Part D
- Robust Details
- British Standard 5628-3
- BRE Thermal Insulation Avoiding Risks
- BS EN ISO 10211: Thermal bridges in building construction



Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling
180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Cavi60 Type WCA Fire Rated Cavicloser to all window and door reveals in cavity walls. Incorporate in Build in carefully observing manufacturers' instructions to ensure correct installation. (2.1m and 3.0m lengths). Metres run _____.

Important

Fire-rated closers have been fire tested at independent Fire Research Stations, achieving the levels of fire integrity displayed with traditional masonry brick and block construction. These tests comply with BS 476: Part 20: 1987. The Cavi 60 prefix identifies closers achieving a sixty-minute fire integrity rating within our reporting parameters.

Where usage falls outside of this scope such as where one skin is not of masonry, it is the users responsibility to ensure the proposed construction provides a level of stability, integration, performance and fire resistance that is fit for purpose and the resultant detail will perform to the standard created and required by the user.

Attention must always be paid to any possible deflection or distortion which could cause gaps to form between the material and a fire barrier.

In the event of a fire, Cavity Trays Ltd cannot accept liability for failure where usage is outside of the standard application, including but not limited to, where deflection or distortion has allowed gaps to form around the barrier, or where the barrier is not fitted in accordance with the manufacturer's guidelines.

Cavi-60 rated closers are insulated with rockfibre mineral wool which conforms to the BS EN 13162: 2001 and has a thermal conductivity of 0.035W/mK.



See how a fire rated cavicloser works

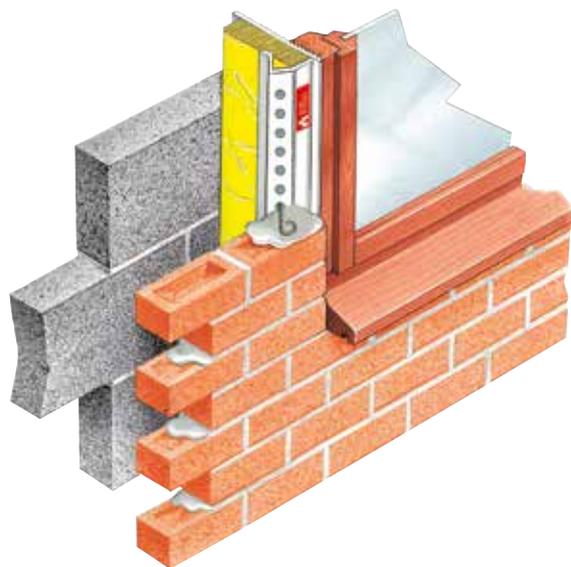
Specifications

Product name - group	Cavi 60 Type V170 Cavicloser
Exposure rating	30+mm setback. Severe Very severe when checked
Cavity - standard sizes accommodated	Up to 170mm
Special cavity widths accommodated	Yes – bespoke closer service state cavity width
Straight reveals	Yes – build in profile as supplied
Checked reveals	Yes – turn hinged section 90° prior to use
Product lengths	2.1m, 3.0m
Acts as vertical dpc	Yes
Acts as insulator	Yes
Permits different frame positions	Yes
Frames fitted as work proceeds or later	Yes – first or second fix options
Construction	Traditional (masonry only)
Masonry skin styles	All popular flat faced masonry
Undulating masonry face finishes	Seek advice providing details of material
Acoustic insulator	Yes reduces direct and flanking transmission
Fire rated	Yes Prefix denotes 60mins (1hr) fire integrity rating when tested as stated, see: Important
Vertical and horizontal applications	Yes – see examples
Compatible with other cavity wall elements	No known restrictions
Securing ties supplied	Yes
Pack sizes	x6 lengths
Weight per pack	2.1m x 6 = 13.5kg. 3m x 6 = 19kg.
Material	PVCU + rock fibre insulator + stainless ties
Colour	White extrusion
Building Regulations	Yes regulations can be satisfied
NHBC	Yes requirements can be satisfied
'k' value of insulation used	0.035W/mK
CFC free	Yes + zero ODP
CAD drawing downloads available	Yes

CAVI 60 TYPE V170 CAVICLOSER

Fire Resistant Barrier / Closer

- One hour fire rating
- Cavity range 100mm to 170mm
- Acts as a DPC
- Closes and insulates reveal
- Acoustic reduction insulator



Requirement

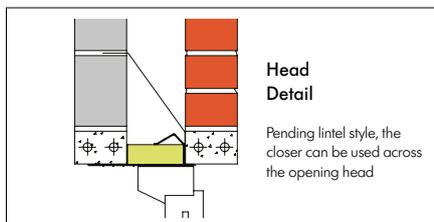
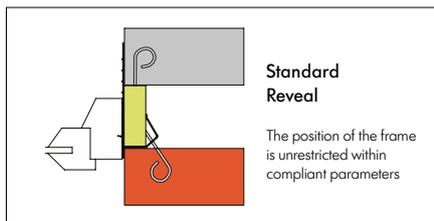
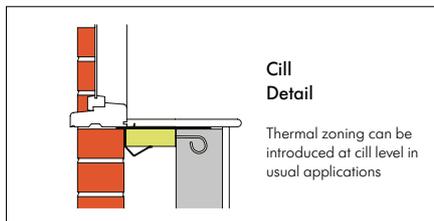
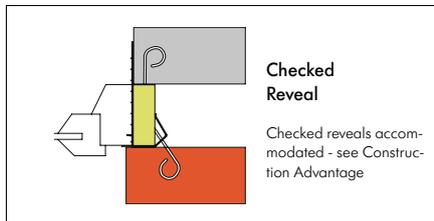
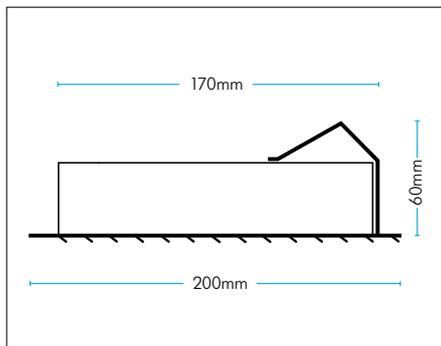
To close a reveal with a wider cavity where a one hour fire rating is required in addition to the closing, thermal and dpc qualities.

Solution

Cavities up to 170mm maximum can be economically closed with the Cavi 60 V 170 which has an acoustic reducing insulator facing into the cavity and an accompanying fire integrity rating of one hour.

References

- BS 476 (fire resistance testing)
- Part E details – resistance to the passage of sound
- Building Regulations Document C L1 & L2
- Scottish Tech Standards Part D
- Robust Details
- British Standard 5628-3
- BRE Thermal Insulation Avoiding Risks
- BS EN ISO 6946:1997



Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling

180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Cavi60 Type V170 Fire Rated Cavity Closer to all window and door reveals in cavity walls. Incorporate in Build in carefully observing manufacturers' instructions to ensure correct installation. (2.1m and 3.0m lengths). Metres run _____.

Important

Fire-rated closers have been fire tested at independent Fire Research Stations, achieving the levels of fire integrity displayed with traditional masonry brick and block construction. These tests comply with BS 476: Part 20: 1987. The Cavi 60 prefix identifies closers achieving a sixty-minute fire integrity rating within our reporting parameters.

Where usage falls outside of this scope such as where one skin is not of masonry, it is the users responsibility to ensure the proposed construction provides a level of stability, integration, performance and fire resistance that is fit for purpose and the resultant detail will perform to the standard created and required by the user.

Attention must always be paid to any possible deflection or distortion which could cause gaps to form between the material and a fire barrier.

In the event of a fire, Cavity Trays Ltd cannot accept liability for failure where usage is outside of the standard application, including but not limited to, where deflection or distortion has allowed gaps to form around the barrier, or where the barrier is not fitted in accordance with the manufacturer's guidelines.

Cavi-60 rated closers are insulated with rockfibre mineral wool which conforms to the BS EN 13162: 2001 and has a thermal conductivity of 0.035W/mK.

Specifications

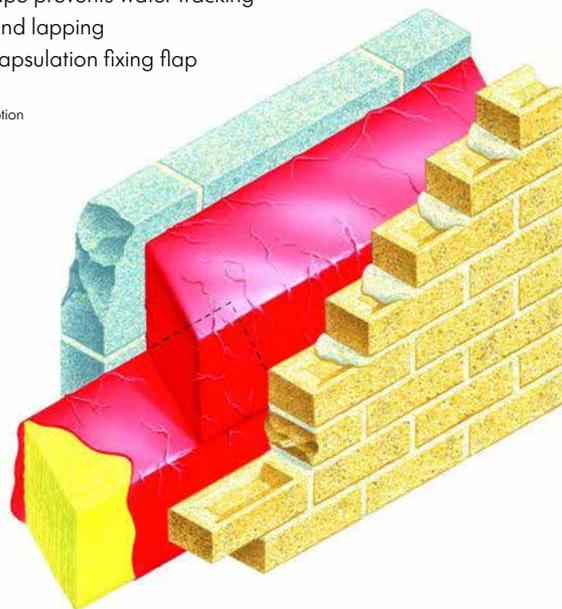
Product name - group	Cavi 60 Type SAF Stop
Exposure rating	Very severe
Cavity - standard sizes accommodated	Up to 140mm
Special cavity widths accommodated	Yes - state actual cavity width requirement
Special cavity widths available	Tested in a cavity up to 180mm
Common cavity wall applications	Yes – build in profile as illustrated
Corners and links	Angled profile laps whilst maintaining integrity
Product lengths	1.2m
Protective sleeving deflects water forward	Yes – at all times even where lapped
Acts as insulator	Yes insulates entire cavity width – see below
Installed as wall is raised	Yes – compresses for optimum fit in cured masonry
Construction	Traditional (masonry only)
Masonry skin styles	Accommodate most types of masonry finish
Acoustic insulator	Yes – reduces direct and flanking transmission
Fire rated	Yes Cavi 60 prefix denotes 60 mins (1 hr) rating when tested as stated, see: Important
Horizontal and vertical applications	Yes – horizontal and numerous vertical uses
Compatible with other cavity wall elements	Yes subject to masonry finishes being appropriate
Securing methods	Friction fit / support on naturally occurring wall ties / flap fixing
Securing ties supplied	N/A. Friction fit + naturally occurring ties support
Pack sizes	x10 lengths
Thermal resistance path	Exceeds minimum requirement
Weight per pack	10kg
Colour	Red
Building Regulations	Yes permits regulations to be satisfied
NHBC	Yes permits requirements to be satisfied
'k' value of insulation used	0.035W/mK
CFC free	Yes + zero ODP
CAD drawing downloads available	Yes

CAVI 60 TYPE SAF HORIZONTAL BARRIER

Fire Resistant Barrier / Closer

- Acoustic barrier
- Fire barrier
- Protective shape prevents water tracking
- Easy linking and lapping
- Optional encapsulation fixing flap

Staggered placement option permits sloping tops and bottoms to interface and eliminate end joining



Conventional end-to-end installation or staggered lap installation. Both direct water forwards

Requirement

Acoustic and one hour rated fire rated cavity barrier to compartmentalise cavity walls of building of multi occupancy.

Solution

This compressible cavity barrier is multifunctional. It acts as an acoustic barrier, a fire barrier and uses its shape to advantage by deflecting all arrested water forward. Overlapping capability means adjacent lengths can maintain functionality and status.

The compliant oriented shape is simply compressed and friction fitted into cured masonry whilst taking advantage of support from naturally occurring wall ties. Additionally, the Cavi60 Type SAF can also be supplied with an upwardly extending flap on one side of the encapsulation. This provides an additional fixing option of securing to the inner skin should this be required.

This product does not normally require any further accompanying DPC measures but cavity trays are available to cap this product should specific construction applications require.

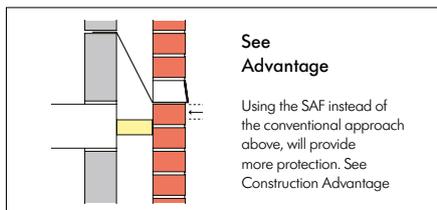
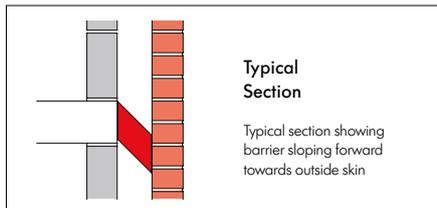
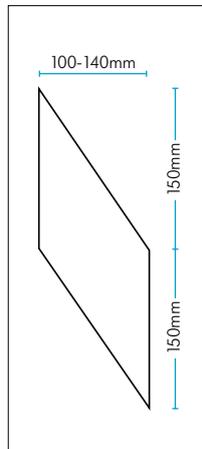


The parallelogram shape means adjacent lengths can lap and still maintain arrestment and forward sloping deflection of penetrating water. Fire and acoustic barrier qualities are uninterrupted. The encapsulation flap shown provides another fixing option if required.

As well as conventional end-to-end joining, the parallelogram shape of the Cavi60 Type SAF accommodates staggered up and down placement. This barrier is designed to be compression fitted within a masonry cavity. In addition, advantage may be taken of naturally occurring wall ties to provide support and upper flap fixing against the inner skin if such a fixing option is selected. Installation must result in all barriers forming a continuous tightly butted and lapped arrangement with no interruptions or gaps.

References

- BS 476
(fire resistance testing)
- Part E details – resistance to the passage of sound
- Building Regulations Document C L1 & L2
- Scottish Tech Standards Part D
- Robust Details



Designers' Comments

Use of the Cavi 60 Type SAF Horizontal Barrier eliminates areas of unprotected masonry between DPC and stop, identified within Robust Detail E-FC-3 (external flanking wall junction). Every building that is divided into more than one area of different occupation must be designed and constructed in such a way that in the event of an outbreak of fire within the building, fire and smoke are inhibited from spreading beyond the area of occupation where the fire originated. 2.2 BR(S) – mandatory.

Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling
180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Cavi60 Type SAF Fire Rated Cavity stop / barrier to close / compartmentalise horizontally cavities of external walls. Incorporate and build in carefully observing manufacturers' instructions to ensure continuous and correct installation. (1200mm lengths). Metres run _____.

Important

Fire-rated barriers have been fire tested at independent Fire Research Stations, achieving the levels of fire integrity displayed with traditional masonry brick and block construction. These tests comply with BS 476: Part 20: 1987. The Cavi 60 prefix identifies barriers achieving a sixty-minute fire integrity rating within our reporting parameters.

Where usage falls outside of this scope such as where one skin is not of masonry, it is the users responsibility to ensure the proposed construction provides a level of stability, integration, performance and fire resistance that is fit for purpose and the resultant detail will perform to the standard created and required by the user.

Attention must always be paid to any possible deflection or distortion which could cause gaps to form between the material and a fire barrier.

In the event of a fire, Cavity Trays Ltd cannot accept liability for failure where usage is outside of the standard application, including but not limited to, where deflection or distortion has allowed gaps to form around the barrier, or where the barrier is not fitted in accordance with the manufacturer's guidelines.

Specifications

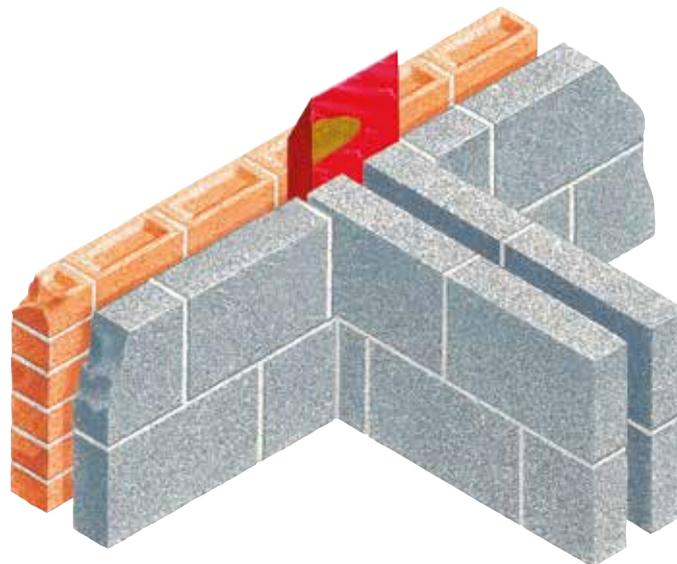
Product name - group	Cavi 60 Type SAF Vertical Barrier
Exposure rating	Very severe
Cavity - sizes accommodated	Up to 140mm
Special cavity widths accommodated	Yes – bespoke service offered
Product lengths	1200mm x 300mm (typical)
Product corners	Internal and external in matching dimensions
Acts as vertical dpc	Yes
Acts as insulator	Yes
Construction	Traditional (masonry only)
Masonry skin styles	All popular flat faced masonry
Undulating masonry face finishes	Seek advice providing details of material
Acoustic insulator	Yes
Fire rated	Yes – Cavi 60 denotes 60 minutes rating when tested as stated, see: Important
Vertical and horizontal applications	Vertical only – see adjacent page for horizontal barrier
Compatible with other cavity wall elements	Yes – see Designers' Comments reference starter section
Securing ties supplied	N/A compression held and wedge holds on lower
Pack sizes	Lengths available individually
Insulation K value	Rock MW 0.035W/mK
Colour	Red
Building Regulations	Yes regulations can be satisfied
NHBC / Robust Details / Building Regulations	Yes requirements can be satisfied
CFC free	Yes + zero ODP
ECO points rating	Low
CAD drawing downloads available	Yes

CAVI 60 TYPE SAF VERTICAL CAVITY BARRIER

Fire Resistant Barrier / Closer

- Acoustic Barrier
- Fire Barrier – 1 hours rating
- Sloping shape deflects water forward
- Easy linking and continuity

Angled ends prevent horizontal water entry between joins + optional bonded DPC



Requirement

To provide vertical 4 hour fire rated acoustic cavity barrier at party wall junctions.

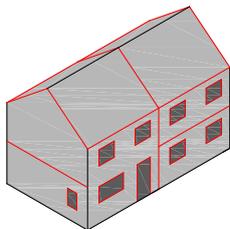
Solution

This vertical dual-function barrier is for use where separating walls (party walls) join exterior cavity walls. The barrier introduces a four hour rated fire integrity level and acoustic cushioning as demanded by legislation. The ends of the Cavi 60 Type SAF Vertical Barrier are angled so that each vertical length wedges into and against the vertical length under it, promoting continuity. Water cannot permeate inwardly because all joints are made sloping forward towards the outer leaf (as with the horizontal SAF barrier).

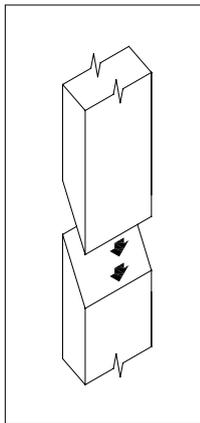
A flap at one end of the encapsulation sleeve is also provided should securing to the inner skin be required.

Vertical barriers are enveloped within a polythene sleeve sufficiently robust to act as a DPC, as defined by NHBC / Building Regulations. In applications where a rigid DPC presence is also required, the barrier is available with a semi-rigid polypropylene DPC bonded to one side. The specifier has the choice of two formats, both of which permit compliance in a manner most appropriate for the specific build detail.

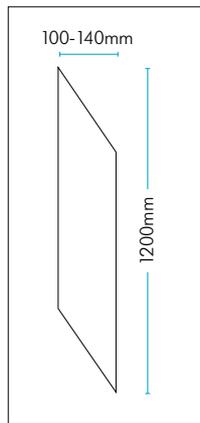
Cavi 60 Type SAF vertical barriers are available in a range of standard and bespoke sizes.



Vertical and horizontal barriers should be installed to create separate compartments in accordance with LABC 7.3.3.3 and NHBC 6.2.9.



The joining between vertical barrier/vertical barrier and vertical barrier/horizontal barrier always slopes forward. Flat / horizontal joins via which penetrating water might permeate are eliminated.



Vertical lengths lap and link use

Designers' Comments

Adoption of this approach can allow you to use a default value of 0.2. Should the party wall incorporate measures to prevent inter-dwelling water (spillage/flooding) contamination as defined by NHBC/Robust Details, the presence of a vertical barrier can block the intended water exit path. To overcome this problem a starter section of the Cavi 60 Type SAF Vertical Barrier that maintains an exit route can be supplied for placement at the base of the intersection. The section also offers compatibility where an exterior wall cavity gas barrier is present. A Type W caviweep-vent is incorporated to facilitate discharge through the exterior skin. Fire and acoustic integrity to both dwellings can be maintained.

Every building that is divided into more than one area of different occupation must be designed and constructed in such a way that in the event of an outbreak of fire within the building, fire and smoke are inhibited from spreading beyond the area of occupation where the fire originated. 2.2 BR(S) – mandatory.

Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling

180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Cavi 60 Type SAF Fire Rated Vertical Cavity Barrier to close vertically cavities of external walls. Incorporate and build in carefully observing manufacturers' instructions to ensure continuous and correct installation. (1200mm lengths). Metres run _____.

Important

Fire-rated barriers have been fire tested at independent Fire Research Stations, achieving the levels of fire integrity displayed with traditional masonry brick and block construction. These tests comply with BS 476: Part 20: 1987. The Cavi 60 prefix identifies barriers achieving a sixty minute fire integrity rating within our reporting parameters.

Where usage falls outside of this scope such as where one skin is not of masonry, it is the users responsibility to ensure the proposed construction provides a level of stability, integration, performance and fire resistance that is fit for purpose and the resultant detail will perform to the standard created and required by the user.

Attention must always be paid to any possible deflection or distortion which could cause gaps to form between the material and a fire barrier.

In the event of a fire, Cavity Trays Ltd cannot accept liability for failure where usage is outside of the standard application, including but not limited to, where deflection or distortion has allowed gaps to form around the barrier, or where the barrier is not fitted in accordance with the manufacturer's guidelines.

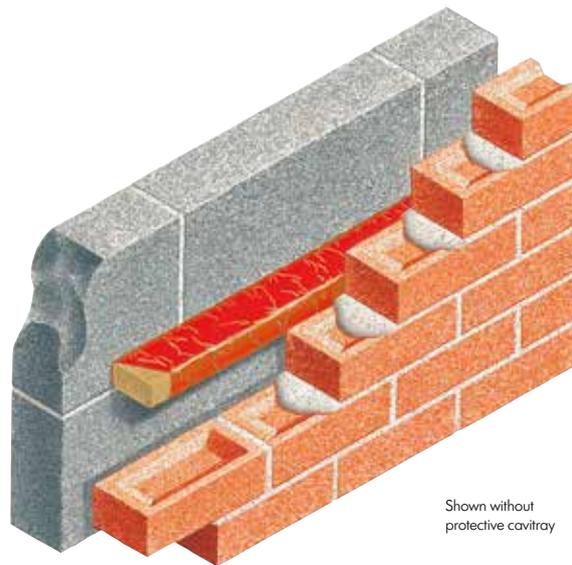
Specifications

Product name - group	Cavi 240 Type CFIS
Exposure rating	Very severe
Cavity - standard sizes accommodated	Up to 90mm maximum
Special cavity widths accommodated	Yes – compression fit
Common cavity wall applications	Yes – build in cavichcek as illustrated
Corners and links	Lap and butt options
Product sizes	1.2m x 50mm x 90mm max
Protective sleeving	Yes
Acts as insulator	Yes – provides highest fire rating – see below
Installed as wall is raised	Yes – compresses for optimum fit in cured masonry
Construction	Traditional (masonry only)
Masonry skin styles	Compresses to accommodate most skin finishes
Acoustic insulator	Yes – reduces direct and flanking transmission
Fire rated	Yes Cavi 240 prefix denotes 240 mins (4 hrs) rating when tested as stated, see: Important
Horizontal and vertical applications	Yes – horizontal and vertical uses
Compatible with other cavity wall elements	Yes – DPC cavitrays and caviveep compatible
Securing ties supplied	N/A - friction fit + any appropriate ties
Pack sizes	x10 lengths
Weight per pack	7.5kg
Material	Rock wool insulator within polysleeve
Colour	Red
Building Regulations	Yes regulations can be satisfied
NHBC	Yes requirements can be satisfied
'k' value of insulation used	0.035W/mK
CFC free	Yes + zero ODP
CAD drawing downloads available	Yes

CAVI 240 TYPE CFIS

Fire Resistant Barrier / Closer

- 240 minutes fire integrity rated barrier
- Friction fit or upstand flap fit
- Accompanying moisture protection measures
- For cavity widths up to 90mm



Shown without protective cavitrays

Requirement

To provide 4 hour fire rated acoustic cavity barrier for use in cavity walls in intermediate and top of wall locations.

Solution

Non-combustible rock mineral insulator promoting acoustic and fire barrier qualities enveloped within a green poly-sleeve. May be compressed to suit cavities of most popular sizes. This product can also be supplied with an upwardly extending flap on one side of the encapsulation. This provides an alternative fixing option of securing to the inner skin should this be required. State clearly which version is required. Preformed trays (Arresting Barriers or Dropcloaks) available to provide deflective qualities within cavity.

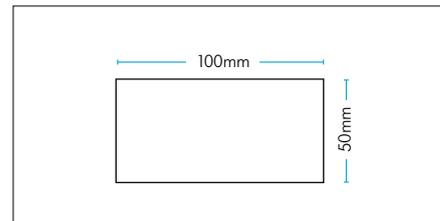
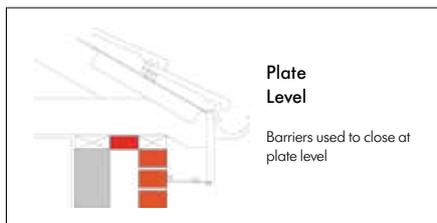
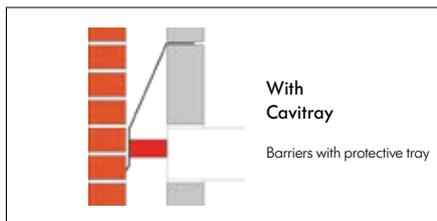
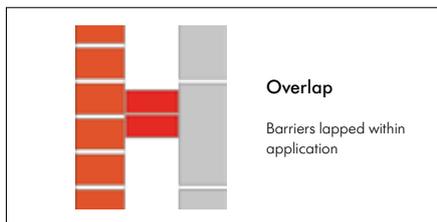
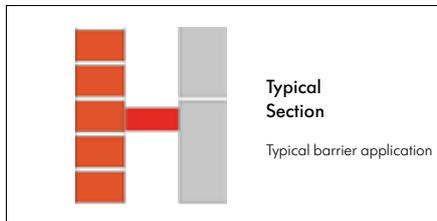
References

- BS 476 (fire resistance testing)
- Part E details – resistance to the passage of sound
- Building Regulations Document C L1 & L2
- Scottish Tech Standards Part D
- Robust Details
- British Standard 5628-3
- BRE Thermal Insulation Avoiding Risks

Designers' Comments

The four hour rating is the highest currently achievable in this style of barrier and permits the specifier to introduce a higher level of fire protection rating within the financial restraints normally associated with alternatives with lower ratings.

Every building that is divided into more than one area of different occupation must be designed and constructed in such a way that in the event of an outbreak of fire within the building, fire and smoke are inhibited from spreading beyond the area of occupation where the fire originated. 2.2 BR(S) – mandatory.



Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling
180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Cavi240 Type CFIS Fire Rated Acoustic Vertical Cavity Barrier to close cavities of external walls. Incorporate and build in carefully observing manufacturers' instructions to ensure continuous and uninterrupted installation. (1200mm lengths). Metres run _____.

Important

Fire-rated barriers have been fire tested at independent Fire Research Stations, achieving the levels of fire integrity displayed with traditional masonry brick and block construction. These tests comply with BS 476: Part 20: 1987. The Cavi 240 prefix identifies barriers achieving a four hour fire integrity rating within our reporting parameters. The Cavi 60 prefix identifies barriers achieving a one hour fire integrity rating within our reporting parameters.

Where usage falls outside of this scope such as where one skin is not of masonry, it is the users responsibility to ensure the proposed construction provides a level of stability, integration, performance and fire resistance that is fit for purpose and the resultant detail will perform to the standard created and required by the user.

Attention must always be paid to any possible deflection or distortion which could cause gaps to form between the material and a fire barrier.

In the event of a fire, Cavity Trays Ltd cannot accept liability for failure where usage is outside of the standard application, including but not limited to, where deflection or distortion has allowed gaps to form around the barrier, or where the barrier is not fitted in accordance with the manufacturer's guidelines.

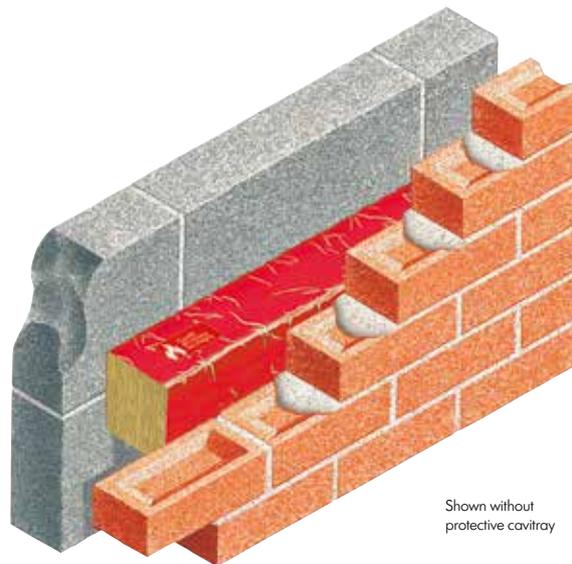
Specifications

Product name - group	Cavi 60 MWR 200
Exposure rating	Very severe
Cavity - standard sizes accommodated	Up to 200mm maximum
Special cavity widths accommodated	Yes – State actual cavity dimension
Common cavity wall applications	Yes – build in cavicheck as illustrated
Corners and links	Lap and butt options
Product sizes	1.2m x 100mm x 200mm max
Protective sleeving	Yes
Acts as insulator	Yes – acts as thermal & fire barrier – see below
Installed as wall is raised	Yes – compresses for optimum fit in cured masonry
Construction	Traditional (masonry only)
Masonry skin styles	Accommodate most types of finish to either skin
Acoustic insulator	Yes – reduces direct and flanking transmission
Fire rated	Yes Prefix denotes 60 mins (1 hr) fire rating when tested as stated, see: Important
Horizontal and vertical applications	Yes – horizontal and vertical uses
Compatible with other cavity wall elements	Yes – DPC cavitrays and caviweep compatible
Securing ties supplied	N/A. Friction fit + naturally occurring traditional ties
Pack sizes	Packs contain 10 lengths
Weight per pack	10kg
Material	Rock wool insulator within polysleeve
Colour	Red
Building Regulations	Yes regulations can be satisfied
NHBC	Yes requirements can be satisfied
'k' value of insulation used	0.035W/mK
CFC free	Yes + zero ODP
CAD drawing downloads available	Yes

CAVI 60 TYPE MWR 200

Fire Resistant Barrier / Closer

- One hour fire rated barrier
- Acoustic barrier
- Friction fit or upstand flap fit
- 100mm to 200mm cavity range



Shown without
protective cavitrays

Requirement

To provide 1 hour fire rated acoustic cavity barrier for use in wider cavity walls in intermediate and top of wall locations.

Solution

This is a larger version of the Type CFIS and accommodates cavities from 100mm up to 200mm. The Cavi 60 prefix denotes one hours fire rating. The insulating core promotes acoustic suppression. Thus this model can be used to address both fire and sound barrier requirements.

This product can also be supplied with an upwardly extending flap on one side of the encapsulation. This provides an alternative fixing option of securing to the inner skin should this be

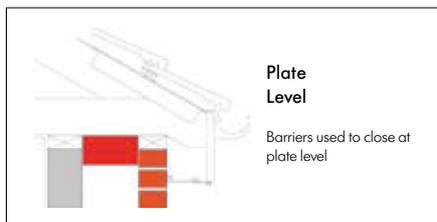
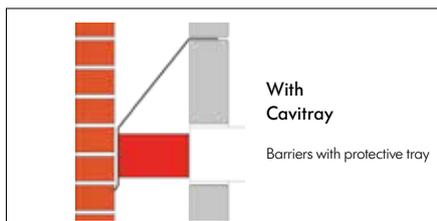
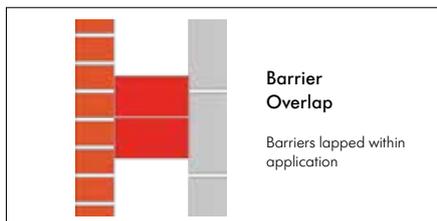
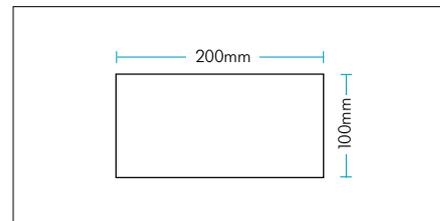
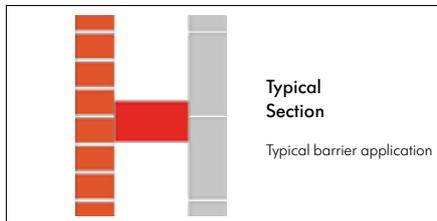
References

- BS 476 (fire resistance testing)
- Part E details – resistance to the passage of sound
- Building Regulations Document C L1 & L2
- Scottish Tech Standards Part D
- Robust Details
- British Standard 5628-3
- BRE Thermal Insulation Avoiding Risks

Designers' Comments

Extensively used at plate level to provide cost effective closing with sound and fire barrier qualities. Establishes one hour fire rated protective separation between cavity and roof space.

Every building that is divided into more than one area of different occupation must be designed and constructed in such a way that in the event of an outbreak of fire within the building, fire and smoke are inhibited from spreading beyond the area of occupation where the fire originated. 2.2 BR(S) – mandatory.



Bill of Quantity / Specification Wording

F30 Accessories / sundry items for brick / block / stone walling

180 Cavity Closers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Cavi 60 Type MWR Maximum Width Range Fire Rated Acoustic Cavity Barrier to close vertically cavities of external walls. Incorporate and build in carefully observing manufacturers' instructions to ensure continuous and correct installation. (1200mm lengths). Metres run _____.

Important

Fire-rated barriers have been fire tested at independent Fire Research Stations, achieving the levels of fire integrity displayed with traditional masonry brick and block construction. These tests comply with BS 476: Part 20: 1987. The Cavi 60 prefix identifies barriers achieving a four hour fire integrity rating within our reporting parameters. The Cavi 60 prefix identifies barriers achieving a one hour fire integrity rating within our reporting parameters.

Where usage falls outside of this scope such as where one skin is not of masonry, it is the users responsibility to ensure the proposed construction provides a level of stability, integration, performance and fire resistance that is fit for purpose and the resultant detail will perform to the standard created and required by the user.

Attention must always be paid to any possible deflection or distortion which could cause gaps to form between the material and a fire barrier.

In the event of a fire, Cavity Trays Ltd cannot accept liability for failure where usage is outside of the standard application, including but not limited to, where deflection or distortion has allowed gaps to form around the barrier, or where the barrier is not fitted in accordance with the manufacturer's guidelines.

VENTILATION

Ventilation of the Building Envelope

Ventilation products are divided into three sections, with each section dealing with a specific area of construction.

- Fascia Ventilators
- Eaves Ventilators
- Soffit Ventilators
- Ventilators where Walls & Roofs meet
- Ventilation through the Roof
- Ventilation through the Wall

Important

Every building must be designed and constructed in such a way that ventilation is provided so that the air quality inside the building is not a threat to the building or the health of the occupants 3.14 BR(S) – mandatory.

The designer has a choice of ways of providing ventilation for each area, and may select from each category the most appropriate in terms of performance and visual presence. Some products appear in more than one category.

Ventilators provide airflow in and out of the building envelope and permit specified rooms, areas and voids to breathe. They are also necessary to evacuate contaminated land gases out of a structure where gas arrestment barriers are present. Options for providing ventilation where a flat roof extension is added to an existing building include provision at the attachment point and corresponding ventilation opposite.

The NHBC advises properties less than two years did not cope with the migration of water vapour from roof space to outside during frost and snow conditions, where moisture evacuation from the roof space relied on permeable membranes only. The NHBC refers to BS 5250 and its guidance regarding using ventilators to provide adequate airflow levels.

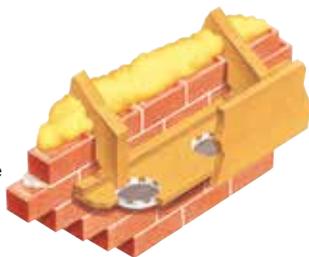
Our options to service roof void ventilation have been increased to address those situations where vapour permeable roofing underlays cannot provide the requisite levels of functionality. Additionally in some roof configurations and roof finishes (such as tight-fitting cement slates) dissipation of moisture is hindered and high and low passive ventilation provision is considered essential.

Different approaches to problem solving are possible using products from our range.

TYPE CSV

Circular Soffit Ventilator

- Superior airflow 2,100m²
- New and existing work applications
- Rotate for visual or non-visual appearance
- Insect screening
- Easy regulation compliance



Solution

The upgraded CSV Circular Soffit Ventilator may be introduced into new soffits or existing soffits. It permits easy and quick upgrading of existing structures.

The unique injection moulded ventilator has a deflecting louvred face, promoting positive air entry and insect screening. Unlike a standard ventilator, the CSV may be installed with louvres facing outwards or inwards. Inward facing can give the impression of a continuous unpenetrated soffit when a CSV of a matching colour is fitted. Fit at approximately 200mm centres to achieve ventilation equivalent to 10mm continuous opening.

Bill of Quantity / Specification Wording

G20 Carpentry / timber framing / first fix

Type CSV Circular Soffit Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour _____. Build into circular holes cut in soffit at specified centres Number _____.

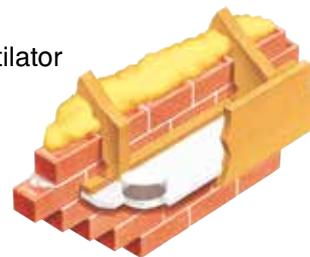
Product name	Type CSV Circular Soffit Ventilator
Size	70/79 x 15mm
Free airflow rating	2,100m ²
Colours	White, Black or Brown
Material	Polypropylene
Observations	Requires 70mm hole



TYPE CRSV

Circular Recessed Soffit Ventilator

- High airflow
- Reduces number of soffit apertures
- Insect screening
- New and existing work applications



Solution

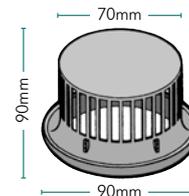
The CRSV differs from the standard CSV as it has a deep body that protrudes up into the soffit box. The airflow apertures are positioned around the sides of the deep body ventilator rather than through the top. This arrangement results in a far greater airflow rating per ventilator. Thus a lesser number are required to fulfil the statutory airflow levels. Fit at approximately 330mm centres to achieve ventilation equivalent to 10mm continuous opening.

Bill of Quantity / Specification Wording

G20 Carpentry / timber framing / first fix

Type CRSV Circular Soffit Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour _____. Build into circular holes cut in soffit at specified centres Number _____.

Product name	Type CRSV Circular Recessed Soffit Ventilator
Size	70/90 x 40mm
Free airflow rating	3420mm ² - suitable pitches 15 degrees upwards
Colours	Brown or Black
Material	Polypropylene
Observations	Requires 70mm hole



TYPE OFV-10

Over Fascia Ventilator

- Hidden ventilation at top of fascia
- All roof pitches accommodated
- Integral insect screening
- Reduces fascia size and cost
- Provides statutory airflow



Solution

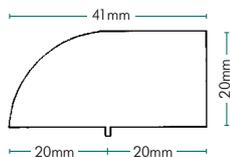
The Type OFV- 10 Over Fascia Ventilator is suitable for use on new and refurbishment work. This ventilator can be used in no-soffit situations as well as where the soffit is in place as the ventilator locates and fixes to the top of the fascia. Integral insect screening and fixing holes.

Bill of Quantity / Specification Wording

G20 Carpentry / timber framing / first fix

Type OFV-10 Over Fascia Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour black. Secure to top of fascia. Metres run _____.

Product name	Type OFV – 10 Over Fascia Ventilator
Size	1000mm x 40 x 20mm high
Free airflow rating	12,500mm ² per running metre
Colour	Black or White
Material	Polypropylene
Observations	For roof pitches of 15 degrees and above

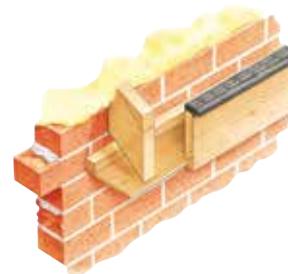


Over Fascia Ventilator OFV10, for roofs requiring the equivalent of a 10mm continuous gap. Suitable for roof pitches of 15 degrees upwards.

TYPE OFV-25

Over Fascia Ventilator

- Hidden ventilation at top of fascia
- All roof pitches accommodated
- Integral insect screening
- Reduces fascia size and cost
- Provides statutory airflow



Solution

The Type OFV -25 is shaped to permit easy fixing to the top of the fascia board. It has an airflow rating of 25,000mm² per metre, making it suitable for use with roof pitches of 15 degrees and below.

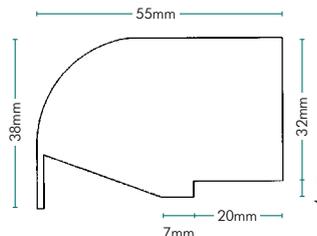
Over Fascia Ventilators are suitable for new and refurbishment work. They eliminate the need for visible soffit ventilation and can be installed in non-soffit locations. Integral insect screening.

Bill of Quantity / Specification Wording

G20 Carpentry / timber framing / first fix

Type OFV-25 Over Fascia Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour black. Secure to top of fascia. Metres run _____.

Product name	Type OFV – 25 Over Fascia Ventilator
Size	500mm x 57 x 48mm high
Free airflow rating	25,000mm ² per running metre
Colour	Black
Material	Polypropylene
Observations	For roof pitches below 15 degrees

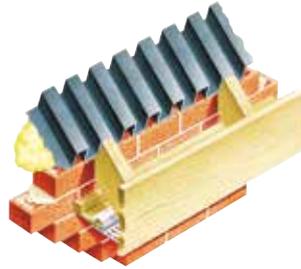


Over Fascia Ventilator OFV10, for roofs requiring the equivalent of a 10mm continuous gap. Suitable for roof pitches of 15 degrees upwards.

TYPE EROV 400

Eaves Roll-out Ventilator

- New and existing work applications
- Maximum free airflow
30,000mm² per metre
- Suitable for all popular truss centres
- Easy regulation compliance



Solution

The Eaves Roll-Out Ventilator is manufactured in PVCU. The cross corrugations permit this product to be supplied in long rolls which are then uncoiled on site across the trusses in the appropriate position. Nails are then used to secure the roll in position.

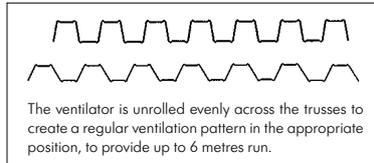
The result is an evenly spaced air route along the eaves, providing ventilation in accordance with the Building Regulation requirements.

Bill of Quantity / Specification Wording

900 Eaves Ventilators

Type EROV Eaves Roll Out Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour black. Locate and secure to roof timbers at all eaves. Metres run _____.

Product name	Type EROV Eaves Roll-Out Ventilator
Size	Rolls open to cover 6m x 400mm wide
Free airflow rating	30,000mm ² per running metre maximum
Colour	Black
Material	Lightweight PVCU
Observations	For all roof pitches. Elongation dictates performance



TYPE OEVWF

Open Eaves Ventilator with flyscreen

- For open-eaves and non-fascia applications
- Integral fly screening
- All roof pitches accommodated
- Easy regulation compliance
- 10,000mm² rating and 25,000mm² rating



Solution

Preformed lightweight ventilator with punched flyscreen.

May be used in new build and re-roofing projects with an open eaves detail (no infilling soffit board).

Available with a 10mm airflow rated punched edge - OEVWF 10

Available with a 25mm airflow rated punched edge - OEVWF 25

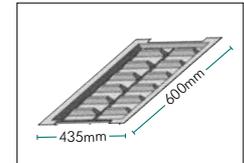
Please note the 25mm rated ventilator has a different appearance than the other rated models.

Bill of Quantity / Specification Wording

900 Eaves Ventilators

Type CRSV Circular Soffit Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour _____. Build into circular holes cut in soffit at specified centres Number _____.

Product name	Type OEVWF Open Eaves Ventilator + Flyscreen	
Size to suit truss centres	400mm	400 x 435-OEVWF 10
	450mm	450 x 435-OEVWF 10
	600mm	600 x 435-OEVWF 10
	600mm	600 x 435-OEVWF 25
Free airflow rating	10,000mm ² per running metre 25,000mm ² per running metre	
Colour	Black	
Material	Lightweight rigid PVCU	
Observations	For roof pitches of 15 degrees and above	



TYPE PV

Panel Ventilator

- Suitable for roof pitches of 15 degrees upwards
- Compatible with fascia and soffit ventilators
- Easy-fit
- Excellent free airflow



Solution

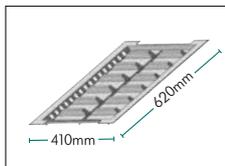
In pitched roof applications, the Type PV Panel Ventilator fits between the roof trusses and maintains a defined airflow path between the underside of roofing felt and the roof insulation. The function of the Type PV is to receive air that enters and exists via a fascia or soffit ventilator. Air is channelled through the body of the ventilator via apertures within the bottom and top upstand edges.

Bill of Quantity / Specification Wording

900 Eaves Ventilators

Type PV Panel Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour black. Secure to roof timber along all eaves. Metres run _____.

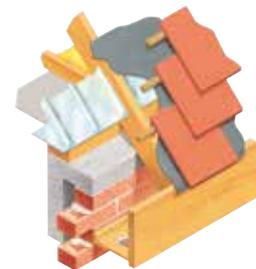
Product name	Type PV Panel Ventilator
Size (3) to suit truss centres 400/450/600	420 x 410mm, 470 x 410mm, 600 x 410mm
Free airflow rating	10,000mm ² per running metre
Colour	Black
Material	Lightweight rigid PVCU
Observations	For roof pitches of 15 degrees and above



TYPE REV

Refurbishment Eaves Ventilator

- Black - checking of correct placement is easy
- Large protected air pocket
- High airflow 10,000mm² per metre run
- Compliance of ventilation regulations



Solution

The Refurbishment Eaves Ventilator fits between rafters and can be placed in position from within the attic space. The ventilator bottom portion rests under the insulation.

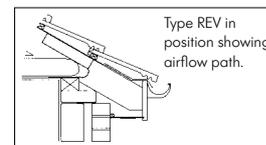
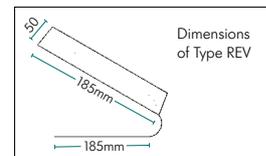
The ventilator top hinged portion hinges to follow the roof line. Its simple shape allows air to travel to and from the roof void. Insulation is not permitted to close the gap between the truss rafters.

Bill of Quantity / Specification Wording

900 Eaves Ventilators

Type REV Refurbishment Eaves Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour black. State truss centres _____mm. Fold and locate against ceiling board and roofing underlay between trusses. Number _____.

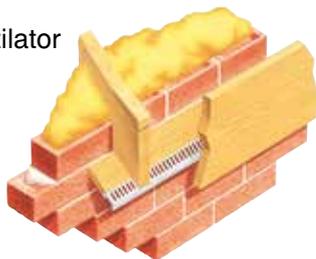
Product name	Type REV Refurbishment Eaves Ventilator
Size (2) to suit three truss centres 400/450. 600	380 x 500 x 50mm and 580 x 500 x 50mm
Free airflow rating	15,000mm ² per running metre on all trusses
Colour	Black
Material	PVC
Observations	For roof pitches of 15 degrees and above



TYPE RASV

Reversible Angled Soffit Ventilator

- Reversible profile for sloping soffits
- Integral insect screening
- Self coloured - corrosion proof
- Easy regulation compliance



Solution

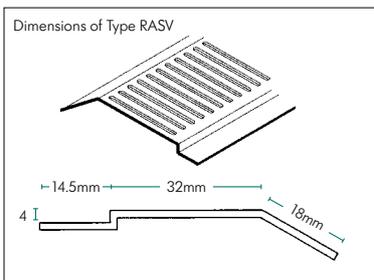
The Type RASV Strip Soffit Ventilator is designed for use with a standard horizontal or sloping soffit boards on roof pitches of 15 degrees or above. The airflow rating is 10,000mm² per metre run. The ventilation slots provide screening in accordance with regulations.

Bill of Quantity / Specification Wording

900 Eaves Soffit Ventilators

Type RASV Reversible Angled Soffit Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour _____. Secure between soffit and fascia. Metres run _____.

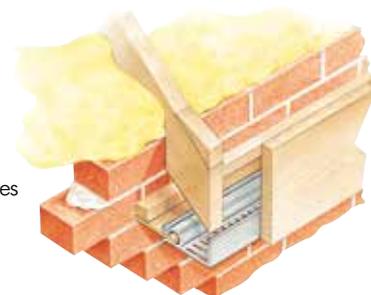
Product name	Type RASV Reversible Angled Soffit Ventilator
Size	2400 x 60mm
Free airflow rating	10,000mm ² per running metre pitches above 15°
Colour	White Brown
Material	PVCU
Observations	Invert to use at top or bottom of sloping soffit



TYPE SSV

Strip Soffit Ventilator

- Regulation airflow compliance
- Integral fly screening
- Accepts different soffit thicknesses
- Self coloured - corrosion proof



Solution

The Type SSV Strip Soffit Ventilator is designed for use with a standard soffit board. It permits airflow via the soffit area whilst also providing support for soffit boards from 4mm to 14mm thickness. The airflow rating is 10,800mm² per metre run, making it suitable for use where the roof pitch is 15 degrees or above.

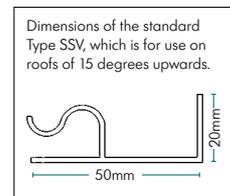
The ventilation slots provide screening in accordance with regulations. (See Type SSV-15 for higher airflow rating.)

Bill of Quantity / Specification Wording

900 Eaves Soffit Ventilators

Type SSV Strip Soffit Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769) Colour _____. Clip to soffit and secure to fascia. Metres run _____. Type SSV-RU Strip Soffit Ventilator with Reduced Upstand by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour _____. Slot into soffit and secure to fascia. Metres run _____.

Product name	Type SSV Strip Soffit Ventilator
Size	2400 x 50 x 20mm
Free airflow rating	10,000mm ² per running metre pitches above 15°
Colours	White Brown Black
Material	PVCU
Observations	Predrilled fixing holes



TYPE SSV-RU

Strip Soffit Ventilator with reduced upstand

- Regulation airflow compliance
- Integral fly screening
- Accepts different soffit thicknesses
- Self coloured - corrosion proof



Solution

The Type SSV-RU Strip Soffit Ventilator is designed for use with a standard soffit board. The RU designation refers to a reduced upstand of 5mm.

This permits the Type SSV-RU to be fitted into the back location groove of a fascia.

All other details and dimensions are as per the standard Type SSV. The airflow rating is 10,800mm² per metre run, making it suitable for use where the roof pitch is 15 degrees or above. The ventilation slots provide screening in accordance with regulations.

Bill of Quantity / Specification Wording

900 Eaves Soffit Ventilators

Type SV-FL Flat Soffit Strip by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour _____. Secure to soffit and fascia. Metres run _____.

Product name	Type SSV-RU Strip Soffit Ventilator with Reduced Upstand
Size	2400 x 50 x 5mm
Free airflow rating	10,000mm ² per running metre pitches above 15°
Colour	White Brown
Material	PVCU
Observations	Fits groove in most fascia backs

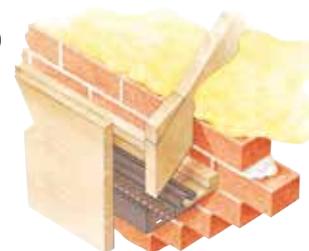
The SSVRU has a reduced upstand of 5mm. It may be fitted into the groove of a fascia.



TYPE SSV-15

SSV15 (for pitches below 15°)

- Regulation airflow compliance for pitches below 15 degrees
- Integral fly screening
- Accommodates different soffit thicknesses
- Self coloured - corrosion proof



Solution

The Type SSV-15 Strip Soffit Ventilator is designed for use with a standard soffit board on roof pitches below 15 degrees. The airflow rating is 25,000mm² per metre run, making it suitable for use where the roof pitch is 15 degrees or below.

The ventilation slots provide screening in accordance with regulations.

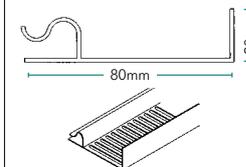
Bill of Quantity / Specification Wording

900 Eaves Soffit Ventilators

Type SSV Strip Soffit Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour _____. Clip to soffit and secure to fascia. Metres run _____.

Product name	Type SSV – 15 Strip Soffit Ventilator low pitches
Size	2400 x 80 x 20mm
Free airflow rating	25,000mm ² per running metre pitches under 15°
Colour	White Brown Black
Material	PVCU
Observations	Predrilled fixing holes

Dimensions of the Type SSV15, which is for use on roofs below 15 degrees pitch and other pitches if the roof space is classified as accommodation. See technical observations.



TYPE SV-FL

Flat Strip Soffit Ventilator

- Flat and sloping roof applications
- 25,000mm² airflow rating
- Self coloured – corrosion proof
- Insect screening



Solution

The Type SV-FL is a strip soffit ventilator designed for use with flat and sloping soffit and has an airflow rating of 25,000mm² per metre run. Thus it may be used where the roof pitch is below 15 degrees.

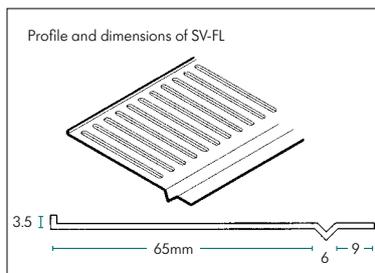
The ventilation slots provide screening in accordance with regulations.

Bill of Quantity / Specification Wording

900 Eaves Soffit Ventilators

Type SV-FL Flat Soffit Strip by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour _____. Secure to soffit and fascia. Metres run _____.

Product name	Type SV-FL Soffit Ventilator for Flat Roofs
Size	2400 x 80mm
Free airflow rating	25,000mm ² per running metre pitches under 15°
Colour	White Brown
Material	PVCU
Predrilled fixing holes	Invert to use at top or bottom of sloping soffit



TYPE SSV-GP

Soffit Ventilator - general purpose

- For sloping and flat roof ventilation
- 25,000mm² airflow rating
- Self coloured - corrosion proof
- Insect screening



Solution

The Type SSV-GP is a general purpose soffit ventilator strip, with an airflow rating of 25,000mm² per metre run. In sloping applications it may be used where the roof pitch is below 15 degrees.

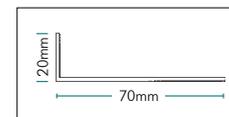
The Type SSV-GP may also be used to ventilate flat roofs, necessitating the fascia to be fitted so it stands off the masonry face a distance of just 70mm. The ventilation slots provide screening in accordance with regulations.

Bill of Quantity / Specification Wording

900 Eaves Soffit Ventilators

Type SSV-GP General Purpose Soffit Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour _____. Secure to soffit and fascia. Metres run _____.

Product name	Type SSV-GP General Purpose Strip Ventilator
Size	2400 x 70 x 20mm
Free airflow rating	25,000mm ² per running metre pitches under 15°
Colours	White Brown
Material	PVCU
Observations	Predrilled fixing holes



TYPE CV

Corbel Ventilator

- Suitable for roofs of 15 degrees upwards
- Free airflow 10,000mm² per metre
- Integral insect screen
- Adjustable anchoring ties
- Compatible with our range of eaves ventilators



Solution

The Type CV Corbel Ventilator is designed to be incorporated above a running masonry corbel built of brick, stone or similar.

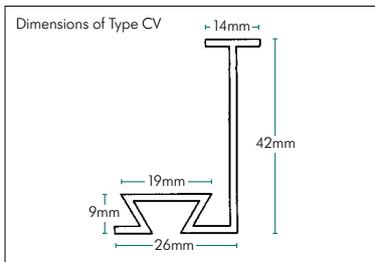
The ventilator has a slotted vertical front face, providing the equivalent of a 10mm continuous air opening. To the rear of the ventilator, the base has a dovetail anchoring slot which permits the securing ties to be positively attached at any position to suit the corbel masonry joints.

Bill of Quantity / Specification Wording

Clause G900 (G20 - first fixing)

Type CV Corbel Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour _____. Attach accompanying ties and build into corbel masonry. Metres run _____.

Product name	Type CV Corbel Ventilator
Size	2400 x 42 x 28mm
Free airflow rating	10,000 per running metre
Colours	White Black
Material	PVCU
Observations	Ties slide in channel to align with masonry joints



TYPE ECF

Eaves Comb Filler

- New and existing work applications
- Flexible teeth suit most tile styles
- Integral fixing holes
- Easy regulation compliance



Solution

The Eaves Comb Filler is manufactured from polypropylene in one metre easy to handle lengths. The supple teeth of the comb flex to accommodate the contours of the tile or sheet.

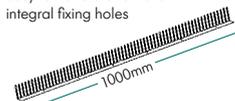
Such flexibility eliminates the need of purpose-made profiles to suit each style of roof finish. Thus the ECF suits a very wide range of profiles. When fixed to the top of fascia, the ECF teeth slope forward, to splay and take up the gap which would otherwise be open.

Bill of Quantity / Specification Wording

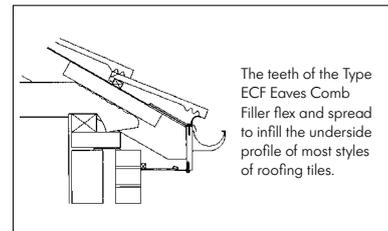
Clause 900 (G20)

Type ECF Eaves Comb Filler by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour black. Secure to top of fascia. Metres run _____. Attach accompanying ties and build into corbel masonry. Metres run _____.

The metre lengths are easy to handle and have integral fixing holes



Product name	Type ECF Eaves Comb Filler
Size	1000 x 55mm
Free airflow rating	N/A
Colour	Black
Material	Polypropylene
Observations	Fix through pre-drilled holes in moulding base



TYPE RAV-FL

Roof Abutment Ventilator

- Permits roof to breathe at masonry intersection
- Integral insect screening
- High airflow - 25,000mm² per metre run
- Removable when re-roofing



Solution

The RAV-FL promotes air entry where a flat roof abuts a vertical masonry wall. It is supplied with pre-drilled fixing holes and an integral insect-resistant grille. Each unit is 1.2 metres in length and the heavy-duty profile incorporates an integral pivot-hold hinge. This hinge permits easy and direct fixing, as the profile may be secured to the vertical board upstand when opened like a book.

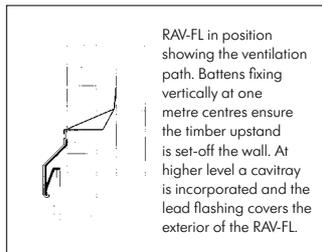
The profile is then closed and fixing completed by securing the top of the profile to the masonry wall. An air ventilation path which complies with the current regulations is established at the flat roof intersection.

Bill of Quantity / Specification Wording

Clause 900

Type RAV-FL Roof Abutment Ventilator for Flat Roofs by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour white. Secure to timber upstand and masonry at flat roof/wall intersection. Metres run _____.

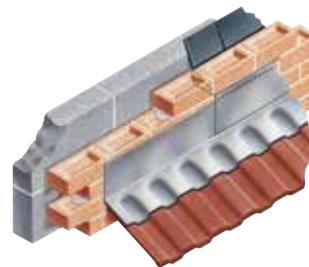
Product name	Type RAV-FL Roof Abutment Ventilator for Flat Roofs
Size	200 o/a x 50mm o/a
Free airflow rating	25,000mm ² per running metre
Colour	Light grey (hidden when overdrressed with flashing)
Material	PVCU
Observations	Use where flat roof requires 25mm equivalent gap



TYPE VF

Ventilating Flashing

- Use in place of ordinary lead
- Easy to dress
- Supplied in flat lengths for easy handling



Solution

The Type VF Ventilating Flashing is cold rolled milled British Standard lead to which on one face is bonded a breathing articulated foam base layer via which air may enter and/or exit. When correctly incorporated at the roof/wall intersection, the flashing can support the requisite airflow. Always make provision for air travelling via the flashing to reach the intended parts of the roof. To guard against wind lift, clip leading edge of flashing to secure as per LSA guidelines.

Type VF Ventilating Flashing is supplied flat and offered on a bespoke basis to customers dimensions.

Bill of Quantity / Specification Wording

Clause 900

Type VF Ventilating Flashing by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769).

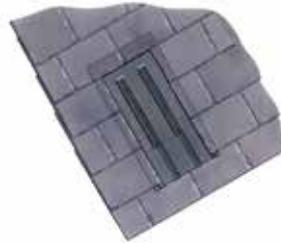
Product name	Ventilating Flashing
Size	To order (limitations apply)
Free airflow rating	5,000mm ² per running metre
Colour	Natural lead colour
Material	Lead flashing code 4 to BS EN 12588
Observations	Do not use on pitches below 22 1/2

Atomic weight	2072u
Atomic number	82
Density	11.34g/cm
Coefficient of linear expansion	0.0000297 per C
Thermal conductivity	34.76W/m C
Melting point	3274 C

FLUSH SLATE

Flat Vent Profile

- Low profile - high throughput
- Integral insect screening
- Cut to match slate size
- Easy regulation compliance



Solution

The Flush Slate Ventilator offers an almost flat external presence and may be used to directly ventilate the roof space or utilising an optional connection kit may be linked to a 110mm outlet pipe servicing bathroom air extraction. Minimum rafter pitch: 22.5° or 25° depending on head lap.

Bill of Quantity / Specification Wording

Clause 900 G20 carpentry

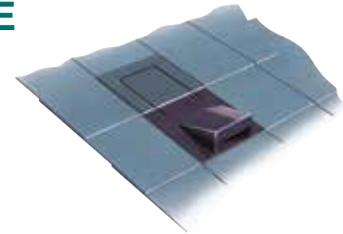
Slate Ventilator Type Contract / Flush (state) by Cavity Trays of Yeovil Somerset, BA22 8HU (01935 474769). Number _____.

Product name	Flush Slate Roof Ventilator
Size (2)	600 x 300mm and 500mm x 250mm
Free airflow rating	Max 10,000mm ² at appropriate centres
Colour	Black - Grey
Material	Polypropylene
Observations	Cut to match slate size. Integral insect grille

CONTRACT SLATE

Raised Vent Profile

- Low profile - high throughput
- Integral insect screening
- Cut to match slate size
- Easy regulation compliance



Solution

The Contract Slate Ventilator can be readily cut to suit both natural and man-made slates. This single model may be used with either 600 x 300mm or 500 x 250mm slates. The Contract Slate Ventilator may also be employed to facilitate natural non-mechanical extraction and ventilation. This is achieved using the Contract Connector Kit CS/HD that permits connection with a 110mm soil vent outlet. The airflow rating when this kit is attached is 8,000mm². Minimum rafter pitch: 22.5° or 25° depending on head lap.

Bill of Quantity / Specification Wording

Clause 900 G20 carpentry

Slate Ventilator Type Contract / Flush (state) by Cavity Trays of Yeovil Somerset, BA22 8HU (01935 474769). Number _____.

Product name	Contract Slate Roof Ventilator
Size	600 x 300mm
Free airflow rating	Max 10,000mm ² at appropriate centres
Colour	Black - Grey
Material	Polypropylene
Observations	Cut to suit 600 x 300 or 500 x 250 slate size. Integral insect grille

TILED ROOF UNIVERSAL VENTILATOR

General purpose ventilator for numerous tile types.

- High airflow
- Integral baffle and grille
- Suitable for new and refurbishment work
- High and low level applications



Solution

Compatible with many styles of interlocking profiled and plain tiles, this universal ventilator may be used on roof pitches from 20 up to 70°. It has an airflow rating of 15,000mm². Supplied with a choice of cap colours, integral insect screening, and a base incorporating external edge weathering strips and a lower edge flashing. An optional adaptor permits this ventilator to be connected to a standard 110mm pipe if required.

Bill of Quantity / Specification Wording

Clause 900 G20

Universal Tiled Roof Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Number _____.

Product name	Tiled Roof Universal Ventilator
Size	Base 405 x 440mm, cap 293 x 210mm
Free airflow rating	15,000mm ²
Colours	Cap available in brown, terracotta or grey.
Material	PVCU/foam/aluminium
Observations	Not recommended for use with Redland Delta, Cambrian, Saxon, Richmond, Anchor Centurion, Marley Monach, clay pantiles or slate

TYPE ERV EXTERNAL

Roof Ventilator

- High free airflow of 6000mm² / 12,000mm²
- Natural lead finish
- Integral baffle and drain slot
- New and existing work application



Solution

The Type ERV External Roof Ventilator is designed to permit the roof void to breathe and prevent condensation occurring. Intended for use on lead covered, felted or similarly decked roofs, the Type ERV is manufactured from lead to BS EN 12588:2006.

When positioned on a plinth or raised surface to suit the application and location, the Type ERV can provide a means of exhausting moist air out of the structure.

Bill of Quantity / Specification Wording

Clause 900 G20

Type ERV External Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Number _____.

Product name	Type ERV External
Size	210 x 140 x 160mm (6,000mm ²), 405 x 140 x 160mm (12,000mm ²)
Free airflow rating	6,000mm ² and 12,000mm ²
Colours	Natural lead finish
Material	Lead
Observations	Integral baffle and drain-out slot

TYPE LSRV LEAD SLATE

Roof Ventilator

- Natural lead finish
- New and existing roof applications
- New and existing roof applications



Solution

Manufactured from code 4 lead flashing the Type LSRV may be introduced into new and existing slate finishes to provide ventilation of the roof space.

Alternatively it may be connected to function as a cold extraction external outlet servicing a kitchen or bathroom. The LSRV sits comfortably with all slates sizes. Minimal cutting under the LSRV is required to accommodate the spigot connection. Natural lead tempers to slate undulations.

The Type SLRV is supplied in dimensions to match the slate size you are using. State slate size, and preferred airflow per ventilator + spigot size.

Bill of Quantity / Specification Wording

Clause 900 G20 carpentry

Roof Ventilator Type LSRV by Cavity Trays of Yeovil Somerset, BA22 8HU (01935 474769). Number _____.

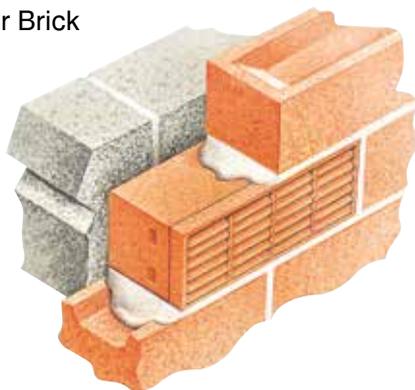
Product name	Type LSRV Lead Slate Roof Ventilator
Size	Base sizes match slate dimensions selected
Free airflow rating	From 3,000mm ² to 8000mm ² pending base dimensions
Colours	Natural lead colour
Material	Lead to BS 12588:2006
Observations	Integral baffle and drain-out slot

Notes:

CAVIBRICK

High Performance Air Brick

- High air throughput
- Insect screening
- Self-draining base
- Clip together to make up composite sizes
- Range of colours



Solution

Manufactured to brick dimensions, the Cavibrick promotes a high air throughput, via a front louvred grille. The louvres are proportioned to maximise performance whilst contouring the air to challenge through-draughts.

The louvres are also spaced to comply with the latest BS requirements but have been staggered to offer also an insect resistant screen which is not offered on some standard airbricks.

The Cavibrick incorporates a water dam back to prevent rain penetration and crossflow separators. Moulded in a range of colours, the cavibrick may be used singularly, or in multiples. The Cavibrick is fully compatible with our range of telescopic and straight sleeves.

Product name	Cavibrick
Size	220 x 60 x 70mm
Free airflow rating	7500mm ²
Colours	Terracotta, Slate, Beige, Brown, White or Black
Material	Polypropylene
Observations	Sleeves - all styles

Colours



Terracotta



Slate



Beige



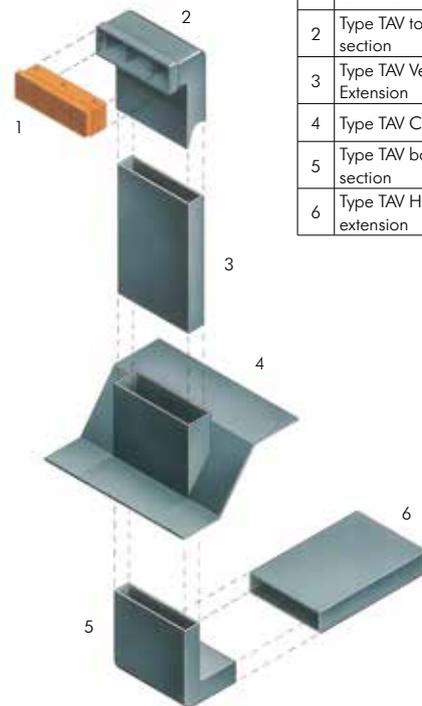
Brown



White



Black



1	Cavibrick
2	Type TAV top section
3	Type TAV Vertical Extension
4	Type TAV Cloak
5	Type TAV bottom section
6	Type TAV Horizontal extension

Bill of Quantity / Specification Wording

F30 Accessories/sundry items for brick/block/stone walling Clause 160 AIR BRICK

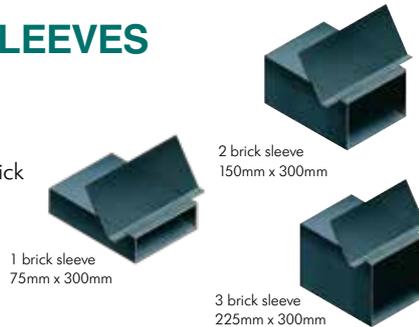
Cavibrick thermoplastic rectangular interlocking airbrick by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Airflow: 7,500mm². Colour _____. Build in individually or interlocked to form two or three brick configuration Attach to matching sized through wall sleeve or adaptor type _____.

CAVIBRICK SLEEVES

Horizontal Sleeves

- Range of sizes
- Compatible with Cavibrick
- Fold flat storage
- Unobstructed airflow

Shown with optional accompanying Cavitray.



Solution

A range of straight sleeves to accommodate one, two or three Cavibricks. (High throughput Cavibricks are designed to be used singularly or can be locked together to form larger brick-sized ventilating units.)

When connected to a Cavibrick the combined length is sufficient to accommodate all popular cavity wall widths.

We recommend sleeves are protected with a Cavitray where they pass through the cavity, to comply with NHBC/best practice. State 'Accompanying Duct Cavitray Required' to receive ducts with protective trays.

Bill of Quantity / Specification Wording

Clause 160 F 30 Accessories for brick/block/stone walling

Clause 171, F 30 Ventilation

Cavibrick through wall sleeve by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Attach to cavibricks(s) to provide sleeving through wall. Airflow: 7,500mm² +. Colour black. Build in individually or interlocked to form two or three brick configuration. Number _____. State if accompanying Cavitrays required.

Product name	Cavibrick Sleeves
Size	300 x 75mm, 300 x 150mm., 300 x 225mm
Free airflow rating	Exceeds Cavibrick rating
Colour	Black
Material	Polypropylene
Observations	Fold-flat for easy transportation and storage

CAVIBRICK SLEEVE

Rectangular to Round Converter Sleeve

- Compatible with Cavibrick
- Fits standard pipe
- Unobstructed airflow



Solution

Where it is proposed to provide ventilation to a remote room, under floor area or void, a rectangular to round converter sleeve is available to permit the use of standard 100mm nominal plastic soil pipe.

We recommend sleeves are protected with a Cavitray where they pass through the cavity, to comply with NHBC/best practice. (See Sleeve and Duct Cavitrays.)

Bill of Quantity / Specification Wording

Clause 160 F 30 Accessories for brick/block/stone walling

Clause 171, F 30 Ventilation

Cavibrick Rectangular to Round Converter Sleeve by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Attach to cavibricks(s) to provide circular outlet to receive round pipe connection. Airflow: 7,250mm². Colour black. Number _____. State if accompanying Cavitrays required.

Product name	Cavibrick Rectangular to Round Converter
Size	225 x 75 x 100mm projection, also 225 x 150 x 100 project and 225 x 225 x 100 protection
Free airflow rating	Exceeds Cavibrick rating
Colour	Black
Material	Polypropylene
Observations	Available for 1, 2 or 3 cavibrick heights

DOUBLE SIZE RECTANGULAR TO ROUND CONVERTER

Rectangular to Round Converter Sleeve

- Accepts two Cavitybricks
- Fits standard pipe
- Pipe capacity airflow



Solution

Where it is proposed to provide ventilation to a remote room, under floor area or void, a rectangular to round converter sleeve is available to permit the use of standard 100mm nominal plastic soil pipe.

We recommend sleeves are protected with a Cavitray where they pass through the cavity, to comply with NHBC/best practice. (See Sleeve and Duct Cavitrays.)

Bill of Quantity / Specification Wording

Clause 160 F 30 Accessories for brick/block/stone walling

Clause 171, F 30 Ventilation

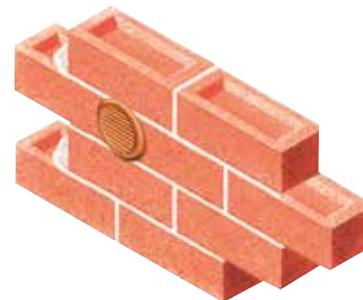
Double Cavitybrick Rectangular to Round Converter Sleeve by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Attach to cavitybrick(s) to provide circular outlet to receive round pipe connection. Airflow: 7,800mm² typical. Colour black. Number _____.

Product name	Double Cavitybrick Rectangular to Round Converter
Size	225 x 150 x 100mm
Free airflow rating	Exceeds Cavitybrick rating 7800mm ² typical
Colour	Black
Material	Polypropylene
Observations	Available for 1, 2 or 3 cavitybrick heights

TYPE CLV

Circular Louvered Ventilator

- Insect screening
- Integral edge grips
- High airflow
- Louvered protection



Solution

The Type CLV is popular in after-fit drill and vent applications. It can be introduced when the wet trades have finished. It differs from most circular ventilators as it has an airflow aperture rating of 2100mm². The installer is required to drill fewer holes around the building, as fewer ventilators are required to provide the requisite levels of ventilation.

Example: if a small circular vent has a free area of 300mm, it would require seven such ventilators to equal the free area of one Type CLV. The Type CLV is commonly installed at 1.2m centres to fulfil ventilation requirements in typical applications. Projecting location grips hold the Type CLV in place when inserted into the drilled hole.

Bill of Quantity / Specification Wording

F30 Accessories/sundry items for brick/block/stone walling Clause 160

Wall louvered circular ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Airflow: 2,100mm². Colour _____. Insert securing lugs into drilled circular hole.

Product name	Type CLV Circular Louvered Ventilator
Size	70/79 x 15mm
Free airflow rating	2,100 ²
Colour	White, Black, Brown, Beige or Terracotta
Material	Polypropylene
Observations	Requires 70mm hole

CAVIBRICK COWL

External Weathering Cowl

- Shelters exposed wall ventilators
- Angles off wall - does not obstruct
- Easy direct fixing



Solution

Where site conditions and exposure to bad weather dictate that wall ventilators and ventilation bricks are sheltered, the Cavibrick Cowl can provide a simple and swift way of introducing protection. Secured to the wall through pre-drilled holes, the Cavibrick Cowl angles off the wall so ventilation grilles are protected but not obstructed. Available in two sizes to suit single or doubled-up Cavibricks.

Bill of Quantity / Specification Wording

Clause 160 / Clause 171, F 30 Ventilation

Cavibrick Cowl by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Secure to external masonry. Number _____.

Product name	Cavibrick Cowl
Sizes	255 x 80mm and 255 x 154mm
Colour	Terracotta
Material	Polypropylene

Notes:

TYPE TAV

Telescopic adjustable ventilator

- Unobstructed airflow route
- Extends and retracts to suit course level
- Accommodates high performance cavibrick
- Accompanying cavitray
- Horizontal and vertical extension sleeves



Solution

The Telescopic Adjustable Ventilator extends or contracts like a telescope. It extends to a maximum of five brick courses.

It is designed to accommodate the high performance cavibrick, or may alternatively be used with a conventional air-brick. Airflow can be directed to a specific area of the structure, at a different level. Where a greater variation is required beyond five courses, an intermediate sleeve is available to extend the range.

Bill of Quantity / Specification Wording

Clause 160 / Clause 171, F 30 Ventilation

TAV Telescopic Adjustable Ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour black. Fit cavibricks to inlet mouth and build into cavity wall adjusting to suit required levels. Number _____.

Product name	Type TAV Telescopic Adjustable Ventilator
Size	225 x 70mm opening
Adjustment range	375 / 225mm
Colour	Black
Material	Polypropylene
Observations	<p>Extension sleeves to increase range offered Free airflow rating 6,600mm² when fitted with a Cavibrick (BS EN 13141-1) To ventilate sub-floor, incorporate in exterior walls down opposing sides of building. Ideally offset to maximise circuitous flow. Minimum requirement equates to 500mm² per sq metre of floor area. Commence and end not more than 450mm from end of any wall. Incorporate @ 2m centres to meet NHBC requirement. Incorporate @ 4m centres to meet Building Regulations minimum of 1500mm² per metre run of exterior wall but note such spacing is considered too infrequent to address stagnant sub areas.</p>

TAV SLEEVES

Vertical & horizontal applications

- Extends ventilation options
- Clear-flow air way
- Fits within 50mm cavity



Solution

Where the distance between air inlet and outlet is greater than 375mm, vertical extension sleeves may be fitted. Similarly horizontal extension sleeves are available for use where a long reach is required and space prevents the use of 100mm nominal pipe connected using a Type TAV to Round Converter.

Whilst a Cavibrick with a 7,500mm² rating attached to a Type TAV can have a combined free airflow rating of 6,600mm², be aware airflow diminishes as the distance from any inlet to outlet increases.

It is recommended under normal applications extension sleeves do not lengthen the total vertical distance by more than one metre and optimum frequency of placement is always determined on an individual basis.

Bill of Quantity / Specification Wording

Clause 160 / Clause 171, F 30 Ventilation

Vertical/horizontal extension sleeve for TAV ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour black. Fit to extend extent of rise, cut as required. Number _____. Round pipe connection. Airflow: 7,250mm². Colour black. Number _____.

Product name	Type TAV Extension Sleeves
Size	300 x 50 x 225mm, 450 x 50 x 225mm
Free airflow rating	9000mm ²
Colour	Black
Material	Polypropylene
Observations	State if horizontal or vertical application

TYPE TAV

To Round Connector

- Compatible with TAV
- Fits standard pipe
- Unobstructed airflow



Solution

Where a plastic nominal 100mm pipe is used to carry airflow to specific parts of a structure, a means of connection to our cranked telescopic ventilator is required.

The TAV to Round Connector is designed for such purposes. This attachment can be successfully used to provide piped exit routes for radon gas (below floor level) to the perimeter of a building where discharge is via cranked ventilators because of the exterior ground levels.

Bill of Quantity / Specification Wording

Clause 171, F 30 Ventilation

TAV to round converter sleeve for TAV ventilator by Cavity Trays of Yeovil Somerset BA22 8HU (01935 474769). Colour black. Fit to provide circular outlet to lower mouth of Type TAV. Number _____. Round pipe connection. Airflow: 7,250mm². Colour black. Number _____.

Product name	Type TAV to Round Converter
Size	225 x 50 x 100mm projection
Free airflow rating	Exceeds Cavibrick rating
Colour	Black
Material	Polypropylene
Observations	Fits bottom of Type TAV only – not Cavibrick

ASSOCIATED ITEMS

Related Construction Products

Important

Valley troughs, running soakers and supporting products may be used within roofs constructed to BS5534: part 1 - 1990 (slating and tiling) and BS8000: Part 6 – Code of Practice for slating and tiling of roofs and cladding. Fire resistance SAB to BS476 part 3 and Class 3 of part 7.

Within this section are components and accompaniments applicable to roof space access, roof construction and floor service duct provision.

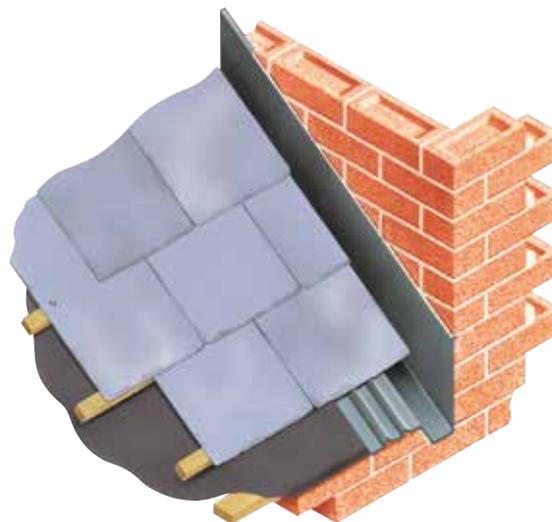
Specifications

Product name - group	Type CRSS Continuous Running Soaker Strip
Dimensions	3000mm 190mm x 105mm high upstand
Roof pitch suitability	22.5° to 60°
Bespoke options	No
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	Most – avoid recessed pointing adjacent
Undulating masonry faces	No – surface required to be flat and vertical
Congruent with other wall elements	No identified incompatibility
Arrested water evacuation	Gutter
Thermal transmission of material	N/A external of masonry face
Material	Glass reinforced polyester
Colour	Grey finish
Extrudes / compresses under load	No
Pack size	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	Can be used to provide weathering provision
May be used if cavity insulation present?	Yes – presence does not affect
CAD downloads	Yes
Design considerations	Upstand must finish against wall surface to permit flashings to be dressed appropriately.

TYPE CRSS

Continuous Running Soaker Strip

- Pre-shaped continuous soaker/secret gutter
- For roof pitches 22.5° to 60°
- Not visible once installed
- Lightweight and easy to handle



Use

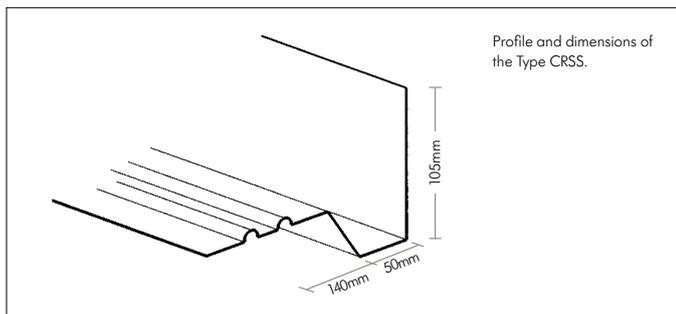
Continuous soaker for use where a slate roof abuts a masonry wall.

Solution

The Continuous Running Soaker Strip may be used instead of conventional lead soakers where a roof of slate abuts a vertical fair faced masonry wall.

Manufactured from glass reinforced polyester and coloured grey, the strip provides a lower cost water arrestment option. Conventional lead may still be used at the saddle.

The upstand is required to rise tightly against the masonry face and has an unlipped top so no chasing is necessary. The upstand can be secured to the masonry if required either by mechanically fixing or by using an appropriate bonding adhesive.



Designers' Comments

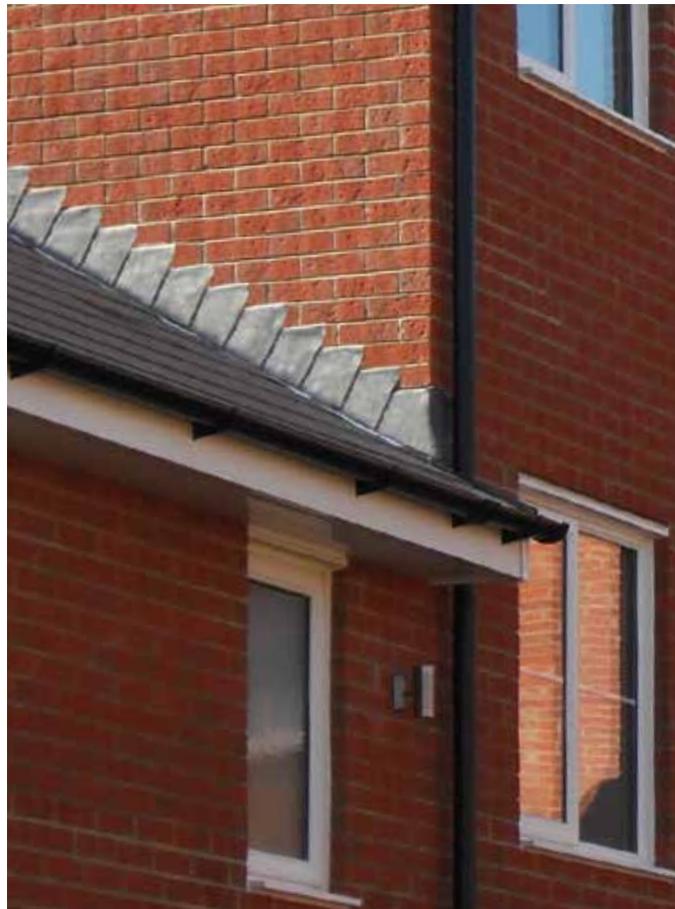
Secure CRSS by nailing to the continuous batten below it that should run parallel with and approximately 100mm from the abutment wall. Allow end laps of 225mm minimum. At gutter extend 150mm and cut back vertical surface at the overhang.

Bill of Quantity / Specification Wording

Type CRSS Continuous Running Soaker Strip

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Incorporate where sloping slate roofs intersect masonry walls. Metres run _____.



Type CRSS Continuous Running Soaker Strip at slate/wall junction with Type X Cavitytray flashings dressing over CRSS upstand

Specifications

Product name - group	Type Eaves Continuous Slate Course
Roof pitch suitability	All pitches
Dimensions	3000mm x 360mm wide
Bespoke options	No
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Congruent with other roof elements	No identified incompatibility
Arrested water evacuation	N/A acts as under layer first course
Thermal transmission of material	N/A external of masonry face
Material	Glass reinforced polyester
Colour	Grey finish
Extrudes / compresses under load	No
Pack size	Packs containing 10 x 3000mm lengths
CFC	CFC Free
ODP	Zero
Regulation compliance	Can be used to provide weathering provision
CAD downloads	Yes
Design considerations	Normal dissipation of roof space moisture via breathable under felt is hindered when slate, imitation slate or other close-fitting finishes are used. Always consider ventilation provision.

TYPE ECSC

Eaves Continuous Slate Course

- Reduces costs and site work
- Provides rigidity and continuity along bottom edge
- Not visible once installed
- Lightweight and easy to handle



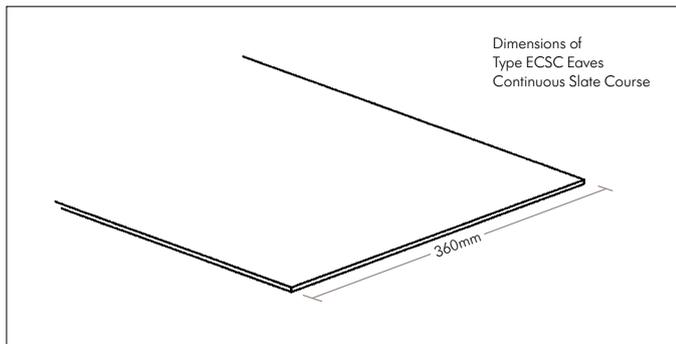
Use

A substitute for the first course (bottom layer) of slate. Reduces slate cutting and minimises joints along weathering edge.

Solution

The Eaves Continuous Slate Course is used in place of slates to form the first course along the bottom of the roof.

This reduces the number of slates and the accompanying slate cutting normally required. Supplied in 3 metre lengths, installation is speedy, easy to align and continuous runs are formed with the minimum of joints along the weathering edge. Subsequently the laying of whole slates may commence immediately.



Designers' Comments

NHBC 72 – S11 (d) states bottom edges of slate roofs should be finished with an under-eaves course.

Bill of Quantity / Specification Wording

Type ECSC Eaves Continuous Slate Course

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Use as substitute on slate roofs for first (bottom layer) of slate prior to commencing slate fixing. Metres run _____.



Specifications

Product name - group	Type RBS Roof Bonding Strip
Dimensions - external 3000m x 230mm	Roof pitch suitability Normally pitches from 15° to 60°
New work applications	N/A
Retrofit applications	Yes
Material	Glass reinforced polyester
Colour	Grey
Extrudes / compresses under load	No
Pack size	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	As part of compliant roofing installation
CAD downloads	Yes
Design considerations	Where a separating or fire break wall rises under ensure continuity by incorporating appropriate infill between wall top and roof. See Type CFIS and similar compressive stops.

Notes:

TYPE RBS

Roof Bonding Strip

- Accommodates merging of roof finishes
- Suitable for roof pitches from 15° to 60°
- Integral keying
- Preformed in long lengths



Use

to link and permit bonding of two dissimilar roof finishes. For use where a differently dimensioned roof tile/slate finish is being introduced alongside a different finish on the same slope.

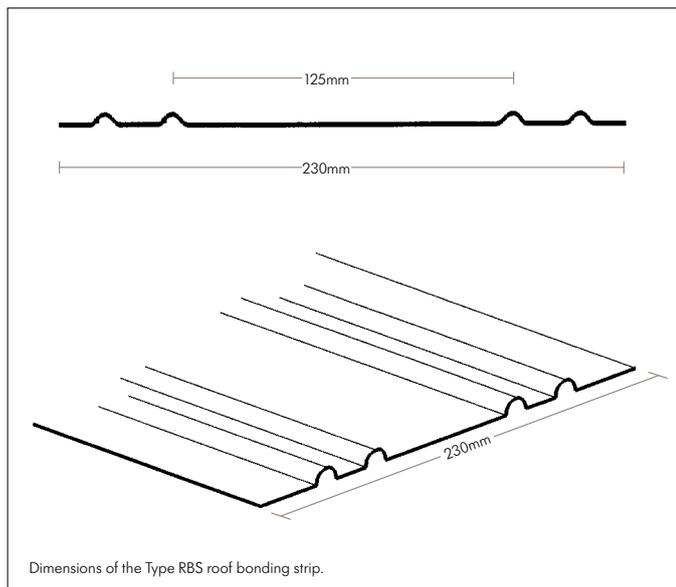
Solution

The Roof Bonding Strip is moulded from glass reinforced polyester and has water-check ribs either side of a central mortar adhesion area.

When located under the point where two dissimilar roofing finishes meet, the strip permits both to be bonded together.

Produced to an overall width of 230mm, the Type RBS is fire resistant in accordance with BS 476, the classification being to P60 (SAB) class three.

The strip acts as an underlying bridge between abutting surfaces and may be used as part of a fire-break detail as defined within the Building Regulations.



Designers' Comments

When executing re-roofing the Roof Bonding Strip should extend 150mm over gutter and be cut back as required after completion. Allow 150mm minimum overlap between lengths. Always ensure RBS is central of the separating wall. See NHBC 72 – S13 for fire-stopping above separating walls and at junctions. When fire-stopping measures are incorporated, presence must be continuous including within any boxed eaves.

Bill of Quantity / Specification Wording

Type RBS Roof Bonding Strip

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Incorporate where different roof finishes abut within common slope when reproofing.
Metres run _____.

Specifications

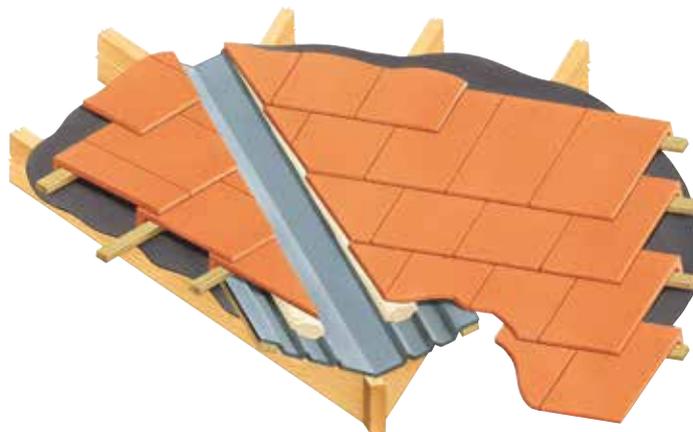
Product name - group	Type VG Valley Gutter
Dimensions	VG-T 3000m x 350mm VG-S 3000m x 330mm
Roof pitch suitability	Normally pitches from 15° to 70°
New work applications	Yes
Retrofit applications	Yes
Material	Glass reinforced polyester
Colour	Grey
Extrudes / compresses under load	No
Pack size	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	As part of compliant roofing installation
CAD downloads	Yes
Design considerations	Ensure installation follows NHBC guidelines regarding support and undercloak strip of roofing felt.



TYPE VG

Valley Gutter

- Suitable for roof pitches from 15° to 70°
- Integral keying
- Conventional appearance when built in
- Preformed in long lengths



Use

To act as water and weatherproof channel within valley between converging roof slopes.

Solution

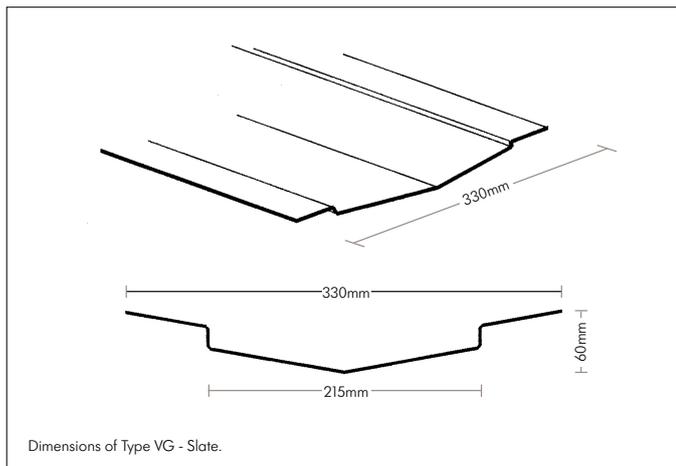
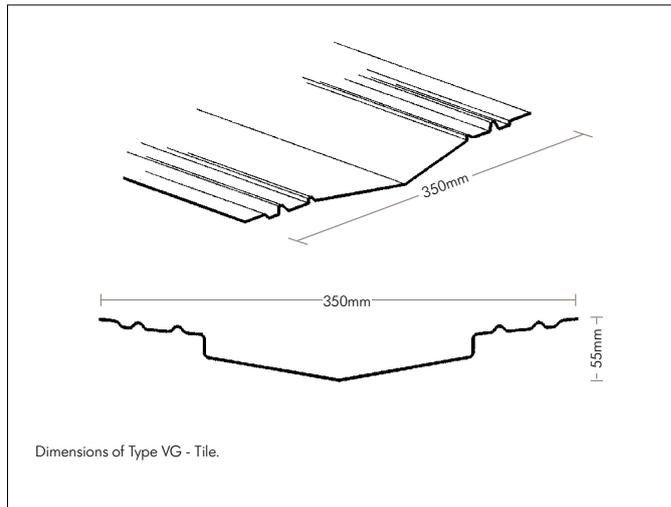
Preformed Valley Gutters are manufactured from glass reinforced polyester and provide an alternative to the site fabricated lead valley. Two styles are available for use with slate or tiled roofs.

Both are finished with a tough film coat that is coloured to resemble the appearance of lead and offers excellent weathering qualities.

The Valley Gutter for tiles (VG-T) has integral water-check ribs to its sides and two sanded mortar adhesion strips.

The Valley Gutter for slates (VG-S) is manufactured with a deeper profile. Both may be used to satisfy the requirements of roofs constructed to BS 5534: Part 1 - 1990 (Slating and Tiling) and Part 6 of BS 8000.

Type VG Valley Gutters are fire resistant in accordance with Bs 476, classification P60 (SAB) class three.



Designers' Comments

NHBC 7.2 - S11 stipulates a strip of roofing felt a width of 600mm minimum be provided under all valleys and the main roof underlay should be dressed over the valley battens. Type VG Valley Gutters meet the requirements for standard double lap valley troughs in NFRC Technical Bulletin 28. Always ensure the open width of the valley in any slate or tile roof complies with BS 5534: part 1 :1997.

Bill of Quantity / Specification Wording

Type VG Valley Gutter by Cavity Trays of Yeovil

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Incorporate at all valleys, supported as required and under-cloaked with roofing felt.
Metres run _____.

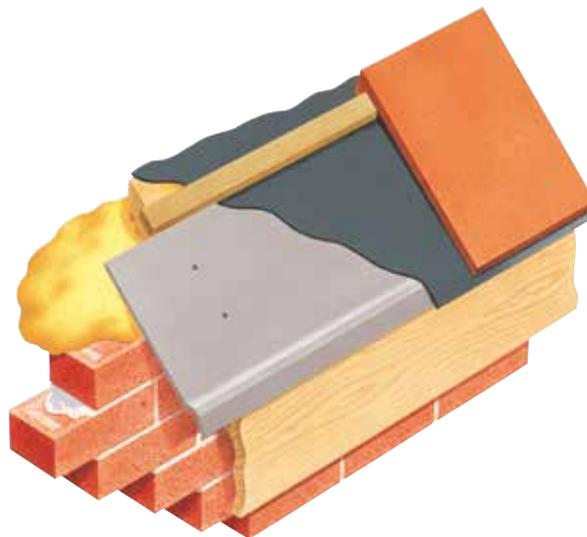
Specifications

Product name - group	Hardedge Eaves Protector 1500
Dimensions	1500mm x 240mm wide approx.
Roof pitch suitability	All pitches
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Congruent with other roof elements	No identified incompatibility
Arrested water evacuation	N/A acts as support of felt
Thermal transmission of material	N/A remote from thermal envelope
Material	Polypropylene
Colour	Grey-Black
Extrudes / compresses under load	No
Pack size	Packs containing 10 x 1500mm lengths
CFC	CFC Free
ODP	Zero
Regulation compliance	As part of compliant roof arrangement
CAD downloads	Yes
Design considerations	Wider than many alternatives, the projecting edge continues to support the felt at the most vulnerable / exposed point.

HARDEGE EAVES PROTECTOR 1500

Eaves Felt Support and Protector

- Suitable for all roof pitches
- Provides consistent felt support
- Prevents water pooling
- Promotes correct discharge into gutter



Use

Provides robust support of roofing felt at eaves so felt sag between timbers is eliminated and water cannot pool.

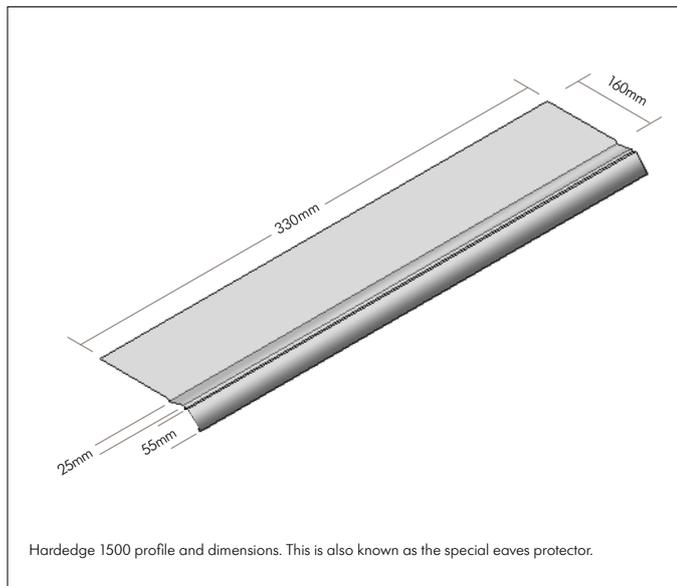
Solution

Hardedge Eaves Protector 1500 is an anti-pooling strip manufactured from rigid PVC.

It is positioned at eaves level prior to the laying of the roofing felt and secured by nailing to the roof timbers. Hardedge provides support of the underlay felt that is positioned and laid in the conventional manner.

The underlay felt is thus prevented from sagging between rafters/ tilting fillets, and the problem of water pooling between rafters is addressed.

The front projecting edge of Hardedge Eaves Protector steers the felt forward of the roof edge so it may terminate into the adjacent guttering.



Designers' Comments

NHBC 7.2 S11 (b) stipulates underlay felt should be dressed into the gutter and pulled tight to ensure there are no troughs to retain water. The presence of Hardedge Eaves Protector makes this requirement easy to achieve.

Bill of Quantity / Specification Wording

Type Hardedge Eaves Protector 1500

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Secure continuously at eaves level prior to laying of roofing felt Metres run _____.



Specifications

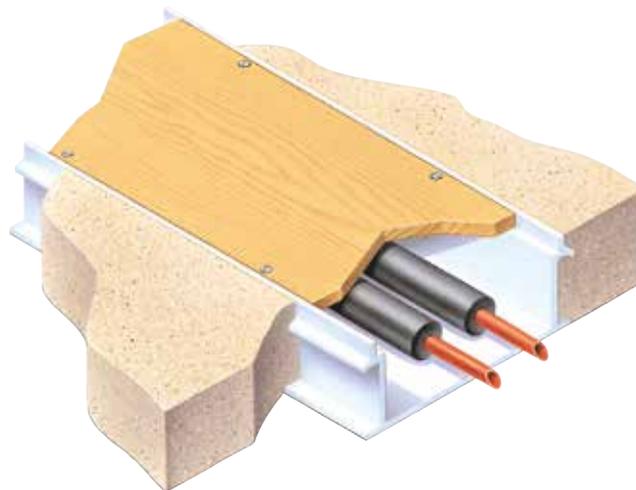
Product name - group	Type I in-screed services duct	
Dimensions	External 2400mm x 140mm x 50mm Internal 104mm x 38mm compartment area	
Screed requirement	Must be in excess of duct height of 50mm	
New work applications	Yes	
Retrofit applications	Yes	
Material	Duct	PVCU
	Cover	Plywood
Colour	White	
Extrudes / compresses under load	No	
Pack size	Available individually	
CFC	CFC free	
ODP	Zero	
Regulation compliance	To provide compliant route eg. water legislation	
CAD downloads	Yes	
Design considerations	May be considered for use with water and electrical routing	

Notes:

TYPE I

In-screed Services Duct

- Preformed ready to use duct
- Easy access for future maintenance
- Integral keying and stability flanges
- Maximum clear duct area



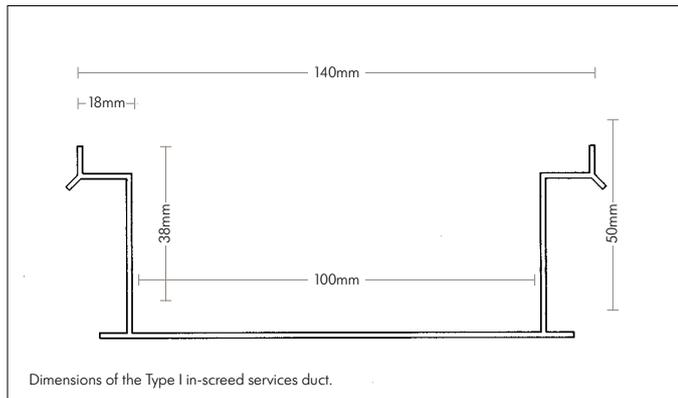
Use _____

Preformed services duct for incorporation within floor screeds. Provides serviceable conduit for pipes or wiring.

Solution

The Type I in-screed services duct is designed to accommodate pipes or electrical wiring required to pass through a screeded floor. The duct is bedded on a level oversite or sub floor and the final screed is finished flush with the duct top edges.

Integral flanges to each side stabilise the duct and promote a firm hold by keying into the screed. Surface covers to accompany the duct are offered in 12mm plywood.



Designers' Comments

The BRE DFA sheet 120 highlights the benefits of laying services in accessible ducts recognising Regulation/Byelaw Clause reference G7.1 & G10.2. Do not embed a service pipe within solid flooring – make provision for access / maintenance. Observe recommendations where a supply pipe passes through one occupancy to another.

Bill of Quantity / Specification Wording

Type I in-screed services duct

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Bed in position prior to laying of screed. Incorporate within screed to provide serviceable conduit route for (water) pipe(s). Metres run _____.



Specifications

Product name - group	Downward opening Loft Access Door & Frame
Dimensions	Trimmed joists Trim to 560mm x 760mm
Clear opening size	630mm x 535mm
New work applications	Yes
Retrofit applications	Yes
Material	Injection moulded high impact polystyrene
Colour	White
Extrudes / compresses under load	N/A
Pack size	Available individually
CFC	CFC Free
ODP	Zero
Regulation compliance	Exceeds minimum NHBC access dimensions
CAD downloads	Yes
Design considerations	Where a fire rated continuance of the ceiling is required, use a fire integrity rated loft access door and frame. See Cavi 120 Type PC Lofthatch.

DOWNWARD HINGING LOFT ACCESS DOOR & FRAME

Loft Access Door

- Door opens downwards into room
- Integral latch
- No painting or finishing required
- Insulated door



Use

To gain access into a roof void.

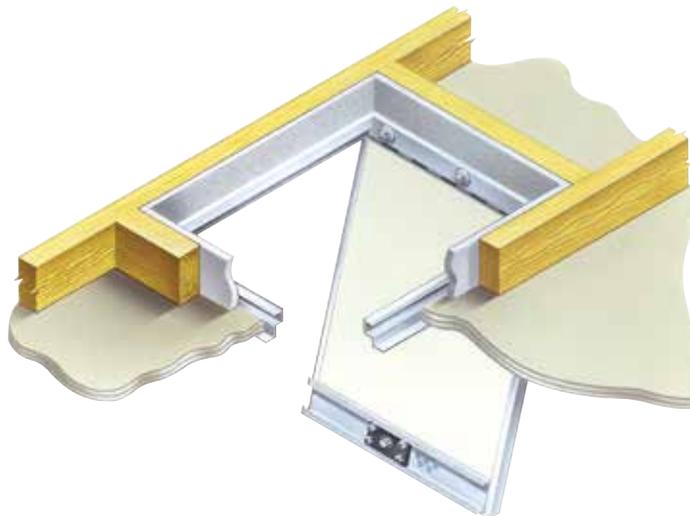
Specifications

Product name - group	Cavi 120 Type PC Lofthatch	
Dimensions	Trimmed joists + prep Trim to 775mm x 560mm then line with p/b or fire board to 755m x 540mm	
Clear opening size	745mm x 530mm	
New work applications	Yes	
Retrofit applications	Yes	
Material	Frame and door Seals	Polyurethane fr Electro galvanized steel
Colour	White RAL 9010	
Extrudes / compresses under load	N/A	
Pack size	Available individually	
CFC	CFC Free	
ODP	Zero	
Regulation compliance	Yes BS 476 Pt 22 – 1987	
CAD downloads	Yes	
Design considerations	Downward opening door is detachable should its removal be required to aid entry of apparatus into or out of the roof space.	

CAVI120 TYPE PC LOFTHATCH

Loft Access Door

- Two hour fire integrity rating
- Integral latch
- White stove finish
- Insulated door



Use

To provide access with a fire integrity rating of two hours into a roof space.

RADON (CONTAMINATED LAND) CONSTRUCTION PROTECTION

Building on Radon Emitting Ground

Radon Gas is everywhere - it is the extent that varies and structures are required to be built so radon exposure risk is minimised.

Radon Gas

This section refers specifically to construction of property with cavity walls on ground emitting naturally occurring Radon gas.

Other Gases

Polypropylene products within this section may be considered for the management of other naturally occurring gases only where the designer / specifier has identified suitability and determined the material polypropylene from which the products are manufactured provides gas control to fully meet the intended permeation control measures sought.

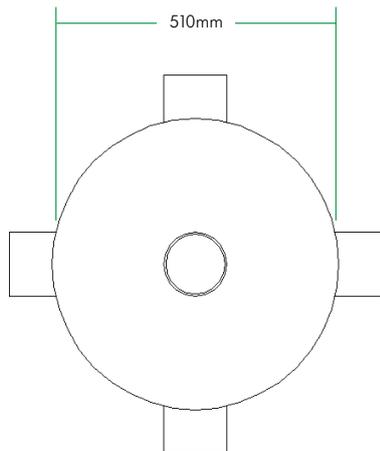
Footprint Protection

When raising a building out of the ground, footprint protection can be incorporated easily and cost effectively. Footprint protection is measured from the face of the exterior masonry skin with all incorporated measures integrated to form a continuous unpunctuated gas resistant barrier. Ground gas pressure affecting a building can also be reduced by incorporating a gas sump(s).

- Gas reception (depressurisation) sumps
- Oversite protective membranes - gas and damp
- Cavity barriers with interfacing angles and steps + profile options
- Threshold protection for openings offering adjustable integration
- Gas evacuation options
- Water evacuation options
- Protective sleeves, collars and interruption safeguards
- Sealing/ bonding gas sealing strips / capping
- Take-off and scheduling service

Specifications

Product name	Radon / Methane gas reception sump
Dimensions	510mm x 240mm + 110mm porthole projections x 5
Gas exit ratio	4:1
Maximum serviceable area	>250m ²
Maximum sumps per outlet pipe	5
Sump to far limit of any area	Not more than 9 metres
Outlet	Via soil / drain 110mm nom pipe
Material	Polypropylene



Each sump has four side connections and one top connection. This permits interconnection if a large area involving multiples of sumps is required.

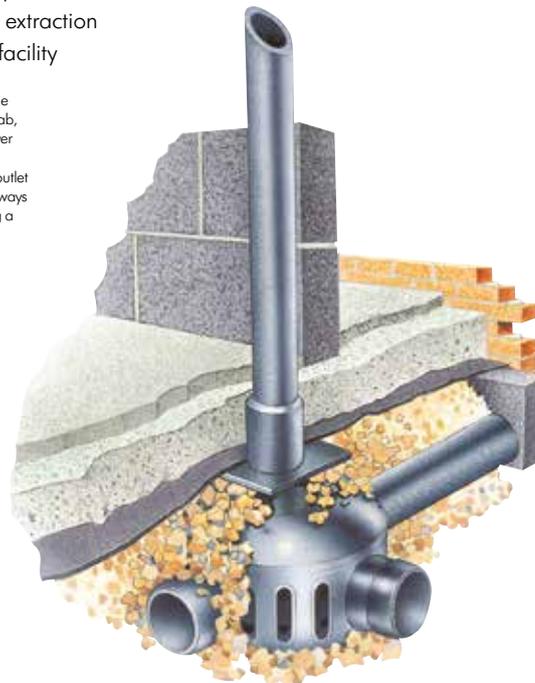
GAS RECEPTION SUMP

Reducing Gas Pressure Under the Building

- One-piece easy placement
- Passive or active extraction
- Interconnecting facility

In this example, the membrane is shown under the oversite slab, rather than above it. Whichever option is selected to suit the construction in question, the outlet from the reception sump is always linked to the membrane using a service pipe flashing.

Both outlet options are illustrated. Vertical stack or up to four horizontal connections are possible. Thus gas evacuation can be to perimeter walls if appropriate, terminating with round converter and Cavitybrick.



Use

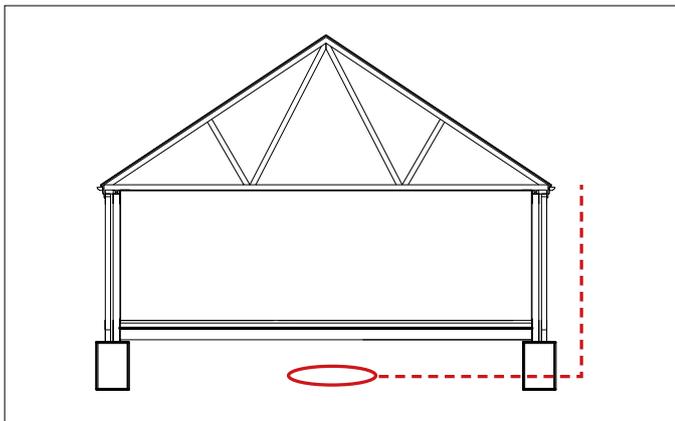
Depressurisation sumps, oversite membranes + compatible preformed cavity wall barriers with accessories integrate to form a radon gas protection arrangement of the building footprint to guard against gas permeation into the structure.

Solution

Sub-floor depressurisation is a way of reducing the pressure beneath a building and therefore directly influencing/easing the extent by which it seeks to infiltrate the construction.

Located beneath the floor slab in non-suspended floor configurations, one or more draw-sump is incorporated within the granular fill. The sump is connected and vented to the atmosphere using 110mm drainage pipe. Such sump configurations are termed passive and rely on the imbalance of pressure under and outside of the structure to naturally evacuate and dissipate gases. External termination dissipation options include Cavibricks, high-level pipe outlets or alternatively the outlet can receive an external cap in preparation to receive optional fan assistance at a later date.

One sump can influence an area up to 9m radius or an area of up to 250m² where the granular fill area is continuous and uninterrupted. How many sumps are required to provide optimum depressurisation depends on the foundation construction of the building and whether or not there is ventilated masonry between those foundation areas. Where a high-water table exists we recommend sump integration is reviewed to ensure functionality is not compromised by being waterlogged. (Note pressure differential requires the surface separating below ground from above ground to be sealed /capped not open).



Determining your Requirements

We recommend advantage is taken of our take-off service. We will be pleased to calculate your requirements and submit a proposal and scheduled for your consideration.

References

- The Environmental Industries Commission: www.eic-uk.co.uk
- The Radon Council: www.radoncouncil.org
- Public Health England: www.gov.uk/government/organisations/public-health-england

Designers' Comments

Public Health England (HPA) advises the only way of knowing the actual radon presence within a building is to test the building once it has been constructed. If a high reading then registers, corrective measures should be sought! It is preferable when constructing from new to remove uncertainty by protecting the entire building footprint. So doing using an appropriate gas grade oversite membrane linked to Radon Cavity Barriers reduces an addressable risk.

Bill of Quantity / Specification Wording

D21 - Clause 370 Depressurisation Sumps

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Gas Reception Sump(s) to be incorporated within granular fill and connected to external discharge point(s) where shown.

Product name	Gas Grade Oversite Membrane
Dimensions – supplied in rolls	30sq metre rolls: 28.6 x 1.05m
Weight	1.2Kg/m ²
Thickness	1.0mm
Tensile strength	230N
Puncture resistance	N 250 (ASTM E154)
Elongation	50%
Jointing method	Lap + integrity seal tape
Moisture vapour transmission	<0.1gm ² 24hr ⁻¹
Methane/Radon Permeability	<0.03ml/m ² /day/atmos

Use

There are two options from which to choose to provide the requisite damp and gas protection to the oversite. To provide protection across the oversite.

Solution

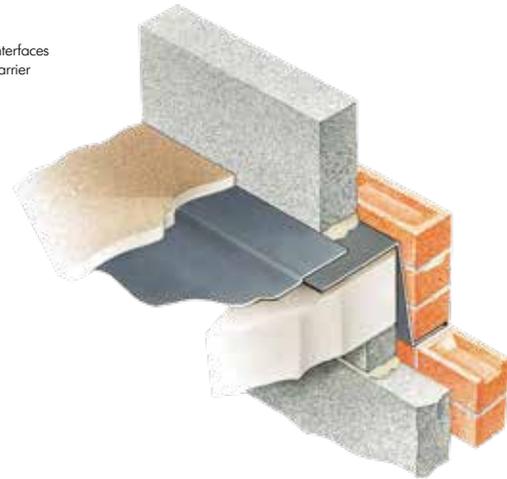
Type N Sitesealer Membrane may be used with conventional concrete ground-bearing slabs and suspended slab oversite construction. Type N is multi-layered membrane consisting of cross-orientated polythene laminated to a bitumen base layer with an aluminium primary sheet sandwiched between. It offers excellent performance with exceedingly low gas permeability. It is supplied in rolls on a carrier paper that upon removal exposes a self-adhesive edge strip. This permits the barrier to be applied to suitably prepared surfaces and for the adjoining widths to adhere to form a continuous presence.

OVERSITE MEMBRANES

Option 1: Type N Sitesealer Membrane

- Combined water and gas protection
- Integrates with cavity barrier
- Integral self-adhesive edge
- Reinforced
- Radon and methane gas resistant

Membrane interfaces
with Cavity Barrier



Bill of Quantity / Specification Wording

D21 -Clause 350 Gas Retardant Membrane -J40 Flexible sheet waterproofing / damp proofing.

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type N Sitesealer Membrane to oversite laid to manufacturers instructions with continuous integration with adjacent barriers.

Product name	Footprint Oversite Membrane - Loose Laid
Dimensions – supplied in rolls	25 x 2m and 25 x 4m
Weight	410gm ⁻²
Thickness	0.4mm
Tensile strength	750N/50mm
Tear Resistance	≤400N
Elongation	15-30%
Jointing method	Lap + integrity seal tape
Moisture vapour transmission	≥1024MNs ⁻¹
Radon Permeability	≤10x10102 ⁻¹² m ² s ⁻¹

Use

To provide protection across the oversite against rising damp and rising gas.

Solution

Footprint Oversite Membrane is supplied in rolls and may be used loose laid with ground-supported or suspended slabs. Where medium to high concentrations of radon gas are experienced, Footprint membrane can function as a water and gas resistant oversite barrier. It may also be used where methane or carbon dioxide are present.

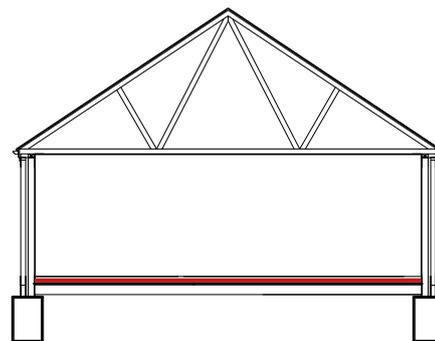
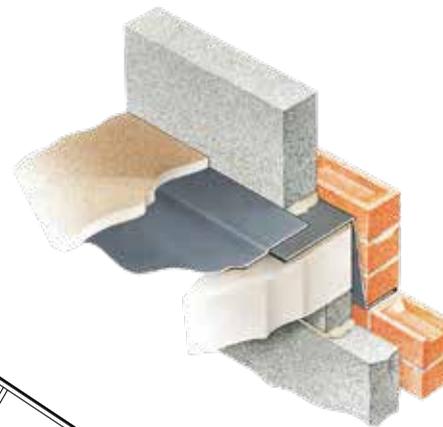
Footprint Membrane is multi-layered incorporating LDPE with polyester reinforcing and an aluminium foil skin. It has low gas permeability.

OVERSITE MEMBRANES

Option 2: Type LLRB Loose Laid Radon Barrier

- Combined water and gas protection
- Integrates with cavity barrier
- Radon, methane and carbon dioxide resistant

Inboard Projection of barrier interfaces with oversite membrane



Membrane level will vary depending on flooring construction

Bill of Quantity / Specification Wording

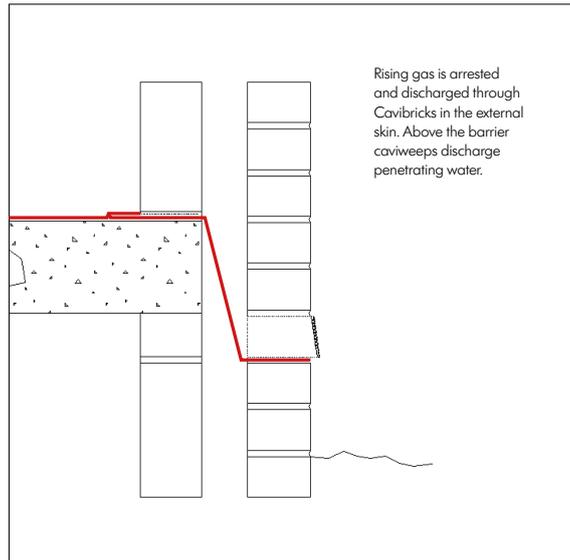
D21 -Clause 350 Gas Retardant Membrane -J40 loose laid polythene gas retardant / damp proofing

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Type LLRB Loose Laid Radon Barrier to oversite laid to manufacturers instructions with continuous and integration with adjacent barriers.

Specifications

Product name	Radon Cavity Barriers
Dimensions	Profile to suit wall detail Supplied in 2440mm lengths Angles / Steps Preformed to match profile. Std angles 450mm x 450mm
Joining method	Lap and integrity seal strip supplied in 30m rolls
Joining method	Lap + integrity seal tape
Material	Petheleyne CTR 1.4 <1.6
Radon Permeability	Less than $1.6 \cdot 10^{-12} \text{ m}^2 \text{ s}^{-1}$
Colour	Black

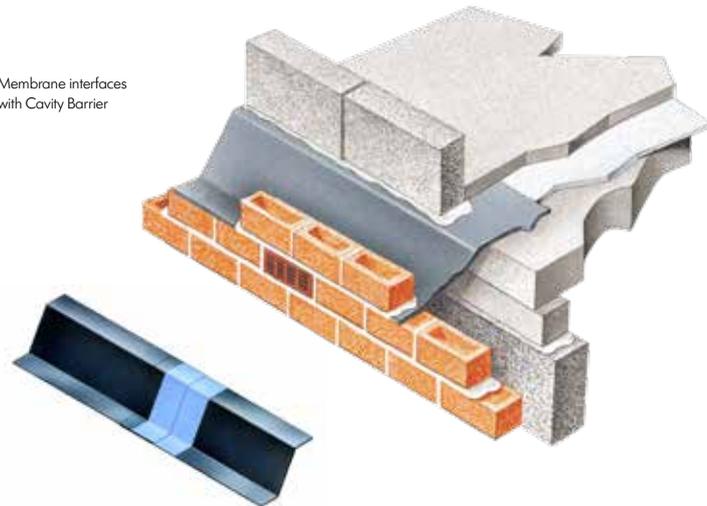


PREFORMED HORIZONTAL EXTERIOR WALL DAMP/RADON GAS BARRIERS

Arrestment within perimeter walls

- Gas guarding through the wall
- Integrates with oversite membrane
- Acts as DPC
- Outward stepping discharges water

Membrane interfaces with Cavity Barrier



Use

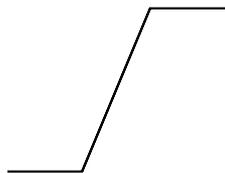
To stop Radon gas from continuing to rise within the exterior wall and cavity. To provide protection that integrates with oversite membrane.

Solution

Radon cavity barriers are built into all exterior walls around the building at floor/wall level. Their function is to arrest gas rising within the cavity/wall from permeating the structure. Barriers link with the protective oversite membrane.

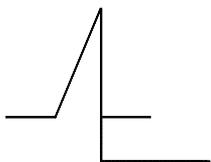
Rising gas arrested by the barrier is discharged out of the structure via appropriately located Cavibricks. The barrier is outward-stepping and shaped so any water penetrating the external masonry skin at higher level can be evacuated from the wall via Caviweeps located within perp joints. (See subsequent pages for further details)

Barriers are based on the Cavicloak design and manufactured in profiles to suit the specific construction detail. On site long runs can be swiftly formed by lap linking and sealing adjacent lengths. Preformed corners, change of level links and threshold barriers are manufactured to suit. In some instances the Radon Barrier can also function as the wall horizontal DPC, eliminating the need for this to be addressed separately.



Lazy Z Barrier

The Lazy Z profile terminates at higher level within the inner masonry skin. To maintain uninterrupted protection against rising gas the oversite membrane must lap and link which entails rising to this level.



Rise and Fall Barrier

The Rise and Fall Barrier commences and finishes at the same masonry course level. It is usually supplied with a projecting inboard section to permit it to extend and lap-link and seal with the oversite membrane.

(Specifications and full details of the above products are located on the specific product pages within the damp-proofing section)

How to Order

We recommend use is made of our take-off service. We will be pleased to schedule your requirements and provide a quotation.

Designers' Comments

Without uninterrupted interfacing of oversite membrane with cavity barrier, the protection will be discontinuous at one of the most vulnerable points – between floor and wall. Incorporating a cavity barrier that commences at the exterior skin face and projects through and beyond the cavity wall so it can seal with the oversite membrane ensures shielding measures are maximised.

Bill of Quantity / Specification Wording

F30 -Clause 3/20 Damp Proof / Gas Resistant Cavity Barriers

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Radon Cavity Barrier (Z shaped / Rise and Fall) to all exterior cavity walls laid and integrated with oversite membrane to form continuous protective arrangement in accordance with manufacturers instructions. Preformed internal and external corners and stepped unit where required.



Additional Options. See how we combine a radon barrier with an insulating ground level DPC to produce a composite multi-functional solution

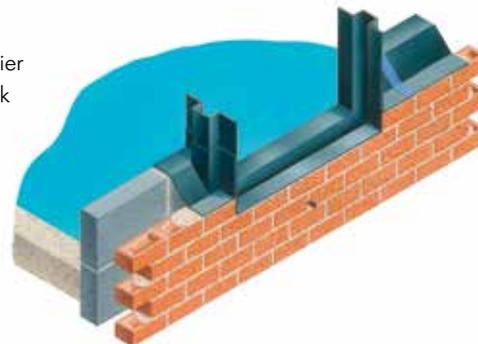
Specifications

Product name - group	Type PAT Protective Adjustable Threshold
Cavity widths accommodated	Cavity widths up to 150mm
Dimensions	All opening widths accommodated
Bespoke options	Yes
Traditional construction compatible	Yes
Timber frame construction compatible	Yes
New work applications	Yes
Retrofit applications	Yes
Masonry skin styles	Split/variable style compatibility limited
Undulating masonry faces	Depends on extent of deviation
Congruent with other wall elements	Designed for Cavicloser accompaniment
Arrested water evacuation	N/A - no horizontal arrestment
Thermal transmission of material	Negligible - 0.15
Material	Polypropylene DPC
Colour	Black
Extrudes / compresses under load	No
Pack size / weight	Varies pending design
CFC	CFC Free
ODP	Zero
Regulation compliance	Yes See Designers' Comments
May be used if cavity insulation present?	Yes with compliant insulation types
CAD downloads	Yes
Design considerations	Side connectors to suit all profiles of cavity barrier. Flexibility - Integration at different levels either side of opening possible should ground and construction levels dictate.

STANDARD ADJUSTABLE THRESHOLD PROTECTION – TYPE PAT

Maintaining gas and damp controls across doorways

- Gas and water threshold barrier
- Adjustable side connectors link with barriers
- Integral drainage outlet
- Accepts numerous barrier profiles



Use

The Type PAT – Protective Adjustable Threshold – is a three-dimensional DPC unit that is bedded within the external wall opening. Integration between wall barriers and the Type PAT is achieved using the adjustable side connectors that attach to the Type PAT and slide up and down to the requisite level.

The cavity face of each connector has a projecting connection profiled to match that of the external wall DPC/barrier profile. (Always first determine your optimum cavity barrier profile, then order Type PAT for openings with side connectors that match the barrier profile.

For specification and full details see Type PAT in damp proofing section.

Bill of Quantity / Specification Wording

F30 -Clause 330 Damp Proof Course

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

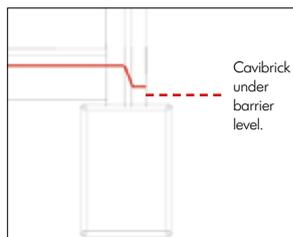
Type PAT Adjustable Threshold Protection to all ground level openings in external walls. To be incorporated with projecting side connectors lapped and sealed within cavity wall barriers to form a continuous protective arrangement. Number of openings / size.

Specifications

Product name	Cavibrick
Size	220 x 60 x 70mm
Free airflow rating	7500mm ²
Colours	Terracotta, Slate, Beige, Brown, White & Black
Material	Polypropylene
Observations	Sleeves – all styles



Radon evacuation from structure via Cavibrick located under Radon cavity barrier level.



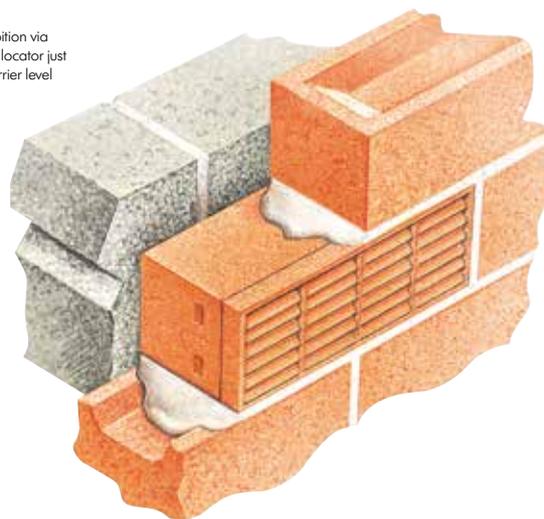
Membrane level will vary depending flooring construction. Barrier profile interfaces with membrane - inboard section shaped to suit membrane level / floor construction configuration.

GAS EVACUATION - CAVIBRICK

Venting from under barrier level

- Passive gas extraction – high throughput
- Masonry harmonizing colours
- Compatible with range of sleeves
- Insect screening
- Self-draining base

Gas exhibition via Cavibrick locator just below barrier level



Solution

Gas can passively discharge via Cavibricks incorporated at regular intervals (normally 1500mm centres) within the wall exterior skin. No connecting sleeves are required where a Cavibrick is releasing gas from the cavity under barrier level.

If ground levels prevent discharge immediately under barrier level, we offer specialist connections and straight/ telescopic sleeves that rise up and pass through the barrier to provide a higher discharge level. There are connecting sleeves and ducts to connect Cavibricks horizontally and vertically to specific voids (Individual listings for these products appear within this publication).

Bill of Quantity / Specification Wording

F30 Accessories/sundry items for brick/block/stone walling Clause 160 AIR BRICK

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

AIR BRICK to BS493, Class 1, built in as the work proceeds.

Specifications

Product name	Product name
Size	105/115 x 65 x 10mm
Free airflow rating	320mm ²
Colours	Grey, Black, Beige, Brown, Terracotta, White & Translucent
Material	Polypropylene
Observations	Dual-function ventilation / water evacuation Extension ducts and covers available

Solution

The cavity barrier prevents penetrating water from draining to the bottom of the cavity wall. Instead it is collected on the barrier upper surface and discharged out of the structure. Caviweeps provide this function. They are located in perp joints at barrier level at 900mm centres. See individual page listing for specification.

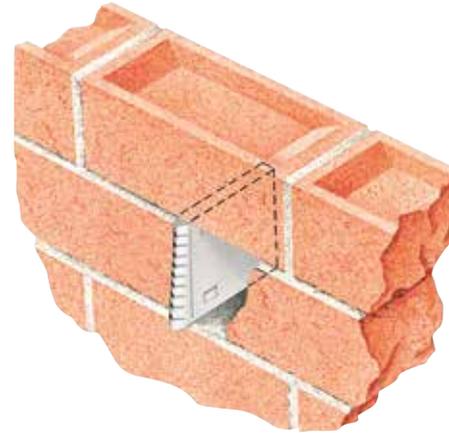


Cavibricks evacuating gas from under cavity barrier and Caviweeps evacuating water from top of cavity barrier

WATER EVACUATION - CAVIWEEP

Draining from top of barrier level

- Combined water and gas protection
- Integrates with cavity barrier
- Radon, methane and carbon dioxide resistant



Use

To provide exit route for water arrested on top of the cavity barrier.

Bill of Quantity / Specification Wording

F30 Accessories/sundry items for brick/block/stone walling Clause 132 / Clause 160 WEEP HOLES
 Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Caviweeps Type _____. Incorporate in perp joints where specified at not greater than 900mm centres immediately on base of Cavitrays and DPC's. Provide not less than two weep holes over openings.

Specifications

Product name	Service pipe entry sleeves (Top Hats) Cavity Barrier Obstruction Sleeves
Dimensions	Service Pipe Entry Sleeves: 25mm pipe x 150mm height x 350 x 350mm base 55mm pipe x 150mm height x 350 x 350mm base 70mm pipe x 150mm height x 350 x 350mm base 85–110mm pipe x 150mm height x 350 x 350mm base 135mm pipe x 150mm height x 450 x 450mm base 150mm pipe x 150mm height x 450 x 450mm base
Cavity Barrier Obstruction Sleeves	Matched barrier profile x 600mm length x matched obstruction profile.
Bespoke options	Yes
Material	Polypropylene
Colour	Black
Joining method	Base lap + bonding strip Products can be supplied with bonding strip already applied to base if specifically requested when ordering. Otherwise always supplied without and bonding strip.
Radon permeability	Less than 1.6 10 ⁻¹² m ² s ⁻¹ spot test.

Solution

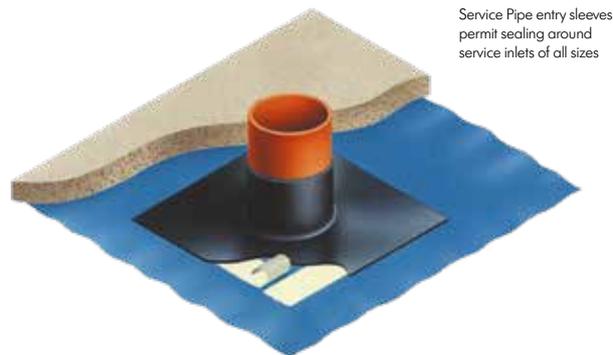
Preformed service pipe entry sleeves (often termed 'top hats') are available in a range of sizes. They provide effective protection against damp and gas ingress around the service pipe penetration. Manufactured from black gas grade rigid polypropylene, the base of each entry point is secured to the dry membrane penetration area utilising bonding strip on and around the underside of the base. The rising sleeve snugly fits the pipe dimension and is secured utilising bonding strip and a tightening clamp.

Where penetrations of the gas-grade oversite membrane are not addressed using standard sized Service Pipe Entry Points, bespoke options are available with collars designed to receive round and rectangular projections of all dimensions. Your requirements can be determined if you make use of our free design and advisory service.

SERVICE PIPE ENTRY POINTS

Service entry pipes through the oversite membrane
Sleeves and ducts through the cavity barrier

- Seal around pipe, sleeve and duct penetrations
- Numerous circular and rectangular sizes
- Gas and water resistant moulding
- Available with Integral bonding strip



Use

To maintain gas and damp resistant measures where services pass through the oversite.

Bill of Quantity / Specification Wording

F30 -Clause 330 Damp Proof Course

Manufacturer: Cavity Trays Ltd, Yeovil Somerset BA22 8HU Tel: 01935 474769

Service Pipe Entry Sleeves (top Hats) to be incorporated, lapped and joints sealed to oversite membrane where membrane is punctuated or interrupted by services rising through it. Build in carefully observing manufacturers' instructions to ensure water and gastight installation.

CALCULATE YOUR PROJECT

Use this prompt page to calculate your own requirements

If you have a drawing you can send them through to our estimating office by email: enquiries@cavitytrays.co.uk

Or you can use the Upload drawing facility tool that also appears on the homepage.



Roof Configuration

E.g. Pitched, Mono-pitched, Flat, Mansard or Other

Blockwork to be finished with a rendering coat?

Yes No

External Wall Material Coursing

E.g. (75mm brickwork, 100mm stonework, 150mm stonework, 225mm blockwork)

Bed width of outer wall leaf (mm)

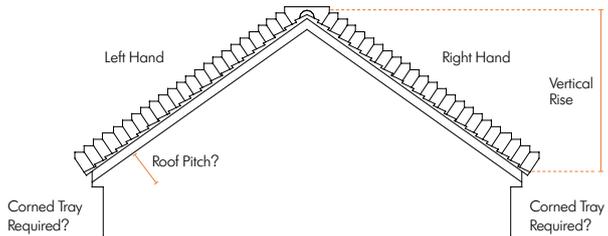
Overall cavity width (mm)

Clear cavity width (mm)

Lead attached or unleaded trays?

E.g. (Trays with lead flashing attached - state length of lead flashing required, Short flashing (150mm) to dress over upstand of secret gutter or soaker, Long flashing (300mm) to dress directly over an appropriately profiled tile.)

STEPPED CAVITY TRAYS



Ridge required? Yes No

Left-hand side slope vertical measurement (mm)

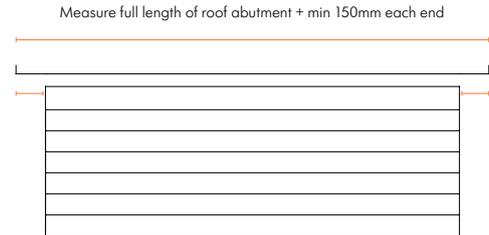
Right-hand side slope vertical measurement (mm)

Roof pitch

Corner tray required (left hand slope) Yes No

Corner tray required (right hand slope) Yes No

HORIZONTAL CAVITY TRAYS



Full length of roof abutment
(+ min. 150mm each end (mm))

New or existing wall?

If there is anything else that we need to know please let us below

Corner tray required (left) Yes No

Corner tray required (right) Yes No

FURTHER INFORMATION

Basis of Supply / Conditions of Supply

Any quotation and/or offer to supply and/or supply by Cavity Trays Ltd in respect of products is deemed to have been made subject to the Conditions and any terms or conditions of the purchaser are superseded are of no effect and do not form part of or apply to the Supply Contract in all circumstances even if included as part of the Purchase Contract Documents unless and to the extent incorporated as Special Conditions varied only in writing prior to supply and signed by an Authorised Director of Cavity Trays Ltd. A full copy of our Conditions of Supply may be obtained upon request and the Purchaser and/or the User shall be deemed to have read and accepted these Conditions in full for all present and future contract relations until further notice is given by Cavity Trays Ltd. Quoted despatch dates are indications only and speed of delivery shall not form any part of any contract. Cavity Trays Ltd reserves the right to amend or change specifications without notice.

Performance

Any undertaking applies only to the functionality of correctly specified dimensioned and manufactured goods installed in accordance with our fitting instructions. No warranty of performance applies unless full settlement is received within settlement terms. Any undertaking applies operative from the date of the applicable supply invoice. Cavity Trays Ltd will pay the cost to bring the performance of the specified units only proven to have failed back to functionality status but not further or otherwise. Any amount payable shall not under any circumstances exceed the original net supply cost of the original specific units affected only. We do not undertake to pay other damages arising from non-performance, including but not limited to the costs of damage to the building structure and liquidated damages. Our liability extends only to specifications based on information provided prior to our design work commencing and excludes any liability arising out of incorrect, inaccurate or incomplete information supplied by any notifying party. Cavity Trays Ltd is not able to make any warranty as to the standards of workmanship affecting products. Any performance undertaking does not extend to any other losses howsoever arising. This undertaking is not transferable.

The following are excluded from all performance undertakings: Water damage. Water entry damage via or around a material or fitting not supplied by Cavity Trays Ltd. Any problem arising through failure or mortar. Any change in colour or appearance. Misuse of product. Alteration or adaptation of product. Damage by lightening, pollution, movement or resulting from weather conditions more severe than average or occurring infrequently. Movement or subsidence. Incorrect installation. Use of incompatible materials.

All information is inevitably generalised and users should ensure it is relevant to the specific circumstances in which they seek to apply it. Adhering to its policy of continuous product improvement, Cavity Trays Ltd reserves the right to introduce product and specification modifications and changes at any time without notice. This manual has been produced and printed with care, but no responsibility can be accepted for data error or misrepresentation. E&OE

Ordering

Products may be source from your local Builders Merchant. Many merchants hold stocks of our goods, and we will be pleased to issue stockist names upon request via telephone fax or e-mail. Alternatively, you may place instructions with our sales offices direct by telephoning 01935 474769. If you adopt this procedure, it permits us to advise on availability and to arrange for the goods to be supplied through a recommended merchant appropriate to your area.

References and Sources of Information

The following information sources have been accessed within the past three-year review cycle and information added to our resources library:

- Building Regulations part A,B,C,D,E,F,L,M
- Building Research Establishment
- Hackett Report
- NHBC Technical Manual 2018 standards and Technical Guidance Updates
- LABC Technical Manual 2018 standards and updates
- Premier Guarantee Technical Manual 2018 standards and updates
- British Standards
- British Board of Agreement
- European Technical Standards
- Cavity Tray Standards

Cavity Trays Ltd wishes to thank the following organizations for their help and co- operation in providing input used in the preparation of this publication:

- NHBC / LABC / BRE
- Forticrete
- Lee & Jackson, installers of approved Cavitytrays
- Surecav Ltd
- DCE

INNOVATION BUILT ON EXPERIENCE AND TRADITION

In the 1920's a West Country family of builders started fabricating 'damp courses and other devices to allay the fears of the unpredictable and volatile English climate'. Today the fourth generation of the same family continue the tradition.

The company is now called Cavity Trays Ltd and can claim more experience, more case histories and more know-how than any other company in this specialised field.

Eric Reginald Shillabeer, the founder of the limited company created the term 'Cavity Tray', which together with 'Cavitray' have subsequently become accepted everyday terms within building language.

Cavity Trays Ltd remains the only UK tray manufacturer awarded European Technical Approval and its products can be found on construction projects as far afield as Singapore.

Approved Cavity Trays and Cavitrays are accompanied with a performance undertaking for the benefit of Architect, Builder and Client.

Enjoy the specialism, experience and service of four generations by clearly specifying approved products from Cavity Trays Ltd.

Log onto www.cavitytrays.co.uk
to access the latest product information.

Data sheets, product specifications, CAD downloads and
video demonstrations showing how products are used.

Where a request to receive technical information is received, we will continue to supply subsequent technical updates unless instructed to stop.
To cancel, please write, or email: removecontactinformation@cavitytrays.co.uk.

 01935 474769

 enquiries@cavitytrays.co.uk

 www.cavitytrays.co.uk



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