BUILDING DETAILS BEST PRACTICE GUIDE

DAMP-PROOFING
CLOSERS
VENTILATION
ASSOCIATED ITEMS
RADON/METHANE
FIRE/ACQUISTIC STOPS

DECISION

Cavity Trays 🙈

Specialism · Experience · Service

Vol. 40

Enjoy the of four generations of experience...

In the 1920's a West Country family of builders started fabricating "dampcourses 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.

Cavity Trays Ltd is the first and only tray manufacturer awarded European Technical Approval – there is no higher standard.

Cavitrays with high performance categorisation are accompanied with product performance liability, for the benefit of Architect, Builder and Client.

Welcome to Cavity Trays Ltd of Yeovil

This pocket-sized handbook illustrates common construction details and problems. It identifies the products that can solve and satisfy your construction compliance requirements.

Carry this handbook with you

Use the freephone number to obtain immediate advice. If you require a non-standard item, please ask. We have an entire department dedicated to problem-solving and producing solutions for projects of all sizes and types. We manufacture standard and bespoke products for new construction, renovation, repair and remedial work. Please use our expertise; we are at your service.



Better for architect, builder and client, and peace of mind.

Our conditions of supply apply in all instances. A copy of the company's terms and conditions is available upon request. Covity Trays ltd shall not be liable for any consequential loss whether this arises from a breach of duty in contract or any other way. The summary conditions appertaining to the covitray product performance undertaking appear in our technical manual. Study of the main manual is essential. Quoted despatch dates and carriage methods apply to the anticipated date of dispatch and the anticipated made of carriage only and speed shall not form any part of any contract. As part of our continuous product development, we reserve the right to amend or change specifications without notice.

"I've a detail like that, except"...

This pocket-sized handbook illustrates common construction details. Use this handbook to identify solutions to your construction requirements. If you cannot see what you are after or you find yourself thinking the words above, freephone us and ask about the numerous variations and solendid solutions available.

"Give me an example"...

Turn to page 53

It shows a cavity barrier that is multi-functional. It acts as a fire stop and ar acoustic stop. Importantly it has sloping upper and lower surfaces that discharge penetrating water forward.

If you have an unusual or different application, just ask. We can usually supply bespoke versions. Best practice and functionality at all times.

"Can you work it out for me?"...

Cavity Trays Ltd is the longest-established organisation in this specialised field We will be delighted to prepare schedules, drawings and costs. We do not charge for such advice. We welcome the opportunity of submitting proposals for your consideration.

"Help me make my decision"...

We have a proven track record unmatched by any other specialist in this field. The only cavily tray manufacturer awarded European Technical Approval.* We also offer Architect, Builder and Client an accompanying benefit. Product performance liability protection.

"A handy book to keep in my pocket"

Cavity Trays Ltd - at your service

More Information

Extensive product details and applications may be found within technical publication vol 22: 'Protecting the Building Envelope'.

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4 CONTENT

DAMP-PROOFING

Type B Vertical DPC Tray	7
Type BA Barrier Arch	7
Type C Cavitray	8
Cavicloak Preformed Damp Course	10
Type CD Cavity Dropcloak	13
Cavilintel	14
Caviroll Premium DPC	15
Combined Edge Insulators	15
Profiled DPC's for Timber Frame Construction & SIP Constructions	16
Type DPC Profiles Raft Construction	16
Type E Cavitray	17
Type E Remedial	19
Type F Corrugated Flashing	20
Туре G	21
Type GBFICS	22
Type GBPWIS	22
Type J Support and Closer	23
Type K Circular Cavitray	23
Type L Lintel Stopend	24
Type L90 Stopend	24
Type LTT Threshold Tray	25
Coneslate	25
Type M Cavitray	26
Masonry Support Cavitray Systems	26
Type P Cavitray	27

Type PWRB Party Wall Barrier	2
Type Q Arresting Barrier	2
Type R Cavitray	2
Rainscreen Baffles	2
Type S Soaker Units	2
Type TFC Timber Frame DPC	3
Type TST Threshold Tray	3
Unleaded Gable Abutment Tray	3
Type U Cavitray	3
Type W Cavity Perp Weep/Ventilator	3
Type W Extension Duct	3
Type W Optional Cover	3
Pyramid Weep	3.
Beak Weep	3.
Euroweep-Vent	3
Small Adjustable (Telescopic) Weep	3
Type X Cavitray	3
Type X Remedial	3
Type X Multicourse	3
Flashing Options	3
Curved Cavitrays - on Plan	4
Type Y Mullion Cavitrays	4
Type Z Fixing Strip for DPC	4

CLOSERS

Acoustic Stops and Thermal Barriers	45
Bespoke Traditional Closing Service	45





Continuity Closer	46
Type D Damp Course (Vertical)	40
Type DIP	47
Type FWC Five Width Cavicloser	47
Type H Cavicloser	48
Quickcloser	48
Sash Frame Insulated DPC	49
Type WCA	49
Type WCA Maxi Range	50
Type V Cavicloser	50
MWR Type V170 Cavicloser	5
Cavi 120 Type V Closer	5
Cavi60 Type WCA	52
Cavi60 MWR V170	52
Cavi60 SAF Horizontal Barrier/Stop	53
Cavi240 SAF Vertical Cavity Barrier/Stop	53
Cavi240 Type CFIS	54
Cavi60 MWR 200	54

VENTILATION

Ventilation at Floor Level	56
Ventilation Through Walls	61
Ventilation at Eaves & Fascia Level	64
Ventilation via the Soffit	71
Ventilation Where Roofs Abut Walls	
+ Through the roof	75

ASSOCIATED ITEMS

Type CRSS Running Soaker Strip	79
Type ECSC Eaves Continuous Slate Course	79
Type RBS Roof Bonding Strip	80
Type VG Valley Gutter	80
Hardedge Strip 1500	81
Type I In-screed Services Duct	81
Type LAD Loft Access Door	82
Downward Hinging Loft Access Door	83
Cavi120 Type PC Lofthatch	83

RADON/METHANE

Sump Provision under the Building	87
Oversite Protection Type N Sitesealer Membrane	87
Oversite Protection	
Footprint Radon Membrane	88
Protection Through the Wall	88
Gas Out & Water Out	89
Sealing Interruptions of the Oversite Membrane	89





Damp-Proofing

Damp Protection of the Building Envelope

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.

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 we identified and drew attention to errors in the original BS 8215:1991 on pages 7 & 8 relating to stepped DPC provision in gables. 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 removes the associated risk.

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



Type B Vertical DPC Tray

use

Provides vertical DPC element to existing cavity wall

solution

The Type B semi-rigid vertical cavitray may be introduced into the existing exterior skin of a cavity wall following vertical cutting of the masonry to provide a 4mm slot.

The Type B establishes a permanent DPC presence. Addressing this vertical requirement in addition to any horizontal requirement (see Type E) is important where a skin changes status by virtue of an extension being added to an existing structure. Where metal profile links are employed to attach masonry and the existing wall is not cutout to create

T-junction cavity continuity, the Type B approach can introduce DPC integrity. See separate page entry for Cavilinks.

data

- Black polygormac DPC
- · Standard 2400mm lengths
- B1 suits standard brickwork skin
- B2 150mm skins
- B3 225mm skins
- See Masonry Cavilinks under separate heading available with this product



Type BA Barrier Arch

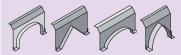
use

Provides a moulded DPC barrier only for arches, thus permitting traditional construction.

solution

The type BA barrier arch is a DPC, supplied ready-shaped to suit the arch opening. The type BA is incorporated within the cavity wall with its base section positioned on the traditional centring. The barrier arch DPC is normally returned into the inside skin, at the appropriate level. The type BA is particularly appropriate for wide arches because it can be supplied in connecting sections.

- All popular styles and sizes available
- Maximum overall length in one piece 2400mm
- Wider arches supplied in linking sections
- Manufactured from thermo stable DPC
- Provides correctly shaped DPC whilst permitting traditional construction
- DPC element is established without doubt, at intrados level









Type C Cavitray

use

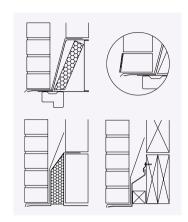
A range of preformed, ready-shaped DPC cavitrays for use with proprietary metal lintels. Also suitable for use with cast in-situ, prestressed and precast concrete lintels.

solution

Type C cavitrays provide a harmonising yet independent DPC tray for all lintel openings. Manufactured from solid DPC, Type C cavitrays are pre-shaped to suit customer's specific construction needs. Being pre-shaped means the installer establishes exactly what is being built into the cavity wall, whilst eliminating the dangers of distortion and misplacement. Wastage is also eliminated as Type C lengths can be scheduled to suit the build programme. All shapes, sizes and profiles available. Type C cavitrays are compatible with our stopends and perp weep/vents. Profiles available to suit Catnic, Keystone, I.G., Hill Smith, Birtley, Bat and other popular lintels including all concrete lintels.

data

- Base thickness of 1.5mm, polypropelene
- Strong preformed profiles
- Adjustable stopends
- Numerous cavity widths accommodated.
- Avoids length wastage
- Securtex finish promotes superior mortar adhesion



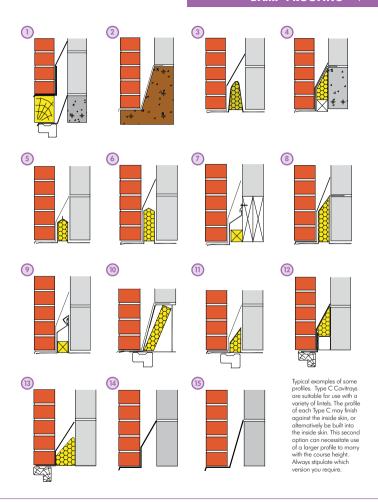
Because Type C cavitrays are profiled from rigid solid DPC, they support themselves. They do not required building into the inside skin. Self-supporting Type C cavitrays can thus be used with either traditional or timber frame construction. Alternatively, if a return into the inside skin is desired, it can be provided upon request. Trays can be supplied for any designated cavity width and are biased-formed to take-up the actual cavity encountered.

















Cavicloak Preformed Damp Courses



Preformed moulded cavicloaks for use within cavity walls. Cavicloaks are shaped to exactly fit the construction detail intended. Cavicloaks are offered in a wide range of standard sizes. Also tailor-made to suit specific applications.

solution

The use of preformed cavicloaks eliminates the need to fabricate on site. The ready-moulded units provide correctly fitting, harmonising components which ensure DPC integrity to features such as corners, columns, steps and angles. Moulded from solid DPC, the preformed cloaks offer flexibility without sagging or distorting. Options include the self-supporting upstand terminating within the cavity or alternatively returning into the inside skin, depending on application.

- Standard and purpose made cloaks
- Solid polypropylene A1 DPC
- Securtex surface aids adhesion
- Preformed moulded components
- Link-seal jointing
- Upstand termination option
- No distortion or sagging
- · Efficient site scheduling and stock control



Type C/P with pipe projecting through cloak CC/CP/0360



Stopend CC/SE/0160



Internal Angle CC/IC/0320



Cloak around vertical vent sleeve CC/CS/0440 CC/CS/050



Change of Profile / Change of Direction / Change of Level CC/CLCP/IC/0270



Party Wall link cavicloak CC/PWL/0220



Column Cavicloak CC/C/090



Radon External Angle CC/RAD/EC/0260







Stopend CC/SE/0410



Stopend cavicloak CC/SE/040



Column Cloak (Supplied in two pieces) CC/CC/0270



Internal Angle CC/IC/0370



External Angle CC/EC/0380



Window Cill tray (Dependant on size) CC/UC/0350



External Angle CC/EC/0390



Change of Profile Cloak CC/COP/0190



Step down cloak (Large step) (150mm - 600mm High) CC/LC/0340



Windpost Cloak (Handed) CC/WRS/0290



Threshold Cavicloak CC/S/060



Windpost Cloak CC/WC/0280



Radon Internal Angle CC/RAD/IC/0250



Balcony Cloak CC/BC/0570



Corbel Cloak CC/CC/0580



Internal Corner / Column Cloak CC/ICC/0510







Column cloak CC/C/0400



Cloak over vent CC/SCC/0330



Change Profile / Corner Cloak



Reveal Protection Cloak CC/RP/0600



Windpost cloak CC/WC/0430



Step down cloak (Small step) CC/LC/080



Change of Level CC/LC/0610



External Corner/ Column Cloak CC/FC/0620



Level Change /External corner Cavicloak CC/S/0110



Change of Level / Change of Direction CC/SLIC/060



Threshold Step Down Cloak CC/TS/0630



Change of Profile / Intersection Seal CC/CPC/0540



Column / Windpost Cloak CC/CWP/0520



Masonry Support / Cloak CC/MS/0530



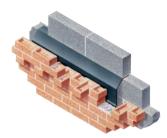
Column Cloak CC/C/0550



Level Change CC/LC/0560







Type CD Cavity Dropcloaks

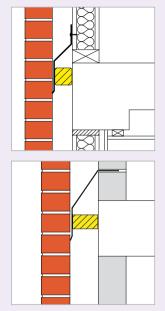
use

To prevent damp penetration via a masonry feature within an external skin, without envelopment within that skin. Thus structural integrity is unaffected and masonry mass is maintained.

solution

Architectural masonry features such as dentils, running break stones or stringcourses often restrict, reduce or interrupt the cavity plane. Thus it is always desirable to minimise and protect against the affects of any volume wash of water around such features. If such masonry features occur towards the top of a cavity wall, any dpc in the external skin separates the masonry below from the masonry above. The bonding is broken and the masonry mass is isolated. The external skin is weakened at the very point where it should ideally be strengthened.

Type CD Cavity Dropcloaks can eliminate such problems. Dropcloaks are preformed dpc sections moulded in petheleyne biased to take-up a wide range of cavity dimensions. Type CD Dropcloaks do not break or affect the bonding of the external skin. Structural stability is enhanced rather than reduced, weakened or isolated. Cloaking to guard



Where horizontal cavity stops or barriers are also incorporated to comply with Robust Details Part E, Dropcloaks prevent penetrating water tracking on the top surface of the barrier.

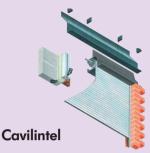
against damp transmission is achieved dropping from the inner leaf only, but protecting from damp in the outer leaf.

- Black petheleyne
- Dimensioned to suit all cavitray and Cavicloak applications
- Stopend facility and expansion facility





Notes



use

Load bearing lintel with security shutter.

solution

The Cavilintel is designed for use with cavity walls. Unlike a conventional lintel, the Cavilintel incorporates a roller shutter within its box design. Electrically operated with an internal manual override facility, the shutter descends to protect the door or window opening under. The Cavilintel package includes shutter guides that are built into the cavity wall reveals. The shutter ends are thus retained within the channels behind the external masonry skin. The Cavilintel is additionally accompanied with insulation and damp protection cavitrays at head and sill level, and provides a complete opening package. Developer may offer customers additional security of openings immediately or benefit of upgrading at a later date

- Bespoke design product
- Stainless steel or galvanised steel
- Shutter colour choice
- Cavitray damp protection measures included
- No mechanical surface fixings
- Safety manual override internally







Caviroll Premium DPC

use

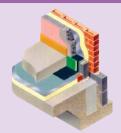
General purpose DPC suitable for specific horizontal and vertical damp proofing of cavity walls.

solution

Premium Caviroll DPC is manufactured from solid polyethylene which conforms with BS6515. It promotes excellent tensile strength and retains flexibility through a temperature range of minus 50 degrees up to plus 80 degrees centigrade. Premium Caviroll DPC is a homogeneous material, possessing superior water impermeability. Both sides of the DPC have a griggrid surface to promote adhesion and unity with the mortar. Premium Caviroll DPC is a clean and easy to handle material. It is tough, flexible and suitable for use as a general purpose roll damp-proof course.

data

- Available in standard 30 linear metre rolls, in the following widths: 100, 150, 225, 300, 375, 450. 600 & 900mm
- $\bullet\,$ No water absorption. Water permeability 0.00036 kg m^2h atm
- Tensile strength 1.266 kg/mm².
- Tearing elasticity 800%
- Temperature scale Flexibility from 50 degrees up to +80 degrees centigrade
- British Standard DPC with gripgrid surface
- Impermeable



Combination Edge Insulators

use

Combination perimeter edge insulator for use where floors and walls meet to provide thermal, acoustic and DPC qualities.

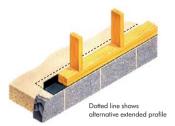
solutior

Ground bearing slab construction commonly requires perimeter edge insulation at its junction with all walls. Similar requirements exist with other forms of construction, to prevent cold-bridging, By selecting an appropriate combination edge insulator, the thermal and acoustic arrangement can be accompanied by damp-protection, acting in addition to or as part of the around floor DPM configuration. The semi-rigid DPC is preformed at 90° to maintain shape and placement and provide easy lapping and interfacing with any adjacent DPM. Thus barriers can be incorporated at screed level (above slab) or below slab level, pending the DPM configuration. This extends the construction options available to meet requirements of Building Regulations and Robust Details where the overall resistance of the edge is required to achieve 3.04m²K/W minimum.

- Provides inner skin DPC
- Uninterrupted vertical protection
- · Integrates with oversite membrane
- Insulation cushion to perimeter







Profiled DPC's for Timber Frame Construction & SIP Systems

use

Pre-shaped DPC's for use under sole plates in timber frame and construction utilising structurally insulated panels.

solution

Traditional roll dpc can distort and misshape during placement and operations on site. Profiled DPC's are accurately dimensioned semi-rigid shaped dpc's that permit the installer to establish consistent dpc protection around the base of timber framed walls. Laid and lapped under the sole plate, the profiles rise vertically to protect the inner face of the plate, as depicted in NHBC Standards 6.2. They can also extend inwardly. In so doing the oversite membrane can benefit both horizontal and vertical interfacing. Profiled DPC's will not extrude under load and functionality is unaffected by normal packing/point loading. Internal/external anales and bespoke profiles available.

data

- Black petheleyne
- Will not extrude or seep under load
- Close fits timber no sagaina or damage
- · Consistent quality of build
- 2400 x 100 x 112 (180)mm
- Bespoke options



Profiled DPC's for Raft Construction / Ground Beam

use

To provide perimeter DPC when constructing using raft foundations or where the cavity does not continue below DPC level

solution

DPC Profiles for raft foundation construction are manufactured from accurately dimensioned semi-rigid shaped Petheleyne. They are bedded and lapped on the foundation prior to the commencement of masonry being laid.

Unlike roll material, the DPC Profile cannot sag or distort and fulfils the requirements of NHBC 4.5 D12 –D13. The cranked DPC Profile is manufactured in a range of heights corresponding with masonry course heights. Because there is no continuation of cavity by virtue of the concrete raft, water is drained out of the structure using Caviweeps appropriately positioned in perp joints ground the structure at DPC level.

- One-piece DPC wall protection
- Matches raft edge dimensions
- Integrates with oversite membrane
- Establishes gas protection provision







Type E Cavitray

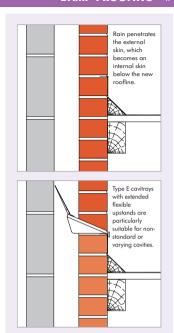
use

To introduce a horizontal DPC at roof intersection level in an outside wall which has become an inside wall, by virtue of an extension being built.

solution

The Type E is a preformed DPC cavitray which is inserted into an existing cavity wall. The Type E requires only one course of bricks to be disturbed, with just a few bricks removed at any time. The self-contained Type E cavitrays are the length of two bricks, and clip together, so long runs are easily and quickly created. Preformed angles cater for corners and piers. Each unit has stand-alone discharge via a weep. Suitable for all popular cavity widths because the cavity upstand of the Type E is hinged and adjusts to always suit the 'asfaund' cavity width.

- Standard two brick length cavitrays with integral perp upstands
- Material solid DPC polypropylene
- Positive jointing integral anticapil clip eliminates gluing, sticking or overlapping
- Shape and depth of projecting lip prevents discharge water permeating the bedding joint - an often overlooked consideration on exposed sites
- Adjustable cavity upstand accommodates cavity size 50mm to 140mm





Type E cavitrays used with a lead flashing, where a new roof abuts an existing wall.

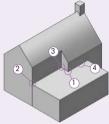




Type E External Angle Right Hand



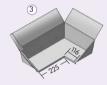
Type E Internal Angle Left Hand



Type E Straight 450mm Long

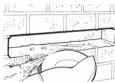


Type E Internal Angle Right Hand

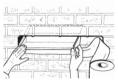




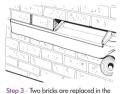




Step 1 - Three bricks are removed from the wall forming a 675mm opening (an angle grinder/cutter is ideal for cutting out).



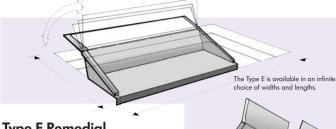
Step 2 - One cavitray is inserted together with the flashing intended for dressing over the skirting of the roof finish (flashing approx 50mm into wall). Lead flashing is not required in most remedial applications.



wall into the cavitray. 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 cavitray 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 cavitrays. The method is continued until the required run is completed. (Always bed on mortar. Do not dry bed.)







Type E Remedial

use

To introduce an effective DPC into an existing cavity wall in which the original high level damp proofing element has been omitted, damaged, incorrectly formed or is suspect/faulty.

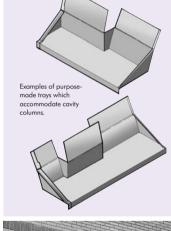
solution

When dampness is experienced at a horizontal intersection, roof junction, ringbeam or over a window or door opening, the Type E may be used and introduced as a remedial DPC, to arrest the penetrating rain water. Type E cavitrays may be supplied in various lengths, widths and depths.

Therefore the external skin masonry module encountered on site may be matched.

Long runs of trays are easily created, whilst maintaining self-contained and stand-alone status. Installation is from the outside of the building only.

- · Self-contained units with stand-alone discharge
- Hinged cavity upstand accommodates actual cavity width 50mm to 140mm
- · Minimum masonry disturbance





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





Notes	



Type F Corrugated Flashing

use

Corrugated flashing suitable for use with plastic roof sheets only.

solution

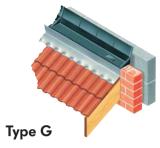
The new Type F corrugated flashing units can be used on porches, lean-tos, outhouses, conservatories or temporary structures having lightweight translucent corrugated roof sheeting. The Type F flashing unit incorporates a unique integral hinge, usually making it suitable for any angle of roof from 17.5 degrees up to and including 60 degrees. The units are fixed simply by positioning before securing the top of sheet fixings, which then hold the units in place.

The Type F fits against the corrugations snugly, whilst the upstand springs to shape vertically against the wall. The upstand can then be finished off with a flashing/cavitray.

- Profiles: Standard 3"/75mm asbestos, Standard 3"/75mm iron. Miniature, Grecca box profile 76/18, Grecca box profile 70/18, Box profile 16mm, Box profile 14mm
- Approximate dimensions 150mm x 85mm upstand x 715mm lengths







use

DPC system for general purpose applications including changes of level, diaphragm walls, roof intersections, building off the solid, etc.

solution

The Type G is supplied in preformed lengths and preformed angles. Long runs can be rapidly laid with adjoining sections interlocking via integral stopends that coincide with masonry perp joints. All arrested water is discharged via caviweeps. The standard Type G profile suits cavity widths from 50mm up to 140mm ands is available in lengths to suit masonry coursings. The Type G is usually supplied with a flashing already attached or with an external bed lip. The Type G is suitable for traditional and timber frame construction and cannot deform or misplace like conventional roll dpc.

data

- Adjusts to suit cavity widths up to 160mm
- Supplied with or without flashing attachedIntegral stopends interlock to create long
 - tray runs
- · Self-supporting, unrestricted cavity compartment
- Not dependent on both skins aligning
- Traditional or timber frame construction



Universal external angle. 220mm x 220mm.
For convenience, this angle is not handed and may normally be used for most external angle applications.
(External angles specifically left or right -handed are available to special order)



Universal internal angle. 120mm x 120mm.



Type G cavitroys with attached lead floshings provide protection to the front horizontal intersection. Note the Type X trays used above the sloping abutment terminate with an external angle. This provides a protective link with the Type G trays.





Type G cavitray with lead flashing attached.

Type G cavitray used in ringbeam / concrete frame application.

Type G cavitrays are now also available with a synthetic flashing attached instead of a lead flashing. See separate entry on page 39 headed Synthetic Flashings, which lists details. State clearly on your instruction if you require this option.







Type GBFICS Ground Bearing Floor Insulating Cavitray System

use

To insulate, provide horizontal dpc, cavitray protection plus radon and methane cavity barrier integrity at ground floor level.

solution

When installed around the perimeter of a building at around floor level the requirements of the Robust Details can be satisfied with use of the Type GBFICS, Manufactured from profiled semirigid damp course, the Type GBFICS provides the horizontal dpc requirement to both inner and outer skins of the cavity wall. At the same time the cavity is also capped, creating an integral barrier to guard against radon or methane gas rising upwardly via the cavity and permeating the building envelope. To maintain gastight integrity, the inboard section extends sufficiently to link with a gas-grade slab membrane. The downward projecting section of the Type GBFICS protects the membrane from damage where it rises against the inside leaf.

data

- One placement multi-compliance protection
- Preformed angles, steps and links
- · Profile dimensions varied to suit site requirements



Type GBPWIS Ground Bearing Party Wall Insulating System

USE

Eliminates temporary formwork, creates cavity, provides party wall slab insulation with dpc corresponding

solution

The Ground Bearing Party Wall Insulating System is secured in position between semi-detached units centrally along the line of the party wall. It permits the oversite concrete to then be laid without the need of temporary formwork or masony. The Type GBPWIS is thus enveloped within the construction and additionally provides slab edge dpc corroboration with cavity insulation infill. The system is available in dimensions to suit all cavity widths and slab thicknesses. If an open cavity below slab level is required, the insulation can be removed after installation.

- Petheleyne black dpc, 2mm
- · All sizes manufactured in 2.4m lengths
- Profiles to suit, example: 300mm base x 150mm high x 75mm cavity
- Polystyrene insulation infill
- Aids easy construction of robust construction arrangement









Type J Support and Closer

use

Provides DPC support and closes cavity under parapet copings. Also provides means of closing cavity in open eaves and other eaves details.

solution

Parapet construction requires a DPC immediately under the copina, BS5628:Part 3 aualifies the manner in which the DPC must be supported. The Type J closer fulfils the requirements of the British Standard, and also the N.H.B.C. performance standard, chapter 6.1, \$4 (c) to (d). The conventional cavity parapet is normally terminated with copinas, under which a DPC is bedded and positioned. The width of the DPC must 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 is designed for such purposes.

 $11 = 130 \text{mm} \times 30 \text{mm} \times 2 \text{mm} / 25 \text{mm}$

 $J2 = 150 \text{mm} \times 30 \text{mm} \times 2 \text{mm} / 2.5 \text{mm}$

data

- Standard lengths 2400mm
- I1 closer make it suitable for use in cavities from 50mm up to and including 90mm
- · J2 is a larger closer suitable for use in cavities from 90mm up to and including 130mm
- Material PVCU, Type 4
- Available with insulated infil



Type K Circular Cavitray

LISE

Cavitray damp course for circular windows.

The Type K cavitray is manufactured from solid DPC and is supplied in one piece ready to receive the circular window. It fits snualy around the window frame, providing a 360 degree barrier. The inside skin of the cavity wall and the sides of the circular window frame are protected from dampness.

The unique design of the Type K cavitray accommodates numerous cavity widths and numerous frame positions. The cavitray travels vertically downwards within the cavity, until it passes the bottom of the circular window. At this point integral balloon mouldings force the hinged base section forward and guide water to discharge safely. Type W weepvents may be incorporated to aid cavity wall ventilation if appropriate.

- Standard dimensions include 470mm, 600mm, 630mm, 675mm, 700mm, 750mm, 800mm
- Special sizes available
- Thermo-stable polypropylene DPC type 6. heavy-duty, black
- Optional polystyrene thermal collar
- 360 degree total protection







Type L Lintel Stopend

use

Lintel stopends for use at the ends of most popular DPC steel lintels/damp courses/trays. Now recommended by N.H.B.C.

solution

The use of the Type L lintel stopend quickly and economically introduces a lintel feature which removes the problems and dangers experienced with volumes of water being directed into the cavity. This stopend is adjustable to suit most popular lintels and lintel damp courses, cavitrays etc. Incorporated into the moulded base of the lintel stopend is a butyl anchoring strip, which enables it to be secured towards the ends of lintels etc, in the most appropriate position to suit the masonry perp ioint. Stopends do not disruot the bond.

When fitted, discharge from lintels is directed through masonry weeps, and we refer to our weepvents.

data

- Durrpolyethylene 6/A, colour black
- Adjusts to suit different shapes of lintel, DPC or cavitray
- Integral butyl anchoring base
- Promotes compliance of the latest
- N.H.B.C./Building Regulation requirements
- Compatible with our weep vents
- Packed in boxes of 50



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

Type L90

use

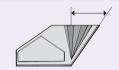
Right-angled stopend for use with vertical back

solution

The L90 stopend differs from our standard Type L because it does not adjust and is intended for use with lintels, DPCs and trays with vertically rising backs. A butyl anchoring strip on the base of the L90 secures it in position in the selected perp joint. This product is recommended for surfaces that rise vertically - see adjustable Type L if the surface is sloping/leaning back.

data

- Polypropylene.
- Colour black
- Integral butyl anchoring strip.
- Packed in boxes of 50



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.







Type LTT Level Threshold Tray (Threshold Isolation DPC)

IISA

Permits internal and external floor levels to interface at an opening within a cavity wall.

solution

The Type LTT encapsulates the threshold masonry so the transmittance of damp from the exterior skin inwardly or from the inner skin upwardly is prevented regardless of the manner the flooring is interfaced. The Type LTT is available in a range of standard opening sizes. In isolating one of the areas most susceptible to damp transference, the Type LTT permits abutting flooring, abutting insulation and dpc's / 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 Type IT is compatible with our range of Coviclesers and together they provide a systematic and consistent approach to construction of openings within covity walls. "Esternally the dpc wraps vertically around the massony at either side of the opening to prevent any pooling? wind-driven water permenting the protected surfaces." Following installation of the frame and dependent on the sill profile, these end wraps may be trimmed, conditional on their functionality not being compromised.

data

- Level threshold compatible
- Permits floor finishes to interface
- Sizes for all opening dimensions
- Ready-shaped solid polypropylene DPC



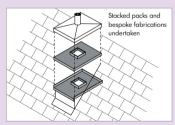
Coneslate

use

To weatherproof where a soil pipe penetrates a pitched roof of tiles, slates or contoured sheet.

solution

Use of the Coneslate eliminates the necessity for the contractor/plumber to purchase a conventional slate of a specific pitch. The tapered shape is also beneficial in terms of easy telescopic storage and reduction in the accompanying risk of damage. This 30 degree Coneslate has an angle tolerance of plus or minus 10 degrees, thus accommodating pitches from 20 degrees to 40 degrees.



- Lead to BSEN 12588
- Suits roof pitches of 20 degrees up to 40 degrees
- Easy storage
- Eliminates the problem of waiting for a specifically angled slate







Type M Cavitray

LISE

Preformed cavitray for use over standard meter boxes (gas or electricity).

solution

The Type M cavitray provides horizontal protection against damp penetration where a cavity wall accommodates an electricity or aas meter consumer supply control unit (meter box).

The length of each tray suits standard meter boxes and provides sufficient overhang to each side. The base of the Type M suits standard thickness exterior skins of brickwork, blockwork etc., whilst the cavity upstand of the Type M automatically adjusts to suit most cavity widths from 50mm up to 140mm

data

- Standard tray length 600mm
- Standard profile as illustration
- · Cavity upstand overall height 150mm
- Cavity upstand adjusts to accommodate cavity sizes from 50mm up to 140mm
- DPC polypropylene, colour black
- Suitable for traditional build and timber frame construction



Masonry Support Cavitray Systems

use

Preformed DPC trays for use with masonry support systems to arrest and discharge penetrating water at optimum level.

solution

When constructing off a masonry support system, the DPC is commonly incorporated at a higher level than is ideal. This compromise is because of the difficulties in bringing together and achieving a consistently profiled relationship between metal support and the roll-out material. This compromise can permit penetrating water can be retained within the masonry sitting on the angle support. In the long term the masonry can suffer discolouration through water retention. In contrast preformed masonry support cavitrays are exactly profiled to sit within the support. They provide protection and weep evacuation at the optimum level. A consistent standard and auality of detail is benefited

- Profiles available to suit most masonry support systems
- Tensioned self-supporting tray format
- Cavity width biased designs
- Black polypropylene
- Project appraisal and scheduling undertaken







Type P Cavitray

use

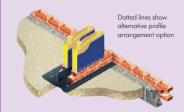
To weatherproof parapet walls.

solution

The Type P cavitray is a rigid horizontal DPC. manufactured in long lengths. Preformed angles enable the complete installation of a parapet damp course to be carefully planned and controlled. It is self-supporting and requires building-in to one skin only. Accordingly, the structural stability of the parapet is enhanced when compared with parapet standard details and related problems. Water collected within the cavity can discharge against the inside face of the building's exterior skin. Penetrating water therefore discharges regardless of the direction of the prevailing wind or rain, whilst also permitting the cavity to breathe. Type P cavitrays can be supplied in almost any special size with dimensions to suit client's particular needs. Adjoining lengths glove-lap to make up runs. Always state actual cavity width.

data

- · 2400mm overall standard length
- 25mm external lip
- 150mm cavity down-turn
- Preformed internal and external angles
- 450mm x 450mm
- 2.0mm tensioned solid polypropylene, black
- DPC Securtex textured finish



Type PWRB Party Wall Rising Barrier

use

Prevents water transference from one dwelling to another via the party wall. Acts as a gas-resistant membrane link barrier from one membrane to adioining membrane. Reduces construction cost.

solution

NHBC 6.6.2(d) deals with providing a means to prevent water originating from one dwelling contaminating the adjoining dwelling via the party wall. The Type PWRB fulfils the requirements in a more cost-effective and functional manner. The barrier projects upwardly in the cavity to provide protection, rather than vice-versa (that necessitates work to the slab to provide a channel to falls). The profile of the Type PWRB is capable of holding back a greater extent of water compared with the channel approach. The profile also makes interfacing considerably easier with any perimeter cavity barriers that might be installed as part of contaminated land protective measures. Type PWRB Party Wall Rising Barriers are available in numerous profiles.

- Black petheleyne
- Std lengths 2400mm x 500mm x 150mm upstand
- Protects against adjacent property water contamination
- Acts as membrane link and dpc to base of wall
- Eliminates need to shutter and cast channel







Type Q Arresting Barrier

use

Pre-shaped DPC barriers to arrest water-wash within cavity wall to specific areas or features.

solution

The function of Type Q barriers is to invisibly arrest and reduce water-wash from an area of cavity wall above a given feature or construction detail. Masonry below the barrier level however still remains damp and receptive to rain penetration. The purpose of the barriers is to influence control of water volumes within a wall and minimise damp transmission risk. Arrestina barriers differ from conventional cavitravs and DPCs. The base dimension does not usually travel the full width of the external skin. Arrestina barriers can be supplied in almost any special size with dimensions to suit client's particular needs. Adjoining lengths glove-lap and Siliconbond to make up runs. Please state cavity width being used.

data

- 1.5mm tensioned solid polypropylene,
 DPC securtex textured finish
- 2400mm standard overall length
- Base dimension approximately 75mm
- Upstand dimension 150mm minimum
- Preformed internal and external angles 450mm x 450mm



Type R Cavitray

use

Integral shuttering tray/water check former. Also suitable for closing cavities.

solution

The Type R is a two-function cavitray. When intermediate upper floors of concrete are cast institu, it is utilised to close the cavity and prevent concrete entering. In addition, the Type R introduces a water check to the underside of the concrete, to prevent water tracking across the cavity. The upturned profile (rather than the down-turned profile) is not susceptible to accommodating course aggregate during the pouring of concrete, which might encourage capillary action if air voids are present and permit perimeter pooling.

- Type R size 1 = 2400mm x 135mm overall width with V section of 25mm x 25mm
- Type R size 2 = 2400mm x 160mm overall width with V section of 50mm x 50mm
- Angles 450mm x 450mm
- Standard 1.5mm solid polypropylene, black
- DPC Securtex top textured finish
- Also available in austenitic stainless steel
- Dual function product acting as water-check and also integral shuttering tray
- Upturned profile eliminates dangers of capillary action and pooling water







Rainscreen Baffles and Flashings

use

Baffles and flashings to arrest, channel and discharge rain penetration in rain screen construction.

solution

Open rain screens and pressure-equalised rain screens place dependence on baffles and flashings arresting and deflecting the kinetic force of driving rain. Whilst the screen minimises the building wetting forces, a means to channel and control water that penetrates and gravitates behind the screen face is an accompanying necessity.

Baffles and flashings are specifically profiled to suit individual applications. It is usual for profiles to be angled to promote tolerance of imbalanced air movement within the vertical compartments. We will be delighted to advise you on your project.

data

- Bespoke product details established following project appraisal
- Black polypropylene and stainless steel material options
- Accompanying stopends and drop discharge units



Type S Soaker Units

use

Pre-shaped soaker for use only with plain tiles where the roof abuts a wall.

solution

Type S Soakers are preformed moulded units manufactured from lightweight high density polypropylene. Soakers are termed 'dry units' as they are incorporated when the tiles are laid and do not require any accompanying wet trade working.

Type S Soakers are designed to be used with plain tiles only and are handed. When positioned in accordance with best practice the vertical 75mm upstand rises tightly against the masonry providing a uniform medium over which flashings may be dressed.

The base of each soaker extends 100mm under the tile and permits easy interleaving with the turn-down portion at the top of each closer aiding positive placement. The upper run-off surface of each soaker has a smooth finish with a textured underside that rests on the tile surface.

- Preformed ready to use
- No incompatibility inert material
- Full rise upstand
- Economical lead alternative







Type TFC Timber Frame Cavitray

use

Provides dpc in both skins. Functions as methane and radon (contaminated land) cavity barrier and cavitray. Interfaces with oversite membrane. Vertically laps with timber frame membrane.

solution

The Type TFC is manufactured in solid pethyleyne dpc, and is ready-shaped for immediate building in. Supplied in long lengths, the TFC section is bedded on mortar and in one placement provides the dpc presence required in both the cavity wall skins. The body of the TFC spans the cavity and guards against contaminated land gases such as radon or methane rising and entering the building envelope. The Type TFC also extends both inwardly and vertically. The inwardly projecting profile interfaces with the oversite membrane to maintain gas and damp protection integrity. The upwardly rising section laps and seals with the timber frame membrane.

data

- Acts as dpc, gas barrier and cavitray
- Interfaces with membranes
- Arrests and permits weep discharge of penetrating water
- · Preformed angles, steps and opening profiles
- · Joined using gas-seal link-bond strips



Type TST

use

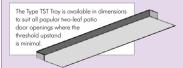
To protect against damp and water penetration around sills and thresholds.

solution

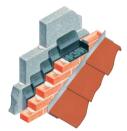
The Threshold and Sill Tray is a three sided moulded unit that is positioned on the oversite prior to the laying of the screed.

The purpose is to provide additional measures to ensure abutting DPC integrity where floor, membrane, sill, internal skin, external skin and vertical DPC meet. Manufactured in widths to match the opening structural dimensions, the Type TST is popular with developers as a means of creating and maintaining a consistent and functional build detail.

- Ready-shaped solution for openings
- Black petheleyne
- Size: opening width variable x 485 x 115mm upstands
- Ensures DPC integrity and functionality







Unleaded Gable Abutment Tray Advantage Range

use

DPC cavitray for stepped/staggered gable abutments.

solution

Preformed cavitray without an integral lead flashing attached. May be used as an alternative method of creating the damp course element only. where a sloping roof abuts a cavity masonry wall. This product is named Advantage, as it offers benefits not available from any other unleaded cavity tray manufacturer. The Advantage unleaded aable abutment cavitray is intended for use by installers who wish to introduce their own flashing medium at a later date. Each unit is moulded in solid DPC and has a variable cavity upstand facility. When incorporated within the external skin, the mortar is raked out underneath the base of the tray whilst it is still green. At a later date lead or other suitable flashing is cut and introduced within the raked out joint. Optional rake-out polystyrene front strip available.

data

- · Solid DPC polypropylene, AB
- Specify pitch, handing and coursing size
- Suits cavity widths, 50mm to 140mm



Type U Cavitray

use

For use under brick or tile sills, providing a DPC and integral guide for sill formation.

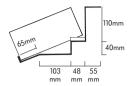
solution

The formation of a brick or tile sill is easily accomplished with the use of a Type U undersill tray. Trays are supplied in a variety of profiles to suit the shape of sill required. Once bedded in position, the bricklayer has automatically established an undersill DPC. The sill bricks or tiles can then be laid using the profiled tray as integral guide shuttering. The entire front section of the Type U which projects forward of the masonry line. is fully detachable. An integral separating link, permits this front portion of the tray to be removed. once the mortar has cured. Type U undersill trays are now available with an optional 25mm polystyrene insulation barrier, bonded to the vertical upstand, (subject to sill design or space permitting.) Specify clearly if this option is required.

- 2mm black polypropylene
- Securtex top surface finish
- Standard profile illustrated
- All profiles and lengths available
- Provides DPC and integral shuttering
- Puncture-proof and robust
- Peel-away front tray section



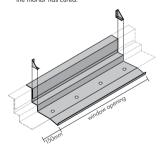




Variations to the profile and variations to the material thickness can be accommodated to suit the customer's requirements.



The entire front section of the Type U which projects forward of the masonry line is fully detachable. An integral separating link permits this front portion of the tray to be removed, once the mortar has cured.



The sill arrangement ideally ends at the edge of the opening and does not extend into the reveal masonry. Although there are exceptions to this rule, edge termination does ease conflicting movement provision, which is especially prevalent in timber frame construction.





Timber-frame construction with brick sill



Traditional construction, tile sill



Expansion gap should always be left between window sill and sub-sill. Siliconbond may be used at this point to provide a resilient yet flexible union.







Type W Cavity Perp Weep/Ventilator

use

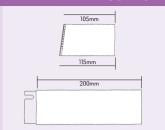
Dual-purpose perp weepvent.

solution

DPCs, lintel and cavity tray installations require weeps to discharge collected water from the building fabric. Ventilating of wall cavities, and enveloped construction is also necessary to avoid interstitial condensation. Type W Caviweeps/Cavivents ensure water is removed from the building whilst also encouraging the wall to breathe. Being dual-functioned, the Type W takes advantage of the pressure differentials which exist in and out of the cavity. This aids evacuation of cavity humid air. The NHBC standards (4.4c.111) advise that the cavity below DPC level and at eaves and verge level should be ventilated. This requirement is fulfilled using Type W weepvents.

data

- Standard size 105/115mm x 65mm x 10mm plus lockfit wedges
- Standard Type W provides 320mm² free air space
- BS polypropylene
- Available in grey, black, beige, brown, terracotta, white and clear



Type W Extension Duct

use

To extend Type W to accommodate masonry of greater thickness.

data

- Material polypropylene.
- Colour grey.
- Size: 200/225 x 65 x 10mm.
- 320mm² air rating.



Type W Optional Cover for use during rendering

use

Protective front cover to protect grille of Type W during single or two-coat rendering.

- Polypropylene
- Florescent coloured
- Boxed in 50s
- Ensures the dual-function Type W caviweep/ cavivent promotes optimum performance







Pyramid Weep (Masonry bleed straw)

use

To provide discharge route for water from lintels, damp courses, cavity trays etc.

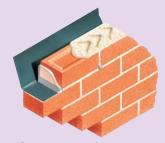
solution

Pyramid Weeps (or masonry bleed straws as they are sometimes termed) permit discreet evacuation of water arrested within a cavity wall. The pyramid profile is rarely noticeable when incorporated within a standard mortar bed. If undersized or reduced gauging is encountered, the triangular shape permits the weep to still be positioned within the bedding mortar but with its peak rising into a vertical perp joint.

The Pyramid Weep is available in two sizes to suit masony skins up to a thickness of 225mm. Pyramid Weeps may be appropriately positioned at regular intervals in normal situations and applications to provide discreet and consistent discharge routes.

data

- Sizes: 100mm x 8mm x 8mm x 8mm
- Sizes: 225mm x 8mm x 8mm x 8mm
- · (May be cut to provide alternative lengths)
- Polypropylene
- Mortar grey colour
- Flush Front
- Direct bleed path
- Packaged in 100 and 500



Beak Weep

use

To evacuate water from lintels, damp courses, cavity trays etc.

solution

The beak weep provides an alternative way of releasing penetrating water from lintels and cavity trays installed within a cavity wall. The beak weep matches the height of a standard perp joint, but has a reduced front section (beak) shaped to be almost indistinauishable from the mortar joint.

The beak is finished in glass-clear polypropylene, and successfully merges with all colours of mortar and masonry making the beak weep unobtrusive and difficult to detect. The discharge outlet is on the beak underside, permitting water and particle debris to wash through and drop from the outlet. This shape also protects against wind-driven rain.

- Standard size 65mm x 105mm
- BS polypropylene/styrene
- Boxed in 50s
- · Direct flow path (not restricted)
- Drop outlet does not encourage build-up of mortar debris
- · Beak protects against wind pressure
- · May be extended with use of Extension Duct









Euroweep-Vent (Alternative to Type W)

use

The purpose and function of the perp weep/ ventilator is described on the previous pages (Type W). An alternative product is now available offering smaller overall dimensions but with high performance categorisation.

solution

Euroweep-vents are positioned within the perp joints between masonry. Their function is twofold. They act as a weep to discharge water from DPCs, cavity trays and lintels.

They also act as ventilators to encourage the cavity to breathe. Euroweep-vents were developed and are now extensively used on the continent. They can also satisfy UK, N.H.B.C. and Building Regulation requirements. Compact size does not compromise the performance of the Euroweep-vent which promotes excellent free airflow and discharge behaviour.

data

- Size 49mm x 87mm x 9mm
- Free airflow approximately 300mm² per unit
- BS polypropylene available in grey, black, beige, terracotta and brown
- Integral baffles
- Vertical front
- Boxed in 50s



Small Adjustable (Telescopic) Weep

use

To weep via a perp joint.

solution

The small adjustable weep is telescopic and adjusts to accommodate external skins built of different thicknesses. Similarly, the rendered wall is instantly and correctly accommodated. This telescopic feature may be employed to project the small weepvent forward of the face line when rendering, and pushed back to the face line upon completion. A further benefit of the small weepvent is the front protective cap. Following building-in it is removed revealing a clear and mortar-free outlet grille. This simple facility ensures cleanliness. So little of the hidden adjustable small weepvent is visible it harmonises with most popular masonry and mortar styles.

- 93mm x 24mm x 9.5mm, with telescopic section providing additional 70mm
- BS polypropylene or BS ABS in clear, grey, terracotta or beige
- Insect resistant grill
- Protective cap promotes cleanliness
- Telescopic feature ensures compatibility
- Suitable for use with rendered walls, also varying thicknesses etc
- Boxed in 100s







Type X Cavitray

use

Preformed DPC cavitray complete with an attached ready-shaped lead flashing to form a stepped cavity DPC and flashing at the abutment of a pitched roof with a cavity wall. The Type X is the only "high performance" classified cavitray for gable abutments, and offers the builder numerous benefits. Ideal for new-build applications.

solution

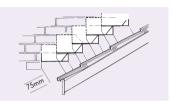
Every stepped and every staggered gable abutment must be so constructed to prevent rainwater and dampness from penetrating below the abutting roof line. This is because the external skin changes status below the roof line and becomes an internal skin. The system fulfils three basic requirements:

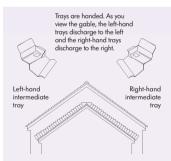
- 1 It prevents dampness from penetrating below the critical stepped roof line.
- 2 It externally weatherproofs and flashes the physical roof/masonry intersection.
- 3 It also prevents the inside skin from becoming damp.

The high performance Type X cavitray speeds up operations on site and ensures a good and known quality of build. Type X trays are handed, to suit left hand slopes and right hand slopes. Every tray is a self-contained unit, with its own ready-shaped lead flashing attached. Select long leads to dress directly over tiles, or alternatively short leads to dress over the upstand of a secret gutter or soaker.



Standard brickwork courses.





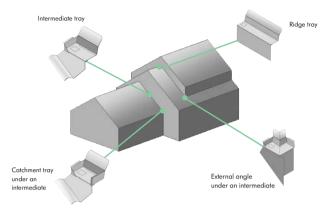
Unlike other systems, the Type X has an adjustable cavity upstand so it always suits the actual cavity width and is therefore always compatible. Just bed in position and flush point as the external skin is raised. At a later date the lead flashing may be dressed.

Synthetic flashing option – see p39





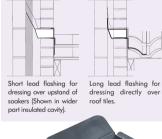




data

- Solid DPC pethelevne, AA
- Lead flashing BS EN 12588
- Specify pitch, lead length, handing and whether external skin is brickwork
- Water drip bars eliminate underbase track-back
- Correct mortar bedding depth is also established as bar dimensions harmonise with front of tray section to aid stability and mortar integrity
- Integral cavitray sealing flap links with upper tray
- Feature on the tray end upstand arrests horizontal tracking at this vulnerable point
- Adjusts for cavities from 50mm up to 140mm

Allow one tray per course up each slope, Stipulate left hand or right hand trays. Also whether long lead or short lead flashings. The bottom of each slope usually starts with a catchment tray (or angle if on a corner). The top usually requires a ridge tray.

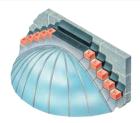




Now also available with a synthetic flashing attached instead of a lead flashing. V See separate entry on page 39. State clearly on your instruction if you require this option







Type X Remedial

use

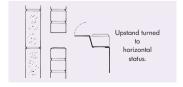
For insertion into existing cavity walls, to introduce a functional DPC and flashing where an existing has failed, has been omitted, or is required because a new pitched roof is to abut. (eg. Extension or conservatory roof).

solution

The upstand of the Type X cavitray is hinged, which permits it to be turned to horizontal status. In this position, the standard Type X cavitray takes up the height of one brick course only, which allows its introduction into a cavity wall with the minimum of disturbance to the surrounding structure.

The cavitray is bedded onto the mortar as it is pushed into position, and at the same time the cavity upstand is allowed to take up its correct angle within the cavity. The amount of masonry which must be removed is kept to an absolute minimum compared with most methods.

data See previous page.





Type X Multicourse

use

Cavitrays for gable abutments in sizes other than standard brickwork.

solution

Brickwork courses accept standard Type X cavitrays. However, different course sizes are sometimes encountered and a range of gable abutment multicourse cavitrays are available to accommodate different coursing heights. Multicourse cavitrays are based on the design of the Type X. They are proportioned to a accept a variety of walling materials and dimensions.

Examples include reconstructed, faced, natural and concrete masonry, in course heights of 100mm, 125mm, 150mm, 175mm, 200mm, 225mm. The cavitray upstands are hinged to suit covity widths from 50mm up to and including 140mm. The tray base dimensions are suitable for masonry skins of thickness up to 125mm, beyond which special fabricated trays are available to suit all depths.

- Lead flashing BS EN 12588
- Specify pitch, lead length, handing, plus details of the external skin thickness and course height
- Solid DPC polypropylene, AA







Flashing Options

use

Flashina material choices available on flashinaattached trays.

solution

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. magnesian 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° LIV and ozone resistant



Lead

Standard Thickness Weight m² 20.41 kgs/m² Colours

RS FN 12588 1.8mm - code 4

Natural



Synthetic Perform

Standard Thickness Weight m² Colours

BBA 09/4681 21mm 3.6kas/m² Light grey,

terracotta, black

BS 2870 ASTM B370



Copper

Standard Thickness

0.55mm+ Weight m² kgs/m²- varies pending gauge

selected Colours

Copper coloured prior to weathering



Aluminium Allov

Standard BS EN 485 Thickness 0.6 /0.9mm

> pending gaug selected

Colours

Aluminium silver

- Thermally stable
- Malleable / stretchable
- Choice of flashing colours
- Available attached to some tray types or in rolls
- No scrap value







Curved Cavitrays on Plan

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 Cavitrays 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.

In comparison roll material is obliged to be laid in a series of straight lengths that cannot mirror the curve resulting in shortfalls from or projections beyond the finished masonry face. 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

Type C Cavitray for Common Openings

Where walls are curved the Cavitray is supplied to match the arc created by the lintel. Where the

data

- · 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

curve is very slight and the opening width is not extensive, straight lintels can be considered. In such instances a straight cavitray 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 Cavitray.



Type P Cavitray for Curved Parapets

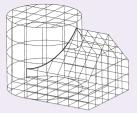
Functionality of the Type P curved parapet tray is unaffected by concave or convex masonry and is able to cope with the concentrations of water wash prevalent in concave situations where wind and gravitation accentuate localised volumes. At higher level the under-coping DPC requires support and consideration should be given to using bespoke Type J Support Closers.

See pages relating to Type P and Type J.









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.

Type X Cavitray 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. 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 Cavitray.



Type Q Cavitray for Curved Walls requiring Arrestina 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 Cavitray.



Type G Cavitray for Curved Horizontal Intersections

Modified versions of the Type G Cavitray 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 Cavitray.







Type Y Mullion Window Cavitrays

use

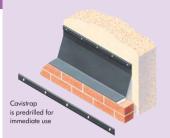
Preformed trays for use with mullion window surrounds and similar.

solution

Mullion window assemblies manufactured from synthetic or real stone generally require a total of three cavitrays to maintain damp course integrity across the window head. Type Y stone mullion assembly cavitrays are preformed and each requires building into one skin only. An upper tray arrests the flow of penetrating water preventing the flow reaching the label-mould where a second tray offers protection where the cavity width is restricted. A third tray with optional insulation isolates connection between inper and outer skins.

data

- · Preformed and packed per opening
- · Consistent build quality detail
- Will not sag, distort or creep
- Black solid polypropylene
- · Dimensioned to suit specific site details



Type Z Fixing Strap for Soft DPCs.

use

Preformed fixing aid for use with polymer, bitumen and polythene roll DPC.

solution

Cavistrap is supplied predrilled for immediate fixing. It may be employed to support and retain soft and flexible DPCs to the inner leaf, as recommended by the DPC manufacturers. The cavistrap is not flat but purposely slightly arched to promote effective securing pressure when fixed, despite irregularities of the inner skin surface. Use of the cavistrap provides an easy and cost effective way of establishing defined and consistent fixing against all types of inner skin such as block, cast concrete and timber.

- PVCU in black
- Size 2000mm x 30mm
- Pre-drilled 4mm holes @ 150mm centres
- Packed in 50s (total 100 metres)
- Cost effective method to mechanically secure flexible DPC





Closers

Thermal Acoustic & Fire-Rated Closers Vertical & Horizontal Applications

IMPORTANT

Every building must be designed and constructed in such a way that an insulation envelope is provided that reduces heat loss. 6.2 BR(S) – mandatory

How to select a Closer and comply with Part L

Compliant progression entails matching ACD's (RD/NHBC). Alternatively simply select the most appropriate closer from our range to suit your proposed construction. Ensure all adjacent elements are in accordance with Best Practice.

Compliant Thermal Performance at Junctions is achieved by installing a cavity closer overlapping the frame a minimum of 30mm having a minimum thermal resistance path through the closer of not less than 0.45m²K/W (manufacturer's certified data).

Adherence to the above qualifies the builder to claim the (default) value given in IP 1/06 Table 3 and SAP 2005 Table K1.

As qualified within BRE Report 262 – Accredited Construction Details for BRE Part L (Conservation of Fuel and Power).

Information regarding the Minimum Thermal Resistance Path (MTRP), frame positioning (setback), and values may be found in BRE Report 262 and the BRE publication Assessing the effects of Thermal Bridging and Junctions and Around Openings.

Introducing... Cavity Wall Closers

bestpractice@cavitytrays.co.uk

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 of 0.45 Wm-2K-1.

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.



Acoustic Stops and Thermal Barriers

use

Sleeved compressible stops and barriers to inhibit noise transmission and improve the thermal performance.

solution

Acoustic Stops and Thermal Barriers are available in a wide range of sleeved sizes for introduction into cavities, thresholds, lintel arrangements etc. Applications at ground level can provide a minimum R-value of 0.75m²K/W.

When used as an insertion between lintels that are independent of each other over a cavity wall opening, the arrangement can minimise cold bridging at the window head to an extent not possible with combined lintels. Lintel infill encapsulations are shaped to fully fill the angled void for the full cavity width under the Cavitray void.

At level thresholds an Acoustic and Thermal Barrier may be introduced between skins to enhance the thermal integrity twixt Type LTT trays to the inner and outer masonry skins.

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. Bespoke service also operates.



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 DPC's 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 Helpdesk at our Yeovil office. (See back for contact numbers).







Continuity Closer

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 agas.

data

- Blocks heat loss path
- Eliminates thermal spikina
- Acts as vertical DPC
- First and second fix applications
- To suit 100, 110, 120 & 130mm cavities





Type D Damp Course (Vertical)

US

Insulated pre-shaped vertical DPC for use when closing cavity walls in the original manner.

solution

In buildings constructed of cavity walls, whenever there is a window or door opening it is necessary to close the cavity. The traditional manner involved turning the internal skin through 90 degrees and incorporating a DPC to prevent actual physical connection with the damp mortar and masonry of the outside skin. A flexible vertical DPC can be easily damaged or misplaced, The Type D DPC overcomes such problems and speeds up operations on site. The Type D is insulated and automatically introduces a thermal break within the reveal. The Type D offers flexibility and self-supporting rigidity, whilst protecting the masonry return comoletely.

- Stabilised DPC polypropylene, 1.5mm
- Expanded polystyrene to BS 3837/1986.
- Standard 2400mm lengths
- Profile illustrated suits standard brickwork and blockwork of up to 110mm thickness
- Other profiles available for all sizes
- Preformed DPC available in many profiles
- Very severe rating with checked reveal using formatted version





Eliminates thermal spiking that exists if the cavity slab insulation has an irregular or inconsistent presence where it is cut into the block work return.



Type DIP

use

The Type DIP is an extended version of the Type D and permits traditional closing of the reveal plus interfacing with the cavity insulation. The resultant continuity ensures thermal integrity at each structural opening is optimised.

solution

The Type DIP (Type D in Interfacing Profile) is used where the mason is returning block work at the reveal in the traditional manner, and slab 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.

data

- Stabilised dpc pethylene
- Expanded 50mm polystyrene to BS 3837/1986
- Ready-shaped for consistent build quality
- 2400mm lengths
- Sizes to suit customers build requirement
- Severe and very severe exposure rating pending profile



Type FWC Five Width Cavicloser

use

Closes cavity walls, insulates reveal and acts as a DPC

solution

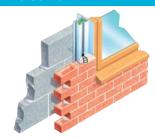
FWC stands for Five Width Cavicloser, being the number of different cavity widths accomodated by this versatile closer. The insulating medium is channelled to permit trimming to the cavity width desired.

The Type FWC promotes full-fill reveal closing of five different cavity widths: 50mm, 65mm, 75mm, 86mm, 100mm. Thus this one model is usually sufficient for a contractor tackling the popular common cavity wall configurations.

- Suits cavities of 50mm, 65mm, 75mm, 85mm, and 100mm
- Packs of 10 lengths x 2.4 metres
- · Closes, insulates, acts as DPC
- New and existing work applications
- Trimmed to suit on site
- Severe weather rating with 30mm set back







Type H Cavicloser

use

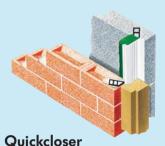
The Type H cavicloser is the first specifically designed universal cavicloser. It permits openings in cavity walls to be quickly closed in a uniform, standardised manner.

solution

The labour intensive necessity of cutting blocks and returning the masonry to form the reveal is eliminated. The Type H cavidoser is an insulated, structurally enveloped member, which literally fills the gap to form the cavity wall reveal. At the same time, the Type H insulates the reveal, minimising cold bridging. The vertical DPC requirement is created at the same time. The Type H cavidoser is universal as its unique two-part design permits permutations to accommodate different sized cavities and different frame positions. The Type H benefits the contractor in terms of speed, regulation compliance, versatility and quality of build. Being universal means most styles of openings can be closed using the standard sized cavidoser. Building costs are reduced.

data

- · H2 for cavity widths of 75mm & 100mm
- Permits varying frame positions
- Insulates and introduces a thermal zone
- Acts as a DPC
- Severe weather rating with 30mm set back
- Very severe rating with checked reveal using formatted version



use

Closes the reveal, insulates and acts as a DPC.

solution

The Quickcloser provides an alternative method of closing cavity wall reveals in new-build construction. It may also be employed to regularise open reveals or reveals uncovered during refurbishment and improvement works. The insulating medium is flexible, and contained within a sleeve that can be squeezed to shape to fill the cavity snugly, eliminating voids. At the same time the Quickcloser acts as a DPC, eliminating the need for a conventional vertical damp course. This closer utilises full-fill cavity insulation in a sleeve that is worked to optimum shape by the installer whilst raising the cavity wall.

data

- Nominal 120mm x 45mm x 2.1 or 2.4 metres
- · Packed in 10s with accompanying ties
- White PVCU and polythene Polypropylene ties
- Siliconised RDT semi-rigid water-proof insulating glass
- Closes the reveal and acts as DPC
- Insulates cavities from 40mm up to 100mm
- New and existing structure applications
- Severe weather rating with 30mm set back

This updated Quickcloser also supersedes Type O and Type RC Closers and may be used to address existing structure applications







use

Sash Frame Insulated DPC's are specifically manufactured for use with sash window frames.

solution

DPC integrity is introduced along the line of the masonry check and cavity, promoting thermal enhancement of the reveal. Sash Frame DPC's are available for both traditional counterweight box style and balance style frames. The specifier is able to select the extent of thermal enhancement to suit the frame and structural opening dimensions. In the case of a balanced sash frame replacing a counterweight sash frame, the opportunity also exists to fully insulate the resultant void. Modified versions are available for use in solid wall construction where envelopment of the frame is desired to isolate against permeating damp.

data

- BS polypropylene, colour black Inskorfoam polystyrene insulator
- Size 2400mm x dimensions to suit window/wall detail
- · Various profiles to suit site requirements.
- Straight or checked reveals
- Permits traditional closing with enhanced thermal integrity



Type WCA

use

Insulated closer for wide cavity applications.

solution

WCA stands for wide cavity applications for which this closer is specifically designed.

This product is available in width increments to suit covities from 100mm wide up to 150mm wide. The heavy-duty body overlays the inner and outer skins, permitting the installer unrestricted frame positions within compliant parameters. The insulating core is polystyrene. The Type WCA is the thermally efficient preformed solution for unusual cavity widths and applications.

- Closes cavities up to 150mm wide
- Insulates reveal
- Acts as a vertical DPC
- Permits choice of frame positions
- Available in lengths of 2.1m and 3.0m
- Severe weather rating with 30mm set back
- Very severe rating with checked reveal using formatted version







Type WCA Maxi Range

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, with a finishing face of heavy duty low conductivity Pethelevne.

Suitable for use in straight reveal. Adapted version available for checked reveal. 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 covity becomes.

data

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



Type V Cavicloser

use

Closes cavity walls. Insulates reveal and acts as a DPC.

solution

The new Type V Contract Closer provides an economical way of closing cavity wall reveals. Manufactured from PVCU, the Type V is a one part closer consisting of a ribbed face section which spans the open cavity and overlays the inner and outer skins of masonry. Secured behind this face is a closed cell insulating core, which is accommodated within the cavity. Integral slots to both sides of the capillary-break V shaped core housing, accept ties and secure the closer to the masonry skins. The new Type V Contract Closer permits frames to be fitted in any position within the depth of the reveal.

- · Material, PVCU, white
- Standard lengths: 2.1 metres, 3 metres
- Insulating core: Closed cell polystyrene
- Combined closer, DPC and insulation
- Positive securing ties
- Severe weather rating with 30mm set back
- Very severe rating with checked reveal using formatted version
- Suits cavities 50mm, 75mm & 100mm







Type V170 Eight Width Cavicloser

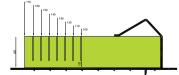
solution

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.

data

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





Cavi 120 Type V Closer (Fire rated designation)

USE

Fire-rated closer with 120 minutes integrity rating.

solution

The Type V cavicloser with a Cavi120 prefix identifies it as having a one hundred and twenty minute fire integrity rating. For general details relating to the Type V versatility, please see previous pages. This vertical fire integrity closer has been tested in cavities up to 100mm wide.

- See previous Type V entry for general use details
- Cavi120 Type V is available to suit cavities of 50mm, 55mm, 60mm, 65mm, 70mm, 75mm, 80mm, 85mm, 90mm, 95mm, 100mm
- PVCU compound
- Stainless steel ties
- Non-combustible semi-rigid rock mineral wool insulation
- Insulates and acts as DPC
- Closes cavity with fire rated product
- Use in traditional construction
- 120 minutes fire integrity rating
- Available in 2.1 and 3.0m lengths
- Severe weather rating with 30mm set back







Cavi60 Type WCA (Fire rated designation)

use

Insulated cavicloser for cavities from 100mm up to 150mm wide. Offers fire integrity rated protection. Acts as a vertical DPC Promotes insulation of reveal

solution

The Cavi 60 Type WCA is prefixed with Cavi 60 as it provided 60 minutes fire integrity when tested to the appropriate British Standard, WCA is the abbreviation for Wide Cavity Applications. This closer is available to order to suit cavity widths from 100mm up to 150mm maximum. The non-combustible semi-rigid rock mineral wool insulator is held within a robust heavy-duty extrusion. The designer has an unrestricted choice of frame positions within the constraints of thermally efficient options. Stainless steel ties accompany the Cavi 60 Type WCA.

data

- Available to suit cavity widths of 100mm up to 150mm
- · Available in lengths of 2.1m and 3.0m
- Rock wool insulating core
- PVCU surround
- 60 minutes fire integrity rating Stainless steel securing ties
- Severe weather rating with 30mm set back
- Very severe rating with checked reveal using formatted version



Cavi60 Type V170 Contract Cavicheck Closer

Fire-rated closer for wider cavities with 60 minutes integrity rating. For use in straight or checked reveals.

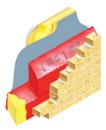
solution

This cavicloser may be used in cavity walls with a cavity of up to 170mm. The extruded profile is a larger and more robust version of our original Type V. The flat reveal closing section has integral fins that permit a variety of frame positions within compliant parameters whilst also promoting best practice. Vertical and horizontal use.

- Size approx 200mm x 60mm x 2.1m or 3m
- Available to suit cavities from 100mm to 170mm
- Cavi 60 rating vertically & horizontally
- Acts as vertical dpc
- Insulates reveal closing
- Integral fins
- · Permits variable frame positions
- · Straight or checked reveals front hinge-turns 90 dearees
- · Severe weather rating with 30mm set back







Cavi60 SAF Horizontal Barrier / Stop

solution

This compressible acoustic and fire cavity barrier has sloping upper and lower surfaces that ensure penetrating water is deflected forward. Considered the most cost-effective way of establishing all three qualities within the cavity wall. Sloping shape means integrity can be maintained whenever lengths are lapped.

Optional hard cap DPC cavitray ensures maximum protection. The compliant oriented shape is simply compressed and positioned into cured masonry. Placement can be without tray if appropriate (such as shown in some Robust Details) Alternatively an optional cavitray caps over the upper sloping surface.

Compatible with Type SAF Vertical Barrier, permitting damp protection, fire-stopping and acoustic integrity to be maintained at horizontal and vertical intersections.

data

- Acoustic barrier
- Fire barrier
- · Protective shape prevents water tracking
- Easy linking and lapping
- 1 hour rating



Cavi240 PWIB/SAF Vertical Cavity Barrier

solution

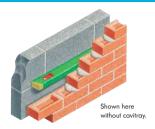
This vertical dual-function barrier is for use where separating walls (party walls) join exterior cavity walls. The barrier introduces a four hour rated fire integrity level and acoustic cushioning as demanded by legislation. The ends of the Cavi 240 Type SAF Vertical Barrier are angled so that each vertical length wedges into and against the vertical length under it, promoting continuity. Water cannot permeate inwardly because all joins are made sloping forward towards the outer leaf (as with the horizontal SAF barrier).

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 semirigid polypropylene DPC bonded to one side. (This product supersedes the Cavi 240 Type PWIB).

- Acoustic Barrier
- Fire Barrier 4 hours rating
- Sizes to suit all cavity & wall dimensions
- Easy linking and continuity
- Standard vertical lengths 1200mm
- Corners 2400mm long







Cavi240 Type CFIS Cavicheck Fire Integrity Stop

use

Compressible fire stops for use horizontally in cavity walls.

solution

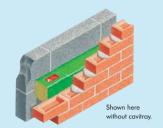
Cavicheck Fire Integrity Stops are manufactured from rock mineral wool that has a non-combustible classification.

The wool is enveloped within a polythene sleeve. Compressing and placing within the cavity secures the Type CFIS in position.

A minimum compression of 10mm is necessary to friction fit the stop and importantly provides a functional relationship between surfaces. The use of an Arresting Barrier or Type CD Cavity Dropcloak is appropriate to introduce DPC measures in accordance with best practice.

data

- Standard size 100mm x 50mm
- For use in cavities up to 100mm
- Rock mineral wool, non-combustible classification (BS 476) within polythene
- 240 minutes fire integrity rating
- Easy friction fit and support from wall ties



Cavi60 MWR 200 Cavicheck Fire Integrity Stop

1156

Compressible fire stop for use in cavity walls where the cavity width is up to 200mm wide.

solution

The Cavi 60 prefix signifies a sixty-minute fire integrity rating for this maximum width range (MWR) cavicloser that may be used in cavities of up to 200mm. For horizontal and vertical use.

Comprising of non-combustible classification rock mineral insulation contained within a polythene sleeve, this cavicloser also reduces acoustic interference when employed within a cavity wall. Horizontal protection cavitray compatible.

- Standard size approx 200mm x 100mm x 2.4m
- For use in cavities from 100mm up to 200mm
- Rock mineral insulation, non-combustible
- Cavi 60 rating, vertically & horizontally
- · Easy compression friction fit





Ventilation

Ventilation of the Building Envelope

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.

Ventilation products are divided into five sections, with each section dealing with a specific area of construction.

- Ventilation at Floor Level
 Ventilation Through Walls
- Ventilation at Eaves & Fascia Level Ventilation via the Soffit
- Ventilation Where Roofs Abut Walls + Through the Roof

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 last winter, 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. NHBC 2011 Standards 7.2- D11 and S11 now incorporate this requirement. It should be noted that the NHBC has announced that when it introduces a standard for this particular purpose, it will take precedence over third party assessments of underlays - ea. BBA certificates.

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.

Ventilation at Floor Level

- Cavibrick
- 2 Cavibrick Sleeves
- 3 Cavibrick Sleeves
- 4 Sleeve & Duct Cavitrays
- 5 Type TAV
- 6 Type TAV Sleeves
- 7 Type TAV to Round Connector



Cavibrick High Performance Air-brick

US

The cavibrick is a high performance ventilator which may be used instead of a conventional airbrick.

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.

- High air throughput
- Insect screening
- Self-draining base
- Clip together to make up composite sizes
- Range of colours







Cavibrick Sleeves

LISE

Sleeve attachments to provide ventilation to specific areas.

solution

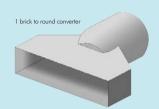
A range of straight sleeves to accommodate one, two or three cavibricks, (High throughput cavibricks are designed to be used singularly or can be locked together to form larger brick-sized ventilatina units.)

When connected to a cavibrick the combined lenath 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. (See Sleeve and Duct Cavitrays.)

data

- Range of sizes
- Compatible with Cavibrick
- Fold flat storage
- Unobstructed airflow



Cavibrick to Round Converter Sleeve

Permits cavibrick to be connected to standard pipe.

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.)

- Compatible with Cavibrick
- Fits standard pipe
- Unobstructed airflow







Sleeve & Duct Cavitrays

use

Preformed trays to protect sleeves and ducts where they pass through a cavity wall.

solution

Where a straight or cranked sleeve/duct passes through a cavity, measures should be taken to ensure penetrating water cannot use the upper surface of the sleeve/duct as a means to reach the inside skin. Use of a preformed cavitray prevents water bridging and promotes compliance of the Building Regulations.

data

- Suits range of cavity sizes
- Compatible with all sleeves
- Prevents tracking



Type TAV Telescopic Adjustable Ventilator

US

Provides cranked air-duct route from cavibrick to

solution

The Telescopic Adjustable Ventilator extends or contracts like a telescope. It extends to a maximum of five brick courses.

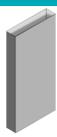
It is designed to accommodate the high performance cavibrick, or may alternatively be used with a conventional air-brick. Airflow can be directed to a specific area of the structure, at a different level. Where a greater variation is required beyond five courses, an intermediate sleeve is available to extend the range.

The Type TAV offers an unobstructed airflow route to promote best practice. An accompanying DPC cavitray is also available to order, to provide damp proofing integrity as defined within the Building Regulations.

- Unobstructed airflow route
- Extends and retracts to suit course level
- Accommodates high performance cavibrick
- Accompanying cavitray
- Horizontal and vertical extension sleeves







TAV Sleeves

LISE

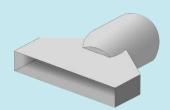
To extend the Type TAV cranked sleeve to create a greater distance between inlet and grea to be serviced

solution

Where the distance between air inlet and outlet is areater 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

data

- Extends ventilation options
- Clear-flow air way
- · Fits within 50mm cavity
- Standard sizes 300mm and 450mm



Type TAV to Round Converter Sleeve

use

To permit attachment of circular pipe to bottom outlet of Type TAV telescopic ventilator.

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.

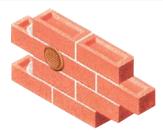
The TAV to Round Connector is designed for such purposes. This attachment can be successfully used to provide piped exit routes for radon gas (below floor level) to the perimeter of a building where discharge is via cranked ventilators because of the exterior ground levels.

- Compatible with TAV
- Fits standard pipe
- Unobstructed airflow









Type CLV Circular Louvered Ventilator

use

Louvered ventilator that can be used to ventilate an existing cavity wall.

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 and is offered in a range of masonry harmonising colours: terracotta, black, white beige and brown. Projecting location arips hold the Type CLV in place when inserted into the drilled hole.

- · Louvers deflect driving rain and provide insect screening
- Integral location grips
- Higher air throughput





Ventilation Through Walls

- Cavibrick
- Cavibrick Sleeves
- 3 Type W
- 4 Euroweep-Vent
- 5 Ventilation Packs



Cavibrick High Performance Air-brick

use

The cavibrick is a high performance ventilator which may be used instead of a conventional airbrick

solution

Manufactured to brick dimensions, the cavibrick promotes a high air throughput, via a front louvred arille. The louvres are proportioned to maximise performance whilst contouring the gir 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.

- High air throughput
- Insect screening
- Self-draining base
- Clip together to make up composite sizes
- Range of colours





62 VENTILATION THROUGH WALLS



Cavibrick Sleeves

use

Sleeve attachments to provide ventilation to specific areas.

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. (See Sleeve and Duct Cavitrays.)

data

- Range of sizes
- Compatible with Cavibrick
- Fold flat storage
- Unobstructed airflow



Type W Cavity Perp Weep/Ventilator

use

Dual-function product acts as a cavity ventilator permitting the cavity to breathe. Also acts as a weep to evacuate water from lintels, DPCs and cavity travs.

solution

The Type W may be used to provide the balanced air conditions demanded within the cavity in timber-frame construction. The equivalent airflow of an open perp is required every 1.5 metres around the base of the cavity walls and around the top of the same walls. Where such wall cavities are closed or compartmented with the presence of horizontal fire stops or similar, ventilation apertures are required below and above such stops.

Type W cavivents are designed for such purposes. Type W cavivents are available in a range of colours to blend with the adjacent mortar or masonry.

- Dual-function combined weep and ventilator
- Insect resistant arille
- Integral water-check baffles
- Superior air throughput and water discharge capability
- Optional render protection cover, keeps grille clean during installation









Euroweep-Vent (Alternative to Type W)

use

The purpose and function of the perp weep/ ventilator is described on the previous pages (Type W),

An alternative product is now available offering smaller overall dimensions but with high performance categorisation.

solution

Euroweep-vents are positioned within the perp ioints between masonry. Their function is twofold. They act as a weep to discharge water from DPCs, cavity trays and lintels.

They also act as ventilators to encourage the cavity to breathe. Euroweep-vents were developed and are now extensively used on the continent. They can also satisfy UK, N.H.B.C. and Building Regulation requirements. Compact size does not compromise the performance of the Euroweep-vent which promotes excellent free airflow and discharge behaviour.

data

- Dual-function weep and ventilator
- Integral baffle
- Vertical front
- Reduced size without bottleneck exit route



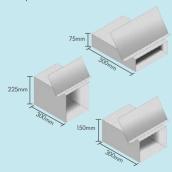
LISE

Provide ventilation to habitable rooms. Also air ventilation for areas in which boilers are enclosed.

solution

EA total of three packs, each of which consists of a cavibrick(s), a sleeve, an interior arille and a protective DPC cavitray, Ideal for new construction and refurhishment work

- Three airflow levels
- Complete ventilation packages
- Accompanying protective cavitray
- Easy stock control and selection







Ventilation at Eaves & Fascia Level

- 1 CSV
- 2 Type CRSV
- 3 Type CV
- 4 Type EROV 400
- 5 Type OEVWF
- 6 Type OFV-10
- 7 Type OFV-25
- 8 Type PV
- Type T
- 10 Type T Long Channel
- Three-in-one
- 12 Type Rev
- 13 Type ECF



Type CSV Circular Soffit Ventilator

use

Circular Soffit Ventilators with louvres, for new and existing work. Ventilators promote the entry of air into the roof space.

solution

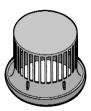
The upgraded CSV Circular Soffit Ventilator may be introduced into new soffits or existing soffits. It permits easy and quick upgrading of existing structures.

The unique injection moulded ventilator has a deflecting louvred face, promoting positive air entry and insect screening. Unlike standard ventilators, the unique CSV may be rotated so that the louvres slope downwards towards the masonry face. In so doing, no visible apertures/grilles are apparent to the eye and the result is of a continuous unpenetrated soffit, when a CSV of a matching colour is fitted.

- Superior airflow 2,100m²
- New and existing work applications
- Rotate for visual or non-visual appearance
- Insect screening
- Easy regulation compliance
- Available in White, Black, Brown, Beige & Terracotta







Type CRSV Circular Recessed Soffit Ventilator

use

To provide airflow in and out of roof space via the soffit board. Suitable for introduction into existing soffit boards to fulfil airflow requirements. Also suitable for new build applications.

solution

The CSRV 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.

data

- · High airflow
- Reduces number of soffit apertures
- Insect screening
- New and existing work applications



Type CV Corbel Ventilator

use

To provide air ventilation at eaves level, where a running masonry corbel is constructed.

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.

- 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
- Available in Black & White









Type EROV400 Eaves Roll-out Ventilator

use

Permits entry of air via eaves.

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.



a regular ventilation pattern in the appropriate position, to provide up to 6 metres run.

The result is an evenly spaced air route along the eaves, providing ventilation in accordance with the Buildina Regulation requirements.

data

- New and existing work applications
- Maximum free airflow 30,000mm² per metre
- Suitable for all popular truss centres
- Easy regulation compliance



Type OEVWF Open Eaves Ventilator with Flyscreen

US

Permits entry of air into the roof space via eaves.

solution

Preformed ventilator with flyscreen. For use between open eaves, without soffits. Provides ventilation route into the roof space. The OEVWF is designed for use with open eaves details. (Cottage-style open-timber detail, with stand-off facia but no infilling soffit board.)

The open eaves ventilator is suitable for use in new-build or re-roofing projects. When located in position, the flyscreen permits air entry whilst promoting insect-resistant status.

- For open-eaves and non-fascia applications
- Integral fly screening
- All roof pitches accommodated
- Easy regulation compliance
- 10.000mm² ratina









Type OFV-10 Over Facia Ventilator

use

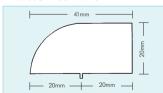
Entry/exit route for air into the roof space via the fascia top.

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.

data

- Hidden ventilation at top of fascia
- All roof pitches accommodated
- Integral insect screening
- Reduces fascia size and cost
- 12,500mm² per metre rating
- Available in Black & White



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 Facia Ventilator

use

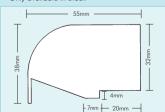
Alternative entry route for airflow servicing the roof space.

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.

data

- Hidden ventilation at top of fascia
- All roof pitches accommodated
- Integral insect screening
- Reduces fascia size and cost
- Provides statutory airflow
- Only available in Black



Over fascia ventilator OFV25, for roofs requiring the equivalent of a 25mm continuous gap. Suitable for roof pitches below 15 degrees.







Type PV Panel Ventilator

use

Permits air entry into the roof space via the eaves.

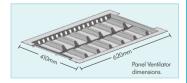
solution

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.

data

- Suitable for roof pitches of 15 degrees upwards
- · Compatible with fascia and soffit ventilators
- Easy-fit
- Excellent free airflow





Type T Eaves Ventilator

LISE

Preformed eaves ventilator permits airflow requirements into roof space.

solution

The Type T ventilator is categorised as universal, as it may be used upon a variety of roof pitches. and a variety of truss centres. The Type T does not fit between truss rafters. Instead it clamps the individual truss rafter and creates a free air void on each side, which more than satisfies the statutory airflow requirements.

- Suits all truss centres
- Suitable for all roof pitches
- Rapid fixina
- Compatible with our fascia and soffit ventilator
- 15.000mm² maximum @ 600mm centres







Type T Longchannel

use

Preformed eaves ventilator permits airflow requirements into roof space in which a room has been incorporated.

solution

The long channel version of the Type T can be used to advantage where airflow is required to service a vented attic with an insulated knee-wall. The house-wrap or rigid sheathing material on the attic side of the knee-wall insulation protects the insulation from wind-washing and the long channel has sufficient reach to ensure airflow is unbindered.

data

- · Suits all truss centres
- Suitable for all roof pitches
- Rapid fixing
- · Compatible with our fascia and soffit ventilator
- 15,000mm² maximum @ 600mm centres





Three-in-one Roof Ventilation Kit

110

Pack providing over fascia ventilation, eaves ventilation and felt support.

solution

The three-in-one roof ventilation kit provides an easy and economical way of satisfying regulation requirements regarding roof ventilation. Each kit contains sufficient products to cover a six metre run. The contents of each kit are as follows: 1 no. 6 metre roll of eaves roll out ventilator (EROV). 4 no. Contract hardedge lengths.

A six metre run of standard over fascia ventilator (OFV). Three-in-one roof ventilation kits may be used with tile and slate roofs. All pack products are also available separately.

- Packaged solution for regulation compliance
- Suitable for roof pitches of 15 degrees upwards
- · Easy ordering and stock control
- Integral insect screening
- 12,500mm² per running metre







Type REV Refurbishment Eaves Ventilator

use

Preformed eaves ventilator for introduction between rafters in existing roof spaces.

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.

data

- Black checking of correct placement is easy
- Large protected air pocket
- High airflow 10.000mm² per metre run
- · Compliance of ventilation regulations



Type ECF Eaves Comb Filler

USE

To provide ventilating infill whilst preventing entry of birds under contoured roof finishes.

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 purposemade 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.

- New and existing work applications
- · Flexible teeth suit most tile styles
- Integral fixing holes
- Easy regulation compliance





Ventilation via the soffit

- **■** RASV
- 2 Type SSV
- 3 Type SSV-RU
- 4 Type SSV-15
- 5 Type SV-GP
- 6 Type USV



Type RASV Reversible Angled Soffit Ventilator

use

Permits entry of air via soffit.

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.

- · Reversible profile for sloping soffits
- Integral insect screening
- Self coloured corrosion proof
- Easy regulation compliance
- Available in White & Brown







Type SSV Strip Soffit Ventilator

use

Permits entry of air via soffit.

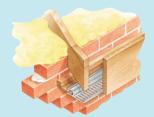
solution

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.

data

- Regulation airflow compliance
- Integral fly screening
- Accepts different soffit thicknesses
- Self coloured corrosion proof
- · Available in White, Black & Brown



Type SSV-RU Strip Soffit Ventilator with Reduced Upstand

1156

Permits entry of air via soffit.

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.

- Regulation airflow compliance
- Integral fly screening
- Accepts different soffit thicknesses
- Self coloured corrosion proof
- Only available in White







Type SSV-15 (for pitches below 15°)

use

Permits entry of air via soffit.

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.

data

- Regulation airflow compliance for pitches below 15 degrees
- Integral fly screening
- Accommodates different soffit thicknesses
- Self coloured corrosion proof
- · Available in White, Black & Brown



Type SV-FL Flat Strip Soffit Ventilator

USE

Permits entry of air via soffit.

solution

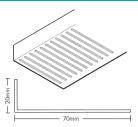
The Type SV-FL is a strip soffit ventilator designed for use with flat and sloping soffit and has an airflow rating of 25,000mm² per metre run. Thus it may be used where the roof pitch is below 15 degrees.

The ventilation slots provide screening in accordance with regulations.

- Flat and sloping roof applications
- 25,000mm² airflow rating
- Self coloured corrosion proof
- Insect screening
- Available in White & Brown







Type SV-GP Soffit Ventilator - general purpose

1156

Permits entry of air via soffit.

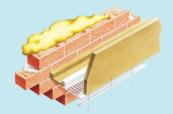
solution

The Type SV-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 SV-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.

data

- · For sloping and flat roof ventilation
- 25,000mm² airflow rating
- · Self coloured corrosion proof
- Insect screening
- Available in White & Brown



Type USV Universal Soffit Ventilator

use

Preformed strip ventilator for use at soffit level on new and existing structures.

solution

The Type USV incorporates a direct fixing method from underneath, which is hidden by an attachable feature moulding. This permits the ventilation strip to be secured either to a batten attached to the lower inner face of the existing fascia, or alternatively the strip may be secured directly to the fascia bottom edge.

When the moulded attachment is clipped in position, all screw fixings are hidden from view.

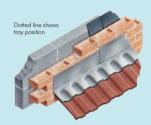
- Easy upgrade of existing structures
- Insect screening
- Hidden fixing with cover moulding
- Self coloured corrosion proof
- 12,500mm² per running metre
- Available in White & Caramel





Ventilation Where Roofs Abut Walls + Through the Roof

- 1 Type VF
- 2 Type RAV-FL
- 3 Type ERV
- 4 Contract Slate Ventilator
- 5 Flush Slate Ventilator
- 6 Ridge & Hip Dry-Fix Ventilation



Type VF Ventilating Flashing

USE

To provide flashing and ventilation at roof and wall intersections

solution

Where a monopitch roof abuts a masonry wall there is a requirement to provide ventilation of the equivalent of a 5mm continuous gap. The Type VF Ventilating Flashing is manufactured from British Standard lead to which is bonded a breathing base layer that permits air to enter and exit.

When correctly incorporated at the roof / wall intersection, and flashing can provide the airflow requirement.

Always make provision for air travelling via the flashing to reach the intended parts of the roof.

- Use in place of ordinary lead
- Easy to dress
- Ventilates and flashes in one operations
- Pre-creased for speedy application
- Suits popular roof pitches*
- 5000mm² per running metre







Type RAV-FL Roof Abutment Ventilator

use

To provide ventilation where flat roofs abut masonry.

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 pivothold 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.

data

- · Permits roof to breathe at masonry intersection
- Integral insect screening
- High airflow 25,000mm2 per metre run
- Removable when re-roofing



Type ERV External Roof Ventilator

use

To provide ventilation within flat and low pitched roofs.

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.

data

- High free airflow of 6,000mm²/12,000mm²
- Natural lead finish
- Integral baffles and drain-out slot
- New and existing work applications

FABRICATED FROM LEAD raditional Aesthetics – Regulation Performance







Type LSRV Lead Slate Roof Ventilator

use

To provide ventilation route via slate roof finish.

solution

Manufactured from code 4 lead flashing the Type SLRV 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

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.

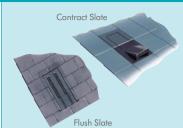
The Type SLRV is supplied in dimensions to match the slate size you are using. State slate size, and preferred airflow per ventilator + spigot size.

data

- · Lead to BS 12588:2006, stainless steel mesh
- Base sizes to match all popular slate sizes
- · Spigot connections of 90mm, 110mm or 150mm
- Airflow ranges from 3000mm to 8000mm sq² (pending base size)
- Deflection grille and integral water dam upstand

FABRICATED FROM LEAD

Traditional Aesthetics – Regulation Performance



Slate Ventilators Contract and Flush Slate

USE

To provide ventilation route via slated roof finish.

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 airflow rating via the protective cowl is 10,000mm?

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.

The Flush Slate Ventilator may also be supplied with a connection kit (ref FL/ILS) that can attach to a 110mm soil pipe or similar.

- Low profile high throughput
- Integral insect screening
- · Cut to match slate size
- Easy regulation compliance







Ridge & Hip Dry-Fix Ventilation System

1156

Promotes roof space ventilation at ridge and hip.

solution

For location on prepared ridge and hip configurations. Two-part system consisting of dry-fix roll-out ventilation membrane with corrugated flashings to both edges. Integral adhesive strips to underside of flashings initially hold in place prior to placement and securing of ridges over the membrane assembly using mechanically fixed flexible moulded retaining agskets.

The flashing section of the membrane can be trimmed back should smaller ridges be deployed. Provides ventilation at high levels to satisfy statutory requirement. Also appropriate where supporting flow is required to aid ventilation via permeable underfelt to address NHBC directive.

data

- Accepts most popular ridge profiles
- Eliminates wet trades
- · Provides statutory airflow
- Ridge mechanically fixed
- 5000mm² per running metre to each side

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.







Type CRSS Continuous Running Soaker Strip

use

Continuous soaker for use with slate roof where it abuts a masonry wall.

solution

The Continuous Running Soaker Strip is pre-shaped for immediate use. It resembles lead in colour and may be employed with conventional lead at the saddle and the foot. The upstand is unlipped, which eliminates the necessity to chase into the masonry wall. If fixing is a consideration, the Type CRSS can be directly mechanically secured through its upstand towards the top of the section.

data

- Glass reinforced polyester
- Colour lead arev
- 105mm high x 190mm wide x 3000mm
- Suitable for pitches from 22½ degrees up to 60 degrees
- · Pre-shaped for immediate use
- Hidden from view when installed
- Lightweight and easy to handle
- Permits use of conventional saddle and foot





Type ECSC Eaves Continuous Slate Course

use

As substitute for first (bottom layer) slate course providing support and reducing slate cutting.

solution

The Eaves Continuous Slate Course replaces the eaves first slate course and establishes rigidity and consistent support off which the slate laying and fixing may commence.

Thus the amount of slate and slate cutting is reduced. Installation is speedy and savings can be achieved in both time and overall purchasing costs.

- Glass reinforced polyester, 1.83 kg/m²
- Colour black
- 360mm wide x 3000mm long
- Supplied in packs of 10
- Reduces costs and site work
- Hidden from view when installed
- Robust and easy to handle









Type RBS Roof Bonding Strip

use

To link and permit bonding of two dissimilar roof

solution

There is a requirement to link and bond different roof finishes where they meet within a common slope. The Roof Bonding Strip is moulded with water-check ribs either side of a central mortar adhesion area.

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. It effectively creates an underlying bridge between abutting surfaces and may be used as part of a fire-break detail, as defined within the Building Regulations. This product may normally be used on roof pitches from 10 degrees up to 60 degrees.

data

- Glass reinforced polyester
- Colour lead grey
- 230mm wide x 3000mm long
- · Pre-shaped for immediate use
- Lightweight and easy to handle



Type VG Valley Gutter

USE

Weatherproof and waterproof preformed valleys.

solution

Preformed Valley Gutters are manufactured from GRP and provide an alternative to the site fabricated lead valley. Two styles are available for use with slate roofs or tiled roofs. Both are finished with a tough bonded film coat which is coloured to resemble lead and provides 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 of a deeper profile. Both may be used to satisfy the requirements of roots constructed to BS5534:Part 1:1990 (Slating & Tiling) and Part 6 of BS8000. Type VG Valley Gutters are fire resistant in accordance with BS476, the classification to P60 (SAB) class three.

- GRP with film/gel coat
- Available in lengths of 3 metres
- Colour arev
- Preformed profile
- Integral water check ribs







Hardedge Strip 1500 Special Eaves Protector

use

Alternative felt support and anti-pooling hardedge for eaves protection.

solution

The Hardedge 1500 or Special Eaves Support as it is also known, is an extended and profiled version of the 1200 model. It is both longer and wider and offers even greater support and rigidity.

The front of this Special Eaves Protector extends forward to carry the projecting roofing felt forward of the fascia. Thus support is provided to a greater extent and the felt is encouraged to gravitate and terminate into the adjacent guttering.

Manufactured from rigid polypropylene, the Hardedge 1500 / Special Eaves Protector is easily and speedily fixed in position prior to the roofing felt.

data

- Size 1500mm x 300mm (225 + 75mm)
- Black polypropylene
- Suitable for use on roof pitches from 15 degrees up to 45 degrees
- Stops water pooling
- Supports felt and carries edge forward to gutter



Type I In-screed Services Duct

use

Preformed services duct for incorporation within floor screeds. Provides designed accessible routes for service pipes or wiring.

solution

Ducts are incorporated on level oversite or sub floors, and the final screed finished flush with the duct top edges. Type I ducts accommodate service pipes or service wiring, and support can be provided for pipes using internal clips. Surface floor covers are available in 12mm plywood, or composition board. Special woven seal glass cloth intumescent barrier bags are available when ducts run from one building compartment to another.

Jata

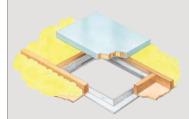
- 140mm x 50mm overall, providing approx accommodation area of 104mm x 38mm
- Standard length 2400mm
- Extruded PVCU
- Colour white
- Keying and stabilising flanges







Notes



Type LAD Loft Access Door

LISE

To gain access into roof space.

solution

Prefabricated and self-finished insulated loft access door and frame. Can be fixed immediately between trimmed standard joists. The LAD loft access door and frame is supplied as a complete unit. It satisfies the contractor's total requirements in terms of aesthetics, finish, cost and stock control. The white laminated door is fully removable, and is supported within a robust white PVC surround which may be directly fixed to standard trimmed joists. Within the surround are soft (draught) resiseals which ensure the access door is correctly and completely accommodated. As the lid is fully removable by lifting upwards, attic insulation can be cut and laid on top if required.

- Size 1 550mm x 750mm
- Size 2 550mm x 550mm
- White compound
- A PVCU white laminated door with solid core of Inskorfoam
- · Self-finished and ready to use
- Insulated
- Fully removable door on resi-seals







Downward Hinging Loft Access Door and Frame

use

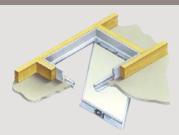
Access into attic spaces.

solution

Hinged downward opening loft access door for use where a door that can be fitted completely clear is not required. Available in one size only, the downward opening model requires a trimmed opening of approximately 560mm x 760mm. Made of lightweight PVCU and finished in white, the insulated door has an integral turn latch.

data

- Clear opening approx. 630mm x 535mm
- · Lightweight high impact polystyrene
- · White finish requires no painting
- · Door contains provisional insulation



Cavi 120 Type PC Lofthatch

US

To provide access into roof space which is also fire integrity rated.

solution

The prefix of Cavi 120 denotes this Lofthatch has a fire integrity rating of 120 minutes. The downward opening door is supported on a full width zinc coated hinge that provides retention across the entire width of the frame.

The door is secured in the closed position by turning an integral locking bolt accessed via a recessed locking point. Draught strips within the frame compress against the door when locked. The dished steel constructed door retains a fire barrier layer.

When installed the 1.5mm thick frame surround appears almost flush with the ceiling plaster so visual presence is minimised.

- Galvanised steel construction
- White finish
- Door opening approx 745mm x 530mm
- Two hours fire rating
- Almost flush finish blends with ceiling





Radon & Methane Gas

Radon Gas is everywhere - it's the extent that varies and structures are required to be built so radon exposure risk is minimised.

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 people in or around the due to the emission and containment of radon gas. $3.2 \, \text{BR(S)}$ – mandatory. 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 people in or around the building due to the presence of harmful or dangerous substances. $3.1 \, \text{BR(S)}$ – mandatory.

Whilst the applications described within this section refer predominately to radon gas, the design principals and functionality may be applied also to structures where methane gas presence demands footprint level arrestment as part of a fully appraised system.

Radon Gas

Why is radon presence within a building best avoided?

Radon remains the biggest single source of public radiation exposure in the UK. The World Health Organisation (WHO) and the International Commission on Radiological Protection (ICRP) have recently issued revised advice on protection against radon. The advice includes recommendations for revised reference (action) levels because radon has been recognised as being a greater risk to health than first thought.

Those most at risk to radon radiation are those exposed to high concentrations. Therefore construction incorporating measures to reduce such levels is the objective.

Dangerous to health?

Radon is a natural radioactive gas and there is a risk of lung cancer largely attributable to inhalation of alpha-particle emissions from the radon decay products. The UK government figures acknowledge several thousand avoidable deaths per year are a consequence of exposure to radon.

How is radon measured?

Radon presence is measured in becquerels per cubic metre and ideally all domestic properties should have radon readings below 200 Bq m $^{-3}$ which was once considered to be an acceptable / tolerable level.

Whilst this is currently the UK regulation action level, the Governments Health Protection Agency advocates a target level of 100 Bq m⁻³ acknowledging there is no same radon level so the lowest possible is preferable. (The definition of target being the level for which one should aim).

Interestingly the action level for commercial properties is currently twice that of domestic -400 Bq m⁻³ with an explanation that people are less likely to spend as long within a commercial property compared with a domestic property.

Paradoxically commercial property includes buildings where inhabitants reside 24 hours a day, highlighting there is an imbalance of justification.

What are the Building Regulations?

The Building Regulations require buildings being constructed on radon emitting ground to incorporate protective measures so that action levels (for the buildings) are not exceeded. Unfortunately with two UK levels (action and target) for both domestic and commercial properties, is there a danger the easier to meet action level will prevail and purchasers of new homes may not be afforded the level offering less exposure to risk?

The current approach in the UK regarding to what extent a property is protected against radon places dependence on reference to maps. Unfortunately maps do not relate to the radon status of the land upon which the property is to be built but to the status of existing properties in the general area.

As a consequence if low radon levels are shown on a map, a new property can be built without radon protection or with minimal radon protection. Only when the property has been completed is one able to really determine its radon contamination level.

Prof William Angell, Chair of the World Health Organisation International Radon Project advises it is a long-term misconception that indoor radon is naturally occurring. Radon indoors is largely caused by the way homes are designed and built.

The person(s) who put the building over the land are responsible.

This prompts several important questions designer and developer should consider:

Awareness of this health risk exists now, so have designer and developer a duty of care to ensure the purchaser/inhabitants of the building are not exposed to a health risk?

What will be the designers and developers position in the future regarding liability if the building (and thus its inhabitants) are not protected to the extent possible?

Will the building asset value falter in the future if radon levels within it are higher than intended or higher than alternatives available that offer a better protected standard?

How desirable will the property be if UK radon action levels are reduced further at some time in the future – how will it compare?

The response from most clients when asked to what extent a new property should be protected is that it should be to the safest and most practical level. Achieving this can be both straightforward and easy as it simply entails protecting the entire footprint of the building, from exterior face to exterior face. By so doing any radon in the ground under the building has reduced opportunity of entering and accumulating within the building.

The current UK approach of relying on maps to provide the only guidance as to whether a structure should be protected against radon is flawed. Maps simply indicate whether there are

structures in an area where radon tests have been carried out and elevated levels obtained.

Maps do not take into account that modern structures by virtue of the new Building Regulations will be more airtight and unable to dissipate radon levels in the manner older structures permit dissipation.

There is a danger that reliance on maps and the incorporation of some radon prevention measures only will be relied upon by designers, contractors and owners of property as being adequate to provide protection. Partial measures do not address cavities, and floor/wall interfacing, both of which are recognised radon entry routes.

It is the person who puts the building over the land who is responsible.

Protecting the entire footprint of a building can remove 'chance' from the radon equation.

The following pages list our products and systems available to protect the entire footprint of the building at the most economical stage – when the oversite level is reached.



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 pioe flashina.

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 Cavibrick.

Sump Provision under the Building

1100

Aids reduction of radon pressure from granular fill under a protected oversite of a building.

solution

Positioned below a floor slab (with membranes/barriers), the sump provides a passive gas exit route via a ventilation stack. The stack is terminated above the roof finish with a tile/slate external roof ventilator. The reception sump may service up to 250m² floor area, positioned in the most central location to promote even/optimum evacuation. Inhalation apertures and inlet/outlet portholes permit spur connection to adjoining sumps should the size or layout of the property dictate.

data

- Polypropylene, black. 510mm x 240mm, plus porthole connections
- High-flow passive discharge design
- Multi-port connection
- Interlink facility
- Accepts standard PVC stack



Oversite Protection

Type N Sitesealer Membrane

LISE

Radon and methane gas resistant membrane for use on oversites. General purpose sitesealer damp-proof membrane. Tanking and waterproofing applications.

solution

Solid concrete floors and underground structures require a damp-proof and waterproof membrane to adequately resist the passage of moisture to the inside of the building. In addition, a membrane with gas-resistance is required when construction takes place on a methane emitting site and/or a site subject to radon gas building control measures. Type N sitesealer membrane is supplied for waterproofing plus gas resistant applications.

- Gas membrane roll size: 28.6m x 1.05m = 30m²
- Minimum overlaps: Side: 50mm
 Ends: 100mm
- High resistance to water pressure, water vapour transmission and gas transmission
- Cross-ply orientated construction
- Self-seal bonding, eliminates joint heating and drying







Oversite Protection

Footprint Radon Membrane

use

Radon resistant membrane (loose-laid) for

solution

Footprint Radon Membrane is a loose-laid membrane supplied in wide rolls. It is primarily designed to be installed below or above the top surface of a suspended floor. It is manufactured from heavy duty reinforced polyethylene and offers good transmittance and permeability prevention qualities. It is laid dry with all joints lapped and sealed using integrity bonding tape.

data

- Rolls 25m x 2m and 4m
- Thickness 0.4mm
- High resistance to water, vapour and gas transmittance
- Radon permeability sample <110x10-12m²s-1



Protection Through the Wall

1100

Preformed cavity barriers designed to minimise the entry of radon gas into the building.

solution

The barriers are installed in cavity walls around the perimeter of a structure. They are so proportioned and shaped to encourage rising radon gas within the cavities, to be arrested and discharged via brick ventilators appropriately positioned. The barriers extend through at floor slab level and link with the radon resistant oversite membrane.

The combined use of cavity barriers and oversite barriers minimise radon entry into the building envelope which would otherwise take place. Thus, levels are reduced within the building and at all times radon-laden air is promoted to follow a discharge route out of the structure, rather than within it.

- Preformed barriers in all profiles and sizes
- Robust Petheleyne mouldings
- Satisfies existing guidelines
- Provides packaged kit appropriate for area requirements
- High-void gas ventilation format







Gas Out & Water Out

use

To provide exit route via Cavibricks for gas arrested under cavity barrier.

To provide discharge route for water arrested on upper surface of cavity barrier.

solution

The introduction of gas control barriers in cavities dictates one installs means by which all arrested gas and water can be routed out of the structure. Additionally, where services penetrate any membrane or barrier the entry point must be suitably sealed. A range of accessories are available for this purpose:

Cavibricks may be installed in the external skin under barriers to discharge gas in the cavity trapped below barrier level.

Caviweeps may be installed within perp joints to discharge penetrating water arrested on the upper surface of the barrier. (drawing)

data

- Material: polypropylene.
- Colour: black.
- Cavibricks and caviweeps are available in a range of colours.



Sealing Interruptions of the Oversite Membrane

USE

To provide positive sealing where service pipes or similar punctuate the membrane.

solution

A range of preformed Petheleyne service point entry sleeves or 'top hats' as they are often termed permit gas tight integrity to be maintained where the oversite membrane is penetrated. Standard pipe sizes accommodated with a bespoke service operating for non-standard requirements. Sleeves may be positively secured using integrity sealing tape and a clamping grip around the pipe surround.

date

- To suit pipe sizes of 25mm, 55mm, 70mm, 110mm, 135mm, 150mm
- Base dimensions 350mm x 350mm or 450mm x 450mm
- 450mm x 450mm
 Material: Pethelevne







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