

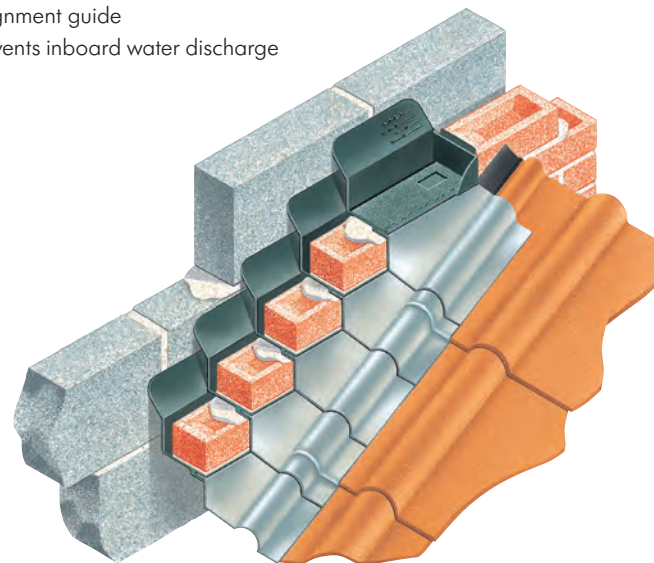
## Specifications

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

## TYPE X

### Cavitrax for Gable Abutments

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



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

### Use

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

## Solution

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

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

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

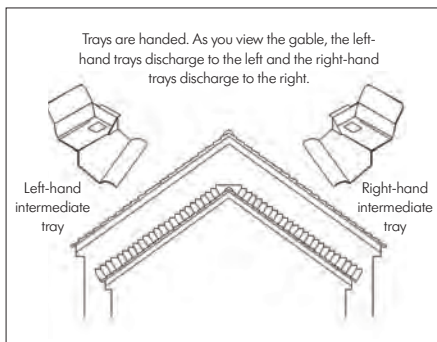
The flashing on every tray is manufactured of lead. Alternatives may be selected from our range including a synthetic flashing. Each flashing is bonded onto the tray and is shaped to suit the roof pitch.

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

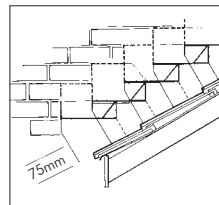
Type X Cavitytrays are suitable for use in both traditional and timber frame construction where the course size is 75mm (standard brickwork coursing).

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

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



Standard brickwork courses

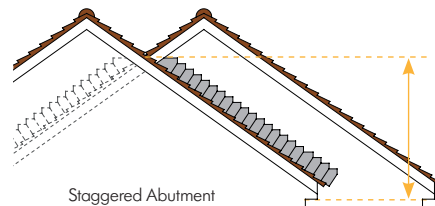
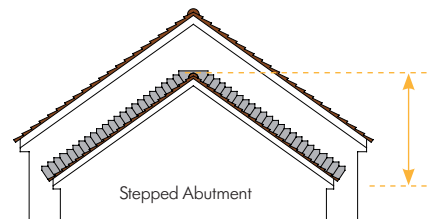
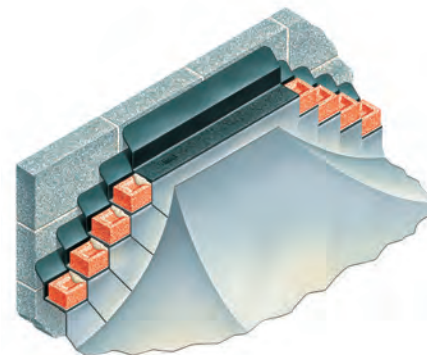


## Designers' Comments

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

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

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

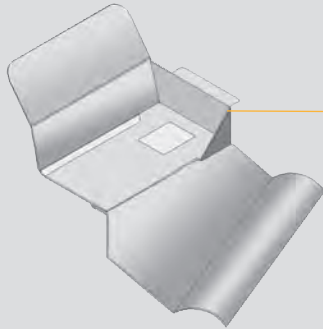


## TYPE X (CONTINUED)

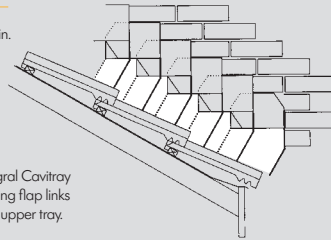
### Cavitytray for Gable Abutments

#### Additional benefit

Unique overlapping flashing arrangement arrests any wind-driven rain.

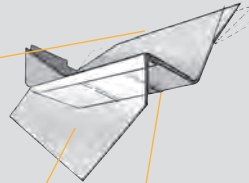


Integral Cavity sealing flap links with upper tray.



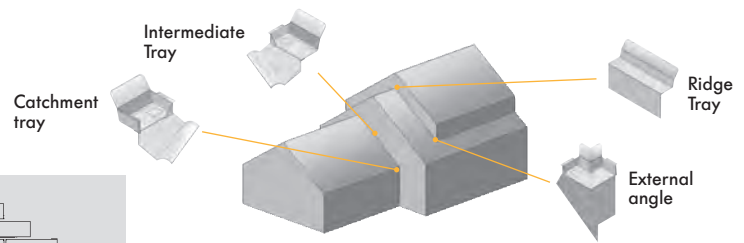
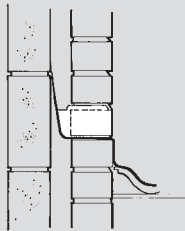
Adjustable cavity upstand accommodates the 'as-built' cavity status.

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



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

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



#### Ridge Tray

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



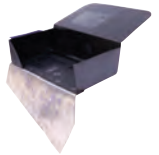
#### Intermediate Tray

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



#### Catchment Tray

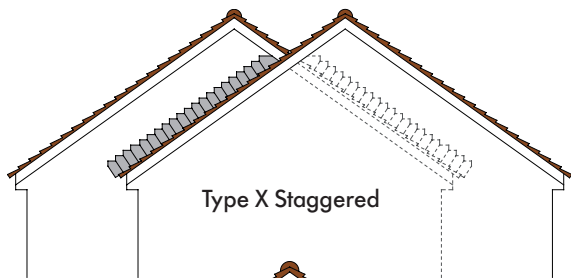
This is similar to an intermediate tray but has upstands to both ends. Its function is to receive water from the intermediate trays and discharge this collected water through a Caviweep supplied with the tray.



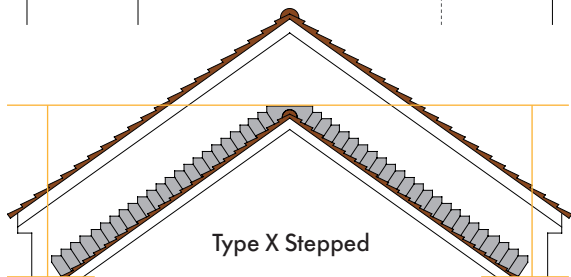
#### Internal / External Angles

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

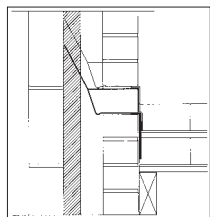




Staggered gable abutments require trays of the same hand. In this staggered example, left-handed trays are required to both slopes. Allow one tray per course

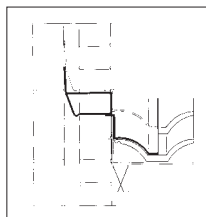


The slope on the left requires left handed trays. The slope on the right requires right handed trays. Allow one tray per course.



**Short Leads**

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



**Long Leads**

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

**Calculating Gable Requirements**

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

**Calculate each slope separately.**

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

**Then calculate the right hand slope opposite.**

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

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

**How to Order**

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

**Bill of Quantity / Specification Wording**

**Approved Type X Gable Abutment Cavity Trays**

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

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