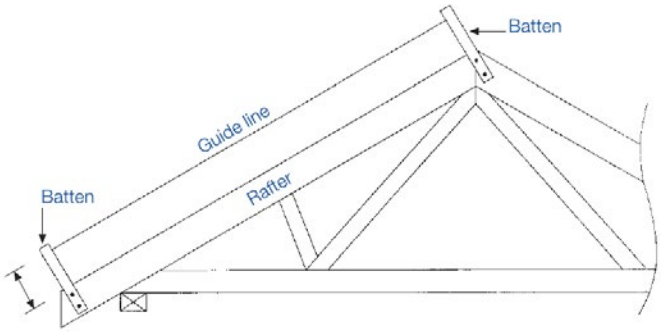
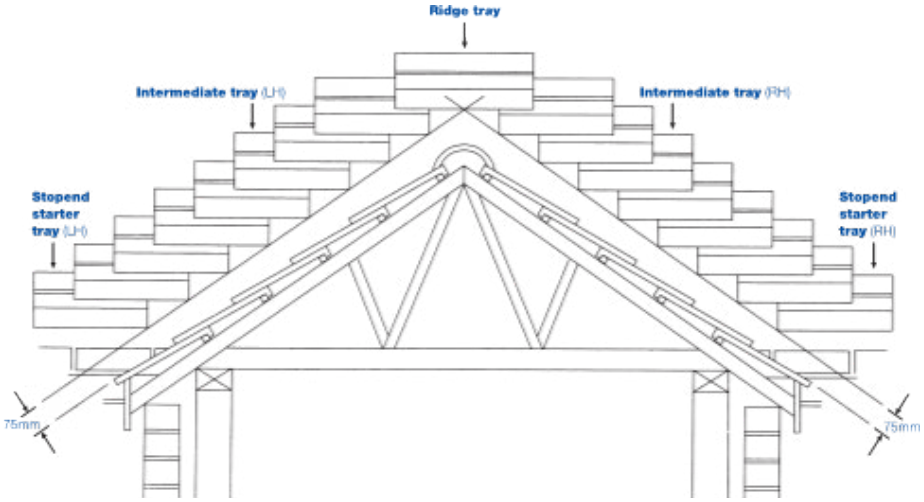
Technical Information & Installation Advice

Cavity trays must always be bedded onto fresh mortar, never dry bedded. The masonry which is then laid over the cavity trays must also be bedded onto fresh mortar with the result that the base of the cavity tray is positioned approximately half way through the mortar joint.

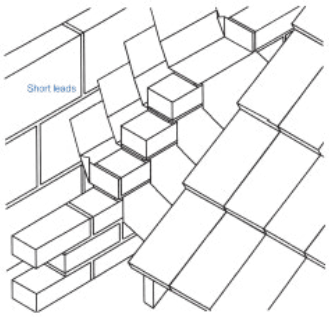


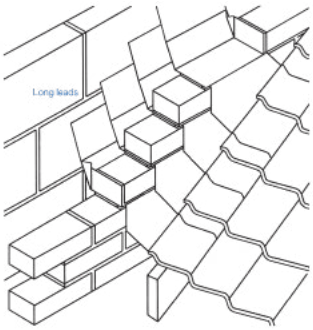
General impression of how a complete cavity tray system should be set out:



Lead Flashings

In most cases a cavity tray will be required to work in conjunction with a lead flashing at a roof/wall abutment. The cavity tray protects the inside of the outer leaf and the cavity and the lead flashing protects the face of the outer leaf and the junction between the roof covering and the wall.
The lead flashings associated with cavity trays can be dealt with in one of two ways. Either as a factory fitted integral part of the cavity tray or as an independent flashing fitted separately to the cavity tray. When specifying or installing cavity trays and lead flashings it is important to consider the following recommendations:





Leaded cavity trays with factory fitted integral flashings

- In the case of stepped cavity trays it is very important to specify the exact pitch of the roof. The lead flashings are accurately cut to suit the specified pitch and will look aesthetically incorrect if used on any other roof pitch
- All leaded cavity trays are available with a choice of 'long' or 'short' leads and it is important to specify which is preferred. The general rule is that long leads are used where the flashing is required to dress down over the surface of the roof covering and short leads are used in conjunction with a separate soaker or secret gutter detail. It is important to remember that this is just a general rule and many specifiers and end users have their own preferences as to how the flashings should be dressed. Timloc must be informed of any specific requirements

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Technical Information & Installation Advice

Product Selection and Calculation of Quantities

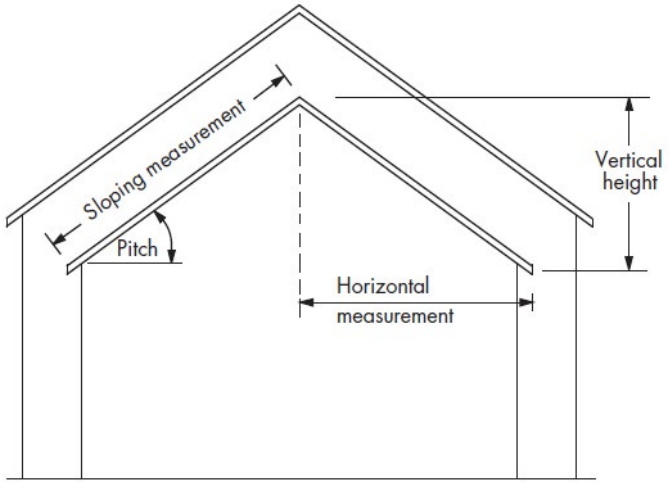
Timloc recommend that customers take advantage of the Technical Advisory Service which is freely available to all users and specifiers of Timloc products. The Technical Services Department will be pleased to advise on the most suitable products to meet the application and will prepare a fully itemised schedule of quantities.
Please provide as much information as possible, including drawings if they are available. All enquiries should include the following information as a minimum requirement:

- The materials used for construction of the outer leaf, i.e. brick, block or stone, including the bed thickness and course height
- The overall structural cavity width within the wall
- The type and thickness of any insulation material used within the wall cavity
- The pitch of the roof (in the case of pitched roof abutments)
- The type of roof covering or state whether long or short leads are required (in the case of leaded cavity trays)
- Clear dimensional information or accurate scale drawings relevant to the areas requiring cavity trays
- Comments with regard to the weather exposure of the site
- Any specific or non-standard requirements are to be clearly stated.

Calculating Quantities of Cavity Trays

Stepped cavity trays
Stepped cavity trays are used where a pitched roof abuts a cavity wall. To calculate the quantity of trays required to cover a section of roof abutment one of three measurements must be determined, either the vertical height or the sloping or horizontal length of the abutment. If the vertical height is measured, simply divide this distance by the coursing height of the material being used for construction.
E.g. If the vertical height is 1.5m and the wall is standard 75mm brick coursing (NB 75mm = 0.075m) the equation would be 1.5 0.075 = 20. Therefore 20 No. cavity trays are required per sloping abutment.
If the sloping or horizontal distance has been measured the tables shown below should be used to convert the distance (measured in metres) into the quantity of cavity trays. Take care to select the correct table and the appropriate column which relates to the coursing height and the pitch of the abutting roof.
E.g. If the sloping measurement is 2.5m, at a pitch of 30°, with a 75mm brick coursing height the equation would be 2.5 x 6.7 = 16.75. This would be rounded up, so 17 No. cavity trays are required.
E.g. If the horizontal measurement is 1.5m, at a pitch of 40°, with a 150mm stone coursing height the equation would be 1.5 x 5.6 = 8.4. This would be rounded down, so 8 No. cavity trays are required.

Horizontal cavity trays
Calculating the quantity of horizontal cavity trays required is reasonably straightforward. Simply measure the overall width of the abutting roof, or width of the area where cavity tray protection is required, and divide this measurement by the effective length of the cavity tray component which you have chosen to use. E.g. If you have an abutment 2.5m in width and you are using a 2005E horizontal tray, divide 2.5m by the effective length of the tray, which in this case is 440mm or 0.44m. This gives an answer of 5.68, which would be rounded up to 6 No.



Stepped cavity trays sloping measurement

	Coursing height			
Roof pitch	**75mm brick**	**150mm stone**	**200mm block**	**225mm block**
10°	2.3	1.2	0.9	0.8
12.5°	2.9	1.4	1.1	1.0
15°	3.5	1.7	1.3	1.2
17.5°	4.0	2.0	1.5	1.3
20°	4.6	2.3	1.7	1.5
22.5°	5.1	2.6	1.9	1.7
25°	5.6	2.8	2.1	1.9
27.5°	6.2	3.1	2.3	2.1
30°	6.7	3.3	2.5	2.2
32.5°	7.2	3.6	2.7	2.4
35°	7.7	3.8	2.9	2.6
37.5°	8.1	4.1	3.0	2.7
40°	8.6	4.3	3.2	2.9
42.5°	9.0	4.5	3.4	3.0
45°	9.4	4.7	3.5	3.1

Stepped cavity trays horizontal measurement

	Coursing height			
Roof pitch	**75mm brick**	**150mm stone**	**200mm block**	**225mm block**
10°	2.4	1.2	0.9	0.8
12.5°	3.0	1.5	1.1	1.0
15°	3.6	1.8	1.3	1.2
17.5°	4.2	2.1	1.6	1.4
20°	4.9	2.4	1.8	1.6
22.5°	5.5	2.8	2.1	1.8
25°	6.2	3.1	2.3	2.1
27.5°	7.0	3.5	2.6	2.3
30°	7.7	3.9	2.9	2.6
32.5°	8.5	4.3	3.2	2.8
35°	9.3	4.7	3.5	3.1
37.5°	10.2	5.1	3.8	3.4
40°	11.2	5.6	4.2	3.7
42.5°	12.2	6.1	4.6	4.1
45°	13.3	6.7	5.0	4.4

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