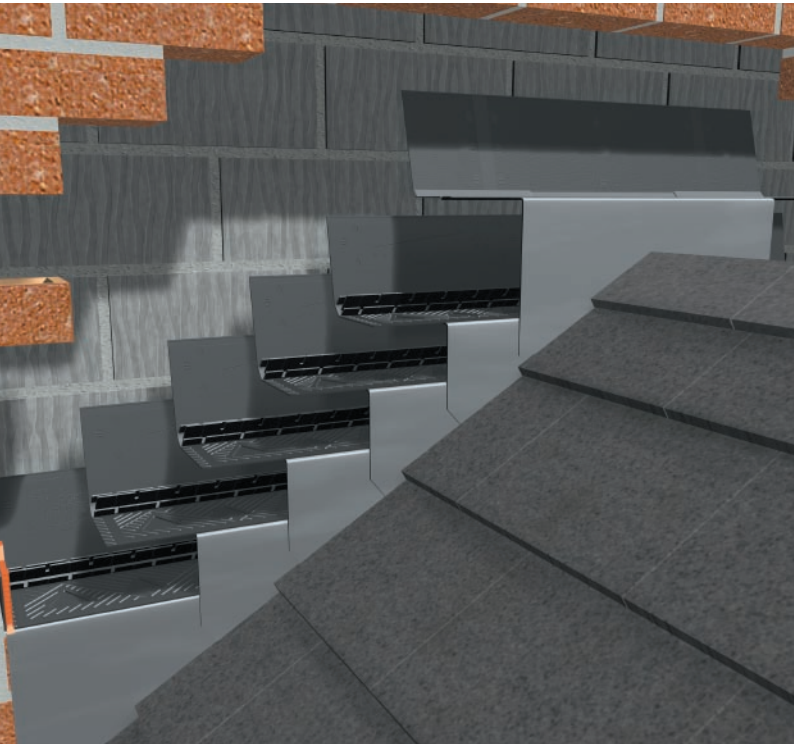




cavity trays

Where a lifetime's protection
is the first priority



cavity trays

Complete Cavity Tray system
from Manthorpe



Over the years Manthorpe has always been at the forefront of developing technology and now produces an easy to fit range of Cavity Trays, suitable for all requirements.

- A Catchment GW293**
- B Horizontal GW294/5/6/7/8/9**
- C Horizontal GW294/5/6/7/8/9**
- D Catchment GW293**
- E Intermediate GW291/2**
- F Apex GW290**

The trays have been developed to incorporate innovative design features to aid fitting and performance for a range of applications;

- A stepped system for pitched roofs
- A horizontal system
- A refurbishment system
- Stonework/Blockwork ranges
- Lintel Tray range

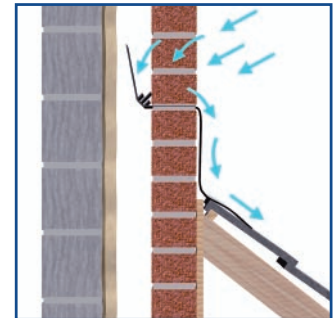
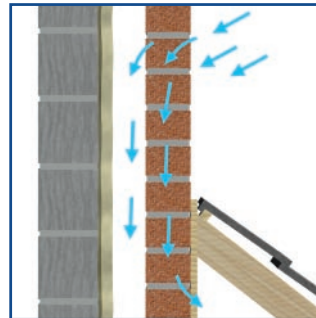
All Manthorpe's trays can be ordered either with or without lead attached. Short, standard, or long lead is available.

Manthorpe – providing protection from water ingress.

Wind driven rain penetrates the porous outer leaf brickwork of a structure and runs down the inside of the cavity.

This is not necessarily a problem unless a roof abuts this wall. When this occurs the outside wall then becomes an inside wall where rain soaked bricks can cause problems in internal rooms.

By installing Manthorpe's cavity trays, penetrating rainwater is diverted back out through a weep hole above the roofline, thus preventing costly damage to internal walls.



Manthorpe – designed to perform



Incorporated into the design is an array of features to make fitting easier.

Manthorpe's stepped trays are injection moulded from durable polypropylene to help withstand on-site fitting rigours.

- A** The problem of mortar falling onto Cavity Trays as the wall is built up can reduce the effectiveness of the system. Manthorpe's ingenious design, which includes a series of angled ribs to catch falling debris, helps to prevent mortar blockage and keeps the water path clear.
- B** Pitch markings and a fitting guide moulded into the tray, provide handy, on-site reference tools.
- C** A location rib at the rear ensures the correct positioning of the tray, while a mortar key helps to keep it in place.
- D** Ribbed water barriers on the underside prevent moisture seeping back along the length of the tray.
- E** A removable mortar strip, which is clipped on to the front of the tray, highlights the position for retro-fitting lead. The space left, once the strip is removed, provides a perfectly chased out slot for inserting lead, without risk of damaging the tray or surrounding masonry.

Stepped Cavity Tray Quantity Guide

Brickwork 75mm Courses

Pitch	15	23	31	39	47	55	63	71	79	87	95	103	111
50°	15	23	31	39	47	55	63	71	79	87	95	103	111
47.5°	14	21	29	36	43	50	58	65	72	80	87	94	101
45°	13	20	26	33	40	46	53	60	66	73	80	86	93
42.5°	12	18	24	30	36	42	48	54	61	67	73	79	85
40°	11	16	22	27	33	39	44	50	55	61	67	72	78
37.5°	10	15	20	25	30	35	40	46	51	56	61	66	71
35°	9	14	18	23	28	32	37	42	46	51	56	60	65
32.5°	8	12	16	21	25	29	33	38	42	46	50	55	59
30°	7	11	15	19	23	26	30	34	38	42	46	50	53
27.5°	6	10	13	17	20	24	27	31	34	38	41	45	48
25°	6	9	12	15	18	21	24	27	31	34	37	40	43
22.5°	5	8	11	13	16	19	22	24	27	30	33	35	38
20°	4	7	9	12	14	16	19	21	24	26	29	31	33
17.5°	4	6	8	10	12	14	16	18	21	23	25	27	29
Span (metres)													
	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7

For pitched roof abutment situations, use Manthorpe's handy guide to simply calculate the number of trays required for 75mm coursing.

Typical example

30 degree pitch
– 6 metre span.

Using the chart, the

number of Cavity Trays required can be calculated as;

23 Left Hand Intermediate Trays

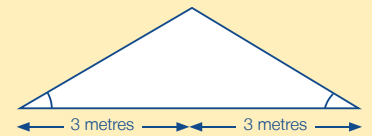
23 Right Hand Intermediate Trays

1 Apex Tray

1 Left Hand Catchment Tray

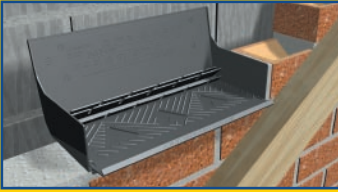
1 Right Hand Catchment Tray

When ordering, remember to state the roof pitch and whether short or long lead is required. Unless otherwise specified, code 4 lead will be supplied.

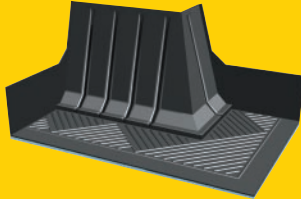
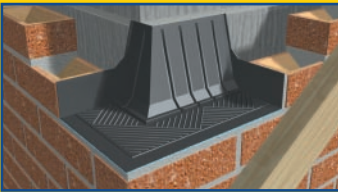


Stepped system

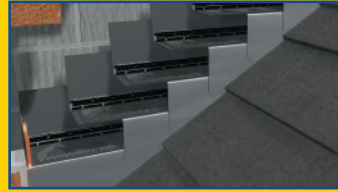
GW293 Catchment Tray



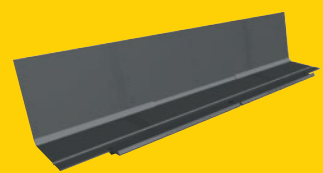
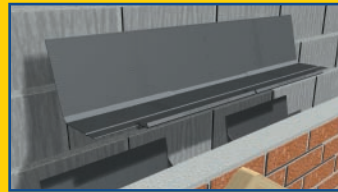
GW293CC RH/LH Corner Catchment Tray



**GW291 Intermediate Tray – Right Hand
GW292 Intermediate Tray – Left Hand**



GW290 Apex Tray



Manthorpe's stepped trays are designed for pitched roof applications.

Manthorpe's GW293 Catchment Tray is fitted first at the bottom of the system and provides a collection point for water from where it is safely diverted out of the wall via a G950 Weep Vent.

Manthorpe's Corner Catchment Trays are used in details where a roof abutment ends at the corner of a building.

Once the Catchment Tray is in place, Manthorpe's Intermediate Trays, GW291 or GW292, are simply built in above the finished roofline in a stepped fashion.

Like the GW293, once installation is complete, the lead locating strips attached to the front of the intermediate trays are designed to be easily removed to reveal a chased out slot, thus removing the need to grind out any mortar.

These trays all include unique angled ribs which trap falling mortar. This prevents debris blocking the tray.

Fitted at the top of the system, water drains from either end of the GW290 Apex Tray, onto the Left or Right Hand Intermediate Trays.

This tray also features the pull out strip which is removed after fitting for simple lead insertion.

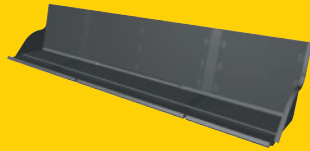
All the above Cavity Trays are manufactured from polypropylene and boxed in quantities of 25.

Product Specification Guide

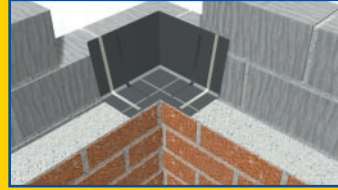
Code	Length (mm)	Height (mm)
GW290	731	155
GW291	317	155
GW292	317	155
GW293	330	155
GW293CC	330 x 214	150

Horizontal system

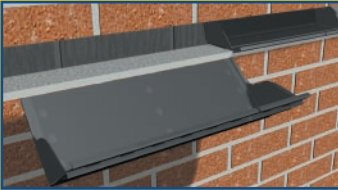
GW295 Horizontal Tray



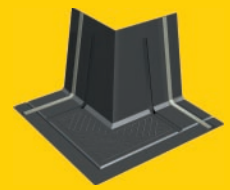
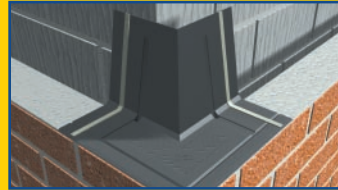
GW296 Internal Corner Tray



GW294 Refurbishment Tray



GW297 External Corner Tray



Manthorpe's Horizontal Trays are designed for use in horizontal abutment situations and for refurbishment details.

Manthorpe's GW295 Horizontal Tray is a 900mm injection-moulded tray which incorporates inter-locking stop-ends for ease of fitting.

The pull away mortar strips clipped to the front of the tray provide a perfectly chased out slot for quick and simple insertion. Each tray is a self contained unit to ensure a failsafe system.

The GW294 Tray is a 450mm version of the GW295 but is specifically designed for use in refurbishment situations.

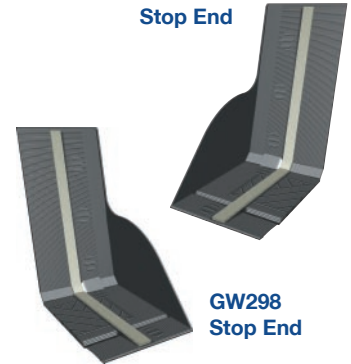
The trays are retro-fitted by removing three bricks at a time from the existing wall and sliding the tray into position through the gap.

The GW296 Internal Corner Tray and GW297 External Corner Tray are used when a Horizontal or Refurbishment run of trays has to turn through a 90° angle.

Depending on the detail it may be necessary to cut down a Horizontal Tray. A GW298/99 Stop-End should be used to terminate a cut down tray.

All the above cavity trays are manufactured from polypropylene and boxed unleaded in quantities of 25 units.

GW299 Stop End



GW298 Stop End

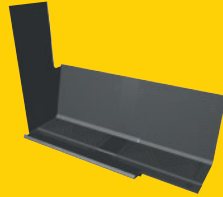
Horizontal System

Product Specification Guide

Code	Length (mm)	Height (mm)
GW294	450	155
GW295	900	155
GW296	194 x 194	155
GW297	265 x 265	155
GW298	83	155
GW299	83	155

Stonework/Blockwork system

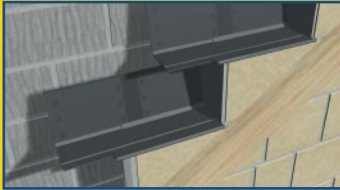
GW291/SBS/LBS Stone/Blockwork Intermediate Tray – Right Hand



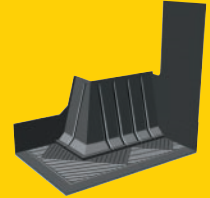
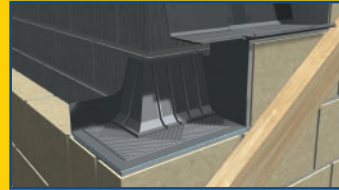
GW293BSRH



GW292/SBS/LBS Stone/Blockwork Intermediate Tray – Left Hand



GW293CC/BSLH



Manthorpe has developed its range of cavity trays for applications where random stone or blockwork is specified.

Examples of the range are illustrated while the tables opposite indicate which trays to use depending on the height of the stones/blocks and the pitch of the roof.

The stonework/blockwork range has all the fitting advantages of Manthorpe's standard trays including locating ridges, removable mortar strips for lead insertion and water deflecting ribs. In addition, a flexible perpend protector attached to the trays prevents driving rain which penetrates the outer wall from tracking across the masonry. For apex details use the GW295 Horizontal Tray.

225mm Blockwork Coursing

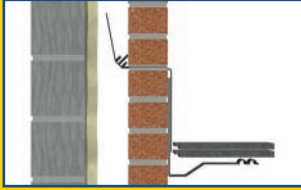
Code	Length (mm)	Roof Pitch
GW291 LBS	814	17.5° to 34°
GW292 LBS	814	17.5° to 34°
GW291 SBS	448	35° to 50°
GW292 SBS	448	35° to 50°
GW293 BS	330	all pitches
GW293CC BS	330 x 219	all pitches

150mm Blockwork Coursing

Code	Length (mm)	Roof Pitch
GW291 LBS	814	12° to 24°
GW292 LBS	814	12° to 24°
GW291 SBS	448	25° to 50°
GW292 SBS	448	25° to 50°
GW293 BS	330	all pitches
GW293CC BS	330 x 219	all pitches

Leaded Trays

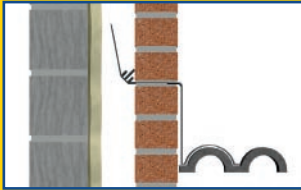
Short Lead



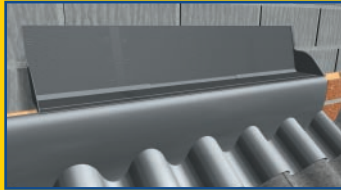
Stepped system shown with short lead.



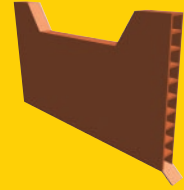
Long Lead



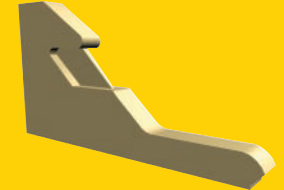
Horizontal system shown with long lead.



G950 Weep Vent



G951 Peep Weep



The Manthorpe range can be supplied with factory fitted lead stapled and sealed securely to the Cavity Trays if requested.

Different lengths and either code 4 or 5 lead are available depending on the application and severity of the prevailing weather conditions.

Long lead is recommended where profiled tiles are used. The lead is dressed over to mould into the contours of the tiles.

Manthorpe's stepped range can be supplied with short lead (75mm) or long lead (150mm) attached to dress over tiles.

Manthorpe's horizontal system is available in a choice of two different lengths of lead: 150mm or 300mm drop.

Detailed lead fitting sheets are available from Manthorpe on request.

When ordering Leaded Trays please remember to state length of lead and pitch required.

Code 4 lead will be supplied unless another code is specified.

The G950 Weep Vent is used with Manthorpe's Cavity Trays to discharge water safely from the system.

At least one should be used with each Catchment Tray and one every 450mm on Horizontal Trays to meet NHBC regulations.

G950 Weep Vent or G951 Peep Weep concealed weep can be used to discharge water in Horizontal/Refurbishment Cavity Tray applications.

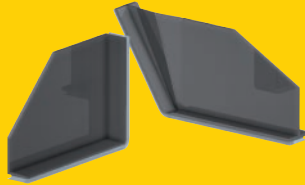
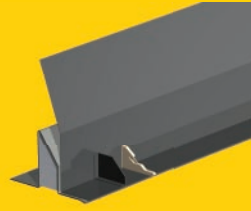
The Peep Weep provides a single point outlet in the brick fascia.

Complete Cavity Tray Systems from Manthorpe

Manthorpe can provide a free take-off service from drawings provided.

Technical data sheets are available on request to provide step-by-step guidance for each Cavity Tray fitting situation plus a technical helpline for one-to-one advice: 01773 514200.

Lintel Tray



Lintel sizes		
Code	Width (mm)	Length
GW281/5	400	5m roll
GW281/25	400	25m roll
GW282/5	463	5m roll
GW282/25	463	25m roll
GW283/5	530	5m roll
GW283/25	530	25m roll

Lintel Tray

Product Specification	
Colour	Black
Texture	Textured finish
Material	Polypropylene
Packaging	Lengths are rolled and packed into polythene bags

Fulfills NHBC and British Standard requirements.

Pre-creased to suit various lintel profiles.

Ideal for self-supporting applications.

Use with G955 Lintel Stop-End or G956 Adjustable Stop-End, Peep Weeps or Weep Vents.

Versatile lengths of 5 and 25 metres.

In response to the NHBC and British Standard requirements now stating that cavity tray / damp proof protection should be provided over all openings, either as a combined part of the lintel or separately, Manthorpe Building Products has designed a range of Lintel Trays.

The Manthorpe range of Lintel Trays is fabricated in three different sizes to fit cavity widths up to 150mm and lintel heights of 230mm. Each size is available in rolled lengths of 5 and 25 metres. The pre-creased design enables the tray to be folded to suit a variety of lintel profiles and its rigidity allows it to be self-supporting, eliminating the need to build into the inner leaf wall.

The Lintel Tray is made from tough, durable polypropylene and will protect cavity wall lintels against corrosion from moisture. When teamed with Manthorpe's Weep Vents and Stop-Ends, the flow of water is prevented from spilling over the ends of the lintel into the cavity below and redirected out through Peep or Weep Vents.

Lintel Stop-End

Product Specification	
Code	G956/G955
Colour	Black
Packing detail	50 per box
Weight	1.2kg
Material	Polypropylene

Full detailed fixing instructions are available upon request.

In addition to the G955 Lintel Stop-End, Manthorpe has designed an Adjustable Lintel Stop-End in line with current recommendations. The Adjustable Lintel Stop-End can be used with all types of lintels with its sloped rear up-stand, providing an economical and simple solution to damp proofing.

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Manthorpe House
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Codnor Gate Business Park
Ripley, Derbyshire DE5 3ND

Tel: 01773 514 200
Email: sales@manthorpe.co.uk
www.manthorpe.co.uk



References:

The Building Regulations 1991
Approved Document C4
Paragraph 4.12

B.S 8215 1991
B.S 5628 Part 3 1995

NHBC 6.1.S4 (g). External Wall
Performance Standards

Manthorpe Quality

Manthorpe manufactures a range of ventilation and building products at its headquarters in Derbyshire, under a ISO9001 Quality Assurance Scheme.

All products are designed to comply with the relevant current Building Standards when fitted in accordance with the manufacturer's instructions.

The company maintains a policy of continuous development of its product range and reserves the right to amend the specifications without notice.

