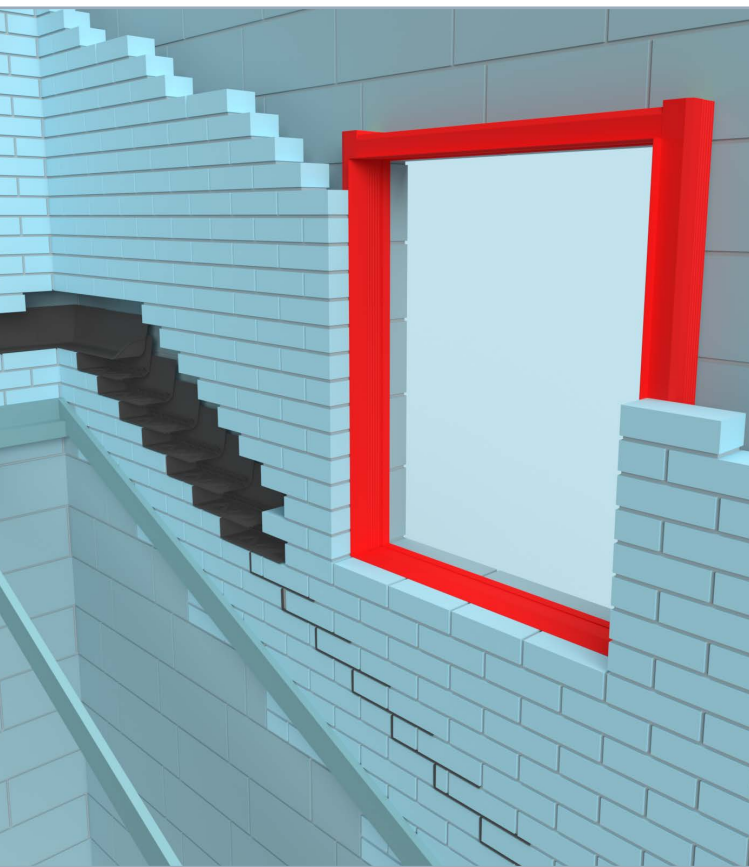


# Manthorpe

## Cavity Trays, Closers & Barriers



Tomorrow's solutions today



For over 30 years laying strong foundations for the future has always been at the heart of our company. Whether that's building long term partnerships with our customers, continued investment in our people or supplying the industry with innovative products.

As we start a new chapter in our history as a member of the Polypipe family our vision for the future could not be clearer: we believe that everyone deserves a home where they can feel safe and comfortable.

This belief is always at the core of what we do and how we do it; from conception of an idea to ensuring our intrinsic values of performance, quality and service, we don't compromise. Our objective is to provide the building industry with products and solutions to meet today's needs and the needs of future generations.

Manthorpe gives you peace of mind, every time.

# Quality cavity solutions from Manthorpe

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Whether it's a new housing development or a single property refurbishment, Manthorpe Building Products provide the building industry with tomorrow's products and solutions today.

With access to premium raw materials along with rigorous control procedures such as sampling, testing and inspecting we ensure quality parameters are met during manufacture and delivery, so developers and home owners can be secure in the knowledge that they are receiving quality finished product to the highest standards.

With continuous improvement initiatives and on-going product development, our research and development expertise is focussed on delivering new and innovative solutions for the building industry.

## Quality

All products manufactured by Manthorpe Building Products are produced in accordance with our ISO 9001 accredited policy and procedures.

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

We maintain a policy of continuous development of our product range and reserve the right to amend the specifications without prior notice.

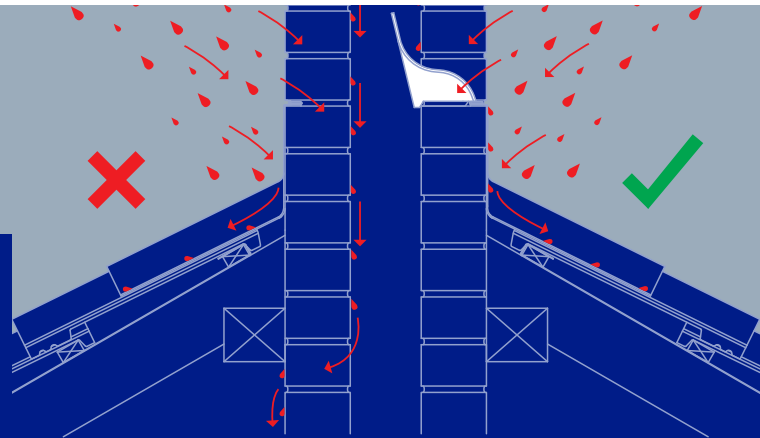
## Associations



# Cavity Trays

Providing protection from water ingress below roof abutments.

Wind driven rain can often force its way through brickwork into wall cavities. If this damp trickles down the cavity and behind an extension, the homeowner faces a major problem, the outside wall then becomes an inside wall where rain soaked bricks can cause problems in internal rooms.



Water ingress behind an unprotected abutment

A cavity tray is a damp-proof course (DPC) that crosses the cavity of a cavity wall in order to prevent dampness from permeating the internal skin of a wall.

The trays sit within the cavity and redirects water back through the external brickwork. By installing Manthorpe's cavity tray systems, rainwater is collected above the abutment allowing it to flow harmlessly away through a weep hole above the roof line, preventing dampness from permeating the internal skin of the wall.

## A tray for every occasion

The cavity and lintel tray ranges have been developed to incorporate several innovative design features to aid the installation and performance for a variety of different abutment applications:

- Stepped systems for pitched roofs
- A horizontal system for straight runs
- A refurbishment system for remedial work
- Brickwork/Stonework/Blockwork ranges
- Lintel tray range for above doorways and windows

All Manthorpe's trays can be ordered either with or without lead attached. Short, standard, or long lead is available (see page 20 for further details).

## Things to consider when specifying and installing cavity trays:

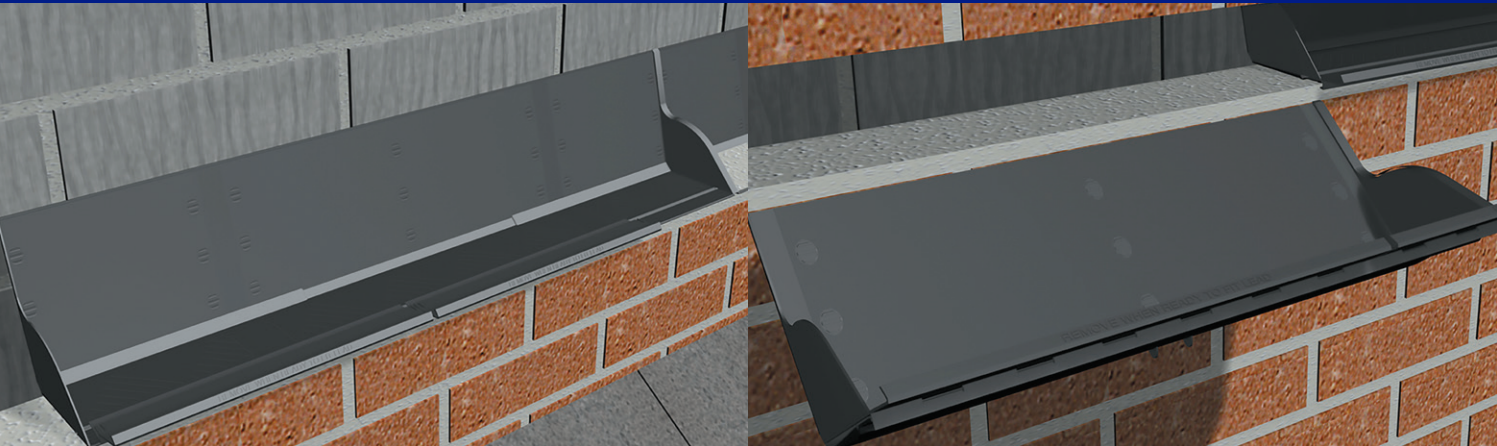
### a) Positioning of a cavity tray

For a cavity tray to function it should be positioned within a mortar bed to provide protection throughout the thickness of the skin in which it is incorporated.

### b) Cavity trays and flashing

To ensure a structure is damp proof the flashing must be located below an associated cavity tray. The flashing is required to extend into the bedding course a minimum of 25mm. The Lead Sheet Association provides guidelines on how flashings can be installed to create a satisfactory detail when installing cavity trays.

Innovative design features have been incorporated into the Manthorpe range of preformed cavity trays; aiding speed of installation and performance for a variety of abutment applications, corners including variations in cavity widths, corners, stop ends, steps and lintels. All our trays can be ordered either with or without lead attached. Short, standard or long lead is available (see page 20 for further details).



Product features

- Preformed tray holds itself rigid within the wall cavity
- Covered interlock allows for multiple trays to be linked
- Integral stop ends ensure water is collected in the tray
- Use with a peep weep to drain moisture onto the roof
- Removable mortar clip for quick and simple lead installation

The GW295 horizontal tray is designed to provide driving rain protection for external walls above straight horizontal roof abutments.

The preformed tray holds itself upright within the cavity and has integral stop ends to catch and contain any moisture that penetrates the wall. A covered hook joint feature allows adjacent trays to be linked together within the perp joint and removes the need for overlap of trays, giving a total tray effective length of 900mm. Two peep weeps must be used in conjunction with this tray, spaced in the perp joints at 450mm centres to meet NHBC standards and drain away the collected water.

The tray has a unique front mortar clip that can be easily removed once the mortar has set leaving a slot into which the lead is inserted.

Specification Guide				
Coursing Height	Bed Size	Coverage	Product Code	Box Qty
75 - 225mm	102.5mm	900mm	GW295	25

Available with short (75mm), standard (150mm) and long (300mm) drop lead.

Product features

- Ideal for remedial work, can be installed into existing walls
- Removable mortar clip for quick and simple lead installation
- Integral stop ends ensure water is collected in the tray
- Use with a peep weep to drain moisture onto the roof
- Covered interlock allows for multiple trays to be linked

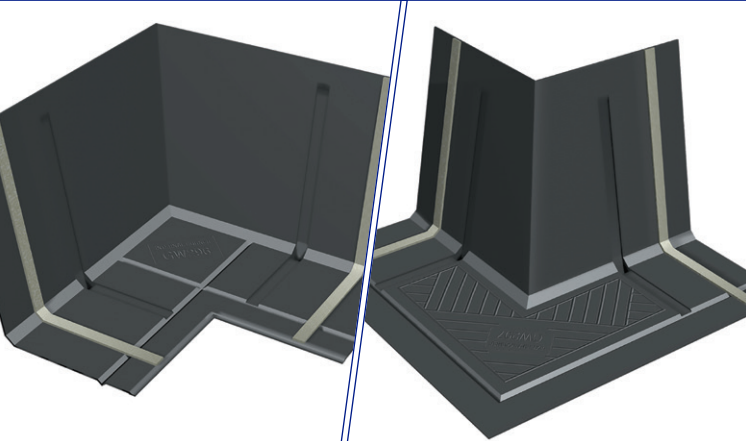
The GW294 refurbishment horizontal tray is designed to provide protection where a new horizontal roof abutment (such as single storey extension) meets an existing external wall. It can also be used where an existing cavity tray system has been found to have degraded or even left out of the wall construction altogether.

Like the longer GW295, the preformed tray holds itself upright in the cavity with stop ends to contain any moisture. A covered interlock joins adjacent trays together to create continuous runs, with each tray having an effective length of 450mm. A single peep weep should be used in each tray to allow moisture that accumulates to drain away onto the roof line. The trays can be used in conjunction with the GW295 trays when a shorter tray is required during the run.

Specification Guide				
Coursing Height	Bed Size	Coverage	Product Code	Box Qty
75 - 225mm	102.5mm	450mm	GW294	25

Available with short (75mm), standard (150mm) and long (300mm) drop lead.





Product features

- Preformed tray holds itself rigid within the wall cavity
- Location ribs ensure correct overlap with adjacent trays
- Mastic tape creates a watertight joint between trays
- Removable foam strip leaves slot for lead installation

The GW296 and GW297 internal and external corner transitions are used where a straight run of the horizontal cavity tray system is required to change direction around an inside or outside corner of a wall.

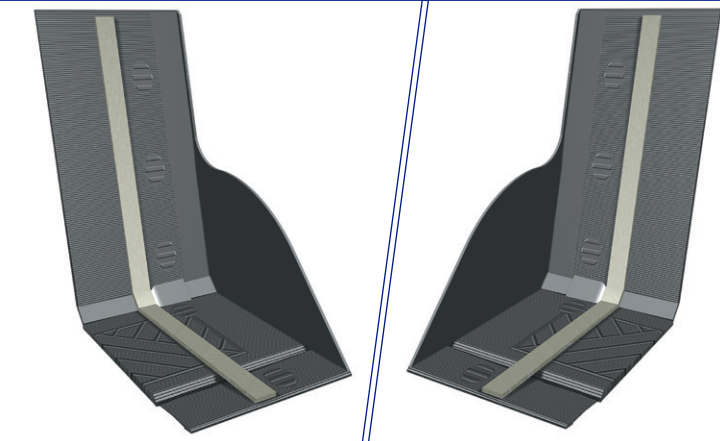
The corner units are easily joined to the rest of the horizontal system. Locating ribs ensure a positive overlap with the adjacent tray while the attached mastic tape creates a watertight bonded seal.

The trays include a foam strip positioned below the front lip of the units that is easily raked out exposing a 25mm deep aperture into which a lead blank can be inserted and secured with lead wedges.

The trays can be supplied with short, standard or long lead.

Specification Guide				
Coursing Height	Bed Size	Corner	Product Code	Box Qty
75 - 225mm	102.5mm	Internal	GW296	25
75 - 225mm	102.5mm	External	GW297	25

Available with short (75mm), standard (150mm) and long (300mm) drop lead.



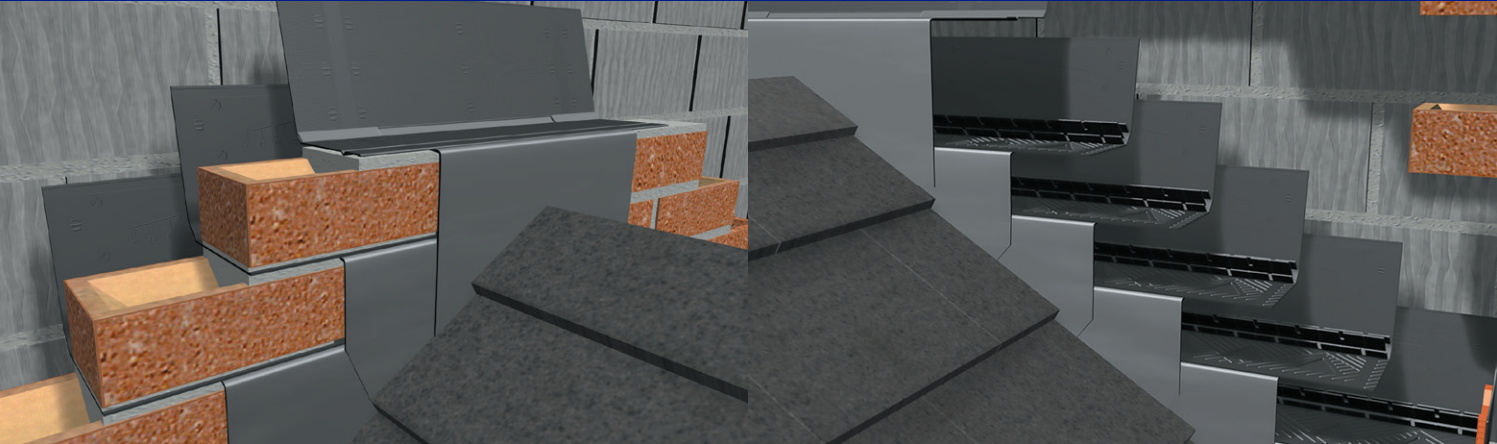
Product features

- Preformed stop end holds itself rigid within the cavity
- Mastic tape creates a watertight joint between trays
- Finishes off corner trays and cut down horizontal runs
- Handed stop ends for left and right tray terminations
- Pre-cut width ensures sufficient overlap with adjacent tray

The GW298 and GW299 left and right hand stop ends are designed for use with the horizontal cavity tray system to finish the end of a run. The stop ends prevent water from discharging off the sides of a corner unit or cut down horizontal tray and into the cavity. Each stop end is supplied with mastic tape strip, which bonds to the adjacent tray ensuring a watertight joint is achieved between the stop end and tray. Depending on the detail it may be necessary to cut down one of the horizontal trays, in these instances a stop end should be used to terminate a cut down end of the tray. Alternatively, the stop ends can be positioned on one side of an external/internal corner to provide a moisture stop for the tray as it protects around the corner of the wall.

Specification Guide				
Coursing Height	Bed Size	Hand	Product Code	Box Qty
75 - 225mm	102.5mm	Right	GW298	25
75 - 225mm	102.5mm	Left	GW299	25

Stop ends are supplied with a mastic tape strip attached.



Product features

- Preformed tray holds itself rigid within the wall cavity
- Sits at the ridge allowing moisture to drain off either side
- 731mm long for effective coverage over a range of pitches
- Removable mortar clip for quick and simple lead installation
- Manufactured from durable black polypropylene

Installed at the very top of a stepped abutment system, the GW290 apex tray is the last tray to be fitted and covers the point at which the intermediate runs meet at the ridge line.

The tray has no stop ends on either side which allows any moisture that collects on the tray to be evenly dispersed down either side of the abutment.

When planning to fit the lead after the system is installed, the tray comes fitted with Manthorpe’s unique front mortar clip, which can be removed at any time once the mortar has set leaving a 25mm deep aperture into which the lead can be inserted and secured with lead wedges.

Alternatively, a made to measure GW290 can be supplied with lead stapled and sealed to the tray.

Specification Guide				
Coursing Height	Bed Size	Pitch Range	Product Code	Box Qty
75mm	102.5mm	17.5° - 50°	GW290	25

Lead drop of 300mm (standard) available to dress down over the apex.

Product features

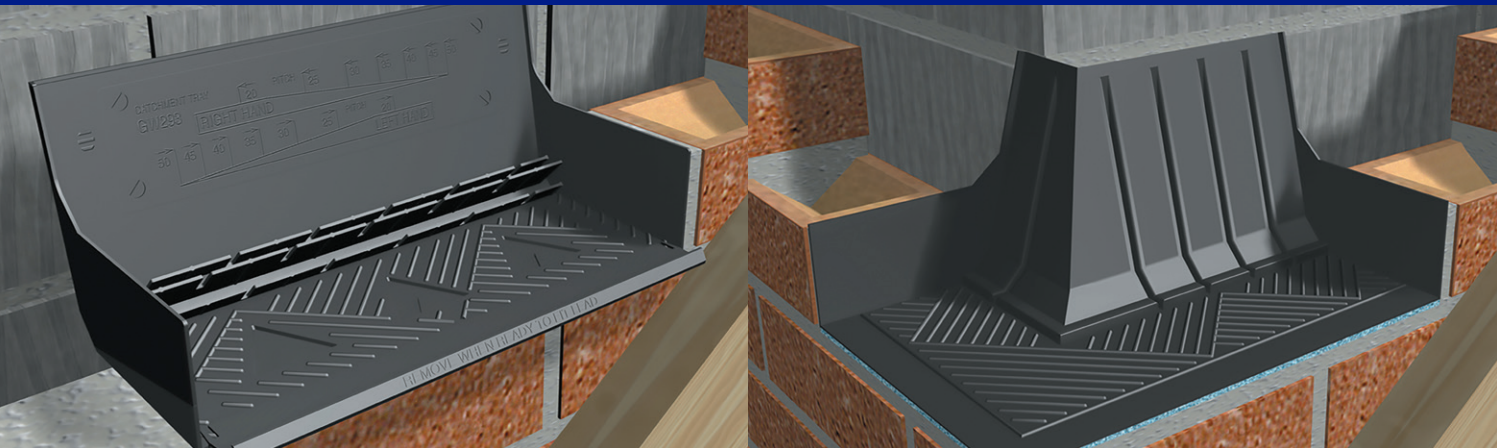
- Left and right-hand stepped trays for pitched abutments
- Preformed tray holds itself rigid within the wall cavity
- Built in stop end ensures correct water run off direction
- Angled ribs trap falling mortar ensuring clean drainage
- Removable mortar clip for quick and simple lead installation

Spaced in every course of brickwork from the top of the abutment to the bottom, the GW291 and GW292 handed intermediate trays have an integral stop end on one side. This ensures that water runs out of the tray in the correct direction, onto the tray below. Intermediate trays should be positioned in every course down the abutment, with the corner positioned 75mm off the finished roof line. The trays will overlap by at least 80mm to help prevent driving rain penetrating the outer wall and tracking across the masonry.

Along with the removable lead clip, the tray also features a unique mortar trap which ensures a clear water path by reducing the risk of mortar droppings and other debris completely blocking the tray.

Specification Guide				
Coursing Height	Hand	Pitch Range	Product Code	Box Qty
75mm	Right	17.5° - 50°	GW291	25
75mm	Left	17.5° - 50°	GW292	25

Short drop (75mm) for soakers and long drop (75+150mm) for dressing over tiles.



Product features

- Collection tray for the lower end of stepped tray runs
- Preformed tray holds itself rigid within the wall cavity
- Integral stop ends ensure water is collected in the tray
- Angled ribs trap falling mortar ensuring clean drainage
- Use with a weep vent to drain moisture onto the roof

Product features

- Collection tray for the lower end of stepped tray runs
- Used at gable edges to shield the corner from water entry
- Integral stop ends ensure water is collected in the tray
- Use with a weep vent to drain moisture onto the roof
- Preformed tray holds itself rigid within the wall cavity

The GW293 catchment tray is located at the lowest point of the abutment. Upstands at both ends of the tray ensure that the water which runs down from the trays above is collected and safely diverted out of the wall. A G950 weep vent must be used in conjunction with this tray to drain the collected water away.

The GW293 includes a removable clip allowing lead to be installed once the tray has been fitted. It also features a unique mortar trap which ensures a clear drainage path for moisture by reducing the risk of mortar droppings and other debris completely blocking the back of the tray. The catchment tray is the first tray in the stepped system to be fitted as you build your way up the wall. Once installed, ensure there is an overlap from the trays above to allow the cascade of moisture to find its way into the catchment tray.

The GW293CC handed corner catchment trays are designed for situations where a stepped roof abutment ends at the edge of an external wall to shield the corner from water entry, also where restricted space prohibits the fitting of a standard catchment tray.

The tray has upstands at both ends ensuring the water running down from the trays above is collected and safely diverted out of the wall. A G950 weep vent must be used in conjunction with this tray to drain the collected water away, diverting it out of the wall and back onto the roof line where it can safely drain away.

The trays include a foam strip positioned below the front lip of the tray that is easily raked out exposing an aperture into which a lead blank can be inserted and secured.

Specification Guide				
Coursing Height	Bed Size	Pitch Range	Product Code	Box Qty
75mm	102.5mm	17.5° - 50°	GW293	25

Short drop (75mm) for soakers and long drop (75+150mm) for dressing over tiles.

Specification Guide				
Coursing Height	Hand	Pitch Range	Product Code	Box Qty
75mm	Right	17.5° - 50°	GW293CC-RH	25
75mm	Left	17.5° - 50°	GW292CC-LH	25

Short drop (75mm) for soakers and long drop (75+150mm) for dressing over tiles.





Product features

- Left- and right-hand stepped trays for pitched abutments
- Preformed tray holds itself rigid within the wall cavity
- Adjustable stop end suits 150mm and 225mm coursing
- 448mm long tray suitable for details with a steeper pitch
- Removable mortar clip for quick and simple lead installation

Spaced in each course of block or stonework between the apex and the catchment, the short block stone handed intermediate trays have a built-in adjustable stop end on one side. This ensures that water runs out of the tray in the correct direction and onto the tray below.

Taller coursing heights of block / stonework means that the trays must travel further horizontally along a course before dropping down onto the one below. As the pitch decreases, the length of the tray required increases; the short block stone intermediate trays service a pitch range from 25°-50° (for stonework) and 35°-50° (for blockwork).

The adjustable stop end allows the trays to be used with varying coursing heights, the flexible end tab is run up the perp joint with any excess folded over the adjacent block.

Specification Guide				
150mm Range	225mm Range	Hand	Product Code	Box Qty
25° - 50°	35° - 50°	Right	GW291-SBS	25
25° - 50°	35° - 50°	Left	GW292-SBS	25

Short drop (75mm) for soakers and long drop (75+150mm) for dressing over tiles.

Product features

- Left- and right-hand stepped trays for pitched abutments
- Preformed tray holds itself rigid within the wall cavity
- Adjustable stop end suits 150mm and 225mm coursing
- 814mm long tray suitable for details with a shallower pitch
- Removable mortar clip for quick and simple lead installation

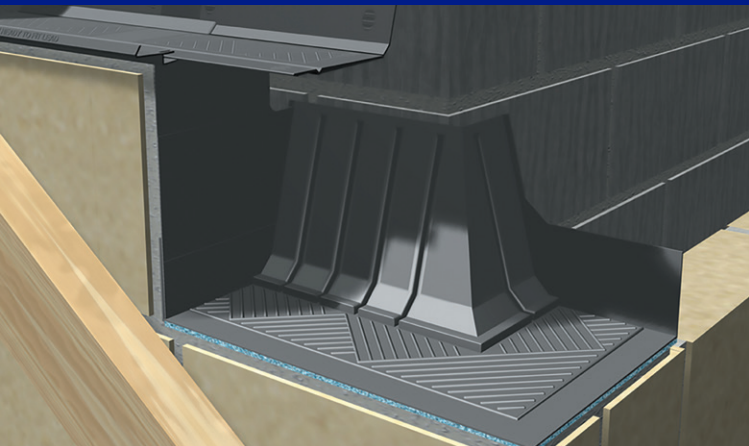
The taller coursing heights of block and stonework means that the trays have to travel further horizontally along a course than brickwork trays before dropping down onto the one below. As the pitch decreases, the length of the tray required increases; the long block stone intermediate trays service a pitch range from 12°-24° (for stonework) and 17.5°-34° (for blockwork).

Spaced in each course between the apex and the catchment, the long block stone intermediate trays have a built-in adjustable stop end on one side, allowing water to drain in the correct direction and onto the tray below.

The adjustable stop end allows the trays to be used with varying coursing heights, the flexible end tab is run up the perp joint with any excess folded over the adjacent block.

Specification Guide				
150mm Range	225mm Range	Hand	Product Code	Box Qty
12° - 24°	17.5° - 34°	Right	GW291-LBS	25
12° - 240°	17.5° - 34°	Left	GW292-LBS	25

Short drop (75mm) for soakers and long drop (75+150mm) for dressing over tiles.



Product features

- Collection tray for the lower end of stepped tray runs
- Preformed tray holds itself rigid within the wall cavity
- Integral stop ends ensure water is collected in the tray
- Angled ribs trap falling mortar ensuring clean drainage
- Use with a weep vent to drain moisture onto the roof

The GW293-BS handed block stone catchment trays are suitable for larger coursing heights typically 150mm stonework or 225mm blockwork. The catchment tray is the first tray in the stepped system to be fitted as you build your way up the wall and is located at the lowest point of the abutment.

Upstands at both ends of the tray ensure that the water, which runs down from the trays above, is collected and safely diverted out of the wall, a weep vent must be used in conjunction with this tray to drain the water away. The flexible perpend protector attached to one end of the tray prevents driving rain from penetrating the outer wall and tracking across the taller coursing of block and stonework, easily folding down to suit various heights.

Specification Guide				
Coursing Height	Hand	Bed Size	Product Code	Box Qty
150 - 225mm	Right	100mm	GW293-BSRH	25
150 - 225mm	Left	100mm	GW292-BSLH	25

Short drop (75mm) for soakers and long drop (75+150mm) for dressing over tiles.

Product features

- Collection tray for the lower end of stepped tray runs
- Used at gable edges to shield the corner from water entry
- Integral stop ends ensure water is collected in the tray
- Use with a weep vent to drain moisture onto the roof
- Preformed tray holds itself rigid within the wall cavity

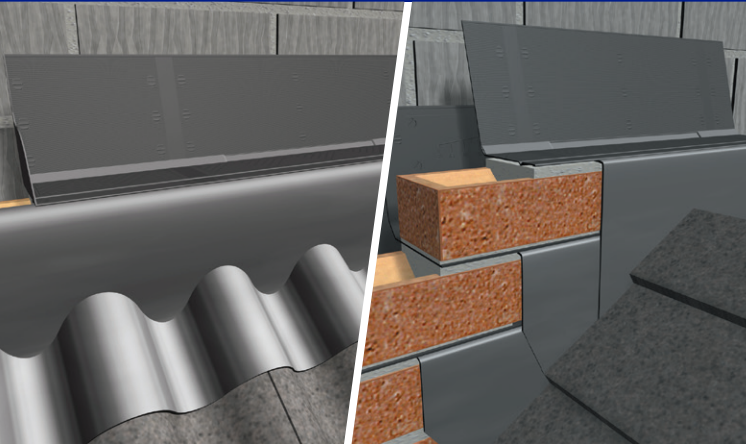
The GW293CC-BS handed block stone corner catchment trays are designed for situations where an abutment ends at an edge of a wall to shield the corner from water entry, and where restricted space prohibits the fitting of a standard catchment tray. The trays are suitable for larger coursing heights typically 150mm stonework or 225mm blockwork.

The tray has upstands at both ends of the tray to ensure that the water which runs down from the trays above is collected and safely diverted out of the wall. The flexible perpend protector prevents driving rain from penetrating the outer wall and tracking across the masonry.

The corner trays include a foam strip positioned below the front lip of the tray that is easily raked out exposing an aperture into which lead can be inserted and secured.

Specification Guide				
Coursing Height	Hand	Bed Size	Product Code	Box Qty
150 - 225mm	Right	100mm	GW293CC-BSRH	25
150 - 225mm	Left	100mm	GW292CC-BSLH	25

Short drop (75mm) for soakers and long drop (75+150mm) for dressing over tiles.



**Product features**

- Trays are unleaded as standard with removable mortar clip
- Leaded trays available with a pre-cut blank of lead attached
- A replacement lead option is also available

**Product features**

- Self-adhesive backing for secure fixing
- Material has no scrap value
- Indistinguishable from traditional lead
- Highly flexible and easily workable
- No specialist tools required for installation
- Available in 4 different rolls widths

The Manthorpe range of abutment cavity trays can be supplied unleaded or with factory fitted lead stapled and sealed securely to the front edge of the tray if requested.

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

The stepped range can be supplied with short lead (75mm) or long lead (150mm) attached to dress over tiles. Short lead is typically used in conjunction with an abutment soaker, with the lead overlapping down over the upstand. Long lead is recommended where profiled tiles are used, the lead is then dressed over to mould into the contours of the tiles.

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

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.

Detailed lead installation sheets are available from Manthorpe on request.

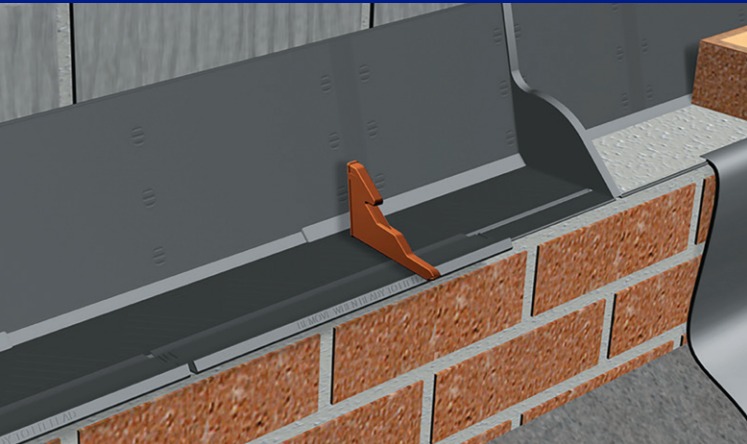
The modern alternative to lead flashing.

The Manthorpe SmartFlash roll is a modern alternative to traditional lead flashing. The versatile self-adhesive flashing can be used in a wide variety of details to weather the joints between numerous construction elements.

Quick and easy to work with SmartFlash can be installed on virtually all roofing substrates down to a minimum slope of 5 degrees and in temperatures ranging between 40°C to 90°C.

Specification Guide				
Colour	Roll Width	Coverage	Roll Length	Box Qty
Anthracite	560mm	5000mm	GWSF-560	1
Anthracite	370mm	5000mm	GSWF-370	1
Anthracite	280mm	5000mm	GSWF-280	1
Anthracite	140mm	5000mm	GSWF-140	2





Product features

- Drains water from DPC, lintels and abutment cavity trays
- Sits discreetly within the perp joint between two bricks
- Available in multiple colours to suit various substrates
- Built in drip lip sheds moisture away from the brick face
- Prevents the ingress of insects into the cavity wall void

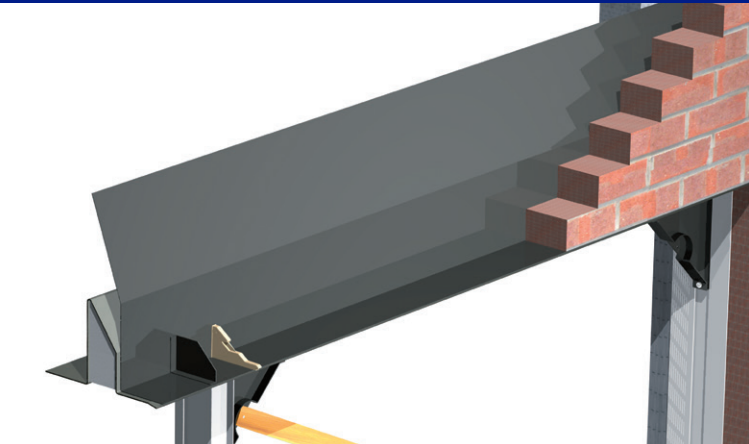
The G951 peep weep provides an unobtrusive solution to cavity wall drainage requirements. The protective hood which when fitted “peeps” out from the brick is designed to guard against blockage during installation and stops penetration of wind driven rain. The exit hole allows for drainage but is small enough to keep out large insects.

They should be spaced at no greater than 900mm centres when fitted over a DPC but to meet NHBC guidelines for lintels “weep holes are recommended to be sited at every 450mm maximum with at least two per opening above all windows and doors”.

The peep weep should be simply fitted in open perp joints and mortared in position leaving approximately 10mm protruding from the brick face. The mortar key ties into the building fabric and an external rib aids in positioning.

Specification Guide			
Free Vent	Size (mm)	Product Code	Box Qty
N/A	9 x 65 x 100	G951	100

Available in buff, terracotta, brown, black, clear and blue/black.



Product features

- Pre-creased rolled up tray for faster installation on site
- Trays available to suit different heights of insulated lintel
- Rolls come in versatile lengths of 5 and 25 metres
- Both fixed and adjustable stop-end units are available
- Can be easily cut to the required length on site

The range of lintel trays come in three sizes to suit cavity widths up to 150mm and lintel heights of 230mm, they are available in rolled lengths of 5 and 25 metres. Its pre-creased design enables the tray to be folded to suit a variety of lintels profiles and its rigidity allows it to be self supporting. This eliminates the need to build into the inner leaf wall.

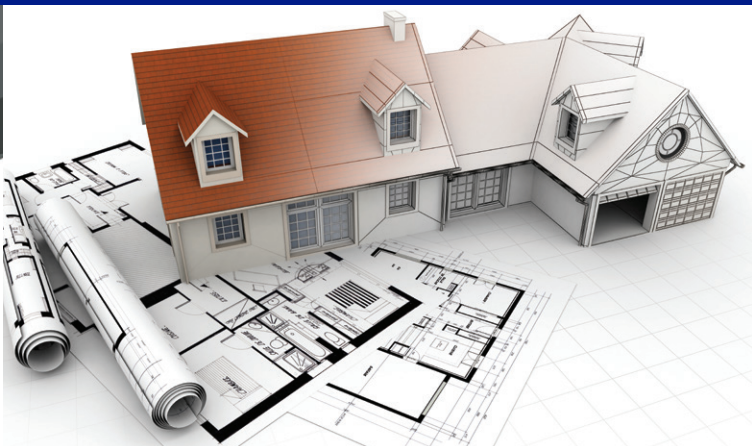
The lintel trays are designed in response to NHBC and BS requirements. These state that cavity tray or damp proof protection should be installed over all openings.

The rolls are tough and durable to help protect lintels against corrosion from moisture. Any water collects on the tray and is contained by the stop ends and directed out through peep or weep vents.

Specification Guide				
Lintel Height	Roll Width	Bed Size	Product Code	Roll Lengths
100mm	400mm	100mm	GW281	5M and 25M
163mm	463mm	100mm	GW282	5M and 25M
230mm	530mm	100mm	GW283	5M and 25M

Both 5 and 25 metre lengths come rolled, taped and sealed in a polythene bag.





Product features

- Stop end units to prevent water spilling over edge of tray
- Mastic tape strip allows for quick and easy installation
- Stop ends available to suit lintels with a 90° upstand
- Adjustable stop end units for sloping lintels also available
- Should be used in conjunction with weep and peep vents

Complete solutions for builders, architects and developers

The G955 and G956 lintel stop ends are designed to prevent water spilling off the ends of lintels into the cavity below causing damage and expensive repairs. In line with NHBC guidelines, water landing on the lintel tray is contained by the stop ends and drains away through weep holes.

The G955 stop ends are supplied in pairs for convenience on site and the attached adhesive tape also ensures that a tightly bonded joint is achieved between the stop end and lintel tray. For lintels with a 90° rear upstand we recommend the use of our G955.

The G956 adjustable lintel stop end can be used with all types of lintels having a sloped rear upstand. The back of the stop end is designed to fold back and forth to fit the angle of various sloped lintel types.

For larger projects we offer builders, architects, and developers a free of charge, project specific take-off service for abutment cavity trays. Simply send us the elevation drawings and we can calculate the type and quantity of trays you require for your project.

Whether it is a simple straight run, or a complex stepped abutment that wraps around two corners, Manthorpe’s in-house specialists can review project drawings and advise the builder of the right type and quantity of cavity trays they require for their project.

Send your enquiries to [mbp.takeoffs@manthorpebp.co.uk](mailto:mbp.takeoffs@manthorpebp.co.uk) along with the details of the wall construction and the elevation drawings of the job, quotes can be easily produced on a specific detail, whole plot or an entire site.

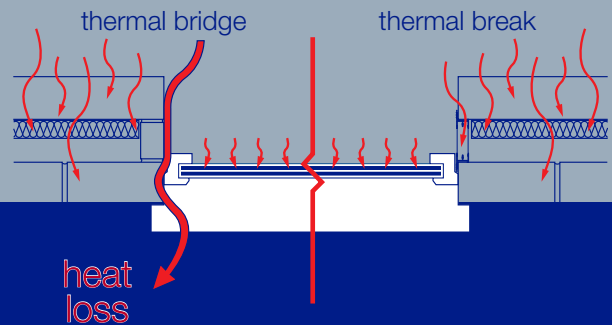
Specification Guide				
Adjustable	Mastic Joint	Colour	Product Code	Box Qty
No	Yes	Black	G955	50*
Yes	Yes	Black	G956	50

\* The G955 stop ends are handed and sold as a pair, each box contains 25 pairs.

# Cavity Closers

## Thermal bridging solutions for window and door reveals

Poorly insulated door and window reveals can lead to significant heat loss and damp issues. Manthorpe's Thermal Cavity Closers provide a versatile solution to cold bridging problems. They also act as a vertical DPC by closing off the cavity without the need to return the blockwork.

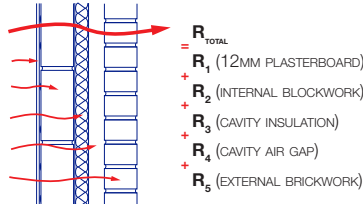


Typical example of a cold bridging issue which results in heat loss through a poorly insulated window reveal.

## Thermal values

To help improve energy efficiency, modern building practices measure the thermal performance of every aspect of a building's construction.

The thermal resistance of a building material such as a brickwork wall or concrete floor is referred to as its 'R-Value'. As buildings are seldom built from a single material, the total R-Value of an assembly is the sum of the resistance of the individual construction elements added together.



In most aspects of cavity wall construction, the building elements are sandwiched together to provide multiple barriers to prevent the heat escaping from the property, as shown above. Heat must pass all the way through one material before it gets to the next, so any heat that is blocked by one material is blocked the rest of the way.

## Thermal bridging

In certain details however, such as around window and door reveals, a single element supporting a window frame can span the distance from inside to outside. These details can create what is known as a thermal bridge, where heat bypasses the layers of the insulated cavity wall and takes the path of least resistance across the single material, creating a cold bridge. Common issues that occur when there is a cold bridge are damp patches and mould growth within the inside face of the window or door reveal.

Thermal bridging can be avoided by placing insulation between the elements of the component that is creating the cold bridge, providing a thermal break. The Manthorpe range of cavity closers offers an economical solution to closing the cavity at window and door reveals while also solving cold bridging problems. The cavity closers also act as an effective vertical damp proof course (DPC), ensuring compliance with Building Regulations.

The lightweight closers are available in a wide range of sizes to suit many cavity widths and are quick and simple to install, requiring no special tools. Lengths can be simply cut with a saw; the PVC flanges and fixing clips provide a secure method of fixing. The closer can be used in individual lengths, or some may be preformed into frames or fixed directly onto window and door frames prior to installation.

Fire rated cavity closers are made to measure rigid frame formers are also available to provide a cavity closing solution for any eventuality.



Product features

- Double flange feature supports the closer in the reveal
- Closer sizes available to suit a variety of cavity wall widths
- Lengths easily joined without loss of thermal efficiency
- Fixing clips allow the closer to be tied into the masonry
- Corner clips can be used to make window frame formers

The G240 cavity closer has a double flange feature for use in standard window reveal details, providing an economical solution to cold bridging problems and is available in a range of sizes to suit varying cavity widths. The closer also acts as a vertical DPC barrier, however a DPC is still recommended in horizontal applications.

The closer is easily installed in individual lengths and can be used in individual lengths or pre-formed into formers and fixed directly on to window and door frames. Lengths are easily cut with a saw and joined together, with no loss of thermal efficiency, allowing smaller offcut lengths to be reused.

Specification Guide			
Length	Cavity Widths Available	Product Code	Box Qty
2.5m	50mm up to 150mm*	G240	6 lengths

\* Additional closer widths are also available to order to suit cavities up to 350mm.

Product features

- Single flange designed for rebated or ‘check’ reveals
- Closer sizes available to suit a variety of cavity wall widths
- Lengths easily joined without loss of thermal efficiency
- Fixing clips allow the closer to be tied into the masonry
- Corner clips can be used to make window frame formers

In areas of high exposure that are subject to severe weather conditions, it is common practice to position the window frame behind a rebate in the outer leaf at the jamb, this is sometimes referred to as a check reveal.

The G242 cavity closer is designed to work in a check reveal detail, making it suitable for use in exposure zones up to and including zone 4 (very severe).

In a rebated opening, the two cavity leaves are not in line, so a conventional double flanged cavity closer would not sit level across them. The G242 is a single flange cavity closer, which is suited to rebated openings, with the flanged edge resting on the internal leaf and the other butting up to the rebated outer leaf. The G245 fixing clips can still be used to tie the flangeless edge of the closer into the outer leaf, securing it in position.

Specification Guide			
Length	Cavity Widths Available	Product Code	Box Qty
2.5m	50mm up to 150mm*	G242	6 lengths

\* Additional closer widths are also available to order to suit cavities up to 350mm.



Product features

- Ties allow the closer to be built into the masonry coursing
- Mountable in different orientations to suit many details
- Vertically adjustable to slot into various coursing heights
- Can be used to join multiple lengths of closer together
- Right angled clips allow the creation of window formers

G245 fixing clips enable the closer to be fixed securely to the brickwork, the clips slide into the fixing channel in the supporting flanges allowing variable height adjustment to match brick courses. The clip has alternative fixing legs at each end to enable the tie to be used at either 30 degrees or 60 degrees.

Lengths of the cavity closer can be joined together using the clips ensuring that the butt joints slope down at 45 degrees to the outer leaf. A minimum of four ties should be used per window jamb, two near the top (one in each leaf) and two near the bottom.

The G246 right angle clip allows for the formation of 90° joints between lengths of closer when constructing cavity window formers.

Specification Guide

Closer Joint Type	Fixing Tie for Masonry	Product Code	Box Qty
Straight	Yes	G245	100
Right angle	No	G246	50

A recommended eight clips should be ordered per 2.44m length of cavity closer.

Product features

- Can be used to close arched and round window reveals
- Single and double flange profile versions are available
- The flexible closers have a minimum diameter of 500mm
- Available in a range of sizes to suit various cavity widths
- Straight and flexible lengths can easily be joined together

The G243 and G244 flexible cavity closers allow for arched and round window and door openings to be easily incorporated into building designs without compromising insulation requirements.

The flexible cavity closers are available in two alternative profiles; the G243 cavity closer has a double flange to suit standard cavities while the G244 is suitable for rebated details with its single flange design. Both are suitable for closing the cavity at circular or arched openings with a minimum diameter of 500mm. Straight closer runs can be easily joined to curved runs to make arched tops.

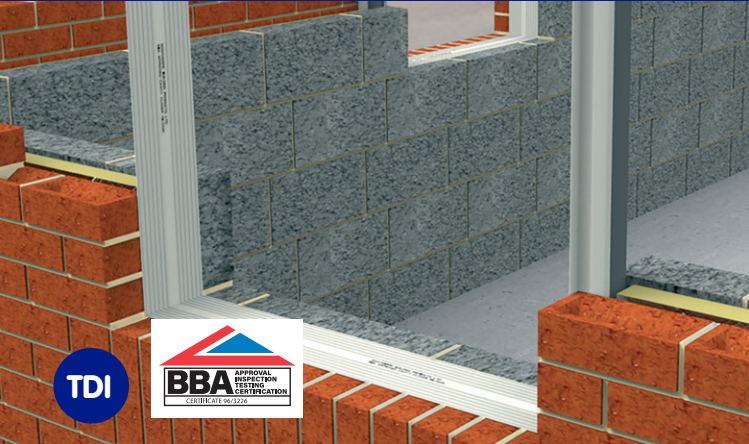
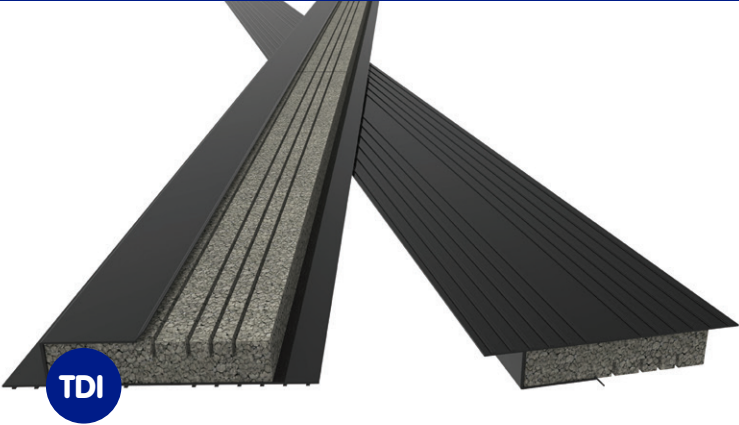
Any larger openings can be easily produced, from domestic bullseye windows to large commercial applications, through a unique joining clip system and flexible capability.

Specification Guide

Length	Cavity Widths Available	Product Code	Box Qty
2.5m	50mm up to 150mm*	G243	To order
2.5m	50mm up to 150mm*	G244	To order

\* Additional closer widths are also available to order to suit cavities up to 350mm.





Product features

- The MULTICOREXL244 Cavity Closer suits standard cavity widths between 50mm and 100mm.
- The MULTICOREXL244 can be quickly and accurately cut down by the user to suit various widths of cavity by using the groove guides.

Product features

- The WCMULTICOR Cavity Closer suits standard cavity widths between 50mm and 100mm.
- It provides an economical solution to cold bridging problems at window and door reveals, not only providing a thermal break to the cavity but also acting as an effective vertical DPC barrier at the jambs.

The TDI range (pages 32 - 36) of insulated DPCs and thermal insulation systems, has been designed to comply with the thermal resistance requirements of Part L Building Regulations.

The MULTICOREXL244 provides an economical solution to cold bridging problems at window and door reveals, not only providing a thermal break to the cavity but also acting as an effective vertical DPC barrier at the jambs.

The MULTICOREXL244 closer achieves the required Thermal Resistance (R Value) at the reveal of door and window openings when the frames are fixed to allow a 30mm overlap into the cavity.

The WCMULTICOR can be quickly and accurately cut down by the user to suit various widths of cavity by using the groove guides.

The WCMULTICOR closer achieves the required Thermal Resistance (R Value) at the reveal of door and window openings when the frames are fixed to allow a 30mm overlap into the cavity.

Specification Guide

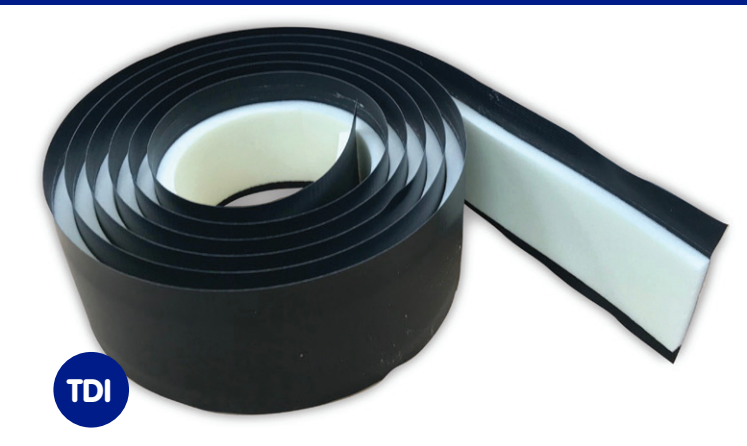
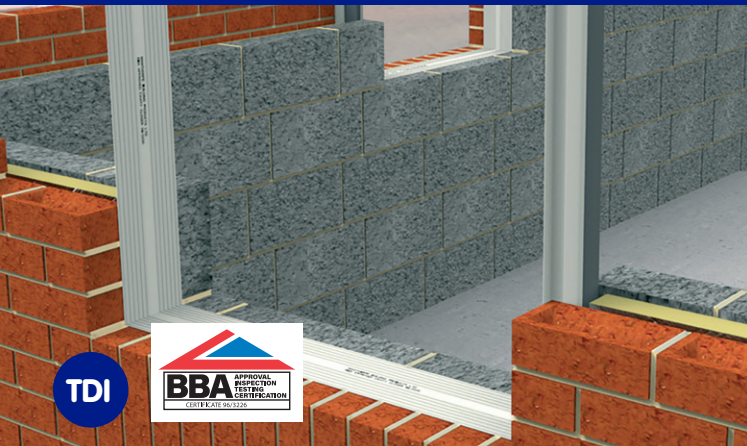
Length	Cavity Widths	Product Code	Pack Qty
2.44m	50mm – 100mm	MULTICOREXL244	6 lengths

\* Initial width 100mm, cut to suit smaller widths using the grooved guides.

Specification Guide

Length	Cavity Widths	Product Code	Pack Qty
2.44m	50mm – 100mm	WCMULTICOR	6 lengths

\* Initial width 100mm, cut to suit smaller widths using the grooved guides.



Product features

- The WCMULTICOR150 Cavity Closer suits standard cavity widths between 100mm and 150mm.
- It provides an economical solution to cold bridging problems at window and door reveals, not only providing a thermal break to the cavity but also acting as an effective vertical DPC barrier at the jambs.

Product features

- Supplied in 6 metre rolls
- Provides thermal break at the reveal
- No special fixings required during installation

The multi width closer can be quickly and accurately cut down by the user to suit various widths of cavity by using the groove guides.

The WCMULTICOR150 closer achieves the required Thermal Resistance (R Value) at the reveal of door and window openings when the frames are fixed to allow a 30mm overlap into the cavity.

Specification Guide			
Length	Cavity Widths	Product Code	Box Qty
2.44m	100mm – 150mm	WCMULTICOR150	6 lengths

\* Initial width 150mm, cut to suit smaller widths using the grooved guides.

Damcor is an insulated DPC to provide a simple solution to thermal bridging where the cavity is closed, using a returned block work detail.

Specification Guide					
Length Per Roll	DPC Width /A	Insulation /B	Insulation /C	Product Code	Bag Qty
6m	165mm	100mm	18mm	DC165	8
6m	225mm	150mm	18mm	DC225	6



- Supplied in 10 metre rolls
- Provides thermal break at the reveal
- Will act as a 30 minute fire barrier

## Specification Guide

Length Per Roll	DPC Width /A	Insulation /B	Insulation /C	Product Code	Bag Qty
10m	165mm	100mm	25mm	GSC165	5
10m	225mm	150mm	25mm	GSC225	5

# REDSHIELD®



## THE ONE-PRODUCT CAVITY BARRIER

Only available from **Manthorpe**

See pages 39 - 41

## Cavity Barriers

Thermal bridging solutions for  
window and door openings

REDSHIELD® is a true-one product cavity barrier which provides the necessary thermal and DPC properties without depending on specific build and material details to fulfil the requirements of a cavity barrier.

REDSHIELD'S unique construction allows the product to be adaptable to suit various cavity sizes, helping to maintain a continuous seal to a range of cavity widths especially those that may 'stray' in size. The ability to shrink and grow to fill a varying cavity gap, offers a more effective barrier in the event of a fire, expanding significantly to block off any wider gaps and subsequently holding itself secure within the opening.

Easily incorporated either in a new build or refurbishment situation and with no special fixing requirements or tools REDSHIELD® once installed, will last the lifetime of the building.

REDSHIELD® Cavity Barriers are currently available in four size configurations, plus rebated versions.

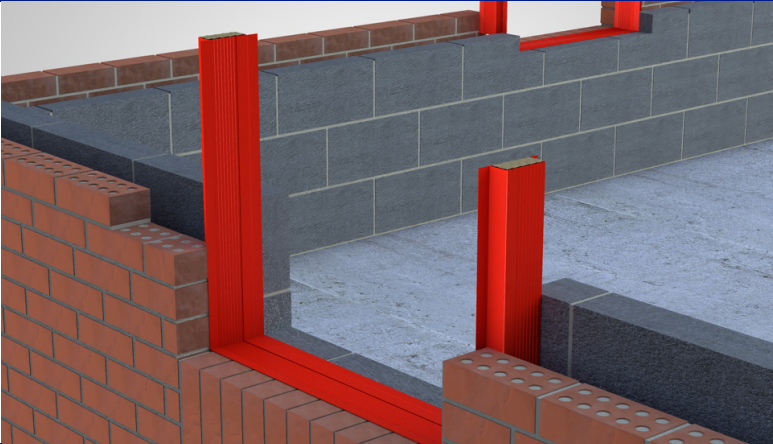
### Product features

- True one-product cavity barrier
- REDSHIELD® cavity barriers exceed the mandatory 30 minutes' fire integrity and 15 minutes' insulation requirement as per building regulation approved document B.
- Closer sizes available to suit a variety of cavity wall widths
- Rigid box section design contains a mineral fibre insulation
- Provides an economical solution to cold bridging acting as a thermal cavity closer, DPC and cavity fire barrier
- Tested by Warringtonfire to BSEN1366-4:2006+A1:2010, independently of other barrier detail

For further information visit

[www.manthorpebp.co.uk](http://www.manthorpebp.co.uk)





Product features

- REDSHIELD® cavity barriers are designed for use where a thermal cavity closer, DPC and cavity fire barrier is required to seal cavities around window and door reveals of a building.

Product features

- Easily incorporated either in a new build or refurbishment situation and with no special fixing requirements or tools REDSHIELD once installed, will last the lifetime of the building.

The construction incorporates a mineral fibre wool insulating core which provides 30 minutes' fire barrier and 15 minutes' insulation as well as providing a solution to cold bridging problems acting as a thermal cavity closer, DPC and cavity fire barrier.

Specification Guide			
Length	Cavity Widths	Product Code	Box Qty
50 – 71.4+ /-2mm	50mm – 70mm	RED/50/70	3 lengths
70 – 91.4+ /-2mm	70mm – 90mm	RED/70/90	3 lengths
90 – 111.4+ /-2mm	90mm – 110mm	RED/90/110	3 lengths
110 – 131.4+ /-2mm	110mm – 130mm	RED/110/130	3 lengths

Fire Rating testing for the 30 minutes' integrity and 15 minutes' insulation of the cavity barriers was carried out by Warrington Fire Research, test report No. 413654.

Specification Guide			
Length	Cavity Widths	Product Code	Box Qty
50 – 71.4+ /-2mm	50 – 70mm	RED/50/70R	3 lengths
70 – 91.4+ /-2mm	70 – 90mm	RED/70/90R	3 lengths
90 – 111.4+ /-2mm	90 – 110mm	RED/90/110R	3 lengths
110 – 131.4+ /-2mm	110 – 130mm	RED/110/130R	3 lengths

# Rigid Frame Formers

Dummy window frame former and cavity closer in one product

Structural window openings need to be created to suit the exact specifications of the glazed unit that will fit into it. A dummy former the size of the window is installed at sill level to build the rest of the opening around, providing a perfectly proportioned square opening.

The Manthorpe rigid frame former is a faster, more efficient and cost-effective alternative to made on-site timber equivalents. The units are a dummy former and cavity closer rolled into one; they are strong, quick to install and are designed to improve efficiency and save man hours.



# Take-off Service

Project specific

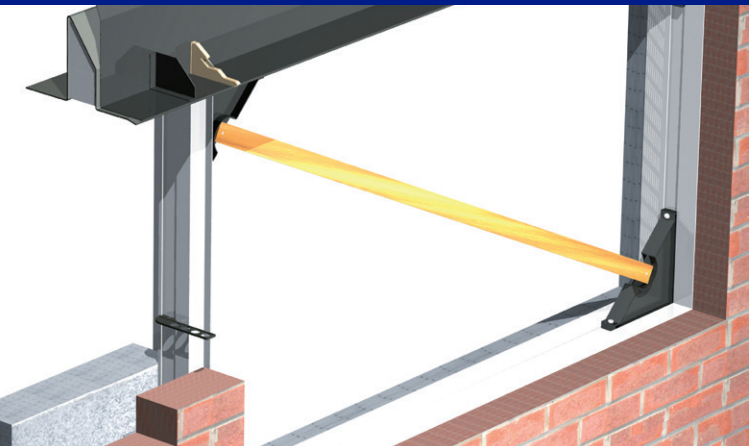
For larger projects we offer builders, architects and developers a project specific take-off service. Send your enquiries to [mbp.takeoffs@manthorpebp.co.uk](mailto:mbp.takeoffs@manthorpebp.co.uk) along with the details of the structural opening information or window schedule.

Once we have your structural information we will calculate the size of the openings and supply Manthorpe rigid frame formers specific to that particular development, streamlining operations, saving more time and increasing efficiency even further.

## Ready assembled or flat packed

Choose the option that suits you best – either ready assembled or cut-to-length, palletised flat packs. Easy to transport and easy to store on-site, the flat pack version has proven to be extremely popular in tests, reducing clutter (no more piles of frames) and leading to quicker, better organised ways of working. Assembly is easy and fast – just click to fit.





Product features

- Double flange feature supports the closer in the reveal
- Closer sizes available to suit a variety of cavity wall widths
- Fixing clips allow the closer to be tied into the masonry
- Corner clips can be used to make window frame formers

The rigid frame former eliminates site clutter that arises from dummy timber frames, which are prone to damage when left lying around. The product provides a framework for the masonry construction around the window aperture and remains in place as a base for the window frame.

The G280 and G282 rigid frame former provides a time saving solution to cold bridging problems around window and door reveals. The rigid design allows the cavity walling to be built up to the frame without the need to manufacture dummy window formers, overcoming more traditional methods of window construction. Strong and extremely simple to install and available in a multitude of widths, the product has been designed to improve efficiency, speed up installation and cut down on the need for on-site fabrication.

The frame formers achieve the required thermal break and vertical DPC at the reveal of the window and door openings when fixed to allow a 30mm overlap into the cavity. This applies to sills, doors and rebated reveals (G282 profile).

Secured with self-tapping screws, quick-fit corner braces and horizontal battens ensure that rigidity is maintained. For larger doors and windows, where rigidity is required, a re-usable diagonal brace is also provided.

Specification Guide

Flange Type	Cavity Width	Product Code	Delivery Type
Double	75mm	G280-75FF	Made Up
Double	85mm	G280-85FF	Made Up
Double	90mm	G280-90FF	Made Up
Double	100mm	G280-100FF	Made Up
Double	110mm	G280-110FF	Made Up
Double	120mm	G280-120FF	Made Up
Double	130mm	G280-130FF	Made Up

FF refers to made up frame, to order a flat pack version replace FF with FP

Specification Guide

Flange Type	Cavity Width	Product Code	Delivery Type
Single	75mm	G282-75FF	Made Up
Single	85mm	G282-85FF	Made Up
Single	90mm	G282-90FF	Made Up
Single	100mm	G282-100FF	Made Up
Single	110mm	G282-110FF	Made Up
Single	120mm	G282-120FF	Made Up
Single	130mm	G282-130FF	Made Up

FF refers to made up frame, to order a flat pack version replace FF with FP





# Manthorpe

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