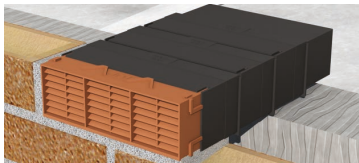
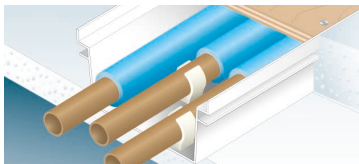


Manthorpe

Plumbing & Drainage Guide



Pipe guides & seals

A significant development in reducing air leakage & heat loss

Inexpensive, quick and easy to fit, the radiator pipe guide and seals provide a highly effective air leakage barrier, conserving energy and reducing householder's fuel costs. For builders, it is an ingeniously simple way of complying with the Part L Regulations regarding air tightness.

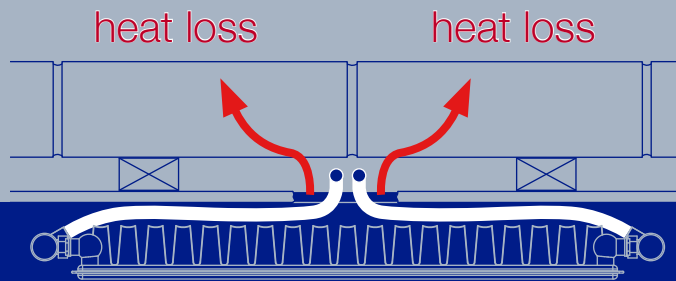


Illustration shows the potential air leakage path through the pipe penetration directly behind the radiator.

Losing heat, losing money ...

To comply with the Part L Building Regulations to make new homes more energy efficient, the area behind central heating radiators where the pipes exit the wall has been identified as a key point of heat loss.

Because there has been no satisfactory method of properly sealing this area, many installations leave gaps around pipes that allow heat to escape and bills to be pushed up. Installations such as that shown below are all too common, and can lead to a failure of the now mandatory pressure test of new houses.



Understanding the problems

As the number of pressure test failures attributed to air leakage behind the radiator increased, a number of major UK house builders sought to resolve the issue.

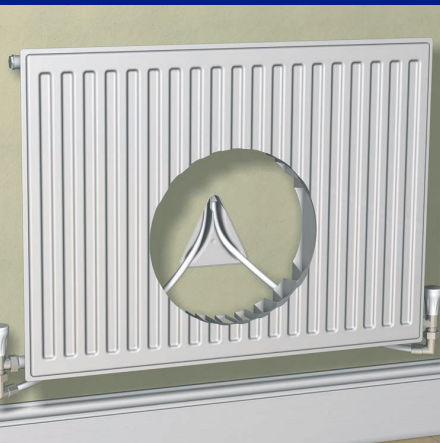
After several unsuccessful ventures, one of the leading house builders approached Manthorpe with the problem. Manthorpe were able to work in conjunction with on site contractors and the house builders themselves to better understand the issues and develop the right solution.

Sealing the deal

Designed specifically for new build homes, where plastic pipe work is used in the central heating system, the radiator pipe guide and seals provide a complete solution to this problem by ensuring there are no gaps around the penetration through which heat can be lost.

In addition, their innovative guide feature directs the pipes at the optimum angle to corners of the radiator, preventing kinks, twists and the sagging of the pipes below the bottom edge of the radiator.

Inexpensive, quick and easy to fit, the radiator pipe guide and seals provide a highly effective barrier, conserving energy and reducing householder's fuel costs. For builders, it is an ingeniously simple way of complying with Part L building regulations regarding air leakage.



Radiator pipe guide & seal



Product Features

- Allows accurate installation with four secure fixing points
- Pipe guides eliminate kinks and help prevent pipe sag
- Clamps hold the pipe work securely to prevent chaffing
- Edge gasket seals around the opening to prevent air leakage
- Skim-bead provides guide for plastering up to the edge

The patented GRS radiator pipe guide and seal provides an impermeable barrier at the point at which radiator pipes penetrate through the plasterboard, an area identified as a key point for the loss of heat.

Designed for use with increasingly popular plastic pipe work, the seal ensures there are no gaps around the penetration through which heat can be lost. The innovative design also guides the pipes to the radiator, preventing kinks and twists.

The unit fits to the internal blockwork or stud wall behind the dry lining, directly behind where the radiator will sit. It guides the pipes through the plasterboard at the ideal angle to the radiator valves without kinking, chaffing or sagging problems. The flexible surround provides a draught seal around the detail which helps builders to achieve the new air leakage requirements of part L of the building regulations.

Specification Guide

Product Code	Pipe Size	Plasterboard Penetration	Box Qty
GRS	ø 10mm	Triangular	20

The seal can be mounted to noggins in a stud wall or directly onto blockwork.



Face-fix radiator pipe seal



Product Features

- Seals onto the plasterboard allowing for accurate installation
- Rubber grommets secure the pipes and prevent air loss
- Pipes exit at the optimum angle to avoid kinking / sagging
- The integral flexible perimeter seal prevents air leakage
- Held by 3 secure fixing points offset from the penetration

The GRS-FF face-fix version of our best selling radiator pipe guide and seal is designed to allow the product to be fitted at the final fix plumbing stage. Once installed the pipe grommets and perimeter seal provides an effective barrier for the loss of warm air through pipe penetration points behind radiators.

The face-fix nature of the product enables the user to detail around both block and particularly studded wall details without any additional preparation work. Simply pull the pipes through a hole in the dry lining and then feed them through the product. The seal can then be screwed in position to close off the detail.

The angled grommets also serve to guide the pipes to the corner valve positions and will work with pipes coming from below, above or from the side of the radiator.

Specification Guide

Product Code	Pipe Size	Plasterboard Penetration	Box Qty
GRS-FF	ø 10mm	ø 90mm hole	20

The centre of the hole should be 125mm from the bottom edge of the radiator.



Single exit radiator pipe seal



Product Features

- Can be orientated in any direction to aid pipe alignment
- Rubber grommet secures the pipe and prevent air loss
- Sealant channel on the reverse to prevent air leakage
- Convex design helps to ensure air tight seal when fitted
- Held by 2 secure fixing points offset from the penetration

The GRS-SE single exit radiator pipe guide & seal has been developed for use with larger radiator units. It is particularly suited to situations when using a larger radiator which has a third mounting bracket running down the centre of the radiator and where the distance from the centre of the radiator to the valves is large enough to cause excessive pipe sag which could become visible below the bottom of the radiator.

Due to the face-fix nature of the product, it is also well suited to studded wall details. The product should be placed close to the radiator valves in a position which avoids conflict with the outer two radiator brackets and provides an uninterrupted route between the pipe and the valve.

The seal can be fixed in any orientation to allow the pipe work to exit in whatever direction is required.

Specification Guide

Product Code	Pipe Size	Plasterboard Penetration	Box Qty
GRS-SE	ø 10mm	ø 60mm hole	20

One seal is required per radiator valve.



4 inch soil pipe seal



Product Features

- Addresses the air leakage issues of soil pipe penetrations
- The seal splits apart for easy fitting to pre-installed pipes
- The halves clamp together to create a seal around the pipe
- Membrane seals the air path around the pipe penetration
- Can be dressed up into tight corners and around walls

The GPS4 4 inch soil pipe seal is designed to seal the hole created around a standard soil pipe when it penetrates through a ceiling or suspended floor.

The seal is intended for use after the installation of the soil pipe and before the stack is boxed in and plastered, as such the seal can be split open to allow it to bend around the back of the pipe once installed and then clipped shut again clamping it to the pipe. The seal can be applied to the ceiling face from inside the room, or down from above in the loft space. A mastic tape will seal around the gap significantly reducing the air leakage through the detail.

The polythene membrane is flexible enough to allow it to bend around any edge or corner, for instances where the soil pipe is located against 1 or more walls, one of the covering edges is longer to accommodate a potentially wider hole.

Specification Guide

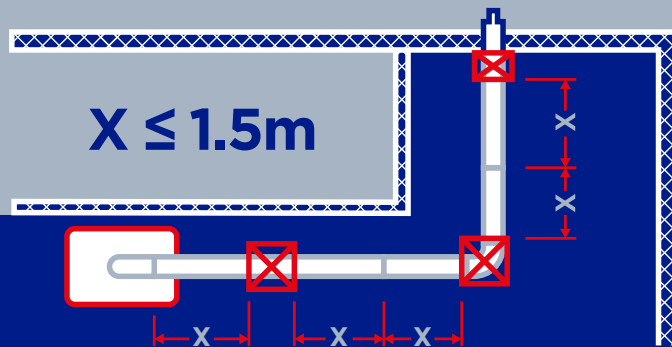
Product Code	Pipe Size	Plasterboard Penetration	Box Qty
GPS4	ø 110mm	180 x 195mm*	20

*Represents maximum permitted hole size, smaller openings can be used.

Access panels

Providing quick access to concealed utilities and services

The practice of dry lining allows the builder to hide utilities such as electrical wiring and plumbing pipe work, from view behind the plasterwork. However, the need for visual inspection and potential maintenance of these utilities will require points of access.



All flue joints and corner transitions should be viewable from an inspection point.

Gas flues in voids

The recent changes to Part J of the Building Regulations, relating to concealed gas flues within false ceilings and walls, has incorporated a Gas Safe guideline requiring sufficient access for inspection and maintenance.

Where boilers are located away from external walls, flues are more likely to run through ceiling or wall voids. In such cases when the gas appliance is serviced or maintained it can be difficult, or impossible, to determine whether the flue has been installed correctly or if it is still in good condition.



Gas engineers are legally required to check the flue after carrying out any work on the boiler. This will include a visual inspection. Similarly, when an engineer installs a boiler they need to ensure that it can be used without constituting a danger to anyone; this would include checking whether the flue is safe.

Areas to inspect

The original installer of the system along with every subsequent servicing or maintenance engineer need to be able to check that:

- The flue is continuous throughout its length
- All joints are correctly assembled and are well sealed
- The flue is adequately supported throughout its length

Unless the gas engineer can make these checks they cannot ensure that the flue from the boiler is safe in order to comply with their legal duties. This necessitates the provision of appropriate inspection hatches in the ceiling or stud wall.

Manthorpe's range of standard and fire rated access panels is ideally suited to providing access to concealed gas flues. The panels can also be used to access utilities and services such as:

- Soil stacks and waste pipes
- Concealed gas flues and outlets
- Valves, stopcocks and plumbing fittings
- Fuse boxes, wiring systems and switches
- System controls and connection link units

In addition Manthorpe offers a unique tile access panel for use in bathrooms and kitchens to provide discreet access behind ceramic tiles.

Rectangular access panels



Product Features

- Allows quick access to concealed services and utilities
- Lightweight, quick and easy to install with no fixings
- The hinged door panel is fully removable for better access
- Fits easily into a hole cut within the dry lining board
- Lightly textured finish, can be painted over if required

The GL50 & GL100 access panels provide a cost effective solution for easy access to hidden building services behind a dry lined ceiling or wall. It is also ideally suited for providing a means of access for inspection and maintenance to concealed gas flues within wall or ceiling voids.

The flush fit panel is lightweight, quick and easy to fit, removing the need for traditional site made hatches. Manufactured from white High-Impact Polystyrene (HIPS), the panel has a light textured finish which can be painted over if required. It also has a hinged door which can be fully removed from the frame with ease to allow for simpler installation and more open access to concealed services.

Once an appropriate size hole is made in the dry lining, the panels are secured in place using a suitable adhesive.

Specification Guide

Product Code	Insulation	Colour	Material	Fitting Size (mm)
GL50	N/A	White	HIPS	100 x 150
GL100	N/A	White	HIPS	150 x 200

The flush fit door panel can be quickly opened with a screwdriver or coin.

Square access panel



Product Features

- Allows quick access to concealed services and utilities
- Lightweight, quick and easy to install with no fixings
- The hinged door panel is fully removable for better access
- Fits into a 300 x 300mm hole within the dry lining
- Lightly textured finish, can be painted over if required

The larger GL300 access panel provides a more practical means of access to hidden building services to better aid maintenance requirements.

In accordance with Part J guidelines, all voids containing concealed flues should have at least one inspection hatch measuring at least 300mm square. The GL300 is an ideal solution to help installers meet this requirement.

The flush fit panel is lightweight, quick and easy to fit, removing the need for traditional site made hatches. Manufactured from white High-Impact Polystyrene (HIPS), the panel has a light textured finish which can be painted over if required. The hinged door panel can be fully removed from the frame to allow for simpler installation and more open access. Once a hole is made, the panel is secured in place using a suitable building adhesive.

Specification Guide

Product Code	Insulation	Colour	Material	Fitting Size (mm)
GL300	N/A	White	HIPS	300 x 300

The flush fit door panel can be quickly opened with a screwdriver or coin.

GL150F / 130F / 450F



Fire rated access panels



Product Features

- Provides a 1 hour fire rated opening in the ceiling or wall
- Built in draught seals limit air leakage through the door
- Made from powder-coated mild steel with a white finish
- Various opening sizes available, including bespoke sizes
- Available with square "T-keys" or lockable Camlock keys

The range of fire rated access panels, GL150F, GL130F and GL450F, provides various sizes of protected openings, in both ceilings and walls, giving access to building engineering services and utility controls. The door is finished in powder-coated white steel and can be over painted to blend with the surrounding surface.

Each one hour fire rated access panel is fitted with a catch lock and a simple 'T' key is supplied. The GL151F, GL131F and GL451F fire rated doors come complete with a more substantial key lock for additional security. All panels are fire rated to one hour as defined in British Standard BS476-22:1987, and were tested at Warrington Fire Research Centre, report number 162703.

Specification Guide

Product Code	Insulation	Material	Fitting Size* (mm)
GL150F	Mineral Wool	Mild Steel	174 x 224
GL130F	Mineral Wool	Mild Steel	324 x 324
GL450F	Mineral Wool	Mild Steel	474 x 474

* The structural opening shown will accommodate a 10mm plasterboard lining.

GLTAP-500



Tile access panel system



Product Kit Includes:

- 4 lengths of uPVC frame extrusion
- 8 high-impact polystyrene corner support clips
- 1 fibre cement composite back board (not in GLTAP-5CP)
- 2 magnetic soft touch, 'push to open' latches
- The ceramic tiles are not included in the kit

The GLTAP-500 tile access panel is a versatile kit of parts that can be quickly assembled to form a concealed access panel within a tiled wall. The panel is completely flexible and can be used with most sizes and thickness of tiles to form an access panel of any varying dimensions from 150mm to 465mm square, up to a maximum panel weight of 5kg.

The kit is quick and easy to fit and ensures a seamless blend with the rest of the tiling within a bathroom or kitchen. When access to services is required, a light touch releases the magnetic catches and the panel opens smoothly.

A contractor pack with enough components to make up to 5 access panels (GLTAP-5CP) is available, providing a cost effective solution aimed at the professional builders and tilers.

Specification Guide

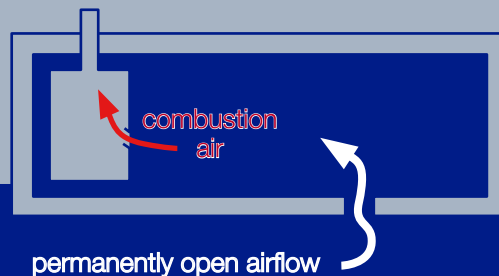
Product Code	Min Panel Size	Max Panel Size	Max Panel Load
GLTAP-500	150mm ²	465mm ²	5 kg
GLTAP-5CP	150mm ²	500mm ² †	5 kg

† Or equivalent area, e.g. 150 x 825mm (this will reduce the total panels available).

Appliance ventilation

Ensuring sufficient air flow for gas burning appliances

It is critically important to supply the correct amount of air to a gas burning appliance as without sufficient fresh air the unit will not burn efficiently. This can result in the build up of potentially deadly carbon monoxide.



Appliances require ventilation to supply them with air for combustion and to ensure the safe operation of the flues so that the products of combustion are safely dispersed to the outside air.

The need for airflow

Gas burning appliances require a supply of fresh air to allow them to burn the gas, clear away the combustion emissions and in some cases to cool the system.

Appliances generally fall into 3 categories depending on the way they intake air flow:

1. Those without flues which take the air they need from the room they are in and also release the products of combustion back into that room.
2. Open flued such as gas fires and older boilers which also take the air they need from the room they are in but send their combustion products out of a flue or chimney to be dispersed into the atmosphere.
3. Room sealed appliances which take the air they need for burning gas from outside and disperse their exhaust products outside, most modern boilers fall into the roomsealed category.

For categories 1 and 2, if sufficient clean air is not provided then the unit will begin to use the oxygen from the air in the room. If the air supply to the appliance is inadequate, the flue will fail to clear all of the combustion products and discharge them into the room itself. This can lead to a build up of carbon monoxide.

Regulation requirements

Ensuring the correct amount of air flow for both the combustion process and to maintain ventilation for appliances is crucial.

Part J of the Building Regulations outlines the requirements for ventilating combustion appliances and fuel storage systems, further guidance can be found in BS 5440: Flueing and ventilation for gas appliances of rated input not exceeding 70 kW.

Ventilation options

Manthorpe's range of through wall ventilators offers a number of airflow options to suit a variety of airflow requirements.

The 5 inch core drill ventilators can provide enough airflow to service a gas appliance with a rated input of up to 27kW or 92,000 Btu/h.

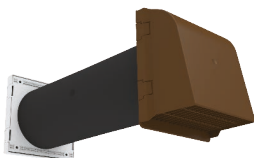
Additional through wall solutions can provide airflow for appliances with smaller power ratings.



G900



5 inch core drill ventilator



Product Features

- Ideally suited to ventilating rooms with gas appliances
- Designed to install through a 5" diameter core drill hole
- Kit includes a hooded, weather proof external cowl cover
- Discreet internal louvred grille with hidden fixing holes
- Anti draught baffle included to reduce airflow if required

The G900 core drill vent is designed for ventilating a gas appliance or supplying general through wall ventilation. Using a standard 5" core drill, the system can be fitted quickly and easily in both new build and refurb situations.

The cowl and louvre significantly reduce any visible light and gusty winds. They also block wind driven rain and large insects. The duct creates an uninterrupted path through an exterior wall up to a maximum thickness of 350mm. An anti-draught baffle can be used to reduce the airflow through the vent.

As standard, the vent area is 100 cm² which is enough to provide ventilation to a 27kW or 92,000 Btu/h rated appliance. The anti-draught baffle reduces the effective ventilation area to 70 cm², enough to provide ventilation to a 21kW or 71,500 Btu/h rated appliance.

Specification Guide

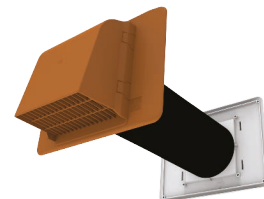
Product Code	Free Vent Area*	Pipe Length	Box Qty
G900	100 cm ²	350mm	1

Product available in brown, terracotta and white (Internal louvre grill always white).

G901



Large backplate core vent



Product Features

- The large backplate covers over any masonry damage
- Easier to fit around masonry that has been chiselled out
- Suited to refurbishment jobs with weak plaster work
- Offers 100 cm² of airflow without draught baffle installed
- Anti draught baffle reduces the effective airflow to 70 cm²

The G901 large backplate 5" core drill vent is similar to the G900 with the addition of a larger perimeter backplate. The backplate gives the installer greater flexibility, allowing them to simply cut masonry away with a hammer, chisel to fit the product and cover over any inaccuracies or uneven edges afterwards.

The cover plate will also hide any damage that may have occurred as a result of using a core drill. This is especially useful in a refurbishment situation when the decorating inside the property has been completed as old plaster work can sometimes break or become loose during the use of the core drill.

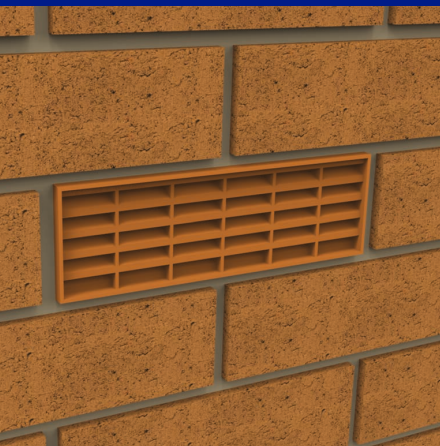
The core drill vents have been independently tested by the BRE to the requirements of BS 5440-2:2009, BRE test report number 240795.

Specification Guide

Product Code	Free Vent Area*	Backplate Size (mm)	Box Qty
G901	100 cm ²	275 x 207	1

* With baffle installed effective free area is 70 cm² (BRE test report no. 240795).

G930



9" x 3" combination airbrick



Product Features

- Stacks together to create 9"x6" and 9"x9" combinations
- Provides 6,450mm² of free airflow per 9"x3" airbrick
- Integral mortar key ensures secure bond to the brickwork
- Louvred grille prevents the entry of large insects
- Available in various colours to suit different substrates

The G930 combination airbrick is designed to provide high levels of ventilation through walls and into underfloor voids.

Replacing a single house brick within the outer leaf wall construction the airbrick incorporates a front mounted louvred grill to permit airflow while blocking out wind driven rain and prohibiting large insects from gaining access.

A single 9" x 3" Airbrick provides 6,450mm² of airflow; this can be increased by stacking more than one unit together. Multiple airbricks can be clipped together and stacked vertically to make 9" x 6" and 9" x 9" combinations which provide 12,900mm² and 19,350mm² respectively.

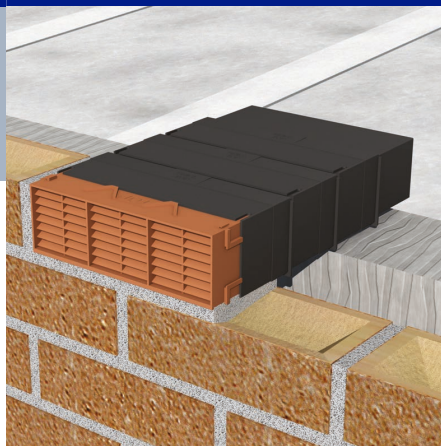
The airbrick is available in a wide range of colours to suit many different masonry finishes and render types.

Specification Guide

Product Code	Free Vent Area	Size (mm)	Box Qty
G930	6,450mm ²	216 x 70	20

The G930 is available in terracotta, buff, white, grey, blue/black and brown.

G935



Combination cavity sleeve



Product Features

- Telescopically expands to suit various cavity widths
- Stacks with the airbrick in 9"x6" and 9"x9" combinations
- The integral wind baffle helps to reduce draughts
- Extends the underfloor vent through thicker external walls
- Can use multiple units to extend the span indefinitely

The G935 combination cavity sleeve is designed to fit into the back of the G930 airbrick to ventilate through a standard cavity or solid brick wall.

Like the airbrick itself, the unit can be stacked to create both a 9"x6" and 9"x9" through wall duct. It also telescopically extends horizontally to fit cavity widths of 50mm to 100mm, with further extension possible through the addition of extra product units.

The G935 also includes an integral wind baffle to help reduce draughts through the product whilst maintaining an effective airflow. It can be used in any combination required and built into the brick course as normal.

This product should be used in conjunction with other products from the through wall & under floor range to provide a complete ventilation system for your detail.

Specification Guide

Product Code	Free Vent Area	Horizontal Extension	Box Qty
G935	6,600mm ²	270 - 320mm*	10

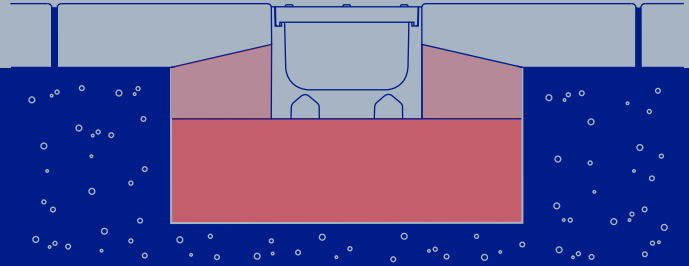
* Horizontal extension range indicated is inclusive of the G930 airbrick.

Drainage channels

Easy and effective ways of removing standing water

With many areas of the UK often exposed to prolonged periods of wet weather, standing water that collects around a domestic property can not only lead to issues with building access, but in some cases can cause significant property damage if left unchecked.

Drainage channels should be laid onto a concrete footing and then haunched in place. The concrete should be at least a C25 mix and be laid with a fall of 1 in 40.



Water, water, everywhere ...

Driveways, pathways and patios if not suitably porous can prevent rainfall from soaking into the ground; this rainfall sits on the surface as standing water if it is not drained away. These areas of standing water can damage the paving over time and encourage the growth of moss and other vegetation. Pools of standing water can become increasingly dangerous in winter especially when frozen.



The biggest concern however would be if this unchecked standing water began to encroach on the building itself to the point that it entered the property and caused damage.

Garage doors at the ends of driveways, especially those with a slight fall on them toward the property, are particularly susceptible to this.

Smarter drainage solutions

Ideal for pedestrian, cyclist and light vehicle traffic on domestic driveways, patios and paths, the Manthorpe drainage channel range provides you with everything you need to remove the standing water from around your property. Sturdy and simple to fit, the system directs rain water away from the home and into drains. The systems can be installed with any type of surface including; block pavers, flagstones, tarmac and concrete.

Quick and easy to install, the channels can be cut to length and clip together for ease of installation on site. The protective grates are high-heel and child friendly. The four-way junction box offers a variety of configurations and slots quickly and easily into channel lengths.

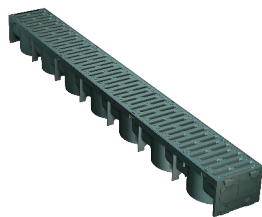
The SmartDrain and SlotDrain systems are ideal for use on a variety of surfaces in the following areas:

- Patios
- Driveways (ideal in front of garages)
- Pathways (threshold drainage in front of doorways)
- Swimming pools
- Gardens (around raised beds and retaining walls)
- Pedestrian areas around commercial buildings

GPD-1000



Smartdrain drainage channel

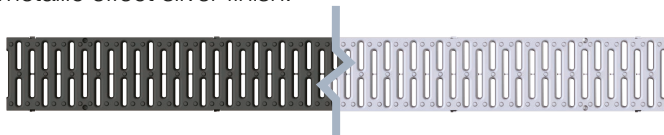


Product Features

- Lengths fix together for quick and easy on-site assembly
- Unique clip feature will not block with silt or site debris
- High heel friendly clip down grate with optional screw fixings
- Can be cut to any length with reusable clips along the base
- Multiple 4" dia. water exit points with easy cut-out feature

The GPD-1000 SmartDrain is a simple and effective way of removing unwanted standing water into a domestic drain. Quick and easy to install, the system can be fitted with any type of surface including: block paving, flag stones, tarmac or cast concrete.

The grate is available with a choice of a matte black or metallic effect silver finish:



The channels are CE Marked to an A15 Load Rating and have been independently tested to the test requirements of BS EN 1433 (see page 39 for more details).

Specification Guide

Product Code	Length	Grate Colour	Box Qty
GPD-1000	1m	Black	Singles*
GPD-1000-SLV	1m	Silver	Singles*

* Sold as a grate and channel assembly, available in pallet quantities of 48 or 96.

GPD-JU



Smartdrain junction unit



Product Features

- The sides can be cut to create multiple junction transitions
- Unique clip feature will not block with silt or site debris
- High heel friendly clip down grate with optional screw fixings
- Units fix together for quick and easy on-site assembly
- 4" dia. water exit point on base with easy cut-out feature

The GPD-JU junction unit is designed to provide options for various changes of direction for linear runs of SmartDrain channels. The unit can be used to create a variety of transitions including: a 90° corner, T-junction or a 4 way cross junction.

The junction unit has 4 thinned out side walls which can be easily trimmed out with a knife. Simply remove whichever and however many sides are required and connect to the rest of the system with the easy to fix location clips in the base of the channel.

The base outlet of the unit also has a pre-moulded connection for a 4 inch diameter drainage pipe which can be easily utilised by drilling a hole in the base of the channel.

Specification Guide

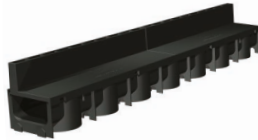
Product Code	Size*	Grate Colour	Box Qty
GPD-JU-BL	117 x 117mm	Black	12
GPD-JU-SLV	117 x 117mm	Silver	12

* Multiple junction units must be accounted for when calculating long run lengths.

GPDST-1000



Slotdrain drainage channel



Product Features

- Ideal for threshold drainage to comply with Part M regulations
- Can be cut to length with reusable joints along the base
- Lengths fix together for quick and easy on-site assembly
- Unique clip feature will not block with silt or site debris
- Multiple 4" dia. water exit points with easy cut-out feature

The GPDST-1000 SlotDrain is a discreet way of removing unwanted standing water from outdoor paved areas and is especially well suited to meet the Part M Building Regulations requirement for level thresholds at doorways.

"The detailing around the entrance door is critical both in terms of providing accessibility and preventing the ingress of water. In all but the most sheltered locations, an adjacent drainage slot or channel is also needed to protect the entrance."

NHBC Building Regulations Guidance Note

Access to and use of buildings - Dwellings

Both the channel and grate can be cut to length and clip together for ease of installation on site. The individual slot grates are 500mm long allowing for easier installation in front of doorways.

Specification Guide

Product Code	Length	Grate Colour	Box Qty
GPDST-1000	1m	Black	Singles*

* Sold as a grate and channel assembly, available in pallet quantities of 48 or 96.

GPDST-JU



Slotdrain junction unit



Product Features

- The sides can be cut to create multiple junction transitions
- Extended channel sleeve allows use with taller SlotDrain
- High heel friendly clip down grate with optional screw fixings
- Units fix together for quick and easy on-site assembly
- 4" dia. water exit point on base with easy cut-out feature

The GPDST-JU SlotDrain junction unit is designed to provide options for various changes of direction for linear runs of drainage channels and should be used at each end of a run as well as at 3m intervals along longer runs to allow for rodding and maintenance access. The junction unit has an additional component in the kit which extends the overall height of the product bringing it level with the top of the SlotDrain grate.

The junction can be used to create a variety of transitions when laying the SmartDrain system including: a 90° corner, T-junction or a 4 way cross junction.

The base outlet of the unit also has a pre-moulded connection for a 4 inch diameter drainage pipe which can be easily utilised by drilling a hole in the base of the channel. A leaf trap can be installed into the hole to block debris.

Specification Guide

Product Code	Size	Grate Colour	Box Qty
GPDST-JU	117 x 117mm	Black	12

The SlotDrain junction unit is only available in black.



Smartdrain accessory pack



Product Features

- Accessory pack for both the SmartDrain & SlotDrain systems
- Leaf trap prevents debris from falling down the drain hole
- Quick and simple to install into the base of the channel
- End caps clip onto block off the end of a channel run
- Caps are ambidextrous and can be used on either end

The GPD-AP accessory pack for the Manthorpe range of drainage channels can be used in conjunction with both the SmartDrain and SlotDrain systems.

The leaf trap is designed to mount over the drainage outlet hole in the base of the channel to prevent silt and debris from flowing in the drain. The trap slots into place once the desired hole has been removed from the channel. The leaf trap locates just below the underside of the grate which prevents it from floating out of place in heavy rainfall.

The end caps are blanking plates to block off the start or finish of a run of channel, preventing water runoff from either end. The caps will fit to either end of the channel by means of a simple push on clip fit. At the male end of the channel, you must remove the thinned tabs on the endcap using a knife or pair of pliers first.

Specification Guide

Product Code	Leaf Trap Qty	End Cap Qty	Fitting Instructions Qty
GPD-AP	1	2	1

The leaf trap and end caps are only available in black.



Drainage channel load testing



To comply with the change to the Construction Products Regulation brought in by the European Commission, it is now mandatory for all products covered by a harmonised European standard (hEN) to be given a CE marking by their manufacturer.

Testing times ...

Testing is an integral part of our design process; it helps us to ensure that the products we design are up to the task, and gives our customers the confidence that they have the right product for the job.

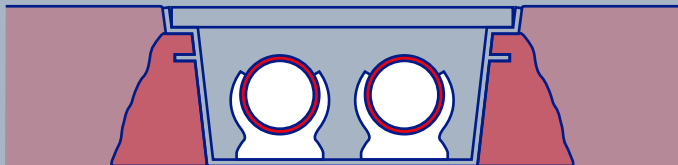
Manthorpe's range of linear drainage channels has been independently tested by the BRE to the requirements of BS EN 1433:2002, and has surpassed the requirements needed to achieve an A15 load rating - BRE test report number 289 099).

The A15 rating ensures that the drainage channel can withstand a 15kN (1.5 tonne) load without breaking or buckling. The Manthorpe channels managed this with ease, which is the equivalent of supporting one wheel on a 6 tonne vehicle.

With these results, we can confidently approve the conformity of both the GPD-1000 SmartDrain along with the GPST-1000 SlotDrain to the standards and grant them a CE mark.

Pipe & cable ducting

Easy to access underfloor ducting system for pipes & services



Manthorpe's range of pipe and cable ducting offers a cost effective alternative to the traditional methods of shuttering. The duct is ideal for internal runs of cables and other services in concrete screed floors. There are 3 sizes available to suit many varying requirements.

Pre-formed ducting is the key

Why waste time fabricating up bespoke shuttering on site from old timber, or worse still why waste money on new timber which may be damaged and rendered useless when removed after screeding? The answer is simple; why not just try ready to use premade pipe and cable ducting channels from Manthorpe.

Our pipe & cable ducting is an easy to access subfloor channel system which means routine maintenance needs little more than a screwdriver.

The duct is ideal for internal runs of cables and other services that need to be cast into a concrete screed floor. Pipe and cable layouts can be highly diverse; as such there are 3 sizes of duct available to suit many varying requirements:



125 x 50mm



150 x 70mm



175 x 50mm

GW510 / GW530 / GW550

Pipe & cable ducting



Product Features

- Provides an easy access point for service pipes and cables
- The components are easy to handle, simple to cut and fix
- Wet haunch the duct in place prior to screeding around it
- T-junction joints and corners are formed by simple mitring
- Solid plywood covering board protects the pipes below

The pipe and cable ducting is designed to provide a cost effective solution over traditional methods of shuttering which can be complicated and time consuming to form. The duct is ideal for internal runs of cables and other services when they are being cast into a concrete screed floor.

An easy to access underfloor ducting system makes routine repair or maintenance work simple and needs little more than a screwdriver. Future access is obtained by first removing the floor covering and then un-screwing the cover board.

The components are easy to handle, cut and fix with joints and corners formed by simple mitring. "T" joints and corners can be formed by mitring both sections of the ducting using a fine cut saw.

Specification Guide

Product Code	Channel Size	Channel Length	Plywood Length*	Pack Qty
GW510 / GW511	125 x 50mm	3.0m	2.44m	10
GW530 / GW531	150 x 70mm	3.0m	2.44m	10
GW540 / GW551	175 x 50mm	3.0m	2.44m	10

* Ducting is longer than the covers, to provide excess to mitre corners & junctions.

Manthorpe

Manthorpe Building Products

Manthorpe House
Brittain Drive
Codnor Gate Business Park
Ripley
Derbyshire
DE5 3ND

Tel +44 (0) 1773 303 000
Fax +44 (0) 1773 303 300
Email: mbp.care@manthorpebp.co.uk
Web: www.manthorpebp.co.uk

