



# smartdrain drainage channels



# linear drainage channel systems

easy and effective ways of  
removing standing water

With many areas of the UK often exposed to persistent wet weather, standing water collecting around a domestic property can not only lead to issues with access, but in some cases can contribute to the problem of flooding.

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 when frozen pools can become treacherous underfoot.



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 are particularly susceptible to this.

The Manthorpe SmartDrain and SlotDrain 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

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 existing drains.

Ideal for pedestrian, cyclist and light vehicle traffic on domestic driveways, patios and paths, the Manthorpe SmartDrain and SlotDrain systems can be installed with any type of paving from block pavers and flagstones to tarmac and concrete.

Quick and easy to install, the channels can be cut to length and clip together easily for ease of installation on site and 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.



Both the SmartDrain and SlotDrain channels are CE Marked and have been independently load tested by the BRE to the requirements of BS EN 1433<sup>1</sup> and have been credited with an A15 load rating.

<sup>1</sup> Tests require the channels to withstand a direct 15kN load without deforming or breaking, this equates to 1.5 tonnes in weight or the load of one wheel on a 6 tonne vehicle. - BRE Test Report Number 289 099.

# smartdrain



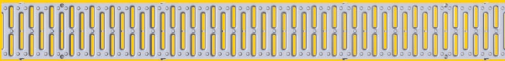
## product features include:

- Lengths fasten together for quick and easy on-site assembly.
- Unique clip feature will not block with silt or site debris.
- Clip down grate with optional screw fixings for added security.
- Can be cut to any length with reusable joints along the base.
- Multiple 4" dia. rainwater exit points with easy cut-out feature.
- End caps shut off both ends of the channel where needed.
- High heel and child friendly grate.
- Independently load tested to A15 rating as per BS EN 1433.

## grate colour options



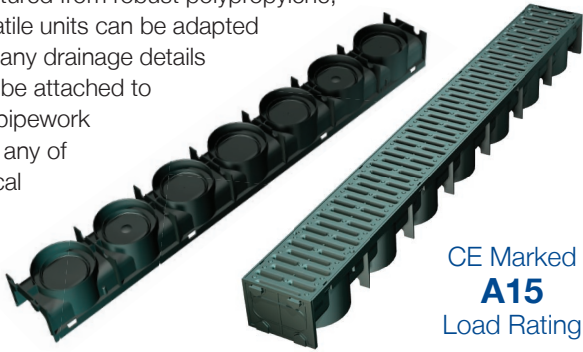
black  
code **BL**



metallic silver  
code **SLV**

The Manthorpe SmartDrain provides you with everything you need to remove the standing water from around your property.

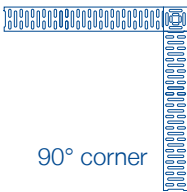
Manufactured from robust polypropylene, the versatile units can be adapted to suit many drainage details and can be attached to existing pipework by using any of the vertical outlets.



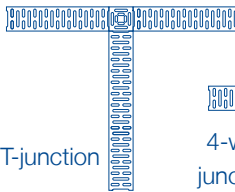
System Specification				
Code	Description	Weight	Colour	Packing Details
GPD-1000	SmartDrain Channel & Grate	1.5kg	Black or Silver	Individual or 48 or 96 per pallet
GPD-AP	Accessory Pack	0.1kg	Black	2 end caps and 1 leaf trap per bag
GPD-JU-12	SmartDrain Junction Unit	0.2kg	Black or Silver	12 per box

## smartdrain junction unit

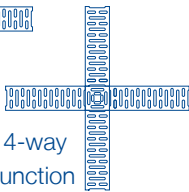
The SmartDrain Junction Unit enables the user to create a variety of drainage junction configurations. Utilising the same clip feature found on the channel lengths, the junction unit is quick and easy to use. Grate coverings are available in black or metallic effect silver. Configurations are illustrated below:



90° corner



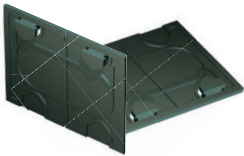
T-junction



4-way junction

## accessory pack

Contains end caps to seal off channel runs and a leaf trap to protect the pipe outlet from debris that may fall into the channel.



2 x End caps  
1 x Leaf Trap  
1 x Instructions

# slotdrain



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

Once installed, the only visible part of the drain channel is a 20mm wide slot. It is ideally suited to block paving and flagstone coverings up to 50mm depth, and can also be used with surface finishes in areas around the home such as patio's, driveways and paths.



The channel and grate units are manufactured from robust polypropylene to ensure durability and long lasting performance. This material is also easy to cut making the SlotDrain units extremely versatile and adaptable to many applications.

## product features include:

- Ideal for use with block pavers and flags up to 50mm deep.
- Narrow slot opening makes for a discreet drainage point.
- Lengths fasten together for quick and easy on-site assembly.
- Unique clip feature will not block with silt or site debris ensuring a secure connection every time.
- Ideal for threshold drainage to comply with Part M regulations.
- Slot grates are 500mm long for easier installation at doorways.
- Can be cut to any length with reusable joints along the base.
- 4 way junction unit used to create multiple intersections.
- Multiple 4" dia. rainwater exit points with easy cut-out feature.
- Junction unit used at the end of runs to allow for maintenance.
- High heel and child friendly grate.
- Independently load tested to A15 rating as per BS EN 1433.

## slotdrain junction unit

The SlotDrain junction unit 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 SlotDrain junction unit has an additional component in the kit which extends the height of the product bringing it level with the top of the SlotDrain grate. Available in black only.



The SlotDrain system uses the same accessory pack components as the SmartDrain system. Drainage outlets can be created along the length of the channel, but are ideally placed within the corner units for ease of access, a leaf trap should be used to prevent the entry of debris into the drainage system.

System Specification				
Code	Description	Weight	Colour	Packing Details
GPDST-1000	SlotDrain Channel & Grate	1.5kg	Black	Individual or 48 or 96 per pallet
GPD-AP	Accessory Pack	0.1kg	Black	2 end caps and 1 leaf trap per bag
GPDST-JU-6	SlotDrain Junction Unit	0.3kg	Black	6 per box

Manthorpe Building Products Ltd  
Manthorpe House  
Brittain Drive  
Codnor Gate Business Park  
Ripley, Derbyshire DE5 3ND

Tel: 01773 514 200  
Email: [bpsales@manthorpe.co.uk](mailto:bpsales@manthorpe.co.uk)  
[www.manthorpe.co.uk](http://www.manthorpe.co.uk)



**EN 1433**

Drainage channel **Type M** for the collection and conveyance of surface water from areas which can only be used by pedestrians and pedal cyclists.

<b>Strength Class:</b>	<b>A 15</b> in accordance with the manufacturer's installation instructions.
<b>Channel Material:</b>	Polypropylene
<b>Grating Material:</b>	Polypropylene
<b>SmartDrain Dimensions:</b>	(L) 1,000mm (W) 119mm (H) 88mm
<b>SlotDrain Dimensions:</b>	(L) 1,000mm (W) 119mm (H) 148mm
<b>Weathering Resistance:</b>	NPD
<b>Load Testing:</b>	BRE Test Report No. 289 099

## 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.

