

**GATIC®**

**DRAINAGE & ACCESS COVERS**

Uniclass

C731

CI/SfB

(52.5)

h1

August 2019

## Surface Water Drainage - Technical Guide



**ALUMASC**

WATER MANAGEMENT SOLUTIONS







Alumasc is a UK-based supplier of premium building products. The majority of the group's business is in the area of sustainable building products which enable customers to manage energy and water use in the built environment.



Alumasc Water Management Solutions provide 'Rain to Drain' solutions, that set the standard for urban water management. They include: **Skyline Fascias, Soffit & Copings**; **Alumasc Rainwater Gutters & Downpipes**; **Harmer Building Drainage**; **Wade Building Drainage & Gatic Civil Drainage & Access Covers**.

Under the AWMS banner, customers benefit from rainwater and drainage products that capture, retain and control the flow of rainwater in the most effective way inside and outside buildings.



**ASSURANCE**  
The Gatic Environmental Management System has been approved to ISO 14001:2004 Certificate No. EMS 593419



**ASSURANCE**  
The Gatic Quality Management System has been approved to BS EN ISO 9001:2008 Certificate No. FM 593418

Best Service	6 - 7
Quality and the Environment	8
Loading class	9
Applications	10 - 11
Slotdrain Range Overview	14 - 15
Product Selector	16 - 20
CastSlot	22 - 25
UltraSlot	26 - 29
PaveSlot	30 - 31
FacadeSlot	32 - 33
Boxes	34 - 37
Flow Regulators	36
Accessories	38 - 39
Drainage System Design	41
Water Storage & Flow Regulation	42
Design Formulae	44
Channel Configuration	46
Specification Clause	47
Structural Design	48
Steel Reinforcement	49



# Best Service

## Technical Support

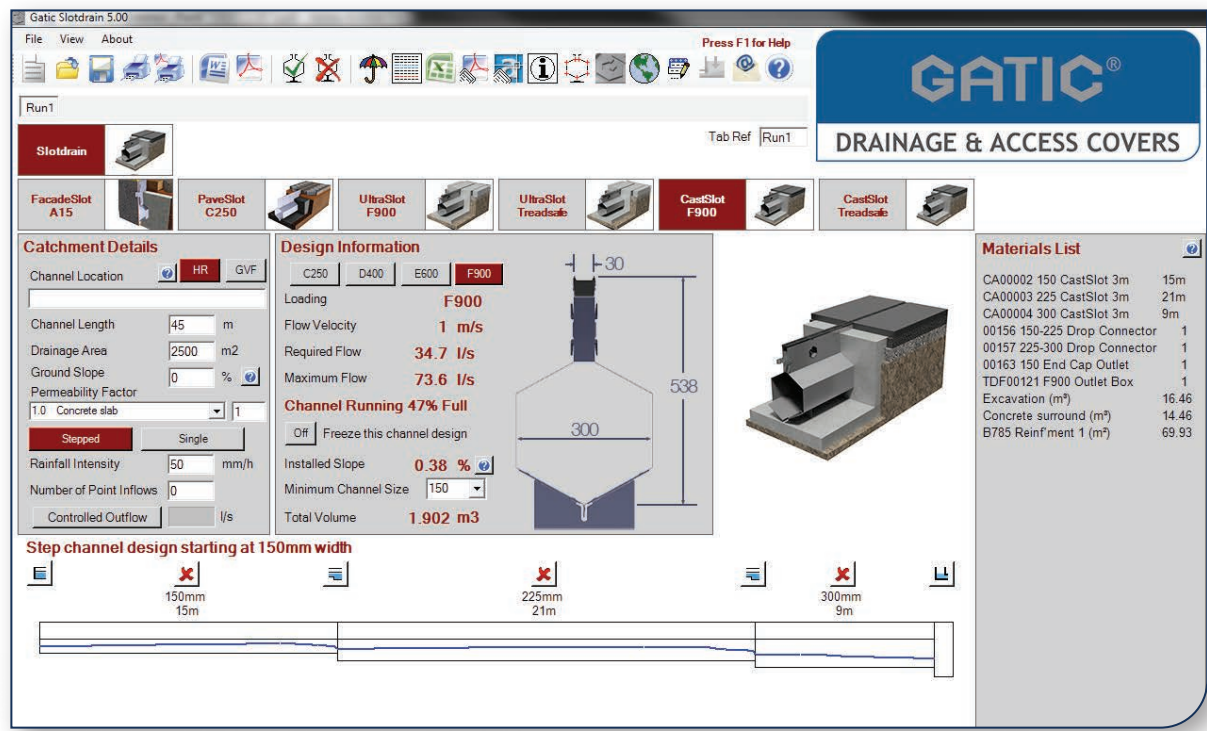
Gatic's wide range of slot drains is backed by the fastest technical response and the most extensive support. Our hands-on approach ensures customers get the best support every step of the way, from technical design through to installation. Our technical team is also accessible for site visits.

## Rapid response design service

We aim to turn around the design of drainage systems based on your drainage layout, complete with quantities and delivery time scales, within 24 hours.

## FREE Drainage Design Software

This interactive software allows you to design your own drainage system using the same programme as our in-house technical team. For a USB containing this free software, simply register your details with us. You can do this on the Knowledge section of our website, or by emailing / phoning us.



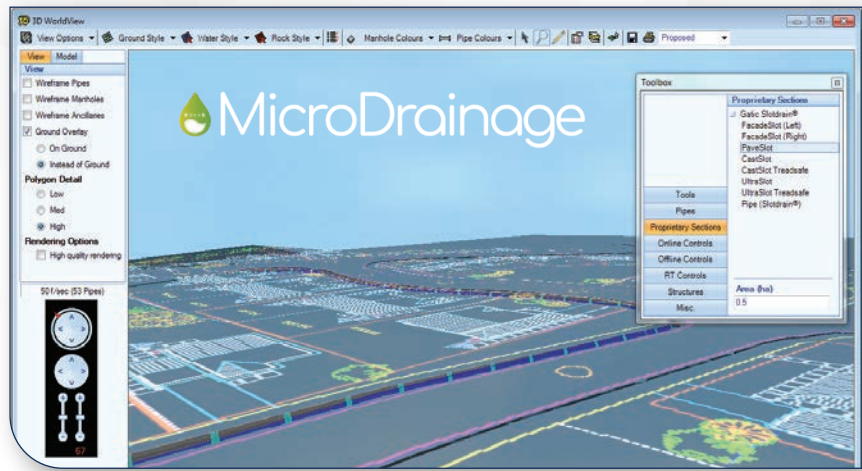
Gatic Slotdrains designed in DrawNet using graphical user interface in 3D worldview

# BIM Compliance with MicroDrainage Software

We have added our highly specified range of Slotdrain channels to Innovyze's MicroDrainage software.

MicroDrainage is a well-recognised tool for civil engineers working on surface water and external drainage calculations. It is the industry standard software for the detailed design of fully integrated storm-water and foul-water drainage systems. Users of MicroDrainage benefit from a user-friendly interface, auto-design and optimisation as well as formal reporting and outputs.

Along with the usual functionality, MicroDrainage can be embedded within Autodesk's Civil 3D software through the DrawNet(CAD) interface. This enables MicroDrainage to conduct intelligent data exchange through the use of Parts Lists, include Gatic Slotdrain Civil 3D, providing engineers with an ability to quickly, accurately and confidently exchange information between models, helping to achieve BIM Level 2 compliance.



Designing Gatic Slotdrains in System 1 using spreadsheet format

## CPDs

We also offer CPD presentations at your premises covering all aspects of surface water drainage and attenuation. Our presentations are accredited by the CPD Certification Service and count towards the continuing personal and professional development of attendees. It's a factor worth bearing in mind for those individuals seeking professional membership.

The CPD presentations currently available are Innovative Surface Water Drainage Design and Access Covers.

Visit [www.gatic.com](http://www.gatic.com) for more information or to book your place.



## NBS Plus

Our technical product information is included in this dedicated library of manufacturers' product information, contained within the UK's industry leading specification products NBS Building, NBS Landscape, NBS Engineering Services and NBS Scheduler.

Products listed in NBS Plus are directly linked to specific clauses and can be imported instantaneously into a specification. NBS Plus contains over 20,000 product specifications and is updated regularly, so designers can be confident that they are always referencing the very latest product information.



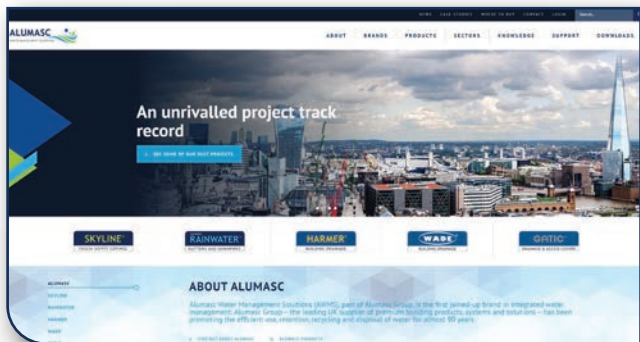
Links of all Gatic products on the NBS Plus Product Register are available on our website.

## www.gatic.com

Our website now contains even more technical information and guidance than before. We have increased our online resources and improved the website design so you can now find all the technical information you need for your projects easily and quickly.

Within each product range, you can explore features and benefits, technical details, graphics, diagrams, and case studies.

By setting up a MyGatic account (registering your name and email address), you can store all the literature, technical specifications and images that you have collected while browsing, and access them again anytime from your MyGatic page simply by logging in.







Our products have been tested in accordance with recognised standards, providing reassurance to industry professionals that our channel systems have proven performance. These include:

- Quality Management Systems ISO 9001 - the recognised standard for the improvement of product, process and service quality.
- European Standard EN 1433 'Drainage Channels for Vehicular and Pedestrian Areas' - the only internationally recognised standard written specifically for trench drainage and slot drain systems. This uses the load classifications between A15 and F900.
- BS EN 877 - Cast iron pipes and fittings, their joints and accessories for the evacuation of water from buildings. Requirements, test methods and quality assurance.

### Quality Assurance

Gatic Slotdrain channels have been tested in accordance with recognised standards, providing reassurance to industry professionals that the system is fit for purpose. The system has proven performance, having been used successfully for many years on a variety of project types in many locations around the world.

### Load Testing Standards

The only internationally recognised standard written specifically for trench drainage and slot drain systems is the European Standard BS EN 1433:2002 'Drainage Channels for Vehicular and Pedestrian Areas'. This uses the load classifications between A15-F900, as listed in the table below.

### Load Tests

Gatic Slotdrain channels have been independently load tested up to F900 load class (depending on the system type) in compliance with the European Standard BS EN 1433. Certificates of conformity are available upon request.

### Watertight Slot Channels

Gatic Slotdrain has been independently tested for 'watertightness' and complies with the European Standard EN 1433 'Drainage Channels for Vehicular and Pedestrian Areas' - when installed within a channel concrete encasement/surround according to manufacturer's details.

## Sustainability and the environment

Gatic is focused on providing effective solutions that enhance sustainability in the built environment. We are committed to adopting environmentally sound business practices throughout our operations and are well positioned to benefit from environmentally-driven changes in policy and regulation. In particular, the growing awareness of sustainability and life-cycle cost among building and construction specifiers.

We work to the following standards:

- Environmental Management Standard ISO 14001 - our programme of environmental audits, carried out by external consultants, are designed to highlight areas in which we can improve, and form a basis for us achieving this standard.
- BREEAM - the world's foremost environmental assessment method and rating system for buildings. Design teams use BREEAM as a method to improve the performance of their buildings and their own experience and knowledge of environmental aspects of sustainability. Gatic's channels have been used on a number of projects associated with BREEAM.



Load Class

### A15

Light duty pedestrian traffic



Load Class

### B125

Pavements, driveways and small private car parks



Load Class

### C250

Heavy duty pedestrian traffic, occasional use by domestic and light duty commercial vehicles



Load Class

### D400

Commercial projects, public pedestrian areas, slow moving vehicles



Load Class

### E600

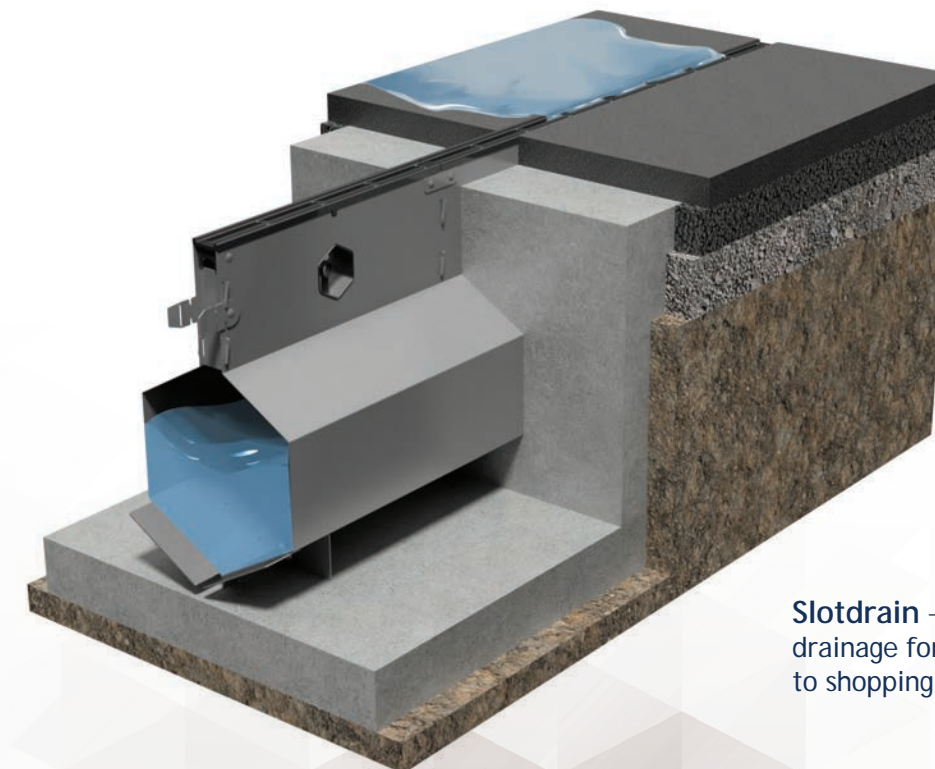
Industrial areas, light commercial forklifts



Load Class

### F900

Airports, docks, industrial applications, fast moving traffic on highways, etc



**Slotdrain** - Highly efficient surface water drainage for all applications, from airports to shopping centres and urban landscaping.



## Applications

Our market leading range of surface water drainage ensures we can provide the best solution for your commercial or domestic projects. Below is a summary of the various applications our range covers.

In a climate where we are experiencing more frequent and extreme rainfall, it is increasingly important our roads, pavements, motorways and other similar infrastructure are protected from the build up of excess rainwater. All our products are designed to manage the discharge of surface water efficiently and effectively.

### Landscaping and Pedestrian Schemes

Landscaping and pedestrian schemes include domestic driveways and paved areas. For these projects the aesthetics and design of the slot drain is important to ensure it is discreet and fits seamlessly with the surrounding environment.



### Car Parks

In car parks, slow turning traffic and a constant flow of vehicles make for a demanding and harsh environment for any surface water drainage system. Strength and durability of the slot or channel drain are essential in these high traffic areas.



### Highways and Motorways

Highways and motorways are under constant strain from heavy traffic and vehicles of various sizes. It's important the surface drainage can manage large volumes of rainfall so that the road remains free and safe from excess water.



### Distribution Yards and Industrial Units

Distribution yards and industrial units typically have large surface areas to drain and must cope with heavy loads manoeuvring on a daily basis.



### Shopping Centres and Retail Parks

Shopping centres and retail parks need unobtrusive but effective drainage to maintain an attractive environment. Looks, style and performance are all important characteristics for these projects.



### Petrol Stations and Forecourts

Petrol stations and forecourts mean wide open spaces and constant weight of traffic. Robustness of the slot or channel drain is essential.



### Bus Terminals

Bus terminals and public transport facilities place heavy demands on surfaces and infrastructure. Strength and reliability are key criteria.



### Container Ports and Distribution Yards

Container ports and distribution yards are extremely hostile environments, pounded continuously by tractor and trailer units. Our robust range of slotdrain systems have been specifically developed with this in mind.



### Ports and Docks

Large ports and dock facilities are occupied by heavy, slow moving cranes that place high demands on the surface drainage. Only products with the highest specification are fit for this purpose.



### Airports

Airports around the world are seeing movements increase year-on-year and aircraft weights reaching new heights. With super jumbos like the Airbus A380, airside drainage is ever more of a challenge.



The GATIC logo is displayed in white capital letters on a blue rectangular background.

DRAINAGE & ACCESS COVERS

## GATIC® Slotdrain

A highly efficient surface water drainage for all applications, from airports to shopping centres and urban landscaping.



Overview

Our core business has traditionally been driven by our success in meeting the heavy demands of the world's major ports and airports. Gatic's Slotdrain\* hexagonal channel profile was originally developed in conjunction with industry professionals from the airport sector.

The concept has proved infinitely scalable and has been developed into a comprehensive range of products suitable for smaller projects such as landscaping schemes, shopping developments and parking facilities.

The current Slotdrain range consists of CastSlot, UltraSlot, PaveSlot and FacadeSlot for total design flexibility, and includes complementary accessories. All channels are manufactured in 3 metre, 1 metre and 0.5 metre lengths of galvanised steel, benefitting from fewer joints and improved flow performance.

*Bespoke units are available on request to suit specific design requirements and are also available in stainless steel grades 304 & 316*

Gatic Slotdrain channels are suitable for applications up to F900 (depending on the system type). The hexagonal profile ensures our systems can handle everything from a rain drop to a rainstorm with similar efficiency. The V-shaped channel base aids a self-cleansing flow, and a tapered throat helps prevent blockages.

\*Patented

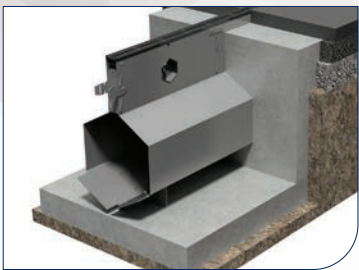
Discreet PaveSlot Top  
Neat aesthetics

Tapered Throat  
Helps prevent blockages

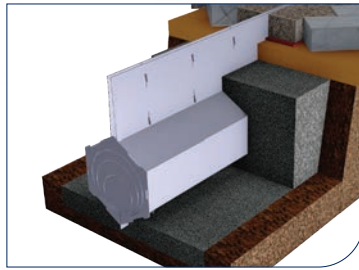
End Caps  
Available with preformed circular outlet knock-outs



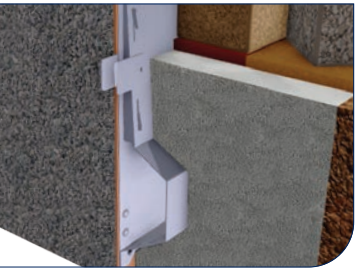
UltraSlot



CastSlot



PaveSlot



FacadeSlot

Sustainable

Gatic Slotdrain is mechanically assembled, which eliminates welding and minimises energy usage in the manufacturing process. A significant proportion of the raw materials used are from recycled sources. Slotdrain is manufactured from sheet steel and is 100% recyclable.

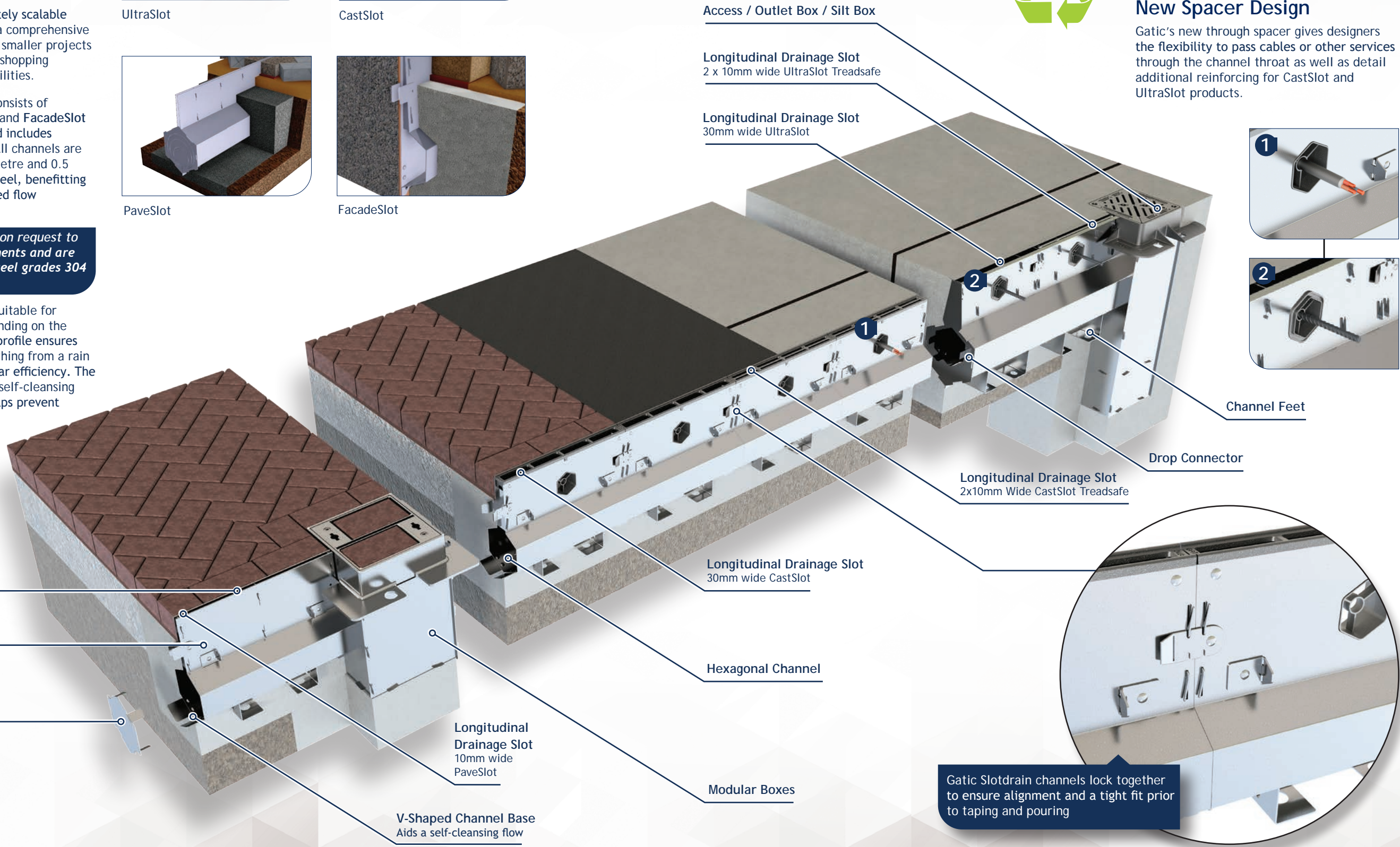


Site Work and Maintenance Guide

Our illustrated literature includes advice and general information on safe handling, installation and maintenance of our Slotdrain products. This can be downloaded from our website [www.gatic.com](http://www.gatic.com). Alternatively, email or phone us to request a copy.

New Spacer Design

Gatic's new through spacer gives designers the flexibility to pass cables or other services through the channel throat as well as detail additional reinforcing for CastSlot and UltraSlot products.





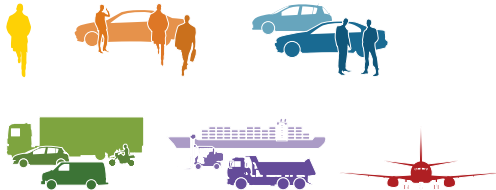
## Gatic CastSlot and CastSlot Treadsafe

The unobtrusive profile of CastSlot sits neatly within concrete, asphalt and block surface finishes.

CastSlot features an electro painted ductile iron throat section, which is securely fixed to the galvanised steel channel body to provide an exceptionally robust yet discreet drainage system.

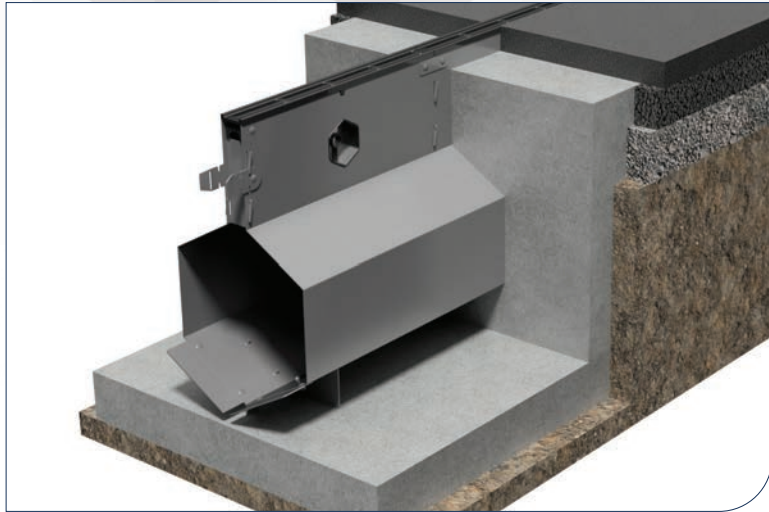
CastSlot is ideal for areas of vehicular traffic such as car parks and industrial units where there is slow turning traffic. Available with a 30mm opening and a Treadsafe option, which reduces the slot opening from 30mm wide to 2 x 10mm wide slots. **Protection Strips Provided.**

Load classification A15 to F900



### Applications:

- Landscaping and Pedestrian Schemes
- Car Parks
- Highways and Motorways
- Distribution Yards & Industrial Units
- Petrol Stations and Forecourts
- Bus Terminals
- Container Ports and Distribution Yards
- Ports and Docks
- Airports

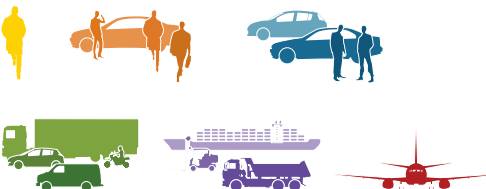


## Gatic UltraSlot and UltraSlot Treadsafe

UltraSlot is used in external pavement areas such as airports, ports, highways and similar areas. The system is designed to withstand infrequent ultra heavy-duty loads.

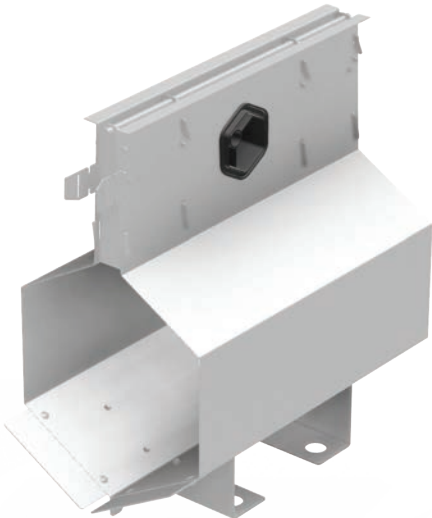
A Treadsafe option is available, which reduces the slot opening from 30mm wide to 2 x 9mm wide slots. This has no effect on the intake capacity of the system but will make the channel safe to cross for pedestrians.

Load classification: A15 to F900  
(Protection strips available)



### Applications:

- Highways and Motorways
- Airports





## Gatic PaveSlot

PaveSlot is used to drain external hard surface areas where a neat, unobtrusive aesthetic is required. The system is used with paving units laid against the top edge of the channel.

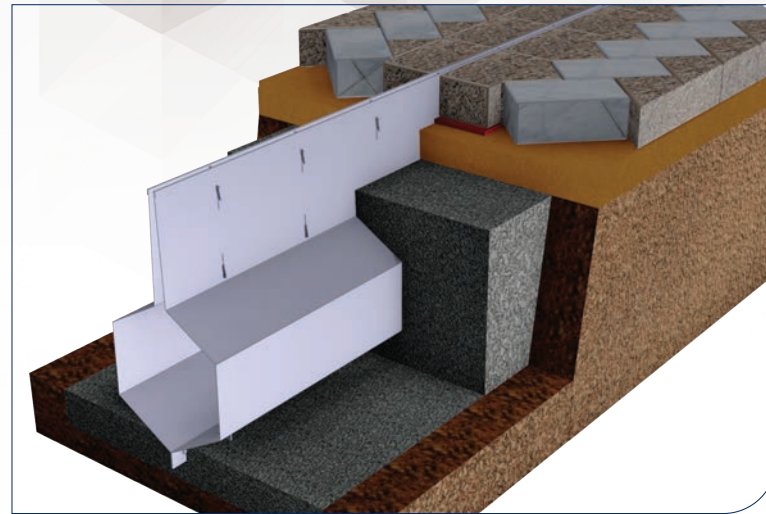
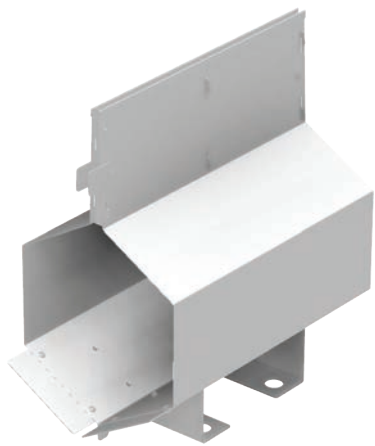
The system is suitable for all paved areas, in public and commercial projects.

Load classification: A15 to C250



### Applications:

- Landscaping and Pedestrian Schemes
- Shopping Centres and Retail Parks



## Gatic FacadeSlot

A discreet surface drainage channel that can be installed against a building, wall or other external landscape feature, to provide effective drainage from vertical surfaces, door thresholds and adjacent pavement areas.

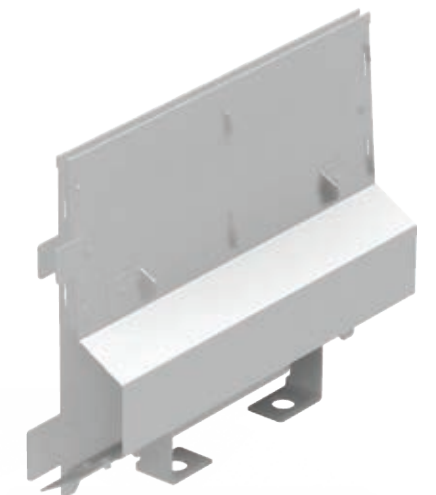
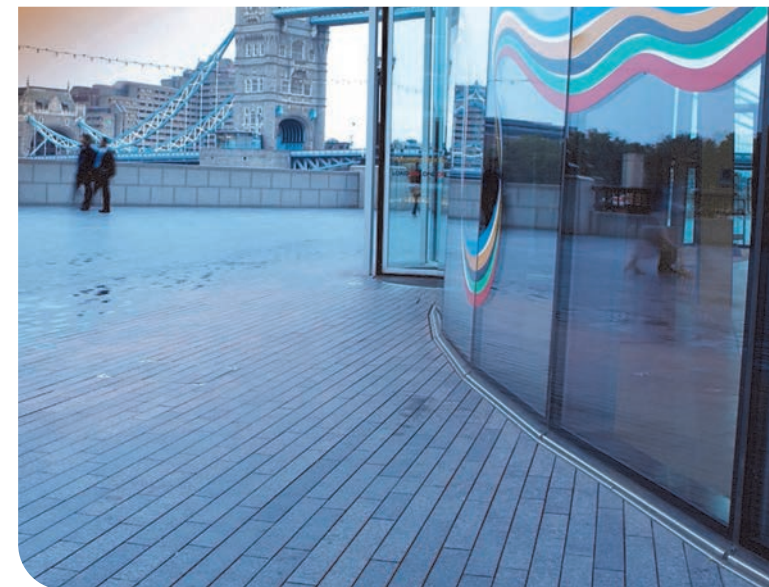
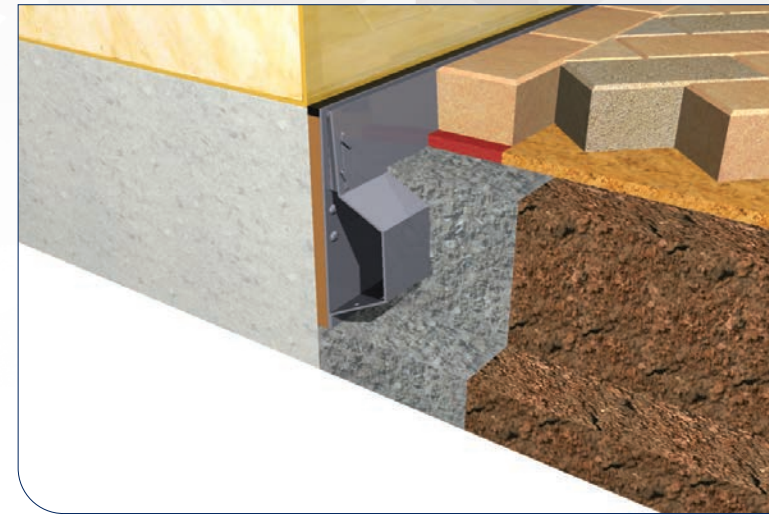
FacadeSlot channels can be made to follow the building perimeter whether straight or curved. The system can accommodate rainwater downpipes which, when positioned over a simple rainwater inlet box, can eliminate the need for a separate drainage network for the roof area, achieving a more efficient drainage system.

Load classification A15



### Applications:

- Landscaping and Pedestrian Schemes
- Shopping Centres and Retail Parks





## Accessories

A comprehensive range of accessories is available to suit every conceivable system design.

The range of standard accessories (shown here) is available to suit all types and sizes of Slotdrain channels.

- Cover and gratings are delivered with locking bolts.



Access box -  
shown with grating



Access box -  
shown with recessed cover



Outlet box -  
shown with grating



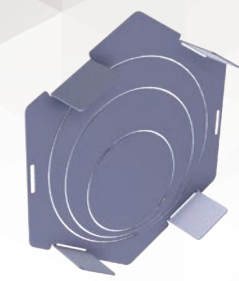
Outlet box -  
shown with recessed cover



Silt box -  
shown with grating



Silt box -  
shown with recessed cover



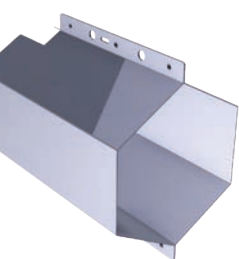
Universal end caps



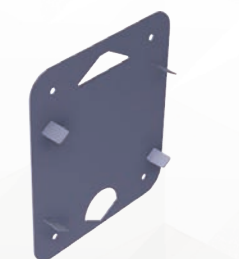
Drop Connector



Channel pipes



Catchpit connectors

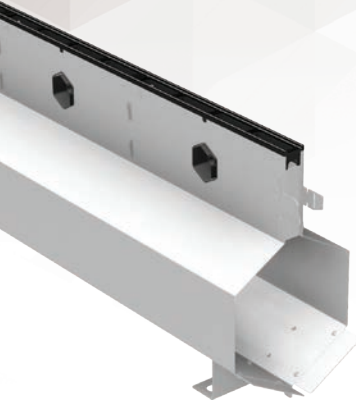


Flow regulators



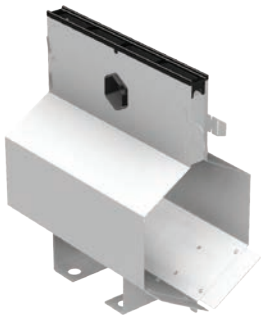
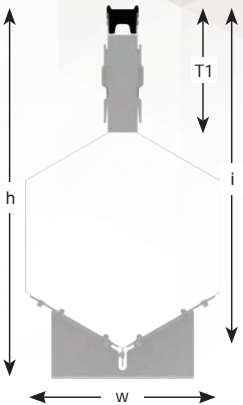


Slotdrain product selector - CastSlot



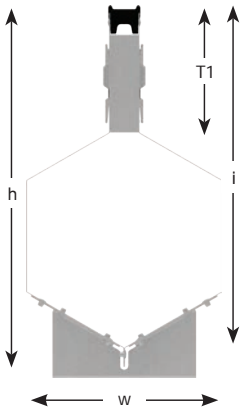
CastSlot 3m Channels

Code	Description	Load Rating	Surface Finish	Length (mm)		Width (w) (mm)	Height (h) (mm)	Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area/ Metre (mm <sup>2</sup> )	Weight (kg)
CA00225	100mm CastSlot - 3m	Up to F900	Concrete / Asphalt / Paving	3000		100	357	308	200	51	30	26350	43.3
CA00226	150mm CastSlot - 3m	Up to F900	Concrete / Asphalt / Paving	3000		150	415	366	200	51	30	26350	49.5
CA00227	225mm CastSlot - 3m	Up to F900	Concrete / Asphalt / Paving	3000		225	501	452	200	51	30	26350	59.7
CA00228	300mm CastSlot - 3m	Up to F900	Concrete / Asphalt / Paving	3000		300	587	538	200	51	30	26350	68.9
CA00229	350mm CastSlot - 3m	Up to F900	Concrete / Asphalt / Paving	3000		350	645	596	200	51	30	26350	75.1
CA00230	400mm CastSlot - 3m	Up to F900	Concrete / Asphalt / Paving	3000		400	712	652	200	51	30	26350	124.8
CA00231	500mm CastSlot - 3m	Up to F900	Concrete / Asphalt / Paving	3000		500	828	768	200	51	30	26350	145.4
CA00232	600mm CastSlot - 3m	Up to F900	Concrete / Asphalt / Paving	3000		600	1091	1031	200	51	30	26350	215.1



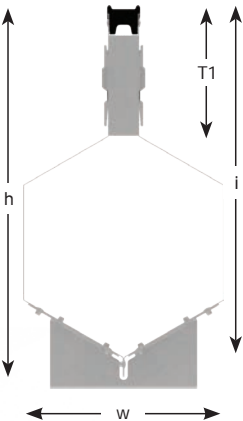
CastSlot 1m Channels

Code	Description	Load Rating	Surface Finish	Length (mm)		Width (w) (mm)	Height (h) (mm)	Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area/ Metre (mm <sup>2</sup> )	Weight (kg)
CA00233	100mm CastSlot - 1m	Up to F900	Concrete / Asphalt / Paving	1000		100	357	308	200	51	30	26350	15.2
CA00234	150mm CastSlot - 1m	Up to F900	Concrete / Asphalt / Paving	1000		150	415	366	200	51	30	26350	17.3
CA00235	225mm CastSlot - 1m	Up to F900	Concrete / Asphalt / Paving	1000		225	501	452	200	51	30	26350	21.5
CA00236	300mm CastSlot - 1m	Up to F900	Concrete / Asphalt / Paving	1000		300	587	538	200	51	30	26350	24.6
CA00237	350mm CastSlot - 1m	Up to F900	Concrete / Asphalt / Paving	1000		350	645	596	200	51	30	26350	26.7
CA00238	400mm CastSlot - 1m	Up to F900	Concrete / Asphalt / Paving	1000		400	712	652	200	51	30	26350	45.2
CA00239	500mm CastSlot - 1m	Up to F900	Concrete / Asphalt / Paving	1000		500	828	768	200	51	30	26350	52.2
CA00240	600mm CastSlot - 1m	Up to F900	Concrete / Asphalt / Paving	1000		600	1091	1031	200	51	30	26350	75.5



CastSlot 500mm Channels

Code	Description	Load Rating	Surface Finish	Length (mm)		Width (w) (mm)	Height (h) (mm)	Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area/ Metre (mm <sup>2</sup> )	Weight (kg)
CA00241	100mm CastSlot - 500mm	Up to F900	Concrete / Asphalt / Paving	500		100	357	308	200	51	30	26350	8.1
CA00242	150mm CastSlot - 500mm	Up to F900	Concrete / Asphalt / Paving	500		150	415	366	200	51	30	26350	9.2
CA00243	225mm CastSlot - 500mm	Up to F900	Concrete / Asphalt / Paving	500		225	501	452	200	51	30	26350	11.8
CA00244	300mm CastSlot - 500mm	Up to F900	Concrete / Asphalt / Paving	500		300	587	538	200	51	30	26350	13.4
CA00245	350mm CastSlot - 500mm	Up to F900	Concrete / Asphalt / Paving	500		350	645	596	200	51	30	26350	14.5
CA00246	400mm CastSlot - 500mm	Up to F900	Concrete / Asphalt / Paving	500		400	712	652	200	51	30	26350	25.3
CA00247	500mm CastSlot - 500mm	Up to F900	Concrete / Asphalt / Paving	500		500	828	768	200	51	30	26350	28.9
CA00248	600mm CastSlot - 500mm	Up to F900	Concrete / Asphalt / Paving	500		600	1091	1031	200	51	30	26350	40.6



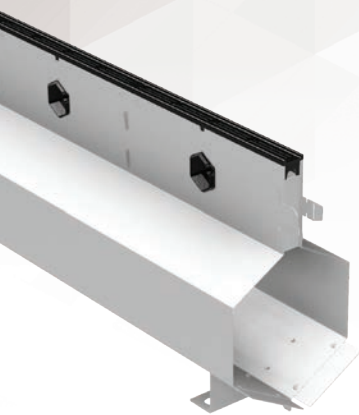
CastSlot Drop Connectors

Code	Description		From Channel Width (mm)	To Channel Width (mm)	Weight (kg)
00155	100-150mm Drop Connector		100	150	0.4
00156	150-225mm Drop Connector		150	225	0.7
00157	225-300mm Drop Connector		225	300	1
00158	300-350mm Drop Connector		300	350	0.9
00159	350-400mm Drop Connector		350	400	1.7
00160	400-500mm Drop Connector		400	500	2.7
00161	500-600mm Drop Connector		500	600	5.9



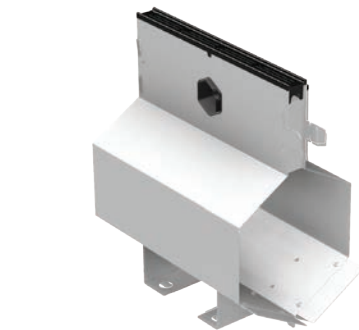
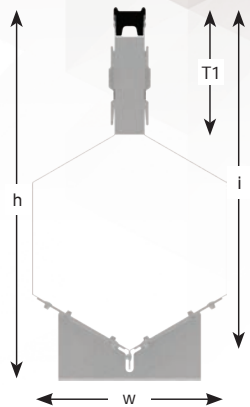


Slotdrain product selector - CastSlot (Treadsafe)



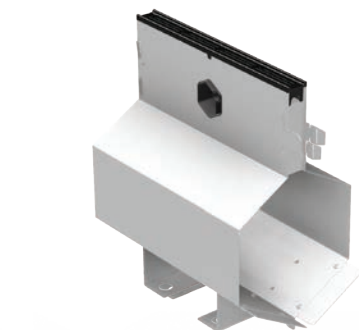
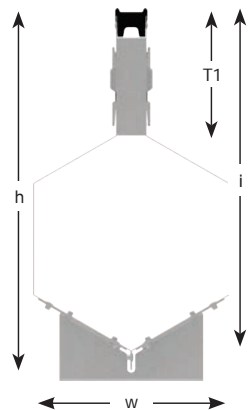
CastSlot Treadsafe 3m Channels

Code	Description	Load Rating	Surface Finish	Length (mm)		Width (w) (mm)	Height (h) (mm)	Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area/ Metre (mm <sup>2</sup> )	Weight (kg)
CAT00225	100mm CastSlot Treadsafe - 3m	Up to F900	Concrete / Asphalt / Paving	3000		100	357	308	200	51	2 X 10	17467	44.7
CAT00226	150mm CastSlot Treadsafe - 3m	Up to F900	Concrete / Asphalt / Paving	3000		150	415	366	200	51	2 X 10	17467	51
CAT00227	225mm CastSlot Treadsafe - 3m	Up to F900	Concrete / Asphalt / Paving	3000		225	501	452	200	51	2 X 10	17467	61.1
CAT00228	300mm CastSlot Treadsafe - 3m	Up to F900	Concrete / Asphalt / Paving	3000		300	587	538	200	51	2 X 10	17467	70.3
CAT00229	350mm CastSlot Treadsafe - 3m	Up to F900	Concrete / Asphalt / Paving	3000		350	645	596	200	51	2 X 10	17467	76.6
CAT00230	400mm CastSlot Treadsafe - 3m	Up to F900	Concrete / Asphalt / Paving	3000		400	712	652	200	51	2 X 10	17467	126.2
CAT00231	500mm CastSlot Treadsafe - 3m	Up to F900	Concrete / Asphalt / Paving	3000		500	828	768	200	51	2 X 10	17467	146.9
CAT00232	600mm CastSlot Treadsafe - 3m	Up to F900	Concrete / Asphalt / Paving	3000		600	1091	1031	200	51	2 X 10	17467	216.6



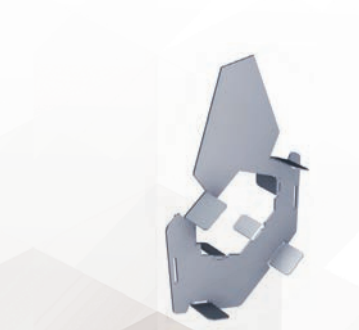
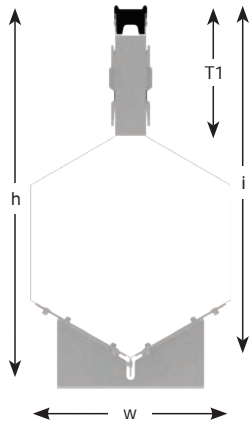
CastSlot Treadsafe 1m Channels

Code	Description	Load Rating	Surface Finish	Length (mm)		Width (w) (mm)	Height (h) (mm)	Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area/ Metre (mm <sup>2</sup> )	Weight (kg)
CAT00233	100mm CastSlot Treadsafe - 1m	Up to F900	Concrete / Asphalt / Paving	1000		100	357	308	200	51	2 X 10	17467	15.6
CAT00234	150mm CastSlot Treadsafe - 1m	Up to F900	Concrete / Asphalt / Paving	1000		150	415	366	200	51	2 X 10	17467	17.8
CAT00235	225mm CastSlot Treadsafe - 1m	Up to F900	Concrete / Asphalt / Paving	1000		225	501	452	200	51	2 X 10	17467	21.8
CAT00236	300mm CastSlot Treadsafe - 1m	Up to F900	Concrete / Asphalt / Paving	1000		300	587	538	200	51	2 X 10	17467	25
CAT00237	350mm CastSlot Treadsafe - 1m	Up to F900	Concrete / Asphalt / Paving	1000		350	645	596	200	51	2 X 10	17467	27.1
CAT00238	400mm CastSlot Treadsafe - 1m	Up to F900	Concrete / Asphalt / Paving	1000		400	712	652	200	51	2 X 10	17467	45.7
CAT00239	500mm CastSlot Treadsafe - 1m	Up to F900	Concrete / Asphalt / Paving	1000		500	828	768	200	51	2 X 10	17467	52.7
CAT00240	600mm CastSlot Treadsafe - 1m	Up to F900	Concrete / Asphalt / Paving	1000		600	1091	1031	200	51	2 X 10	17467	76



CastSlot Treadsafe 500mm Channels

Code	Description	Load Rating	Surface Finish	Length (mm)		Width (w) (mm)	Height (h) (mm)	Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area/ Metre (mm <sup>2</sup> )	Weight (kg)
CAT00241	100mm CastSlot Treadsafe - 500mm	Up to F900	Concrete / Asphalt / Paving	500		100	357	308	200	51	2 X 10	17467	8.4
CAT00242	150mm CastSlot Treadsafe - 500mm	Up to F900	Concrete / Asphalt / Paving	500		150	415	366	200	51	2 X 10	17467	9.5
CAT00243	225mm CastSlot Treadsafe - 500mm	Up to F900	Concrete / Asphalt / Paving	500		225	501	452	200	51	2 X 10	17467	12
CAT00244	300mm CastSlot Treadsafe - 500mm	Up to F900	Concrete / Asphalt / Paving	500		300	587	538	200	51	2 X 10	17467	13.7
CAT00245	350mm CastSlot Treadsafe - 500mm	Up to F900	Concrete / Asphalt / Paving	500		350	645	596	200	51	2 X 10	17467	14.8
CAT00246	400mm CastSlot Treadsafe - 500mm	Up to F900	Concrete / Asphalt / Paving	500		400	712	652	200	51	2 X 10	17467	25.5
CAT00247	500mm CastSlot Treadsafe - 500mm	Up to F900	Concrete / Asphalt / Paving	500		500	828	768	200	51	2 X 10	17467	29.1
CAT00248	600mm CastSlot Treadsafe - 500mm	Up to F900	Concrete / Asphalt / Paving	500		600	1091	1031	200	51	2 X 10	17467	40.9



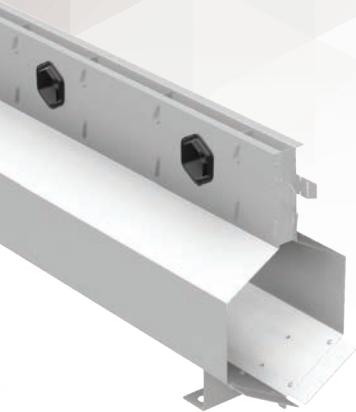
CastSlot Treadsafe Drop Connectors

Code	Description		From Channel Width (mm)	To Channel Width (mm)	Weight (kg)
00155	100-150mm Drop Connector		100	150	0.4
00156	150-225mm Drop Connector		150	225	0.7
00157	225-300mm Drop Connector		225	300	1
00158	300-350mm Drop Connector		300	350	0.9
00159	350-400mm Drop Connector		350	400	1.7
00160	400-500mm Drop Connector		400	500	2.7
00161	500-600mm Drop Connector		500	600	5.9



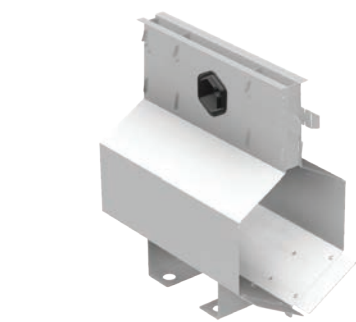
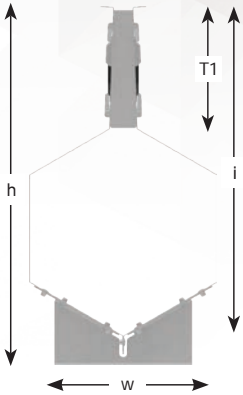


Slotdrain product selector - Gatic UltraSlot



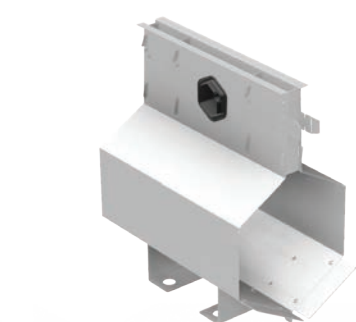
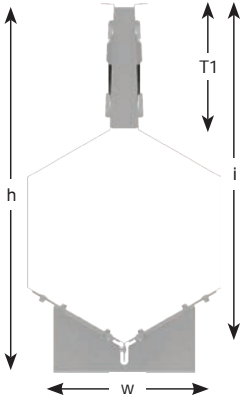
UltraSlot 3m Channels

Code	Description	Load Rating	Surface Finish	Length (mm)	Width (w) (mm)		Height (h) (mm)	Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area/ Metre (mm²)	Weight (kg)
UA00325	100mm UltraSlot - 3m	Up to F900	Concrete	3000	100		357	308	200	70	30	30083	31.7
UA00326	150mm UltraSlot - 3m	Up to F900	Concrete	3000	150		415	366	200	70	30	30083	37.9
UA00327	225mm UltraSlot - 3m	Up to F900	Concrete	3000	225		501	452	200	70	30	30083	48.1
UA00328	300mm UltraSlot - 3m	Up to F900	Concrete	3000	300		587	538	200	70	30	30083	57.3
UA00329	350mm UltraSlot - 3m	Up to F900	Concrete	3000	350		645	596	200	70	30	30083	63.6
UA00330	400mm UltraSlot - 3m	Up to F900	Concrete	3000	400		713	653	200	70	30	30083	114.4
UA00331	500mm UltraSlot - 3m	Up to F900	Concrete	3000	500		829	769	200	70	30	30083	135
UA00332	600mm UltraSlot - 3m	Up to F900	Concrete	3000	600		1091	1031	200	70	30	30083	205.4



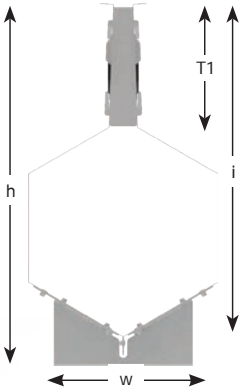
UltraSlot 1m Channels

Code	Description	Load Rating	Surface Finish	Length (mm)	Width (w) (mm)		Height (h) (mm)	Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area Metre (mm²)	Weight (kg)
UA00333	100mm UltraSlot - 1m	Up to F900	Concrete	1000	100		357	308	200	70	30	30083	11.2
UA00334	150mm UltraSlot - 1m	Up to F900	Concrete	1000	150		415	366	200	70	30	30083	13.3
UA00335	225mm UltraSlot - 1m	Up to F900	Concrete	1000	225		501	452	200	70	30	30083	17.4
UA00336	300mm UltraSlot - 1m	Up to F900	Concrete	1000	300		587	538	200	70	30	30083	20.6
UA00337	350mm UltraSlot - 1m	Up to F900	Concrete	1000	350		645	596	200	70	30	30083	22.7
UA00338	400mm UltraSlot - 1m	Up to F900	Concrete	1000	400		713	653	200	70	30	30083	41.6
UA00339	500mm UltraSlot - 1m	Up to F900	Concrete	1000	500		829	769	200	70	30	30083	48.6
UA00340	600mm UltraSlot - 1m	Up to F900	Concrete	1000	600		1091	1031	200	70	30	30083	72.2



UltraSlot 500mm Channels

Code	Description	Load Rating	Surface Finish	Length (mm)	Width (w) (mm)		Height (h) (mm)	Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area Metre (mm²)	Weight (kg)
UA00341	100mm UltraSlot - 500mm	Up to F900	Concrete	500	100		357	308	200	70	30	30083	6
UA00342	150mm UltraSlot - 500mm	Up to F900	Concrete	500	150		415	366	200	70	30	30083	7.1
UA00343	225mm UltraSlot - 500mm	Up to F900	Concrete	500	225		501	452	200	70	30	30083	9.7
UA00344	300mm UltraSlot - 500mm	Up to F900	Concrete	500	300		587	538	200	70	30	30083	11.3
UA00345	350mm UltraSlot - 500mm	Up to F900	Concrete	500	350		645	596	200	70	30	30083	12.4
UA00346	400mm UltraSlot - 500mm	Up to F900	Concrete	500	400		713	653	200	70	30	30083	23.4
UA00347	500mm UltraSlot - 500mm	Up to F900	Concrete	500	500		829	769	200	70	30	30083	27
UA00348	600mm UltraSlot - 500mm	Up to F900	Concrete	500	600		1091	1031	200	70	30	30083	38.8



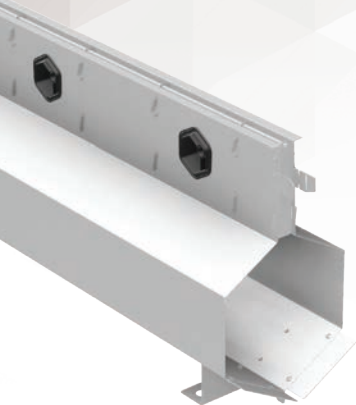
UltraSlot Drop Connectors

Code	Description		From Channel Width (mm)	To Channel Width (mm)	Weight (kg)
00155	100-150mm Drop Connector		100	150	0.4
00156	150-225mm Drop Connector		150	225	0.7
00157	225-300mm Drop Connector		225	300	1
00158	300-350mm Drop Connector		300	350	0.9
00159	350-400mm Drop Connector		350	400	1.7
00160	400-500mm Drop Connector		400	500	2.7
00161	500-600mm Drop Connector		500	600	5.9



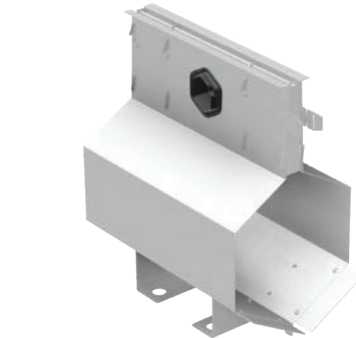
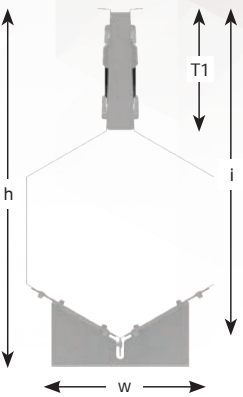


Slotdrain product selector - Gatic UltraSlot (Treadsafe)



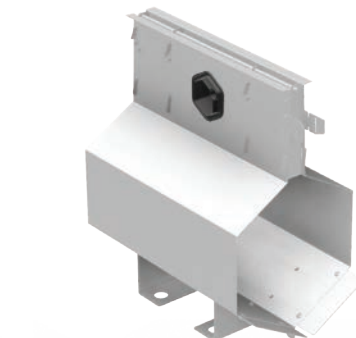
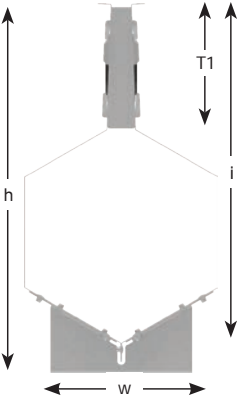
UltraSlot Treadsafe 3m Channels

Code	Description	Load Rating	Surface Finish	Length (mm)	Width (w) (mm)		Height (h) (mm)	Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area/ Metre (mm²)	Weight (kg)
UAT00325	100mm UltraSlot Treadsafe - 3m	Up to F900	Concrete	3000	100		357	308	200	70	2 X 9	18079	34.5
UAT00326	150mm UltraSlot Treadsafe - 3m	Up to F900	Concrete	3000	150		415	366	200	70	2 X 9	18079	40.7
UAT00327	225mm UltraSlot Treadsafe - 3m	Up to F900	Concrete	3000	225		501	452	200	70	2 X 9	18079	50.8
UAT00328	300mm UltraSlot Treadsafe - 3m	Up to F900	Concrete	3000	300		587	538	200	70	2 X 9	18079	60.1
UAT00329	350mm UltraSlot Treadsafe - 3m	Up to F900	Concrete	3000	350		645	596	200	70	2 X 9	18079	66.3
UAT00330	400mm UltraSlot Treadsafe - 3m	Up to F900	Concrete	3000	400		713	653	200	70	2 X 9	18079	117.1
UAT00331	500mm UltraSlot Treadsafe - 3m	Up to F900	Concrete	3000	500		829	769	200	70	2 X 9	18079	137.8
UAT00332	600mm UltraSlot Treadsafe - 3m	Up to F900	Concrete	3000	600		1091	1031	200	70	2 X 9	18079	208.2



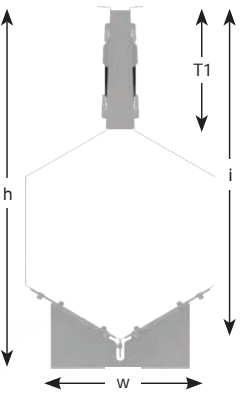
UltraSlot Treadsafe 1m Channels

Code	Description	Load Rating	Surface Finish	Length (mm)	Width (w) (mm)		Height (h) (mm)	Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area/ Metre (mm²)	Weight (kg)
UAT00333	100mm UltraSlot Treadsafe - 1m	Up to F900	Concrete	1000	100		357	308	200	70	2 X 9	18079	12.1
UAT00334	150mm UltraSlot Treadsafe - 1m	Up to F900	Concrete	1000	150		415	366	200	70	2 X 9	18079	14.2
UAT00335	225mm UltraSlot Treadsafe - 1m	Up to F900	Concrete	1000	225		501	452	200	70	2 X 9	18079	18.3
UAT00336	300mm UltraSlot Treadsafe - 1m	Up to F900	Concrete	1000	300		587	538	200	70	2 X 9	18079	21.5
UAT00337	350mm UltraSlot Treadsafe - 1m	Up to F900	Concrete	1000	350		645	596	200	70	2 X 9	18079	23.6
UAT00338	400mm UltraSlot Treadsafe - 1m	Up to F900	Concrete	1000	400		713	653	200	70	2 X 9	18079	42.6
UAT00339	500mm UltraSlot Treadsafe - 1m	Up to F900	Concrete	1000	500		829	769	200	70	2 X 9	18079	49.6
UAT00340	600mm UltraSlot Treadsafe - 1m	Up to F900	Concrete	1000	600		1091	1031	200	70	2 X 9	18079	73.1



UltraSlot Treadsafe 500mm Channels

Code	Description	Load Rating	Surface Finish	Length (mm)	Width (w) (mm)		Height (h) (mm)	Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width	Slot Orifice	Intake Area/ Metre (mm²)	Weight (kg)
UAT00341	100mm UltraSlot Treadsafe - 500mm	Up to F900	Concrete	500	100		357	308	200	70	2 X 9	18079	6.4
UAT00342	150mm UltraSlot Treadsafe - 500mm	Up to F900	Concrete	500	150		415	366	200	70	2 X 9	18079	7.6
UAT00343	225mm UltraSlot Treadsafe - 500mm	Up to F900	Concrete	500	225		501	452	200	70	2 X 9	18079	10.1
UAT00344	300mm UltraSlot Treadsafe - 500mm	Up to F900	Concrete	500	300		587	538	200	70	2 X 9	18079	11.8
UAT00345	350mm UltraSlot Treadsafe - 500mm	Up to F900	Concrete	500	350		645	596	200	70	2 X 9	18079	12.9
UAT00346	400mm UltraSlot Treadsafe - 500mm	Up to F900	Concrete	500	400		713	653	200	70	2 X 9	18079	23.8
UAT00347	500mm UltraSlot Treadsafe - 500mm	Up to F900	Concrete	500	500		829	769	200	70	2 X 9	18079	27.4
UAT00348	600mm UltraSlot Treadsafe - 500mm	Up to F900	Concrete	500	600		1091	1031	200	70	2 X 9	18079	39.3



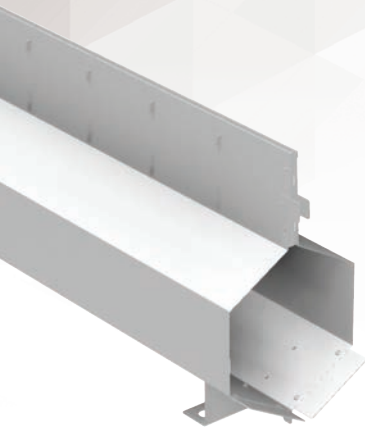
UltraSlot Treadsafe Drop Connectors

Code	Description		From Channel Width (mm)	To Channel Width (mm)	Weight (kg)
00155	100-150mm Drop Connector		100	150	0.4
00156	150-225mm Drop Connector		150	225	0.7
00157	225-300mm Drop Connector		225	300	1
00158	300-350mm Drop Connector		300	350	0.9
00159	350-400mm Drop Connector		350	400	1.7
00160	400-500mm Drop Connector		400	500	2.7
00161	500-600mm Drop Connector		500	600	5.9



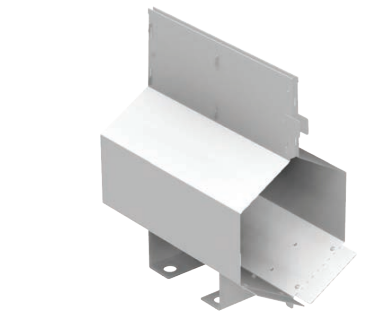
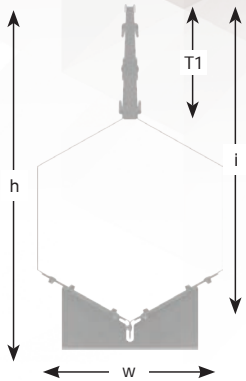


Slotdrain product selector - Gatic PaveSlot



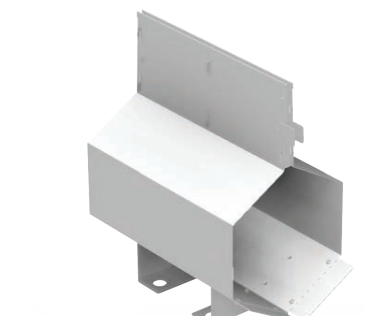
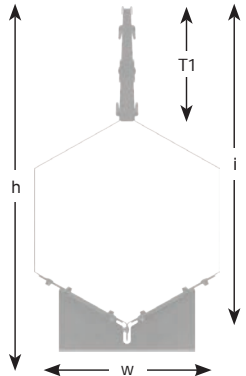
PaveSlot 3m Channels

Code	Description	Load Rating	Surface Finish	Length (mm)	Width (w) (mm)		Height (h) (mm)	Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area/ Metre (mm²)	Weight (kg)
PA00025	100mm PaveSlot - 3m	Up to C250	Paving	3000	100		357	308	200	16	10	10261	30.3
PA00026	150mm PaveSlot - 3m	Up to C250	Paving	3000	150		415	366	200	16	10	10261	36.5
PA00027	225mm PaveSlot - 3m	Up to C250	Paving	3000	225		501	452	200	16	10	10261	46.7
PA00028	300mm PaveSlot - 3m	Up to C250	Paving	3000	300		587	538	200	16	10	10261	55.9
PA00029	350mm PaveSlot - 3m	Up to C250	Paving	3000	350		645	596	200	16	10	10261	62.1
PA00192	400mm PaveSlot - 3m	Up to C250	Paving	3000	400		712	652	200	16	10	10261	111.9
PA00193	500mm PaveSlot - 3m	Up to C250	Paving	3000	500		828	768	200	16	10	10261	132.5
PA00194	600mm PaveSlot - 3m	Up to C250	Paving	3000	600		1091	1031	200	16	10	10261	202.8



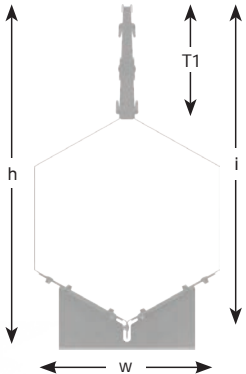
PaveSlot 1m Channels

Code	Description	Load Rating	Surface Finish	Length (mm)	Width (w) (mm)		Height (h) (mm)	Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area/ Metre (mm²)	Weight (kg)
PA00033	100mm PaveSlot - 1m	Up to C250	Paving	1000	100		357	308	200	16	10	10261	10.7
PA00034	150mm PaveSlot - 1m	Up to C250	Paving	1000	150		415	366	200	16	10	10261	12.8
PA00035	225mm PaveSlot - 1m	Up to C250	Paving	1000	225		501	452	200	16	10	10261	16.9
PA00036	300mm PaveSlot - 1m	Up to C250	Paving	1000	300		587	538	200	16	10	10261	20
PA00037	350mm PaveSlot - 1m	Up to C250	Paving	1000	350		645	596	200	16	10	10261	22.2
PA00195	400mm PaveSlot - 1m	Up to C250	Paving	1000	400		712	652	200	16	10	10261	40.8
PA00196	500mm PaveSlot - 1m	Up to C250	Paving	1000	500		828	768	200	16	10	10261	47.8
PA00197	600mm PaveSlot - 1m	Up to C250	Paving	1000	600		1091	1031	200	16	10	10261	71.3



PaveSlot 500mm Channels

Code	Description	Load Rating	Surface Finish	Length (mm)	Width (w) (mm)		Height (h) (mm)	Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area/ Metre (mm²)	Weight (kg)
PA00041	100mm PaveSlot - 500mm	Up to C250	Paving	500	100		357	308	200	16	10	10261	5.7
PA00042	150mm PaveSlot - 500mm	Up to C250	Paving	500	150		415	366	200	16	10	10261	6.8
PA00043	225mm PaveSlot - 500mm	Up to C250	Paving	500	225		501	452	200	16	10	10261	9.4
PA00044	300mm PaveSlot - 500mm	Up to C250	Paving	500	300		587	538	200	16	10	10261	11
PA00045	350mm PaveSlot - 500mm	Up to C250	Paving	500	350		645	596	200	16	10	10261	12.1
PA00198	400mm PaveSlot - 500mm	Up to C250	Paving	500	400		712	652	200	16	10	10261	22.9
PA00199	500mm PaveSlot - 500mm	Up to C250	Paving	500	500		828	768	200	16	10	10261	26.5
PA00200	600mm PaveSlot - 500mm	Up to C250	Paving	500	600		1091	1031	200	16	10	10261	38.3

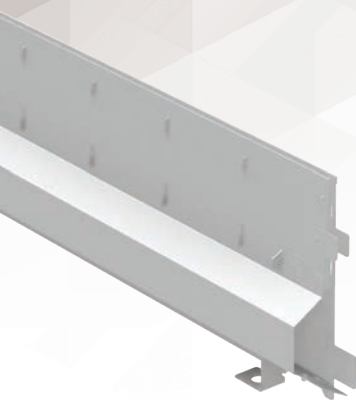


PaveSlot Drop Connectors

Code	Description		From Channel Width (mm)	To Channel Width (mm)	Weight (kg)
00155	100-150mm Drop Connector		100	150	0.4
00156	150-225mm Drop Connector		150	225	0.7
00157	225-300mm Drop Connector		225	300	1
00158	300-350mm Drop Connector		300	350	0.9
00159	350-400mm Drop Connector		350	400	1.7
00160	400-500mm Drop Connector		400	500	2.7
00161	500-600mm Drop Connector		500	600	5.9

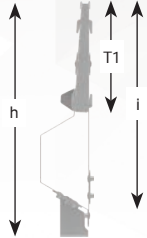






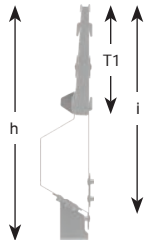
FacadeSlot 3m Channels

Code	Description	Load Rating	Surface Finish	Length (mm)	Width (w) (mm)	Height (h) (mm)		Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area/Metre (mm²)	Weight (kg)
FA00025	50mm FacadeSlot - 3m	A15	Paving	3000	50	357		308	200	16	10	10470	28.2
FA00026	75mm FacadeSlot - 3m	A15	Paving	3000	75	415		366	200	16	10	10470	33.4
FA00027	115mm FacadeSlot - 3m	A15	Paving	3000	115	501		452	200	16	10	10470	41.5



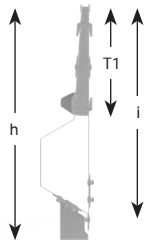
FacadeSlot 1m Channels

Code	Description	Load Rating	Surface Finish	Length (mm)	Width (w) (mm)	Height (h) (mm)		Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area/Metre (mm²)	Weight (kg)
FA00033	50mm FacadeSlot - 1m	A15	Paving	1000	50	357		308	200	16	10	10470	9.8
FA00034	75mm FacadeSlot - 1m	A15	Paving	1000	75	415		366	200	16	10	10470	11.6
FA00035	115mm FacadeSlot - 1m	A15	Paving	1000	115	501		452	200	16	10	10470	14.6



FacadeSlot 500mm Channels

Code	Description	Load Rating	Surface Finish	Length (mm)	Width (w) (mm)	Height (h) (mm)		Invert (i) (mm)	Throat Depth (T1) (mm)	Throat Width (mm)	Slot Orifice (mm)	Intake Area/Metre (mm²)	Weight (kg)
FA00041	50mm FacadeSlot - 500mm	A15	Paving	500	50	357		308	200	16	10	10470	5.1
FA00042	75mm FacadeSlot - 500mm	A15	Paving	500	75	415		366	200	16	10	10470	6.1
FA00043	115mm FacadeSlot - 500mm	A15	Paving	500	115	501		452	200	16	10	10470	7.8



FacadeSlot System End Caps

Code	Description		To suit channel widths	Weight (kg)
00170	FacadeSlot End Cap 50mm		50mm	0.1
00171	FacadeSlot End Cap 75mm		75mm	0.2
00172	FacadeSlot End Cap 115mm		115mm	0.4

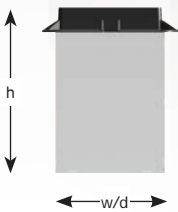






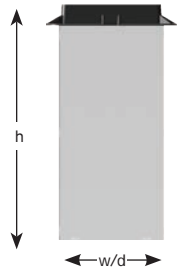
Access Box C/W Treadsafe Double Triangular Grating (CastSlot/UltraSlot)

Code	Description	To Suit Channels	Load Rating	Surface Finish		Height (h) (mm)	Width (w) (mm)	Depth (d) (mm)	Intake Area (mm²)	Pipe Outlet Sizes (mm)	Box Weight (kg)	Cover/Grate Weight (kg)	Total Weight (kg)
ADD00116	Access Box c/w Double Triangular Grating	Up to 225	Up to D400	Asphalt / Paving		475	308	308	9008	N/A	6.7	38.4	45.1
ADD00119	Access Box c/w Double Triangular Grating	From 225 to 400	Up to D400	Asphalt / Paving		675	485	485	33486	N/A	26.7	67.6	94.3
ADD00122	Access Box c/w Double Triangular Grating	From 400 to 600	Up to D400	Asphalt / Paving		1055	686	686	82845	N/A	73.1	122.9	196.1
ADF00118	Access Box c/w Double Triangular Grating	Up to 225	Up to F900	Concrete		475	308	308	9008	N/A	6.7	40.1	46.8
ADF00121	Access Box c/w Double Triangular Grating	From 225 to 400	Up to F900	Concrete		675	485	485	33486	N/A	26.7	76.7	103.4
ADF00124	Access Box c/w Double Triangular Grating	From 400 to 600	Up to F900	Concrete		1055	686	686	82845	N/A	73.1	146.2	219.3



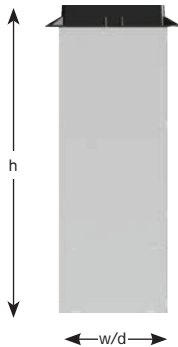
Outlet Box C/W Treadsafe Double Triangular Grating (CastSlot/UltraSlot)

Code	Description	To Suit Channels	Load Rating	Surface Finish		Height (h) (mm)	Width (w) (mm)	Depth (d) (mm)	Intake Area (mm²)	Pipe Outlet Sizes (mm)	Box Weight (kg)	Cover/Grate Weight (kg)	Total Weight (kg)
TDD00116	Outlet Box c/w Double Triangular Grating	Up to 225	Up to D400	Asphalt / Paving		740	308	308	9008	115/ 165/ 205/ 255	10.6	38.4	49.1
TDD00119	Outlet Box c/w Double Triangular Grating	From 225 to 400	Up to D400	Asphalt / Paving		1125	485	485	33486	205/ 255/ 320/ 360/ 440	44	67.6	111.6
TDD00122	Outlet Box c/w Double Triangular Grating	From 400 to 600	Up to D400	Asphalt / Paving		1495	686	686	82845	320/ 360/ 440	101.7	122.9	224.7
TDF00118	Outlet Box c/w Double Triangular Grating	Up to 225	Up to F900	Concrete		740	308	308	9008	115/ 165/ 205/ 255	10.6	40.1	50.7
TDF00121	Outlet Box c/w Double Triangular Grating	From 225 to 400	Up to F900	Concrete		1125	485	485	33486	205/ 255/ 320/ 360/ 440	44	76.7	120.7
TDF00124	Outlet Box c/w Double Triangular Grating	From 400 to 600	Up to F900	Concrete		1495	686	686	82845	320/ 360/ 440	101.7	146.2	247.9



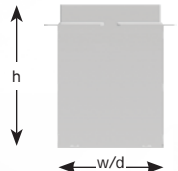
Silt Box C/W Treadsafe Double Triangular Grating (CastSlot/UltraSlot)

Code	Description	To Suit Channels	Load Rating	Surface Finish		Height (h) (mm)	Width (w) (mm)	Depth (d) (mm)	Intake Area (mm²)	Pipe Outlet Sizes (mm)	Box Weight (kg)	Cover/Grate Weight (kg)	Total Weight (kg)
SDD00116	Silt Box c/w Double Triangular Grating	Up to 225	Up to D400	Asphalt / Paving		930	308	308	9008	115/ 165/ 205/ 255	14.1	38.4	55.3
SDD00119	Silt Box c/w Double Triangular Grating	From 225 to 400	Up to D400	Asphalt / Paving		1415	485	485	33486	205/ 255/ 320/ 360/ 440	57.1	67.6	136.5
SDD00122	Silt Box c/w Double Triangular Grating	From 400 to 600	Up to D400	Asphalt / Paving		1935	686	686	82845	320/ 360/ 440	133.8	122.9	287.8
SDF00118	Silt Box c/w Double Triangular Grating	Up to 225	Up to F900	Concrete		930	308	308	9008	115/ 165/ 205/ 255	14.1	40.1	55.3
SDF00121	Silt Box c/w Double Triangular Grating	From 225 to 400	Up to F900	Concrete		1415	485	485	33486	205/ 255/ 320/ 360/ 440	57.1	76.7	145.6
SDF00124	Silt Box c/w Double Triangular Grating	From 400 to 600	Up to F900	Concrete		1935	686	686	82845	320/ 360/ 440	133.8	146.2	311



Access Box C/W Galvanised Recessed Cover (PaveSlot)

Code	Description	To Suit Channels	Load Rating	Surface Finish		Height (h) (mm)	Width (w) (mm)	Depth (d) (mm)	Intake Area (mm²)	Pipe Outlet Sizes (mm)	Box Weight (kg)	Cover/Grate Weight (kg)	Total Weight (kg)
AFC00125	Access Box c/w Galvanised Recessed Cover	Up to 225	Up to C250	Paving		475	308	308	2710	N/A	6.7	28.7	35.4
AFC00127	Access Box c/w Galvanised Recessed Cover	From 225 to 400	Up to C250	Paving		675	485	485	4460	N/A	26.7	50.5	77.2
AFC00129	Access Box c/w Galvanised Recessed Cover	From 400 to 600	Up to C250	Paving		1055	686	686	6460	N/A	73.1	78	151.1



Outlet Box C/W Galvanised Recessed Cover (PaveSlot)

Code	Description	To Suit Channels	Load Rating	Surface Finish		Height (h) (mm)	Width (w) (mm)	Depth (d) (mm)	Intake Area (mm²)	Pipe Outlet Sizes (mm)	Box Weight (kg)	Cover/Grate Weight (kg)	Total Weight (kg)
TFC00125	Outlet Box c/w Galvanised Recessed Cover	UP TO 225	UP TO C250	Paving		740	308	308	2710	115/ 165/ 205/ 255	10.6	28.7	39.3
TFC00127	Outlet Box c/w Galvanised Recessed Cover	FROM 225 TO 400	UP TO C250	Paving		1125	485	485	4460	205/ 255/ 320/ 360/ 440	44	50.5	94.5
TFC00129	Outlet Box c/w Galvanised Recessed Cover	FROM 400 TO 600	UP TO C250	Paving		1495	686	686	6460	320/ 360/ 440	101.7	78	179.7



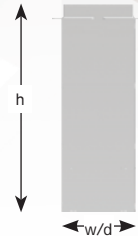


Slotdrain product selector - Boxes



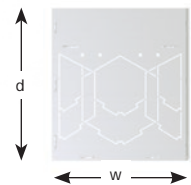
Silt Box C/W Galvanised Recessed Cover (PaveSlot)

Code	Description	To Suit Channels	Load Rating	Surface Finish		Height (h) (mm)	Width (w) (mm)	Depth (d) (mm)	Intake Area (mm²)	Pipe Outlet Sizes (mm)	Box Weight (kg)	Cover/Grate Weight (kg)	Total Weight (kg)
SFC00125	Silt Box c/w Galvanised Recessed Cover	Up to 225	Up to C250	Paving		930	308	308	2710	115/ 165/ 205/ 255	14.1	28.7	45.4
SFC00127	Silt Box c/w Galvanised Recessed Cover	From 225 To 400	Up to C250	Paving		1415	485	485	4460	205/ 255/ 320/ 360/ 440	57.1	50.5	119.4
SFC00129	Silt Box c/w Galvanised Recessed Cover	From 400 To 600	Up to C250	Paving		1935	686	686	6460	320/ 360/ 440	133.8	78	242.8



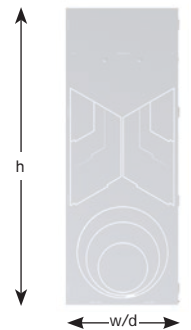
Facade Access Box C/W Galvanised Recessed Covers (FacadeSlot)

Code	Description	To Suit Channels	Load Rating	Surface Finish		Height (h) (mm)	Width (w) (mm)	Depth (d) (mm)	Intake Area (mm²)	Pipe Outlet Sizes (mm)	Box Weight (kg)	Cover/Grate Weight (kg)	Total Weight (kg)
FBA00140	Facade Access Box c/w Galvanised Recessed Cover	115	A15	Paving		475	253	253	N/A	N/A	7.1	2.5	9.8



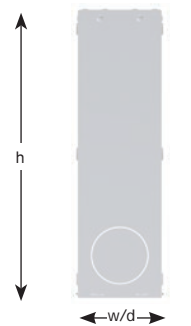
Facade Outlet Box C/W Galvanised Recessed Covers (FacadeSlot)

Code	Description	To Suit Channels	Load Rating	Surface Finish		Height (h) (mm)	Width (w) (mm)	Depth (d) (mm)	Intake Area (mm²)	Pipe Outlet Sizes (mm)	Box Weight (kg)	Cover/Grate Weight (kg)	Total Weight (kg)
FBA00144	Facade Outlet Box c/w Galvanised Recessed Cover	115	A15	Paving		675	253	253	N/A	115, 165, 205	9.5	2.5	12.2



Facade Combined Access/Outlet VBox (FacadeSlot)

Code	Description	To Suit Channels	Load Rating	Surface Finish		Height (h) (mm)	Width (w) (mm)	Depth (d) (mm)	Intake Area (mm²)	Pipe Outlet Sizes (mm)	Box Weight (kg)	Cover/Grate Weight (kg)	Total Weight (kg)
FBA00146	Facade Combined Access / Outlet Box	115	A15	Paving		575	168	333	7511	115, 165, 250	N/A	N/A	9.9



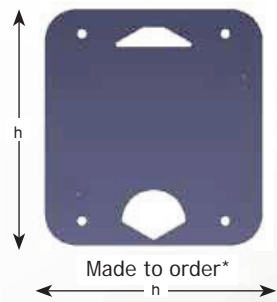
Flow Regulators



Available for all Slotdrain  
(for use with Chambers formed on site)

Code	Description		To suit Channel	Height (h)	Width (w)	Weight (kg)
00217	225mm Flow Regulator		225	295	275	1.9
00218	300mm Flow Regulator		300	380	350	3.1
00219	350mm Flow Regulator		350	440	400	4.1
00220	400mm Flow Regulator		400	495	450	5.4
00221	500mm Flow Regulator		500	610	550	8.1
00222	600mm Flow Regulator		600	875	650	13.7

\*Made to order outlet size on all regulators





CastSlot / CastSlot Treadsafe / UltraSlot / UltraSlot Treadsafe / PaveSlot  
Catchpit Connector

Code	Description	To Suit Channel	Length (mm)	Effective Length (mm)	Weight (kg)
CCA00173	100mm Catchpit Connector	100	375	300	1.9
CCA00174	150mm Catchpit Connector	150	375	300	2.6
CCA00175	225mm Catchpit Connector	225	375	300	3.9
CCA00176	300mm Catchpit Connector	300	375	300	5
CCA00177	350mm Catchpit Connector	350	375	300	5.8
CCA00178	400mm Catchpit Connector	400	375	300	10.9
CCA00179	500mm Catchpit Connector	500	375	300	13.5
CCA00180	600mm Catchpit Connector	600	375	300	21.9

CastSlot / CastSlot Treadsafe / UltraSlot / UltraSlot Treadsafe / PaveSlot  
Channel Pipes

Code	Description	To Suit Channel	Length (mm)	Weight (kg)
SPA00181	100mm Channel Pipe - 3m	100	3000	17.1
SPA00182	150mm Channel Pipe - 3m	150	3000	23.3
SPA00183	225mm Channel Pipe - 3m	225	3000	33.5
SPA00184	300mm Channel Pipe - 3m	300	3000	42.7
SPA00185	350mm Channel Pipe - 3m	350	3000	49
SPA00186	400mm Channel Pipe - 3m	400	3000	91.4
SPA00187	500mm Channel Pipe - 3m	500	3000	112
SPA00188	600mm Channel Pipe - 3m	600	3000	178.6

CastSlot / CastSlot Treadsafe / UltraSlot / UltraSlot Treadsafe /  
PaveSlot / FacadeSlot End Caps / End Cap Outlets

Code	Description	To Suit Channel	Pipe Outlet Sizes (mm)	Weight (kg)
00162	100mm End Cap / Outlet	100	92	0.2
00163	150mm End Cap / Outlet	150	115	0.4
00164	225mm End Cap / Outlet	225	115/165/205	0.7
00165	300mm End Cap / Outlet	300	115/165/205/255	1.2
00166	350mm End Cap / Outlet	350	115/165/205/255/320	1.6
00167	400mm End Cap / Outlet	400	115/165/205/255/320/360	3.3
00168	500mm End Cap	500	N/A	4.9
00169	600mm End Cap	600	N/A	10.6
00170	FacadeSlot End Cap 50mm	50	N/A	0.1
00171	FacadeSlot End Cap 75mm	75	N/A	0.2
00172	FacadeSlot End Cap 115mm	115	N/A	0.4

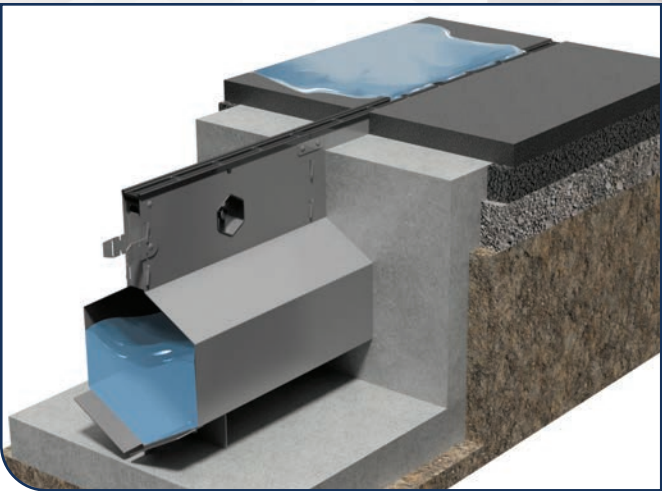




Tests undertaken by an independent hydraulics consultant indicated that the intake capacity of slot channel systems compares favourably with that of surface channel systems with conventional slotted gratings. Test results are available on request.

Rainfall Intensity

When designing a drainage scheme, professional engineers will most often choose a worst case rainfall intensity rate experienced over a period of 10 years or longer. This ensures that the system can accommodate the most severe storm event.



Slotdrain Intake Capacity

The intake capacity of each type of Gatic Slotdrain system is much greater than would be required in almost all realistic situations, despite the fact it only appears as a very neat 10 or 30mm wide slot in the pavement. The table right shows intake capacities for Gatic Slotdrain with surface water flowing to both sides, or from one side only (flow interception on a slope).

Intake capacity (l/s per linear metre)*				
Width of Slot	Feed Both Sides	Feed one side only at cross slope		
		1:40	1:80	1:200
10mm	8.5	2.6	3.5	3.2
30mm Treadsafe	14	3.5	4.1	4.2
30mm Standard	14	5.0	5.5	5.5





Introduction

The design and requirements of a surface drainage system will vary according to geographic location. Some regions may experience very low levels of rainfall throughout the year, so drainage systems can be designed to capture and conserve water, which may be viewed as a valuable commodity. Other regions may experience long periods of adverse weather conditions, with high and prolonged rainfall rates. In these areas, drainage systems can be designed to quickly and efficiently dispose of surface water. However, the flow of water away from the channel system or site may have to be regulated in order to reduce the flood risk of rivers downstream of the site.

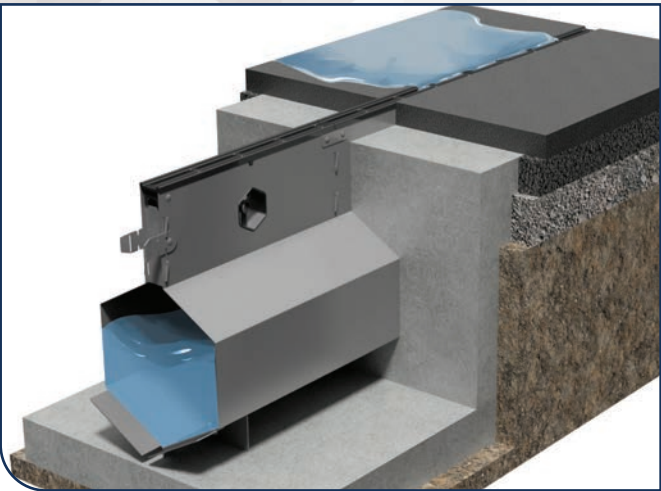
Gatic Slotdrain can be incorporated within the drainage scheme of urban projects to assist with the efficient collection and re-use of water. This provides construction industry professionals with a simple and effective method of water storage and flow regulation.

Water Storage

Gatic Slotdrain channels are available up to 600mm wide, the largest unit having a water storage capacity of 405 l/m. By including larger Slotdrain channels in a surface drainage design, individual channel runs can be used to store higher volumes of water immediately after rainfall occurs. Stormwater may then be diverted to a larger water storage facility on site to conserve water. The flow of water away from the channel may be controlled to meet regulations regarding stormwater discharge from sites. Gatic Slotdrain provides the greatest advantage when 'close to source' water storage is required.

Examples are:

- A. Depth restrictions on site for pipe inverts, or no space to install a deep water attenuation tank.
- B. Water storage required at a shallow invert.
- C. Rocky ground so deep excavation is restricted.
- D. High water-table.
- E. Areas of site infill.



Gatic Slotdrain Channel	Capacity
100mm	9 l/m
150mm	20 l/m
225mm	44 l/m
300mm	78 l/m
350mm	108 l/m
400mm	139 l/m
500mm	217 l/m
600mm	405 l/m

Flow Regulation

The easiest and most cost effective way to control water flow away from a slot drain channel system is through the use of an orifice plate, fitted to the catch pit of the channel system or to access units along the channel run. The methodology and hydraulic performance of the orifice plate is well proven and well understood. By designing the size of the orifice within a blanking end plate, maximum flow levels can be established and controlled.

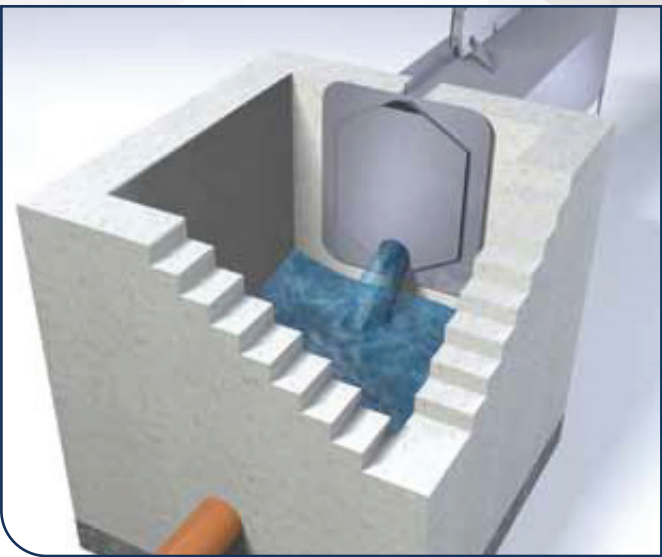
If you are considering using Gatic Slotdrain for water storage, or if you wish to design a slot drain system where the flow will be regulated, please use the Hydraulic Design Software, or contact our technical department who can provide details of the size of orifice required to achieve the flow rates requested.

**Flow Regulator:**  
In order to control the flow of water away from the Gatic Slotdrain channel, a Flow Regulator accessory must be used.

Flow Regulators are supplied by Gatic in Grade 304 stainless steel, and are available in a variety of sizes to fit specific channel widths. There are two types of Flow Regulator available; used with the standard range of boxes and an alternative design used for catch pits formed from concrete on site.

Flow Regulator Performance & Maintenance

The Flow Regulator accessory supplied by Gatic incorporates a semi-circular sharp edged orifice, which is located at the invert level of the nearest slot drain channel, to ensure that there are no restrictions to flow in normal operational conditions. If the orifice becomes blocked with debris, the Flow Regulator also incorporates an overflow weir at the top of the unit. This ensures that the channel system will not become totally blocked, which could cause surface flooding.



A Flow Regulator can be installed at any point along the channel run where there is an access unit or catch pit, thus water flow can be regulated at any point along the channel run. This is particularly useful on sloping sites, where water can be retained at all levels of the site, rather than just at the bottom of the channel run. The Flow Regulator is in all cases bolted neatly onto the inside wall of the catch pit or concrete chamber. This allows easy inspection and removal, for cleaning and maintenance purposes.



Design Formulae

The common equation used by professional engineers for the design of surface channel drainage is Manning’s formula for flow calculation. This relates to the steady, uniform flow found in open channels such as culverts or irrigation trenches. This formula does not allow for the effects of lateral intake of water along the full length of a grated trench drain or slot drain system.

HR Wallingford

The established and universally accepted methodology for calculating the hydraulic performance of linear drainage systems is the formula derived from the research carried out by HR Wallingford in the Report SR581 “Hydraulic Capacity of Drainage Channels With Lateral Inflows”.

As the name suggests, the formula derived from this research takes into account the flow of liquid carried through the slot channel, as well as the lateral intake of liquid through the slot along the full length of the channel. The liquid entering the slot along the length of the channel will have a disrupting effect on the flow of water through the channel, which leads to nonuniform flow within the channel.

Gatic Slotdrain ‘Hydraulic Design Software’ successfully incorporates the formula determined by HR Wallingford, so achieves very accurate results regarding the sizing of slot drain channels. These have been confirmed by manual calculations undertaken by professional engineers on many projects where Gatic Slotdrain has been installed. For further information regarding the formulae used in the design software, please refer to the ‘Help’ section within the software.

Alternative Formulae

There are other formulae that have been used by some surface drainage manufacturers to size and design channel schemes. One such is the Saint-Venant methodology and equation. When required, our technical department can provide an alternative design using this methodology, in order to provide a comparison with competing systems where their design has been based on this formula.

The Hydraulic Design Software provided by Gatic also has the option to calculate channel sizes using this methodology at the press of a button in order to avoid the necessity of manual calculations.

Gatic Slotdrain Channel Sizing - Manual Procedure

Gatic Slotdrain is proven over hundreds of projects in the UK and overseas, however some professional engineers may wish to understand the formulae used within the software and calculate the channel hydraulics manually. Below are the manual procedures for sizing Gatic Slotdrain channels for a given project. Procedure for the design of Gatic Slotdrain

- 1. Calculate the total area of the catchment drainage area for a specific channel; in square metres.
- 2. Apply a permeability factor to that area to achieve an impermeable area (Ap) in square metres. Suitable figures for area multipliers are shown in the table below:

Material	Run-off coefficient
Concrete	1.0
Roofing Materials	0.95
Tarmac	0.90
Asphalt	0.85
Block / Stone paving - Cement joints	0.80
Block / Stone paving - Open joints	0.60
High permeability materials (Gravel etc)	<0.60

- 3. Decide upon a design rainfall rate (r) in l/s/m².
- 4. Calculate required flow from the impermeable area x rainfall rate (Ap.r) in l/s.
- 5. If the slotdrain is to be used for conveyance of flow from other sources, such as roof drainage downpipes, then add the sum of the point inflows to the required flow.
- 6. Determine the required length of channel (L) in m.
- 7. Determine the ground slope along the length of the channel (S) as a %. The maximum value for S should not exceed 3.3% and S should not be adverse to the direction of flow along the channel.
- 8. Decide upon the design loading for the channel. If F900 loading is used, decide upon the slot type (Standard or Treadsafe). Select a channel range that is to be used for the design.
- 9. Decide if a stepped channel design can be incorporated; if so, proceed to Step 16 in the list.

Single Size Channel

10. Calculate the slope factor b using the following rules:

for S ≤ 0.5%  $b = 0.132S - 0.00022$   
for 0.5% < S ≤ 3.33%  $b = 0.00044$

11. Select a suitable channel from the range. When full, the water in the channel will be just below the section. Determine the maximum depth (h) in m, and the channel cross sectional area (A) in m for the chosen channel.

12. If L/h exceeds 1000 then select a larger channel and repeat from Step 11, or reduce the channel length and repeat from Step 6.

13. Calculate the channel capacity from:  
$$Q = 2.66 A^{1.25} (6.74 S^{0.7} + 0.4 + \frac{L}{h} b)$$

14. If the required flow; calculated at step 5, is larger than the channel capacity calculated at Step 13, then select a larger channel and repeat from Step 11.

15. If the required flow; calculated at Step 5, is smaller than 40% of the channel capacity calculated at Step 13, it may be possible to use a smaller channel. To check this, select a smaller channel size and repeat from Step 11.

Stepped Fall Channel Design

16. First time through, use the smallest channel in the range and perform the calculations as the previous Steps 10-13.

17. If the required flow; calculated at Step 5, is less than the channel capacity calculated at Step 16, then proceed to Step 20, otherwise select the next size of channel in the range.

18. Calculate the imposed slope given by the sum of the drops (steps) in the invert, divided by the channel length (Σstep \* 100 / L) as a %.

19. Add the channel slope calculated at Step 7 to the imposed slope calculated at Step 18, to give S, and repeat the calculations from Step 16.

20. Calculate the required flow from the impermeable area x rainfall rate:

21. First time through, use a 3m length of channel (Lx =

3m) or any other length that the designer considers may be close to the finished design length.

22. Calculate the flow in the channel, from Lx times the flow per unit length, calculated at Step 20. Add any point inflows that occur in channel length Lx from the upstream end, to achieve the design flow.

23. Using the slope calculated at Step 19; and hence the last calculated value of b, and the values of A and h for the size of channel being considered, calculate the flow in the channel using:

$$Q = 2.66 A^{1.25} (6.74 S^{0.7} + 0.4 + \frac{L}{h} b)$$

24. If the required flow, calculated at Step 22, is less than the channel capacity, calculated at Step

23, then increase Lx by 3m (or any other length that the designer considers may be close to the finished design length) and repeat from Step 22.

25. Determine the length of channel at the current size, by subtracting the previous length of channel from Lx.

26. Use the next size unit in the design until all sizes set at step 17 have been allocated. Increase Lx by 3m (or any other length that the designer considers may be close to the finished design length) and repeat from Step 22.

Key:

- Ap impermeable area (m²).
- r rainfall rate {l/s/m²}.
- L length of channel run (m).
- S ground slope along length of channel
- b coefficient.
- h depth from invert to bottom of slotdrain throat (channel body) (m).
- A cross-sectional area of channel body (excluding throat) (m²).
- Q flow capacity of channel (m³/s).
- Lx part length

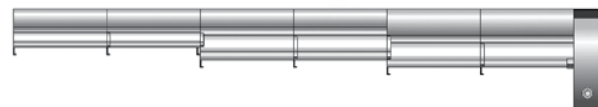
Slotdrain Design Software: We produce software that allows you to design your own Slotdrain system using the same programme as our in-house design engineers. To be sent a USB or digital download containing this free software, simply register your details with us. You can do this on the MyGatic section of our website, or by emailing/ phoning us using the contact information at the back of this brochure.





## Stepped Fall Channel Layout

Gatic Slotdrain channels are available in various sizes ranging from a small and compact 100mm wide channel through to an extremely high capacity 600mm wide channel. Whilst single size channel runs may at times prove to be more suitable, there are significant improvements in hydraulic performance, invert depths and total installed cost where Slotdrain designs incorporate stepped falls.



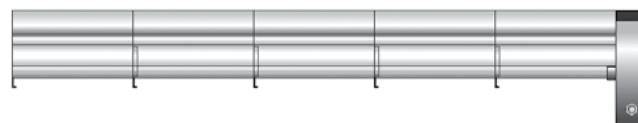
## Benefits

- Creates an installed gradient within the channel, achieving a positive flow towards the outlet even if there is a 0% longitudinal ground slope along which the channel is laid. Often the installed gradient is greater than 0.6%.
- Large surface areas can be drained with a single Slotdrain run, which reduces the number of Slotdrain runs required in a given area.
- Longer runs can be formed by interconnecting channel sizes, greatly reducing the requirement for underground pipe-work, manhole chambers and outlets and significantly reducing installation time and costs.
- Achieves higher water flow velocity within the channel to improve the self-cleansing capabilities of the system.
- Increased flow velocity reduces the channel sizes required in the channel run.
- Optimises the use of smaller channel units at the head of the channel, therefore reducing installation costs.
- Minimises invert depths at the outlet end.
- Reduces the amount of excavation, by using the smallest channels available.

## Same Depth Channel Layout

Channel runs formed from same depth channel units may prove more practical and easier to install in some projects. These are generally used when the channel is laid along a positive gradient. Same depth channel layouts can also be used when there is no ground slope, usually if the channel run is short. In such instances, water will find its way to the outlet point, due to the effect of gravity on the body of water, which achieves a natural installed gradient regarding the water line within the channel.

When using Slotdrain as a storage medium, a same depth channel layout also provides storage volume for surface water.



## Drop Connectors

These system components provide a smooth transition between different sizes of channel, whilst the surface detail of the channel run remains the same.



## Gatic Slotdrain modular drainage system as manufactured by Gatic

[www.gatic.com](http://www.gatic.com)

The channel system should have a continuous, single, horizontal slot design to ensure maximum intake and to resist 'wash-over' of surface liquids. Channels to be a single unit design, with no removable parts. Units should have a hexagonal profile with v-shaped channel base for improved self-cleansing and optimum flow. Channels to have a \*10mm/ 30mm (\*insert appropriate dimension - 10mm/30mm) wide intake slot and a tapered throat. Throat walls can be designed to incorporate weep holes to allow for drainage of subsurface water if this is required.

Channels should be impact-resistant and manufactured from galvanised sheet steel to BS EN 10346: DX51D+Z275-NA-C. Channel material should have 0% water absorption. All materials used in manufacture of channel units should be heatresistant and recyclable. The manufacturer should ideally operate in accordance with the European Environmental Standard BS EN ISO 14001. Channel units should be level invert and supplied in 3.0m, 1.0m or 0.5m lengths.

A stepped fall channel configuration can be achieved if required by using varying depths of Gatic Slotdrain channel in combination, towards the outlet. Channels should be fitted with socket and spigot joints, support feet and concrete anchors that are integral within the design of each unit. Anti-lift channel stabilisers will be fitted to Gatic Slotdrain channels that are 300mm, 350mm, 400mm, 500mm and 600mm wide.

Channels are to be fitted with a removable plastic throat protection strip or tape to prevent debris from entering the slot and throat area during installation. The system shall be supplied with appropriate 'End Caps' and 'Drop Connectors' relevant to the channels specified. Please refer to the manufacturer's product literature for reference numbers of relevant End Caps/ Drop Connectors to be specified and installed. All components within the scope of this system shall be obtained from the manufacturer.

The system shall be installed in accordance with the manufacturer's guidelines and the work carried out as specified by the structural/mechanical engineer and in accordance with recognised good practice. Standards of workmanship should generally be as specified in BS EN 752 and BS 8000 - 0.

## Outlets - D400 Channel

The system is to be supplied with a range of Access, Silt and Outlet Boxes designed to withstand a load of D400, complete with recessed covers or gratings as supplied by Gatic.

## Outlets - F900 Channel

Ultra Heavy Duty Outlet Boxes will be used to terminate all Gatic UltraSlot runs. Alternatively, purpose made 'Catch Pit Connectors' are available from Gatic to provide simple connection of channel units to Catch Pits/Manhole Chambers. Gatic also provides a range of Ultra Heavy Duty (F900) grated or solid covers for Catch Pits/Manhole Chambers.

The system shall be supplied with in line Access Units where required. These should be fitted with solid or grated covers up to F900 loading, as available from Gatic.

## Specific Channel Types

The channel type(s) should be the following: List product reference and characteristics for each channel type to be specified - please refer to product catalogue for relevant details.

## Gatic Slotdrain Ref: (\*Insert Channel Reference)

Where Gatic UltraSlot is specified, if the 'Treadsafe' option is required, the relevant product reference number should be selected.

Channel Width: mm  
Channel Invert Depth: mm  
Channel Overall Depth: mm  
Throat Depth: mm

NB: Where possible, please attach data sheets from the Slotdrain software programme for each channel run.

These contain all of the specific information referred to above



Drawings are available in both 'AutoCAD' or 'pdf' formats. Drawings are included in the Hydraulic Design Software package, can be downloaded from the website ([www.gatic.com](http://www.gatic.com)), or can be supplied on a USB Stick. Please contact Gatic or complete an enquiry form on the website.

Manufactured from high quality galvanised sheet steel, and with an innovative design incorporating special features to enhance the structural integrity of the installation, the Gatic Slotdrain system is strong and durable. When specified and installed according to manufacturers' recommendations, the system is fit for purpose and will meet the performance requirements of the client and specifying engineer.

### Load Testing

Gatic Slotdrain channels comply with BS EN 1433, Load classes A15 to F900.

### Installation Details

A comprehensive set of standard construction installation details are available for each channel type and size, relating to a variety of surface materials (flexible asphalt, paving units, concrete pavement). Installation details and product drawings are also available for the system accessories (modular boxes, drop connector, end caps, flow regulators, etc) supplied with Gatic Slotdrain.

### Durability

### Impact Resistant

Gatic Slotdrain is manufactured from pre-galvanised sheet steel. Channel units are impact resistant, and will not break during transport, site storage, installation and when the facility is in operation. This reduces replacement costs for the contractor, and lowers long term maintenance costs for the client.



### Extreme Temperatures

The system can be used in regions where temperatures may fall well below freezing point. Gatic can supply a much deeper modular outlet to special order (for D400 and F900 load applications), for regions subject to perma-frost, to ensure that underground pipes running from these boxes are located beneath the perma-frost layer.



### Longevity

Specified and installed in accordance with manufacturers' recommendations, Gatic Slotdrain should perform and be 'fit for purpose' for the lifetime of an appropriate site.

Gatic Slotdrain can be considered as a concrete trench drainage system, with a durable steel lining along the inner wall of the channel. The system is therefore likely to be more durable compared with a 'cast in place' trench drainage system formed from concrete on site. For performance information regarding more extreme environmental conditions and/or resistance to specific chemicals, please refer to Gatic.

*Gatic Slotdrain can also be supplied in stainless steel.*

To meet the strength requirements of BS EN 1433, the following has been concluded:  
A15 - C250 Loading:

All channel sizes - Steel reinforcing is not required within the channel concrete encasement/surround.

D400 - 600mm Requires reinforcement.

E600 Loading:

\*UltraSlot channel sizes 150-350mm wide - Steel reinforcing is not required within the channel concrete encasement/surround.

F900 - Loading

UltraSlot & CastSlot channel sizes 100 - 600mm wide - Steel reinforcing is required within the channel concrete encasement/surround.

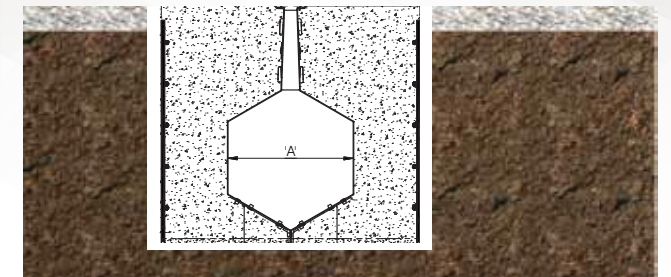
The project engineer may decide to install steel reinforcing around all sizes of Gatic Slotdrain where the traffic is heavy and constant, or where ground conditions dictate.

### Installing Steel Reinforcing

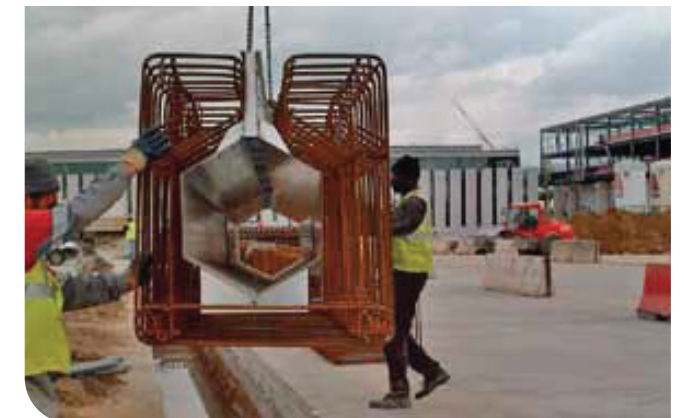
Steel reinforcement installation details are available from Gatic on request for all UltraSlot channels and for chambers formed from concrete on site. These drawings can be supplied to provide an indication of the steel reinforcing for an F900 loading application. Each project has a unique and diverse combination of ground conditions and traffic movements that are beyond the control of Gatic.

As such the Slotdrain product may be required to withstand vertical and horizontal loads outside the scope of the load class and testing criteria specified within BS EN 1433.

We therefore advise that the specifying engineer departs from our standard installation details and adds reinforcement or other applicable construction details where necessary.



Fitting of the steel reinforcement cage can be carried out away from the trench, making the task easier for the contractor. The completed unit can then be lifted into the trench.





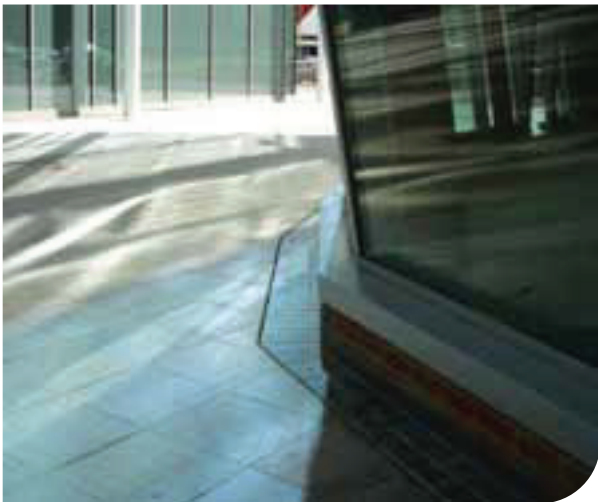
In some projects there may be a requirement to install the slot drain system to follow a given radius, for example around the perimeter of a taxi-way on an airport project, or following the curve of a landscape feature.

Gatic Slotdrain channel units are available in straight lengths of 500mm, 1m or 3m.

Gradual Radius

These can be formed using standard units, with each consecutive channel unit positioned at a slight angle in relation to the previous channel. Please refer to the table below for the achievable radius for standard channels in the range.  
When positioning channel units, the gap formed between channels on the outside edge of the radius should not exceed 5mm.

All gaps between the channel joints, on both sides of the channel, should be sealed with a strong construction tape prior to concreting.



Slotdrain Type and Length	Channel Width (mm)									
	50	75	100	115	150	225	300	400	500	600
FacadeSlot System 3m Channels	32m	48m		70m						
FacadeSlot System 1m Channels	13m	17m		25m						
FacadeSlot System 500mm Channels	6m	8m		12m						

Slotdrain Type and Length	Channel Width (mm)									
	50	75	100	115	150	225	300	400	500	600
Other Slotdrain Systems 3m Channels			64m		94m	139m	183m	244m	304m	363m
Other Slotdrain Systems 1m Channels			23m		32m	46m	62m	82m	103m	123m
Other Slotdrain Systems 500mm Channels			11m		16m	23m	31m	41m	51m	61m

A slot drain channel system will require access units to be placed in strategic locations along the channel run, to provide access into the system for cleaning and maintenance.

The position of access units should be determined by the client and project engineer, taking into account the maintenance equipment that will be used. Specifiers may consider the following:

- Access units should be placed at the start of every channel run.
- Access units should be placed at every corner, or at the point where the channel changes direction.
- 100-300mm Wide Channels: Mid-run access units should be placed every 30-50m.
- 400-600mm Wide Channels: Mid-run access units should be placed every 75-100m.
- For short channel runs of 10m long or less, then channel end-caps may be sufficient at the start of the channel run, as cleaning can be carried out from the catch pit end.

Further advice and information is available from Gatic regarding the positioning of access units.



An access unit should always be placed in corner positions



An access unit is always positioned at the start of channel

Midpoint access unit (in line)



Catch pit can be used as an access point for cleaning and rodding



Access units should always be placed whenever a channel changes direction



An access unit is always positioned at the start of channel



These are guidelines only - each project should be individually assessed regarding placement of access units.







**GATIC®**

DRAINAGE & ACCESS COVERS

[www.gatic.com](http://www.gatic.com)

GATIC  
3rd Avenue  
Halstead  
Essex  
CO9 2SX

+44 (0)1787 475 151  
[info@gatic.com](mailto:info@gatic.com)

**ALUMASC**

WATER MANAGEMENT SOLUTIONS

