

GATIC KERB

Recycled Composite Combined Kerb Drain Solutions



KERB

GATIC®

DRAINAGE & ACCESS COVERS

Best products. Best service. Best results.

Gatic is a global leader in engineered surface water drainage and access covers. Established since 1928, our highly specified civil drainage range is well recognised for innovation, quality and performance across many prestigious projects in the construction, transport and utility markets.

Our range includes engineered gas and air-tight access covers, heavy duty access covers, Slotdrain surface water drainage systems, channel drainage, linear drainage and kerb drainage. Our gas and airtight access covers are the international standard, while our flagship Slotdrain hexagonal channel profile was originally developed in conjunction with industry professionals from the airport sector. Gatic products and systems help to keep the world's major ports and airports open. We are constantly improving and developing our range to match the demands of ever-increasing weight and volume of traffic and provide the ultimate protection in severe weather conditions.

Rain to Drain solution

Gatic is part of Alumasc Water Management Solutions (AWMS) one of four specialist divisions within the Alumasc Group which manufactures and supplies a wide range of products for applications across the built environment.

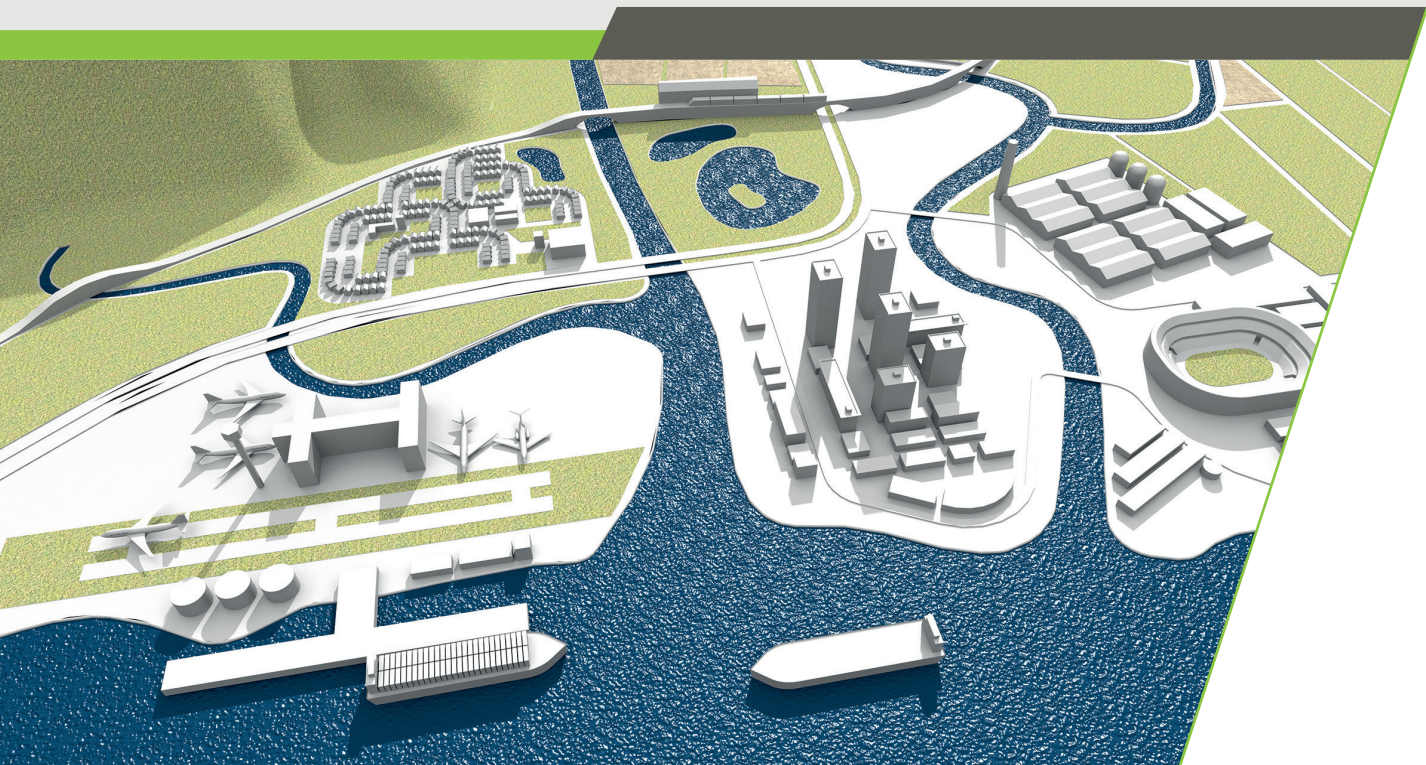


AWMS is a leading brand in the industry for proven water management. It harnesses the expertise of five trusted brands:

- Skyline (Fascia, Soffit and Copings)
- Alumasc Rainwater (Gutters and Downpipes)
- Harmer Building Drainage
- Wade Building Drainage
- Gatic Drainage & Access Covers

Uniquely, these brands represent a complete rain to drain solution which starts at the roof and deals with water from its source: capturing, cleansing, controlling, and channelling water safely back into the water course. It is the kind of joined up thinking we adopt at the design stage to help protect our buildings, people and environment from changes in our climate and increasing levels of rainfall.

www.alumascwms.co.uk



Contents

Introduction

Gatic Services	2
Gatic Kerb Benefits	6-7
Gatic Kerb - combined kerb drainage	3
Installation Guide	8
Quality Assurance and Accreditation	9
Environmental Benefits	10
	11

Combined Kerb Drainage

Products	14-17
Hydraulic Performance	18

Best Service

Technical Support

Gatic's wide range of slot and channel 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, complete with quantities and delivery time scales, within 24 hours. Send us your drainage layout and we will produce the design for you.

Email: technical@gatic.com or call +44 (0)1304 203 545

FREE Drainage Design Software

Our Design and Engineering software for slot and channel drains (Slotdrain, Filcoten and ProSlot) is online at www.gatic.com. This programme takes you through the complete process of designing a slotdrain or channel drain system that will meet the requirements of your project. It is the same software that is developed for and used by our own engineers to plan the most advanced surface water drainage schemes in the world.

If you'd like the USB containing this free software, simply register your details on our website. You can also do this on the MyGatic section of our website, or by emailing or phoning us using the contact information in this brochure.

Gatic Slotdrain 5.00

File View About

Run1

Slotdrain ProSlot Filcoten

FacadeSlot A15 PaveSlot C250 UltraSlot F900 UltraSlot Treadsale CastSlot F900 CastSlot Treadsale

Tab Ref Run1

GATIC®
DRAINAGE & ACCESS COVERS

Catchment Details

Channel Location: HR GVF

Channel Length: 45 m

Drainage Area: 2500 m²

Ground Slope: 0 %

Permeability Factor: 1.0 Concrete slab

Stepped Single

Rainfall Intensity: 50 mm/h

Number of Point Inflows: 0

Controlled Outflow l/s

Design Information

C250 D400 E600 F900

Loading: F900

Flow Velocity: 1 m/s

Required Flow: 34.7 l/s

Maximum Flow: 73.6 l/s

Channel Running 47% Full

Off Freeze this channel design

Installed Slope: 0.38 %

Minimum Channel Size: 150

Total Volume: 1.902 m³

3D Model Dimensions: 300mm width, 538mm height, 150mm depth

Materials List

Material	Quantity
CA00002 150 CastSlot 3m	15m
CA00003 225 CastSlot 3m	21m
CA00004 300 CastSlot 3m	9m
00156 150-225 Drop Connector	1
00157 225-300 Drop Connector	1
00163 150 End Cap Outlet	1
TDF00121 F900 Outlet Box	1
Excavation (m ³)	16.46
Concrete surround (m ³)	14.46
B785 Reinf'ment 1 (m ²)	69.93

Step channel design starting at 150mm width

150mm 15m 225mm 21m 300mm 9m

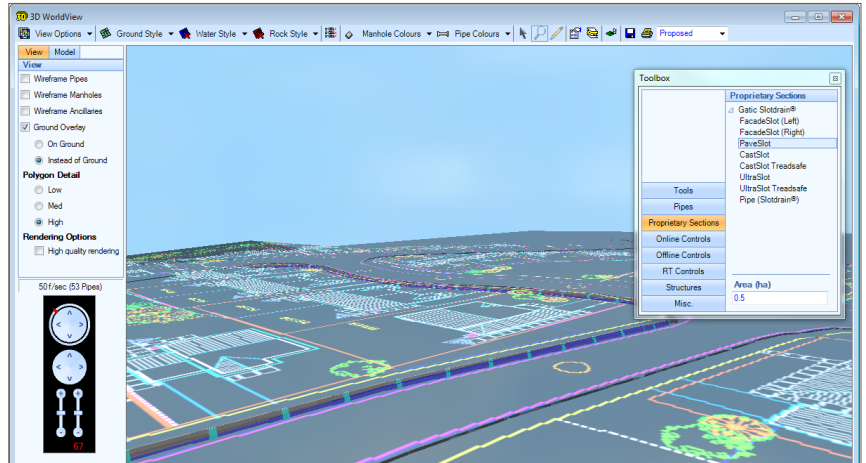
Gatic Slotdrains designed in DrawNet using graphical user interface in 3D worldview

BIM Compliance with MicroDrainage Software

We have added our highly specified range of Slotdrain channel and Filcoten drainage to XP Solutions' MicroDrainage software (Version 2016.1). This development means Gatic can now provide a BIM (Building Information Modelling) Level 2 compliant solution.

MicroDrainage is a well-recognised tool for civil engineers working on surface water and external drainage calculations. It is the industry standard software to detail design fully integrated storm-water and foul water drainage systems. Users of MicroDrainage benefit from a user-friendly interface, interaction with third party CAD software, and an auto-design and editing facility.

Along with the usual functionality, MicroDrainage will include a Gatic Slotdrain parts list that is available in Network and within AutoCAD Civil 3D through the DrawNet(CAD) interface. The advantage is that normal design workflows will be maintained and the resulting drainage design that is generated through MicroDrainage will be BIM compliant. This can then be exported into a program like Navisworks or similar for different file types.



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 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.

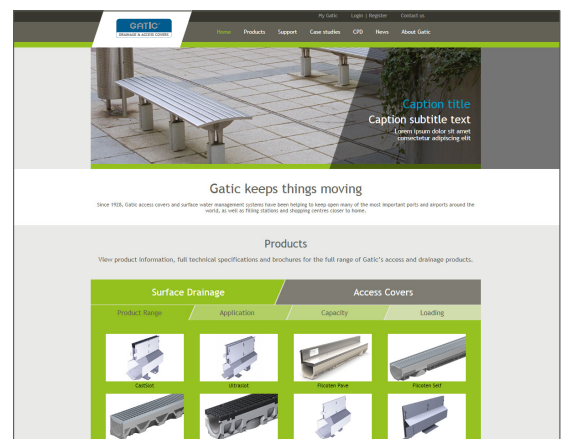
Links of all Gatic products on the NBS Plus Product Register are available on our website.

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.



Gatic Kerb

The Lightweight Gatic Kerb Range of products conform to Manual Handling Regulations, cutting out the cost of any mechanical handling equipment. Installation time is exceptionally quick on the whole Gatic Kerb System, as well as reducing the RISK of personal injury.

Reputation built through innovation

Whilst the Gatic Kerb drainage product range has proven to be a great success as the lightest, yet strongest unit on the market, it has always been the policy of Gatic to continually improve our product ranges.

We have now been able to develop a method of manufacturing the Gatic Kerb that improves strength to an even greater level, reduces weight over the existing units, but also has the added benefit of dramatically improving the aesthetic finish of the product.



Features & Benefits

Lightweight

Each Gatic Kerb component has been designed to be installed manually. The standard 305mm depth weighs only 15kg, the 385mm weighs 18.5kg and the 480mm weighs 24kg.

Strong and Robust

The material used in manufacture is exceptionally strong and complies with BSEN1433 Group 3 kerb side installations load class D400KN. The product also conforms to the HIGHWAY AGENCY IAN117/08 for combined kerb drainage.

Impact Resistant

The product has the added advantage over traditional materials in being virtually unbreakable, offering exceptional strength, provided it is installed correctly and to our specification.

Chemical Resistance

The product is resistant to all forms of effluents found in highway situations such as road-salts, petrol, diesel etc.

Aesthetics

Gatic Kerb, through a policy of material and process development, has a finish almost identical to a standard concrete kerb. Further large investment in new tooling and production techniques has allowed for improved aesthetics over the original product. We are confident that we now produce a product that cannot be differentiated from concrete - unless you pick it up!

System components

The Gatic Kerb system is complemented by a full range of additional components including drop kerbs, centre stones, lightweight gully chamber, rodding access units, radius units and numerous outlet possibilities.



Available in 305, 385, 480, depths in both HB2 and 45° splay. The Gatic Kerb Range has been used on motorways, car parks, traffic calming, urban areas, train stations and now on structures and bridges.

Gatic Kerb - combined kerb drainage

Gatic Kerb is available in a range of depths and kerb profiles to suit all types of contracts including Motorways, Trunk Roads, Car Parks and other urban areas.

With the advantage of full accreditation to EN1433 and Clause 516 (SHW) and the added advantage of a 'CE' mark, you can be confident in the 100% recycled combined Gatic Kerb drainage for your scheme:

- Lightweight - the lightest product on the market by up to 70% allowing easy installation.
- Durable - high impact resistant greater than traditional materials.
- Manufactured from recycled materials.
- Available in both 305mm, 385mm and 480mm depths in 45° SPLAY and HB2 profile.
- For use on motorways, trunk roads, car parks and most other urban areas.
- Conforms to EN1433 linear drainage systems D400KN loading.
- Full Quality Assurance.

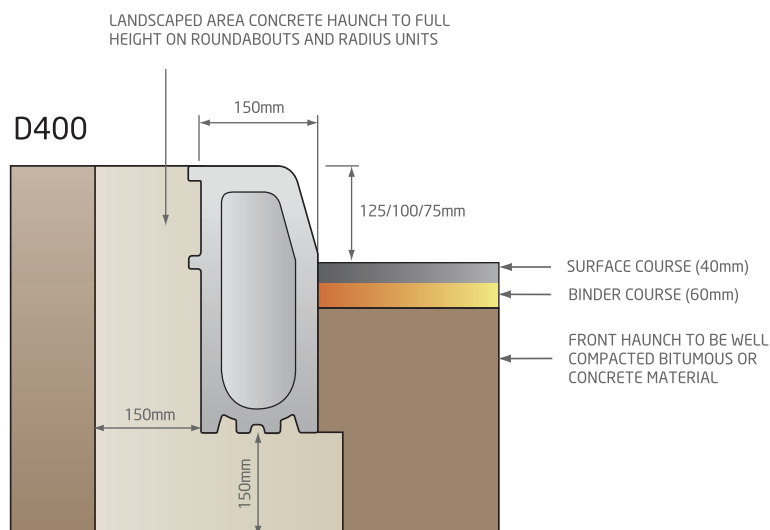
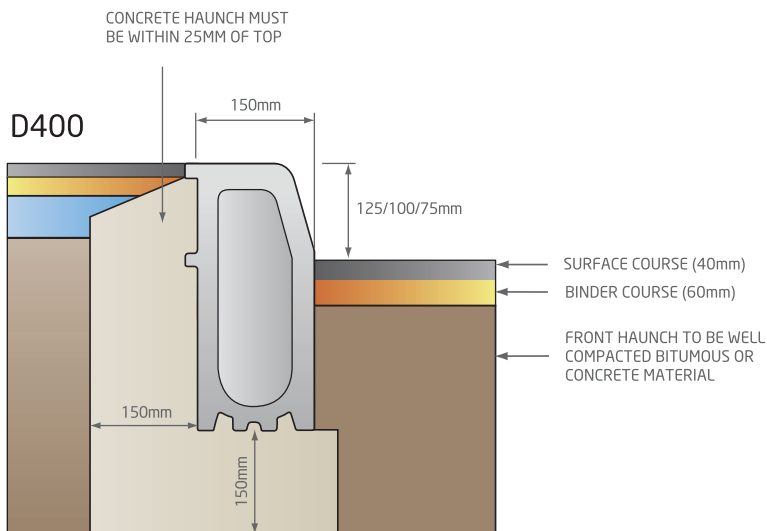


Installation Guide

Gatic Kerb is manufactured to comply with the D400kn loading requirement of EN1433, an integral part of this standard is the installation detail used and the concrete surround/haunch.

It is imperative that the rear haunch is at the correct height, using a concrete with the correct strength and slump. Standard concrete kerb laying material should NOT be used.

If asphalt pavement is present at rear of units the concrete can be adjusted accordingly, the concrete haunch can be lower. Any block paving adjacent to the kerbs should be restrained from movement on an epoxy or polymer modified mortar.



Please note: EN1433 is clear and concise. ALL combined kerb products must be tested for watertightness - therefore units must be sealed to ensure conformity.

- 1) Risk assessment should be carried out.
- 2) Excavate through to line and level.
- 3) Lay out units prior to installation to ensure all rodding access units and outlets are positioned correctly.
- 4) Start at outfall and work away, finished line and level should be pre-determined.
- 5) Sealant is to be applied to unit not yet laid then butt together - keep joints clean of concrete bedding material.
- 6) Rear haunch - concrete should be a minimum st4 concrete with a 50mm slump to ensure the correct density.
- 7) Gatic Kerb suggest a very simple shutter system will reduce the amount of concrete used and will enable concrete density.
- 8) Asphalt can be laid to the bottom of outlets for a 125mm kerb-face, or to the watermark for 75mm/100mm kerb face.
- 9) Units should be cleaned prior to hand over.

Quality Assurance/Accreditation



- **EN1433 CERTIFICATION TO D400KN** - EN1433 is a European Harmonised standard with an attestation level of 3. This defines how to test products and where to source NOTIFIED BODIES to oversee all tests.
- Tests covered in EN1433 include **LOAD TEST (D400KN)**, **WEATHERING TEST (R+)** and also watertight test (an essential requirement of EN1433).
- **S09001 Quality Assurance** for the Design, Manufacture and Distribution of Combined Kerb and Line drainage.
- The above allow us to issue a “Declaration of Conformity” and to **CE Mark** our product range- Under European legislation this is the only Mark relevant under a **Harmonised Standard** - No other Mark **SHOULD BE SPECIFIED** as this can undermine the CE mark and lead to confusion.
- Gatic Kerb is fully compliant with all revisions of the **HIGHWAYS AGENCY Interim Advice Note IAN117/08** and clause **516 of the Specification for Highways Works**.
- Gatic Kerb is type tested in accordance with 89/106/EEC attestation systems 3. Management system of production location(s) are assessed to the requirements of ISO 9001:2000 and additional product focused audit trails and samples are carried out, to the intent of 89/106/EEC attestation system 1.

Environmental Benefits

Gatic Kerb uses recycled materials that would otherwise be destined for landfill within the UK & China. If sent to landfill the material we use, for example, to manufacture our Gatic Kerb range, would take between 750-1000 years to degrade. Gatic Kerb can help your company decrease its carbon footprint. Existing Combined Kerb Drainage systems manufactured in traditional materials rely heavily on natural resources.

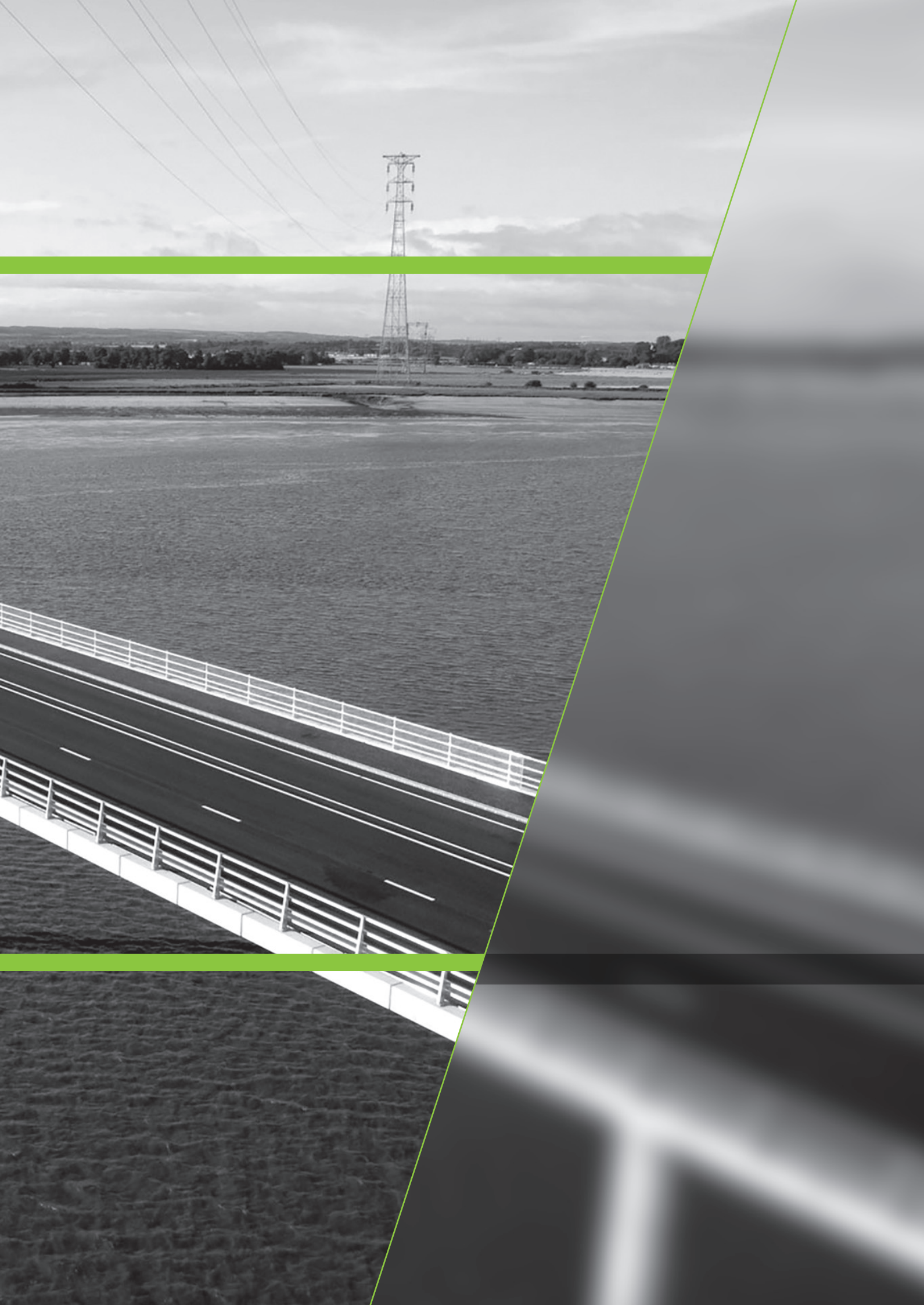
There are additional logistical concerns on the transportation of these materials through the smaller countryside communities in the UK. These products are heavy, brittle, difficult to recycle, and carry a number of on-site safety issues associated with their handling and installation.

Environmental Considerations

Concrete / Polymer concrete products	Gatic Kerb
All raw materials are newly quarried using large machinery.	The UK sourced raw material was originally manufactured for other products. There is therefore no extra carbon cost for our products.
Products include cement or resins which are all manufactured for the process.	Kerbs are manufactured using heat and moulding. This would be our biggest carbon factor.
Products are moved around production facility, and around site using forklifts - less on a pallet than Gatic Kerb.	Products are moved around production facility and around site using forklifts - but due to light weight we have more units per pallet.
HAULAGE - this is one of the major considerations - There is 26 tonnes of raw material, or finished product on an articulated lorry. The meterage of product is much less than our lightweight product. We would be happy to carry out haulage calculations for your client.	HAULAGE - we can now carry 1320 units per load (660mts), compared to 320 (160mts of Concrete kerb drains). This is the largest factor for consideration.
Most concrete products will be installed by machinery due to excessive weight - this is a high carbon cost.	The full Gatic Kerb range is installed manually. Therefore the carbon cost is greatly reduced over concrete type products.
	Other considerations when using the Gatic Kerb may include the carbon cost of dumping the waste on landfill sites and its degradation over a 1000 year period. The other consideration would be the incineration of this plastic waste if it was not recycled into a new product.

Gatic Kerb - combined kerb drainage





Gatic Kerb - combined kerb drainage

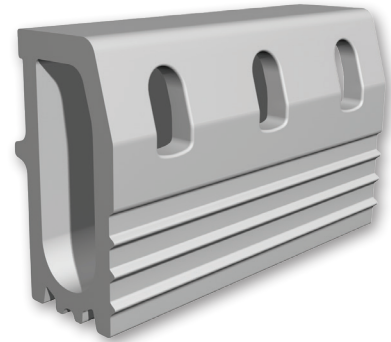
Standard Unit

305mm standard unit. Available half battered or splayed profile.

Design Features

A 500mm long one-piece unit designed for ease of installation. At least 34% lighter in weight than conventional combined kerb drainage systems, and yet fully meets the EN1433 load requirements, and has exceptional impact resistance. Applications include trunk roads, car parks, access roads, traffic calming areas and industrial areas. The product is also 100% recycled.

Product Code	Total Depth	Invert	Width Bore (nominal)	Length	Weight
GKD305SU	305mm	275mm	100mm	500mm	15kg



Standard Unit

385mm standard unit. Available half battered or splayed profile.

Design Features

A 500mm long one-piece unit designed for ease of installation. Fills the large Hydraulic gap between the 305 and the 480. This provides much greater flexibility to any designer. The product is also 100% recycled.

Product Code	Total Depth	Invert	Width Bore (nominal)	Length	Weight
GKD385SU	385mm	355mm	100mm	500mm	18kg



Standard Unit

480mm standard unit. Available half battered or splayed profile.

Design Features

A 500mm long one-piece unit designed for ease of installation. At least 25% lighter in weight than conventional combined kerb drainage systems, and yet fully meets the EN1433 load requirements, and has exceptional impact resistance. Designed for areas requiring greater hydraulic capacity.

Product Code	Total Depth	Invert	Width Bore (nominal)	Length	Weight
GKD480SU	480mm	450mm	100mm	500mm	24kg



Gatic Kerb - combined kerb drainage

Solid Head Ductile Iron Rodding Access Unit

305mm, 385mm and 480mm splayed and HB rodding access unit.

Design Features

Rodding units are installed to allow access for cleaning purposes. Units should be installed at the run-head or high point and at 40mtr intervals.

Product Code	Total Depth	Invert	Width Bore (nominal)	Length	Weight
GKD305RA	305mm	275mm	100mm	250mm	16.8kg
GKD385RA	385mm	355mm	100mm	250mm	19.5kg
GKD480RA	480mm	450mm	100mm	250mm	23kg



Gully Top Cover and Base

305mm, 385mm and 480mm Gully cover and frame with top section.

Design Features

The Gully top section is manufactured in Ductile Iron to comply with the EN1433 loading of D400KN for kerb side covers and frames. The cover is hinged and locking to ease maintenance, and gully cleaning. The base section has been redesigned to offer greater compressive loads and side wall strength, yet it is still a 100% recycled product. The gully accepts drainage units on both sides.

Product Code	Total Depth	Invert	Width Bore (nominal)	Length	Weight
GKD305GMT	505mm	275mm	390mm	500mm	47kg
GKD385GMT	505mm	355mm	390mm	500mm	47kg
GKD480GMT	505mm	450mm	390mm	500mm	47kg



End Caps available:
GKD305EC
GKD385EC
GKD480E

Gatic Kerb - combined kerb drainage

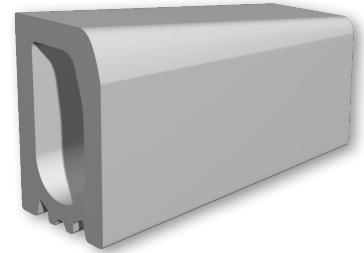
Drop Kerb Inner Unit

305mm and 480mm deep drop kerb inner unit.

Design Features

A 457.5mm long inner drop unit is installed alongside a 457.5mm outer drop kerb. These will form a 915mm total length to suit existing openings in footpaths within maintenance contracts. The units have been developed at half the length of existing systems to reduce the weight, and ease general handling to speed the installation process.

Product Code	Total Depth	Width Bore (nominal)	Length	Weight
GKD305DI	255-205mm	100mm	457.5mm	15kg
GKD385DI	335-285mm	100mm	457.5mm	16.5kg
GKD480DI	430-380mm	100mm	457.5mm	22kg



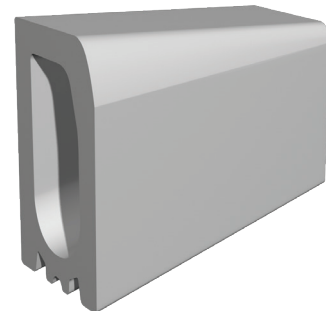
Drop Kerb Outer Unit

305mm and 480mm deep drop kerb outer unit.

Design Features

A 457.5mm long inner drop unit is installed alongside a 457.5mm inner drop kerb. These will form a 915mm total length to suit existing openings in footpaths within maintenance contracts. The units have been developed at half the length of existing systems to reduce the weight, and ease general handling to speed the installation process.

Product Code	Total Depth	Width Bore (nominal)	Length	Weight
GKD305DO	305-255mm	100mm	457.5mm	15kg
GKD385DO	385-335mm	100mm	457.5mm	16.5kg
GKD480DO	480-430mm	100mm	457.5mm	22kg



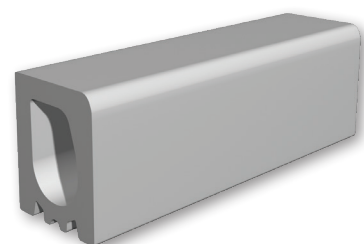
Centre Stone

305mm, 385mm and 480mm centre stones.

Design Features

Centre stones - 305, 385, 480 centre stones with either 25mm upstand or flush/6mm as required dependant on the installation detail. (If the flush/6mm upstand is to be used, a third drop is required.)

Product Code	Total Depth	Width Bore (nominal)	Length	Weight
GKD305CS	205-180mm	100mm	457.5mm	11.5kg
GKD385CS	285-260mm	100mm	457.5mm	15kg
GKD480CS	380-355mm	100mm	457.5mm	18.5kg



Gatic Kerb - combined kerb drainage

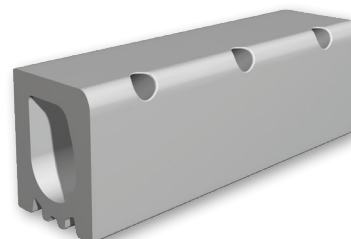
Centre Stones with various inlets

305mm, 385mm and 480mm centre stones.

Design Features

Due to the adaptable nature of the raw material used in the manufacture of Gatic Kerb we are able to create numerous types of drainage facilities within our centre stones. These have included in the past Holes in the upstand, holes in the centre top, or more popular recently is a number of slots which also offer the “Heel-safe” facility.

Product Code	Total Depth	Width Bore (nominal)	Length	Weight
GKD305CS	205-180mm	100mm	457.5mm	11.5kg
GKD385CS	285-260mm	100mm	457.5mm	15kg
GKD480CS	380-355mm	100mm	457.5mm	18.5kg



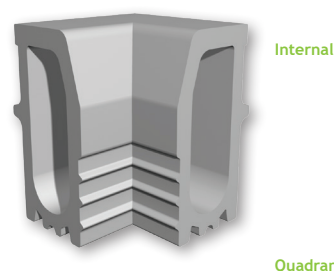
305 90° Quadrant Internal and External angles for all sizes

305mm Internal angle. 305mm Quadrant - for external angles rounded for safety reasons.

Design Features

Gatic are able to offer internal and external angles to suit site requirements. We have supplied 90° and 45° on numerous schemes. Enables continuation of hydraulic flow around 90° external angles - we suggest that a rodding access unit (305RA) is installed alongside this product. The top surface has been designed to be slip resistant, and the base has an in-built ‘key’ for the concrete bed.

Product Code	Total Depth	Invert	Width Bore (nominal)	Length	Weight
GKD305QUAD	305mm	275mm	100mm	500mm	16.5kg (approx.)
GKD305ANG	305mm	275mm	100mm	305mm	19kg (approx.)



Internal & External Radius Units

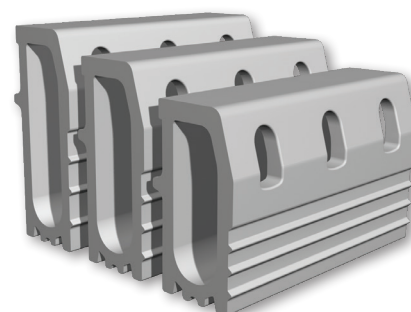
305, 385 and 480 internal and external radius.

Design Features

Gatic are the only manufacturer that supply radius units to suit your site requirements. A wide range of radius from 4Mtr to 14Mtr. Straight units can be used to form a radius in excess of 14mtrs by manipulating the joints as the units are only 500mm long. Gatic offer a number of outlets and end caps - please call for full details.

Product Code	Total Depth	Invert	Width Bore (nominal)	Length	Weight
GKD305IR/GKD305ER	305mm	275mm	100mm	500mm	16.5kg (approx.)
GKD385IR/GKD385ER	385mm	355mm	100mm	*500mm	15kg
GKD480IR/GKD480ER	480mm	450mm	100mm	*500mm	24kg

*effective length along centre line

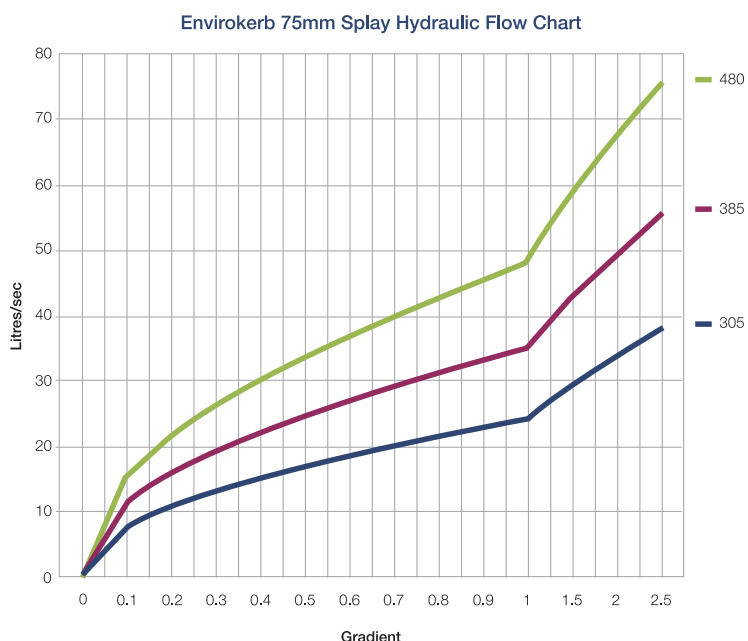
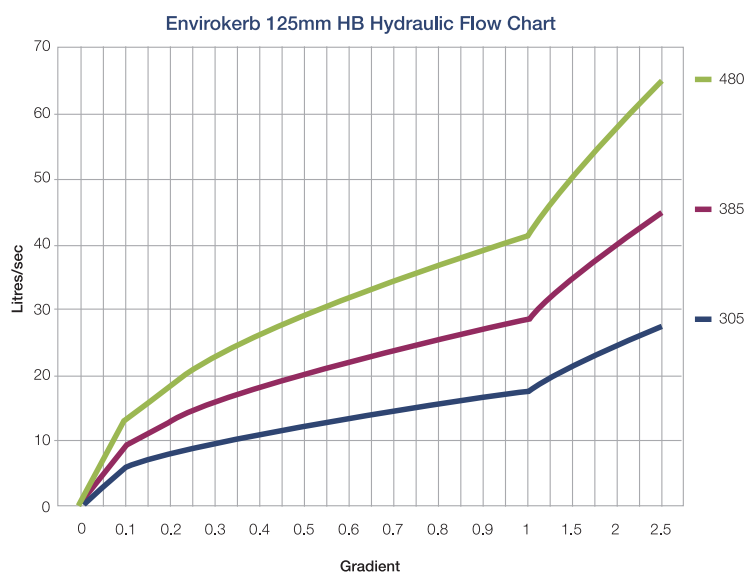


Improved Hydraulic Performance

Due to the composite material used in the manufacture of Gatic Kerb giving excellent co-efficiency values, the hydraulic performance is improved over traditional materials. We have also incorporated three surface water inlet points offering a higher waterway area, designed to restrict the ingress of large debris.

Intermediate size

Gatic Kerb have a unique 385mm deep unit within the Gatic Kerb range. It was noted that there was a large 'Hydraulic gap' between the 305mm and 480mm sizes. The 385mm offers a wider range and yet still weighs in at only 18kg - alternative products have no other option than to offer larger/heavier sizes.





PAUSA
CAFE

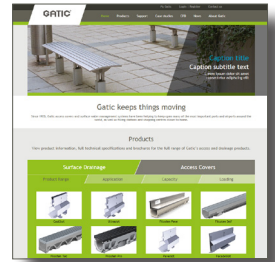
DELICIOUS FOOD
GREAT COFFEE



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Website

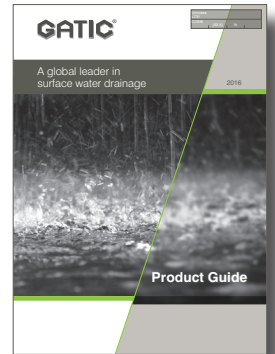
Our website is ultra user-friendly and offers full details of our Slotdrain surface water drainage systems, channel drainage and linear drainage. This includes features and benefits, sizes and load categories, as well as design service and contact information. The website also contains dedicated Access Covers.



Drainage Overview Brochure

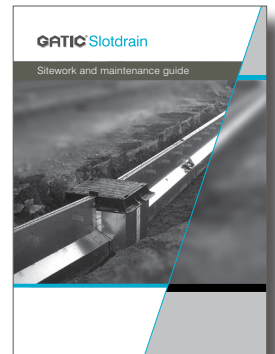
A comprehensive brochure on Gatic's extensive range of surface water drainage: Slotdrain, Filcoten® and ProSlot, as well as Harmer's SML below ground drainage for the complete solutions package.

The brochure includes detailed information on load classes, product applications, technical tables, 3D render images and technical support, plus Gatic's free Drainage Design Software and its association with MicroDrainage software.



General advice and guidance on the installation and maintenance of Slotdrain

Illustrated literature giving advice and general information on safe handling, installation and maintenance of all our products.



FREE Drainage Design Software

This interactive software allows you to design your own drainage system using the same programme as our in-house design engineers. For a USB 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.



Access Covers Product Selector Software
Our Gatic Access Covers Product Selector software is now available and can be sent to you on a USB for free. Simply register your details with us on the MyGatic section of our website, or by emailing / phoning us.



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