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Cl/SfB (52.5)	

ACO Water Management



Product Range Overview



ACO. The future of drainage.

Throughout the world ACO branded drainage and surface water management systems are recognised for their innovative design, high quality manufacture, environmental excellence and industry leading performance.

Today the ACO Group has a research and production base that reaches across four continents. This unmatched resource pioneers the development of solutions that are tailored to individual applications, meeting the need for high performance, sustainable products that deliver optimum value throughout their operational life.

ACO Technologies plc

ACO operates as ACO Technologies plc in the United Kingdom. Founded over 30 years ago, the company has grown quickly on a reputation for design innovation and customer service.

There are now 2 core divisions, ACO Water management and ACO Building Drainage, that serve every sector of the construction industry, providing solutions for applications as diverse as rail, highways, airports, landscaping, retail, distribution centres and environmentally sensitive projects.



To help architects, designers and contractors meet the legal requirements that now tightly control the way surface water is managed; ACO has created its unique 'Surface Water Management Cycle' – Collect, Clean, Hold, Release – the four core processes now required for the complete and sustainable management of surface water drainage.

This brochure provides an overview of the current products available from ACO Water Management, one of the four divisions of ACO Technologies.



The Surface Water Management Cycle

Collect

The point at which runoff enters the surface water management system. Drainage channels can be used individually or in combination to ensure optimal removal of all surface water.

Clean

The process of removing hydrocarbons and particulates from contaminated surface water runoff prior to its release into natural watercourses or to groundwater.

Hold





The provision of sufficient attenuation volume within the surface water management system to ensure it retains its designed collection and release performance under maximum rainfall conditions.

Release

The use of flow control devices to safely control surface water runoff volumes entering either the mains drainage network or the local natural groundwater or surface water courses.



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ACO Water Management Design Services

Surface water management system design can often be a complex task involving many products and processes. The ACO Water Management Design Services Team is able to work closely with you through the entire design process to make sure maximum benefit is gained from new products and installation techniques.

If you need help with specification, design or installation, or just wish to learn more about Surface Water Management products from ACO, contact our Design Services Team who can provide free, no obligation advice and dedicated design support for your project.

Tel: 01462 816666
 Email: technical@aco.co.uk
 Web: www.aco.co.uk

Use of sustainable materials

ACO's continuous investment in research and development and the drive for innovation push forward the development of new sustainable products and materials. Where possible ACO aims to incorporate as much recycled material or waste material as is practicable during the manufacturing process.

ACO has developed Vienite®, a sustainable high strength material. Vienite® utilises high levels of post consumer recycled waste without compromising strength or performance characteristics. At the end of a product's operational life, Vienite® can be collected, processed and returned to production as a raw material.



Project references

For examples of how ACO Water Management products have been used to satisfy many drainage schemes, please visit our case study section on the ACO website www.aco.co.uk



Surface + Grating Visualiser

A clever, yet easy to use software program that visualises how our range of grating designs could enhance your project.

To make specification easier, the software will suggest our most suitable ranges based on the project requirements.

You can then select from the available options and visualise how these may look in different surface finishes. Once a choice is made, a simple, yet detailed specification sheet provides full product information.

Visit www.aco.co.uk/gratingvisualiser to find out more.





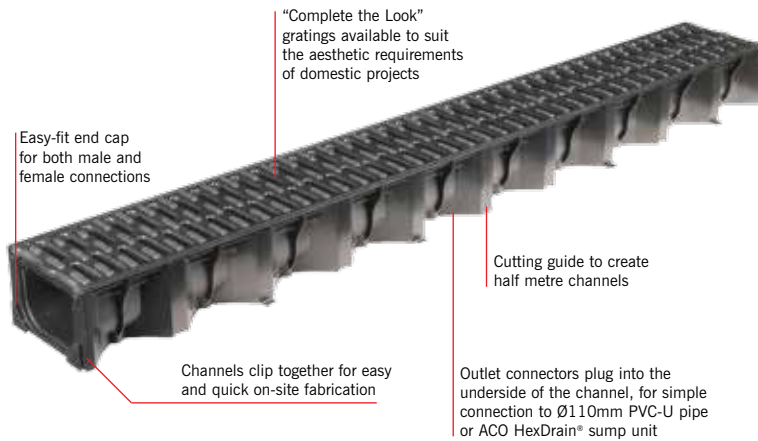
Domestic channel drainage

ACO HEXDRAIN



COMPLETE THE LOOK

New range of grating available. See page 5.



Manufactured from recycled polypropylene, ACO HexDrain® is suitable for a range of domestic applications, and its range of innovative features makes installing drainage channels easier than ever.

This high quality, high strength channel system is available in lightweight 1 metre units, making ACO HexDrain® quick and easy to install.



Other features

- Choice of eight vertical outlet positions on every channel
- Hexagonal columns give the channel excellent strength for load bearing
- System CE marked and fully certified to Load Class A 15 BS EN 1433:2002

ACO RAINDRAIN



COMPLETE THE LOOK

New range of grating available. See page 5.



ACO RainDrain® is a lightweight channel drainage system manufactured from Vienite®. The system is designed to provide surface water drainage for a range of domestic and light duty traffic applications.

ACO RainDrain® has a full set of accessories available to provide a wide variety of quick and professional installations.



Other features

- Lightweight design for easy handling and installation
- Manufactured from Vienite®, ACO's sustainable high strength material
- Improved performance, system CE marked and fully certified to Load Class A 15 BS EN 1433:2002

*Watertight installations can be achieved with the use of appropriate construction details and in accordance with ACO's recommendations. Channels comply with the watertightness requirements of BS EN 1433.

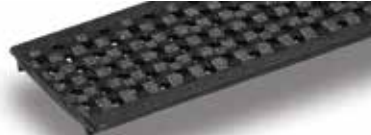


Domestic channel drainage

ACO COMPLETE THE LOOK GRATINGS



Wedge Wire Stainless Steel Grating
Add prestige and value to your patio with the contemporary elegance of ACO's Stainless Steel Wedge Wire grating.



NEW! Mosaic Heelguard™ ATec Grating
Add long lasting style to your driveway or patio with the robust ATec coated, ACO Mosaic Heelguard™ grating.



NEW! Intercept Heelguard™ ATec Grating
ACO's stylish Intercept ATec coated grating is Heelguard™ certified, making it ideal for patio and driveway areas.



NEW! Antique Iron Heelguard™ ATec Grating
Add character to your driveway or patio with ACO's improved Antique Iron Heelguard™ grating, now with ATec coating.



Polished Stainless Steel Grating
Cool and contemporary, ACO's polished steel grating gives driveways and patios a modern look.



Anthracite Grating
High quality looks can be achieved with the versatile Anthracite grating.



Galvanised Steel Grating
Elegance and warmth to suit traditional and contemporary settings.



Black Plastic Grating
Renowned for quality and durability, ACO's black plastic grating will maintain its look for years.

COMPLETE THE LOOK

ACO's range of elegant and modern grating finishes provide choice and style to 'Complete the Look' of driveway and patio projects.

Designed to be used with ACO's bestselling domestic drainage channels ACO HexDrain® and ACO RainDrain®, a choice of 8 gratings are now available to provide the perfect finish.



ACO HEXDRAIN B 125



Environmentally friendly product – manufactured from recycled polypropylene and 100% recyclable

100mm overall channel depth

Heelguard™ grating with 8mm slots

Cutting guide to create half metre channels

ACO Drainlock™ grating – this bar-less locking device allows quick and simple installation of gratings

Male and female channel connections clip together for quick and easy installation

Other features

- Easy handling and installation
- Anti-shunt prevents grating movement when installed
- CE marked and fully certified to Load Class B 125 BS EN 1433:2002

ACO HexDrain® B 125 provides a drainage system for driveways and small private car parks.

Manufactured using recycled polypropylene, the high strength 1m channel comes complete with Heelguard™ black composite gratings, fitted with ACO's Drainlock™ barless locking system.

ACO HexDrain® B 125 has a full set of accessories to provide a variety of quick and professional installations.



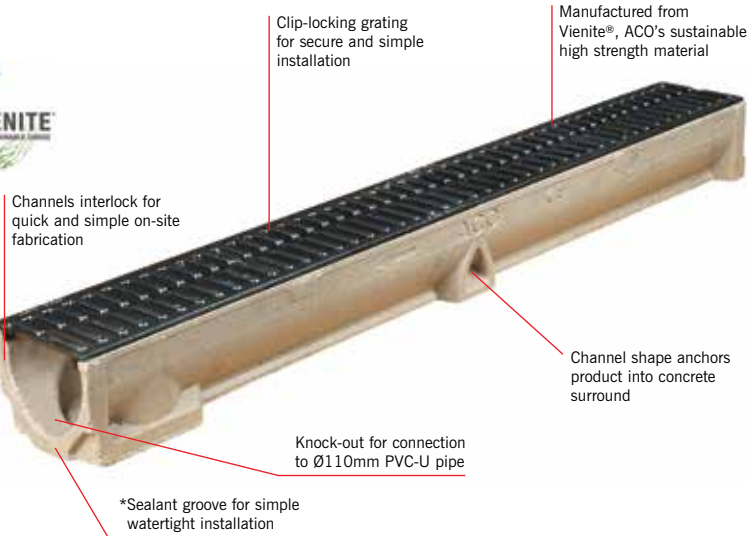
Watertight installations can be achieved with the use of appropriate construction details and in accordance with ACO's recommendations. Channels comply with the watertightness requirements of BS EN 1433.





Domestic channel drainage

ACO RAINDRAIN B 125



Manufactured from Vienite®, ACO's high strength recycled polymer concrete material, ACO RainDrain® B 125 is designed to provide surface water drainage for driveways and small private car parks. Its lightweight 1m channel design makes it quick and easy to install.

ACO RainDrain® B 125 has a full set of accessories to provide a variety of quick and professional installations.



Other features

- Lightweight design for easy handling and installation
- Profile improves speed of water and promotes self cleansing
- Improved performance, system CE marked and fully certified to Load Class B 125 BS EN 1433:2002

ACO HEXDRAIN BRICKSLOT



ACO HexDrain® Brickslot provides a discreet slot drainage system for domestic block paving installation and threshold drainage.

Manufactured from 100% recycled polypropylene, the highly successful 1m ACO HexDrain® channel has been combined with an offset slot cover specifically designed for slab and block paving, to create ACO HexDrain® Brickslot.



Other features

- Choice of eight vertical outlet positions on every channel
- Hexagonal columns give the channel excellent strength for load bearing
- System CE marked and fully certified to Load Class A 15 BS EN 1433:2002

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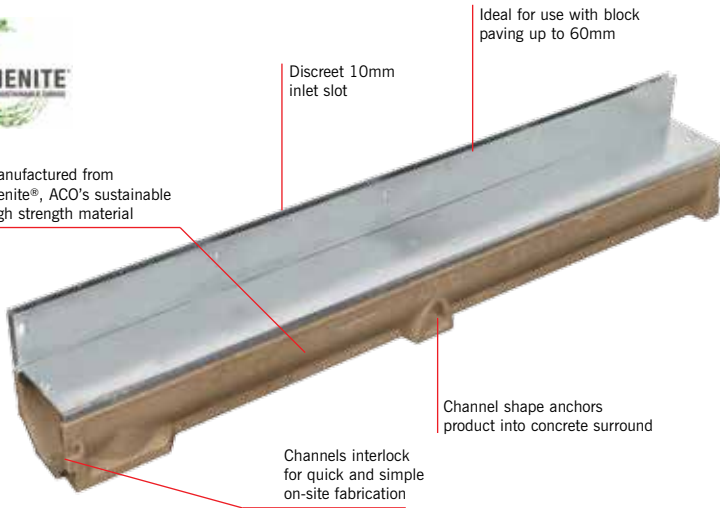


Domestic channel drainage / level threshold drainage

ACO RAINDRAIN BRICKSLOT B 125



Manufactured from Vienite®, ACO's sustainable high strength material



Discreet 10mm inlet slot

Ideal for use with block paving up to 60mm

Channel shape anchors product into concrete surround

Channels interlock for quick and simple on-site fabrication

Other features

- Improved performance, system CE marked and fully certified to Load Class B 125 BS EN 1433:2002
- Profile improves speed of water and promotes self cleansing
- Knock-out for connection to Ø110mm PVC-U pipe

ACO RainDrain® Brickslot B 125 provides a discreet slot drainage system for driveways and small private car parks.

Manufactured from Vienite®, ACO's high strength recycled polymer concrete material. ACO RainDrain® Brickslot B 125 is designed to provide surface water management for domestic block paving projects, subjected to higher wheel loads.

ACO RainDrain® Brickslot B 125 has a full set of accessories to provide a variety of quick and professional installations.



ACO STEPDRAIN / ACO DOORWAY DRAIN



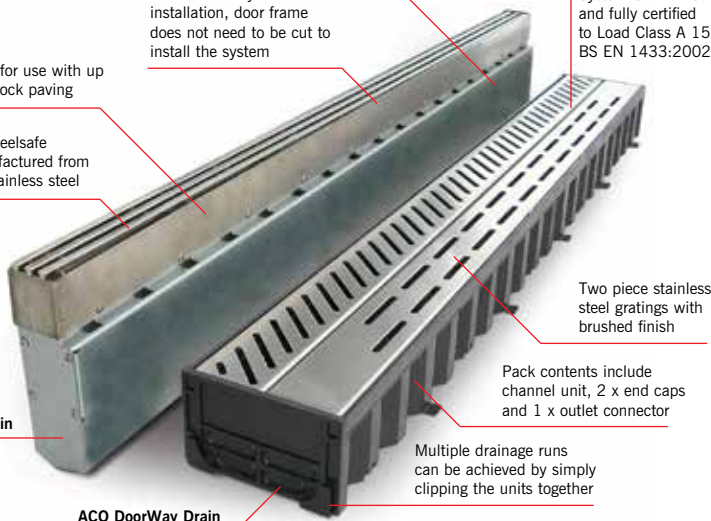
Frame manufactured from grade 304 stainless steel

Quick and easy installation, door frame does not need to be cut to install the system

System CE marked and fully certified to Load Class A 15 BS EN 1433:2002

System ideal for use with up to 100mm block paving

Removable Heelsafe grating manufactured from grade 304 stainless steel



Two piece stainless steel gratings with brushed finish

Pack contents include channel unit, 2 x end caps and 1 x outlet connector

Multiple drainage runs can be achieved by simply clipping the units together

ACO StepDrain

ACO DoorWay Drain

ACO StepDrain and ACO DoorWay Drain provide unobtrusive, high quality level threshold drainage compliant with Part M of the Building Regulations for England and Wales and Section 4 of the Scottish Building Standards.

ACO StepDrain is a slimline stainless steel unit with a removable Heelsafe grating. The system is available in 940mm and 1088mm lengths.

ACO DoorWay Drain is a simple, easy to use 1m unit, provided with all the accessories needed to complete a domestic threshold installation.



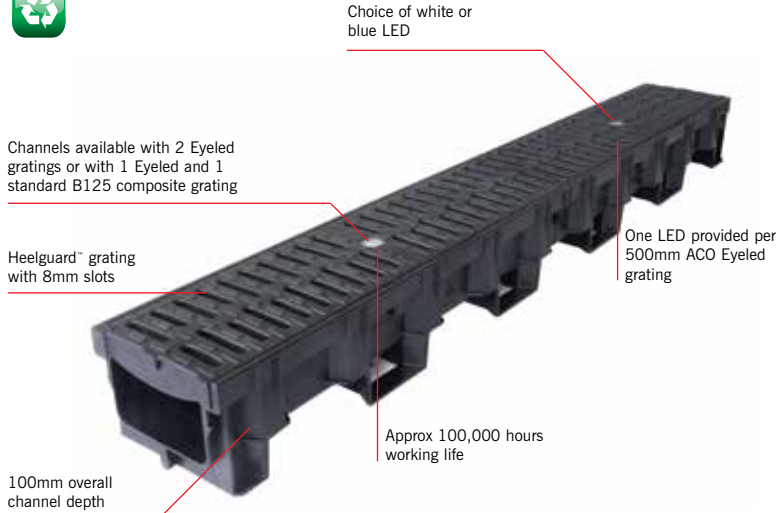
Watertight installations can be achieved with the use of appropriate construction details and in accordance with ACO's recommendations. Channels comply with the watertightness requirements of BS EN 1433.





Channel lighting / light duty channel drainage

ACO EYELED



ACO Eyeleds is a high quality surface water drainage system for use in pedestrian and light vehicle applications such as patios, drives, and private parking areas.

The complete ACO Eyeled channel assembly consists of a 1m drainage channel and two 500mm ACO Eyeled gratings fitted with an LED spotlight, which is available in white or blue.

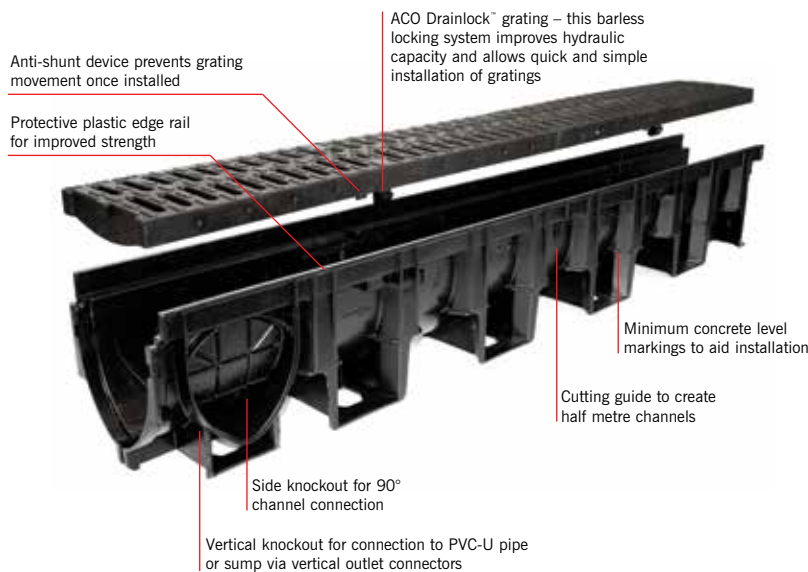
Channels and gratings are manufactured from high strength black recycled polypropylene and can be used to provide distinctive accents and enhancements to many applications.



Other features

- Environmentally friendly product – manufactured from recycled polypropylene and 100% recyclable
- Each ACO Eyeled grating comes complete with a watertight cable connection (IP67)
- System CE marked and fully certified to Load Class B 125 BS EN 1433:2002

ACO HEXDRAIN PRO



Manufactured from recycled polypropylene, ACO HexDrain® Pro is a high quality channel drainage system ideal for light to medium duty traffic applications.

The high strength 1m black plastic channel has integral edge rails for improved strength and comes complete with Heelguard™ black gratings fitted with ACO's Drainlock™ barless locking system.



Other features

- Textured external surfaces and anchors key product securely into concrete surround
- V-shaped ultra smooth channel bore improves speed of water flow and promotes self cleansing
- CE marked and fully certified to Load Class C 250 BS EN 1433:2002

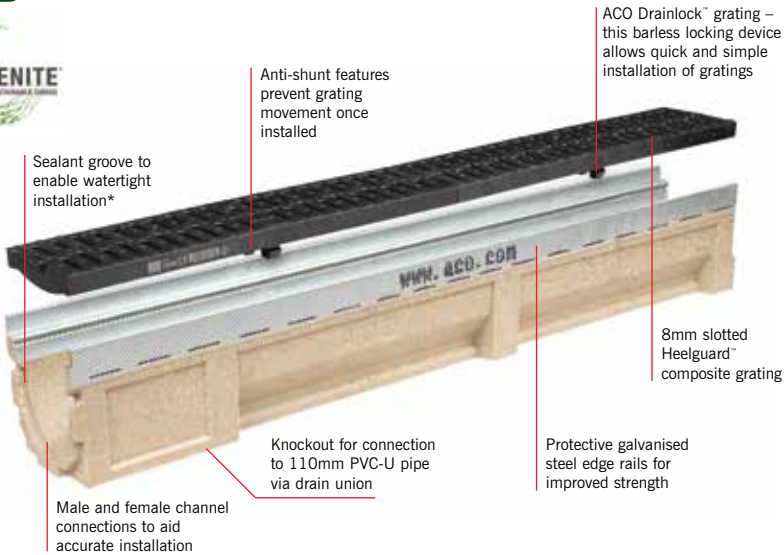
Watertight installations can be achieved with the use of appropriate construction details and in accordance with ACO's recommendations. Channels comply with the watertightness requirements of BS EN 1433.





Light duty channel drainage / ground reinforcement

ACO CIVICDRAIN



ACO CivicDrain® is a lightweight channel drainage system for light to medium duty traffic applications.

Manufactured from Vienite®, ACO's high strength recycled polymer concrete, the 1m channel has a 100mm wide bore and is available in three channel depths to create a stepped system where required.

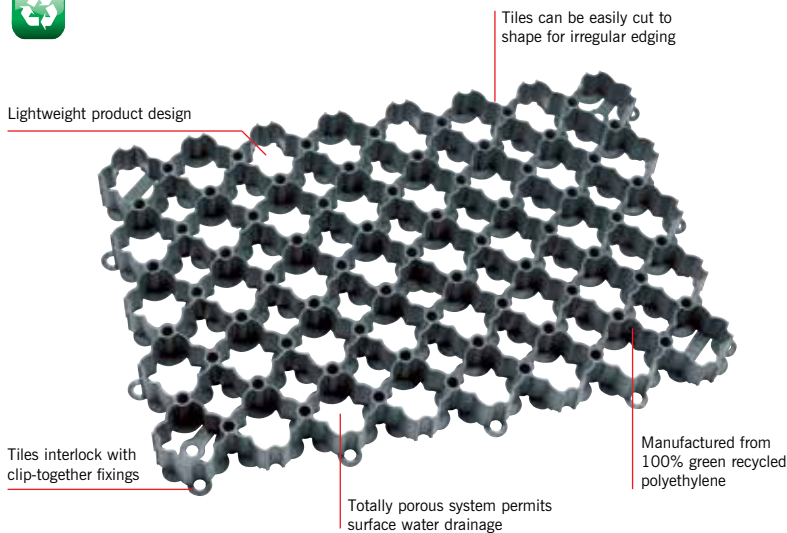
The channel unit comes complete with black composite Heelguard™ gratings and protective galvanised steel edge rails.



Other features

- Profile improves speed of water and promotes self cleansing
- CE marked and fully certified to Load Class C 250 BS EN 1433:2002
- Strong and lightweight polymer concrete design improves stability and anchors product into concrete surround

ACO GROUNDGUARD



While channel systems are ideal for the localised collection of water for storage or treatment, it is not always necessary to move water away from where it lands.

ACO GroundGuard is a lightweight ground reinforcement system ideal for grass or gravel stabilisation. This type of surface helps to reduce the risks of potholes, rutting or grass damage.

The system is exceptionally lightweight and strong, making installation quick and easy. ACO GroundGuard is suitable for a wide range of applications including paths, drives, parking areas and access routes.

ACO GroundGuard is over 90% porous, reducing the rate of surface water runoff and saving cost on unnecessary drainage installation.



Other features

- Strong, robust system certified to 250 tonnes per square metre
- ACO GroundGuard specification coverage: 4.42 tiles per square metre
- Product design ensures easy handling and installation

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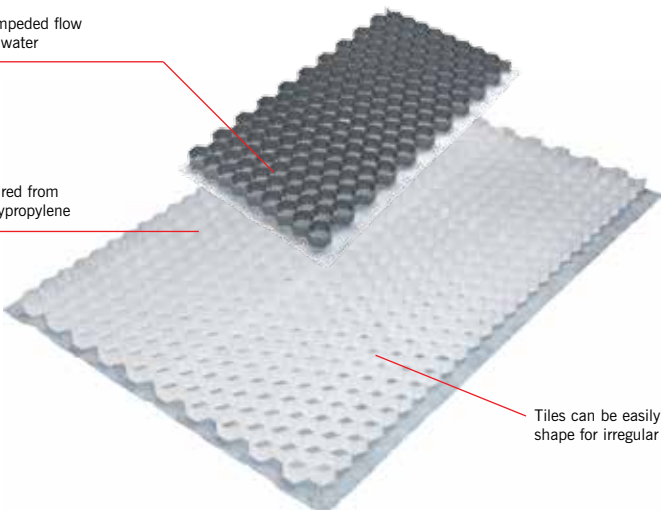
Ground reinforcement / general purpose channel drainage

ACO GravelGuard



Offers unimpeded flow to surface water

Manufactured from 100% polypropylene



Tiles can be easily cut to shape for irregular edging

ACO GravelGuard is a lightweight ground reinforcement system for gravel stabilisation, helping to reduce the risk of potholes.

The incorporated Dupont® Tytar™ geotextile helps to reduce weed growth and speed up installation. ACO GravelGuard is manufactured from polypropylene and is suitable for driveway, paths and shed base applications.

Correctly installed, ACO GravelGuard Pro is suitable for loads up to 40 tonnes per square metre, more than enough for its applications.

In addition, ACO GravelGuard offers unimpeded flow to surface water, reducing the rate of run-off and potentially saving cost on unnecessary drainage installation.



Other features

- Robust system for loads up to 40 tonnes per square metre
- Incorporated DuPont™ Tytar® geotextile for reduced weed growth
- Product design ensures easy handling and installation

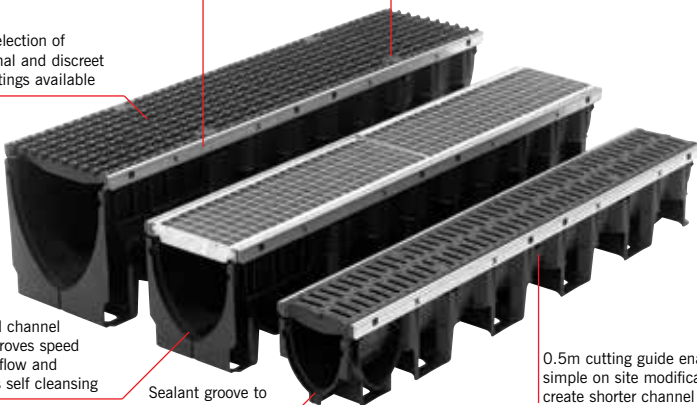
ACO MULTIDRAIN PPD

Surface + Grating
Visualiser

Durable galvanised steel edge rail protects channel from traffic damage

ACO MultiDrain® PPD gratings are fitted with the ACO Drainlock® fastening system for quick installation

Wide selection of traditional and discreet slot gratings available



V-shaped channel bore improves speed of water flow and promotes self cleansing

Sealant groove to enable watertight connection*

0.5m cutting guide enables simple on site modification to create shorter channel lengths

The ACO MultiDrain® PPD system has been specifically developed with the installer and user in mind.

The high quality 1m black plastic channel unit forms the main component of the system, which is complemented by a wide choice of ACO Drainlock barless locking gratings.

The ACO MultiDrain® MD system is available in three widths, 100mm, 150mm and 200mm and has shallow and constant depth channels for optimum performance and system design.



Other features

- High quality channel CE marked and certified to Load Class D 400† BS EN 1433:2002
- Security locking option available to restrict unwanted grating removal

† Not suitable for carriageways of public roads or motorways

*Watertight installations can be achieved with the use of appropriate construction details and in accordance with ACO's recommendations. Channels comply with the watertightness requirements of BS EN 1433.



General purpose channel drainage

ACO MULTIDRAIN MD



Surface + Grating



ACO MultiDrain® MD gratings are fitted with the ACO Drainlock™ fastening system for quick installation

Durable UltraSTEEL™ galvanised steel edge rail protects channel from traffic damage

Wide selection of traditional and discreet slot gratings available



Improved knockout for connection to Ø110mm (for M100D channels) and Ø160mm (for M150D and M200D channels) PVC-U pipes

Sealant groove to enable watertight connection*

Strong and lightweight design improves stability and anchors product into concrete surround

The ACO MultiDrain® MD System is available in both sloping and constant depths and has a range of channel widths: 100mm, 150mm and 200mm. The channel unit forms the main component of the system which can then be combined with a grating to suit the required application.

You can choose from a range of traditional and discreet slot drainage gratings, solid covers and cross footpath drainage units to ensure a wide variety of applications is catered for. The system's gratings are fitted with ACO Drainlock™, a barless locking device which reduces the risk of blockages and improves hydraulic capacity.



Other features

- Strong and robust channel manufactured from Vienite®, ACO's sustainable high strength material
- ACO MultiDrain® MD System is CE marked and fully certified to Load Class D 400† BS EN 1433:2002
- Security locking option available to restrict unwanted grating removal

ACO MULTIDRAIN MD BRICKSLOT



Surface + Grating



Offset grating ideal for use with up to 100mm block paving

Discreet 10mm inlet slot



Sealant groove to enable watertight connection*

Offset slot enables drainage location adjacent to walls and door threshold

Designed as standard with a Heelguard™ 10mm offset drainage inlet, ACO Brickslot is a subtle and unobtrusive grating which can be combined with ACO MultiDrain® MD and PPD to complement discreet drainage applications.

Compatible with most paving materials, the vertical sides of the grating enable pavements to be laid directly to the unit's edge. Once installed the system is totally secure and not vulnerable to vandalism or loose gratings, making it suitable for applications such as schools and playgrounds where grating removal can create a hazard. It is ideal for use against building facades.



Other features

- The ACO Brickslot grating is designed to be used with ACO MultiDrain® MD and PPD 100mm, 150mm and 200mm channels
- ACO MultiDrain® MD Brickslot system is CE marked and fully certified to Load Class C 250/D 400† BS EN 1433:2002

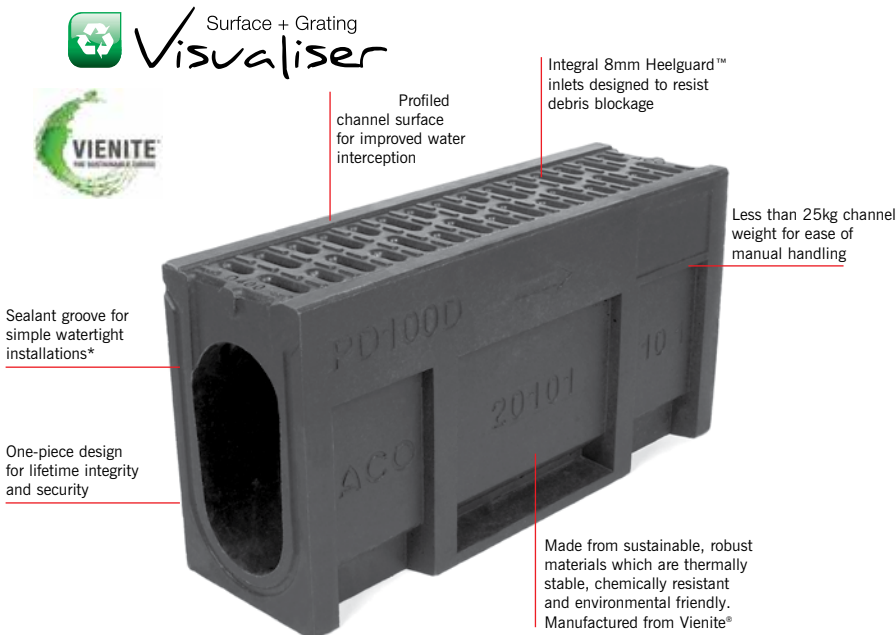
† Not suitable for carriageways of public roads or motorways

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Monocast channel drainage

ACO MULTIDRAIN MONOBLOCK P100D



ACO MultiDrain® Monoblock PD100D is a simple yet versatile channel drainage system for surface water conveyance which has been specifically developed to meet the demands of contractors and clients alike.

Designed to maintain the long term performance and appearance of the installation, its robust one piece construction removes the risks associated with dislodged or stolen gratings.

Specification couldn't be easier as all channels and accessories are certificated to BS EN 1433:2002 Load Class D 400†, making the system suitable for a range of light duty pedestrian, landscaped and medium duty applications including town centres, commercial developments and parking areas for cars and HGV's.

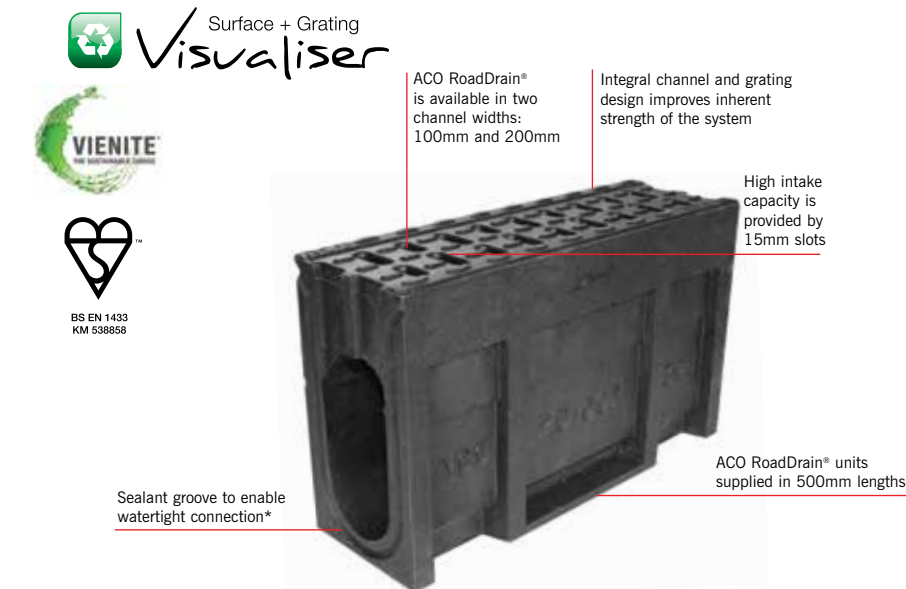


Other features

- ACO MultiDrain® Monoblock PD100D units supplied in 500mm lengths.
- Level or stepped invert units for efficient scheme design
- Strong and lightweight
- Three colour options available: Black, Grey and Natural Buff

† Not suitable for carriageways of public roads or motorways

ACO ROADRAIN



ACO RoadDrain® is a tough one-piece channel drainage system ideal for medium to heavy-duty highway, distribution yards and airfield applications.

Manufactured from Vienite®, ACO's sustainable high strength material, the one-piece system is strong and robust in design and the absence of separate gratings eliminates the risk of loss or vandalism. The integral channel and grating design also improves the inherent strength of the system.



Other features

- Range of accessories available for simple connection to underground drainage
- ACO RoadDrain® is CE marked and fully certified to Load Class F 900 BS EN 1433:2002
- Level or stepped invert units for efficient scheme design.
- Complies with IAN 117/08 and is Kitemarked to BS EN 1433:2002 D 400 for highway use

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Heavy duty channel drainage / combined kerb and drainage

ACO S RANGE

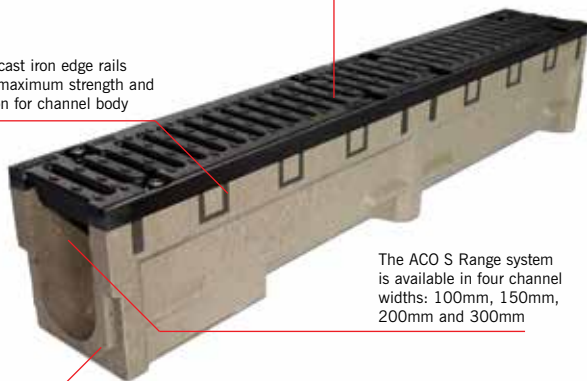


Integral cast iron edge rails provide maximum strength and protection for channel body

A range of high intake heavy duty ductile iron gratings all locked by 8 bolts per metre

Interconnecting channel end detail to aid alignment during installation

The ACO S Range system is available in four channel widths: 100mm, 150mm, 200mm and 300mm



ACO S Range is a channel drainage system designed to provide efficient removal of surface water in heavy duty applications.

Manufactured from Vienite®, ACO's sustainable high strength material, ACO S Range is a tough channel drainage system with excellent chemical resistance. Integral cast iron edge rails provide maximum protection for the channel body.

The system is available in four channel widths and is provided in constant and sloping depths for optimum performance and system design.



Other features

- Traditional channel and grating drainage system
- Strong and robust design for demanding heavy duty applications
- Constant and sloping depth channels available
- Fully CE marked and certified to Load Class F900 BS EN 1433:2002

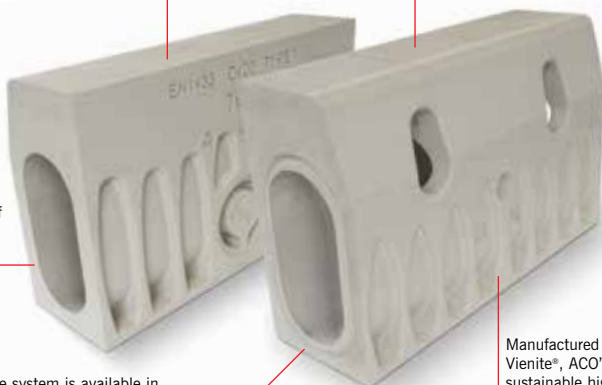
ACO KERBDRAIN



ACO KerbDrain® is available in a range of HB1, HB2 and splay profiles

One-piece combined kerb and drainage system

Tough and robust channel design



The system is available in a range of depths 255mm, 280mm, 305mm, 380mm, 405mm and 480mm

Manufactured from Vienite®, ACO's sustainable high strength material

ACO KerbDrain® is a kerb drainage system which conforms to Load Class D400 BS EN 1433:2002.

The system is available in a range of HB1, HB2 and SP kerb stone profiles to meet a wide range of applications.

The ACO KerbDrain® system has been extended with complementary products consisting of perforated and flush centre stones, drop kerb assemblies, radius units, 90° external quadrant (KD305), 90° internal angle (KD305), Splayed (KD480), Bus Stop (KD480), etc.



Other features

- Complies with IAN 117/08 and is Kitemarked to Load Class D 400 BS EN 1433:2002 for highway use
- Full range of accessories available including drop kerb assemblies, radius units and bus stop kerbs
- Range of accessories available for simple connection to underground drainage

Watertight installations can be achieved with the use of appropriate construction details and in accordance with ACO's recommendations. Channels comply with the watertightness requirements of BS EN 1433.

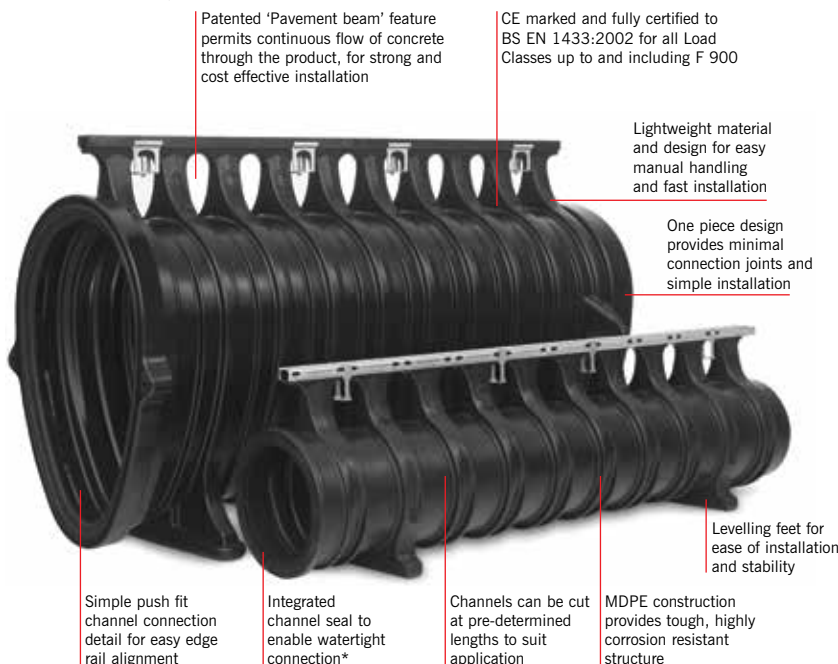




High performance channel drainage

ACO QMAX

Surface + Grating Visualiser



ACO Qmax® has been developed to satisfy the demand for a versatile, high capacity slot drainage system for applications involving small to large catchment areas. For economical system design and installation, ACO Qmax® can cater for a wide range of applications to any load class.

ACO Qmax® is specifically designed to form an integral part of any modern, sustainable surface water management solution.

The system provides all necessary components to deliver conveyance, attenuation and source control for effective SuDS drainage schemes and designs.

The ACO Qmax® system has five channel sizes ensuring greater system flexibility for engineers and designers to optimise scheme hydraulics (150, 225, 350, 550, 700 and 900).



ACO Qmax® - Construction Product of the Year 2006, and awarded The Queen's Award for Enterprise: Innovation in 2006

Edge rails

ACO Qmax® channels are available in the following edge rail designs

Ductile iron edge rails

ACO Q-Flow

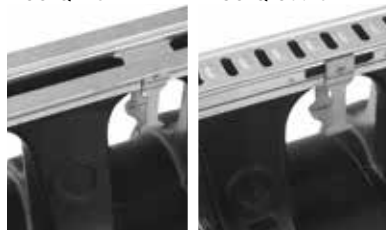
ACO Q-Guard



Galvanised steel edge rails

ACO Q-Flow

ACO Q-Guard



ACO Q-Slot steel edge rail



▶ ACO Q-Flow and Q-Guard ductile iron edge rails for applications in concrete and asphalt pavements

▶ ACO Q Flow and Q-Guard galvanised edge rails for applications in concrete and asphalt pavements

▶ ACO Q-Slot hot dipped galvanised steel edge rails for pedestrian applications in block, slab and natural stone pavements

COMPONENTS

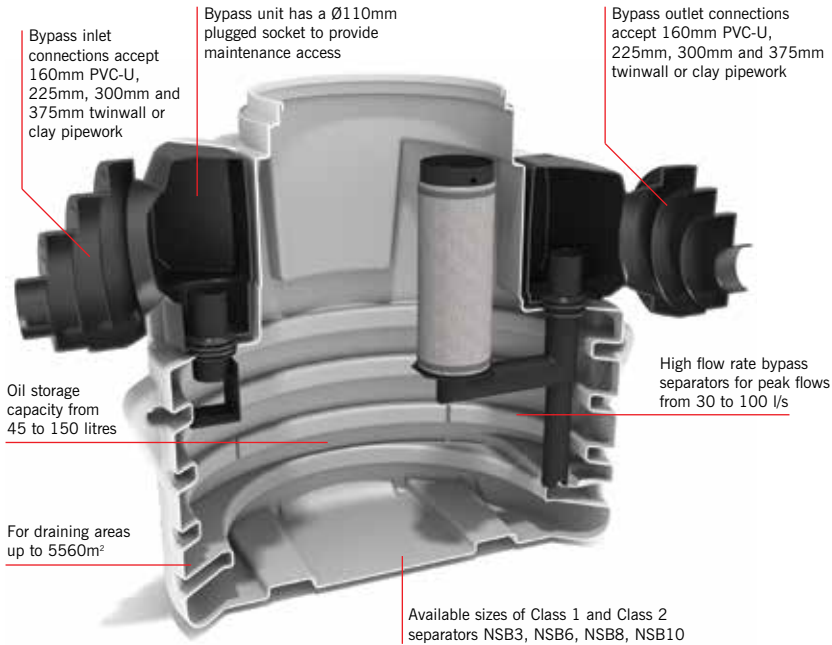


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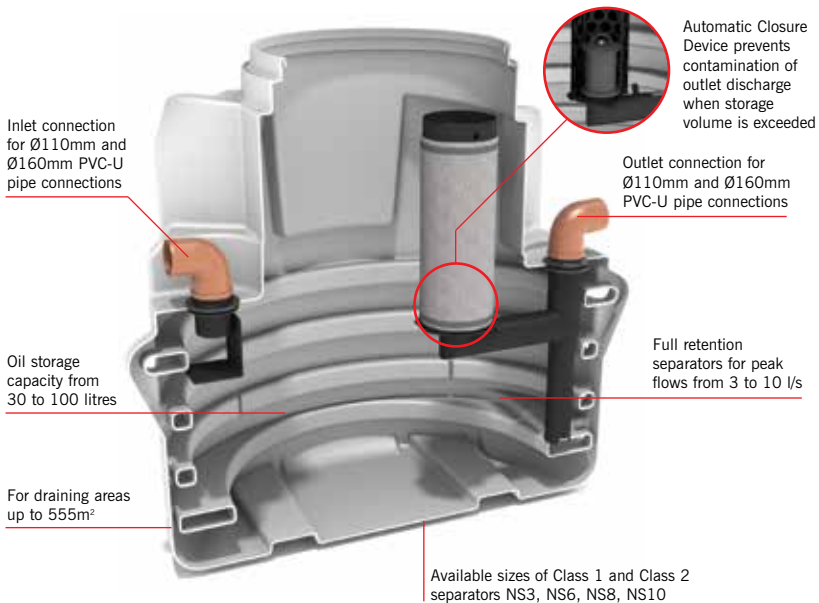


Oil separators

ACO Q-CEPTOR



ACO Q-Ceptor bypass oil separators



ACO Q-Ceptor full retention oil separators

ACO Q-Ceptors are available in a range of chamber sizes and flow rates ideal for use in car parks, maintenance areas, and industrial and residential applications. Manufactured from polyethylene, the innovative single chamber design of the ACO Q-Ceptor is extremely compact and robust offering significant advantages in installation and handling costs over traditional GRP products.

ACO Q-Ceptors are available in two performance classes as specified by BS EN 858-1:2002.

Class 1 separators are designed to achieve discharge concentrations of less than 5mg/litre of oil under standard test conditions. These separators are required for discharges to surface water drains and the water environment.

The Class 1 ACO Q-Ceptor uses high performance coalescing filters positioned above the silt storage area, ensuring optimum performance under the harshest conditions. Under test conditions the ACO Q-Ceptor reduces concentrations to less than 1mg/litre of oil.

Class 2 separators are designed to achieve discharge concentrations of less than 100mg/litre of oil under standard test conditions. They are suitable for dealing with discharges where a lower quality requirement applies, for example where the sewer provider allows discharges to the foul system.

Both Class 1 and Class 2 ACO Q-Ceptors are available as bypass or full retention separators.



Other features

- Compact design reduces excavation and installation costs
- Highly durable polyethylene body, less prone to damage than GRP units
- Minimum working capacity of 1,000 litres excluding silt complies fully with PPG3
- Connection for optional sampling pump which obviates the need for separate and expensive sampling chambers
- Large diameter opening for easy maintenance access
- Extension shaft Ø716mm available
- Cast iron solid cover and frame available
- Coalescing filter located for simple removal and maintenance. Unit can be cleaned by normal water pressure
- All Environment Agency compliant and certified to BS EN 858-1:2002 and BS EN 858-2:2003
- Ribbed body design resists deflection during installation and provides concrete key/anchors





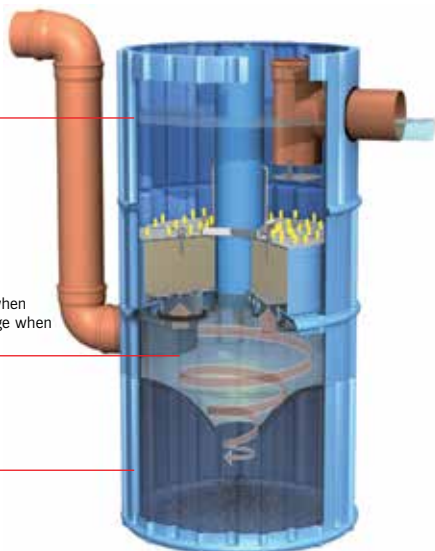
Surface water treatment

ACO QUADRACEPTOR

4 processes treatment: sedimentation, filtration, adsorption and precipitation

Filter elements can be cleaned when required and are easy to exchange when the media is exhausted

Supplied in a plastic housing and is safe and easy to fit on site



ACO QuadraCeptor is an efficient and reliable system for the treatment of surface water run-off from roofs, car parks and roads, even in heavily trafficked areas, before discharge in to ground (infiltration) or to a surface water feature.

The system has been designed to remove, in a four stage process, heavy particles, silt and nutrients and dissolved materials, such as heavy metals, from the surface water as part of an integrated Sustainable Drainage Solution. ACO QuadraCeptor will improve the water quality ensuring no pollutants are infiltrated into the soil.



Other features

- No moving parts, the only maintenance required is occasional emptying of the silt chamber and cleaning or replacing of the filters when required
- Supplied as a standalone unit, easily installed in a load bearing shaft, either standard concrete or plastic chambers

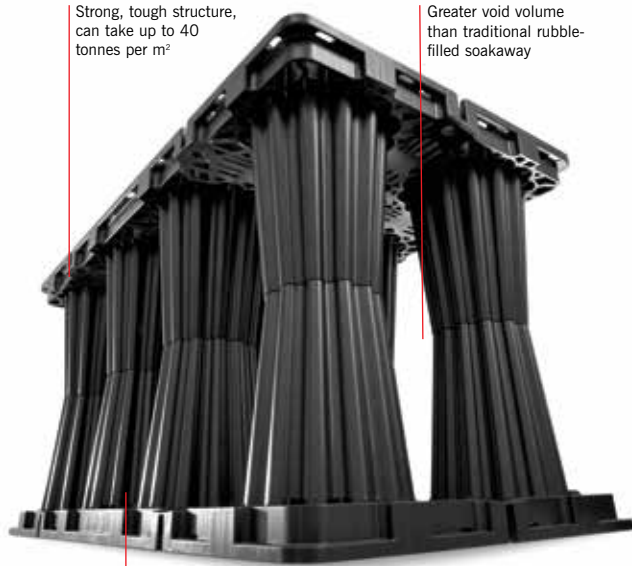


Domestic soakaways

ACO STORMBRIXX

Strong, tough structure, can take up to 40 tonnes per m²

Greater void volume than traditional rubble-filled soakaway



Lightweight design

Drainage of surface water around any property is vitally important and with the right to connect to a sewer no longer automatic, effective soakaways are now a key part in the planning of any development. They are probably the most common form of surface water disposal for areas less than 100m².

Manufactured from recyclable plastic, ACO StormBrixx is easy to handle and quick to install. Its high void ratio reduces the cost associated with traditional soakaways.

It is important to note that Building Regulations Part H3 states that any soakaway should be installed at minimum 5 metres away from any building line (e.g. foundations).

ACO StormBrixx provides the installer with added assurance for an effective long life solution.



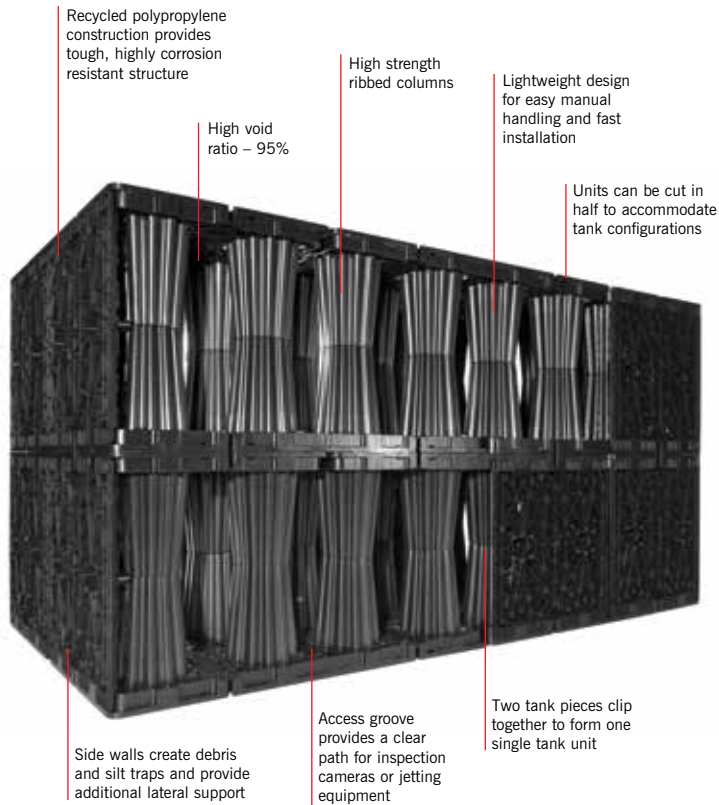
Other features

- Stackable units nestle together for transport and storage
- Patented brick and cross bonding feature
- Open cell structure permits whole system to be inspected and maintained
- Manufactured from recycled plastic and is recyclable



Stormwater attenuation and infiltration

ACO STORMBRIXX



ACO StormBrixx is a unique and patented plastic geocellular stormwater management system. Designed for surface water infiltration and storage, its versatility allows it to be used in applications across all construction environments as a standalone solution or as part of an integrated sustainable urban drainage (SuDS) scheme.

ACO StormBrixx addresses the fundamental requirement of simple access and maintenance for adopting drainage authorities. The open cell structure permits completely free access for CCTV and jetting equipment which allows the whole system, including all the extremities, to be inspected and maintained from just a few access points.

ACO StormBrixx benefits from a patented cell brick and cross bonding feature which provides unparalleled stability in the construction of the tank. Where brickbonding is not used or for multilayered tank structures, connectors are available to support the integrity of the structure.

Designed and manufactured in accordance with CIRIA C680.

Other features

- Low flow and drain down facility
- Delivery, site logistics and installation are all dramatically simplified, as a result of the system's 'stackable' design
- Access chamber provides access for cleaning, large pipe diameter inlets and silt management
- Inspection points for camera or jetting equipment
- Modular man access chamber can be built to suit the size of the system



ACCESSORIES



Side panels



Layer connectors



Top covers



Inspection points



Ø110mm Pipe connector



Ø160mm Pipe connector



Ø225mm Pipe connector



Ø300mm Pipe connector



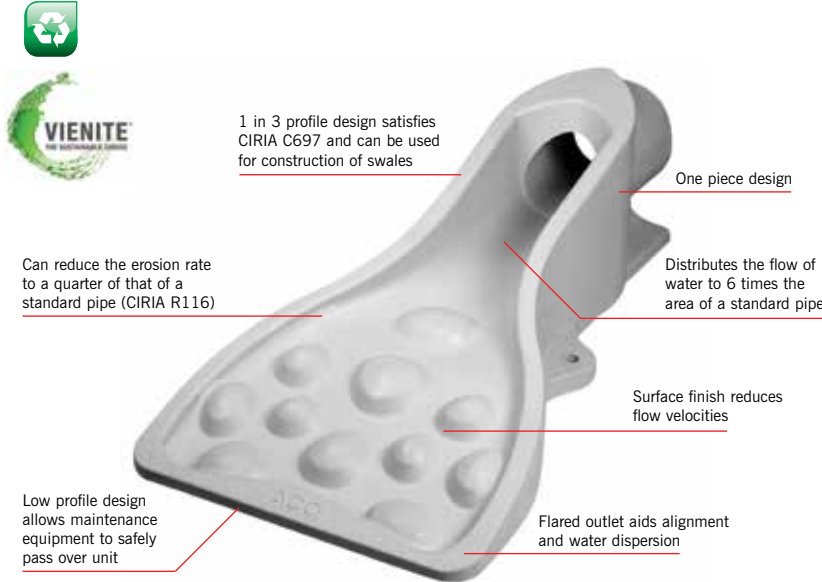
Ø450mm/Ø500mm pipe connector





SuDS Swale Inlet / Flow control

ACO SUDS SWALE INLET



The ACO SuDS Swale Inlet unit provides an aesthetically pleasing solution when linking proprietary conveyance drainage systems to vegetated infiltration features such as swales, basins, ponds and water courses.

The surface finish and the flared outlet of the unit encourages water dispersion and reduces excessive flow velocities – helping to protect the surrounding environment from erosion and meeting the flow rate guidance in CIRIA C697. The ACO SuDS Swale Inlet will reduce the velocity and distribute the flow across a footprint up to 6 times that of a traditionally constructed pipe outfall.

The ACO SuDS Swale Inlet can be integrated into any SuDS drainage scheme where there is a requirement to manage water on or near the surface, helping to manage surface water at its source.

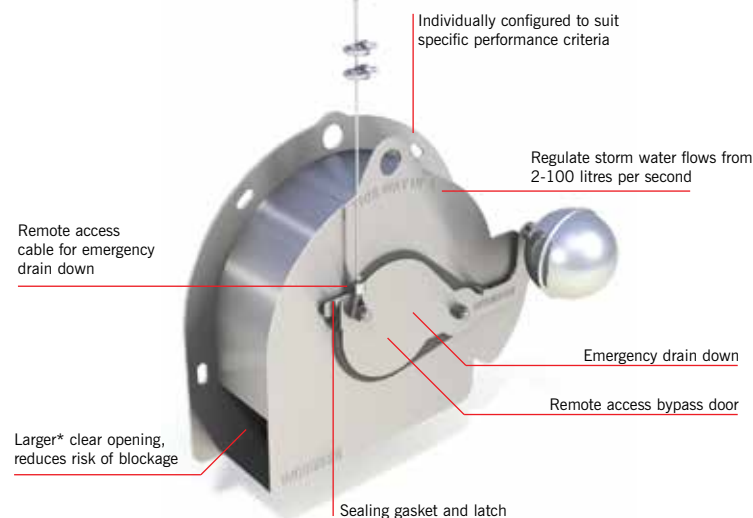


ACO SuDS Swale Inlet additional features

- Inlet connection: Ø160mm single wall or Ø150mm twinwall pipe
- Fixing points for ground anchors or concrete haunching
- Made from sustainable, robust, thermally stable materials
- Flat base for level installation

SURFACE WATER FLOW CONTROL SYSTEMS

Image shows an ACO Q-Brake Vortex



ACO Q-Brake Vortex flow controls and ACO Q-Plate orifice plates are capable of regulating any flow for surface water applications and can be used in conjunction with retention and attenuation systems, such as ACO StormBrixx, as an integrated sustainable urban drainage (SuDS) scheme.

ACO Q-Brake Vortex is a horizontal vortex flow control designed to regulate stormwater flows from 2-100 litres per second. Manufactured from grade 304 stainless steel, each ACO Q-Brake Vortex is individually configured to suit specific performance criteria.

ACO Q-Brake Vortex utilises the upstream head and discharge to generate a 'vortex' within the structure of the unit.

ACO Q-Brake Vortex is fitted with an integral bypass door which in the event of a blockage can be opened so the unit can be drained. A stainless steel wire attached to the bypass door is run to cover level and provides control of the bypass door. Once the water level within the manhole subsides the blockage can be cleared.

ACO Q-Plate orifice plates are designed for use where an ACO Q-Brake Vortex is not the most effective solution.

ACO Q-Brake additional features

- Inlet/outlet determined by laboratory verified discharge curves
- Flexible fitting options custom built to suit the profile of the chamber
- Manufactured from grade 304 stainless steel
- All parts are welded to BS 4872
- Can reduce up stream attenuation required by up to 25%

*Larger than traditional orifice plates.

ACO Technologies

There are three further divisions of ACO Technologies that together with ACO Water Management serve every sector of the construction industry, providing solutions for applications as diverse as rail, highways, airports, landscaping, retail, distribution centres and environmentally sensitive projects.

A short overview on these specialist divisions is provided below. Further information on these areas along with full details of all the products listed in this brochure can be found on the ACO website www.aco.co.uk



ACO Building Drainage

ACO Building Drainage specialises in the development of drainage products and corrosion resistant drainage systems for applications across the internal and external built environments.

ACO Wildlife

ACO Wildlife is dedicated to the development of wildlife conservation products including amphibian fencing and tunnels, nest boxes and wildlife kerbs.

ACO Sport

ACO Sport provides specialist drainage systems for sports arenas, recreational facilities and stadiums.



ACO Technologies plc

- ACO Water Management
Civils + Infrastructure
Building + Landscape
- ACO Building Drainage
- ACO Sport
- ACO Wildlife

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