

# ACO Building Drainage



**Engineered Solutions**  
Product Catalogue

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**www.aco.co.uk**

## ACO Building Drainage

ACO building drainage specialise in the design and manufacture of corrosion resistant drainage systems and products. These are tailored to suit the specific needs of each project, and cover a wide variety of commercial and industrial applications.

Fully engineered by our in-house technical design team, these solutions are designed to eliminate design risk, optimise installation and minimise lifetime ownership costs. Every product in the range is designed to provide exceptional performance, with a high aesthetic finish and durability; whether used internally or externally.

Our team has specialists in design area covering drainage, grease management, pipework solutions and back flow. They also have experience in a wide range of sectors – from healthcare, food and beverage manufacture, sport & leisure, catering and education. In addition they have production knowledge enabling the design and manufacture of engineered solutions to suit the physical and commercial constraints of any project.

As our built environment grows, and related legislation becomes more complex, the support of our technical design team in any project can help to provide complete solution in the knowledge that all relevant criteria has been considered. This technical expertise is backed by ACO Building Drainage's reputation as a division of UK based ACO Technologies, part of the worldwide ACO group.



### ACO Building Drainage

#### Enquiries Team:

Tel: +44(0)1462 810421

Email: [abdestimating@aco.co.uk](mailto:abdestimating@aco.co.uk)

- A complete pricing service to stockists, contractors and clients.

### ACO Building Drainage

#### Customer Services Team:

Tel: +44(0)1462 810411

Email: [abdcommercial@aco.co.uk](mailto:abdcommercial@aco.co.uk)

- Product availability, delivery lead times, and all other queries including collections, returns and product / service issues.

### ACO Building Drainage

#### Design Services Team:

Tel: +44(0)1462 810431

Email: [abdtechnical@aco.co.uk](mailto:abdtechnical@aco.co.uk)

- Technical and installation advice.
- Detailed design and 'Value Engineering' advice.
- Hydraulic calculations and AutoCAD drawings.
- Advice on the suitability of ACO equivalent products.

### ACO Building Drainage

#### Marketing and Media Support

Tel: +44(0)1462 810400

Email: [abdmarketing@aco.co.uk](mailto:abdmarketing@aco.co.uk)

- For all product brochures, imagery or merchandising material requests.

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## ACO System Chain - drainage solutions for tomorrow's environmental conditions



### collect:

- Stainless Steel and Galvanised Steel Channels
- Stainless Steel Gullies
- Pipe Systems
- Roof / Balcony Drainage
- Wetroom & Shower Drainage



### clean:

- Grease Management Systems



### hold:

- Anti-flood Backflow Protection Systems



### release:

- Lifting Stations

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### Office address and contact details:

ACO Building Drainage  
ACO Business Centre  
Caxton Road  
Bedford  
Bedfordshire  
MK41 0LF

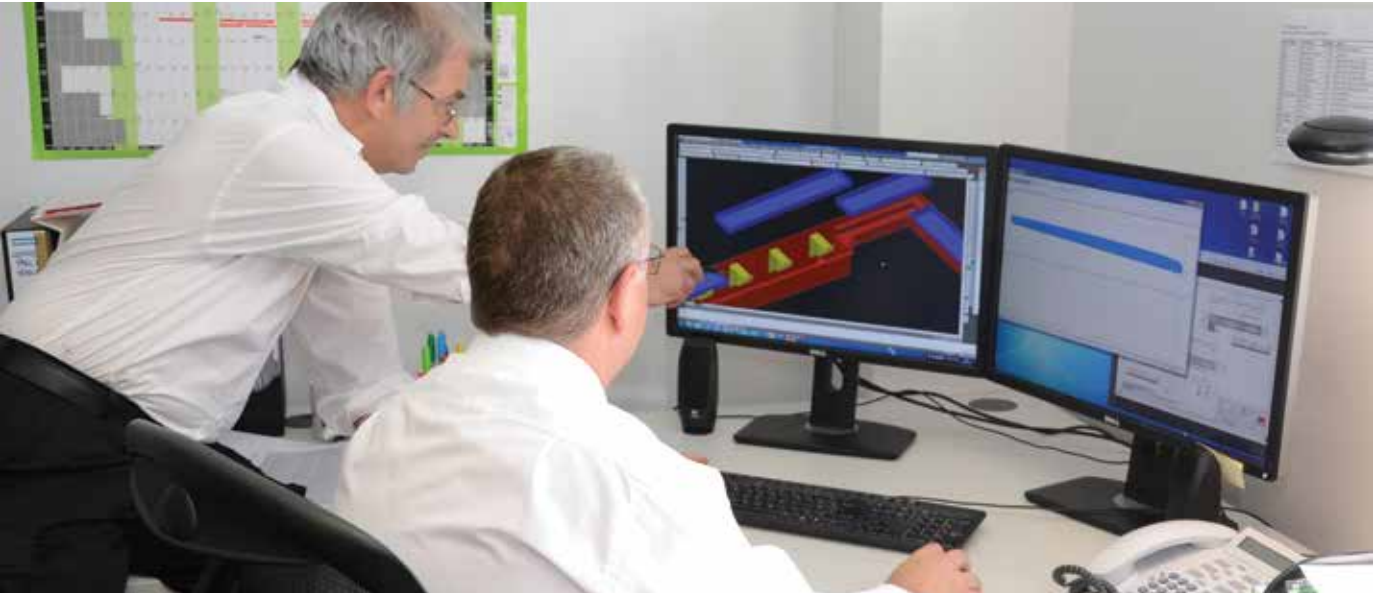
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our website, scan:





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ACO Building Drainage specialises in the development of corrosion-resistant drainage systems and products which are tailored to suit the specific needs of projects being undertaken in a wide variety of commercial and industrial applications. Engineered by our in-house technical design team to eliminate design risk, optimise installation and minimise lifetime ownership cost, every product in the range delivers exceptional levels of performance, finish and durability whether specified for use in the internal or external built environment.

Our team designs specialist drainage, grease management and fireproofing systems that provide safe and hygienic solutions across a range of sectors including healthcare, food and drink manufacture, sport and leisure, catering and education. In addition, ACO Building Drainage provides stainless steel decorative tree grills, laser cut curved gratings and wet room drainage systems for use in applications which require the very highest quality of aesthetic finish.

As our built environment and related legislative requirements grow ever more complex, the support of technical design experts who can create bespoke, engineered solutions becomes increasingly important if design, technical performance and financial requirements are to be met. This technical expertise is backed up by ACO Building Drainage's world-class manufacturing facilities and comes with the added reassurance of working with a division of UK-based ACO Technologies, part of the worldwide ACO Group.

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Gratings

**Application**

Ideal for swimming pools and wet usage in leisure centres

Suited to internal and external usage in places such as hotels, retail etc.

Optimal in pharmaceutical environments

Ideal for industrial workplaces

Suited to food production sectors

Optimal for landscaped areas

**Load Classes**

Load classes and typical uses according to BS EN 1433:2002

**A 15**

**A 15**  
Pedestrian, cycleways and domestic drives

**B 125**

**B 125**  
Pedestrian precincts, light vehicles, private car parks

**C 250**

**C 250**  
Parking areas, service stations (cars) and slow-moving light commercial vehicles

**Note:** The application icons shown above are generic; used to aid product selection  
Please contact ACO Building Drainage Technical for further clarification and advice

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## ACO AS101 DPC Channel

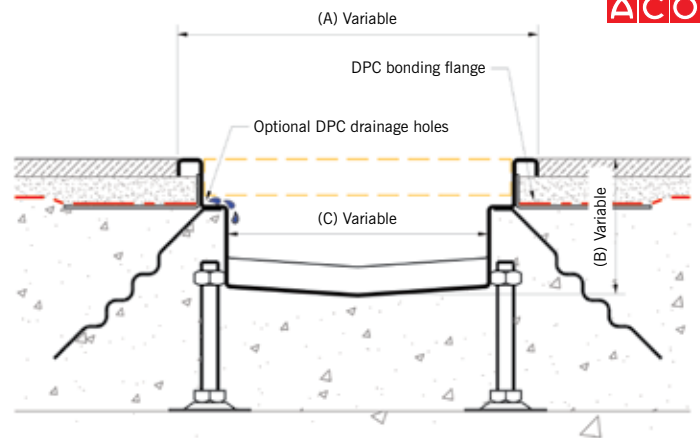


### Specification

- Provides flange to seal to secondary DPC
- DPC drainage option available
- Can be modelled hydraulically to confirm flow capacities
- Grades 304 (1.4301) or 316 (1.4404) stainless steel

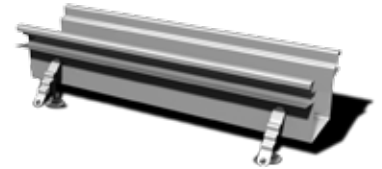
### What we want to know...

- What the sub-base is and the floor build ups (provide a section ideally)
- Amount of water to be drained/+area to be drained and rainfall intensity
- Discharging into foul or storm
- Position and number of outlets (provide a plan detail ideally)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalis etc)



Floor finishes are indicative  
Dimensions are all variable to meet your specification

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### Application



### Load Classes



Length  
Width (A)  
Depth (B)  
Bore (C)  
Load class  
Grate type

For customisable options  
please call 01462 810431

## ACO AS201 Membrane Clamp Channel

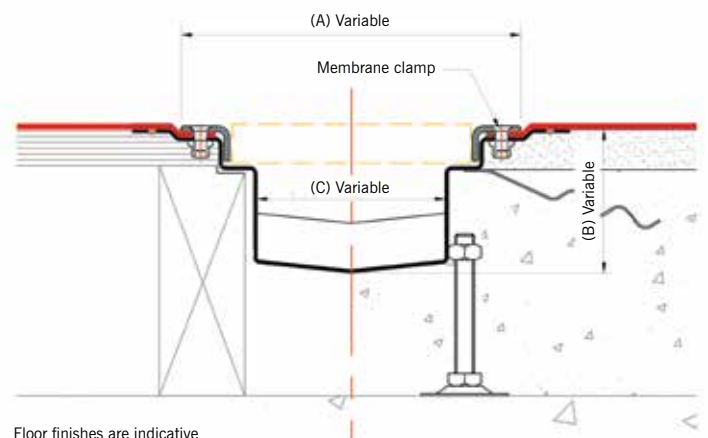


### Specification

- Provides a mechanical clamp for vinyl flooring
- Accommodates standard grates
- Suitable for suspended floors
- Grades 304 or 316

### What we want to know...

- What the sub-base is and the floor build ups (provide a section ideally)
- Amount of water to be drained/+area to be drained and rainfall intensity
- Discharging into foul or storm
- Position and number of outlets (provide a plan detail ideally)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalis etc)



Floor finishes are indicative  
Dimensions are all variable to meet your specification

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### Application



### Load Classes



Length  
Width (A)  
Depth (B)  
Bore (C)  
Load class  
Grate type

For customisable options  
please call 01462 810431



## ACO AS301 Box Channel

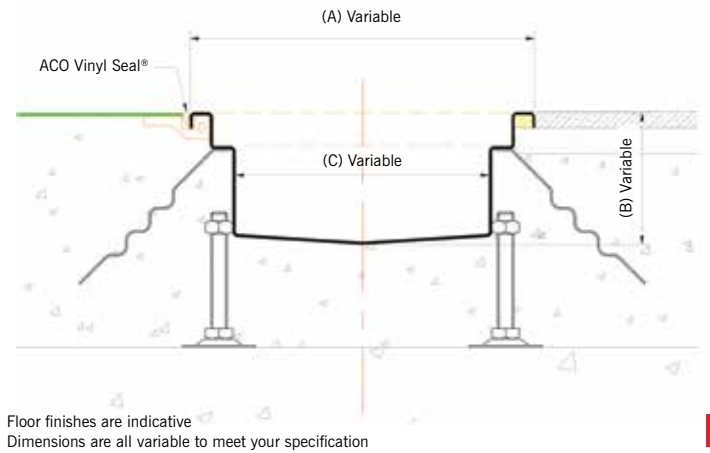


### Specification

- Standard channel profile
- Suited to internal and external application
- Standard and high security locking available
- Grades 304 or 316
- Interfaces with ACO vinyl seal

### What we want to know...

- What the sub-base is and the floor build ups (provide a section ideally)
- Amount of water to be drained/+area to be drained and rainfall intensity
- Discharging into foul or storm
- Position and number of outlets (provide a plan detail ideally)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalis etc)



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### Application



### Load Classes



Length  
Width (A)  
Depth (B)  
Bore (C)  
Load class  
Grate type

For customisable options  
please call 01462 810431

## ACO AS401 Fire Lift Channel

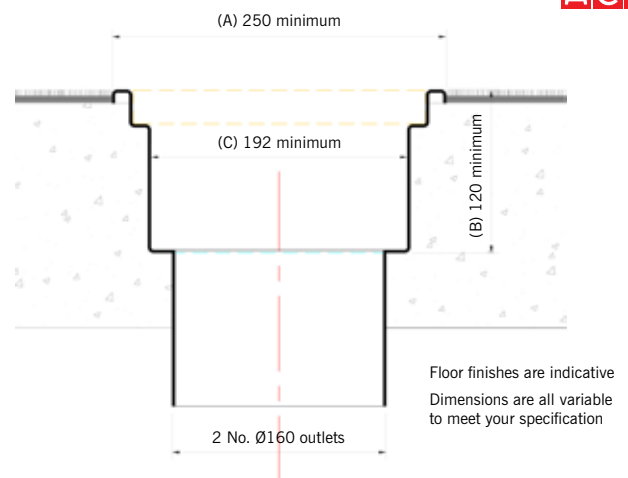


### Specification

- Up to 25 l/s capacity (2x160mm diameter untrapped outlets)
- Designed and hydraulically modelled to your specifications
- Channel conforms to BS 9999. 2008
- Grades 304 or 316
- Can be designed for carpet or flexible flooring
- Floor structure must accommodate deep channel depth

### What we want to know...

- What the sub-base is and the floor build ups (provide a section ideally)
- Amount of water to be drained/+area to be drained and rainfall intensity
- Discharging into foul or storm
- Position and number of outlets (provide a plan detail ideally)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalis etc)



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### Application



### Load Classes



Length  
Min. width (A)  
Min. depth (B)  
Min. Bore (C)

For customisable options  
please call 01462 810431

## ACO AS501 Easy-clean Channel

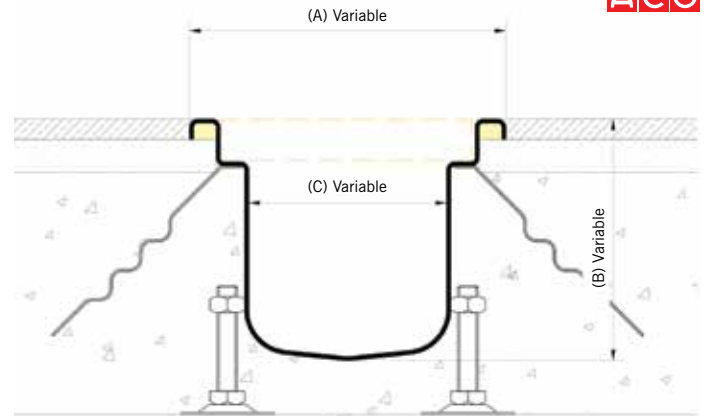


### Specification

- Radius base profile
- Minimises debris build up
- Ideal for food processing or anywhere hygiene is a prerequisite
- Grades 304 or 316
- Interfaces with ACO vinyl seal

### What we want to know...

- What the sub-base is and the floor build ups (provide a section ideally)
- Amount of water to be drained/+area to be drained and rainfall intensity
- Discharging into foul or storm
- Position and number of outlets (provide a plan detail ideally)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalis etc)



Floor finishes are indicative  
Dimensions are all variable to meet your specification

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### Application



### Load Classes



Length  
Width (A)  
Depth (B)  
Bore (C)  
Load class  
Grate type

For customisable options  
please call 01462 810431

## ACO AS601 Slot Channel

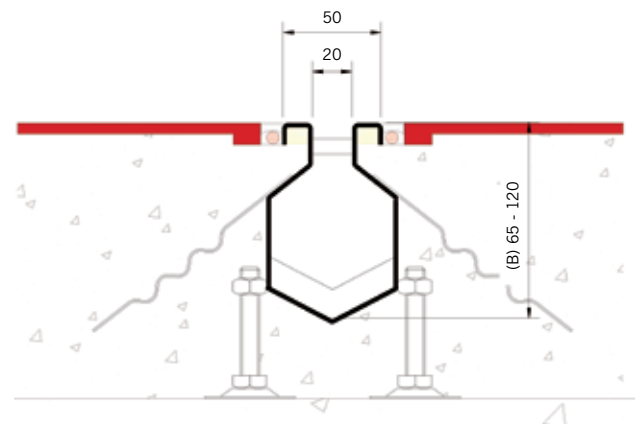


### Specification

- Discrete slot channel
- 50mm visible width
- Slot 20mm
- Interfaces with ACO vinyl seal
- Grades 304 or 316

### What we want to know...

- What the sub-base is and the floor build ups (provide a section ideally)
- Amount of water to be drained/+area to be drained and rainfall intensity
- Discharging into foul or storm
- Position and number of outlets (provide a plan detail ideally)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalis etc)



Floor finishes are indicative  
Dimensions are all variable to meet your specification

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### Application



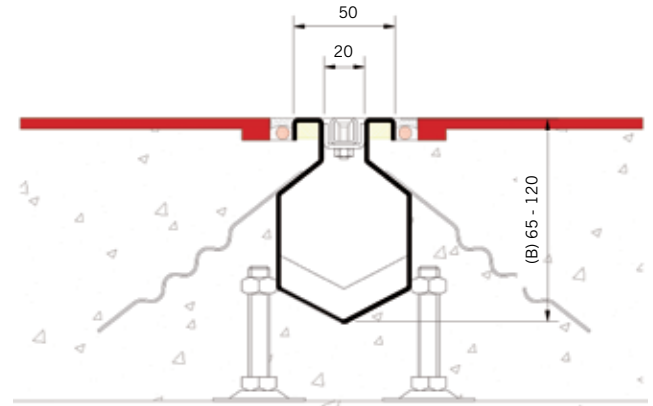
### Load Classes



Length  
Depth (B)

For customisable options  
please call 01462 810431

## ACO AS601 Slot Channel with Toe bar



Floor finishes are indicative  
Dimensions are all variable to meet your specification

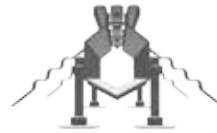
12

### Specification

- Toe bar reduces slot to 5mm
- Interfaces with ACO vinyl seal
- Grades 304 or 316
- Low capacity drainage
- No grating required

### What we want to know...

- What the sub-base is and the floor build ups (provide a section ideally)
- Amount of water to be drained/+area to be drained and rainfall intensity
- Discharging into foul or storm
- Position and number of outlets (provide a plan detail ideally)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalis etc)



### Application



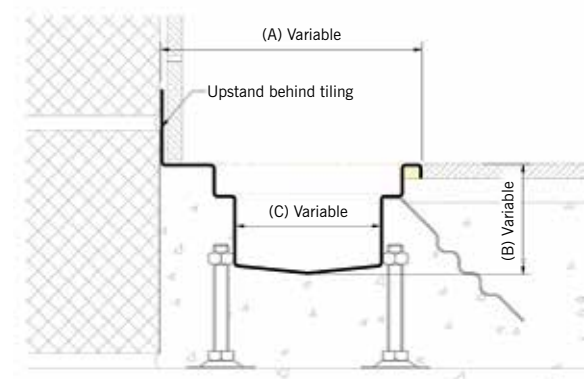
### Load Classes



Length  
Depth (B)

For customisable options  
please call 01462 810431

## ACO AS701 Uprand Channel



Floor finishes are indicative  
Dimensions are all variable to meet your specification

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### Specification

- Ideal for areas where a wall tanking is required
- Integrates with tiled walls
- Ideal for public shower areas
- Grades 304 or 316

### What we want to know...

- What the sub-base is and the floor build ups (provide a section ideally)
- Amount of water to be drained/+area to be drained and rainfall intensity
- Discharging into foul or storm
- Position and number of outlets (provide a plan detail ideally)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalis etc)



### Application



### Load Classes



Length  
Width (A)  
Depth (B)  
Bore (C)  
Load class  
Grate type

For customisable options  
please call 01462 810431



## ACO AS801 Micro Channel

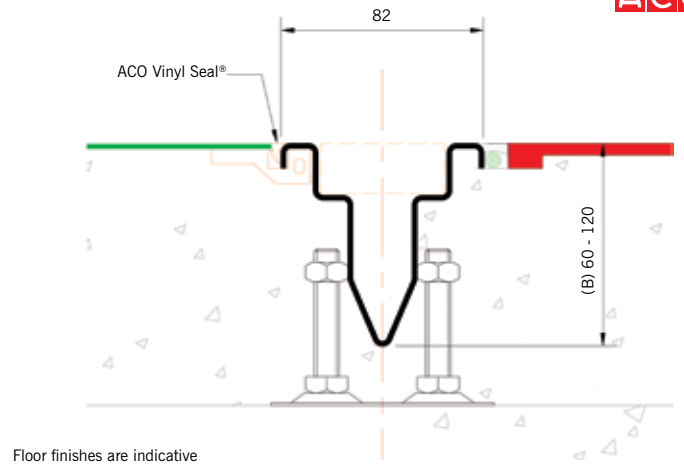


### Specification

- 82mm wide discrete channel
- Bespoke grating patterns to suit
- Suited to low flow applications
- V-Profile to assist debris removal
- Interfaces with ACO Vinyl Seal
- Grades 304 or 316

### What we want to know...

- What the sub-base is and the floor build ups (provide a section ideally)
- Amount of water to be drained/+area to be drained and rainfall intensity
- Discharging into foul or storm
- Position and number of outlets (provide a plan detail ideally)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalis etc)



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### Application



### Load Classes



Length  
Depth (B)  
Grate type  
- (50mm wide)

For customisable options  
please call 01462 810431

## ACO AS901 Hi Load Channel

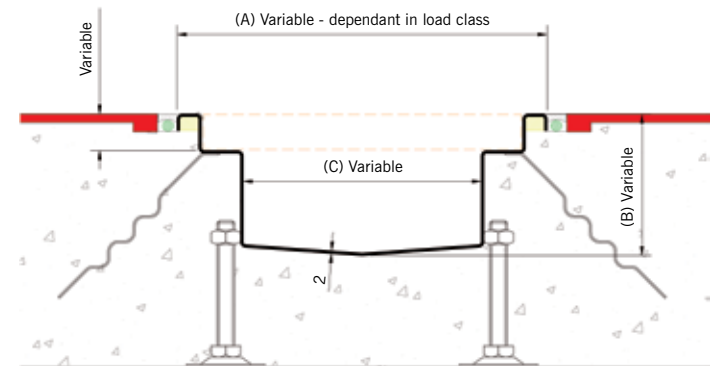


### Specification

- Extended grating seat depth and width
- For high load applications up to load class D
- Grades 304 or 316

### What we want to know...

- What the sub-base is and the floor build ups (provide a section ideally)
- Amount of water to be drained/+area to be drained and rainfall intensity
- Discharging into foul or storm
- Position and number of outlets (provide a plan detail ideally)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalis etc)



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### Application



### Load Classes



Length  
Width (A)  
Depth (B)  
Bore (C)  
Load class  
Grate type

For customisable options  
please call 01462 810431



## ACO AS1010 Brickslot Channel

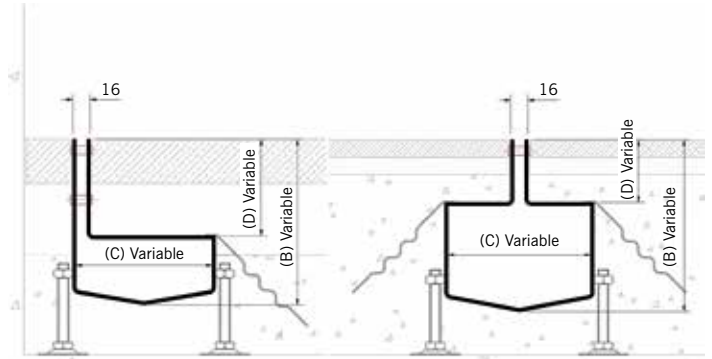


### Specification

- 10mm wide channel throat visible on surface
- Conventional bore for high capacity
- Heel safe aperture for safety and enhanced aesthetics
- Available in radius version
- Ideal for external prestige applications
- Grades 304 or 316

### What we want to know...

- What the sub-base is and the floor build ups (provide a section ideally)
- Amount of water to be drained/+area to be drained and rainfall intensity
- Discharging into foul or storm
- Position and number of outlets (provide a plan detail ideally)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalis etc)



Floor finishes are indicative  
Dimensions are all variable to meet your specification

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### Application



### Load Classes



Length  
Depth (B)  
Bore (C)  
Throat D

For customisable options  
please call 01462 810431

## ACO AS1050 Discrete Channel

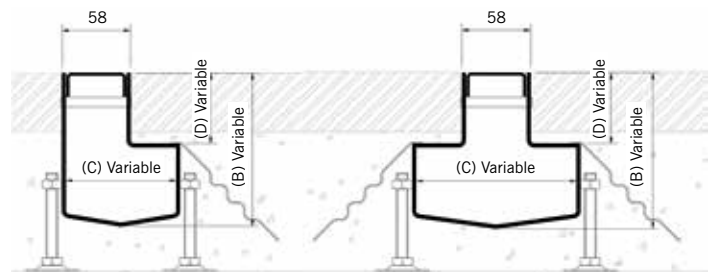


### Specification

- 50mm wide channel throat provides cleaning jet access
- Conventional bore for high capacity
- Heel safe gratings for safety and enhanced aesthetics
- Available radius version
- Ideal for external prestige applications
- Grades 304 or 316

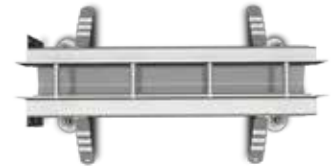
### What we want to know...

- What the sub-base is and the floor build ups (provide a section ideally)
- Amount of water to be drained/+area to be drained and rainfall intensity
- Discharging into foul or storm
- Position and number of outlets (provide a plan detail ideally)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalis etc)



Floor finishes are indicative  
Dimensions are all variable to meet your specification

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### Application



### Load Classes



Length  
Depth (B)  
Bore (C)  
Load class  
Grate type - 50 wide

For customisable options  
please call 01462 810431

## ACO Radius Channel



### Specification

- Radius is completely customisable to meet your needs
- Flat bottom channels only

### What we want to know...

- What the sub-base is and the floor build ups (provide a section ideally)
- Amount of water to be drained/+area to be drained and rainfall intensity
- Discharging into foul or storm
- Position and number of outlets (provide a plan detail ideally)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalis etc)



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### Application



### Load Classes



Length  
Depth (B)  
Bore (C)  
Throat D

For customisable options  
please call 01462 810431

## ACO Gratings Load Class A



### Specification

- Load class A is the lowest load capacity we provide
- Suitable to be used with pedestrians, cyclists and planted areas
- BS EN 1433 A15
- BS EN 124 A15
- BS EN 1253 H1.5, K3 & L15
- Load capacity up to 1,500kg (15kN)



Plain Mesh



Slip Resistant Mesh



White Plastic



Composite



Intercept



Slotted



Perforated



Heelsafe



Quadrato



Ladder

### AS101

- Quadrato
- Intercept
- White Plastic

### AS201

- Quadrato
- Intercept
- White Plastic
- Heelsafe

### AS301

- All gratings suitable

### AS401

- Heelsafe

### AS701

- All gratings suitable

### AS2001

- Plain Mesh
- Slip Resistant Mesh
- Ladder

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## ACO Gratings Load Class B



### Specification

- Load class B is a mid range load class option we provide
- Suitable to be used with car parks, residential driveways & delivery vehicles at low speed
- BS EN 1433 B125
- BS EN 124 B125
- BS EN 1253 R50 & M125
- Load capacity up to 12,500kg (125kN=12.5Tons)



Heelsafe



Intercept



Heelsafe External

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### AS101

- Heelsafe
- Intercept

### AS301

- Heelsafe
- Intercept

### AS701

- Heelsafe
- Intercept

### AS1001

- Heelsafe

For more information  
please call 01462 810431

## ACO Gratings Load Class C



### Specification

- Load class C is the highest load class we provide in the engineered solutions range
- Suitable for use with heavy duty loads, industrial and commercial sites
- BS EN 1433 C250
- BS EN 124 C250
- BS EN 1253 N250
- Load capacity up to 25,000kg (250kN=25Tons)



Plain Mesh



Perforated



Slip Resistant Mesh



Ladder



Composite



Slotted

### AS101

- Plain Mesh
- Slip Resistant Mesh
- Ladder
- Perforated Slotted
- Composite (Black)

### AS301

- Plain Mesh
- Slip Resistant Mesh
- Ladder
- Perforated Slotted
- Composite (Black)

### AS501

- Plain Mesh
- Slip Resistant Mesh
- Ladder

### AS701

- Plain Mesh
- Slip Resistant Mesh
- Ladder
- Perforated Slotted
- Composite (Black)

### AS901

- Ladder grate which can achieve Load Class D

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For more information  
please call 01462 810431



# Stainless Steel Explained



Stainless steel is the name given to a wide range of steels which have the characteristics of greatly enhanced corrosion resistance over conventional mild and low alloy steels.

The enhanced corrosion resistance of stainless steel essentially comes from the addition of at least 11% chromium, however most stainless steels commonly used contain around 18% chromium. Other significant alloying elements include nickel and for superior corrosion resistant properties, molybdenum.

For ACO Building Drainage applications, the principal properties of stainless steel may be summarised as follows:

- Durable and corrosion resistant in highly aggressive environments.
- Hygienic, easily cleaned surfaces.
- Aesthetically attractive surface finish.
- Good forming and fabrication characteristics.
- Excellent strength and resistance to oxidation at high temperatures.

All these make stainless steel an obvious first choice material for demanding applications.

## Stainless Steel Families

Stainless steel is used across a wide spectrum of engineering applications and this has led to the development of the vast range of different types of stainless steels that are now available.

Austenitic Stainless Steel is the most widely used and encompasses the generic 304 and 316 grades of material. These materials are used in the ACO Building Drainage manufacturing process and are ideal for applications including food processing, leisure, dairy, brewing, pharmaceutical, chemical and petrochemical industries.

304 grade stainless steels contain around 18% chromium and 10% nickel and provides excellent corrosion resistance.



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For applications where superior corrosion resistance properties are required under extreme conditions particularly where chlorides are involved, 316 grade stainless steels are used and contain around 17% chromium, 12% nickel and 2.2% molybdenum.

Unlike all other grades of stainless steels, austenitic grades are non-magnetic and as a consequence magnetic particles are not attracted to the system surfaces which otherwise would encourage both contamination and corrosion.

Ferritic, Martensitic and duplex stainless steels are unsuitable for drainage products.

## CE ACO go further than the minimum legal standard

ACO believe that higher quality standards are vital for any product that is being installed permanently, and as market leader our customers would expect nothing else from us. Therefore ACO design and manufacture products to the full requirements of applicable harmonised standards. This ensures that the product is not only safe, but all aspects of performance and function are of the highest possible quality.

In addition to product specific standards ACO also has Integrated Management Registration PAS 99:2006, which covers the design, manufacture and supply of our products, and is compliant with ISO 9001:2008, and ISO 14001:2004 and BS OHSAS 18001:2007.

ACO Building Drainage introduced CE marking on its standard products ahead of schedule in 2011. Providing assurance to our customers has been a key driver for ACO. We have done everything to protect our clients and end-users. Please contact us for help and advice.

The implications of not carrying CE marking on products are potentially very serious for the manufacturer and supply chain. After 1 July 2013 it will become a criminal offence to place any construction product covered by hENs on the market without an authorised CE mark. Any companies who do so could find themselves pursued by Trading Standards. If convicted, this could mean a fine and even potentially a prison sentence. So make sure that you follow the rules.

## Pickle Passivation Process



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**ACO resources include the largest pickle passivation plant in Europe.**

The standard ACO Building Drainage manufacturing process uses the pickle passivation chemical finishing process to restore the products to their full optimum corrosion resistant state without damaging the surface finish. This is considered the best post-fabrication surface treatment method.

**Pickle Passivation fully restores the corrosion resistance properties of stainless steel ensuring optimum performance.**



FM 13502

#### BS EN ISO 9001:2008

ACO Technologies plc has been certified and registered by BSI to operate a quality management system which complies with the requirements of BS EN ISO 9001:2000.



NBS is the Architectural standard specification and ACO products are fully detailed in the NBS Plus section.



ACO Building Drainage is a member of FeRFA the Resin Flooring Association.



ACO Building Drainage are members of Campden BRI.



ACO is a member of the Foodservice Consultants Society International (UK). FCSI is the premier association promoting professionalism in foodservice and hospitality consulting.



ACO Technologies plc is a member of Construction Products Association.



ACO is a leading member of the European Hygienic Engineering & Design Group (EHEDG).



ACO is a member of the Construction CPD Certification Service. The Construction CPD Certification Service assists in the dissemination of high quality, independently certified, continuing personal/professional development (CPD).



The Builders Merchant Federation (BMF) provides Builders Merchants with the support and advice needed to run their business in a competitive environment. ACO hold a suppliers and manufacturers membership.



ACO Technologies plc is a member of BASEA (British Airport Service & Equipment Association).



ACO Building Drainage is a member of the Fabricated Access Cover Trade Association.



ACO is registered under the Rail Industry Supplier Qualification and Registration Scheme for Civil Engineering - Supply of Materials, Drainage products (inc. Environmental Protection products).



ACO Building Drainage is an affiliate member of B&ES.



ACO Building Drainage are affiliate members of the FDF.



For quick access to our website, scan:



#### ACO Building Drainage

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