

# ACO Building Drainage: Leisure Industry + Hotel

Uniclass L7315:P4131	EPIC J342: X4122
CI/SfB (52.6)	

ACO Shower Systems



*ACO Shower and Wetroom Drainage Systems*

## **Technical Data**





## ACO Building Drainage

Our built environment is becoming ever more complex. Applications are more sophisticated and the increasing pressure of regulations and standards makes achieving design, performance and financial goals ever tougher.

Our mission: to eliminate design risk, to reduce installed and life cost, to deliver exceptional finish and performance in every product application.

Our global resources and fabrication capacity make it possible for us to deliver the best value, both with our standard products and with our bespoke designs. Confidence is further assured with quality systems that are in accordance with ISO 9001-2008.

ACO Building Drainage is a division of ACO Technologies plc and part of the worldwide ACO Group. The Group has sales in excess of £700 million worldwide with production facilities in the UK, Germany, France, Switzerland, Denmark, Spain, Poland, Czech Republic, Australia and the USA. In total more than 4,000 people are employed in over 40 countries throughout the world.

**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 merchants, contractors and clients.

**ACO Building Drainage Customer Services Team:**  
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- Product availability, delivery lead times, and all other queries including collections, returns and product / service issues.

**ACO Building Drainage Design Services Team:**  
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- 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**  
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- For all product brochures, imagery or merchandising material requests.



**collect:**

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



**clean:**

- Grease Management Systems



**hold:**

- Anti-flood Backflow Protection Systems



**release:**

- Anti-flood Backflow Protection Systems

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For quick access to our website, scan:



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# ACO ShowerDrain and Wetroom Systems

## Introduction

Sophisticated, barrier-free bathroom drainage for domestic, hotel, commercial and leisure applications where style, function and performance are pre-requisites.

Level entry wet room showers are easier, safer and more comfortable than standard shower tray designs. They are also much easier to maintain.

ShowerDrain products facilitate easy and convenient conformance to **Part M Building Regulations - Access To and Use of Buildings for level access to bathrooms.**



### ACO Shower Channel

Austenitic stainless steel linear drainage channels with clean lines that characterise today's trends in bathroom design.

### ACO ShowerDrain C Line

The ShowerDrain C series is characterised by modern design, perfect functionality and high flow capacity.



### ACO Shower Gully

Compact and attractive stainless steel point gullies for a wide range of applications where capacity is a key factor..

### ACO Shower Engineered Solutions

Design Services - Let us help!

**ACO Shower Engineered Solutions Design Services - Let us help!**

Our team has specialists in design areas 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.

**ACO AS101 DPC Channel**

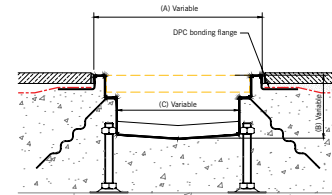


**Specification**

- Provides flange to seal to secondary DPC
- DPC drainage option available
- Can be modelled hydraulically to confirm flow capacities
- Grades 304 or 316

**What we want to know...**

- What the sub-base is and the floor build ups (provide a section)
- 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)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalies)



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

**Application**

**Load Classes**

A 15	B 125	C 250
------	-------	-------

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

For custom made options please call 01462 810431

**ACO AS201 Membrane Clamp Channel**

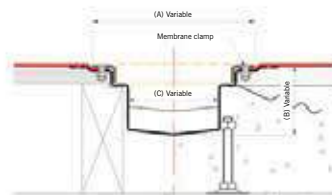


**Specification**

- 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 (ideally provide a section)
- 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)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalies)



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

**Application**

**Load Classes**

A 15	B 125	C 250
------	-------	-------

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

For custom made options please call 01462 810431

**ACO AS701 Upstand Channel**

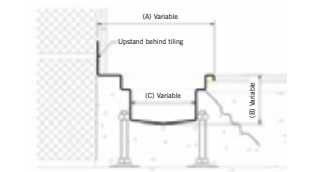


**Specification**

- 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)
- 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)
- Outlet connection diameter
- Whether any caustic solutions are to be drained (chlorinated water, acids, alkalies)



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

**Application**

**Load Classes**

A 15	B 125	C 250
------	-------	-------

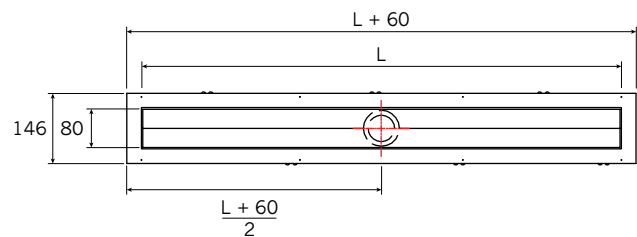
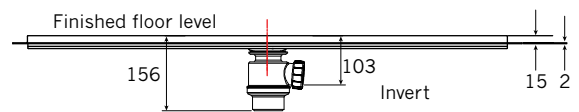
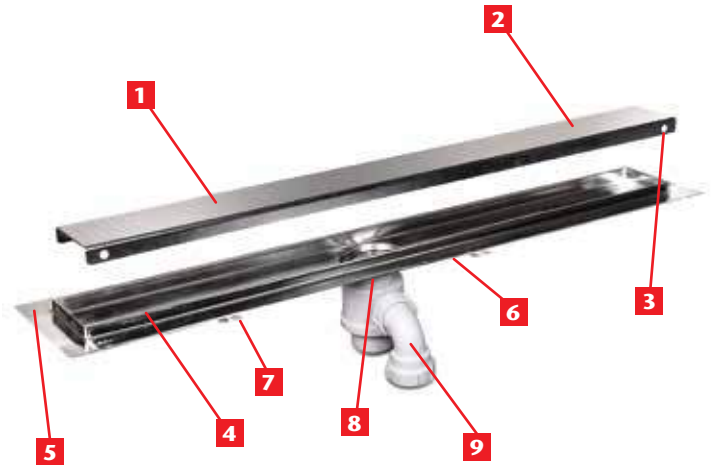
Length  
Width (A)  
Depth (B)  
Bore (C)  
Load class  
Grate type

For custom made options please call 01462 810431

## Shower channel system for tiled flooring

### Features and benefits

- 1** Five lengths, 700-1200mm gratings designed to fit most applications.
- 2** Choice of attractive grating designs.
- 3** Friction lock ensures safe grating retention, yet is easily removed without the need for special tools.
- 4** Corrosion resistant stainless steel channel body ensures trouble-free and long-life use. 'Vee' channel base eliminates standing water and aids efficient flow to outlet.
- 5** Stainless steel bonding flange integrated with channel body design ensures fully watertight construction and the ideal interface to wetroom tanking materials for assured adhesion.
- 6** Fixing holes for timber floor installation.
- 7** Anchor tangs for concrete/screed floor installation.
- 8** High flow rate 0.9 l/s corrosion resistant ABS foul air trap with 50mm water seal to BS EN 1253 with full 360° rotation for convenient waste pipe connection. Trap elements easily removed for cleaning and access without special tools.
- 9** 40mm multi-fit waste pipe connection accepts all 40mm (1 1/2") solvent weld and push-fit waste pipes to BS 5254 and BS 5255. Variable orientation outlet for horizontal or vertical waste pipe connection.



All dimensions in mm

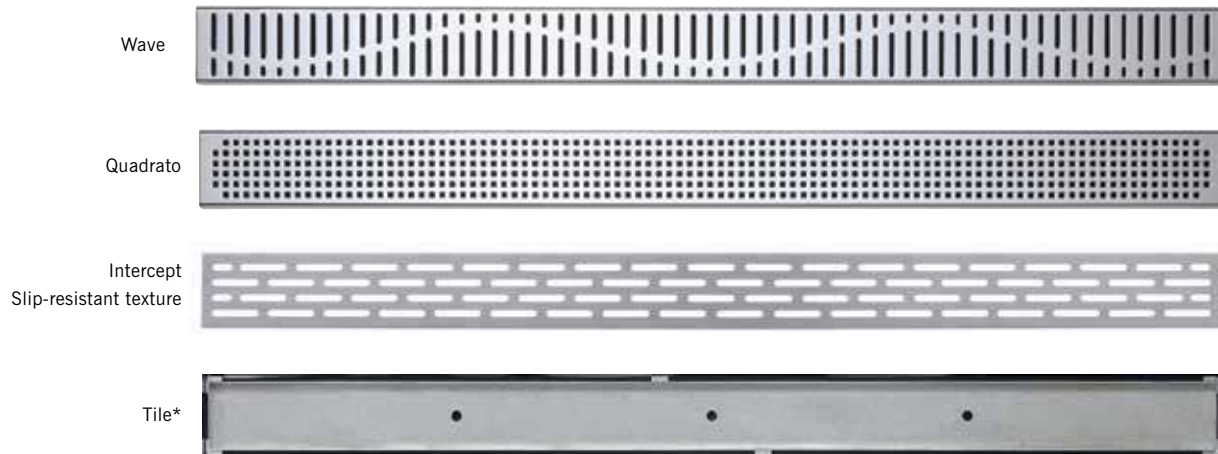
Foul Air Trap 50mm Water Seal Part No	Visible Shower Channel Length L (mm) and Part No				
	L = 700	L = 800	L = 900	L = 1000	L = 1200
91095	04435	04436	04460	04441	04448

**Note:** Channel part numbers **exclude grating and foul air trap**. These items are to be ordered separately. See page 7.

### Standard Specification Clause Reference

For relevant specification, refer to page 25.

**Grating selection for shower channel system for tiled flooring**



\*Cut tile (10mm thick max.) to size. Use tile adhesive to fix in grating. Apply grout.



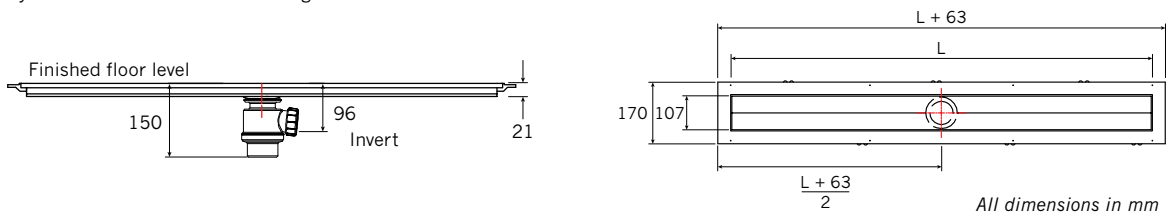
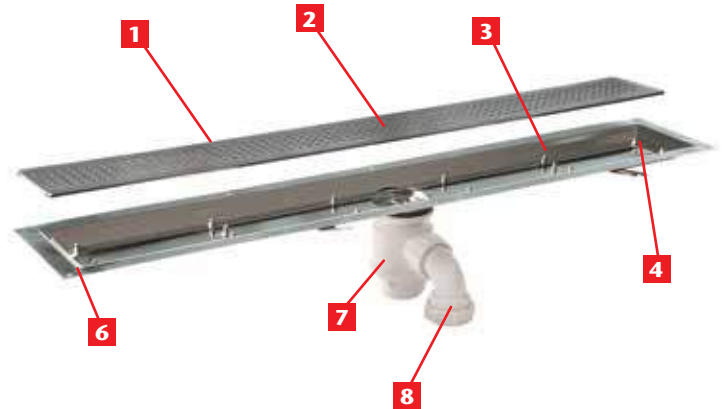
Grating Design	Visible Grating Length L (mm) and Part No					Max Waterway perture Width (mm)
	L = 700	L = 800	L = 900	L = 1000	L = 1200	
Wave	04449	04467	04461	04442	04450	5
Quadrato	04437	04438	04471	04445	04455	5
Intercept	105636	105637	105638	105639	105640	6
Tile	105630	105631	105632	105633	105634	6



## Shower channel system for flexible sheet flooring

### Features and benefits

- 1** Attractive finished stainless steel grating options.
- 2** Textured grating styles available for enhanced slip resistance performance.
- 3** Grating locks for user safety.
- 4** Mechanical clamping system for ultimate reliability for flexible sheet flooring.
- 5** Suitable for screed or suspended timber floor construction.
- 6** Durable, slim profile fully welded stainless steel construction.
- 7** High flow rate, 50mm water seal 0.9 l/s trapped outlet with 40mm Multi-fit waste connection. See page 5.
- 8** Easy horizontal or vertical outlet configuration.



Foul Air Trap 50mm Water Seal Part No	Visible Shower Channel Length L (mm) and Part No				
	L = 700	L = 800	L = 900	L = 1000	L = 1200
91095	105781	105782	105783	105784	105785

**Note:** Channel part numbers **exclude grating and foul air trap**. Our channels, gratings and FAT are to be ordered separately, to give you the widest range of options.

## Grating selection for channel system for flexible sheet flooring

Intercept finished  
(optionally with slip  
resistant texture)



Quadrato finished  
(optionally with slip  
resistant texture)



Grating Design	Visible Grating Length L (mm) and Part No					Max Waterway perture Width (mm)
	L = 700	L = 800	L = 900	L = 1000	L = 1200	
Quadrato finished	105786	105790	105794	105798	105802	6
Quadrato slip-resistant	105787	105791	105795	105799	105803	6
Intercept finished	105788	105792	105796	105800	105804	6
Intercept slip-resistant	105789	105793	105797	105801	105805	6



## ACO ShowerDrain C linear solution

The ShowerDrain C series is characterised by modern design, perfect functionality and high-flow capacity. This high quality stainless steel shower channel system is available with a wide range of gratings and includes the channel body and integrated foul air trap.

The foul air trap is manufactured from corrosion resistant polypropylene. The stainless steel components are pickle passivated; the gratings are brushed to silk gloss.

The ACO ShowerDrain C has been specifically designed for high flow rate capacity, very low construction height and easy maintenance.



### Features and benefits

- 1 Compact shower channel system** - The ACO ShowerDrain C has an overall height of 92mm making it ideal for shallow screed applications.
- 2 Easy maintenance** - The user's comfort is increased by the efficiency of the foul air trap and its easy maintenance. The air-tight seal is injection-moulded together with the foul air trap eliminating any risk of lost seals. The foul air trap is easily removed from the shower channel and is easy to dismantle to be cleaned by hand or dish washer.
- 3 Versions of ACO ShowerDrain C** - The visible grating width is 70 mm and available in 6 lengths – 585 mm, 685 mm, 785 mm, 885 mm, 985 mm, and 1185 mm.

There are 4 attractive stainless steel grating styles available and brushed to silk gloss.

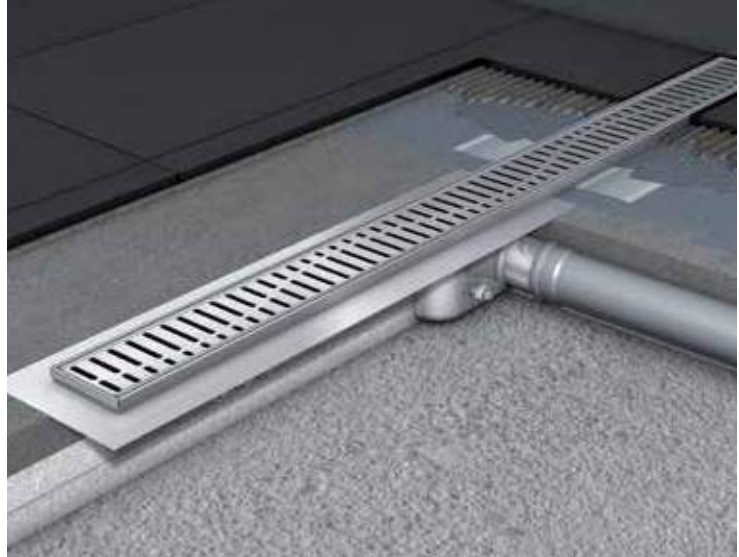
- 4 Gratings** - The stainless steel ShowerDrain C gratings have an unique profile in which the centre section of the grating is lower than the edges. This significantly reduces the risk of overshooting water.



## ShowerDrain C Line with horizontal tanking flange

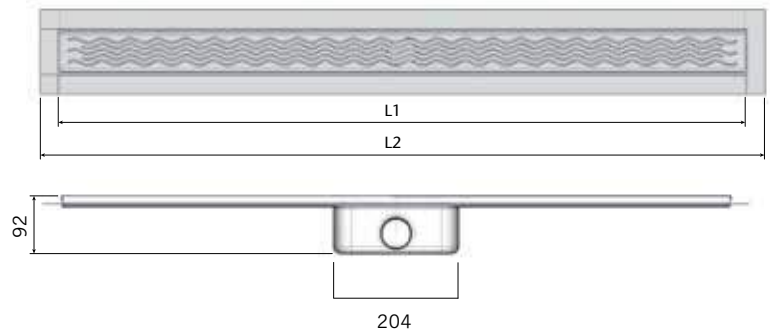
### Product description

- Drainage channel with 50mm spigot outlet.
- Overall height: 92 mm.
- Stainless steel channel and grating construction.
- Tested according to BS EN 1253: flow rate 0.95 l/s.
- Integrated removable foul air trap with 50mm water seal to BS EN 1253.
- Visible channel width: 70 mm.
- Channel body with lateral slope.
- There are 4 grating styles with brushed silk gloss gratings.
- Integral tanking flange.
- Unique profile



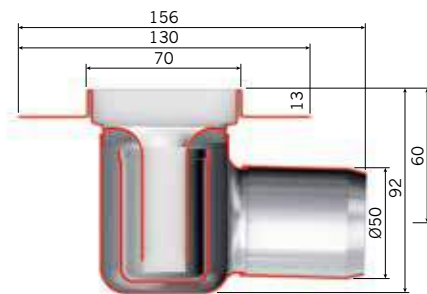
### Product advantages

- Fully welded stainless steel body, eliminates risk of leakage.
- Low construction height ideal for refurbishment projects.
- Easy removed and cleaned foul air trap, full access to the outlet pipe.
- Unique profile of gratings reduces water over-shoot.



### Installation dimensions

L1 (mm)	585	685	785	885	985	1085	1185
L2 (mm)	645	745	845	945	1045	1145	1245

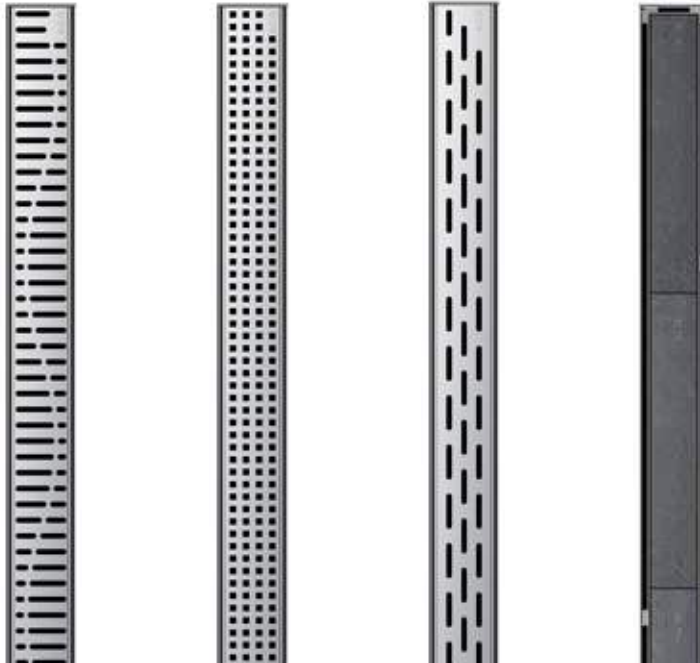


Installation with tanking flange

\*Flow rate of tile grating is 0.5 l/s compliant to BS EN 1253 testing.

**ShowerDrain C with horizontal tanking flange**

**Order data – channel complete with grating and foul air trap**



Length L1 (mm)	Wave	Grating		Tile Infill (Max tile thickness 10mm)
		Quadrato	Slot	
585	404484	404492	403798	408651
685	404485	404493	403799	408652
785	404486	404494	403800	408653
885	404487	404495	403801	408654
985	404488	404496	403802	408655
1185	404490	404498	403804	408657

Tile Infill  
(Max tile thickness 10mm)

## Shower gully system

### Features and benefits

- 1** 150mm square plus one circular top tile grating in 7 individual styles. Refer to page 15.
- 2** Barefoot friendly electro-polished stainless steel grating designs.
- 3** Foul air trap conforms to BS EN 1253 requirements for 50mm water seal. High 1.2 l/s flow rate suitable for most modern showers.
- 4** Separate flexible sheet flooring clamp avoids installation disturbance during cleaning and maintenance, or acts as a dpm clamp on tiled system.
- 5** Locked grating for added safety and security.
- 6** Compact horizontal outlet bodies ideal for shallow invert waste pipe connections with easy to install flat bottomed body design to aid installation.
- 7** Vertical outlet spigot options for suspended or solid floor construction.
- 8** Tile grate bezel interfaces with main gully body. Optional grating bezel extension for deep screed applications. Refer page 19.
- 9** Rotational and vertical adjustment on ceramic tile models accommodates orientation, finished floor level and position adjustments.
- 10** Supplied boxed complete with universal 2"/50mm connector and 2"/50mm to 1 1/2"/40mm reducer for easy and convenient connection to horizontal or vertical pipe outlet configuration.
- 11** Square or circular perforated grating available in slip resistant finish that adds style as well as improving wet grip. Refer page 15.



## Shower gully system

### Introduction

Gully bodies with 110mm outlet are available to enable direct connection to below ground drainage where required.

### Features and benefits

- 1** Telescopic height adjustment providing full 360° rotation and +/- 7.5° pitch and roll adjustment.
- 2** DPM bonding flange.
- 3** 110mm vertical spigot trapped outlet.
- 4** Flexible sheet flooring clamp.
- 5** Integrated end stops preventing accidental dismantling.

### Tiled floors

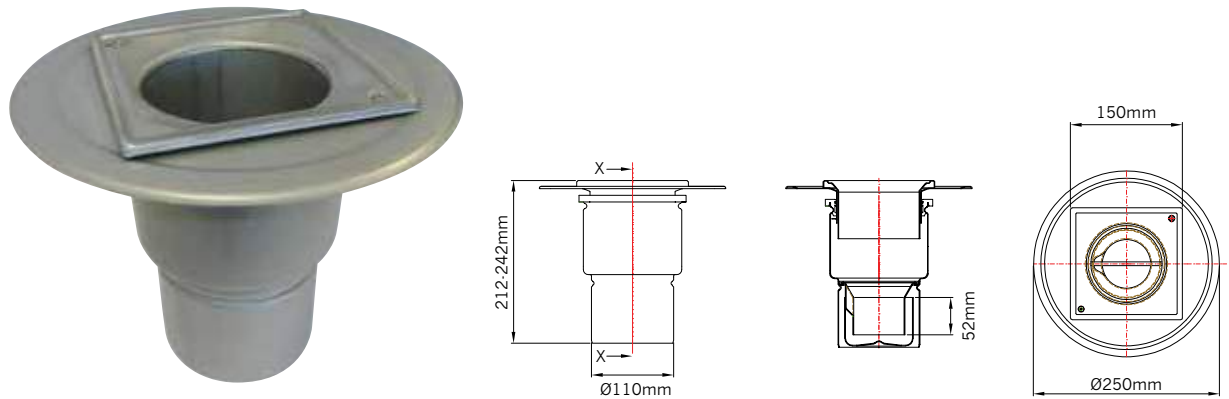
### Vinyl floors



**Note:** 32mm/40mm back inlet gully body options available upon request.

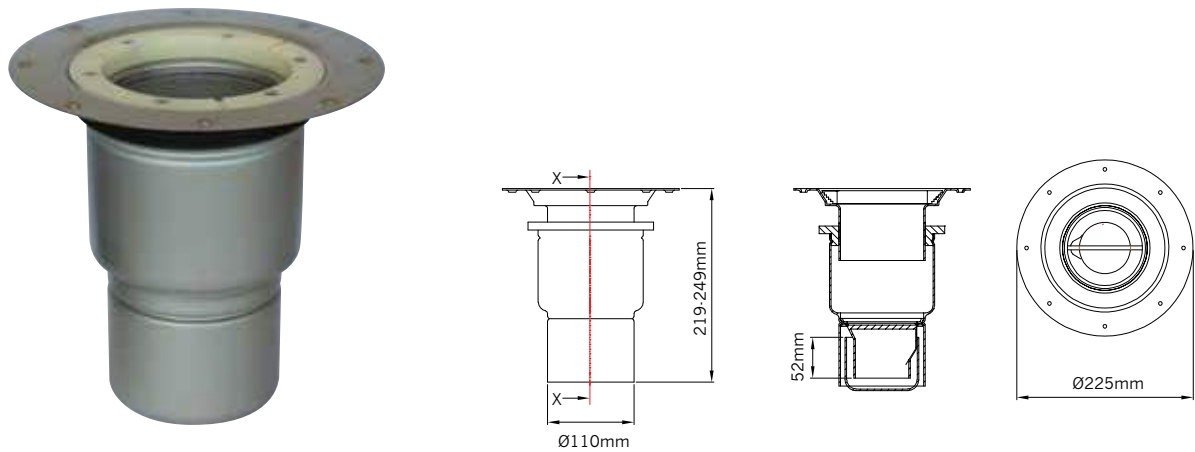
**Vertical spigot slab penetration gullies, outlet dia 110 mm**

**Technical and order data - tiled and cementitious flooring applications**



Part No	Description	Flow Rate l/s	Weight kg	Load Class BS EN 1253
405854	110mm Vertical outlet - tile	1.2	1.2	K3

**Technical and order data - flexible sheet flooring application**



Part No	Description	Flow Rate l/s	Weight kg	Load Class BS EN 1253
405855	110mm Vertical outlet - vinyl	1.2	1.7	K3

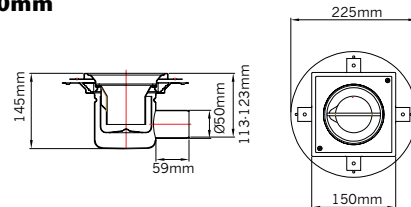
**Note:** All gullies are supplied without grating. Select grating option from page 16.

**Standard specification clause reference**  
For relevant specification, refer to page 26.

## Shower Gully System

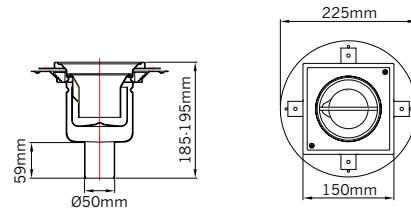
### Technical and order data for vertical and horizontal gullies, outlet dia 50mm - tiled and cementitious flooring applications

Universal waste pipe  
connectors not shown



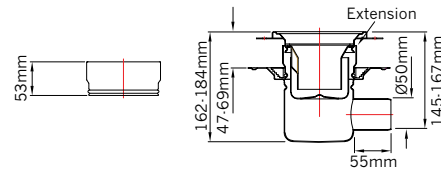
Part No	Description	Flow Rate l/s	Weight kg	Load Class BS EN 1253
405821	50mm Horizontal outlet - tile	1.2	2.3	K3

Universal waste pipe  
connectors not shown



Part No	Description	Flow Rate l/s	Weight kg	Load Class BS EN 1253
405817	50mm Vertical outlet - tile	1.2	2.3	K3

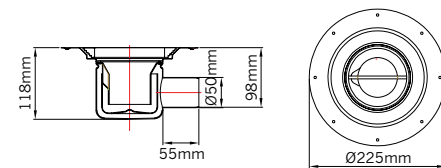
### Optional grating bezel extension - for use with tile options only



Part No	Description	Weight kg	Overall Gully Height mm
402725	Extension	0.2	162-184

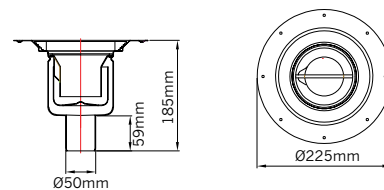
### Flexible sheet flooring application

Universal waste pipe  
connectors not shown



Part No	Description	Flow Rate l/s	Weight kg	Load Class BS EN 1253
405819	50mm Horizontal outlet - vinyl	1.2	1.9	K3

Universal waste pipe  
connectors not shown



Part No	Description	Flow Rate l/s	Weight kg	Load Class BS EN 1253
405815	50mm Vertical outlet - vinyl	1.2	1.9	K3

**Note:** All gullies are supplied **without** grating. Select grating option from page 16.





### ACO Grating selections for gully systems

Grating Only Part No 304 Stainless Steel	Grating Style	304 Stainless Steel (electro-polished)	Load Class to BS EN 1253	Suitable For	Weight kg	Dimension mm
104039	Quadrato		K3	Tiled Cement	0.25	135 x 135
104040	Wave		K3	Tiled Cement	0.25	135 x 135
104041	Mondo		K3	Tiled Cement	0.25	135 x 135
104043	Wellness		K3	Tiled Cement	0.25	135 x 135
104044	Classic		K3	Tiled Cement	0.25	135 x 135
104045	Arco		K3	Tiled Cement	0.25	135 x 135
401183	Perforated Square		K3	Tiled Cement	0.25	135 x 135
401185	Perforated Circular		K3	Flexible Sheet Flooring	0.25	Ø 157

### Slip resistant gratings

ACO have developed an attractive, slip resistant finish for their standard gullygratings. Slip tests in conformance with BS 7976 parts 1-3-2002 carried out on ACO slip resistant gratings reliably exceed the "Low slip potential" of SRV36.

Grating Only Part No 304 Stainless Steel	Grating Style	304 Stainless Steel (electro-polished)	Load Class to BS EN 1253	Suitable For	Weight kg	Dimension mm
104047	Slip Resistant Perforated Square		K3	Tiled Cement Screed	0.25	135 x 135
104048	Slip Resistant Perforated Circular		K3	Flexible Sheet Flooring	0.25	Ø 157

#### Notes:

- All gratings are supplied complete with fixings. Maximum waterway inlet slot width: 8mm.
- All gratings electro-polished stainless steel as standard with the exception of the slip resistant gratings.

### Features and benefits

ACO slip gratings are ideal for shower areas, wet rooms, washdown areas, ablution facilities and particularly effective when used in conjunction with flexible sheet safety flooring.

- Retextured metal surface:
  - High slip resistance, reducing slips and trips
  - No messing with coatings
- Excellent wear quality
- Attractive 2 tone finish
- Comfortable for bare feet
- Corrosion resistant stainless steel, grade 304
- No sharp or protruding parts

## Cleaning Methods

Problem	Cleaning Agent	Comment
Routine cleaning, all finishes.	Soap or mild detergent and water (such as washing up liquid).	Sponge, rinse with clean water, wipe dry if necessary.
Fingerprints, all finishes.	Soap or warm water or organic solvent (e.g. acetone, alcohol).	Rinse with clean water, wipe dry if necessary.
Stubborn stains and discolouration.	Mild cleaning solutions (e.g. Cif, Goddard Stainless Steel Care).	Rinse well with clean water and wipe dry.
Oil and grease marks, all finishes.	Organic solvents (e.g. acetone, alcohol).	Clean after with soap and water, rinse with clean water and dry.
Rust and other corrosion products.	Oxalic acid. the cleaning solution should be applied with a swab and allowed to stand for 15-20 minutes before being washed away with water. May continue using Cif to give final clean.	Rinse well with clean water (precautions for acid cleaners should be observed).
Scratches on Brush (Satin) finish.	Household synthetic fibre scouring pads (e.g. Scotch Brite fibre pad).  For deeper scratches apply in direction of polishing. then clean with soap or detergent as per routine cleaning.	Do not use ordinary steel wool (iron particles can become embedded in stainless steel and cause further surface problems).

ALWAYS READ INSTRUCTIONS ON PROPRIETARY CLEANING AGENTS BEFORE USE.

## Precautions

Acids should only be used for cleaning when all other methods have been proved unsatisfactory.

## ACO Shower Channel Systems

### Servicing of foul air trap



1. Remove the grating and gently prise open by inserting a flat blade screwdriver into either end of the grating between the grating and channel body. Note that the grating has 4 plastic inserts on its edge to provide necessary friction to hold the grate in place.
1. Simply pull the drain strainer out. The foul air trap can be removed by turning 1/4 turn anti-clockwise, and pulling out. Clean thoroughly with soapy water Re-insert by lubricating the sealing ring with petroleum jelly, pushing the trap firmly down and twisting 1/4 turn clockwise. Check full location by gently pulling upward. Replace drain strainer, the grating is re-inserted by pressing down evenly into the channel.

### ACO ShowerDrain 'C' Line

#### Cleaning & maintenance



- i. The grating is retained in the channel body using a friction lock. Remove the grating using the tool supplied by inserting into a slot at the end of the grating and gently pull to remove the grating. Similarly, remove the foul air trap using the same tool as shown above.
- ii. Separate the inner and outer sections of the foul air trap by pulling the two components apart. Wash components in warm, soapy water. Rinse and re-assemble foul air trap.
- iii. With the grating and trap removed, rinse all stainless steel items in warm soapy water. Wipe dry.
- iv. Replace foul air trap and grating. Prime trap with clean water to prevent odours.

### ACO Shower Gully

#### Servicing of foul air trap

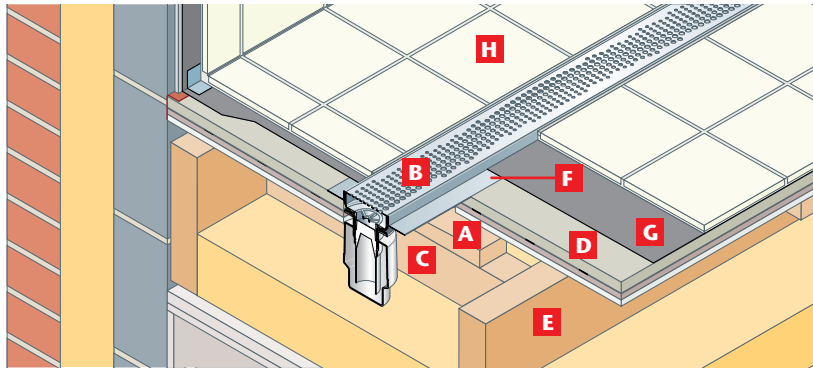


1. Remove crosshead screws from grating. Using appropriate gloves, grip the crossbar of the foul air trap and pull upwards making sure that the rubber sealing ring does not dislocate and fall into the drain. Remove sealing ring. Clean foul air trap thoroughly with soapy water.
2. Lubricate the sealing ring with petroleum jelly and carefully locate the ring back onto the foul air trap. Lubricate the gully body in the area where the sealing ring will locate. Push the foul air trap firmly into position making sure that the trap seats squarely and that the sealing ring remains in position. Replace grating and tighten until resistance is felt.

## ACO channel systems

### Tiles in joisted acoustic floor

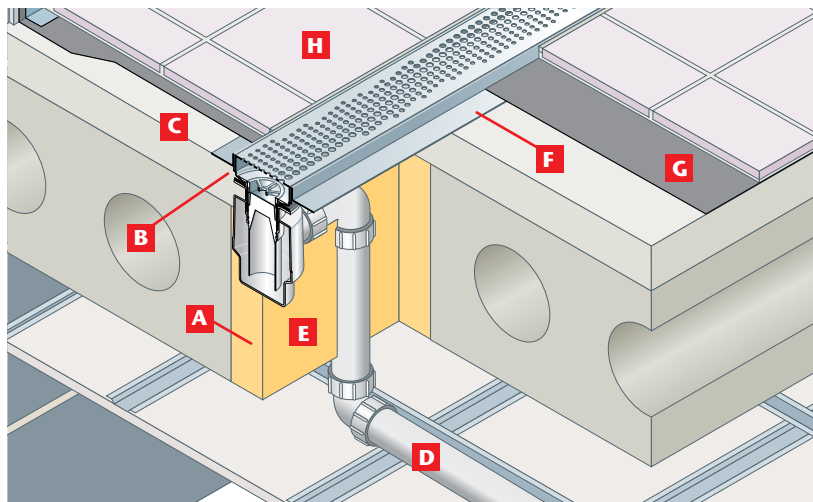
1. Where alterations to joists are necessary consult Structural Engineer for advice and reinforce joists as advised. Cut firrings **A** to 1:80 fall towards channel **B** and fix to blocking **C** between joists.
2. Lay acoustic overfloor **D** in accordance with manufacturer's instructions, cut rectangular hole and locate shower channel body **B** parallel to joists **E**.
3. Bond and fix channel flange **F** using No.8 x 12mm countersunk screws to acoustic floor **D** - fixings must not penetrate through top board.
4. Connect pipework, laid to fall (hidden detail). Connection to stack should use a flexible pipe coupling to eliminate noise transference. Test for leaks. Provide temporary debris protection to inner channel.



5. Apply suitable primer to channel flange **F**.
6. Apply tanking membrane **G** to whole floor in accordance with manufacturer's instructions. Dress membrane over channel flange **F**.
7. Apply tile adhesive working carefully around channel. Lay the ceramic tiles **H**, working away from channel. Leave 8mm gap for grout or flexible sealant at edge of grating frame.
8. Complete all local work and remove temporary protection. Prime trap and fit grating.

### Tiles in suspended concrete floor

1. Form hole **A** in concrete floor to receive shower channel body, trap and outflow pipework.
2. Set fishtail ties **B** on underside of channel to provide key with screed **C** and temporarily support all components to required finished floor level. Provide temporary debris protection to inner channel.
3. Lay screed **C** to 1:80 fall ensuring fishtail ties are fully keyed in.
4. Connect pipework **D**, laid to fall and test for leaks.
5. Inject fire retardant polyurethane expanding foam **E** into void around drain body, trap and pipework to provide additional support.
6. Apply suitable primer to channel flange **F**.

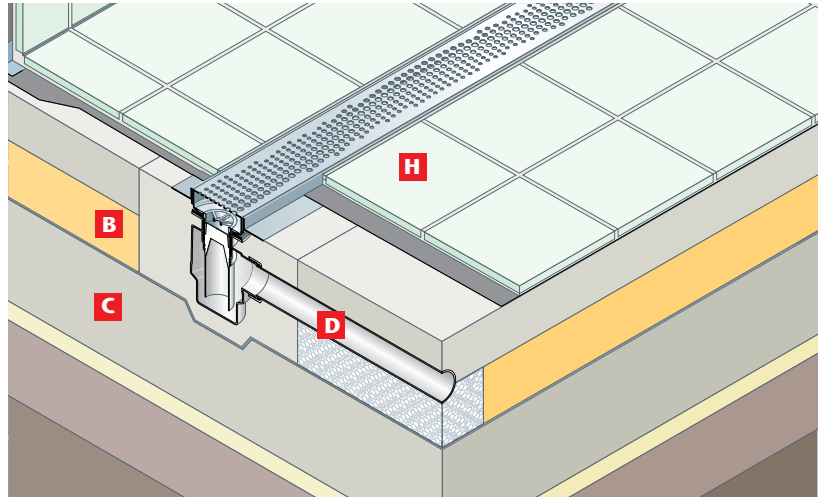


7. Apply tanking membrane **G** to whole floor screed in accordance with manufacturer's instructions. Dress membrane over channel flange **F**.
8. Apply tile adhesive working carefully around the channel. Lay ceramic tiles **H** working away from channel. Leave 8mm gap for grout or flexible sealant at edge of grating frame.
9. Complete all local work and remove temporary protection. Prime trap and fit grating.

### ACO channel systems

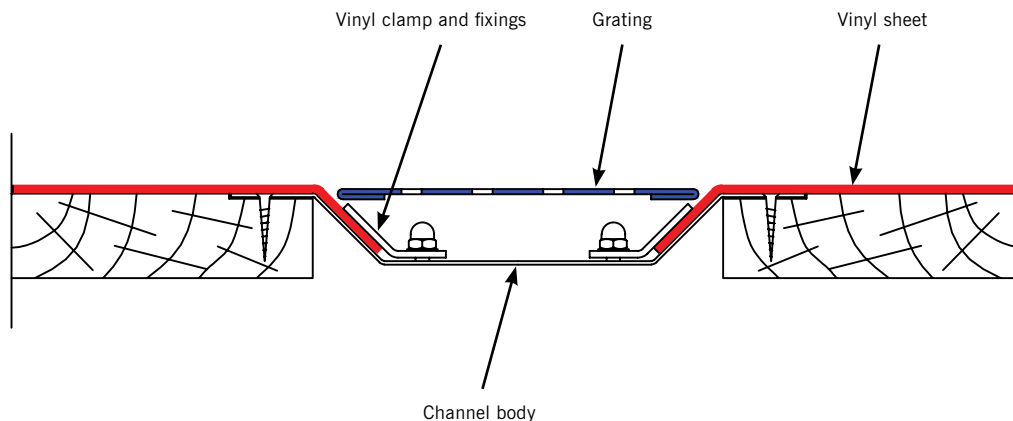
#### Tiles in ground floor

1. Form recess in slab to accommodate trap prior to laying DPM **A**. Lay DPM.
2. Set fishtail ties **B** to provide key with concrete backfill **C**. Temporarily support all components to required finished floor level.
3. Connect pipework **D** to fall, discharging to back inlet gully and test for leaks. Provide temporary debris protection to inner channel.
4. Box out and backfill concrete **C** around trap and channel ensuring fishtails are fully keyed-in.
5. Remove shutters and lay insulation **E** forming 20mm duct **F** around pipe to receive polystyrene bead fill.
6. Lay screed **G** to 1:80 fall.
7. Apply suitable primer to channel flange **H**.
8. Apply tanking membrane **I** to whole floor screed in accordance with manufacturer's instructions. Dress membrane over channel flange **H**.
9. Apply tile adhesive working carefully around the channel. Lay ceramic tiles **J** working away from channel. Leave 8mm gap for grout or flexible sealant at edge of grating frame.
10. Complete all local work and remove temporary protection. Fit and prime trap. Fit grating.



## Shower channel installation detail – vinyl flooring

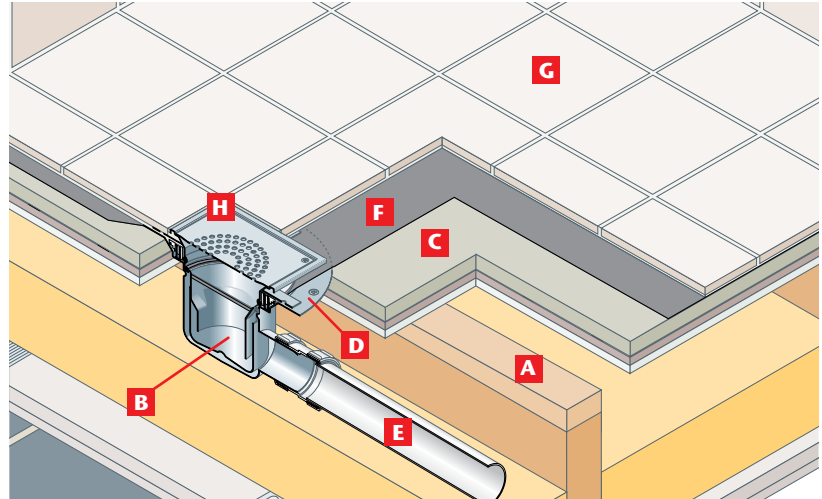
- Adequate falls (1:80 generally) to the channel are required to remove water reliably from the wetroom. Remove grating and vinyl clamp from the channel body.
- **For timber floor installations**, assess floor joist direction and locations and waste pipe run requirements to identify optimal channel location. Cut floor to provide suitable aperture to accept the channel body and rebate the floor to allow channel flange to sit flush with the surface of the floor to prevent pressure points in vinyl flooring.
- Depending on floor construction and waste pipe run, attach foul air trap to channel body and 40mm waste pipe connection and test for leaks. Secure channel to the floor using suitable countersunk screws. Grout screw heads flush to prevent pressure points in vinyl flooring.
- **For concrete/screed installations**, connect foul air trap and 40mm waste pipe connections and test for leaks. Bed the channel on suitable mortar to the required floor level ensuring the screed anchors are extended and twisted to provide a positive key. Screed the surrounding floor providing falls to the channel as required. Grout flange fixing holes flush to prevent pressure points in vinyl flooring.
- Cut coving to required size as appropriate and apply adhesive to manufacturer's instructions and install coving against walls in usual manner.
- Cut vinyl sheet oversize for area. Apply adhesive to the floor, coving, walls, Shower Channel clamped areas as shown to manufacturer's instructions and lay the vinyl sheet in position covering the channel. **DO NOT** apply adhesive to the removable clamp or the channel base.
- Make a longitudinal cut in the vinyl covering the void over the channel to allow the vinyl to be dressed into the clamped areas of the channel taking care not to cut the area near the clamped areas.
- Dress the vinyl into the channel flanks. **DO NOT** cut the vinyl to accommodate the internal radii of the channel. The use of an evenly applied hot-air gun over the surface of the vinyl adjacent to the clamp to soften the vinyl may be required if the ambient temperature is too low. Apply the stainless steel clamp and tighten evenly using the fixings provided.
- Complete the installation to the coving as required.
- Finally, clean the area with brush and vacuum cleaner. Fit the grating.
- Cover the area with thin plywood or stiff cardboard and apply weights on the plywood overnight until the adhesive cures to ensure the vinyl flooring does not ride up out of position.



## ACO shower gully systems

### Tiles in joisted acoustic floor

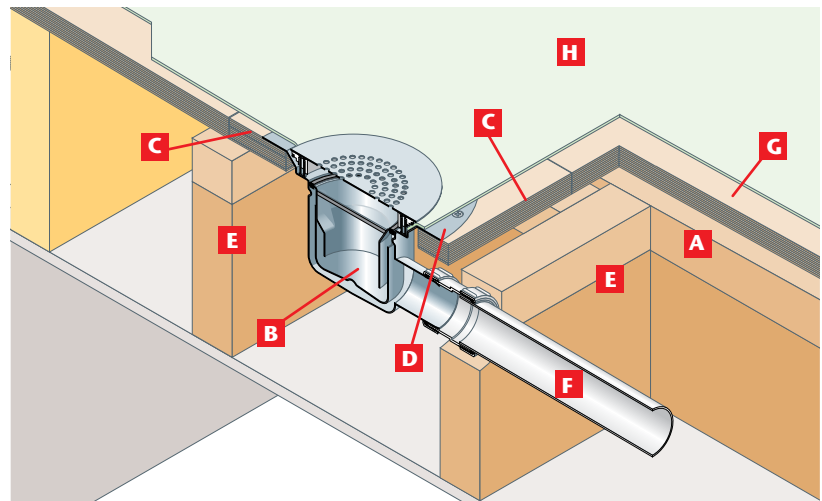
1. Where alterations to joists are necessary consult Structural Engineer for advice and reinforce joists as advised. Cut firrings **A** to 1:80 fall in four directions towards gully **B**.
2. Lay acoustic overfloor **C** in accordance with manufacturer's instructions, cut circular hole to fully support flange **D** and location of drain body. Rebate flange, bond and fix using non ferrous No.8 x 12mm screws - fixings must not penetrate through acoustic top board. Provide temporary debris protection to inner drain.
3. Connect pipework **E**, laid to fall, using coupling provided. (Connection to stack should use a flexible pipe coupling to eliminate noise transference). Test for leaks.
4. Apply primer to drain flange **D**.



5. Apply tanking membrane **F** to whole floor in accordance with manufacturer's instructions. Dress membrane over drain flange **D** and fix clamp ring, ensuring tanking membrane is securely clamped.
6. Adjust grating frame **H** to finished floor level and protect grating for duration of building work.
7. Apply tile adhesive working carefully around the drain. Lay the ceramic tiles **G** working away from drain. Leave 8mm gap for grout or flexible sealant at edge of grating frame.
8. Complete all local work and remove temporary protection. Fit and prime trap. Fit grating.

### Vinyl in joisted floor

1. Where alterations to joists are necessary consult Structural Engineer for advice and reinforce joists as advised. Cut firrings **A** to 1:80 fall in four directions towards gully **B**.
2. Cut a square marine plywood panel **C** to joist centres. Form rebated circular hole to fully support drain flange **D** and location of drain body. Bond and screw fix using non ferrous screws. Fill the screw heads flush with flange. Provide temporary debris protection to inner drain.
3. Support butt joints between plywood panel and plywood decking with blocking and battens **E** to full joist depth finishing flush with top of firrings. Fully screw fit plywood panel **C**.
4. Connect pipework **F**, laid to fall, using coupling provided and test for leaks.



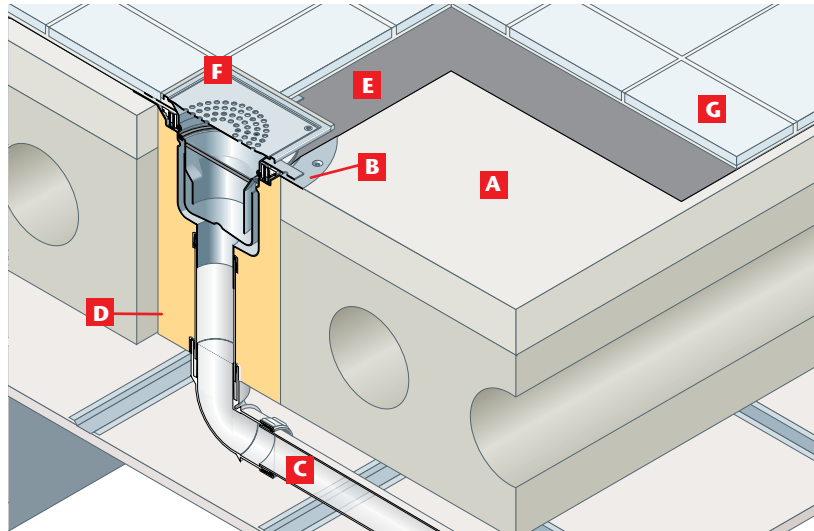
5. Lay 18-22mm marine plywood decking **G** on firrings **A** and butt joint to plywood panel **C**.
6. Lay and bond vinyl sheet flooring **H** over drain flange **D**. Fix clamping ring (hidden detail) ensuring vinyl sheet flooring is securely clamped.
7. Complete all local work and remove temporary protection. Fit and prime trap. Fit grating.



## ACO shower gully systems

### Tiles in suspended concrete floor

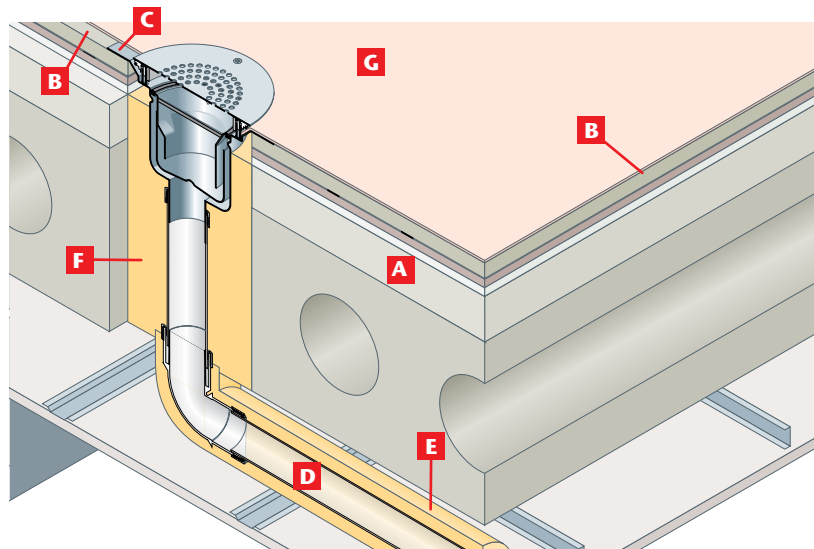
1. Lay screed **A** to 1:80 fall over structural floor and cast or core drill circular hole through screed and concrete floor.
2. Position drain body in hole and bond drain flange **B** to screed. Provide temporary debris protection to inner drain.
3. Connect pipework **C**, laid to fall, using coupling provided and test for leaks.
4. Inject expanding fire retardant polyurethane foam **D** into void around drain body and pipework to provide additional support.
5. Apply primer to drain flange **B**.
6. Apply tanking membrane **E** to whole floor in accordance with manufacturer's instructions. Dress membrane over drain flange **B** and fix clamp ring, ensuring tanking membrane is securely clamped.



7. Adjust grating frame **F** to finished floor level and protect for duration of work.
8. Apply tile adhesive working carefully around the drain. Lay the ceramic tiles **G**, working away from drain. Leave 8mm gap for grout or flexible sealant at edge of grating frame. Fit and prime trap. Fit grating.

### Vinyl in suspended concrete acoustic floor

1. Lay screed **A** to 1:80 fall over structural floor and cast or core drill circular hole through screed and concrete floor.
2. Lay acoustic overfloor **B** in accordance with manufacturer's instructions and cut a circular hole centred over the hole through concrete floor slab/screed.
3. Locate drain body in hole, countersink flange **C**, bond and fix using No.8 x 12mm screws - fixings must not penetrate through top board. Fill screw heads flush with compression flange and provide temporary debris protection to inner drain.
4. Connect pipework **D**, laid to fall, using coupling provided. (Connection to stack should use a flexible coupling to eliminate noise transference). Test for leaks.

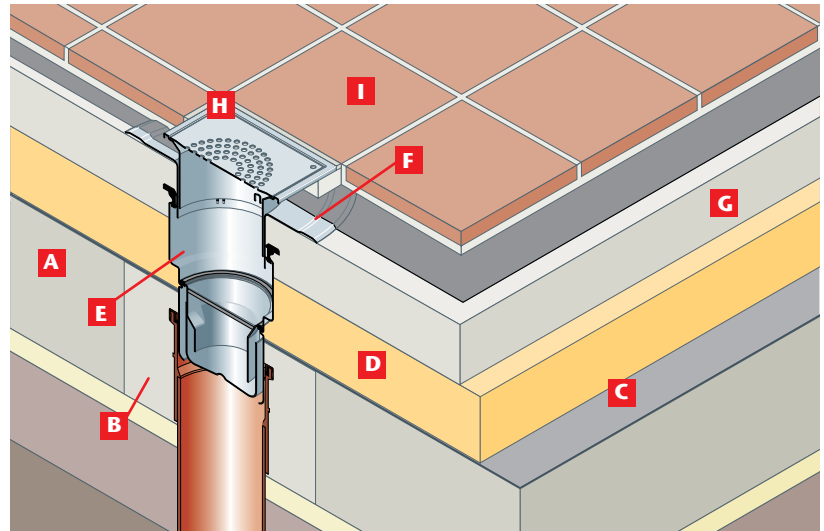


5. Fit slit insulation **E** around pipework for acoustic purposes. Inject expanding fire retardant polyurethane foam **F** into hole around drain body and pipework to provide additional support, taking care not to bridge acoustic floor system.
6. Lay and bond vinyl sheet flooring **G** over drain flange **C**. Fix clamping ring (hidden detail) ensuring that vinyl sheet flooring is securely clamped.
7. Complete all local work and remove temporary protection. Fit and prime trap. Fit grating.

## ACO shower gully systems

### Tiles in ground floor

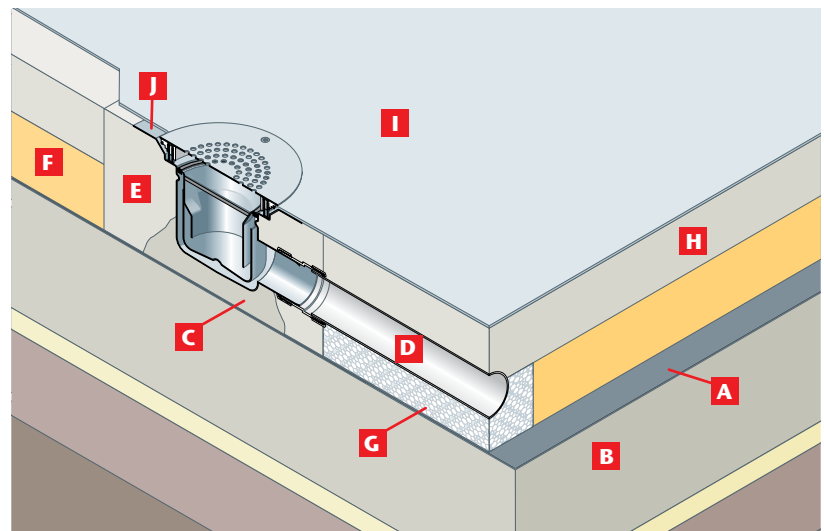
1. Box out around drain pipe and cast concrete floor slab **A**.
2. Remove shuttering and connect drain body to pipe. Test pipework for leaks and provide temporary debris protection to inner drain. Backfill concrete **B** around drain body.
3. Lay DPM **C** over floor slab and seal to drain body. Lay insulation **D** and fit around drain body **E**. Remove temporary protection and push fit tanking flange **F** into seal within drain body. Adjust to required screed height and replace temporary protection.
4. Lay screed **G** to 1:80 fall.
5. Remove temporary protection, push fit grating frame **H** into tanking flange **F** and adjust to finished floor level. Provide temporary protection for duration of building works



6. Apply tanking membrane to whole floor in accordance with manufacturer's instructions. Dress membrane over tanking flange **F** and around bezel.
7. Apply tile adhesive working carefully around drain. Lay quarry tiles **I**, working away from drain. Leave 8mm gap for grout or flexible sealant at edge of grating frame.
8. Complete all local work and remove temporary protection. Fit and prime trap. Fit grating.

### Vinyl in ground floor

1. Lay DPM **A**, over floor slab **B** and sit drain body onto mortar bed **C** to finished floor level.
2. Connect pipework **D**, laid to fall, using coupling provided. Discharge to back inlet gully and test for leaks. Provide temporary debris protection to inner drain.
3. Box out and backfill concrete **E** around the drain body.
4. Remove shutters and lay insulation **F** forming 20mm duct **G** around pipe to receive polystyrene bead fill.
5. Lay screed **H** to 1:80 fall.
6. Lay and bond vinyl sheet flooring **I** over drain flange **J**. Fix clamping ring ensuring vinyl sheet flooring is securely clamped.



7. Complete all local work and remove temporary protection. Fit and prime trap. Fit grating.

**Standard specification clause:**

**Shower channel, shower gully**

<b>Shower channel</b>		<b>ShowerDrain C</b>		<b>Shower gully</b>	
<b>Description:</b>	Shower Channel Load class K3 to BS EN 1253.	<b>Description:</b>	Shower Channel Load class K3 to BS EN 1253.	<b>Description:</b>	Shower Channel Load class K3 to BS EN 1253.
<b>Function:</b>	Light duty channel drain for tiled or vinyl covered floors in wet room, shower and washdown areas.	<b>Function:</b>	Light duty channel drain for tiled or vinyl covered floors in wet room, shower and washdown areas.	<b>Function:</b>	Light duty channel drain for tiled or vinyl covered floors in wet room, shower and washdown areas.
<b>Type of Floor:</b>	Solid ground floor. Joisted timber and suspended concrete floors.	<b>Type of Floor:</b>	Solid ground floor. Joisted timber and suspended concrete floors.	<b>Type of Floor:</b>	Solid ground floor. Joisted timber and suspended concrete floors.
<b>Material:</b>	Stainless Steel Grade 304.	<b>Material:</b>	Stainless Steel Grade 304.	<b>Material:</b>	Stainless Steel Grade 304.
<b>Options:</b>	Interchangeable grating varieties.	<b>Options:</b>	Interchangeable grating varieties.	<b>Options:</b>	Interchangeable grating varieties.
<b>Type of Body:</b>	Standard range in 5 lengths c/w 40mm Ø trapped outlet. Fixed invert with "V" sump. Flow rate 0.4 l/s.	<b>Type of Body:</b>	Standard range in 5 lengths c/w 40mm Ø trapped outlet. Fixed invert with "V" sump. Flow rate 0.4 l/s.	<b>Type of Body:</b>	Standard range in 5 lengths c/w 40mm Ø trapped outlet. Fixed invert with "V" sump. Flow rate 0.4 l/s.
<b>Type of Grate:</b>	Standard range of 6 designs in 5 lengths Stainless Steel grade 304.	<b>Type of Grate:</b>	Standard range of 6 designs in 5 lengths Stainless Steel grade 304.	<b>Type of Grate:</b>	Standard range of 6 designs in 5 lengths Stainless Steel grade 304.

**NBS specification clause reference:**

**ACO Shower Channel & ShowerDrain C** - For relevant NBS Specification, refer to NBS section for FLOOR DRAINS relating to clause 310 FLOOR CHANNELS in R11 Above Ground Foul Drainage Systems.

**ACO Shower Gully** - For relevant NBS Specification, refer to NBS section for FLOOR DRAINS relating to clause 315 FLOOR DRAINS and clause 05 FLOOR DRAINS in R11 Above Ground Foul Drainage Systems.

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Email: abdinfor@aco.co.uk

**Material:** Electro-polished grade 304 austenitic stainless steel gratings to BS EN 10088. Gully tops and body manufactured from ABS and polypropylene.

**Product:** ACO Easyflow drainage system to BS EN 1253 Load Class K3. Wetroom gully tops complete with polypropylene.

**Literature:** ACO Easyflow drainage system to BS EN 1253 Load Class K3. Wetroom gully tops complete with polypropylene.

**Website:** Consult ACO Building Drainage technical literature for details.

**Design:** Consult ACO Building Drainage technical literature for details.

www.acobd.co.uk

ACO Building Drainage Technical Services provide design and specification.

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- ACO Water Management  
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