



*Product catalogue*

**ACO Decline 125**  
**Galvanised Steel**  
**Shallow Invert Surface Water Drainage System**



## ACO Building Drainage

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

ACO Building Drainage is a new concept within the ACO Group. Our mission: to eliminate design risk, to reduce installed and life cost and to deliver exceptional finish and performance in every product application.

We achieve this through three factors:

- High performance materials
- Design experience and project support
- Global manufacturing capacity

Our global resources and fabrication capacity make it possible for us to deliver 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's extensive portfolio includes:

- Stainless steel Modular Channel system
- Stainless steel EuroGully gully system
- Stainless steel and polymer composite access covers
- Biological Grease Management system
- Gravity Grease Separator system
- Sewer backflow protection valves
- Stainless steel socketed pipe system
- Rainwater outlets for flat roofs
- Wetroom and shower drainage systems

ACO Building Drainage is a division of ACO Technologies plc and part of the worldwide ACO Group. The Group has sales in excess of £400 million worldwide with production facilities in the UK, Germany, France, Switzerland, Denmark, Spain, Poland, Czech Republic, Australia and the USA. In total more than 3500 people are employed in 40 countries throughout the world.

**Tel: 01462 816666**

**Fax: 01462 851490**

**e-mail Enquiries: [buildingdrainage@aco.co.uk](mailto:buildingdrainage@aco.co.uk)**

**website: [www.acobuildingdrainage.com](http://www.acobuildingdrainage.com)**

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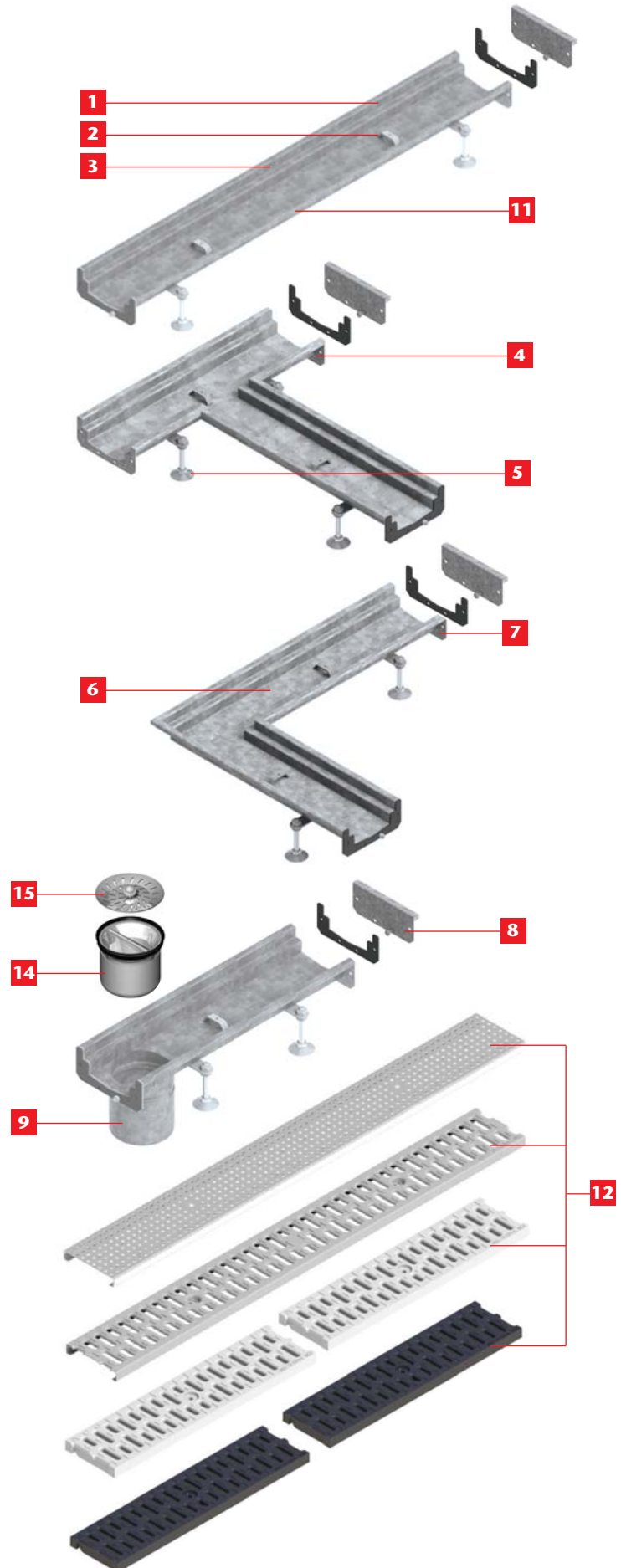
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## ACO Deckline 125 System Overview

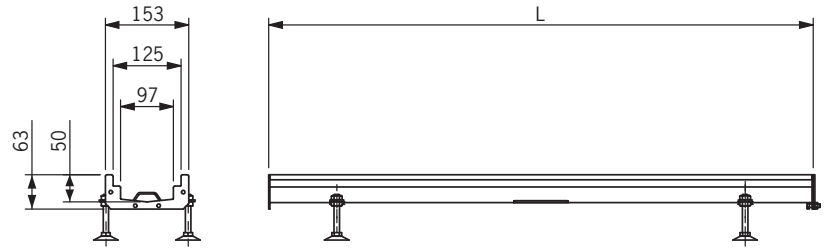
### Features and benefits

- 1** Channels manufactured from hot-dipped galvanised steel to BS EN ISO 1461: 2009 – available in 0.5m, 1m, 2m and 3m lengths
- 2** Two locking points per metre
- 3** 50mm level invert depth ideal for car park decks or other areas where similar construction restrictions exist
- 4** Branch unit for intersecting drain runs
- 5** All channel components supplied complete with levelling feet and concrete anchors to aid installation
- 6** Corner unit
- 7** Fully welded flange plates provide watertight channel joints, 4-point channel connection security and alignment
- 8** Universal closing end plate
- 9** Convenient Ø110mm OD spigot outlet
- 10** Neoprene gasket for 100% watertight channel joint connection
- 11** Rigid PVC infill provided as standard to support channel edge in trafficked applications
- 12** Grating choice includes galvanised steel perforated, slotted and composite black and white to Load Class C250 to BS EN 1433. All gratings supplied complete with lockings
- 13** Vee-bottomed channel to enhance flow velocity at low flow rates
- 14** Optional in-line foul air trap with 50mm water seal. Flow rate 1.2 l/s
- 15** Optional outlet sieve



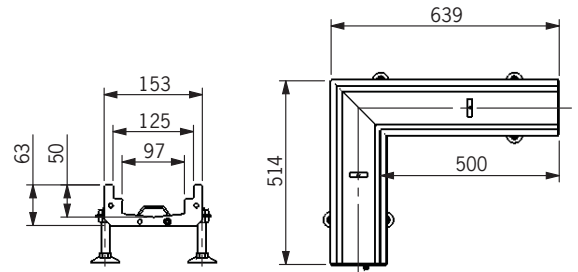
**Technical detail**

**Level Invert Channels**



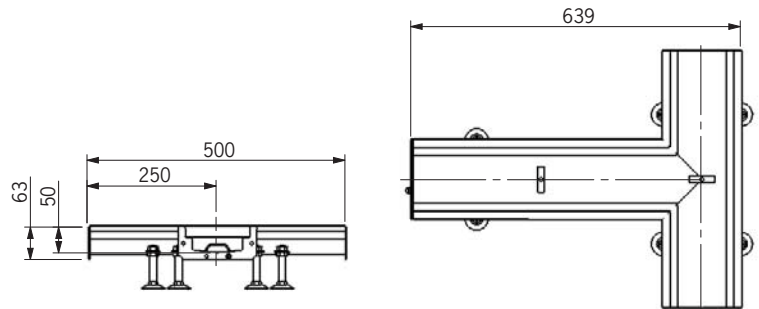
Description	Part No	L mm	Weight kg
Level Invert Channel	105254	500	2.3
	105255	1000	3.9
	105256	2000	7.0
	105257	3000	10.2

**Corner Unit**



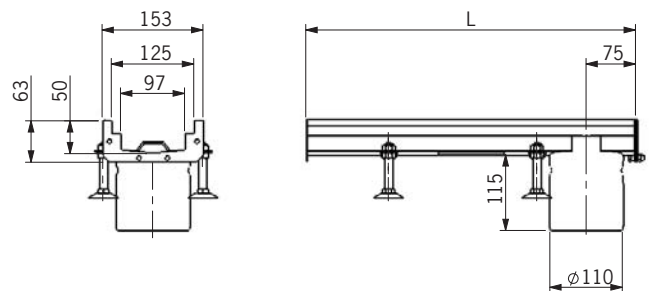
Description	Part No	Weight kg
Corner Unit	105259	4.0

**Branch Unit**



Description	Part No	Weight kg
Branch Unit	105261	3.9

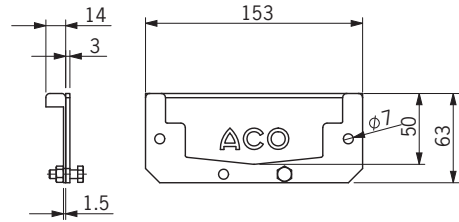
**Outlet Unit**



Description	Part No	L mm	Weight kg
Outlet Unit	105263	500	2.6
	105264	1000	4.2

**Technical detail**

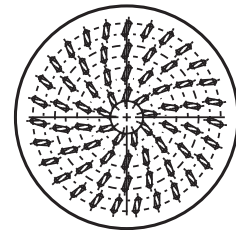
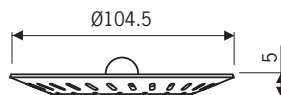
**End Plate**



Description	Part No	Weight kg
End Plate	105251	0.2

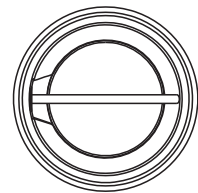
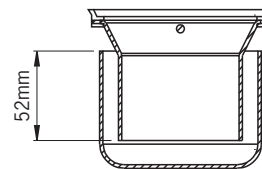
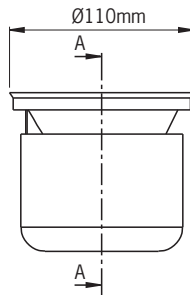
**Outlet Spigot Accessories**

**Sieve**



Description	Part No	Weight kg
Sieve	97235	0.1

**Foul Air Trap**



Description	Part No	Weight kg
110mm Outlet Trap	97217	0.3

**Load Class Definitions**

To BS EN 1433 - Drainage channels for vehicular and pedestrian areas.



Pedestrian and cycleways, domestic drives.



Pedestrian precincts, light vehicles, private car parks and drives.



Kerbside drainage, parking areas, service stations (cars), slow-moving light commercial vehicles.

**Benefits of BS EN 1433 : 2002 – Linear Drainage Channels**

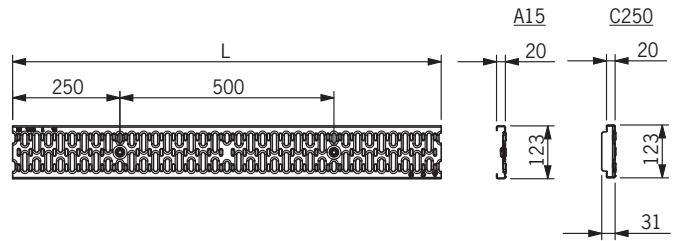
3rd party product assessment with CE marking to ensure products fulfil the Essential Requirements of BS EN 1433 for complete reliability, namely:

- **Load bearing capacity** – guarantees performance of channels and gratings for the chosen application
- **100% watertight** – no contamination of drained fluids to surrounding installation/ground
- **Durable** – for long, reliable life



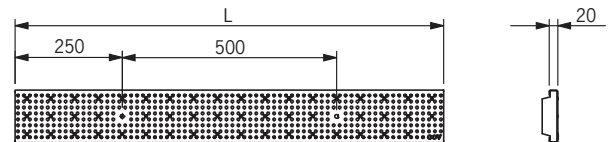
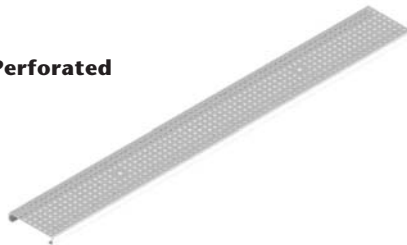
**Technical detail - gratings**

**Slotted**



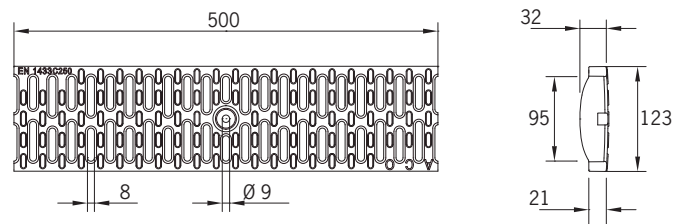
Description	Part No	L mm	BS EN 1433 Load Class	Finish	Weight kg
Slotted Grating	105522	1000	A15	Galvanised	2.0
	105523	500	A15	Galvanised	1.0
	105524	1000	C250	Galvanised	4.7
	105525	500	C250	Galvanised	2.3

**Perforated**



Description	Part No	L mm	BS EN 1433 Load Class	Finish	Weight kg
Perforated Grating	105508	1000	C250	Galvanised	4.8
	105509	500	C250	Galvanised	2.3

**Composite Grating**



Description	Part No	L mm	BS EN 1433 Load Class	Finish	Weight kg
Composite Grating	15704	500	C250	Black	1.2
	10735	500	C250	White	1.2

**Note:** All gratings supplied complete with locking bolts.

**NBS Specification Clause Reference**

For relevant NBS Specification, refer to NBS Section Q10 Kerbs/edgings/channels/ paving accessories, Clause 180 drainage channel systems and insert the appropriate model reference number.

## General points

### Ground Locations

Excessive slab movement resulting in lateral loading on the channel must be avoided by the inclusion of longitudinal expansion joints.

If transverse joints are present in the slab these should cross the channel aligned with a bolted joint in the channel run.

### Product

All components should be stored in a clean, dry level area prior to installation.

For chemically aggressive applications, use ACO Modular 125 stainless steel channel drainage systems.

ACO Deckline 125 is not suitable for swimming pools.

Deckline 125 not suitable for carriageways of public roads or motorways.

## Installation

### Step 1 Excavation

For shallow deck installations allow for a minimum of 30mm bedding material below the channel and approximately 100mm either side of the channel to allow access to levelling feet and joint flange plates.

### Step 2 Pipe Connections

#### Spigot Outlet

Make the connection to the underground pipe with the spigot from the channel, being sure to position the channel correctly.

### Step 3 Positioning

Position the channel and set to line and level using supplied levelling feet. Adjust the feet so the finished installation height is approximately 3mm below the finished floor level.

### Step 4 Backfilling

To provide adequate clearance for grating installation, it may be necessary to use timber spacing struts which should be placed within the channel grating seat before concreting in to maintain the correct grating clearance of 2mm.

It may be necessary to weigh the channels down when filling the trench with concrete to prevent channels from lifting or floating.

The bed and surround must have sufficient strength to support the channel in service. A suitable mortar of minimum Strength Class of C30/37 should be used.

Remove any concrete or mortar spillages immediately from the surfaces of the channel.

### Step 5 Grating Installation

Wash and clean the channels taking care to remove any concrete or mortar splashes. Install the gratings and lock using the M8 hexagon bolts using a 13mm A/F wrench.

## Operation and Maintenance

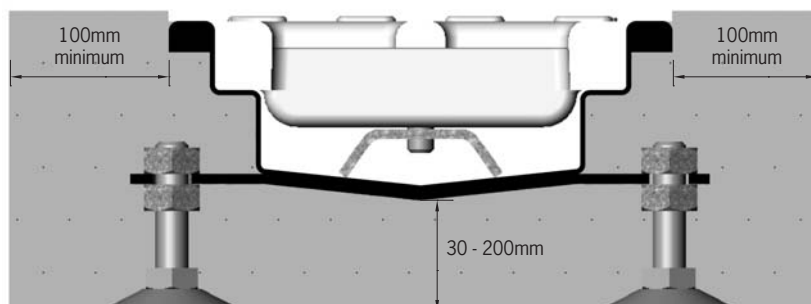
Because of the nature of the channel system, care should be taken to maintain a clear waterway within the channel. Inspections should be made periodically to assess the extent of the debris build-up and maintenance schedule established to remove such debris.

### Cleaning Galvanised Steel

Galvanised steel surfaces can be cleaned and rinsed with copious amounts of clean water and stubborn stains removed with a stiff bristled brush. Do not use a wire brush.

### Galvanised Steel Maintenance

Heavy damage to the galvanised surface exposes the underlying metal to the atmosphere and corrosion will result if not treated. Any corrosion should be removed by light abrasion and the area treated with one of the many commercially available zinc sprays using the manufacturers' instructions.



## ACO Technologies plc

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

### ACO Building Drainage

A division of ACO Technologies plc

ACO Business Centre

Caxton Road

Bedford

Bedfordshire

MK41 0LF

Tel: 01462 816666

Fax: 01462 851490

e-mail: [buildingdrainage@aco.co.uk](mailto:buildingdrainage@aco.co.uk)

[www.acobuildingdrainage.co.uk](http://www.acobuildingdrainage.co.uk)

### The ACO Group: A strong family you can depend on.

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