

# ACO Building Drainage Products

Channels and Gullies



Hygiene**First**

*System Overview Brochure*



**Stainless steel channels**

**Stainless steel gullies**



## The ACO Group

Founded in 1946, the ACO Group manufactures products for the building and construction industry.

ACO was established in Australia in 1993 and is Australasia's leading manufacturer of drainage products.

ACO has extensive experience in manufacturing and supplying a diverse range of stainless steel drainage systems throughout Australia and overseas.

## The Range

ACO's hygienic product range comprises stainless steel floor gullies and channels with a variety of grates.

ACO's stainless steel gullies and channels are compliant to AS 3495 and are manufactured and tested in accordance with EN 1253 - *Gullies for buildings*.

In addition to this, all products have WaterMark approval. This is granted to products that comply to AS 5200.000 or AS 3495 and certified in accordance with ISO/IEC Guide 67.2004, System 18.



### Areas of application

- Kitchens
- Food processing factories
- Brewing, bottling and canning plants
- Chilled warehouses
- Laboratories
- Pharmaceutical and chemical plants
- Leisure buildings
- Human and animal healthcare facilities



## ACO. The future of drainage.

### System Chain

ACO is a global leader in water management, with products to collect, clean, hold and release water; addressing all phases of the water cycle and supporting water sensitive urban design.

ACO's hygiene products focus on the collect phase of the water cycle.



### Service Chain

To support this extensive product range, ACO provides full support from design conception to final installation.

Services include full in-house project specific design services, field support and post-installation advice. Product training and continuing professional education seminars provide updates to the design community in the latest product innovation.

# HygieneFirst

At ACO, our HygieneFirst philosophy represents our commitment to delivering products that provide the ultimate in hygienic performance. Through extensive research and development, ACO has incorporated hygienic design principles into commercial drainage.

ACO understands the critical role that drainage plays in a successful commercial food business and appreciates that food safety, hygiene and cost control are all vital factors.

For many businesses, drainage is out of sight and therefore out of mind. As a result, many drainage systems are badly designed. At best this leads to costly ongoing cleaning and maintenance and at worst, it can result in food contamination resulting in a loss of business or even closure of a facility.

As ACO is driving the future of drainage, we are determined to raise the profile of hygienic drainage and are committed to improving standards across every process.

All radiuses are larger than 3mm which greatly increases cleaning effectiveness



✘

✔

Edge in-fill ensures stability with the surrounding floor minimising floor cracks



✘

✔

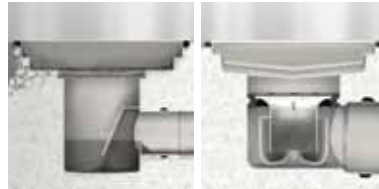
Continuous shaped metal with smooth contours reduces the risk of bacteria



✘

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Dry sump design is completely drainable, eliminating stagnant water and hazards



✘

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## Hygiene First Principles

### 1 Food Safety

Food safety can be severely affected by poor drainage within food and beverage processing and preparation facilities.

ACO drainage solutions not only effectively remove wastewater from floors, but also eliminates standing water inside the drain, thereby preventing any growth of bacteria. Maintenance is simple as all components have large internal corners and are easy to clean.

ACO drainage systems are designed to comply with the strictest industry standards to prevent risk of contamination.

### 2 Cost Control

In food production, drainage must be cost effective throughout its life whilst fulfilling its function effectively. Good drainage design is therefore fundamental. In addition to this, correct planning and installation will avoid costly repairs.

Throughout a project's design life, the only way to minimise cost and disruption is to invest in well-designed, durable and easy to maintain drainage systems.

### 3 Health & Safety

Minimising the risk of injury in the workplace is of prime importance to any business.

The presence of heat, liquids and grease can create a hazardous environment and reducing the amount of liquid present on workplace floors is paramount.

ACO drainage systems are specifically designed for hydraulic performance and safety. This is particularly important where there is heavy water usage and constant foot traffic.

Slip resistant grates and safe to handle components give food production and maintenance workers additional safety.





## Product Solutions

### ACO Food – TrayChannel

Manufactured from durable stainless steel, TrayChannel comprises both narrow and wide grated channels with an in-built fall. These systems are designed to meet stringent industry standards to prevent the contamination of harmful bacteria.

Narrow channels provide an excellent barrier to intercept the movement of liquids on the kitchen or factory floor. Wide channels are designed for large 'point' fluid discharges and are ideal for use beneath equipment such as tilting kettles, bratt and boiling pans.

Both systems are designed to be versatile, enabling the run length, outlet type and position to be customised to suit individual project requirements. All channels are deep-drawn with smooth contours ensuring ease of cleaning.



### ACO Gully – Gully 157 & Gully 218

The ACO Gully product range comprises a choice of stainless steel floor wastes, bucket traps with vertical or horizontal outlets and optional internal foul air traps.

These gullies are suitable for use in commercial food preparation areas and offer a fixed height and an adjustable height option for limited construction depths.

Deep drawn bodies enable full drainage, eliminating stagnant waste water, smells and microbial growth.

## Relevant Standards

### Hygiene

In order to maintain a clean and hygienic environment, it is essential that drainage elements are designed and manufactured to ensure bacteria traps are minimised.

ACO's HygieneFirst products are designed to comply with Australian, New Zealand and International standards for optimum hygiene performance.

**The Australian Food Standards Code, Section 3.2.3, Food Premises and Equipment, calls for the design of fittings to facilitate cleaning operations. This is to minimise the likelihood of contamination. Additionally, for these applications, ponding of water on floors is not acceptable.**

ACO's HygieneFirst products are also designed according to guidelines described in standards, EN 1672, EN ISO 14159 and those from the European Hygienic Engineering and Design Group (EHEDG).

EN 1672 and EN ISO 14159 are standards that set out hygiene requirements for use in food processing and commercial kitchens.

EHEDG is a consortium of food industries, public health authorities, research institutes and equipment manufacturers. Their purpose is to promote hygiene through improved engineering and design in all aspects of food manufacture. EHEDG principles are recognised by food industry designers worldwide, including Australia.

### Slip resistance


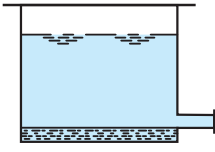

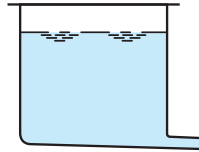

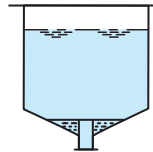

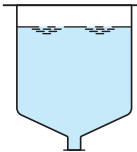

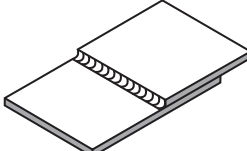

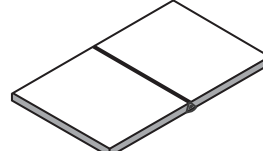

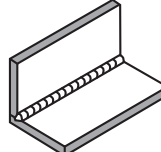

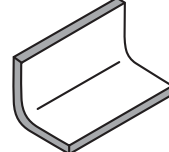

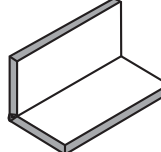

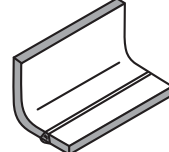
Slip resistant grates are recommended for installation in food processing and commercial kitchen areas, where the potential of serious injury involving high temperature food and cooking equipment is of a concern.

### Load standards

Standards only give an objective means for comparing products. There are various factors affecting a product's resistance to load and consideration must be given to:

- (1) Type of traffic
- (2) Wheel type
- (3) Frequency and speed of traffic
- (4) Position of gully

There is no Australian Standard that governs the load performance of floor gullies. ACO believes that the International Standard EN 1253, specifically written to regulate these types of products is the most appropriate standard.

<b>Hygiene risk</b> According to standards EN 1672 and EN ISO 14159	<b>Hygienic design</b> According to standards EN 1672 and EN ISO 14159
  Inferior drainage design	  Superior drainage design
  Inferior drainage design	  Superior drainage design
  Continuously welded lap joint	  Continuously welded butt joint
  Welded in corners	  Round internal corner
  Welded in corners	  Welded in smooth area





## ACO Building Drainage Products

ACO Building Drainage Products range comprises:

- **ACO Wexel**  
Cast floor and roof drains
- **ACO Stainless**  
Industrial stainless steel linear drainage systems
- **ACO Food**  
Stainless steel drainage systems for food and beverage applications
- **ACO Gully**  
Stainless steel floor gullies
- **ACO Pipe**  
Stainless steel push-fit waste pipes
- **ACO BuildLine**  
Drainage for thresholds, balconies and green roofs
- **QuARTz by ACO**  
Bathroom linear drains and floor wastes
- **ACO Passavant**  
Grease separators

Contact ACO for information relating to ACO's Surface Water Management and Utility Enclosure Solutions.

### ACO Polycrete Pty Ltd

#### Head Office:

134-140 Old Bathurst Road  
Emu Plains NSW 2750

**Branches in:** New South Wales / Australian Capital Territory  
Victoria / Tasmania  
South Australia / Northern Territory  
Queensland  
Western Australia

**Tel:** 1300 765 226  
+61 2 4747 4000 (International)  
**Fax:** +61 2 4747 4040  
**Email:** [sales@acoaus.com.au](mailto:sales@acoaus.com.au)  
**Web:** [www.acoaus.com.au](http://www.acoaus.com.au)

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Quality  
ISO 9001



QEC 1883

BR0009  
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