# **ACO Building Drainage Products**

Floor Drainage Systems







ACO STAINLESS

Technical Handbook and Product Catalogue

**Trough & Grate Systems** 



# ACO

## ACO – World Leaders in Drain Technology



ACO Australia's Head Office Emu Plains, New South Wales

ACO is the world leader in the design and manufacture of corrosion resistant products and grated line drainage systems.

Established in 1946, the ACO group has manufactured products for over 50 years for the construction industry. The group operates on a global basis through its subsidiaries and manufacturing facilities in over 28 countries. ACO employs more than 3,700 people and has sales in excess of \$A1 billion.

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## Quality

The ACO group is dedicated to achieving the highest possible standards of quality throughout the organisation.

ACO Polycrete Pty Ltd is an ASI registered company having been assessed to ISO 9001, the internationally recognised standard for quality.



ISO 9001:2000 QEC 1883 SAI Global Assurance Services

## **Member of ASSDA**



## WaterMark Licence Level 2

This is granted to products that comply with MP52 or AS/NZS 3500 and certified in accordance with ISO/IEC Guide 67.2004, System 1B. All ACO's grate and trough systems are certified to conform.



## NATA Certification

As part of ACO's continuous product development and commitment to quality, ACO has a NATA certified laboratory (Licence no. 15193), with fully trained and certified technicians.





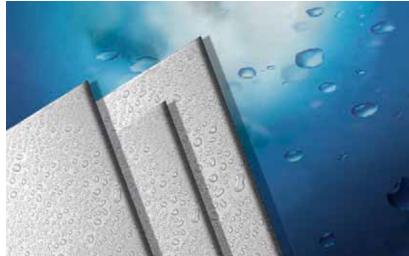
## **Material Technology**

Stainless steel is the name given to a wide range of steels that have greatly enhanced corrosion resistance over conventional mild steels.

In the building and construction industry, stainless steel is selected due to its:

- excellent strength and resistance to oxidation at high temperatures
- durability and corrosion resistance in highly aggressive environments
- hygienic benefits, easily cleaned surfaces
- aesthetically attractive surface finishes
- non-magnetic properties

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

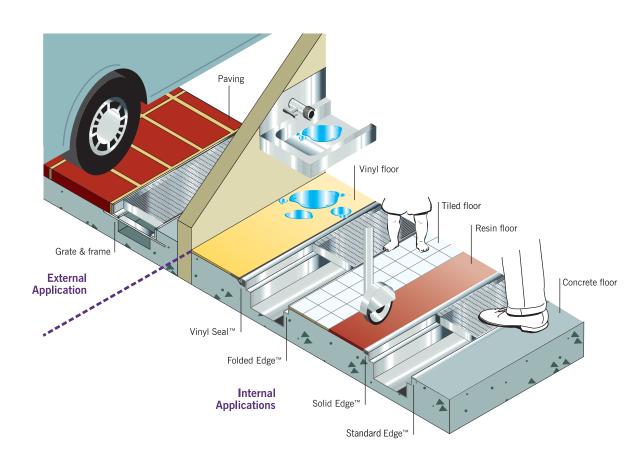


There is a vast range of different stainless steels available. Austenitic stainless steels are the most widely used and encompass the generic 304 and 316 grades. These materials are ideal for applications found in the food processing, dairy, brewing, pharmaceutical, chemical and petrochemical industries.

Marine grade is often used in reference to grade 316. Although correct, it can be misleading as it is not the only grade available in this group. Other grades have different characteristics. If in doubt, contact ACO to assess the material suitability for the application.



## Choosing the Right System



When selecting a stainless steel drainage system, the following issues must be considered:

1. Liquid Characteristics
[Grade 304 or 316]

Ensure the correct grade of stainless steel is chosen for adequate chemical and temperature protection.

Refer to Chemical Resistance Chart on page 17

2. Load Class/Security
[Class A. B. C. & D]

Ensure the correct edge profile, grate and installation is selected to suit the load requirements of the project. ACO recommends that grates are secured for heavy duty applications.

Refer to the Load Classifications on page 5 locking device options on page 6 and typical installation drawings on page 16

3. Volume
[Size of drain]

Ensure the widths, invert depths, grate types and any falls within the trough meet the hydraulic and installation requirements of the project.

Refer to Hydraulics on page 9

4. Aesthetics & Safety

Ensure the correct grate and edge profile meet the aesthetic and safety requirements of the project.

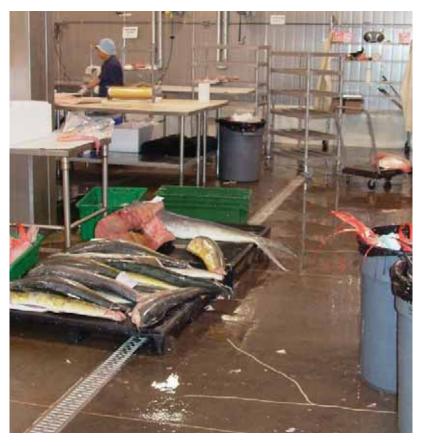
Refer to Safety and Versatility on page 6

5. Outlet Type

Ensure the correct size and location of outlet is selected to meet the underground pipework requirements.

To simplify selection, please fill in all sections of the Project Specification Sheet on Page 18 or contact your local ACO Representative. ACO Technical Services will give specifiers and installers advice on choosing the correct drainage system for the application.





## Stainless Steel Line Drainage

ACO Polycrete offers a variety of stainless trough and grate solutions.

The systems comprise 1.2mm (minimum thickness) steel troughs, manufactured in grades 304 and 316 stainless steel. A variety of edge profiles and grates are available to suit varying load requirements and surrounding floor finishes. Grates may be locked for safety and security.

Grate and trough systems are available in standard 100mm, 200mm & 300mm internal widths and in varying depths and configurations.

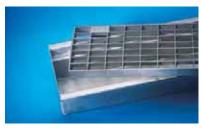
## Load Standards AS 3996

Clause 1.1 Scope

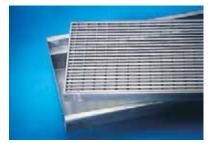
"This standard specifies requirements for access covers and grates for use in vehicular and pedestrian areas. It applies to access covers & grates having a clear opening of up to 1300mm..."

ACO believes that EN 1433: Drainage Channels for Vehicular and Pedestrian Areas, also provides a good measure of performance.

The load classes of both codes are shown in the table below.



System 100



System 200



System 300



**Custom Solutions** 

- for applications requiring products to be manufactured in custom widths, shapes and in other grades of steel, ACO can supply a total custom solution
- grate & frame, and matting

Load Class Classifications	AS 3996	A.10kN	B.80kN	C.150kN	D.210kN
	EN 1433:2002	A.15kN	B.125kN	C.	250kN
		林林	5 <sup>7</sup> 0	•••	6.
Edge Profile	Standard / Folded Edge™	Dependent or	n grate		
	Vinyl Seal™	Dependent or	n grate		
	Solid Edge™	Dependent or	n grate		



## **Fit For Purpose**

## - Safety and Versatility

## Legislative & User Requirements

AS1428.2-1992 Design for access and mobility - Part 2, clause 9(c) states:

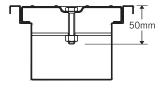
Gratings. If gratings are located in a walking surface, they shall have spaces not more than 13mm wide and not more than 150mm long. If grates have elongated openings, they shall be placed so that the long dimension is transverse to the dominant direction of travel.

ACO offers a range of heel safe grates that have openings of less or equal to 7mm.

Heelguard Antislip™ grates are only available from ACO and are rated to R10 – AS/NZS 4586:2004, Slip Resistance Classification.

### **Grate Locking Device Options**

**Bolt Locking** consists of a bolt which is tightened through a bar & stud assembly. The bar is welded to the trough walls. Contact ACO if special security bolts are required.



**Non Locking.** Grates are not locked and can be removed anytime.

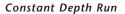
Note: Locking devices might partially restrict flow and will require troughs to have a minimum depth of 50mm.

### Flexible Run Designs

ACO's trough & grate systems can be adapted seamlessly to suit any flooring surface. There is a choice of 4 edge profile options. For efficient drainage and discrete run positioning, systems can be manufactured:

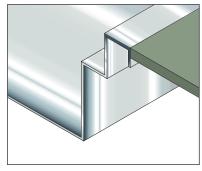
- to any length and depth
- with corner and branch units to direct flow around corners – ideal for kitchens and machinery surrounds
- with sloped inverts

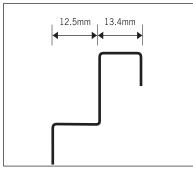
All constant depth runs have a crossbreak incorporated into the base of the trough. This is to direct water to the outlet and to eliminate standing water.



Sloped Run

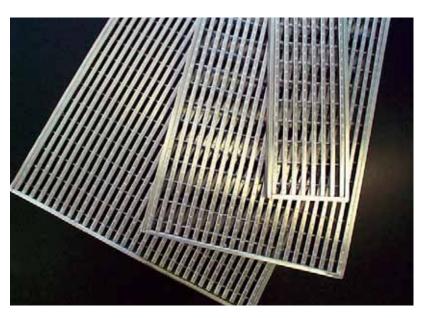
## **Edge Profile Options**

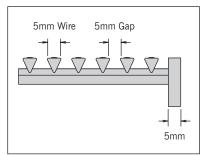




## Standard Edge™

An all purpose trough suitable for tiles, concrete and resin floors in pedestrian and light commercial applications.

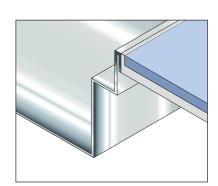


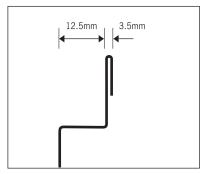




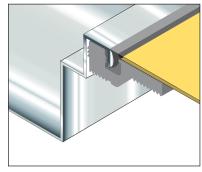


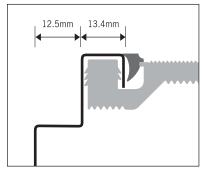






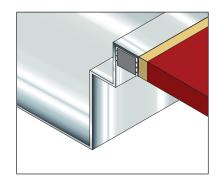
Folded Edge $^{\text{TM}}$  Provides an aesthetic, discreet finish.

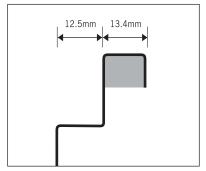




Vinyl Seal™

Provides superior seal between trough and vinyl sheet flooring applications. Also suitable for some resin floor applications.





Solid Edge™

Provides strength in dense traffic areas, and when floor surround is poured, avoids having to fill beneath the edge.



## **High Performance**

## - Hygiene and Corrosion Resistance

Some industrial applications provide a challenging environment for drainage systems. All systems featured in this catalogue are manufactured in austenitic stainless steel grade 304. Grade 316 is available on a made to order basis for many of the products shown. All products are fully pickle passivated in order to ensure corrosion free joints.

Typical Applications:

- wineries
- hospitals
- breweries
- abattoirs
- kitchens
- · change rooms
- · plant rooms
- food processing
- · clean rooms
- laundrettes

In waste applications, most steps in the production process require some method of quickly removing spills and runoff from wash down operations. Waste deposits from highly aggressive liquids combined with the very alkaline cleaning agents used during wash down operations; require drainage products to be durable and corrosion resistant. For these applications, ACO recommends stainless steel systems to be manufactured in Grade 316. For systems to be installed in hygiene environments, this grade also ensures resistance to bacteriological action. See chemical resistance chart on page 17.

Typical factors that affect material selection:

- type(s) of chemical(s) and % composition in the liquid
- · concentration percentages
- contact time with trough system
- temperatures of liquid flowing into the trough
- flushing system employed to clear liquids from the system
- type of cleaning agent (see Care & Maintenance on page 16)
- grate, locking mechanism and trash basket materials
- sealant for compatibility, if applicable

Test samples should be used for final determination of chemical resistance, contact ACO.



## **Hydraulics**

The volume of liquid a trough system needs to collect and remove in a given time period determines its size. Slab restrictions may limit the depth of the trough system leaving its width as the usual variable for correct sizing.

Typical factors that affect the size of a trough system:

- number of, and discharge rate (generally measured in litres per second) of wash down hoses in a room
- volume of spill containment
- hydraulic capacity of waste pipe beneath the floor connecting to the trough system (for liquid evacuation)
- quantity, size(s) and location (along its length) of trough outlet(s)
- desired trough invert fall along the length of the system
- speed of liquid across the floor during service and/or wash down operations.
   In this instance the selection of the grate must also be considered
- for external areas: rainfall intensity, size of catchment, ground falls etc

ACO offers different sized trough systems and a broad selection of grates to meet most hydraulic requirements and offers technical support to customers to help ensure correct system specification. See Technical Services on page 16.







System 100 is a versatile and cost effective grate and trough solution for floor drainage applications. The system is designed around a standard width grate.

- standard 100mm (internal) width trough to suit ACO's range of steel grates (page 11), including heel safe grates and those that comply with AS1428.2 (Design for access and mobility, Part 2)
- bolt locking option is available
- available in any depth (subject to manufacture) to meet the hydraulic demands and installation requirements of the application
- corner and branch units can be manufactured to give added flexibility.
  - Intercept run-off;
  - Direct flow around corners and in specific directions; ideal for kitchens and machinery surrounds
- available in a constant depth and sloped configuration
- troughs are available with different edge profiles to suit varying load requirements and surrounding floor finishes (see page 6-7)
- long runs are available in a modular format for ease of transport and installation
- 100mm vertical outlet as standard, or other sizes to customer requirements
- sediment basket for vertical outlets
- · contact ACO for gully options



## **Grates for System 100**

### **HEELGUARD**

### **Pedestrian / Accidental or Infrequent Vehicular Traffic**

Manufactured in stainless steel grade 304, designed to minimise the trapping of narrow high heeled shoes.

A	Description	Part No.	Length mm	Intake Area mm²	Slot Size mm	Weight kg
C	Heelguard 100 Class A	71008	1000	61,290	5 x 21	3.6
<u>₹</u>	Heelguard Antislip 100 Class C	71947	1000	43,050	5 x 21	4.3

† Grate lengths may be manufactured to suit precise trough lengths. Contact ACO.

### **SLOTTED**

## **Pedestrian / Heavy Duty Vehicular Traffic**

Manufactured in stainless steel grade 304, for areas requiring a cost effective grate.

A		Description	Part No.	Length mm	Intake Area mm²	Slot Size mm	Weight kg
D	83	Slotted 100 Class A	31630	1000	24,380	45 x 10 max	2.7
E	25	Slotted 100 Class A	31631	500	12,190	45 x 10 max	1.4
	~//	Slotted 100 Class D	31640	1000	24,380	45 x 10 max	4.0
	4	Slotted 100 Class D	31641	500	12,190	45 x 10 max	2.0

#### **MESH**

#### **Heavy Duty Vehicular Traffic**

Manufactured in stainless steel grade 304, offering high intake for spill applications.

D	MA	Description	Part No.	Length mm	Intake Area mm²	Slot Size mm	Weight kg
		Mesh 100 Class D Mesh 100 Class D	98683 98695	1000 500	80,840 40,450	13.5 x 31 13.5 x 31	3.5 1.8

#### **PERFORATED**

## **Heavy Duty Vehicular Traffic**

Manufactured in stainless steel grade 304, designed to minimise the trapping of narrow high heeled shoes.

D	Description	Part No.	Length mm	Intake Area mm²	Slot Size mm	Weight kg
<u></u> ₹	Perforated 100 Class D Perforated 100 Class D	98927 98957	1000 500	17,805 8,905	6.25 dia. 6.25 dia.	5.1 2.6

### **SLOTTED COMPOSITE**

## **Heavy Duty Vehicular Traffic**

Manufactured from a resin composite, a cost effective grate ideal for highly trafficked areas requiring corrosion resistance.

D	Description	Part No.	Length mm	Intake Area mm²	Slot Size mm	Weight kg
<u>&amp;</u>	Slotted Comp. 100 Class D	04780	500	12,190	45 x 8 max	1.6

## **LADDER**

## **Heavy Duty Vehicular Traffic**

Manufactured in stainless steel grade 304, a high intake dual purpose grate – slip resistant one side, plain on the other.

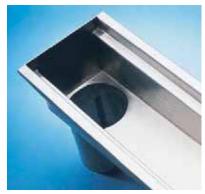
D	ASSI	Description	Part No.	Length mm	Intake Area mm²	Slot Size mm	Weight kg
		Ladder 100 Class D	02874	500	45,400	113.5 x 20	2.6
		Ladder Antislip 100 Class D	98948	500	45,400	113.5 x 20	2.6



system layout comprising 100mm nominal width system available as sloped and constant depth runs

Constant Depth Run

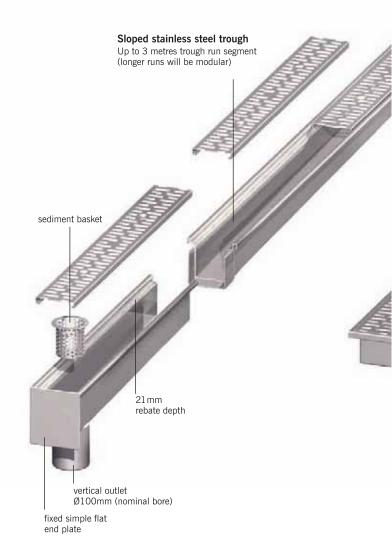
Sloped Run



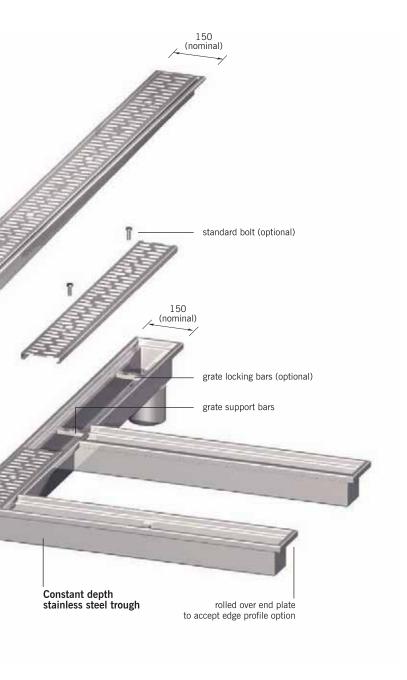
**Vertical Outlet** 



Sediment Basket for Vertical Outlets



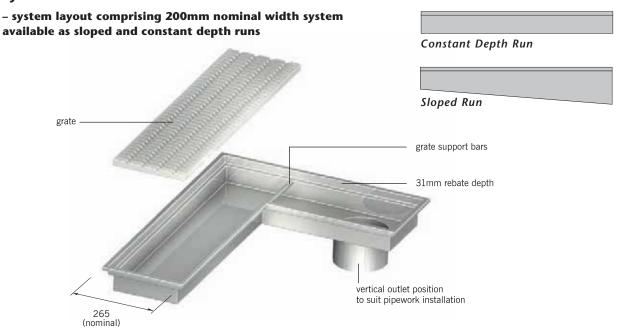
## **ACO STAINLESS**







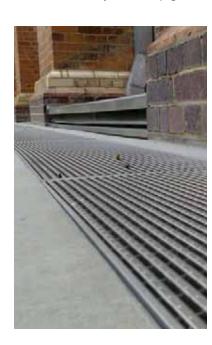




## System 200 & System 300

System 200 & System 300 are wide grate and trough systems designed for applications requiring the drainage of high volumes of liquids. As with System 100, they are designed around a standard width grate.

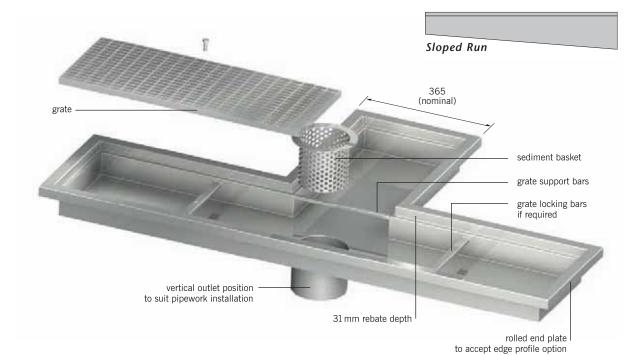
- standard widths to suit ACO's range of stainless steel grates (opposite), including heel safe grate and those that comply with AS1428.2 (Design for access and mobility, Part 2)
- System 200 & System 300 are available in the same configurations, edge profiles and with the same accessories as System 100 (page 10)





system layout comprising 300mm nominal width system available as sloped and constant depth runs

Constant Depth Run



## Grates for System 200 & System 300

## HEELGUARD Pedestrian / Accidental or Infrequent Vehicular Traffic

Manufactured in stainless steel grade 304, designed to minimise the trapping of narrow high heeled shoes.

A B	1	Description	Part No. mm	Length mm	Intake Area mm²	Slot Size mm	Weight kg
R		Heelguard 200 Class A	95053	1000	96,600	5 x 21	8.8
		Heelguard Antislip 200 Class B	95054	1000	90,405	5 x 21	11.8
<u>₹</u>	S	Heelguard 300 Class A	93926	1000	145,000	5 x 21	12.9
~		Heelguard Antislip 300 Class B	93927	1000	129,150	5 x 21	18.7

## MESH Medium Duty Vehicular Traffic

Manufactured in stainless steel grade 304, high intake for spill applications.

C	Description	Part No. mm	Length mm	Intake Area mm²	Slot Size mm	Weight kg
	Mesh 200 Class C	95090	500	79,050	33 x 20	5.4
	Mesh 300 Class C	93966	500	108,000	33 x 20	9.2

## **LADDER** Heavy Duty Vehicular Traffic

Manufactured in stainless steel grade 304, high intake dual purpose grate - slip resistant one side, plain on the other.

D	Description	Part No. mm	Length mm	Intake Area mm²	Slot Size mm	Weight kg
	Ladder 200 Class D	95081	500	91,200	228 x 20	6.1
	Ladder Antislip 200 Class D	95123	500	91,200	228 x 20	6.1
1	Ladder 300 Class D	93950	500	101,760	318 x 20	14.3
	Ladder Antislip 300 Class D	93997	500	101,760	318 x 20	14.3



#### **Technical Services**

ACO Polycrete supports its drainage product ranges with an established Technical Services department to advise customers on the selection of the appropriate systems.

The service is offered without obligation and is free of charge. The department is staffed by fully qualified engineers, and is equipped with purpose-written computer software. All advice is fully supported with extensive, high quality documentation.

Technical Services can assist in:

- determining the optimum size
   of the trough. A purpose written
   computer program, 'Hydro', is used to
   assist with calculations
- determining the capture efficiency of grates. ACO can confirm the capture rate of any grate using the results of extensive independent experimentation
- drafting installation details to the customer's requirements using CAD DXF, DWG or 3D modelling

All documentation can be submitted by fax, email or directly by ACO's trained technical representatives.

For a prompt reply, please fill in all sections of the attached Project Specification Sheet and fax to ACO.

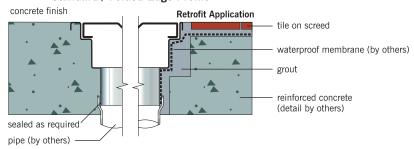
Alternatively, contact ACO Technical Services at: technical@acoaus.com.au

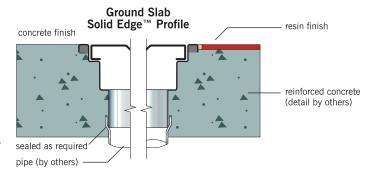
## Care & Maintenance

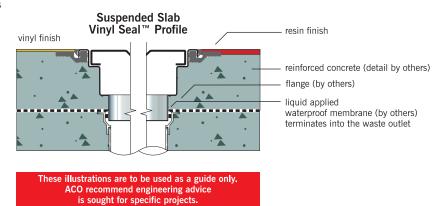
Stainless Steel is easy to clean. Washing with soap or a mild detergent and warm water followed by a clear water rinse is usually adequate for most commercial applications. An enhanced aesthetic appearance will be achieved if the cleaned surface is finally wiped dry. A list of suggestions and actions can be found on www.acoaus.com.au/stainless/line

#### Typical Installation Details

#### Ground Slab Standard / Folded Edge Profile







## Specification Clause

The floor drain troughs are to be ACO Stainless **System 100 / 200 / 300**\* as supplied by ACO Polycrete Pty Ltd. All Components used within the scope of the system are shown on **Drawing No(s):**\_\_\_\_\*. All work should be carried out strictly in accordance with the manufacturer's instructions and the installation details set out on **Drawing No.**\_\_\_\_.

All components are to be manufactured from austenitic stainless steel **Grade 304 / 316 / (other)**\_\_\_\_\*.

System to be supplied with **Constant depth / Sloped\*** troughs with the overall depths specified as follows in **Drawing No:**\_\_\_\*

Troughs to be supplied complete with **Standard / Folded Edge / Solid Edge / Vinyl Seal\*** edge profile, in the specified **lengths / layout\*** according to **Drawing No:**\*. Position and nominal size of outlet as detailed in **Drawing No:**\*.

Grates to be **part no.** \*, with / without bolt locking devices.

\* Please delete or complete where appropriate

## **Chemical Resistance**

The resistance information contained within this table is indicative only and is based on an ambient temperature of 20°C. Please note that higher temperatures will generally reduce the corrosion resistance of the materials. Contact ACO for further advice.

Reagent		ss Steel
	304	316
Acetic Acid 20%	~	~
Acetic Acid 80%	~	~
Acetone	<b>V</b>	~
Alcohol (Methyl or Ethyl)		<b>✓</b>
Aluminium Chloride	?	?
Aluminium Sulphate Ammonia Gas (Dry)		~
Ammonium Chloride	?	
Ammonium Hydroxide	· /	?
Ammonium Nitrate		
Ammonium Phosphate	~	V V
Ammonium Sulphate	?	V
Ammonium Sulphide	V	V
Amyl Chloride	~	~
Aniline	<b>~</b>	~
Design Oblesia		
Barium Chloride Barium Hydroxide 10%	~	V
Barium Sulphate	-	~
Barium Sulphide	-	
Beer Sulphide	- •	_
Beet Sugar Liquors	1	
Benzene	1	- V V V
Benzoic Acid	V	V
Bleach-12.5%Active C1		_
Boric Acid	~	-
Bromic Acid	?	? <b>*</b>
Bromine Water	×	X
Butane	~	
Calcium Carbonate	V	~
Calcium Chloride	×	?
Calcium Hydroxide	?	V
Calcium Hypochlorite	X	?
Calcium Sulphate	~	<b>~</b>
Cane Sugar Liquors	-	-
Carbon Acid	- V	-
Carbon Bisulphide	<b>V</b>	
Carbon Dioxide	~	
Carbon Monoxide	~	- - - - - - - - - - - - - - - - - - -
Carbon Tetrachloride	?	?
Caustic Potash	~	~
Caustic Soda	7	
Chloride (Dry) Chloride (Wet)		?
Chloride (wet) Chloroacetic Acid	×	×
Chlorobenzene	- Ĉ	- Ĉ
Chloroform	?	
Chrome Acid 50%	×	? <b>x</b>
Chromic Acid 30%	- D	Ž
Citric Acid	?	~
Copper Chloride	×	×
Copper Cyanide	~	1
Copper Nitrate	~	
Copper Sulphate	~	<b>~</b>
Cottonseed Oil	-	-
Cresol	-	-
Cyclohexanone	-	-
Cyclorexanol	-	-

Reagent	Stainles 304	s Steel 316
Dimethyleanine	-	-
Dionylphalate Disodium Phosphate	-	-
Distilled Water	~	~
Ethyl Acetate	V	~
Ethylene Chloride	~	~
Ethylene Glycol		<b>/</b>
Fatty acids (cb) Ferric Sulphate	V	~
Fluorene Gas (Wet)	×	×
Formaldehyde 37%	V	V
Formic Acid 90%	×	<b>~</b>
Freon 12	?	-
Fruit Juices & Pulp Furfural	? -	-
Gasoline (Refined)		
Glucose	-	-
Glycerine	<b>V</b>	
Hydrobromic Acid 20%	X	×
Hydrochloric Acid 40%	×	×
Hydrocyanic Acid Hydrogen Peroxide 90%		7
Hydroguinone	-	-
Hypochlorous Acid	-	-
lodine	~	?
Kerosene	<b>v</b>	~
Lactic Acid 25 %	V	~
Linseed Oil	<b>~</b>	~
Liqueurs	-	
Magnesium Chloride	?	?
Magnesium Sulphate Maleic Acid	2	2
Methyl Chloride	?	? ? -
Methyl Ethyl Ketone	-	-
Milk	<b>~</b>	~
Mineral Oils Muriatic Acid	×	×
Nickel Chloride	?	?
Nickel Sulphate	V	~
Oils and Fats	~	~
Oleic Acid	~	<b>~</b>
Oleum	- ?	- ?
Oxalic Acid		<u>'</u>
Palmitic Acid 10%	-	-
Perchloric Acid 10% Perchloric Acid 70%	X	X
Petroleum Oils (Sour)	×	×
Phenol 5%	~	/
Phosphorous Trichloride	~	<b>V</b>
Photographic Solutions Picric Acid	?	<b>V</b>
FICHC ACIO		•

## Legend

- ✓ Recommended.
- Suitable. However, contact ACO for further advice.
- Not recommended.
- No data available.

Reagent	Stainles 304	s Steel 316
Plating Solutions Potassium Carbonate	-	-
Potassium Chloride		~
Potassium Cyanide Potassium Dichromate	7	~
Potassium Hydroxide		
Potassium Permanganate		~
Potassium Sulphate		~
Propane Gas	-	-
Propyl Alcohol		
Sea Water Sewerage	<b>X</b> 2	?
Silver Nitrate	?	?
Silver Sulphate	V	V
Sodium Bicarbonate	<b>~</b>	<b>~</b>
Sodium Bisulphite	~	<b>~</b>
Sodium Carbonate		
Sodium Cyanide	-	-
Sodium Ferrocyanide Sodium Hydroxide	·	~
Sodium Hypochlorite	?	
Sodium Sulphate	?	~
Sodium Sulphide	?	<b>V</b>
Sodium Sulphite	? ?	~
Sodium Thiosulphate	2	<b>✓</b>
Stannous Chloride Stearic Acid	: •/	?
Sulphite Liquor	_	_
Sulphurous Acid	?	?
Sulphur	? ? ?	~
Sulphur Dioxide (Dry)	?	~
Sulphur Dioxide (Wet)	? <b>X</b>	<b>~</b>
Sulphuric Acid 50% Sulphuric Acid 70%	X	X X
Sulphuric Acid 93%	x	x
Tannic Acid	v	
Tanning Liquors	V	V
Tarianc Acid	-	-
Toluene	- ,	- ,
Trichloroethylene Triethanolamine		
Trisodium Phosphate	_	_
Turpentine	•	~
Urea	~	~
Urine	<b>V</b>	
Vinegar	~	~
Water (Fresh)	V	V
Water (Mine) Water (Salt)	X	<i>V</i>
Whisky	$\hat{z}$	
Wines	~	~
Xylene	-	
Zinc Chloride	X	×
Zinc Sulphate	?	

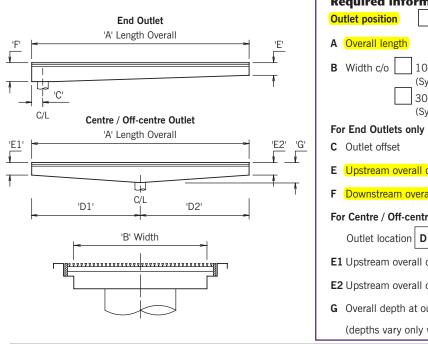


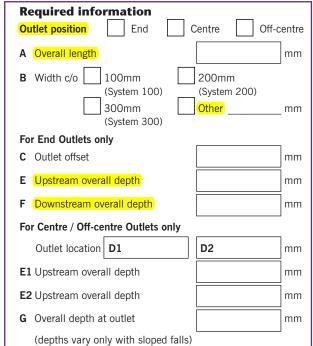
## Photocopy & fax to your nearest ACO sales office: NSW (02) 4747 4040 • VIC (03) 9795 6444 • QLD (07) 3267 8711

#### © 2007 ACO Polycrete Pty Ltd **Project Specification Sheet** This sheet is designed to ensure all project requirements are understood. It will allow ACO to quote accurately and supply you with further technical information. Please fill in all sections. Tick more than one box in each category if applicable. If any are not applicable, please indicate with 'N/A'. If you require assistance with any of the questions we will be happy to assist you. Contact name Company Project name Telephone Facsimile **Project location** Date **Email** Liquid Characteristics Grade of stainless steel: 304 316 Other No Yes, please attach information Chemical resistance required Optional: Temp / Operating Conditions Ambient (room temperature) Peak Intermittent Load Class / Security Load Class: A10kN B80kN C150kN D210kN Standard Folded Vinyl Seal Trough edge details: Solid Edge Lockings required: None Bolt Type of application Commercial Residential Industrial Kitchen Food preparation Other Refurbishment Type of project New building Extension Optional: Traffic conditions Pedestrian Other Cars Intermittent Frequent Pneumatic tyres Solid tyres Wheel load Volume Water volumes: Wash down Continuous Measured Unknown Min. depth Depth restrictions: Max. depth Inbuilt falls Trough invert: Constant depth with crossbreak **Aesthetics & Safety** Grate type: Heelguard Slotted Ladder Composite Perforated Grate finish: Electropolished Do the grates need to comply to AS1428.2 Design for access and mobility - Part 2? Yes Optional: Do the grates need be heel safe? **Outlet Type** DN40 DN80 DN100 DN150 Vertical outlet to fit pipe size: DN50 Debris collection: Not required Sediment basket - fixed Sediment basket - removable

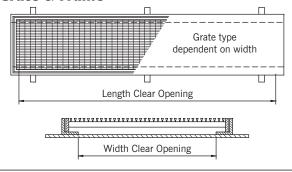
## System 100/200/300 or Custom Trough & Grate

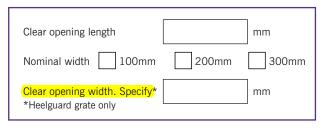
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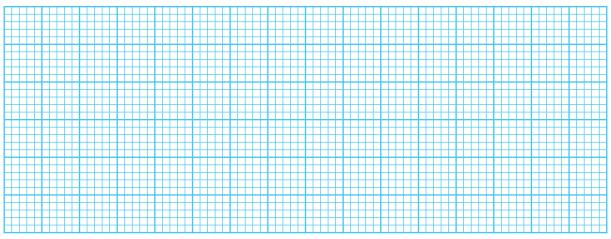


## **Grate & Frame**





## **Other Details**



Checklist	All sections completed	Drawings enclosed	Chemical resistance info enclosed	



## **Other ACO Product Lines**

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A range of high performance stainless steel drainage channels, grates, floor drains and pipes for hygiene and aesthetic applications.

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A range of grated trench drainage systems and pits made from 'Polycrete' polymer concrete. Grates are available in various materials and finishes for all loadings.

#### ■ ACO CABLEMATE

A range of electrical and communication cable jointing pits and surface ducting systems.

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A range of ductile iron, galvanised steel and composite access covers in a wide range of sizes and configurations from single to large multipart units.

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A range of surface drainage systems and ancillary products for sport fields, running tracks and stadiums.

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