











High Temp Suitable



Performance Features

Load rated channel and grate designs to suit heavy loads such as forklifts.

Epoxy lip infill option to increase strength and prevent bacteria growth.

To improve flow and prevent stagnant water, fall to outlet is incorporated as standard.

Range of channel base designs to suit high flows, flows with solids, multiple outlets and floor types.

Designed specifically for hygiene: HACCP and EHEDG approved.

Experience Counts

We've been working with consultants and installers on specialised solutions since 1992 with a focus on food processing, commercial and industrial projects across Australia and New Zealand.

Quality to Install

Levelling angles and concrete tags fitted standard.

Supplied as single piece or when over 6m in length, as bolted segments with Viton gasket.

Spigot and Drain Bowl outlets are integrated into the channel body. Grate types to match the Floor Gully range.

Reliable Design

Used by leading Australian food processors in demanding environments since 2002.

In-house design staff with custom fabrication for all project requirements.

With the strength and chemical resistance qualities of stainless steel.

© AusPress Systems Pty Ltd. No part of this document may be copied, altered or extracted without our written consent. No responsibility is taken for any errors or omissions, contained or implied by this document. Information may be updated or corrected at anytime without notice.





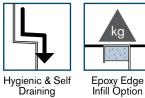
HygieneMAX Channel with Spigot or Drain Bowl Outlet

Round-Bottom, fall to outlet with top edge for concrete, tile or epoxy floor finishes.

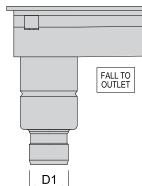


Radius-Bottom Fall to Outlet





Saving

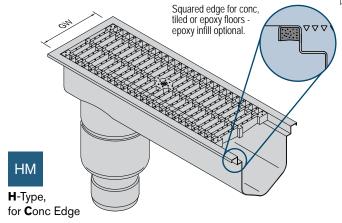


Channel images shown with an end drain bowl vertical outlet and Frameless Ladder

Accessories sold separately.

End, Centre or Specific Outlet positions available with this channel type.

Levelling angles & concrete fixing tags supplied as standard.



Why HygieneMAX?

Solids fall and are collected at the central curved base of the HygieneMAX channel and are moved in a continuous smooth method to the outlet with reduced water requirements.

The consistent internal trough curve is easy to clean and grades towards the outlet.

OL

Channel & Edge Type?	'HMC' for Conc, Tiled, Epoxy	'HMV' for Vinyl Sheet	
Channel Material?	316 Stainless Steel	304 Stainless Steel	> 1.5mm thick standard.
Overall Length [OL]	mm	> Lengths over 6m supplied in bolt together	sections.

Channel Width (Grate Width)	200 (168)			30	00 (268)	or 4	400 (368)
Outlet Type?	Spigot	Drain	Bowl '200'	Spigot		Drain '200'	Bowl	300'
Filter Basket Std = Standard Height Ext = Extended Height	Mini	Std Ext		Mini	Std Ext		Std Ext	
Foul Air Trap (FAT) & Filter Basket (Std)	Х			Х				
Vertical: Outlet Size [D1] (mm)	110	110	160	110	110	160	110	160
Horizontal:	Х	110*	Х	х	110*	Χ	110*	X

Reference	Atta	ched
Drawing?	L	

* Horizontal outlets require both a Foul Air Trap (FAT) & a standard height Filter Basket to be fitted.

Secondary Strainer?	3mm None	> Aperture (hole) size. Available vertical outlets only.
Outlet Location?	Centre	Offset from end by:
Epoxy Edge Infill?	Yes None	> Applied under the edge lip to add strength and improve hygiene.
Retaining Chain?	Fix to Filter Basket Only	Fix to FB & FAT None
Grate Type?	Cast SS Ladder	Mesh
	300 wide max	300 wide max

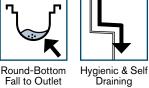




Hygiene Channel with Spigot or Drain Bowl Outlet

Round-Bottom, fall to outlet with top edge for concrete, tile or epoxy floor finishes.









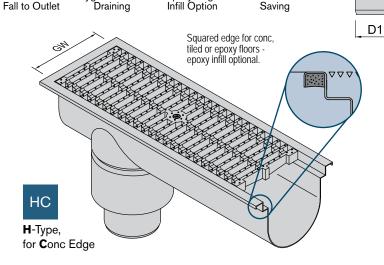
FALL TO OUTLET

Channel images shown with an end drain bowl vertical outlet and Frameless Ladder

Accessories sold separately.

End, Centre or Specific Outlet positions available with this channel type.

Levelling angles & concrete fixing tags supplied as standard.



Why Hygiene?

OL

Solids fall to the curved base of the hygiene channel and are pushed to the outlet easily in a self cleaning washing action with reduced water usage.

The consistent curve is easy to clean and grades towards the outlet.

Channel & Edge Type?	'HC' for Conc, Tiled, Epoxy	'HV' for Vinyl Sheet	
Channel Material?	316 Stainless Steel	304 Stainless Steel	> 1.5mm thick standard.
Overall Length [OL]	mm	> Lengths over 6m supplied in halt tagether	sections

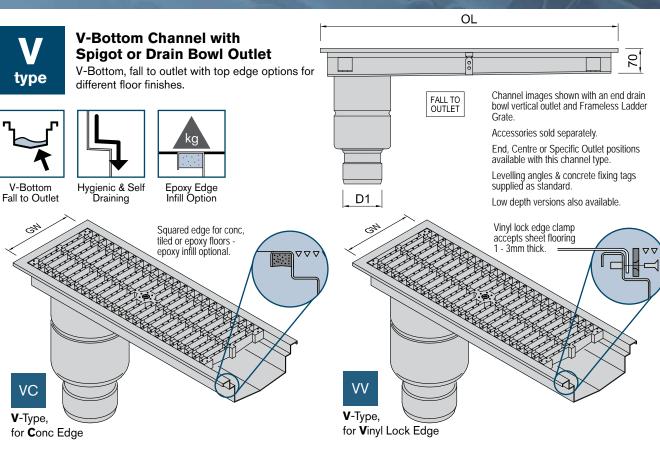
Channel Width (Grate Width)	20	00 (168)	300 (268) or 400 (368)			
Outlet Type?	Spigot	Drain Bowl	Spigot	'200'	Bowl '300'	
Filter Basket Std = Standard Height Ext = Extended Height	Mini	Std Ext	Mini	Std	Std	
Foul Air Trap (FAT) & Filter Basket (Std)	Х		X			
Vertical: Outlet Size [D1] (mm)	110	110 160	110	110 160	110 160	
Horizontal:	х	110* X	Х	110* X	110* X	

Attached Reference Drawing?

* Horizontal outlets require both a Foul Air Trap (FAT) & a standard height Filter Basket to be fitted.

Secondary Strainer?	3mm 1	None	> Aperture (hole) size. Av	ailable vertical outlets	s only.
Outlet Location?	Centre	End	Offset from end b	y:	mm
Epoxy Edge Infill?	Yes	None	> Applied under the edge	lip to add strength ar	nd improve hygiene.
Retaining Chain?	Fix to Filter Basket Only		Fix to FB & FAT		None
Grate Type?	Cast SS	Ladder	Mesh	Wedge	
	300 wide max	1		300 wide max	





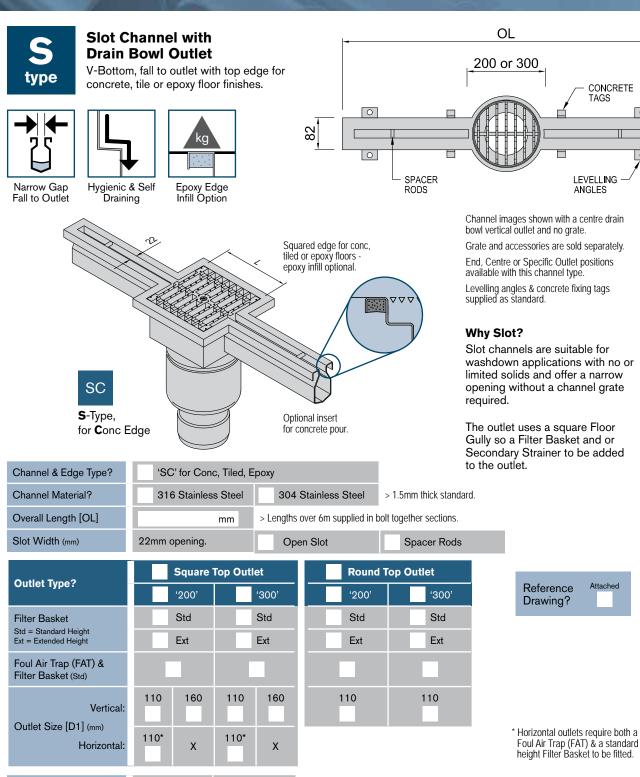
Channel & Edge Type?	'VC' for Conc, Tiled, Epoxy	'VV' for Vinyl Sheet	
Channel Material?	316 Stainless Steel	304 Stainless Steel	> 1.5mm thick standard.
Overall Length [OL]	mm	> Lengths over 6m supplied in bolt together s	sections.

Channel Width (Grate Width)	200 (168)			300 (268) or 400 (368))
Outlet Type?	Spigot	Drain	Bowl 200'	Spigot		Drain '200'	Bowl	300'
Filter Basket Std = Standard Height Ext = Extended Height	Mini	Std Ext		Mini	Std Ext		Std Ext	
Foul Air Trap (FAT) & Filter Basket (Std)	Х			Х				
Vertical:	110	110	160	110	110	160	110	160
Outlet Size [D1] (mm) Horizontal:	х	110*	X	X	110*	Х	110*	X

Reference Attached Drawing?

* Horizontal outlets require both a Foul Air Trap (FAT) & a standard height Filter Basket to be fitted.

Secondary Strainer?	3mm None > Aperture (hole) size. Available vertical outlets only.
Outlet Location?	Centre End Offset from end by: mm
Epoxy Edge Infill?	Yes None > Applied under the 'VC' edge lip to add strength and improve hygiene.
Retaining Chain?	Fix to Filter Basket Only Fix to FB & FAT None
Grate Type?	Cast SS Ladder Mesh Wedge
	300 wide max



None

End

None

Ladder

Fix to Filter Basket Only

3_{mm}

Centre

Cast SS

Yes

Product numbers and detailed information for each accessory can be found listed further in this section of the catalogue.

None

> Aperture (hole) size. Available vertical outlets only.

> Applied under the edge lip to add strength and improve hygiene.

Wedge

Offset from end by:

Fix to FB & FAT

Mesh

Secondary Strainer?

Outlet Location?

Epoxy Edge Infill?

Retaining Chain?

Drain Bowl Outlet will be supplied with a square or round grate to suit.

Grate Type?

CONCRETE

LEVELLING

ANGLES

available with this channel type. Levelling angles & concrete fixing tags supplied as standard.





Flat-Bottom Channel with Spigot or Drain Bowl Outlet

V-Bottom, fall to outlet with different top edge options for concrete or tiled floor finishes.



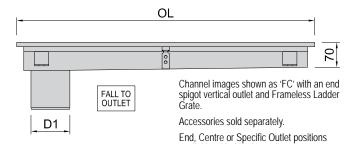
Flat-Bottom

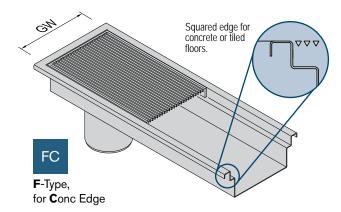
Fall to Outlet

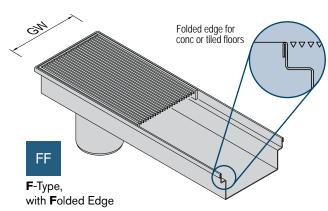


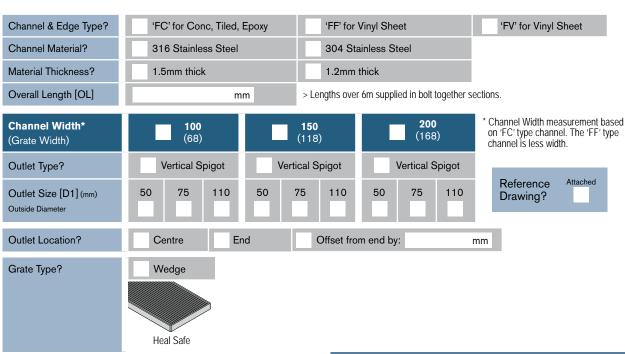


Hygienic & Self Draining Narrow Folded Edge Option

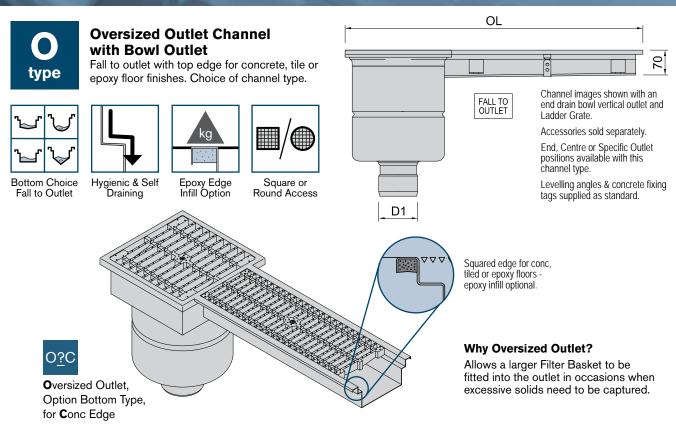


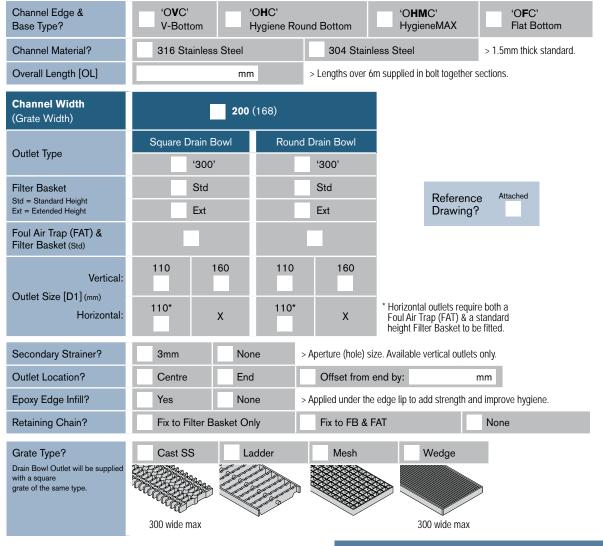












FALL TO OUTLET





Kitchen/Kettle Channel with **Drain Bowl Outlet**

For Commercial Kitchen Facilities with top edge options for different floor finishes.







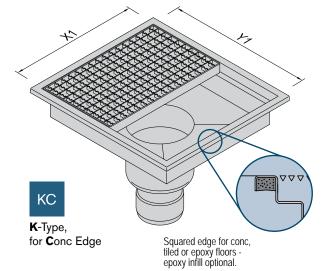
Hygienic & Self Draining

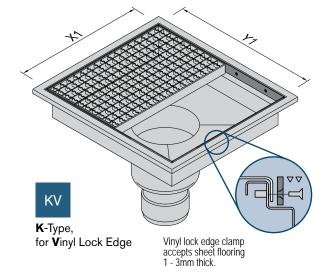


Epoxy Edge Infill Option

Channel images shown with a centre drain bowl vertical outlet and Mesh



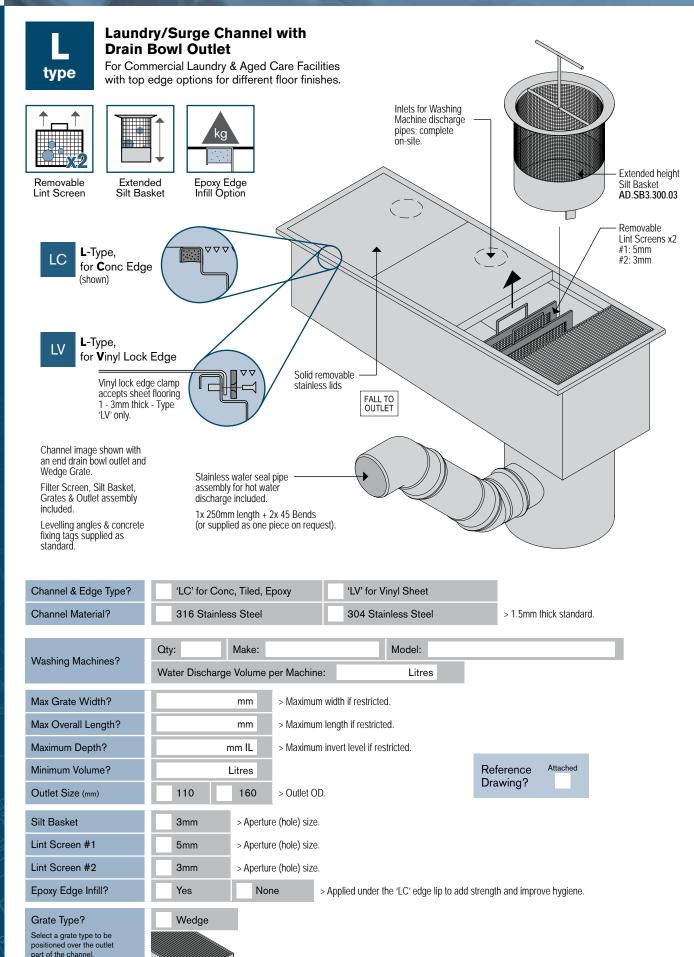




Channel & Edge Type?	'KC' for Conc, Tiled, Epoxy	'KV' for Vinyl Sheet		
Channel Material?	316 Stainless Steel 304 Stainless Steel		> 1.5mm thick standard.	
Grate Size [X1 x Y1]	500 x 500mm 1000 x 4	00mm 1000x 500mm	Other: x	mm

Grate Size [X1 x Y1]	500 x 500mm	1000	x 400mm	1000x 500mm	Other:
Outlet Type	Drain Bowl '200' '300'				
Filter Basket Std = Standard Height Ext = Extended Height Silt = Silt Basket	Std Ext Silt			Reference Drawing?	
Foul Air Trap (FAT) & Filter Basket (Std)					
Vertical: Outlet Size [D1] (mm) Horizontal:	110	160 X	* Horizontal o Foul Air Tra height Filter	outlets require both a o (FAT) & a standard Basket to be fitted.	
Secondary Strainer?	3mm	None	> Aperture (hole) size. Available vertical	outlets only.
Epoxy Edge Infill?	Yes	None	> Applied ur	nder the 'KC' edge lip to add	strength and improve hygiene.
Retaining Chain?	Fix to Filter Baske	t Only	Fix to	FB & FAT	None
Grate Type An internal support may be required to strengthen the middle of wide span grates. Grates are supplied as 1 or 2 pieces for OH&S (lifting weight).	Mesh	Ladder			





Heel Safe

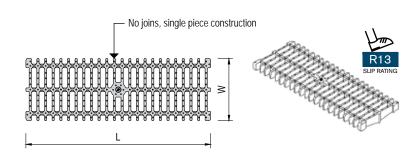
The remainder is covered with a solid 'non-load bearing' cover plate.

■ Cast Stainless Grate

Material: 316 stainless steel, electopolished finish.

Surface: Raised dimple pattern.

GW	Product No	W	L	Class	Ultimate Load
200	AC.G C .168.499	168	499	D	14480‡
300	AC.G C .268.499	268	499	С	15050‡
150	AC.G C .118.499	118	499	-	15000*

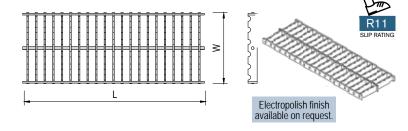


Ladder Grate

Material: 304 or 316 stainless steel, mill finish.

Surface: Half round notch.

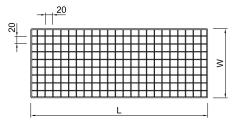
GW	Product No	W	L	Class	Ultimate Load
200	AC.G LM .168.499	168	499	В	4800 [‡]
300	AC.G LMX .268.499	268	499	В	8150 [‡]



Mesh Grate

Material: 304 stainless steel, electropolished finish. Surface: Half round notch.

GW	Product No	W	L	Class	Ultimate Load
200	AC.G M .168.499	168	499	-	1500 [*]
300	AC.G M .268.499	268	499	-	1500 [*]
400	AC.G M .368.398	368	398	-	1500 [*]
500	AC.G M .468.499	468	499	-	1500 [*]





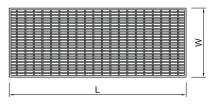
Wedge Grate (Heel Safe)

Material: 316 stainless steel, mill finish. Surface: Raised dimple pattern.

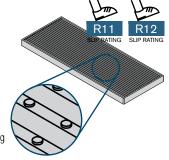
GW	Product No	W	L	Class	Ultimate Load
200	AC.G W .168.499	168	499	-	1500 [*]
300	AC.GW 268 499	268	499	_	1500*

[‡] Load ratings to AS3996-1029 testing in kilograms (kg). Lesser values for solid wheel and moving wheel loads. Slip ratings tested to EN13036.

> *Indicative load shown. Contact AusPress for further details.



Grate with a dimpled surface achieves a R12 slip rating across (transverse) & R11 with the bars (longitudinal).



Load Rating Class

Tests are completed according to different standards depending on the grate type (ie floor gully grates are tested to different methods than a linear channel grate). Both Australian and European stardars are considered however, note the two standards do not align in actual weight values per class, as summaried below. Refer to the relevant standard for full details and limitations.

Ultimate Limit: 10kN Design Load: 6.7kN Wheel Load: 330kg		:	80kN 53kN 2,670kg		150kN 100kN 5,000kg	
AS 3996:2019	Α	В	С		D	
EN 1433:2002	A	В			С	
Ultimate Limit: Design Load:	15kN 10kN		1 25kN 83kN			
Wheel Load:	330kg		2,67	'0kg		5,000kg

Note: Load rating standards include EN 1433:2002, EN 124:2015 & AS 3996:2019, depending on the type and application and region. Lesser values expected for solid and moving/turning wheel loads. Slip ratings tested to EN13036.

Check the individual drain bowl page for suitability as not all accessories shown fit all drain bowl types.





Items below for '300' size Drain Bowls

■ Filter Basket Options

Material: 316 stainless steel.

Why Use a Filter Basket?

The mesh of the Filter Basket prevents solids in wash down waters from passing and possibly blocking the drainage beyond so this material can be disposed of appropriately.

Retaining Chain?

We can fix the basket to the drain bowl to prevent the basket being thrown away.

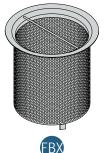


'Standard' Height

Filter Basket







'Standard' Height Filter Basket

'Extended' Height Filter Basket Cannot be used with a Foul Air Trap (FAT).

Mesh	Mesh Hole Product No		Product No	Product No	Product No
3mm	3.25Ø	AD. FB2 .075.03	AD. FB2 .200.03	AD. FB3 .075.03	AD. FB3 .200.03
Volume	e:	0.7 L	2.0 L	1.9 L	6.2 L

FBX

'Extended' Height

Filter Basket

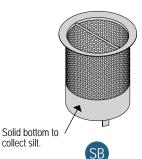
Cannot be used with a Foul Air Trap (FAT).

■ Silt Basket Options

Material: 316 stainless steel.

Why use a Silt Basket?

When wash down water contains fine or sand like solids, these particles fall to the solid bottom for collection and allow the water to overflow through the mesh and drain beyond.



Dry 'Silt' Basket with Solid Bottom Cannot be used with a Foul Air Trap (FAT).

Solid bottom to collect silt.

Dry 'Silt' Basket with

Dry 'Silt' Basket with Solid Bottom Cannot be used with a Foul Air Trap (FAT).

Mesh	Mesh Hole Product No		Product No		
3mm	3mm 3.25Ø AD. SB2 .200.03		AD. SB3 .200.03		
Volume:		2.0L	6.2L		

■ Foul Air Trap (FAT) Removable

Material: 316 stainless steel with NBR seal.

Why Use A FAT?

With the Foul Air trap removed, pipework beyond is clear for maintenance access.

Use instead of a P-Trap to reduce the IL depth of the outlet.

FAT must be used with a standard height Filter Basket in a standard height Drain Bowl (all sold separately).





Foul Air Trap (FAT) with NBR Sealing Ring





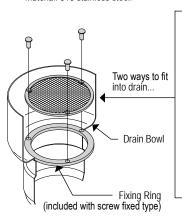
Foul Air Trap (FAT) with NBR Sealing Ring

Seal Height	Product No	Product No
75mm	AD. FAT2 .KIT	AD. FAT3 .KIT
Flow Rate [‡] :	3.5 L/sec (max)	4.6 L/sec

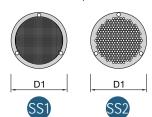
[‡] Max rate based on a continuous flow of water in clean conditions with vertical outlet drain bowl.

■ Secondary Strainer Option

Material: 316 stainless steel.



- Strainer (Screw Fixed)	Outlet OD	Aperture	Style	Product No	Open %
Secured with 3x torx screws to the Drain Bowl outlet. Screw	110	3.2mm	SS1	AD. SSK .110.03	42%
Fixed available on request.	160	3.8mm	SS1	AD. SSK .160.03	43%



Requirements for Trade Waste:

Some Water Authorities list 'Screw Fixed' Secondary Strainers as a standard requirement. Please ask if you're unsure.

Key to remove? Order a AD.KEY

Strainer (Clip-In)	Outlet OD	Hole Dia	Style	Product No	Open %
With 3x support legs, no fixing ring required (not shown).	110	3.8mm	SS2	AD. SSC .110.03	36%
ring required (not snown).	160	3.8mm	SS2	AD. SSC .160.03	41%

Channel Drain Bowl

or Spigot Outlet

■ P-Trap Socket - Spigot

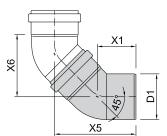
Material: 316 stainless steel, mill finish. Ring Seal: EPDM x1 fitted.

Riser	Product No	D1	X4	
A small vertical length	AP.P.015.110	110	225	
may be required. Riser length sold separately.	AP.P.025.160	160	345	

							×
P-Trap	Product No	D1	X1	X2	ХЗ	Flow Rate [‡]	→ -
	AP.PT.110	110	132	300	254	3.4-10.4 L/sec	×
	AP.PT.160	160	190	403	347	7.5-28.5 L/sec	
¹ Max rate based on a continuous flow of water in clean conditions.							. X2

■ Bend 45° Socket - Spigot

Material: 316 stainless steel, mill finish. Ring Seal: EPDM x1 fitted.



Double 45 bend arrangements shown for offset dimensions only - each bend sold separately.

Product No	וט	ΧI	Χb	Χб
AP.B.45.110	110	93	195	150
AP.B.45.160	160	131	269	200
AP.B.45.200*	200	152	308	228
AP.B.45.250*	250	177	362	273
AP.B.45.315*	315	199	411	317

■ Mini Filter Basket

Material: 316 stainless steel.

When use the Mini Basket?

With a collection volume of 300mL, the Mini Basket is used when solids are few in washdown water.

Suits items with a 110mm spigot outlet.





Mesh	Hole	Product No
3mm	3.25Ø	AD. FB1 .075.03

Retaining Chain

Material: 316 stainless steel.

A Retaining Chain can be fitted between the Filter Basket and the Drain Bowl to prevent the basket being left out of the Drain Bowl or discarded.



Length	Product No		
700mm	AD PCK 0700*		



Technical Guide

AusPress Stainless Drainage Products

The following information is only a guide. All work must comply with AS/NZ 3500 and any other relevant standards applicable to the installation. For specific installation assistance, or if you're in doubt, please contact us before proceeding.

As with all work using tools, the following points are to be adhered to and understood, along with the general safety practices such as wearing suitable clothing and equipment, being alert and focused, keeping the work area clear of obstacles and observing WHS (OH&S) requirements.

Stainless Drainage Pipe & Fittings

Installing Stainless Drainage

The socket-spigot stainless drainage system comprises directional pipe and fittings (installed with flow into the socket, out the spigot) with the socket pre-fitted with a rubber ring to seal each join.

Refer to the installation guides at the front of each AusPress Drainage catalogue section for more information.

1. Cutting

Stainless drainage pipe lengths are supplied in set lengths from 150mm through to 6.0m and may be cold cut using an approved pipe cutter that creates a bevel on the pipe end and assists fitting. Care should be taken as cut ends could be sharp.

Do NOT cut with drop saws or angle grinders.

Ensure the socket is retained on pipe lengths when cutting shorter. Spigot-spigot pipe lengths are not recommended.

2. Ring Seals

Ring seals are fitted to each socket end with an EPDM type supplied pre-fitted as standard.

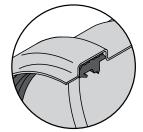
Check the ring seal is free of debris and the correct type of seal is fitted for the application and temperatures to be used. **Not sure? Ask!**

Ensure the ring seal is fitted correctly with taper facing outward (see image).

Replace the seal if unsure or incorrect. Remove the seal to see the type labelled on the inside flat surface of the ring seal.

3. Joining

Apply lubricant to ring seal & outside of spigots.

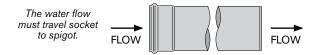


Material	Colour	Application [‡]	Operating Temp
EPDM	Black (Dull)	General use.	-40° to +100°C
FPM	Green (or Purple)	High temp, gas, oil, fuel.	-25° to +200°C
NBR	Black (Shiny)	Gas, oil, fuel.	-30° to +80°C

^{*}Confirm with AusPress prior to installation.

Preferred lubricant is silicon based (such as Super Glidex) but an approved soap based lubricant can also be used. Grease is not to be used as this may damage ring seals.

Push the spigot into the socket fully with a slight turning movement.



Joint is then pulled back 5mm to 10mm to allow for expansion and contraction within the socket.

4. In-Ground Installation

When stainless drainage products are being installed inground, grade 316L stainless is to recommended.

Bedding and surrounding fill is to be a minimum thickness of 50mm pH neutral sand, free of chlorides and/or salts.

Crushed aggregate or fine gravel is NOT to be used.

Wrapping of inground drainage is not required for standard applications - contact us if wrapping is required for your installation.

NOTE: Check with us prior to installation if soil is constantly damp, wet or subject to often or occasional high water table levels, reclaimed or contaminated soil or soil of unknown origin is used!

5. Bracketing

Bracketing is to comply with AS/NZ 3500.

If a dissimilar bracket metal is used, a protective isolation barrier is to be provided between the stainless surface and the bracket.

Changes of direction on main suspended drainage should be bracketed in both directions as close as possible to bend, to prevent lateral movement.

Extra bracketing may also be required at socket joints to prevent sagging.

6. Good Practice

Preference installing 45° branches.

All main horizontal 90 degree direction changes should be made using 2 x 45° bends with a minimum 150mm length between.

Venting procedures must comply with AS/NZ 3500.

7. Welding

If welding is to be carried out, prior approval must be obtained from AusPress. Purge-welding procedures must be undertaken and all welds are to be pickled and passivated prior to installation and backfilling.

8. Special Applications

Stainless drainage pipe and fitting products can be used for special applications such as ducting, vacuum, siphonic drainage and low pressure pumping applications. Please consult us for technical advice and vacuum specific products.

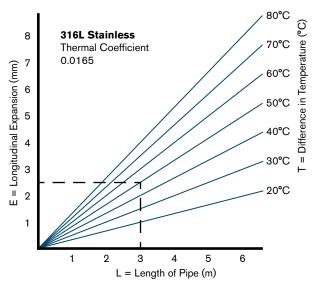


Expansion & Contraction

Pipes in any direction (including horizontal suspended and horizontal in ground) must be supported to prevent the force arising through heat expansion can neither bend the pipes nor pull the spigot ends from the sockets.

Expansion Sockets are available for larger expansion and contraction movements.

The below graphs the expected expansion of grade 316 stainless steel with change in temperature. This is expressed as the formula E=L. T.



For example: A 3m length pipe at ambient temperature (20°C) is filled with 70°C hot water. The temperature difference of 50°C (70°C minus 20°C) expands the grade 316L stainless longitudinally approximately 2.5mm overall.

Stainless has a very low coefficient of expansion under normal conditions; as a general rule, fixing points and expansion sleeves may be omitted if the temperature remains under 100°C and the maximum straight run of pipework is under 40m. Spigot ends must be pulled the 5 to 10mm from the socket after full insertion.

Suspended Graded Installation

Diameter	Support Spacing
50mm	2.2m
75mm	2.5m
110mm	2.8m
160mm	3.3m
200mm	3.0m
250mm	3.0m
315mm	3.0m

The distance between the suspended supports must be calculated on the basis of a permissible 1 mm bending of the pipe. The bending for a single mounting is calculated for a water-filled pipe.

Spacing distances apply to continuous straight lengths. At joins in the suspended drainage, additional fixing points must be placed that either the branch or the through pipe is held directly under the sleeve (not on the socket part). Changes in direction shall be supported with suitable bracketing to prevent movement & the join separating.

If this is not possible, the span between fixing points must be reduced by half or, as an alternative, Joint Clamps can be installed for stability.

Vertical Installation

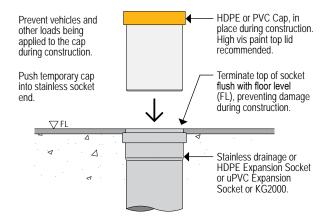
3.0m maximum gap between each support or designed to support water-filled pipe plus any expected loads.

Where larger inlets are connected, the pipe must be secured immediately below the inlet and under (not on) each socket.

Consideration for forces against change in directions for vertical drops must be provided to suit and securing any joins as part of the installation.

Connecting at Floor Level

Protecting the drainage & socket from damage & debris.



Fire Protection

Stainless drainage is a class A1 fire resistant product (highest rating) and certified as non-combustible (EN1124 parts 1 & 2).

Penetrations that require fire rating can be sealed between the opening and stainless pipe with a suitably rated mortar or insulation/mastic product that is compatible with stainless steel (eg low chloride). Fire collars are not required for stainless pipework. Consult standards for local requirements.

Vacuum & Siphonic

Stainless drainage is suitable for vacuum (sewer) piping and siphonic (rainwater) installations. We recommended these systems are professionally designed - we have more information on request.

The material strength of stainless provides a high resistance to implosion and the rigid lengths are lightweight to install. We recommend Joint Clamps are used on each join and bracketing to resist the vibrations at 3m internals maximum or at a change in direction.

Handling & Surface Finish

Stainless is resistant and durable but care must be given during transport and installation to not damage the shape or stainless surface.

Storing: Ensure stainless is kept suitably protected from contaminants, welding and/or grinding sparks, excessive weight or over stacked. Long lengths are recommended to be handled by more than one person.

Mill Finish: A dull surface finish, suitable for drainage however not suitable for exposed or aesthetic applications (such as downpipes as it shows fingerprints). For exposed installations, polishing the external surface is available on request.



Installing Floor Gully & Channel

Stainless Drain Bowls & Channel Bases

Both these systems are installed with the body/base fixed into position permanently with the accessories including grates, filter basket and foul air trap (FAT) fitted into the body/base afterwards.

These instructions are based on common installation situations for our products. If conditions, requirements or situations vary, contact AusPress for advice before installing. Other elements, including structural, are to be designed and specified by suitably qualified others and shown here for illustration purposes only.

1. Preparation

If to be installed in a recess, it should have a minimum 50mm gap on all edges (eg the cutout is 100mm wider overall than the channel) and 50mm deeper than the outer dimensions.

Remember to allow for the anchor tags and levelling angles in sizing the cutout hole size.

If connecting to metric drainage such as ACO Pipe®, Blucher® EuroPipe or KG2000®, the outlet spigot will push into a socket end connection. For HDPE and PVC, use an expansion socket; for cast iron use an 'Ensign' joining socket.

Standard outlet dimensions are 110mm and 160mm outside diameter (OD).

2. Installing

Points are illustrated in the adjacent diagrams.

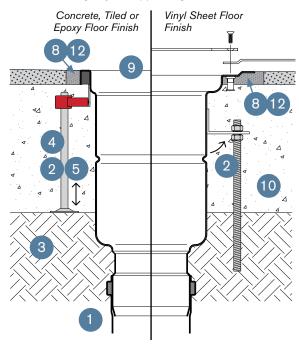
- Ensure drainage piping is set up at correct height to suit depth of floor drain chosen (refer to technical information for measurements).
- Position the support brackets for threaded rod or the supplied support legs to suitably support the drain bowl or channel base from moving.
- Ensure appropriate moisture barriers are used to prevent corrosion as best practice construction, such as under each support leg stand for suspended slabs.
- Place the drain bowl or channel into position and align with the levelling supports.
 - Long channels with bolted flanges will require this to be completed in sections and with multiple people to prevent the channel from torquing.
- 5) Adjust each of the supports to adjust & level the drain bowl or channel to the correct height. Threaded rod is recommended to be secured with a second nut, one each side of the tag.
- 6) Tie anchor tags to steel reinforcement. This will help prevent movement or floating during concreting and earth the drain bowl or channel.
- 7) Confirm the drain bowl is at correct height and is level.
- Install 10mm thick x 20mm deep styrene foam to outside perimeter of the top of the drain bowl or channel edge.
- Protect the opening with plywood or similar to ensure concrete and other foreign matter does not enter during construction.

- 10) Concrete footing is poured.
- 11) After concrete is set, and before final floor finish is applied (eg epoxy coating), remove the styrene foam from around outside perimeter.
- 12) Fill the gap made by the foam with an approved polyurethane sealant (such as Sikaflex-11FC) as per manufacturer's instructions and ensuring the product installation procedures are adhered to.

Two common methods are used to secure & level the drain bowl or channel when installing are shown below.

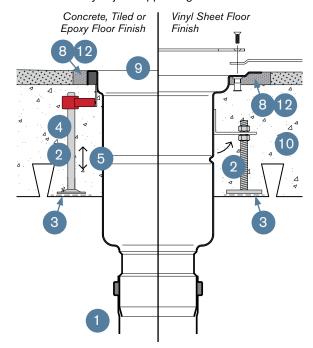
Method A – In Ground

Use the easy adjust support legs or threaded rod.



Method B - Suspended Slab

Use the easy adjust support legs or threaded rod.



3. Installing Grates and Accessories

We recommend installing the grates and accessories as part of commissioning to prevent damage or loss of items during construction.

Remove any protective covering only if no damage can occur to the drain bowl or channel before use.

Fit the grate and accessories within the drain bowl as supplied. If a removable Foul Air Trap (FAT) is supplied, fit the rubber seal over the drain bowl bump first, then fit the FAT to the seal. The filter basket must be positioned above the removable Foul Air Trap (FAT) within the drain bowl.

Confirm the grating fitted is suitable for the traffic load and application prior to use.

Prevent construction traffic, scissor lifts, forklifts, vehicles or heavy loads from driving over an unprotected floor gully or channel.

4. Bolted Flange Connections

Channels manufactured with bolted connections are supplied with the fixings and a Viton rubber gasket to assemble and join the channel sections together. Tighten bolts evenly and ensure the gasket is not over or under compressed.

5. Special Installation Notes

Site materials can contaminate and damage the surfaces. Ensure the drain bowl and channel are clear of debris and cleaned in the approved method to avoid damage.

It is recommended that channels greater than 2.5m in length or irregular shapes be handled and installed with multiple people. This is to prevent the channel from accidental twisting and being damaged.

6. Flow Rates

Depending on the accessories installed and the drain bowl selected, the flow rates are expected based on 'clean' continuous flow of water, without solids. Flows with solids or contaminated water will experience lesser values.

Use the component with the lowest flow rate value when making flow calculations. Accessories such as Filter Baskets, Secondary Strainers and Silt Baskets will restrict the flow further, whether clean or otherwise.

Corrosion Resistance

Resistance Against Corrosion

316 stainless steel is resistant to corrosion when it is exposed to clean atmosphere (ambient air). The probability of corrosion is increased by contact with corrosion-promoting construction materials or by installation in corrosive atmospheres such as coastal areas or chemical production facilities.

We offer technical advice and have access to metallurgist specialists for water quality & purity testing for specialised applications or projects with specific needs.

External Surface Protection

High ground water, external conditions such as coastal environments and contaminated soils can all effect the external surface of stainless steel drainage.

In areas where a risk of damaging effects exists, installation of stainless without protection should be avoided.

If there is the risk of corrosive substances (eg. Unsuitably high chloride content waters, plaster, building materials containing chloride, specialised concrete, high ground water levels, nitrite or ammonium) acting on the drainage over prolonged periods, surface-mounting or suitable corrosion protection is recommended.

Protection against external corrosion must meet the following requirements:

Waterproof.

Non-porous.

Resistant to heat and ageing.

Undamaged.

The minimum protection against external corrosion is coating, priming or painting. Denso® wrapping is also suitable. Plastic wrapping in not recommended. Contact AusPress for recommended protection options.

Potable Water

Corrosion-resistant steels do not react with potable water due to their protective chromium oxide layer. This makes stainless steel corrosion-resistant to potable water.

Local corrosion effects such as pitting or crevice corrosion can occur in water with unduly high chloride content. This can occur from excessive chlorous disinfectant use or naturally occurring such as in bore water. Therefore, the duration of application and concentration for use must be strictly observed.

The content of water-soluble chloride ions at ambient temperature in potable water and water which is similar to potable water should not exceed 250 mg/l (250 ppm).

Corrosion resistance decreases as the temperature increases. Therefore, AusPress must be notified of maximum media temperature and media contents (eg water analysis) to enable a suitability recommendation.



Treated Water

All water treatment methods such as ion exchange or reverse osmosis can be used with grade 316 stainless steel. No additional measures to protect against corrosion are necessary.

Stainless steel is corrosion-resistant to treated water such as:

Softened/decarbonised water.

Fully desalinated water (deionised, demineralised, distilled and pure condensates).

Ultrapure water with a conductivity of $< 0.1 \mu S/cm$.

Chemical Suitability

Some chemicals are not suitable for stainless steel, diluted or otherwise. Please confirm suitability with the chemical manufacturer before use or contact AusPress for an assessment.

Complete a Project Info Sheet with the relevant MSDS and details from our website.

Commissioning & Maintenance

Stainless products require little maintenance. In most environments, little or no maintenance is necessary. This would include wet areas and shower rooms with no washdown debris.

We recommend installing the grates and accessories as part of commissioning to prevent damage during construction.

Please ensure wash down waters or waste debris do not contain chemicals that are either high in chlorides or not suitable for stainless.

Care is to be taken to prevent scratching the stainless steel surface. Avoid any contact with, grinding and welding sparks, metal shavings, corrosive chemicals or any material or process which may cause failure during construction and also from future maintenance.

Ensure that all drains and accessories are properly "dry" cleaned to remove any foreign products from drain bowls etc, before initial wet clean. A visual inspection is recommended if any rust spots appear caused by these foreign products, please ensure these are removed using a scotch bright cleaning pad only, then thoroughly washed out with cold potable water. This process should also be followed after any maintenance once plant is commissioned.

In especially demanding environments, such as food processing, chemical industries and agriculture, it may be necessary to clean to avoid coating that could lead to corrosion later. Cleaning can be carried out with high-pressure cleaning or high pressure flushing equipment using potable water.

If installed in locations effected by coastal conditions, a regular cleaning regime must be implemented to remove external salts and contaminants from the stainless.

Where there is heavy coating, plastic or brass tools can be used. With especially persistent coating, diluted citric acid can be used to loosen the deposit. This must be flushed with large quantities of cold potable water afterwards.

Cleaning of drains, including the emptying of filter basket, is to be performed at least once every shift and when required.

In cases of difficulty, users should consult us for technical advice.

Disinfecting the System

This is carried out to meet more stringent hygiene requirements, and in the event of severe microbial contamination. Contact us for more information.

To protect the environment and simplify handling, the Australian Drinking Water Guidelines (ADWG) recommend the use of hydrogen peroxide, however chlorine can also be used to disinfect.

Before commissioning the system carefully follow the instructions for use, particularly in relation to the contact time, maximum solution concentration and subsequent flushing requirements.

Note: To reliably prevent corrosion damage, during disinfection do not exceed the maximum chlorine concentration and contact times as tabled below:

The Australian water regulations allow dosing with up to 1.2mg/l of free chlorine in the disinfectant solution, provided a limit of 0.3mg/l of free (active) chlorine is not exceeded in the drinking water.

Quantities can be increased to 6mg/l and 0.6mg/l respectively in exceptional circumstances for example, high or increased micro bacterial contamination.

Flushing the System

In the case of stainless steel, the possibility of corrosion promoted by foreign matter such as dirt or swarf can be ruled out. It is therefore sufficient to simply flush the system with potable (drinking) water ensuring the content of water-soluble chloride ions is within approved AusPress limits.

When using any solution, ensure the system is flushed correctly and the manufactures instructions are followed in an accurate and safe manner at all times.

Commissioning

Systems must be commissioned in accordance with the applicable standards and regulations.

The installation contractor must familiarise the user(s) with the system. This is to be documented with a hand-over and acceptance record.

The user must also be provided with the manufacturer's maintenance and operating instructions for all installed valves and equipment.