



*ACO Product Catalogue*

**ACO Industrial Drainage**



## ACO. creating the future of drainage



The ACO system chain provides drainage solutions which meet the future needs of industries where hygiene is essential

In a food service environment, hot water, grease and organic waste must be counteracted by more complex and sophisticated drainage concepts. ACO achieves this with intelligent system solutions which optimise food safety, health and safety of employees and the protection of water. Every ACO product within the ACO system chain safely controls water as it passes along the chain to ensure it can be hygienically, economically and ecologically handled in a viable way.



**collect:**  
Collect and  
remove



**clean:**  
Pre-clean and  
process



**hold:**  
Protect and  
attenuate



**release:**  
Pump, discharge and  
reuse



ACO system chain  
in action

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**General introduction**

ACO is one of the World's leading drainage specialists with 60 years' experience gained across a wide range of sectors. Our passion for producing high performance products has led us to make major investments in research and development.

We are working in partnership with commercial facility owners, managers and operators. We are continuously developing our products and enhancing our expertise. We understand the critical role that drainage plays in a successful business.

Our product portfolio includes items which are fully compliant with the highest hygienic requirements. We also have a full understanding of the food industry's own standards such as HACCP and we work with bodies including the European Hygienic Engineering and Design Group (EHEDG).

**ACO drainage is used in applications anywhere where hygienic, corrosion resistant and durable drainage performance is essential:**

- Professional kitchens
- Food processing facilities
- Brewing, bottling and canning plants
- Chilled warehouses
- Laboratories
- Chemical industries
- Pharmaceutical industries
- Restaurants
- Schools
- Hospitals
- Hotels
- and others



**HygieneFirst**

As one of the World's leading commercial drainage specialists, The ACO Group understands the critical role that drainage plays in a successful commercial food preparation business. We appreciate that food safety, hygiene and cost control are all vital factors, yet we also understand that for many, drainage is out of sight and out of mind.

As a result, many drainage systems are not designed well, which leads to inefficiencies, costly on going cleaning and maintenance. In worst case scenario it can result in food contamination, closure of a facility and even loss of a business. As the company that's driving the future of drainage, we are determined to change this by raising the profile of hygienic drainage and improving standards across every part of the process.

Our HygieneFirst philosophy represents our commitment to delivering products that provide ultimate hygienic performance. We design intelligent drainage solutions that minimize operational costs without compromising food safety.



**Hygienic design requirements**

ACO offers sustainable, integrated drainage systems which are designed to protect business, the environment and ultimately public health. Our aim is to constantly improve every aspect of safety, hygiene and functional performance. We believe that our systems and services are truly unique, delivering unparalleled benefits to everyone involved in project delivery or subsequent operation.

**NSF International**

ACO has become the first and only drainage company to obtain 14159-1 - Hygiene Requirements for the Design of Meat and Poultry Processing Equipment certification for its products from NSF International.

The certification has been awarded to ACO in recognition of the hygienic performance of its drainage systems and products, and its compliance with the strict standards and procedures of the NSF. It also underlines ACO's ongoing commitment to the very high standards of manufacturing

and to research-led product development which ensures its products deliver optimum hygienic performance.

**EHEDG**

ACO hygienic drainage fulfils stringent hygienic requirements to prevent harmful bacteria contamination. We apply relevant hygienic design principles that are reserved for food contact surfaces EN 1672, EN ISO 14159 and EHEDG documents No. 8, 13 and 44 to the design of our drainage products.



**Hygienic design**

**Full drainability**

The outlet is in lowest position.  
 Sleek slope functionality provides a fully drainable solution.

**Round internal corners**

Minimum radius of internal corners is 3 mm.

**Hygienic joints**

Butt welds are fully welded.  
 Metal-to-metal contact at non-disassembled joints is avoided.  
 Sealed joints are designed to prevent accumulation of soil and bacteria.

**Edge in-fill**

The channel frame edge is filled with a waterproof material.

**Material**

**Stainless steel grade min. 1.4301 according to EN 10088 (304 according to AISI).**

**Fully pickled and passivated or electropolished.**

**Hygienic design principles**

**Hygienic design**

All internal radii equal or larger than 3 mm which greatly increases cleaning effectiveness



✓ X

Hygienic joints: deep-drawn body ensures smooth contours eliminating crevices that can harbour dangerous bacteria



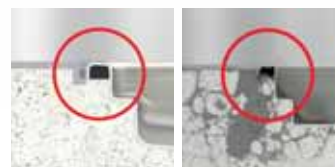
✓ X

Dry sump design, completely drainable - eliminating stagnant water, smells, microbial growth and potential chemical hazards.



✓ X

Edge in-fill ensures stable and durable transition between the gully and surrounding floor and helps to minimise the risk of floor cracks which could harbour microorganism



✓ X

Cleaning performance



✓ X

## Material

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### **Stainless steel**

Stainless steel is the name given to a wide range of steels which have the characteristics of greatly enhanced corrosion resistance over conventional mild and low alloy steels. The enhanced corrosion resistance of stainless steel essentially comes from the addition of at least 11% of chromium, however, most commonly used stainless steels contain around 18% of chromium. Other significant alloying elements include nickel and for superior corrosion resistant properties, molybdenum.

#### **Stainless steel has the following unique advantages:**

- High corrosion resistance
- Nonporous, easy to clean and disinfect
- Aesthetically pleasing
- Resistant to extreme temperatures and thermal shock
- Coefficient of linear expansion similar to concrete
- 100% recyclable material

ACO drainage is manufactured from austenitic stainless steel, grades 1.4301 or 1.4404 according to EN 10088 (304 or 316L according to AISI) and is ideal for applications including food processing, leisure, dairy, brewing, pharmaceutical, chemical and petrochemical industries.

### **Surface treatment**

The process cutting, forming and welding of stainless steel will introduce impurities into the surface of the material and unless the appropriate action is taken, the material will begin to corrode and ultimately fail in service. Therefore, after fabrication, it is vital that stainless steel is treated with the correct surface treatment to ensure it is fully corrosion resistant. By applying pickle passivation as the primary surface treatment, the corrosion resistance of stainless steel can be fully restored to its original state, ensuring long and reliable life performance together with the required aesthetic appearance.

### **Finishes used by ACO include:**

#### **Pickle passivation (acid treatment)**

All ACO drainage is pickle passivated by immersing products in a series of acid baths. This is a fundamental requirement for removing iron embedded particulates introduced in the fabrication process and also for restoring the chromium depleted regions generated by the welding process. ACO has one of the largest and most advanced pickle passivation installations in Europe which ensures the optimum corrosion resistance of our products.

#### **Electropolishing (electrochemical process)**

After pickle passivation, some products are then immersed in an electrolytic fluid in which the products become the anode of a direct current electrical circuit. This process is characterized by a selective attack of the surface of the components whereby upstanding roughness is preferentially dissolved and will yield a progressively smoother, brighter surface. All hygienic box channel grates are electropolished as a standard.

#### **Brushing (mechanical process)**

ACO channels have a brushed upper edge for aesthetic reasons.

## Standards and Certifications

### ACO gully and ACO channel

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ACO gully and ACO channel ranges are designed, manufactured, tested and certified in accordance with EN 1253. Furthermore ACO modular channels are also certified in accordance with EN 1433 and they are CE marked.

We apply the relevant hygienic design principles reserved for food contact surfaces EN 1672, EN ISO 14159 and EHEDG documents No. 8, 13, 44 and NSF International.

ACO fire protective kit is tested according to EN 1366-2 (Fire resistance tests for service installations) and classified according to EN 13501 (Fire classification of construction products and building elements).

### ACO pipe

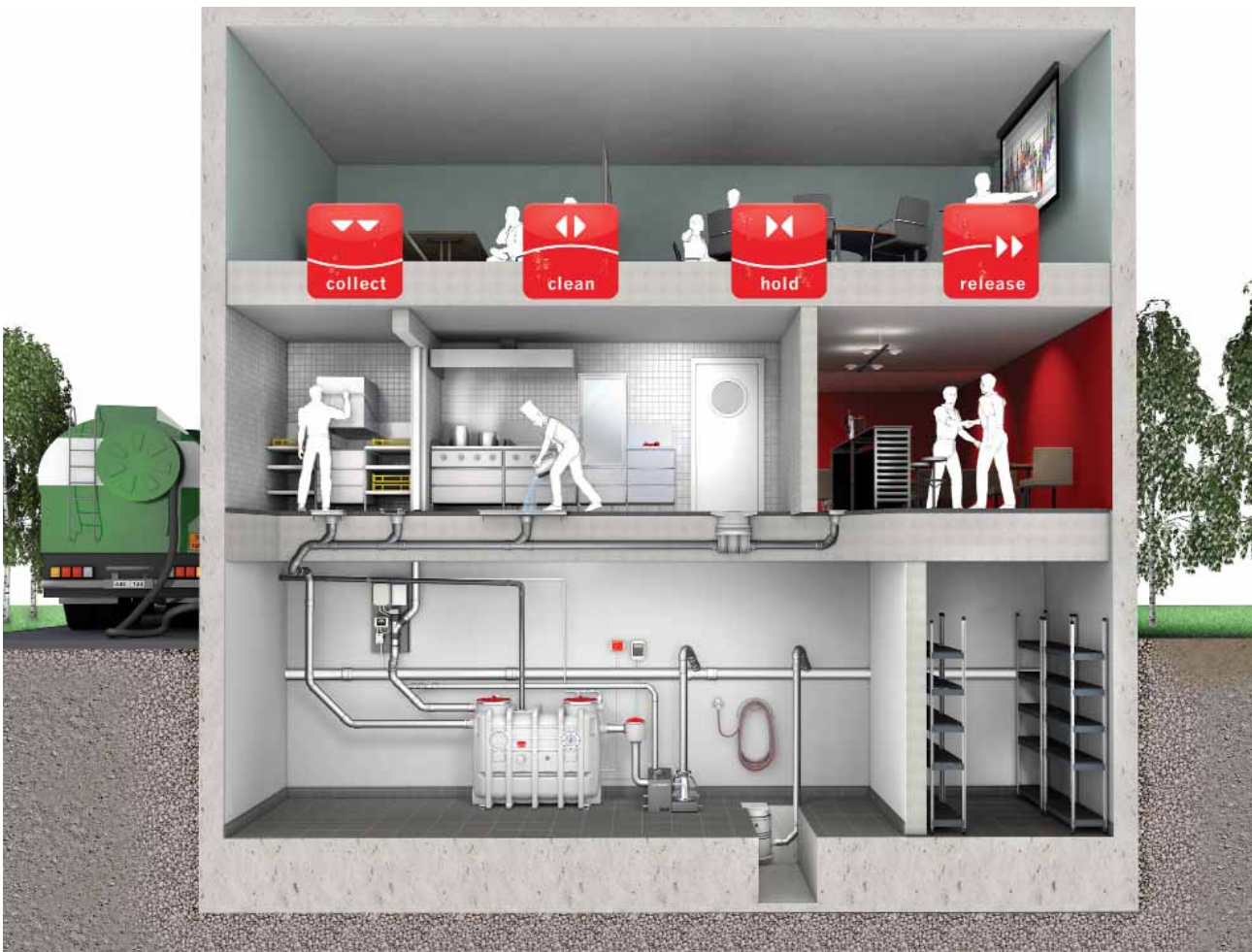
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The ACO pipe push-fit system is classified and certified as non-combustible product and is manufactured in compliance with EN 1124. This standard classifies the ACO pipe systems as class A1 fire resistant (highest rating).

ACO pipe systems are certified also by SITAC authority as fire resistant (cert. no. 0410-01).

Special certificate of fire resistance for coated pipes (no. CSI PK-13-083) is available.

**System overview and benefits**



### Benefits

ACO provides solutions which optimise food safety, employee's health and safety and water protection. Every ACO product safely controls the water to ensure that it can be hygienically, economically and ecologically managed in a viable way.

#### Food safety

- ACO hygienic drainage fulfills hygienic requirements to prevent harmful bacteria contamination. We apply relevant hygienic design principles reserved for food contact surfaces as recommended by EHEDG.
- Our product design ensures minimal build-up of food particles and debris as well as a safe connection with the surrounding floor to minimise any opportunity for bacteria to grow throughout the drainage system.
- Sleek slope function and hygienically designed products ensure our system is fully drainable, eliminating the stagnant odour of waste water.

#### Cost control

- ACO drainage systems can be easily maintained, reducing associated cleaning costs, thanks to their functional design and cleaning recommendations which have been developed in partnership with premium cleaning agent suppliers.
- ACO's advanced manufacturing technologies ensure durability and our special surface treatment guarantees corrosion resistance. Our systems perform effectively at all times and keep business disruption to a minimum.
- We provide expertise in drainage system planning, correct installation and creating a safe connection with the surrounding floor to avoid unnecessary costs.

#### Health & Safety

- For additional safety in high risk areas that require heavy water usage, a slip resistant grating is available.
- Each component of the drainage system is easy to remove and clean, and there are no sharp edges for optimum employee safety.
- ACO drainage products have a fire resistant solution certified according to EN 136.

**Industrial Drainage selection guide**

**Application**

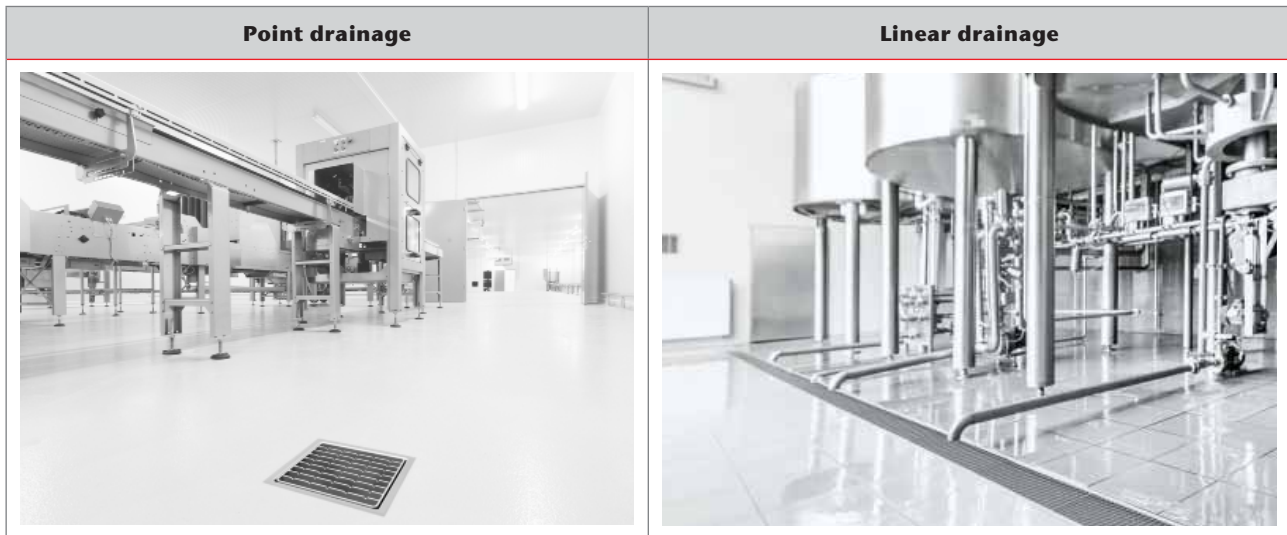
The layout of the drainage system as well as the design of drainage elements has an impact on future operational effectiveness and on costs. This guide offers a range of basic areas which need to be considered when specifying a drainage system.

To specify an appropriate drainage system for a particular application, the zone of operation and amount and frequency of water used is crucial.

<b>Production process/ Cleaning process</b>	<b>Zones with high risk for food safety</b>	<b>Zones with medium or low risk for food safety</b>	<b>Zones without direct risk for food safety</b>
<b>Wet production process/ Wet cleaning process</b>	<ul style="list-style-type: none"> <li>Hygienic design - one piece solution without connections; ladder or cast gratings or slot covers</li> </ul>	<ul style="list-style-type: none"> <li>Hygienic design - connections and mesh gratings could be considered if cleaning and sanitation procedures allow</li> </ul>	<ul style="list-style-type: none"> <li>Hygienic design is recommended for easy cleaning and maintenance. A combination of products could be considered for easy layout design</li> </ul>
	<ul style="list-style-type: none"> <li>High retention - high flow rate</li> </ul>	<ul style="list-style-type: none"> <li>High retention - high flow rate</li> </ul>	<ul style="list-style-type: none"> <li>High retention - high flow rate</li> </ul>
	<ul style="list-style-type: none"> <li>Slip resistance - high requirement</li> </ul>	<ul style="list-style-type: none"> <li>Slip resistance - high requirement</li> </ul>	<ul style="list-style-type: none"> <li>Slip resistance - high requirement</li> </ul>
<b>Dry production process/ Wet cleaning process</b>	<ul style="list-style-type: none"> <li>Hygienic design - one piece solution without connections; ladder or cast gratings or slot covers</li> </ul>	<ul style="list-style-type: none"> <li>Hygienic design - connections and mesh gratings could be considered if cleaning and sanitation procedures allow</li> </ul>	<ul style="list-style-type: none"> <li>Hygienic design is recommended for easy cleaning and maintenance; combination of products could be considered for easy layout design</li> </ul>
	<ul style="list-style-type: none"> <li>High flow rate</li> </ul>	<ul style="list-style-type: none"> <li>High flow rate</li> </ul>	<ul style="list-style-type: none"> <li>High flow rate</li> </ul>
	<ul style="list-style-type: none"> <li>Slip resistance - medium requirement</li> </ul>	<ul style="list-style-type: none"> <li>Slip resistance - medium requirement</li> </ul>	<ul style="list-style-type: none"> <li>Slip resistance - medium requirement</li> </ul>
<b>Dry production process/ Controlled wet cleaning process</b>	<ul style="list-style-type: none"> <li>Hygienic design - one piece solution without connections; ladder or cast gratings or slot covers</li> </ul>	<ul style="list-style-type: none"> <li>Hygienic design - connections and mesh gratings could be considered if cleaning and sanitation procedures allow</li> </ul>	<ul style="list-style-type: none"> <li>Hygienic design is recommended for easy cleaning and maintenance. A combination of products could be considered for easy layout design</li> </ul>
	<ul style="list-style-type: none"> <li>Medium to low flow rate</li> </ul>	<ul style="list-style-type: none"> <li>Medium to low flow rate</li> </ul>	<ul style="list-style-type: none"> <li>Medium to low flow rate</li> </ul>
	<ul style="list-style-type: none"> <li>Odour proof cover</li> </ul>	<ul style="list-style-type: none"> <li>Odour proof cover</li> </ul>	<ul style="list-style-type: none"> <li>Odour proof cover</li> </ul>

## Drainage type

Based on the basic application, the type of drainage needs to be selected according to the layout of the operational space and technology employed.



## Material resistance

The chemical mixture of the waste water from the process and/or from the cleaning as well as temperature of the final mixture influences the material resistance of the drainage system.

**ACO drainage is manufactured from austenitic stainless steel; grades 1.4301 or 1.4404 according to EN 10088 (304 or 316L according to AISI)** and is ideal for applications within food processing, dairy, brewery, commercial kitchen, pharmaceutical, chemical, petrochemical industries and leisure.

Besides stainless steel, drainage products also contain sealing materials:

**ACO gullies** – all the seals are made of NBR (acryl nitrile-butadiene rubber) or SBR (styrene-butadiene rubber)

**ACO box and slot channels** – flange connection seals are made of NBR (acryl nitrile-butadiene rubber)

**ACO modular box and slot channels** – flange connection seals are made of NBR (acryl nitrile-butadiene rubber)

**ACO pipes** – socket seals can be made from either EPDM (ethylene propylene diene monomer) or FPM (fluoroelastomer) – Viton®.

For details of material resistance see page 234 or contact our Sales/Technical department.



**Floor structure and finish**

Depending on the composition of the floor construction; the appropriate type of gully or channel should be selected. If there is insulation in the floor structure, the O-ring needs to be removed from the friction ring, which will allow the water from the insulation to be drained to the gully body.

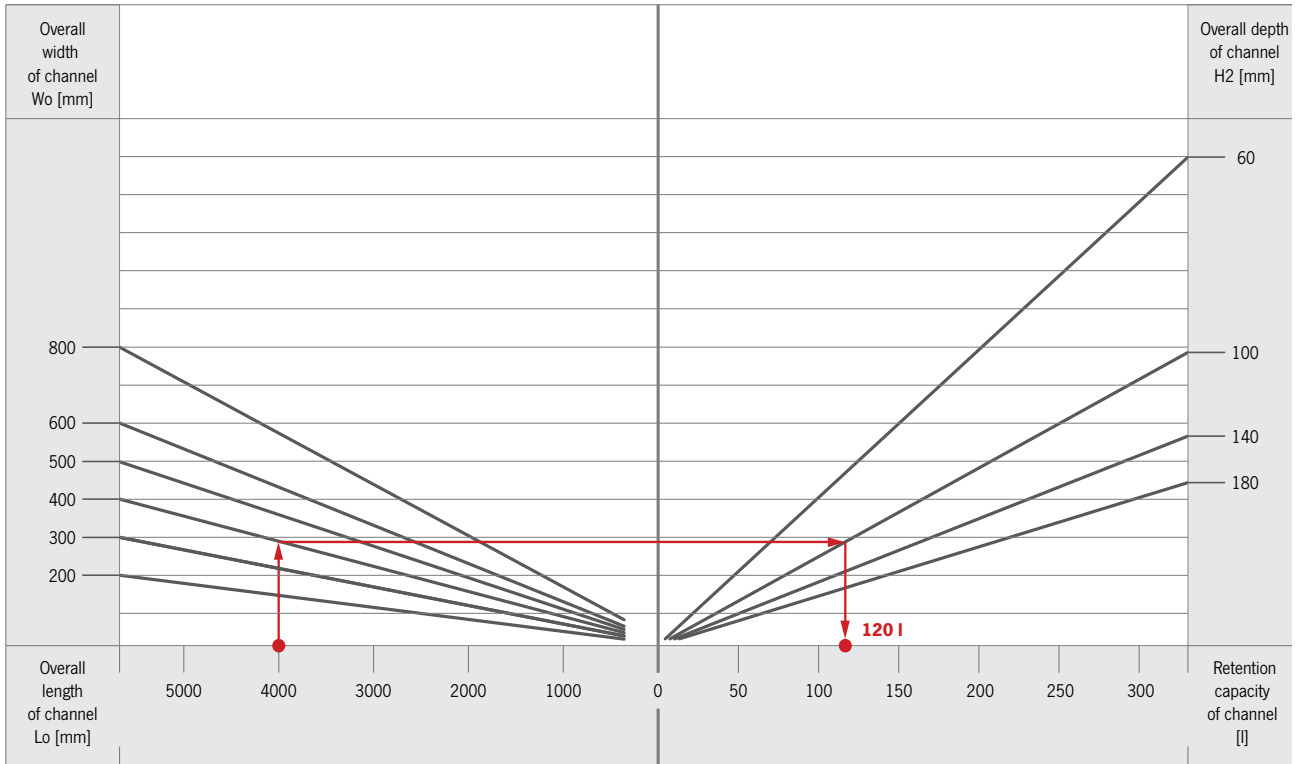
Depending on the floor finish; the appropriate edge of the channel or gully top should be selected.

Floor finish Channel or gully edge	Channels + Telescopic gullies			Fixed height gully
	Tiled, concrete or resin floor Standard edge	Vinyl Vinyl edge	Tiled (thin bed installation) Extended edge	Tiled, concrete or resin floor Standard edge
Channel or gully top drawing				
Waterproof membrane connection	Connected to gully body		Connected to channel / gully top	Independent of the gully
Gully body type	Telescopic adjustable Adhesive bonding flange or mechanical clamping flange		Telescopic adjustable Location flange	Fixed height gully
Gully body picture				
Installation example				



## Retention capacity

Depending on the application, the appropriate retention capacity should be considered.

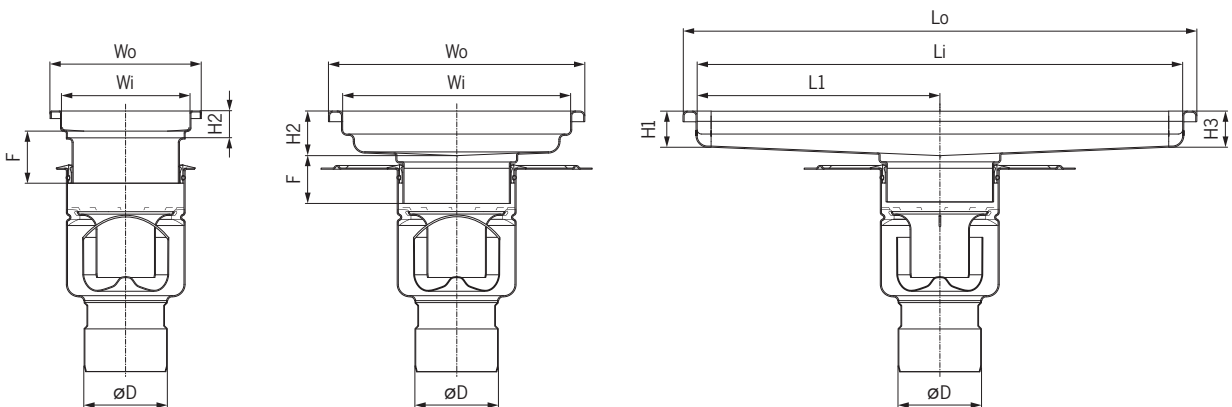


Example: channel length 4000mm, width 400mm, depth 100mm, retention capacity 120 l.

## Channel geometry

Based on the retention capacity considered, as well as the floor structure, the particular dimensions of a channel or gully top (for telescopic solution) need to be specified. For the channel a construction height at

the outlet position as well as the position of the outlet and the height of the endcaps has to be defined.



**Flow rates**

Flow rates reflect the system’s ability to constantly drain a certain amount

of water. Flow rate is generally defined by the ACO gully size.

For details of flow rates see page 83 or contact our Sales/Technical department.

**Accessories**

For the collection of solid parts, the gully or channel should be fitted with a silt basket.

Telescopic connection without flange for waterproofing	Telescopic connection with flange for waterproofing		
ACO gully EG150	ACO hygienic gully 142	ACO hygienic gully 157	ACO hygienic gully 218
<b>Accessories delivered as standard with the gully</b>			
<ul style="list-style-type: none"> <li>▪ Friction ring</li> </ul>	<ul style="list-style-type: none"> <li>▪ Friction ring; FAT; FAT support</li> </ul>		
<b>Optional accessories</b>			
<ul style="list-style-type: none"> <li>▪ Sieve</li> <li>▪ FAT with silt basket</li> <li>▪ FAT</li> </ul>	<ul style="list-style-type: none"> <li>▪ Silt basket for fixed height gully 0.3 l</li> <li>▪ Silt basket for telescopic gully 0.4 l</li> </ul>	<ul style="list-style-type: none"> <li>▪ Silt basket for vertical gully 0.6 l</li> <li>▪ Silt basket for horizontal gully 0.3 l</li> </ul>	<ul style="list-style-type: none"> <li>▪ Silt basket for vertical gully 1.4 l</li> <li>▪ Silt basket for horizontal gully 0.7 l</li> </ul>

**Gratings selection guide**

When selecting the correct grating for your application, careful attention must be given to number of factors. The most important challenge is selecting the right

type of grating with appropriate load class. Careful consideration of this will positively influence the grating lifespan.

**The correct grating type and load class**

The grating itself is the most exposed part of gully or channel in regards to traffic. To minimize the risk of failures, a proper

grating type and load class have to be considered based on the defined traffic during all future operations.

- **Type of machinery**  
 Depending on the type of production facility, usually there is a wide range of traffic machinery that will pass over the drainage. Forklifts with pneumatic tires and trolleys with small plastic wheels both behave differently when moving over the same type of grating.
- **Unusual traffic**  
 In occasional situations, machinery that hasn't been considered during grating specification may enter the area where the drainage is installed. This can include heavy trucks used for cleaning or disposal of waste. Even though this will happen rarely, it presents a great risk of damaging the gratings in just this one instance.

- **Traffic frequency**  
 Wide range of ACO gratings and covers offers a great selection base for both light and heavy load requirements. Consider all grating types and combinations for the most comfortable use.
- **Drainage location**  
 in real life scenario, the traffic movement can be irregular, causing sudden impacts or torque generated by wheels turning on the grating itself. This dynamic load stress can mount up to 2 times the static load value.








## Different load class standards

ACO gullies and ACO channels are tested and specified in accordance with EN 1253 norm and the ACO modular channels are tested and specified in accordance with

EN 1433 norm. The testing method for the two norms is different; therefore the values are not directly comparable. To assist with evaluating and comparing the two different

load standards, the table below provides a simple comparison between the EN 1253 and EN 1433 load class specifications.

Traffic type		Recommended load class*		Description
		EN 1253	EN 1433	
Pedestrian		L 15	A 15	Pedestrian areas, change rooms, toilets and areas inaccessible to vehicular machinery
Light Duty		R 50	B 125	Light commercial and industrial areas accessible to solid tyres
Medium Duty		M 125	C 250	
Heavy Duty		N 250		
Extra Heavy Duty		P 400	D 400	Commercial and industrial areas subjected to heavy traffic

\*The EN 1433 and EN 1253 load class specification norms for each type of traffic correspond with results acquired under laboratory testing.

Other grating features to consider during selection are hygienic performance, chemical resistance, flow rate and slip

resistance. All of these are necessary to choose the appropriate grating that will last for a long time without any defects.

The table below provides an overview of available gratings and their properties.



ACO grating type	ACO frameless ladder grating	ACO ladder grating		ACO slot cover	ACO cast grating	ACO mesh grating	
	Slip resistant	Slip resistant	Plain	Plain	Slip resistant	Slip resistant	Plain
<b>Surface</b>	electropolished	electropolished	electropolished	sand blasted top	electropolished	electropolished	electropolished
<b>Slip resistance</b>	Yes	Yes	No	Yes	Yes	Yes	No
<b>Cleanability</b>	Excelent	Good	Good	Good	Good	Sufficient	Sufficient
<b>Potential for slip - Pendulum test BS 7976-2</b>	Low	Low	Moderate	Low	Low	Low	Moderate
<b>Slip resistance classification - Ramp test DIN 51130</b>	R11	R11	R9	R11	R13	R11	R9
<b>Load class availability acc. EN 1253 for hygienic channels</b>	M 125	R 50; M 125; N 250; P 400*	R 50; M 125; N 250; P 400*	R 50; M 125; N 250	M 125	L 15	L 15
<b>Load class availability acc. EN 1253 for hygienic gullies</b>	M 125	R 50; M 125	N 250	R 50; M 125	M 125	L 15	L 15

\*P 400 load class available as customised solution only



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	<b>Gully top – telescopic</b>	<b>30</b>
	<b>Raising piece – telescopic</b>	<b>33</b>
	<b>Fixed height – vertical outlet</b>	<b>34</b>
<b>ACO hygienic gully 157</b>	<b>Fixed height – horizontal outlet</b>	<b>37</b>
	<b>Telescopic – vertical outlet</b>	<b>40</b>
	<b>Telescopic – horizontal outlet</b>	<b>43</b>
	<b>Gully top – telescopic</b>	<b>46</b>
	<b>Raising piece – telescopic</b>	<b>49</b>
	<b>Fixed height – vertical outlet</b>	<b>50</b>
	<b>Fixed height – horizontal outlet</b>	<b>53</b>
<b>ACO hygienic gully 218</b>	<b>Telescopic – vertical outlet</b>	<b>55</b>
	<b>Telescopic – horizontal outlet</b>	<b>58</b>
	<b>Gully top – telescopic</b>	<b>60</b>
	<b>Raising piece – telescopic</b>	<b>62</b>
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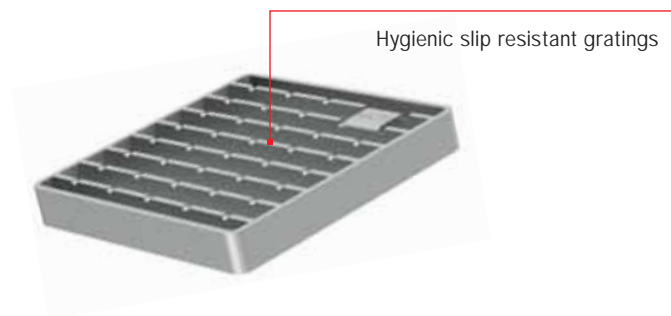
**Hygienic design**

ACO hygienic drainage fulfils strongest hygienic requirements to prevent harmful bacterial contamination. We apply the relevant hygienic design principles reserved for food processing equipment EN 1672, EN ISO 14159, EHEDG document No. 8, 13, 44.

**ACO gully hygienic features:**

- Full drainability
- Internal radii equal or larger than 3 mm
- Hygienic joints
- Edge infill
- Stainless steel grade min. 1.4301 according to EN 10088 (304 according to AISI)
- Fully pickled and passivated

ACO gully



All internal radii equal or larger than 3 mm which greatly increases cleaning effectiveness

Hygienic joints: deep-drawn body ensures smooth contours eliminating crevices that can harbour dangerous bacteria



Full drainability: Dry sump design, completely drainable - eliminating stagnant water, smells, microbial growth and potential chemical hazards.

Edge in-fill ensures stable and durable transmission between the gully and surrounding floor and helps to minimize risk of floor cracks which could harbour microorganism

Foul air trap without overlapped joints

Foul air trap internal corners smooth and rounded

**System overview**

**ACO gully** range is available in a number of versions featuring different flow rates, grating designs, sizes and spigot outlet diameters to suit various applications.

The floor construction and depth together with the use of any waterproofing membrane play an important role in the selection of the appropriate type of gully.

The ACO gully range is available with vertical or horizontal spigot outlets.

**Fixed height** gullies are convenient and free-standing units which are suitable for cementitious, resin or tiled floors.

**Telescopic** gullies can be installed either with a gully top or ACO channel in most flooring constructions, including floors with waterproofing membranes.

**Fixed height solution**



- 1 Gratings
- 2 Silt basket
- 3 Foul air trap
- 4 Foul air trap support
- 5 ACO gully body
- 6 Gully top
- 7 Friction ring
- 8 ACO EasyFix levelling feet

**Telescopic solution**





**Fixed height – vertical outlet**

**Product information**

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of the gully body. Those gullies can be combined with different grates depending on requested load class.

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available.  
See page 232 for more details

- Tested and certified according to EN 1253
- Fire tested and certified solution available for classes EI 90 – EI 180 (EN 13 501-2)
- Outlet diameter DN 70/DN 100 (75 mm or 110 mm O.D.)
- Gully top frame size: 200 x 200 mm
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



**Order information**

	<b>Top size</b> [mm]	<b>Outlet diameter</b> ø [mm]	<b>Foul air trap</b>	<b>Material</b>	<b>Item number</b>
<b>Standard edge</b>					
	200 x 200	75	Without FAT	1.4301	414700
				1.4404	414800
			With FAT	1.4301	414701
				1.4404	414801
	200 x 200	110	Without FAT	1.4301	414702
				1.4404	414802
			With FAT	1.4301	414703
				1.4404	414803



	<b>Top size</b> [mm]	<b>Outlet diameter</b> ø [mm]	<b>Foul air trap</b>	<b>Material</b>	<b>Item number</b>
<b>Extended edge</b>					
	200 x 200	75	With FAT	1.4301	414744
				1.4404	414844
	200 x 200	110	With FAT	1.4301	414745
				1.4404	414845

**Fixed height – horizontal outlet**

**Product information**

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of the gully body. Those gullies can be combined with different gratings depending on requested load class.

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available. See page 232 for more details

- Tested and certified according to EN 1253
- Outlet diameter DN 70/DN 100 (75 mm or 110 mm O.D.)
- Gully top frame size: 200 x 200 mm
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



**Order information**

	<b>Top size</b> [mm]	<b>Outlet diameter</b> ø [mm]	<b>Foul air trap</b>	<b>Material</b>	<b>Item number</b>
<b>Standard edge</b>					
	200 x 200	75	Without FAT	1.4301	414704
				1.4404	414804
			With FAT	1.4301	414705
				1.4404	414805
	200 x 200	110	Without FAT	1.4301	414706
				1.4404	414806
			With FAT	1.4301	414707
				1.4404	414807

	<b>Top size</b> [mm]	<b>Outlet diameter</b> ø [mm]	<b>Foul air trap</b>	<b>Material</b>	<b>Item number</b>
<b>Extended edge</b>					
	200 x 200	75	With FAT	1.4301	414746
				1.4404	414846
	200 x 200	110	With FAT	1.4301	414747
				1.4404	414847

**Telescopic – vertical outlet**

**Product information**

Telescopic gully can be combined either with gully tops or with linear drainage channels.

Telescopic solution enables height and rotational adjustment of connected gully top or channel. Gullies are equipped with flanges for connection of waterproof membrane.

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)

- Tested and certified according to EN 1253
- Fire tested and certified solution available for classes EI 90 – EI 180 (EN 13 501-2)
- Suitable for all floor types including vinyl flooring
- Outlet diameter DN 70/DN 100 (75 mm or 110 mm O.D.)
- Gully body with location flange or integrated membrane flange for either adhesive bonding or mechanical clamp
- Telescopic friction ring included



**Order information**

	Type of flange	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	Location flange	75	Without FAT	1.4301	414708
				1.4404	414808
			With FAT	1.4301	414709
				1.4404	414809

	Type of flange	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	Adhesive bonding flange	75	Without FAT	1.4301	414710
				1.4404	414810
			With FAT	1.4301	414711
				1.4404	414811
	Mechanical clamping flange	75	Without FAT	1.4301	414712
				1.4404	414812
			With FAT	1.4301	414713
				1.4404	414813
	Location flange	110	Without FAT	1.4301	414714
				1.4404	414814
			With FAT	1.4301	414715
				1.4404	414815

**ACO hygienic gully 142**  
**Telescopic – vertical outlet**

	Type of flange	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	Adhesive bonding flange	110	Without FAT	1.4301	414716
				1.4404	414816
			With FAT	1.4301	414717
				1.4404	414817
	Mechanical clamping flange	110	Without FAT	1.4301	414718
				1.4404	414818
			With FAT	1.4301	414719
				1.4404	414819

**Telescopic – horizontal outlet**

**Product information**

Telescopic gully can be combined either with ACO gully top or ACO channel in most flooring constructions.

Telescopic solution enables height and rotational adjustment of connected gully top or channel. Gullies are equipped with flanges for connection of waterproof membrane.

- Tested and certified according to EN 1253
- Suitable for all floor types including vinyl flooring
- Outlet diameter DN 70/DN 100 (75 mm or 110 mm O.D.)
- Gully body with location flange or integrated membrane flange for either adhesive bonding or mechanical clamp
- Telescopic friction ring included
- Adjustable EasyFix levelling feet



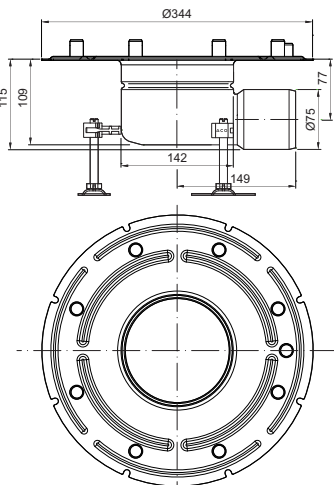
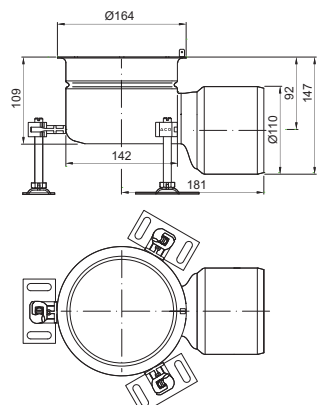
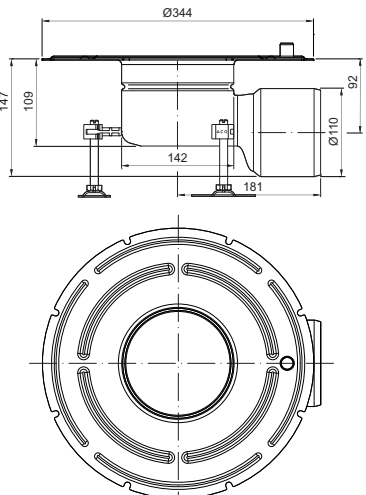
**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)

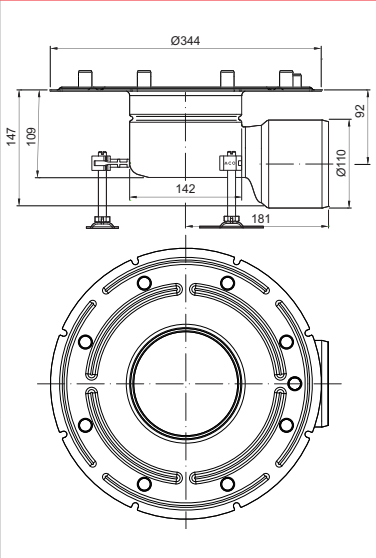
**Order information**

	Type of flange	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	With location flange	75	Without FAT	1.4301	414720
				1.4404	414820
			With FAT	1.4301	414721
				1.4404	414821
	With adhesive bonding flange	75	Without FAT	1.4301	414722
				1.4404	414822
			With FAT	1.4301	414723
				1.4404	414823

**ACO hygienic gully 142**  
**Telescopic – horizontal outlet**

	Type of flange	Outlet diameter Ø [mm]	Foul air trap	Material	Item number
	With mechanical clamping flange	75	Without FAT	1.4301	414724
				1.4404	414824
			With FAT	1.4301	414725
				1.4404	414825
	With location flange	110	Without FAT	1.4301	414726
				1.4404	414826
			With FAT	1.4301	414727
				1.4404	414827
	With adhesive bonding flange	110	Without FAT	1.4301	414728
				1.4404	414828
			With FAT	1.4301	414729
				1.4404	414829



	Type of flange	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	With mechanical clamping flange	110	Without FAT	1.4301	414730
				1.4404	414830
			With FAT	1.4301	414731
				1.4404	414831

**Gully top – telescopic**

**Product information**

Gully top can be combined with telescopic gully. Different gully top types are available depending on floor structure.

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Protective cover available.  
See page 232 for more details

- Tested and certified according to EN 1253
- Gully top frame size: 200 x 200 mm
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



**Order information**

	<b>Gully top type</b>	<b>Gully top size [mm]</b>	<b>Material</b>	<b>Item number</b>
	Standard edge	200 x 200	1.4301	414732
			1.4404	414832
	Extended edge	200 x 200	1.4301	414734
			1.4404	414834

	<b>Gully top type</b>	<b>Gully top size [mm]</b>	<b>Material</b>	<b>Item number</b>
	Extended top with drainage holes	200 x 200	1.4301	414735
			1.4404	414835
	Plastic top with stainless steel grating (K3)	149 x 149	Plastic	414903 *
	MEKU top with stainless steel grating (K3)	148 x 148	Plastic	414904 *
	Square top with stainless steel grating (K3)	148 x 148	1.4301	414905 *

\* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

**ACO hygienic gully 142**  
**Gully top – telescopic**

	<b>Gully top type</b>	<b>Gully top size [mm]</b>	<b>Material</b>	<b>Item number</b>
	Plastic top with stainless steel grating (K3)	150 x 150	Plastic	414906 *
	Plastic thin-bed top with sliding frame and stainless steel grating (K3)	148 x 148	Plastic	414907 *
	Square top with sanded flange and stainless steel grating (K3)	148 x 148	1.4301	414909 *

\* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

**Raising piece – telescopic**

**Product information**

Raising piece can be used for floor structures where multi waterproofing is needed (heat insulation) or where construction height of the slab needs to be increased.

- Tested and certified according to EN 1253
- Suitable for all floor types including vinyl flooring
- Variety of flanges for membranes
- Telescopic friction ring included



**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated

**Order information**

	Type of flange	Material	Item number
	Location flange	1.4301	414736
		1.4404	414836
	Adhesive bonding flange	1.4301	414737
		1.4404	414837
	Mechanical clamping flange	1.4301	414738
		1.4404	414838

**Fixed height – vertical outlet**

**Product information**

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of the gully body. Those gullies can be combined with different grates depending on requested load class.

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available. See page 232 for more details

- Tested and certified according to EN 1253
- Fire tested and certified solution available for classes EI 90 – EI 180 (EN 13 501-2)
- Outlet diameter DN 70/DN 100 (75 mm or 110 mm O.D.)
- Gully top frame size: 200 x 200 mm and 250 x 250 mm
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



**Order information**

	Top size [mm]	Outlet diameter ø [mm]	Foul air trap	Material	Item number
<b>Standard edge</b>					
	200 x 200	75	Without FAT	1.4301	408000
				1.4404	408100
			With FAT	1.4301	408001
				1.4404	408101

**ACO hygienic gully 157**  
**Fixed height – vertical outlet**

	<b>Top size</b> [mm]	<b>Outlet diameter</b> ø [mm]	<b>Foul air trap</b>	<b>Material</b>	<b>Item number</b>
	250 x 250	75	Without FAT	1.4301	408016
				1.4404	408116
			With FAT	1.4301	408017
				1.4404	408117
	200 x 200	110	Without FAT	1.4301	408002
				1.4404	408102
			With FAT	1.4301	408003
				1.4404	408103
	200 x 200 with extended vertical edge and PUR infill	110	With FAT	1.4301	445556

**ACO hygienic gully 157**  
**Fixed height – vertical outlet**

ACO gully

	Top size [mm]	Outlet diameter Ø [mm]	Foul air trap	Material	Item number
<b>Standard edge</b>					
	250 x 250	110	Without FAT	1.4301	408018
				1.4404	408118
			With FAT	1.4301	408019
				1.4404	408119
<b>Extended edge</b>					
	200 x 200	75	With FAT	1.4301	408047
				1.4404	408147
	200 x 200	110	With FAT	1.4301	408099
				1.4404	408199



**Fixed height – horizontal outlet**

**Product information**

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of the gully body.

Those gullies can be combined with different grates depending on requested load class.

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available.  
See page 232 for more details

- Tested and certified according to EN 1253
- Outlet diameter DN 70/DN 100 (75 mm or 110 mm O.D.)
- Gully top frame size: 200 x 200 mm and 250 x 250 mm
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



**Order information**

	<b>Top size</b> [mm]	<b>Outlet diameter</b> ø [mm]	<b>Foul air trap</b>	<b>Material</b>	<b>Item number</b>
<b>Standard edge</b>					
	200 x 200	75	Without FAT	1.4301	408008
				1.4404	408108
			With FAT	1.4301	408009
				1.4404	408109
	250 x 250	75	Without FAT	1.4301	408024
				1.4404	408124
			With FAT	1.4301	408025
				1.4404	408125

# ACO hygienic gully 157

## Fixed height – horizontal outlet

	Top size [mm]	Outlet diameter Ø [mm]	Foul air trap	Material	Item number
<b>Standard edge</b>					
	200 x 200	110	Without FAT	1.4301	408010
				1.4404	408110
			With FAT	1.4301	408011
				1.4404	408111
	200 x 200 with extended vertical edge and PUR infill	110	With FAT	1.4301	445557
	250 x 250	110	Without FAT	1.4301	408026
				1.4404	408126
			With FAT	1.4301	408027
				1.4404	408127

**ACO hygienic gully 157**  
**Fixed height – horizontal outlet**

	<b>Top size</b> [mm]	<b>Outlet diameter</b> ø [mm]	<b>Foul air trap</b>	<b>Material</b>	<b>Item number</b>
<b>Extended edge</b>					
	200 x 200	75	With FAT	1.4301	408014
				1.4404	408114
	200 x 200	110	With FAT	1.4301	408015
				1.4404	408115

**Telescopic – vertical outlet**

**Product information**

Telescopic gully can be combined either with gully top or ACO channel in most flooring constructions.

Telescopic solution enables height and rotational adjustment of connected gully top or channel. Gullies are equipped with flanges for connection of waterproof membrane.

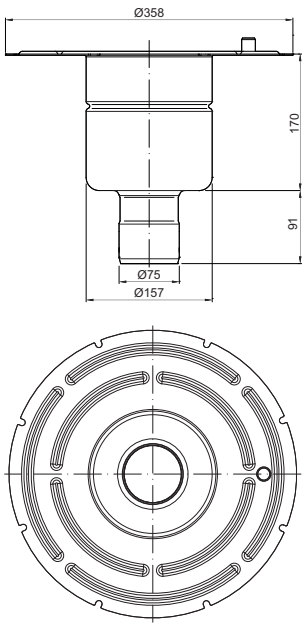
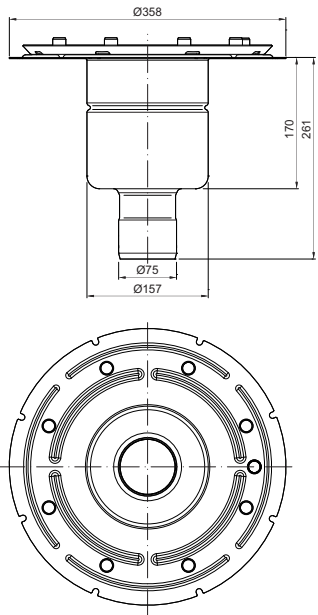
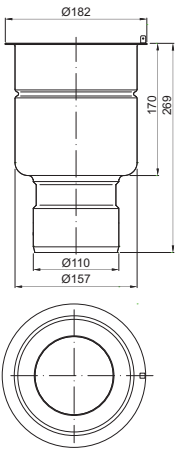
**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Tested and certified according to EN 1253
- Fire tested and certified solution available for classes EI 90 – EI 180 (EN 13 501-2)
- Suitable for all floor types including vinyl flooring
- Outlet diameter DN 70/DN 100 (75 mm or 110 mm O.D.)
- Gully body with location flange or integrated membrane flange for either adhesive bonding or mechanical clamp
- Telescopic friction ring included



**Order information**

	Type of flange	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	Location flange	75	Without FAT	1.4301	408048
				1.4404	408148
			With FAT	1.4301	408049
				1.4404	408149

	Type of flange	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	Adhesive bonding flange	75	Without FAT	1.4301	408050
				1.4404	408150
			With FAT	1.4301	408051
				1.4404	408151
	Mechanical clamping flange	75	Without FAT	1.4301	408052
				1.4404	408152
			With FAT	1.4301	408053
				1.4404	408153
	Location flange	110	Without FAT	1.4301	408054
				1.4404	408154
			With FAT	1.4301	408055
				1.4404	408155

**ACO hygienic gully 157**  
**Telescopic – vertical outlet**

	Type of flange	Outlet diameter Ø [mm]	Foul air trap	Material	Item number
	Adhesive bonding flange	110	Without FAT	1.4301	408056
				1.4404	408156
			With FAT	1.4301	408057
				1.4404	408157
	Mechanical clamping flange	110	Without FAT	1.4301	408058
				1.4404	408158
			With FAT	1.4301	408059
				1.4404	408159

**Telescopic – horizontal outlet**

**Product information**

Telescopic gully can be combined either with gully top or ACO channel in most flooring constructions.

Telescopic solution enables height and rotational adjustment of connected gully top or channel. Gullies are equipped with flanges for connection of waterproof membrane.

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)

- Tested and certified according to EN 1253
- Suitable for all floor types including vinyl flooring
- Outlet diameter DN 70/DN 100 (75 mm or 110 mm O.D.)
- Gully body with location flange or integrated membrane flange for either adhesive bonding or mechanical clamp
- Telescopic friction ring included
- Adjustable EasyFix levelling feet



**Order information**

	Type of flange	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	Location flange	75	Without FAT	1.4301	408072
				1.4404	408172
			With FAT	1.4301	408073
				1.4404	408173

**ACO hygienic gully 157**  
**Telescopic – horizontal outlet**

	Type of flange	Outlet diameter Ø [mm]	Foul air trap	Material	Item number
	Adhesive bonding flange	75	Without FAT	1.4301	408074
				1.4404	408174
			With FAT	1.4301	408075
				1.4404	408175
	Mechanical clamping flange	75	Without FAT	1.4301	408076
				1.4404	408176
			With FAT	1.4301	408077
				1.4404	408177
	Location flange	110	Without FAT	1.4301	408078
				1.4404	408178
			With FAT	1.4301	408079
				1.4404	408179



	Type of flange	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	Adhesive bonding flange	110	Without FAT	1.4301	408080
				1.4404	408180
			With FAT	1.4301	408081
				1.4404	408181
	Mechanical clamping flange	110	Without FAT	1.4301	408082
				1.4404	408182
			With FAT	1.4301	408083
				1.4404	408183

**Gully top – telescopic**

**Product information**

Gully top can be combined with telescopic gully. Different gully top type is available depending on floor structure.

**HygieneFirst features**

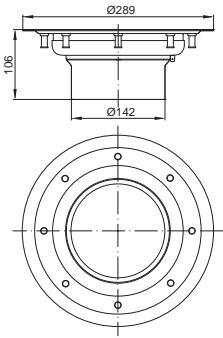
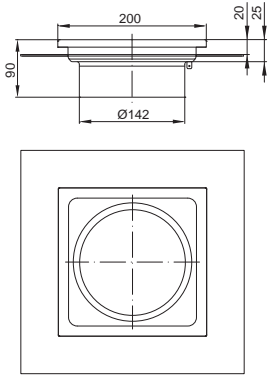
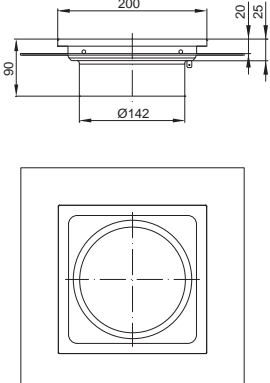
- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in grades 1.4301 (304) or 1.4401 (316L) of stainless steel
- Fully pickled and passivated
- Protective cover available. See page 232 for more details

- Tested and certified according to EN 1253
- Gully top frame size: 200 x 200 mm and 250 x 250 mm
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



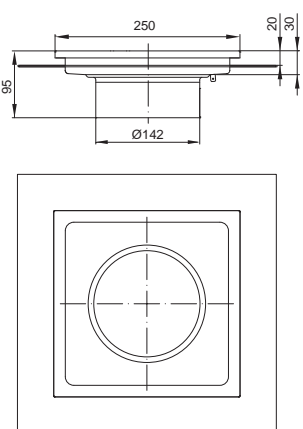
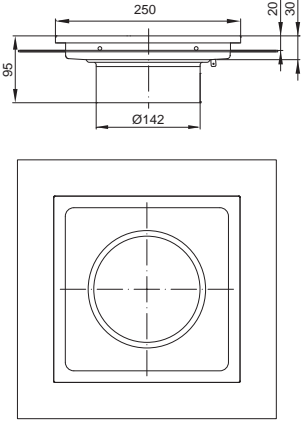
**Order information**

	<b>Gully top type</b>	<b>Gully top size [mm]</b>	<b>Material</b>	<b>Item number</b>
	Standard edge	200 x 200	1.4301	408208
			1.4404	408218
	Standard edge	200 x 200 with extended vertical edge	1.4301	446401
	Standard edge	250 x 250	1.4301	408248
			1.4404	408258

	<b>Gully top type</b>	<b>Gully top size [mm]</b>	<b>Material</b>	<b>Item number</b>
	Vinyl edge	Ø289	1.4301	408240 *
			1.4404	408250 *
	Extended edge	200 x 200	1.4301	408241
			1.4404	408251
	Extended edge with drainage holes	200 x 200	1.4301	408244
			1.4404	408254

\* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

**ACO hygienic gully 157**  
**Gully top – telescopic**

	<b>Gully top type</b>	<b>Gully top size [mm]</b>	<b>Material</b>	<b>Item number</b>
	Extended edge	250 x 250	1.4301	408245
			1.4404	408255
	Extended edge with drainage holes	250 x 250	1.4301	408246
			1.4404	408256

**Raising piece – telescopic**

**Product information**

Raising piece can be used for floor structures where multiple waterproofing is needed (heat insulation) or where construction height of the slab needs to be increased.

- Tested and certified according to EN 1253
- Suitable for all floor types including vinyl flooring
- Variety of flanges for membranes
- Telescopic friction ring included



**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated

**Order information**

	Type of flange	Material	Item number
	Location flange	1.4301	408249
		1.4404	408259
	Adhesive bonding flange	1.4301	408206
		1.4404	408216
	Mechanical clamping flange	1.4301	408207
		1.4404	408217

**Fixed height – vertical outlet**

**Product information**

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of the gully body. Those gullies can be combined with different grates depending on requested load class.

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available. See page 232 for more details

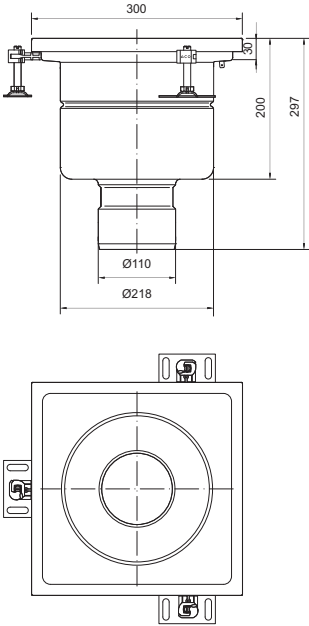
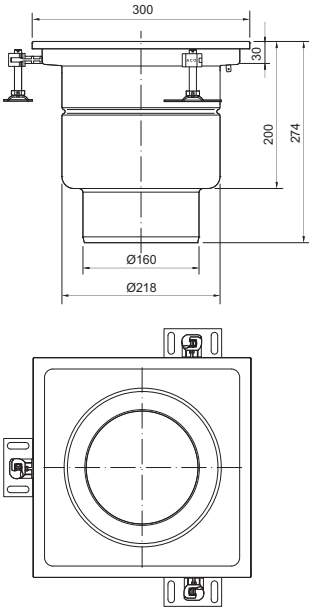
- Tested and certified according to EN 1253
- Fire tested and certified solution available for classes EI 90 – EI 180 (EN 13 501-2)
- Outlet diameter DN 100/DN 150 (110 mm or 160 mm O.D.)
- Gully top frame size: 300 x 300 mm
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



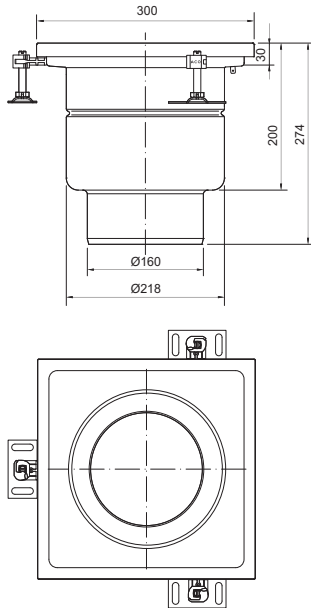
**Order information**

	<b>Top size</b> [mm]	<b>Outlet diameter</b> ø [mm]	<b>Foul air trap</b>	<b>Material</b>	<b>Item number</b>
<b>Standard edge</b>					
	300 x 300	110	Without FAT	1.4301	408004
			Without FAT	1.4404	408104
			With FAT	1.4301	408005
			With FAT	1.4404	408105

**ACO hygienic gully 218**  
**Fixed height – vertical outlet**

	<b>Top size</b> [mm]	<b>Outlet diameter</b> ø [mm]	<b>Foul air trap</b>	<b>Material</b>	<b>Item number</b>
	300 x 300 with extended vertical edge and PUR infill	110	With FAT	1.4301	445559
	300 x 300	160	Without FAT	1.4301	408006
				1.4404	408106
			With FAT	1.4301	408007
				1.4404	408107

**ACO hygienic gully 218**  
**Fixed height – vertical outlet**

	Top size [mm]	Outlet diameter Ø [mm]	Foul air trap	Material	Item number
	<p>300 x 300 with extended vertical edge and PUR infill</p>	<p>160</p>	<p>With FAT</p>	<p>1.4301</p>	<p>445560</p>



**Fixed height – horizontal outlet**

**Product information**

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of the gully body. Those gullies can be combined with different grates depending on requested load class.

- Tested and certified according to EN 1253
- Outlet diameter DN 100/DN 150 (110 mm or 160 mm O.D.)
- Gully top frame size: 300 x 300 mm
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



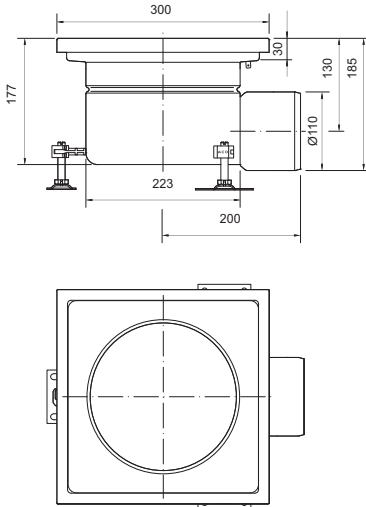
**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available. See page 232 for more details

**Order information**

	<b>Top size</b> [mm]	<b>Outlet diameter</b> ø [mm]	<b>Foul air trap</b>	<b>Material</b>	<b>Item number</b>
<b>Standard edge</b>					
	300 x 300	110	Without FAT	1.4301	408012
				1.4404	408112
			With FAT	1.4301	408013
				1.4404	408113

**ACO hygienic gully 218**  
**Fixed height – horizontal outlet**

	Top size [mm]	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	300 x 300 with extended vertical edge and PUR infill	110	With FAT	1.4301	445561

**Telescopic – vertical outlet**

**Product information**

Telescopic gully can be combined either with ACO gully top or ACO channel in most flooring constructions.

Telescopic solution enables height and rotational adjustment of connected gully top or channel. Gullies are equipped with flanges for connection of waterproof membrane.

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)

- Tested and certified according to EN 1253
- Fire tested and certified solution available for classes EI 90 – EI 180 (EN 13 501-2)
- Suitable for all floor types including vinyl flooring
- Outlet diameter DN 100/DN 160 (110 mm or 160 mm O.D.)
- Gully body with location flange or integrated membrane flange for either adhesive bonding or mechanical clamp
- Telescopic friction ring included

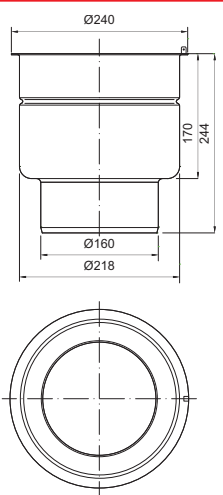
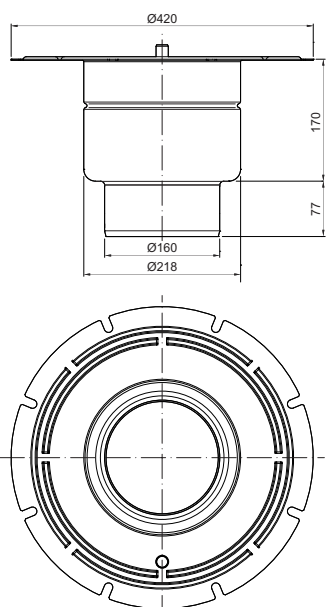
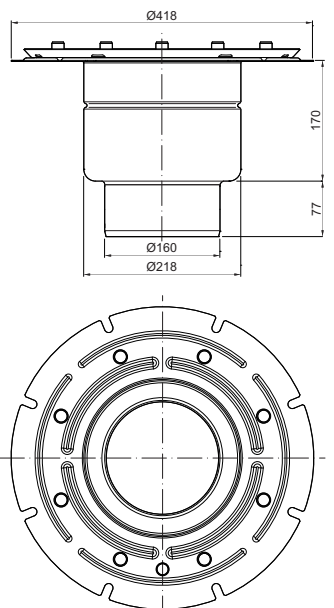


**Order information**

	Type of flange	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	Location flange	110	Without FAT	1.4301	408060
				1.4404	408160
			With FAT	1.4301	408061
				1.4404	408161

**ACO hygienic gully 218**  
**Telescopic - vertical outlet**

	Type of flange	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	Adhesive bonding flange	110	Without FAT	1.4301	408062
				1.4404	408162
			With FAT	1.4301	408063
				1.4404	408163
	Mechanical clamping flange	110	Without FAT	1.4301	408064
				1.4404	408164
			With FAT	1.4301	408065
				1.4404	408165

	Type of flange	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	Location flange	160	Without FAT	1.4301	408066
				1.4404	408166
			With FAT	1.4301	408067
				1.4404	408167
	Adhesive bonding flange	160	Without FAT	1.4301	408068
				1.4404	408168
			With FAT	1.4301	408069
				1.4404	408169
	Mechanical clamping flange	160	Without FAT	1.4301	408070
				1.4404	408170
			With FAT	1.4301	408071
				1.4404	408171

**Telescopic – horizontal outlet**

**Product information**

Telescopic gully can be combined either with gully top or ACO channel in most flooring constructions.

Telescopic solution enables height and rotational adjustment of connected gully top or channel. Gullies are equipped with flanges for connection of waterproof membrane.

- Tested and certified according to EN 1253
- Suitable for all floor types including vinyl flooring
- Outlet diameter DN 100/DN 160 (110 mm or 160 mm O.D.)
- Gully body with location flange or integrated membrane flange for either adhesive bonding or mechanical clamp
- Telescopic friction ring included
- Adjustable EasyFix levelling feet



**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)

**Order information**

	Type of flange	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	Location flange	110	Without FAT	1.4301	408084
				1.4404	408184
			With FAT	1.4301	408085
				1.4404	408185

	Type of flange	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	Adhesive bonding flange	110	Without FAT	1.4301	408086
				1.4404	408186
			With FAT	1.4301	408087
				1.4404	408187
	Mechanical clamping flange	110	Without FAT	1.4301	408088
				1.4404	408188
			With FAT	1.4301	408089
				1.4404	408189

**Gully top – telescopic**

**Product information**

Gully top can be combined with telescopic gully. Different gully top type is available depending on floor structure.

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Protective cover available.  
See page 232 for more details

- Tested and certified according to EN 1253
- Gully top frame size: 300 x 300 mm
- Wide range of gratings for load class L 15, R 50, M 125 or N 250 (EN 1253) including slip resistant solution
- Adjustable EasyFix levelling feet



**Order information**

	<b>Gully Top type</b>	<b>Gully Top size [mm]</b>	<b>Material</b>	<b>Item number</b>
	Standard edge	300 x 300	1.4301	408228
			1.4404	408238
	Standard edge	300 x 300 with extended vertical edge	1.4301	446402



	<b>Gully Top type</b>	<b>Gully Top size [mm]</b>	<b>Material</b>	<b>Item number</b>
	Vinyl edge	ø350	1.4301	408242 *
			1.4404	408252 *
	Extended edge	300 x 300	1.4301	408243
			1.4404	408253
	Extended edge with drainage holes	300 x 300	1.4301	408247
			1.4404	408257

\* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

**Raising piece – telescopic**

**Product information**

Raising piece can be used for floor structures where multiple waterproofing is needed (heat insulation) or where construction height of the slab needs to be increased.

- Tested and certified according to EN 1253
- Suitable for all floor types including vinyl flooring
- Variety of flanges for membranes
- Telescopic friction ring included



**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated

**Order information**

	Type of flange	Material	Item number
	Location flange	1.4301	408209
		1.4404	408219
	Adhesive bonding flange	1.4301	408226
		1.4404	408236
	Mechanical clamping flange	1.4301	408227
		1.4404	408237

Fixed height

Product information

Fixed height gully can be specified as a point drainage in areas where waterproofing is independent of the gully body. 2 pieces are required for ordering grating for ACO gully - high capacity.

HygieneFirst features

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) grades of stainless steel
- Fully pickled and passivated
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Protective cover available.  
See page 232 for more details



Order information

	Top size [mm]	Outlet diameter ø [mm]	Foul air trap	Material	Item number
	600 x 600	200	Without FAT	1.4301	446396
				1.4404	446412
			With FAT	1.4301	446397
				1.4404	446413

**Telescopic – vertical outlet**

**Product information**

ACO gully EG150 can be combined with ACO channel with outlet diameter 110 mm. Foul air trap needs to be ordered separately.

- Stainless steel construction for durability and long life



**Order information**

	FAT	Material	Item number
	Without FAT	1.4301	405066 *
		1.4404	402663 *
	Without FAT	1.4301	408805 *
		1.4404	405312 *

\* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

**Telescopic – horizontal outlet**

**Product information**

ACO gully EG150 can be combined with ACO channel with outlet diameter 110 mm. Foul air trap needs to be ordered separately.

- Stainless steel construction for durability and long life



**Order information**

	<b>FAT</b>	<b>Material</b>	<b>Item number</b>
	Without FAT	1.4301	<b>406677</b> *
		1.4404	<b>405311</b> *

\* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

**Gratings for gully top 200 x 200 mm**

**Product information**

Variety of grate types is available depending on application and requested load class. For applications with high hygienic demands ladder grate or cast grate should be selected.

- Fits to stainless steel gully, fully compliant to EN 1253 and NSF International
- Gully top frame size: 200 x 200 mm
- Range of gratings suitable to load class L 15, R 50, M 125 or N 250 (EN 1253)
- Slip resistant solution available

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated

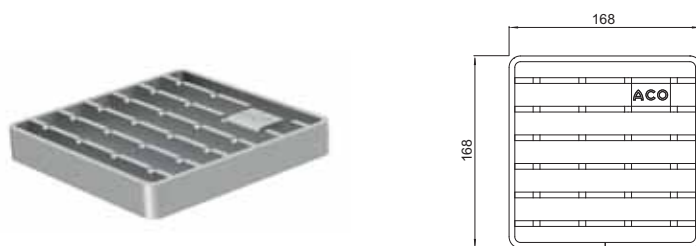
**ACO frameless ladder grating**



Load class	Slip resistant	Material	Item number
M 125	Yes	1.4301	446264
		1.4404	446265

Note: Surface electropolished

**ACO hygienic ladder grating**



Load class	Slip resistant	Material	Item number
R 50	Yes	1.4301	416912
		1.4404	416913
M 125	Yes	1.4301	408093
		1.4404	408193
N 250	No	1.4301	408043
		1.4404	408143

Note: Surface electropolished

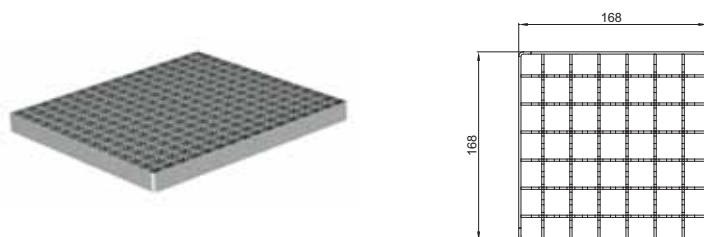
ACO hygienic cast grating



Load class	Slip resistant	Material	Item number
M 125	Yes	1.4301	416942

Note: Surface electropolished

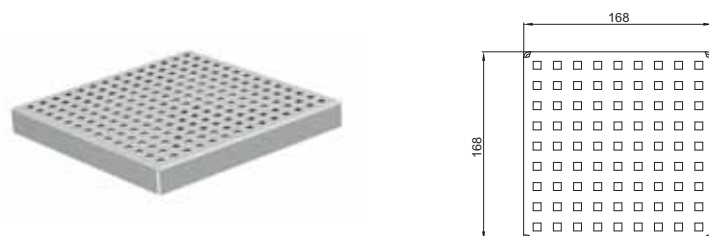
ACO mesh grating



Load class	Slip resistant	Material	Item number
L 15	Yes	1.4301	408090 *
		1.4404	408190 *
	No	1.4301	408091 *
		1.4404	408191 *

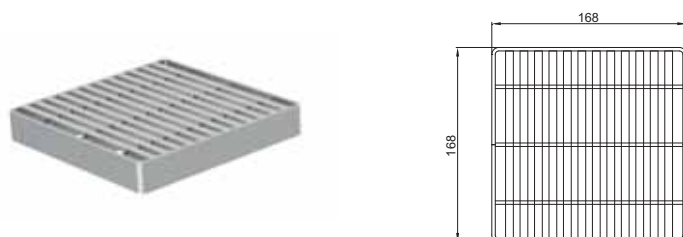
Note: Surface electropolished

ACO quadrato grating



Load class	Slip resistant	Material	Item number
L 15	No	1.4301	408092 *
		1.4404	408192 *

ACO heelsafe grating



Load class	Slip resistant	Material	Item number
L 15	No	1.4301	408022 *
		1.4404	408122 *

\* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

# Gratings

## Gratings for gully top 200 x 200 mm

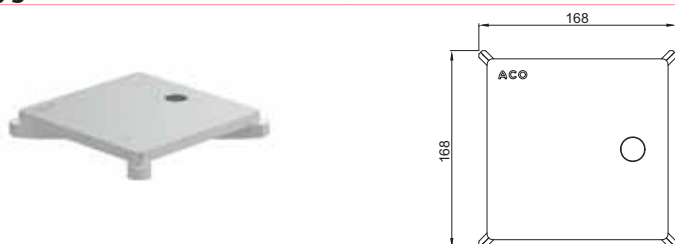
### ACO multi-slot 5 grating



Load class	Slip resistant	Material	Item number
L 15	Yes	1.4301	408094 *
		1.4404	408194 *

Note: Surface electropolished

### ACO hygienic slot cover



Load class	Slip resistant	Material	Item number
R 50	Yes	1.4301	445780
		1.4404	445781
M 125	Yes	1.4301	445782
		1.4404	445783

Note: Top surface sandblasted

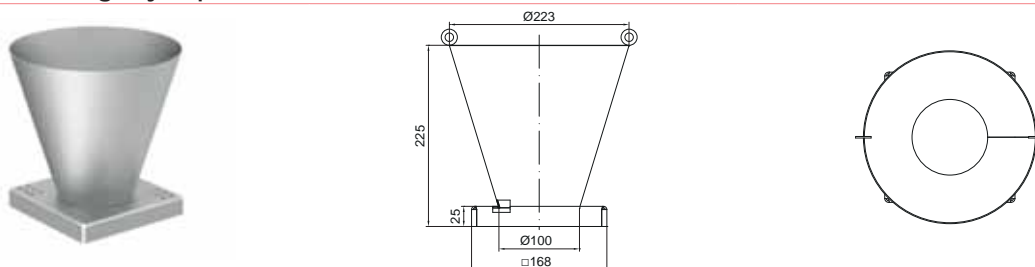
### ACO odour proof gully cover



Load class	Slip resistant	Material	Item number
R 50	No	1.4404	445398 *
M 125	No	1.4404	445605 *

For ACO vacuum handle, please go to page 72.

### ACO tundish for gully top



Description	Material	Item number
ACO tundish for gully top 200 x 200	1.4301	415918

\* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.



## Gratings for gully top 250 x 250 mm

### Product information

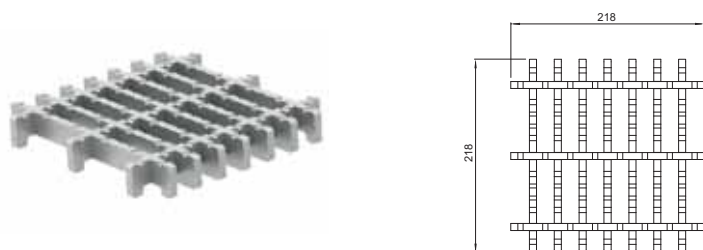
Variety of grate types is available depending on application and requested load class. For applications with high hygienic demands ladder grate or cast grate should be selected.

- Fits to stainless steel gully, fully compliant to EN 1253 and NSF International
- Gully top frame size: 250 x 250 mm
- Range of gratings suitable to load class L 15, R 50, M 125 or N 250 (EN 1253)
- Slip resistant solution available

### HygieneFirst features

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated

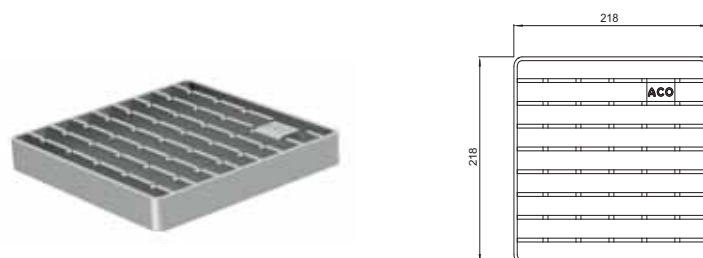
### ACO frameless ladder grating



Load class	Slip resistant	Material	Item number
M 125	Yes	1.4301	446268
		1.4404	446269

Note: Surface electropolished

### ACO hygienic ladder grating



Load class	Slip resistant	Material	Item number
R 50	Yes	1.4301	416914
		1.4404	416915
M 125	Yes	1.4301	408028
		1.4404	408128
N 250	No	1.4301	408044
		1.4404	408144

Note: Surface electropolished

# Gratings

## Gratings for gully top 250 x 250 mm

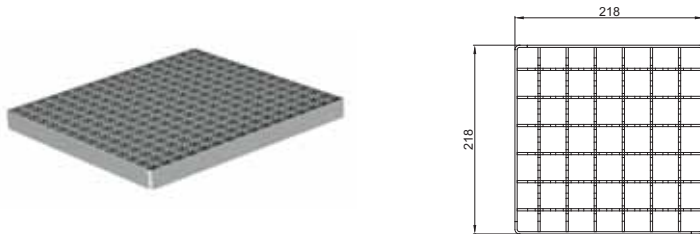
### ACO hygienic cast grating



Load class	Slip resistant	Material	Item number
M 125	Yes	1.4301	416943

Note: Surface electropolished

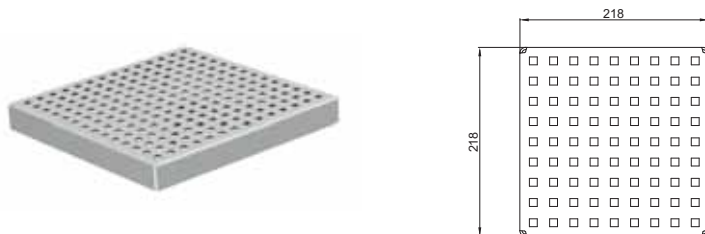
### ACO mesh grating



Load class	Slip resistant	Material	Item number
L 15	Yes	1.4301	408095 *
		1.4404	408195 *
	No	1.4301	408096 *
		1.4404	408196 *

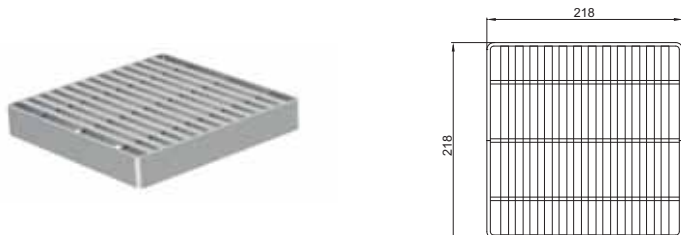
Note: Surface electropolished

### ACO quadrato grating



Load class	Slip resistant	Material	Item number
L 15	No	1.4301	408097 *
		1.4404	408197 *

### ACO heelsafe grating



Load class	Slip resistant	Material	Item number
L 15	No	1.4301	408031 *
		1.4404	408131 *

\* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

ACO multi-slot 5 grating



Load class	Slip resistant	Material	Item number
L 15	Yes	1.4301	408033 *
		1.4404	408133 *

Note: Surface electropolished

ACO hygienic slot cover



Load class	Slip resistant	Material	Item number
R 50	Yes	1.4301	445784
		1.4404	445785
M 125	Yes	1.4301	445786
		1.4404	445787

Note: Top surface sandblasted

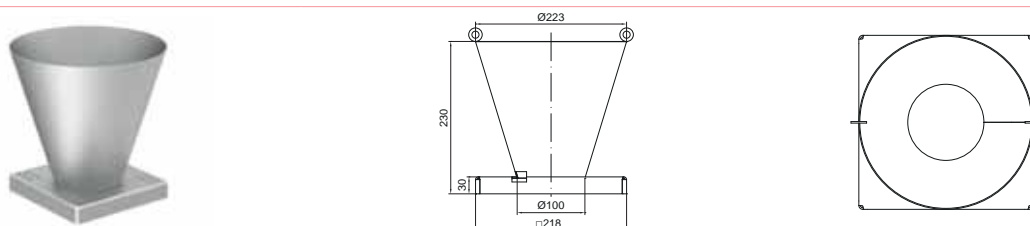
ACO odour proof gully cover



Load class	Slip resistant	Material	Item number
R 50	No	1.4404	445399 *
M 125	No	1.4404	445607 *

For ACO vacuum handle, please go to page 73.

ACO tundish for gully top



Description	Material	Item number
ACO tundish for gully top 250 x 250	1.4301	413546

\* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

**Gratings for gully top 300 x 300 mm**

**Product information**

Variety of grate types is available depending on application and requested load class. For applications with high hygienic demands ladder grate or cast grate should be selected.

- Fits to stainless steel gully, fully compliant to EN 1253 and NSF International
- Gully top frame size: 300 x 300 mm
- Range of gratings suitable to load class L 15, R 50, M 125 or N 250 (EN 1253)
- Slip resistant solution available

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated

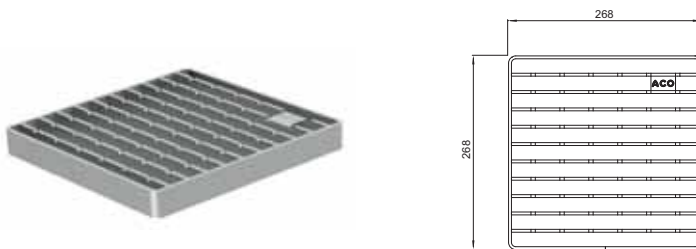
**ACO frameless ladder grating**



Load class	Slip resistant	Material	Item number
M 125	Yes	1.4301	446272
		1.4404	446273

Note: Surface electropolished

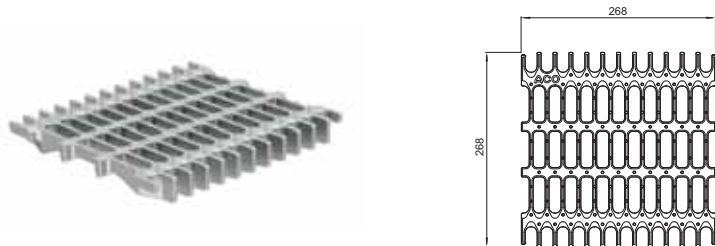
**ACO hygienic ladder grating**



Load class	Slip resistant	Material	Item number
R 50	Yes	1.4301	416916
		1.4404	416917
M 125	Yes	1.4301	408037
		1.4404	408137
N 250	No	1.4301	408045
		1.4404	408145

Note: Surface electropolished

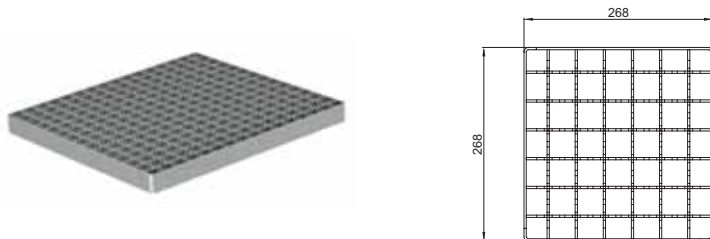
**ACO hygienic cast grating**



Load class	Slip resistant	Material	Item number
M 125	Yes	1.4301	416944

Note: Surface electropolished

**ACO mesh grating**



Load class	Slip resistant	Material	Item number
L 15	Yes	1.4301	408034
		1.4404	408134
	No	1.4301	408035 *
		1.4404	408135 *

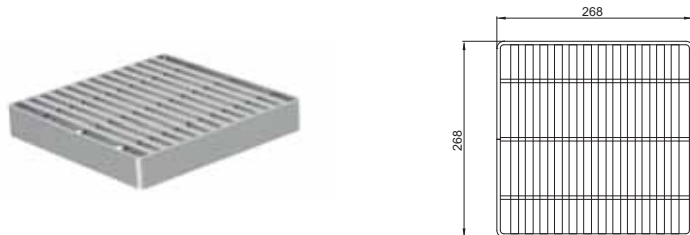
Note: Surface electropolished

**ACO quadrato grating**



Load class	Slip resistant	Material	Item number
L 15	No	1.4301	408036 *
		1.4404	408136 *

**ACO heelsafe grating**



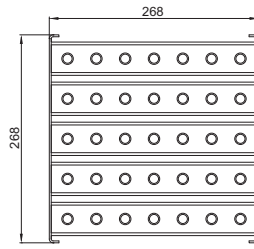
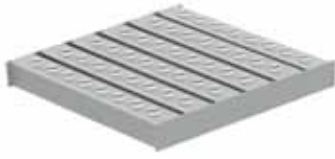
Load class	Slip resistant	Material	Item number
L 15	No	1.4301	408040 *
		1.4404	408140 *

\* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

## Gratings

### Gratings for gully top 300 x 300 mm

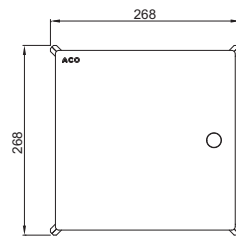
#### ACO multi-slot 5 grating



Load class	Slip resistant	Material	Item number
L 15	Yes	1.4301	408042 *
		1.4404	408142 *

Note: Surface electropolished

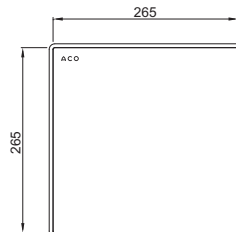
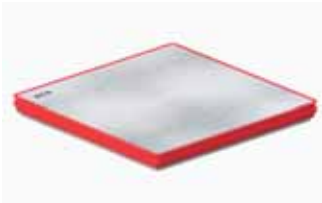
#### ACO hygienic slot cover



Load class	Slip resistant	Material	Item number
R 50	Yes	1.4301	445788
		1.4404	445789
M 125	Yes	1.4301	445790
		1.4404	445791

Note: Top surface sandblasted

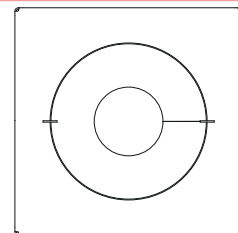
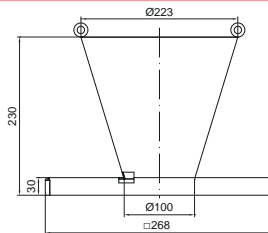
#### ACO odour proof gully cover



Load class	Slip resistant	Material	Item number
R 50	No	1.4404	445400 *
M 125	No	1.4404	445609 *

For ACO vacuum handle, please go to page 74.

#### ACO tundish for gully top



Description	Material	Item number
ACO tundish for gully top 300 x 300	1.4301	413547

\* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

## Gratings for vinyl top ø170

### Product information

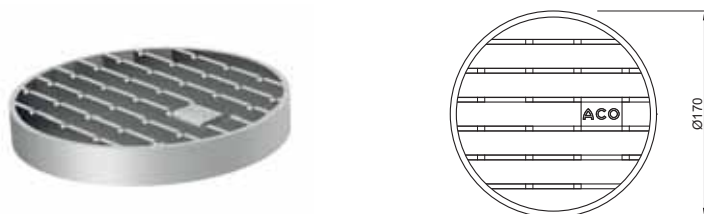
Variety of grate types is available depending on application and requested load class. For applications with high hygienic demands ladder grate or cast grate should be selected.

- Fits to stainless steel gully, fully compliant to EN 1253
- Stainless steel construction for durability and long life
- Range of gratings suitable to load class L 15 and M 125 (EN 1253)
- Slip resistant solution available

### HygieneFirst features

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated

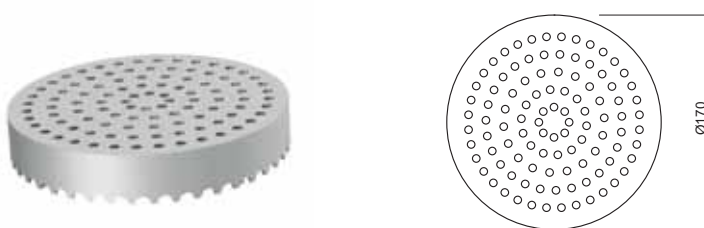
### ACO ladder grating



Load class	Slip resistant	Material	Item number
M 125	Yes	1.4301	97146
		1.4404	97367

Note: Surface electropolished

### ACO perforated grating



Load class	Slip resistant	Material	Item number
L 15	No	1.4301	97152 *
		1.4404	97369 *

\* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

### ACO odour proof gully cover

For ACO odour proof gully cover, please contact our Sales/Technical department.

**Gratings for vinyl top ø222**

**Product information**

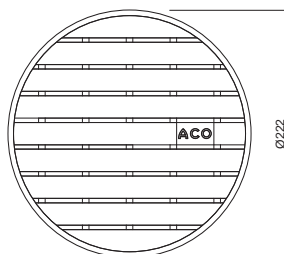
Variety of grate types is available depending on application and requested load class. For applications with high hygienic demands ladder grate or cast grate should be selected.

- Fits to stainless steel gully, fully compliant to EN 1253
- Stainless steel construction for durability and long life
- Range of gratings suitable to load class L 15 and M 125 (EN 1253)
- Slip resistant solution available

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated

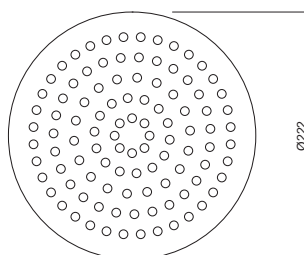
**ACO ladder grating**



Load class	Slip resistant	Material	Item number
M 125	Yes	1.4301	97148
		1.4404	97388

Note: Surface electropolished

**ACO perforated grating**



Load class	Slip resistant	Material	Item number
L 15	No	1.4301	97153 *
		1.4404	97390 *

\* Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13, 44 not applied.

**ACO odour proof gully cover**

For ACO odour proof gully cover, please contact our Sales/Technical department.



**Grating for ACO hygienic gully - high capacity**

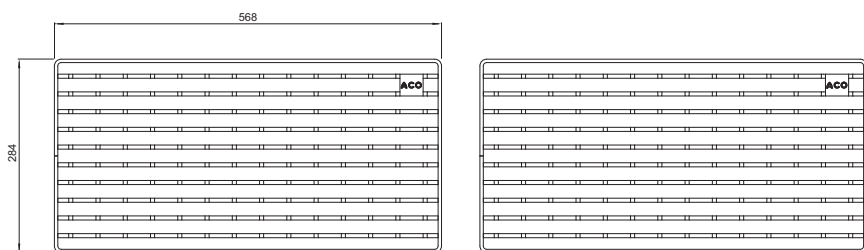
**Product information**

Variety of grate types is available depending on application and requested load class. For applications with high hygienic demands ladder grate or cast grate should be selected. 2 pieces are required for ordering grating for ACO hygienic gully - high capacity

**HygieneFirst features**

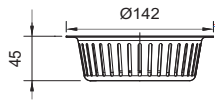
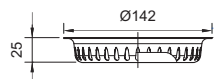
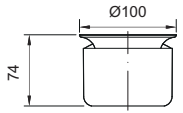

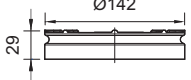
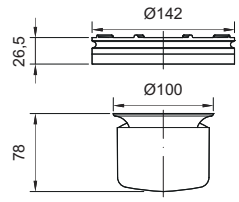
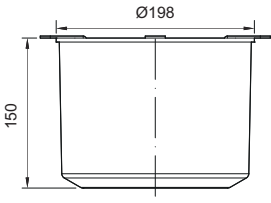
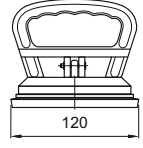
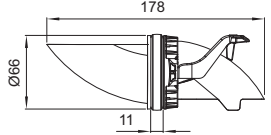
- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) grades of stainless steel
- Fully pickled and passivated

**ACO hygienic ladder grating**

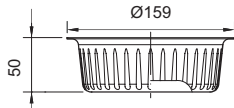
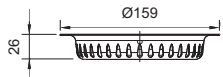
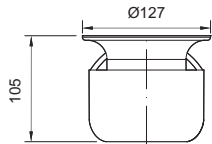

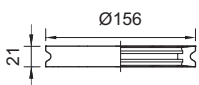
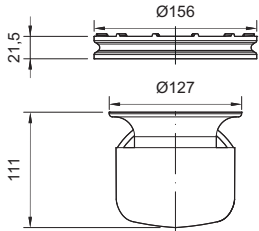
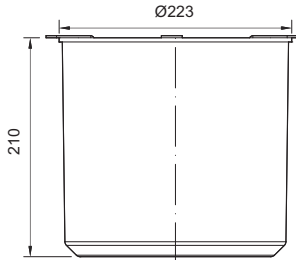
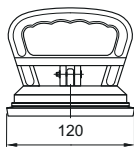
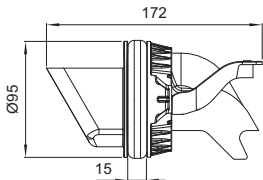


Load class	Slip resistant	Material	Item number
R 50	Yes	1.4301	446400
		1.4404	446416

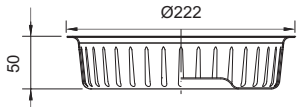
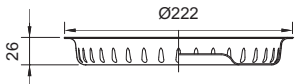
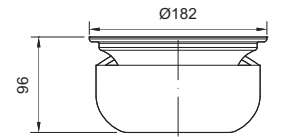

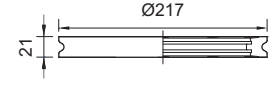
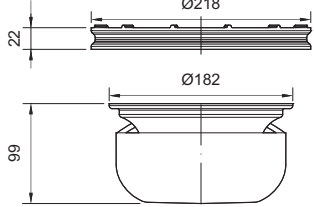
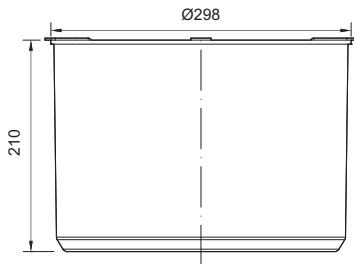
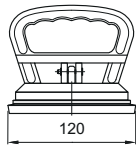
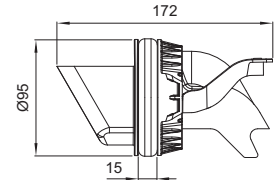
Accessories for ACO hygienic gully 142

	Description	Used with	Material	Item number
	ACO silt basket ■ Stainless steel ■ 0,4 litre capacity	■ ACO hygienic gully 142 - Telescopic <input type="checkbox"/> Vertical or horizontal	1.4301	<b>416900</b>
			1.4404	<b>416901</b>
	ACO silt basket ■ Stainless steel ■ 0,3 litre capacity	■ ACO hygienic gully 142 - Fixed height <input type="checkbox"/> Vertical or horizontal	1.4301	<b>416902</b>
			1.4404	<b>416903</b>
	ACO hygienic foul air trap ■ Stainless steel ■ Water seal 50 mm	■ ACO hygienic gully 142 <input type="checkbox"/> Fixed height <input type="checkbox"/> Telescopic	1.4301	<b>414741</b>
			1.4404	<b>414841</b>
	ACO friction ring ■ SBR (Styrene-butadiene rubber)	■ ACO hygienic gully 142 <input type="checkbox"/> Telescopic	SBR	<b>414742</b>
	ACO standard foul air trap support ■ NBR (Acryl nitrile-butadiene rubber)	■ ACO hygienic gully 142 <input type="checkbox"/> Fixed height <input type="checkbox"/> Telescopic	NBR	<b>414743</b>
	ACO fire resistant kit for gully 142/DN 70 <input type="checkbox"/> Fixed height, vertical <input type="checkbox"/> Telescopic, vertical	■ ACO hygienic gully 142 <input type="checkbox"/> Fixed height, vertical <input type="checkbox"/> Telescopic, vertical	1.4404 / NBR	<b>416930</b>
				
	ACO vacuum handle	■ ACO odour proof gully cover	Aluminium	<b>445622</b>
	ACO foul air trap for horizontal outlet DN70 and DN100 ■ PP (Polypropylene plastic) ■ NBR (Acryl nitrile-butadiene rubber)	■ ACO hygienic gully 142 - Horizontal <input type="checkbox"/> Fixed height or Telescopic	PP / NBR	<b>9575.30.15</b>

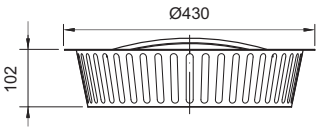
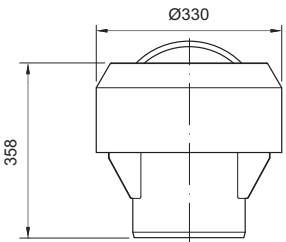
Accessories for ACO hygienic gully 157

	Description	Used with	Material	Item number
	ACO silt basket ■ Stainless steel ■ 0,4 litre capacity	■ ACO hygienic gully 157 - Vertical <input type="checkbox"/> Fixed height or Telescopic	1.4301	<b>416904</b>
			1.4404	<b>416905</b>
	ACO silt basket ■ Stainless steel ■ 0,3 litre capacity	■ ACO hygienic gully 157 - Horizontal <input type="checkbox"/> Fixed height or Telescopic	1.4301	<b>416906</b>
			1.4404	<b>416907</b>
	ACO hygienic foul air trap ■ Stainless steel ■ Water seal 50 mml	■ ACO hygienic gully 157 <input type="checkbox"/> Telescopic	1.4301	<b>408200</b>
			1.4404	<b>408210</b>
	ACO friction ring ■ SBR (Styrene-butadiene rubber)	■ ACO hygienic gully 157 <input type="checkbox"/> Telescopic	SBR	<b>408205</b>
	ACO standard foul air trap support ■ NBR (Acryl nitrile-butadiene rubber)	■ ACO hygienic gully 157 <input type="checkbox"/> Fixed height <input type="checkbox"/> Telescopic	NBR	<b>408201</b>
	ACO fire resistant kit for gully 157/DN 70 <input type="checkbox"/> Fixed height, vertical <input type="checkbox"/> Telescopic, vertical	■ ACO hygienic gully 157 <input type="checkbox"/> Fixed height, vertical <input type="checkbox"/> Telescopic, vertical	1.4404 / NBR	<b>416932</b>
				
	ACO vacuum handle	■ ACO odour proof gully cover	Aluminium	<b>445622</b>
	ACO foul air trap for horizontal outlet DN100 ■ PP (Polypropylene plastic) ■ NBR (Acryl nitrile-butadiene rubber)	■ ACO hygienic gully 157 - Horizontal <input type="checkbox"/> Fixed height or Telescopic	PP / NBR	<b>445845</b>

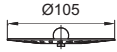
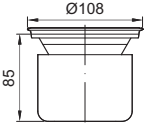
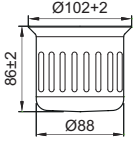
Accessories for ACO hygienic gully 218

	Description	Used with	Material	Item number
	ACO silt basket ■ Stainless steel ■ 1,4 litre capacity	■ ACO hygienic gully 218 - Vertical <input type="checkbox"/> Fixed height or Telescopic	1.4301	<b>416908</b>
			1.4404	<b>416909</b>
	ACO silt basket ■ Stainless steel ■ 0,7 litre capacity	■ ACO hygienic gully 218 - Horizontal <input type="checkbox"/> Fixed height or Telescopic	1.4301	<b>416910</b>
			1.4404	<b>416911</b>
	ACO hygienic foul air trap ■ Stainless steel ■ Water seal 50 mm	■ ACO hygienic gully 218 <input type="checkbox"/> Fixed height <input type="checkbox"/> Telescopic	1.4301	<b>408220</b>
			1.4404	<b>408230</b>
	ACO friction ring ■ SBR (Styrene-butadiene rubber)	■ ACO hygienic gully 218 <input type="checkbox"/> Telescopic	SBR	<b>408225</b>
	ACO standard foul air trap support ■ NBR (Acryl nitrile-butadiene rubber)	■ ACO hygienic gully 218 <input type="checkbox"/> Fixed height <input type="checkbox"/> Telescopic	NBR	<b>408221</b>
	ACO fire resistant kit for gully 218/DN 110 <input type="checkbox"/> Fixed height, vertical <input type="checkbox"/> Telescopic, vertical	■ ACO hygienic gully 218 <input type="checkbox"/> Fixed height, vertical <input type="checkbox"/> Telescopic, vertical	1.4404 / NBR	<b>416934</b>
	ACO fire resistant kit for gully 218/DN 160 <input type="checkbox"/> Fixed height, vertical <input type="checkbox"/> Telescopic, vertical	■ ACO hygienic gully 218 <input type="checkbox"/> Fixed height, vertical <input type="checkbox"/> Telescopic, vertical	1.4404 / NBR	<b>416935</b>
	ACO vacuum handle	■ ACO odour proof gully cover	Aluminium	<b>445622</b>
	ACO foul air trap for horizontal outlet DN100 ■ PP (Polypropylene plastic) ■ NBR (Acryl nitrile-butadiene rubber)	■ ACO hygienic gully 218 - Horizontal <input type="checkbox"/> Fixed height or Telescopic	PP / NBR	<b>9515.30.15</b>

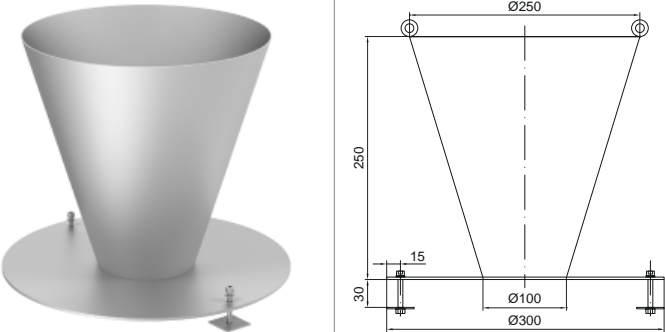
**Accessories for ACO hygienic gully - high capacity**

	Description	Used with	Material	Item number
	ACO silt basket ■ Stainless steel ■ ??? litre capacity	■ ACO hygienic gully - high capacity □ Fixed height	1.4301	<b>446399</b>
			1.4404	<b>446415</b>
	ACO hygienic foul air trap ■ Stainless steel	■ ACO hygienic gully - high capacity □ Fixed height	1.4301	<b>446398</b>
			1.4404	<b>446414</b>

**Accessories for ACO gully EG150**

	Description	Used with	Material	Item number
	Sieve (for outlet 110 mm) ■ Stainless steel	<ul style="list-style-type: none"> <li>■ ACO slot channel 20</li> <li>■ ACO modular box channel 125</li> <li>■ ACO modular box channel 200</li> <li>■ ACO modular slot channel 20</li> </ul>	1.4301	<b>97235</b>
			1.4404	<b>97285</b>
	Foul air trap ■ Stainless steel ■ Water seal 50 mm	<ul style="list-style-type: none"> <li>■ ACO slot channel 20</li> <li>■ ACO modular box channel 125</li> <li>■ ACO modular box channel 200</li> <li>■ ACO modular slot channel 20</li> </ul>	1.4301	<b>97217</b>
			1.4404	<b>97267</b>
	Silt basket ■ Stainless steel	<ul style="list-style-type: none"> <li>■ ACO slot channel 20</li> <li>■ ACO modular box channel 125</li> <li>■ ACO modular box channel 200</li> <li>■ ACO modular slot channel 20</li> <li>■ <b>Don't combine with FAT</b></li> <li>■ Suitable with P-Trap (ACO pipe chapter)</li> </ul>	1.4301	<b>409190</b>
			1.4404	<b>409189</b>

**ACO tundish portable**

	Description	Material	Item number
	ACO tundish portable ■ Stainless steel	1.4301	<b>415821</b>

**Flow rates and Construction heights**

**ACO hygienic gully 142 – fixed height**

Outlet diameter	Outlet position	Flow rate [l/s]
øD	Vertical	A = 135 [mm]
75		1.4
110		1.6

Outlet diameter	Outlet position	Flow rate [l/s]
øD	Horizontal	A = 135 [mm]
75		1.4
110		1.6

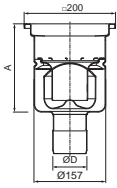
**ACO hygienic gully 142 – telescopic**

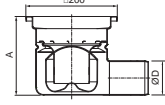
Outlet diameter	Outlet position	Flow rate [l/s]				
øD	Vertical	A = 52 [mm]	A = 82 [mm]	A = 97 [mm]	A = 127 [mm]	A = 157 [mm]
75		1.4	1.6	1.6	1.7	1.8
110		1.6	1.8	1.8	1.9	2.0

Outlet diameter	Outlet position	Flow rate [l/s]				
øD	Horizontal	A = 52 [mm]	A = 82 [mm]	A = 97 [mm]	A = 127 [mm]	A = 157 [mm]
75		1.4	1.6	1.6	1.7	1.8
110		1.6	1.8	1.8	1.9	2.0

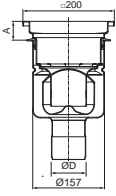
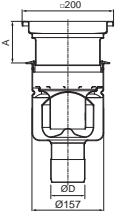
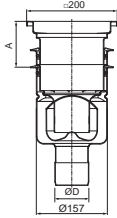
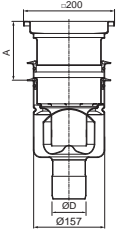
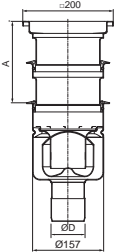
**Flow rates and Construction heights**

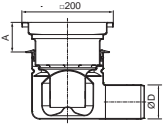
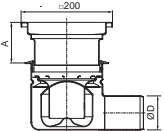
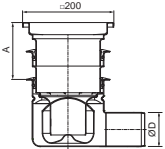
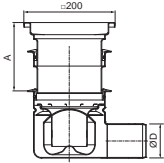
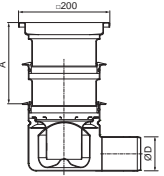
**ACO hygienic gully 157 – fixed height**

		
Outlet diameter	Outlet position	Flow rate [l/s]
$\varnothing D$		A = 193 [mm]
75	Vertical	2.7
110		3.5

		
Outlet diameter	Outlet position	Flow rate [l/s]
$\varnothing D$		A = 170 [mm]
75	Horizontal	2.6
110		2.8

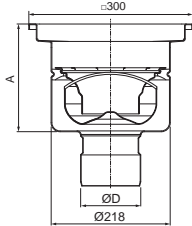
**ACO hygienic gully 157 – telescopic**

						
Outlet diameter	Outlet position	Flow rate [l/s]				
$\varnothing D$		A = 65 [mm]	A = 91 [mm]	A = 125 [mm]	A = 153 [mm]	A = 180 [mm]
75	Vertical	2.7	3.0	3.0	3.1	3.3
110		3.5	4.0	4.1	4.2	4.4

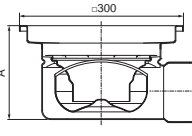
						
Outlet diameter	Outlet position	Flow rate [l/s]				
$\varnothing D$		A = 52 [mm]	A = 82 [mm]	A = 97 [mm]	A = 127 [mm]	A = 157 [mm]
75	Horizontal	2.6	2.9	3.0	3.1	3.3
110		2.8	3.3	3.6	4.0	4.4



**ACO hygienic gully 218 – fixed height**

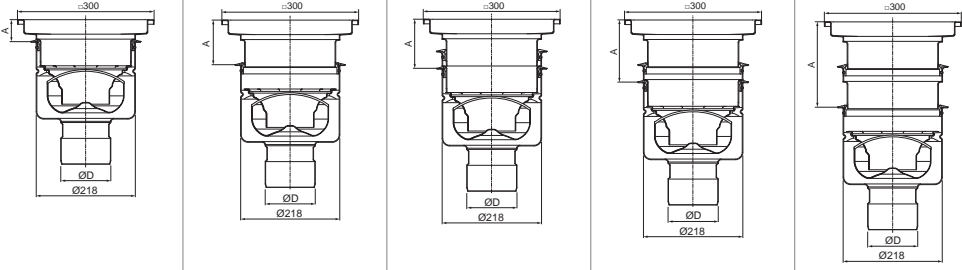


Outlet diameter	Outlet position	Flow rate [l/s]
ØD	Vertical	A = 200 [mm]
110		5.0
160		5.0

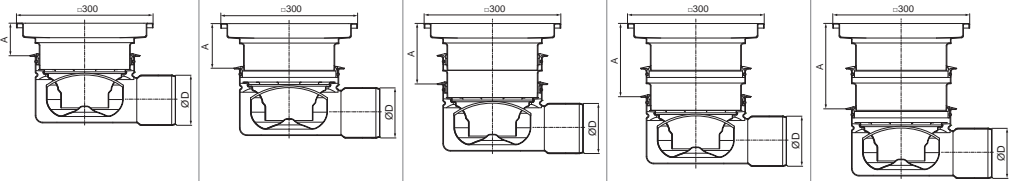


Outlet diameter	Outlet position	Flow rate [l/s]
ØD	Horizontal	A = 177 [mm]
110		4.4

**ACO hygienic gully 218 – telescopic**



Outlet diameter	Outlet position	Flow rate [l/s]				
ØD	Vertical	A = 65 [mm]	A = 91 [mm]	A = 125 [mm]	A = 153 [mm]	A = 180 [mm]
110		5.0	5.5	5.6	5.8	6.2
160		5.0	5.5	5.6	5.8	6.2



Outlet diameter	Outlet position	Flow rate [l/s]				
ØD	Horizontal	A = 72 [mm]	A = 98 [mm]	A = 132 [mm]	A = 156 [mm]	A = 187 [mm]
110		4.4	4.6	4.8	4.9	5.4



<b>ACO channel</b>		<b>Page</b>
<b>Introduction</b>	<b>Hygienic design</b>	<b>88</b>
	<b>System overview</b>	<b>89</b>
<b>ACO box channel</b>	<b>Introduction</b>	<b>90</b>
	<b>ACO hygienic box channel - standard articles</b>	<b>92</b>
	<b>ACO hygienic box channel - semi-standard</b>	<b>95</b>
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	<b>ACO vinyl box channel - semi-standard</b>	<b>98</b>
	<b>ACO frameless ladder grating</b>	<b>99</b>
	<b>ACO hygienic ladder grating</b>	<b>101</b>
	<b>ACO hygienic cast grating</b>	<b>105</b>
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	<b>Accessories for ACO hygienic box channel</b>	<b>110</b>
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	<b>Gratings for ACO modular box channel 125</b>	<b>134</b>
	<b>Accessories for ACO modular box channel 125</b>	<b>139</b>
	<b>ACO modular box channel 200 - standard articles</b>	<b>140</b>
	<b>Gratings for ACO modular box channel 200</b>	<b>14</b>
	<b>Accessories for ACO modular box channel 200</b>	<b>152</b>
	<b>ACO modular slot channel 20 - standard articles</b>	<b>153</b>
	<b>Accessories for ACO modular slot channel 20</b>	<b>158</b>
<b>ACO modular channel - semi-standard</b>	<b>159</b>	
<b>ACO design channel</b>	<b>ACO design channel</b>	<b>160</b>
<b>Flow rates</b>	<b>Flow rates and Construction heights</b>	<b>161</b>

**Hygienic design**

ACO offers sustainable, integrated drainage systems which are designed to protect your business, the environment and ultimately public health. Our aim is to constantly improve every aspect of safety, hygiene and functional performance.

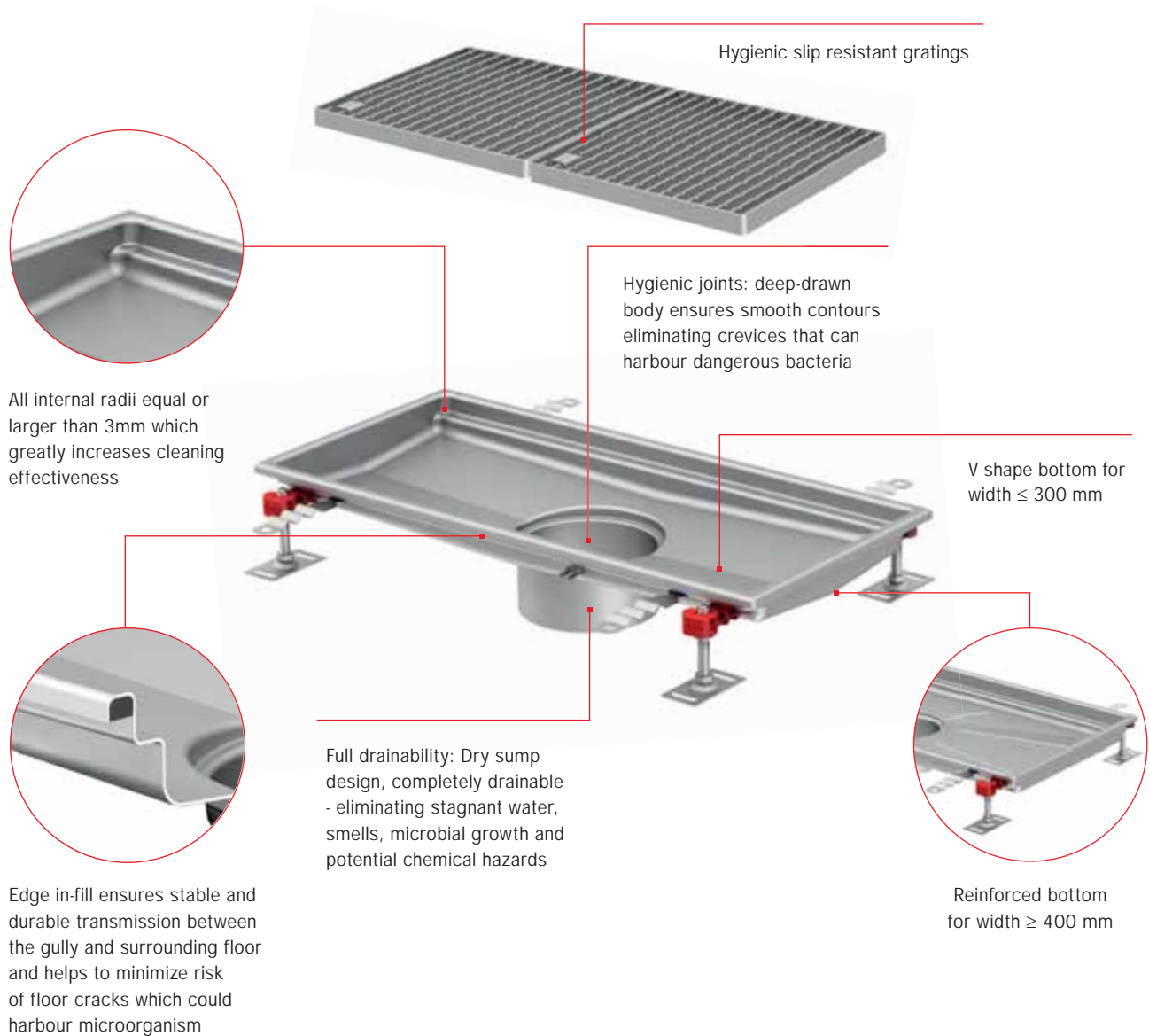
We believe that our systems and services are truly unique, delivering unparalleled benefits to everyone involved in project delivery or subsequent operation.

ACO hygienic drainage fulfils stringent hygienic requirements to prevent harmful bacterial contamination. We apply the relevant hygienic design principles reserved for food contact surfaces EN 1672, EN ISO 14159, EHEDG document to the channel design.

**ACO channel hygienic features:**

- Fully drainable
- Internal radii equal or larger than 3 mm
- Hygienic joints
- Edge infill
- Stainless steel grade min. AISI 304
- Fully pickled and passivated

ACO channel



All internal radii equal or larger than 3mm which greatly increases cleaning effectiveness

Hygienic slip resistant gratings

Hygienic joints: deep-drawn body ensures smooth contours eliminating crevices that can harbour dangerous bacteria

V shape bottom for width  $\leq$  300 mm

Full drainability: Dry sump design, completely drainable - eliminating stagnant water, smells, microbial growth and potential chemical hazards

Edge in-fill ensures stable and durable transmission between the gully and surrounding floor and helps to minimize risk of floor cracks which could harbour microorganism

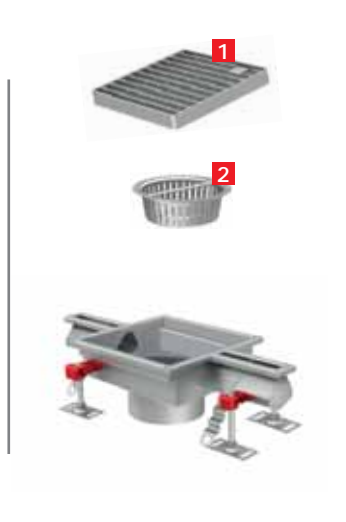
Reinforced bottom for width  $\geq$  400 mm

**System overview**

**ACO channel**



**ACO box channel**



**ACO slot channel**



**ACO modular box channel**

- 1** Gratings
- 2** Silt basket
- 3** Friction ring
- 4** Foul air trap
- 5** Foul air trap support
- 6** ACO gully



**ACO gully  
with accessories**

### Introduction

#### ACO box channel portfolio

The ACO box channel range includes channels for all common applications and all common floor types (concrete, tiles, resin or vinyl). The ACO box channel portfolio is designed with respect to hygienic design requirements. Selecting a channel from the range is easy.

The unique variability of the whole portfolio makes it easy to choose a channel that suits a customer's specific needs. Channel length, depth and outlet position are just a few of the parameters which can be varied and, regardless of the variations specified, there is no impact on delivery lead times.

#### ACO box channel ordering

The dimensions of the ACO box channel can be easily specified in respect of project requirements. To specify the channel please use the Customization template (see page 111) which will help you to identify the information you need, or contact our Sales/Technical department.

ACO box channels with fixed dimensions are also available. These dimensions are a selection of most frequently sold ACO box channels. Please see page 91 where you can find the overview.

#### ACO box channel customization

In addition all ACO box channels can be designed with:

- Special outlet position
- Special depth
- Special slope
- Special channel width
- L-shape and T-shape lay out
- Special side inlets

To ask for customised ACO box channel, please contact our Sales/technical department. Please take into consideration that ACO channel customization could decrease the number of hygienic design features.



ACO box channel system overview

ACO box channel - fixed height solution



**ACO hygienic box channel  
Standard edge**



**ACO hygienic box channel  
Extended edge**



**ACO vinyl box channel**

ACO box channel - telescopic solution



**ACO hygienic box channel  
Standard edge**



**ACO hygienic box channel  
Extended edge**



**ACO vinyl box channel**



**ACO hygienic gully  
with accessories**

**ACO hygienic box channel - standard articles**

**Product information**

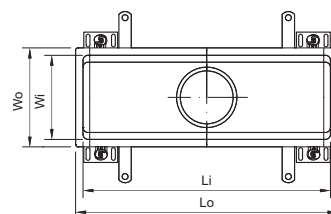
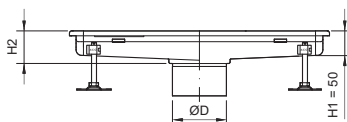
The dimensions of the ACO hygienic box channel for concrete, tiles and resin floor can be easily specified in respect of project requirements or easily chosen from predefined fixed dimensions.

**HygieneFirst features**

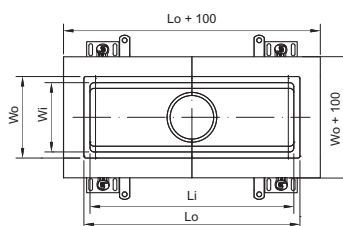
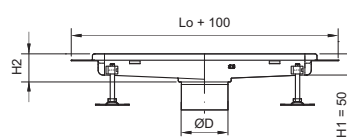
- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Material thickness 1.5 mm
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Rubber edge infill
- Fully pickled and passivated
- Minimal longitudinal slope 1%
- Min. sectional slope 5°
- Material thickness 1.5 mm
- Hygienic gratings with slip resistance available
- Protective cover available. See page 232 for more details
- Tested and certified according to EN 1253
- V-shape bottom for width < 300 mm
- Reinforced bottom for width > 400 mm
- Outlet without deformation
- Easy and secure telescopic connection with gully
- Adjustable EasyFix levelling feet 60-110 mm
- Anchors for fixing in concrete

**Order information**

**Standard edge**



**Extended edge**



Wo [mm]	Wi [mm]	Channel dimensions		H2 [mm]	øD [mm]	Gully	Material	Standard edge	Extended edge
		Lo [mm]	Li [mm]					Item number	Item number
200	170	530	500	60	125	ACO hygienic gully 142	1.4301	<b>416584</b>	<b>416680</b>
		530	500					<b>416602</b>	<b>416698</b>
		830	800					<b>416585</b>	<b>416681</b>
		830	800					<b>416603</b>	<b>416699</b>
		1030	1000					<b>416586</b>	<b>416682</b>
		1030	1000					<b>416604</b>	<b>416700</b>
		1230	1200					<b>416587</b>	<b>416683</b>
		1230	1200					<b>416605</b>	<b>416701</b>
		1530	1500					<b>416588</b>	<b>416684</b>
		1530	1500					<b>416606</b>	<b>416702</b>
		2030	2000					<b>416589</b>	<b>416685</b>
		2030	2000					<b>416607</b>	<b>416703</b>



**Order information**

Wo [mm]	Wi [mm]	Channel dimensions		H2 [mm]	øD [mm]	Gully	Material	Standard edge	Extended edge					
		Lo [mm]	Li [mm]					Item number	Item number					
200	170	530	500	60	142	ACO hygienic gully 157	1.4301	<b>416590</b>	<b>416686</b>					
		530	500				1.4404	<b>416608</b>	<b>416704</b>					
		830	800				1.4301	<b>416591</b>	<b>416687</b>					
		830	800				1.4404	<b>416609</b>	<b>416705</b>					
		1030	1000				1.4301	<b>416592</b>	<b>416688</b>					
		1030	1000				1.4404	<b>416610</b>	<b>416706</b>					
		1230	1200				1.4301	<b>416593</b>	<b>416689</b>					
		1230	1200				1.4404	<b>416611</b>	<b>416707</b>					
		1530	1500				1.4301	<b>416594</b>	<b>416690</b>					
		1530	1500				1.4404	<b>416612</b>	<b>416708</b>					
		2030	2000				1.4301	<b>416595</b>	<b>416691</b>					
		2030	2000				1.4404	<b>416613</b>	<b>416709</b>					
		300	270				330	300	55	142	ACO hygienic gully 157	1.4301	<b>416614</b>	<b>416710</b>
							330	300	1.4404			<b>416628</b>	<b>416724</b>	
630	600			60	1.4301	<b>416615</b>	<b>416711</b>							
630	600			1.4404	<b>416629</b>	<b>416725</b>								
1030	1000			60	1.4301	<b>416616</b>	<b>416712</b>							
1030	1000			1.4404	<b>416630</b>	<b>416726</b>								
1530	1500			60	1.4301	<b>416617</b>	<b>416713</b>							
1530	1500			1.4404	<b>416631</b>	<b>416727</b>								
2030	2000			60	1.4301	<b>416618</b>	<b>416714</b>							
2030	2000			1.4404	<b>416632</b>	<b>416728</b>								
3030	3000			70	1.4301	<b>416619</b>	<b>416715</b>							
3030	3000			1.4404	<b>416633</b>	<b>416729</b>								
4030	4000			80	1.4301	<b>416620</b>	<b>416716</b>							
4030	4000			1.4404	<b>416634</b>	<b>416730</b>								
300	270	330	300	55	200	ACO hygienic gully 218	1.4301	<b>416621</b>	<b>416717</b>					
		330	300	1.4404			<b>416635</b>	<b>416731</b>						
		630	600	60			1.4301	<b>416622</b>	<b>416718</b>					
		630	600	1.4404			<b>416636</b>	<b>416732</b>						
		1030	1000	60			1.4301	<b>416623</b>	<b>416719</b>					
		1030	1000	1.4404			<b>416637</b>	<b>416733</b>						
		1530	1500	60			1.4301	<b>416624</b>	<b>416720</b>					
		1530	1500	1.4404			<b>416638</b>	<b>416734</b>						
		2030	2000	60			1.4301	<b>416625</b>	<b>416721</b>					
		2030	2000	1.4404			<b>416639</b>	<b>416735</b>						
		3030	3000	70			1.4301	<b>416626</b>	<b>416722</b>					
		3030	3000	1.4404			<b>416640</b>	<b>416736</b>						
		4030	4000	80			1.4301	<b>416627</b>	<b>416723</b>					
		4030	4000	1.4404			<b>416641</b>	<b>416737</b>						
400	370	430	400	60	142	ACO hygienic gully 157	1.4301	<b>416642</b>	<b>416738</b>					
		430	400				1.4404	<b>416648</b>	<b>416744</b>					
		630	600				1.4301	<b>416643</b>	<b>416739</b>					
		630	600				1.4404	<b>416649</b>	<b>416745</b>					
		830	800				1.4301	<b>416644</b>	<b>416740</b>					
		830	800				1.4404	<b>416650</b>	<b>416746</b>					
		400	370				430	400	60	200	ACO hygienic gully 218	1.4301	<b>416645</b>	<b>416741</b>
430	400			1.4404	<b>416651</b>	<b>416747</b>								
630	600			1.4301	<b>416646</b>	<b>416742</b>								
630	600			1.4404	<b>416652</b>	<b>416748</b>								
830	800			1.4301	<b>416647</b>	<b>416743</b>								
830	800			1.4404	<b>416653</b>	<b>416749</b>								

## ACO box channel

### ACO hygienic box channel - standard articles

Wo [mm]	Wi [mm]	Channel dimensions		H2 [mm]	øD [mm]	Gully	Material	Standard edge	Extended edge
		Lo [mm]	Li [mm]					Item number	Item number
500	470	530	500	65	142	ACO hygienic gully 157	1.4301	<b>416654</b>	<b>416750</b>
		530	500				1.4404	<b>416660</b>	<b>416756</b>
		830	800				1.4301	<b>416655</b>	<b>416751</b>
		830	800				1.4404	<b>416661</b>	<b>416757</b>
		1030	1000				1.4301	<b>416656</b>	<b>416752</b>
		1030	1000				1.4404	<b>416662</b>	<b>416758</b>
500	470	530	500	65	200	ACO hygienic gully 218	1.4301	<b>416657</b>	<b>416753</b>
		530	500				1.4404	<b>416663</b>	<b>416759</b>
		830	800				1.4301	<b>416658</b>	<b>416754</b>
		830	800				1.4404	<b>416664</b>	<b>416760</b>
		1030	1000				1.4301	<b>416659</b>	<b>416755</b>
		1030	1000				1.4404	<b>416665</b>	<b>416761</b>
600	570	630	600	70	200	ACO hygienic gully 218	1.4301	<b>416666</b>	<b>416762</b>
		630	600				1.4404	<b>416669</b>	<b>416765</b>
		930	900				1.4301	<b>416667</b>	<b>416763</b>
		930	900				1.4404	<b>416670</b>	<b>416766</b>
		1230	1200				1.4301	<b>416668</b>	<b>416764</b>
		1230	1200				1.4404	<b>416671</b>	<b>416767</b>
800	770	830	800	80	200	ACO hygienic gully 218	1.4301	<b>416672</b>	<b>416768</b>
							1.4404	<b>416673</b>	<b>416769</b>

**ACO hygienic box channel - semi-standard**

**Product information**

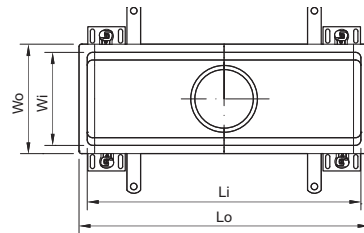
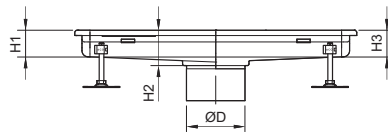
The dimensions of the ACO hygienic box channel for concrete, tiles and resin floor can be easily specified in respect of project requirements.

**HygieneFirst features**

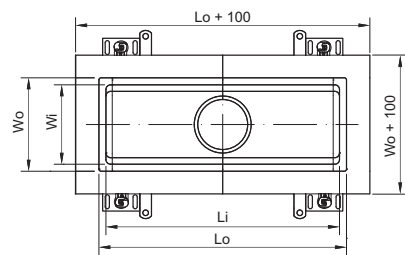
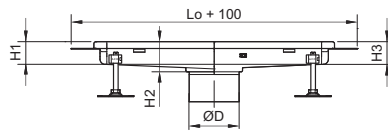
- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully removable and easily cleanable stainless steel foul air trap (FAT)
- Rubber edge infill
- Fully pickled and passivated
- Sectional slope of the channel bottom 5°
- Longitudinal slope of the channel bottom 1-5 %
- Material thickness 1.5 mm
- Hygienic gratings with slip resistance available
- Protective cover available. See page 232 for more details
- Tested and certified according to EN 1253
- V-shape bottom for width < 300 mm
- Reinforced bottom for width > 400 mm
- Length - up to customer request
- Height - variable 50-200
- Outlet position variable in longitudinal axis
- Standardized widths
- Easy and secure telescopic connection with gully
- Adjustable EasyFix levelling feet 60-110 mm
- Anchors for fixing in concrete

**Order information**

**Standard edge**



**Extended edge**



External (overall) width Wo [mm]	Internal (grating) width Wi [mm]	Length of channel Lo	Height at outlet of channel H2	Height at end of channel H1 and H3
200	170	Variable *	50-200	50, 80, 110, 140
300	270			
400	370			
500	470			
600	570			
800	770			

\* Long channels over 6m are standard divided in 6m sections with transport joins.

In case of one piece channel requirement, channels have to be welded on site. Please contact our Sales/Technical department.

**ACO vinyl box channel - standard articles**

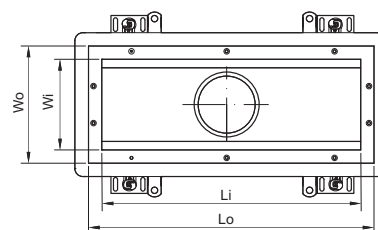
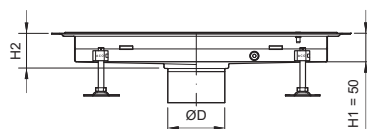
**Product information**

The dimensions of the ACO vinyl box channel can be specified in respect of project requirements or easily chosen from predefined fixed dimensions.

- Fully compliant to EN 1253
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel, pickled and passivated
- Material thickness 1.5 mm
- Easy and secure telescopic connection with gully
- Adjustable EasyFix levelling feet 60-110 mm
- Anchors for fixing in concrete
- Protective cover available. See page 232 for more details

**Order information**

Vinyl edge



Wo [mm]	Wi [mm]	Channel dimensions		H2 [mm]	øD [mm]	Gully	Material	Vinyl edge
		Lo [mm]	Li [mm]					Item number
220	170	60	125	ACO hygienic gully 142	1.4301	550	500	<b>413358</b>
						550	500	<b>413376</b>
						850	800	<b>413359</b>
						850	800	<b>413377</b>
						1050	1000	<b>413360</b>
						1050	1000	<b>413378</b>
						1250	1200	<b>413361</b>
						1250	1200	<b>413379</b>
						1550	1500	<b>413362</b>
						1550	1500	<b>413380</b>
						2050	2000	<b>413363</b>
						2050	2000	<b>413381</b>
220	170	60	142	ACO hygienic gully 157	1.4301	550	500	<b>413364</b>
						550	500	<b>413382</b>
						850	800	<b>413365</b>
						850	800	<b>413383</b>
						1050	1000	<b>413366</b>
						1050	1000	<b>413384</b>
						1250	1200	<b>413367</b>
						1250	1200	<b>413385</b>
						1550	1500	<b>413368</b>
						1550	1500	<b>413386</b>
						2050	2000	<b>413369</b>
						2050	2000	<b>413387</b>

**ACO box channel**  
**ACO vinyl box channel - standard articles**

Wo [mm]	Wi [mm]	Channel dimensions		H2 [mm]	øD [mm]	Gully	Material	Vinyl edge
		Lo [mm]	Li [mm]					Item number
320	270	350	300	60	142	ACO hygienic gully 157	1.4301	<b>413388</b>
		350	300				1.4404	<b>413402</b>
		650	600				1.4301	<b>413389</b>
		650	600				1.4404	<b>413403</b>
		1050	1000				1.4301	<b>413390</b>
		1050	1000				1.4404	<b>413404</b>
		1550	1500	1.4301			<b>413391</b>	
		1550	1500	1.4404			<b>413405</b>	
		2050	2000	1.4301			<b>413392</b>	
		2050	2000	1.4404			<b>413406</b>	
		3050	3000	1.4301			<b>413393</b>	
		3050	3000	1.4404			<b>413407</b>	
		4050	4000	1.4301			<b>413394</b>	
		4050	4000	1.4404			<b>413408</b>	
320	270	350	300	60	200	ACO hygienic gully 218	1.4301	<b>413395</b>
		350	300				1.4404	<b>413409</b>
		650	600				1.4301	<b>413396</b>
		650	600				1.4404	<b>413410</b>
		1050	1000				1.4301	<b>413397</b>
		1050	1000				1.4404	<b>413411</b>
		1550	1500	1.4301			<b>413398</b>	
		1550	1500	1.4404			<b>413412</b>	
		2050	2000	1.4301			<b>413399</b>	
		2050	2000	1.4404			<b>413413</b>	
		3050	3000	1.4301			<b>413400</b>	
		3050	3000	1.4404			<b>413414</b>	
		4050	4000	1.4301			<b>413401</b>	
		4050	4000	1.4404			<b>413415</b>	
420	370	450	400	60	142	ACO hygienic gully 157	1.4301	<b>413416</b>
		450	400				1.4404	<b>413422</b>
		650	600				1.4301	<b>413417</b>
		650	600				1.4404	<b>413423</b>
		850	800				1.4301	<b>413418</b>
		850	800				1.4404	<b>413424</b>
420	370	450	400	60	200	ACO hygienic gully 218	1.4301	<b>413419</b>
		450	400				1.4404	<b>413425</b>
		650	600				1.4301	<b>413420</b>
		650	600				1.4404	<b>413426</b>
		850	800				1.4301	<b>413421</b>
		850	800				1.4404	<b>413427</b>
520	470	530	500	65	142	ACO hygienic gully 157	1.4301	<b>413428</b>
		530	500				1.4404	<b>413434</b>
		830	800				1.4301	<b>413429</b>
		830	800				1.4404	<b>413435</b>
		1030	1000				1.4301	<b>413430</b>
		1030	1000				1.4404	<b>413436</b>
520	470	550	500	65	200	ACO hygienic gully 218	1.4301	<b>413431</b>
		550	500				1.4404	<b>413437</b>
		850	800				1.4301	<b>413432</b>
		850	800				1.4404	<b>413438</b>
		1050	1000				1.4301	<b>413433</b>
		1050	1000				1.4404	<b>413439</b>
620	570	650	600	70	200	ACO hygienic gully 218	1.4301	<b>413440</b>
		650	600				1.4404	<b>413443</b>
		950	900				1.4301	<b>413441</b>
		950	900				1.4404	<b>413444</b>
		1250	1200				1.4301	<b>413442</b>
		1250	1200				1.4404	<b>413445</b>
820	770	850	800	80	200	ACO hygienic gully 218	1.4301	<b>413446</b>
							1.4404	<b>413447</b>

**ACO vinyl box channel - semi-standard**

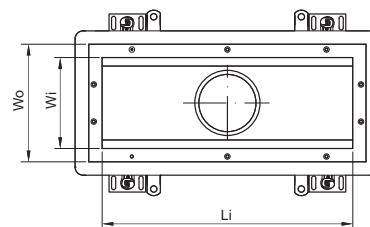
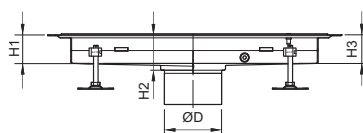
**Product information**

The dimensions of the ACO vinyl box channel can be easily specified in respect of project requirements.

- Fully compliant to EN 1253
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel, pickled and passivated
- Material thickness 1.5 mm
- Height variable 50-200 mm
- Length – up to customer request
- Standardized widths
- Outlet position central or variable in longitudinal axis
- Longitudinal slopes of the channel bottom 1-5 %
- Adjustable EasyFix levelling feet 60-110 mm
- Anchors for fixing in concrete
- Protective cover available. See page 232 for more details

**Order information**

Vinyl edge



External (overall) width Wo [mm]	Internal (grating) width Wi [mm]	Length of channel Li	Height at outlet of channel H2	Height at end of channel H1 and H3
230	170	Variable *	50-200	50, 80, 110, 140
330	270			
430	370			
530	470			
630	570			
830	870			

\* Long channels over 6m are standard divided in 6m sections with transport joints.

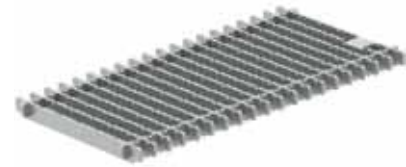
In case of requirements one piece channel, channels have to be welded on site. Please contact our Sales/Technical department.

**ACO frameless ladder grating**

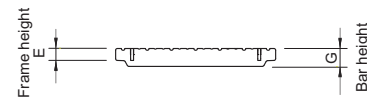
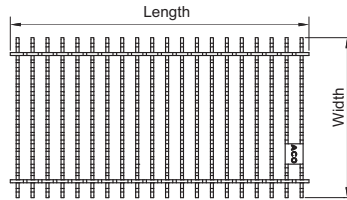
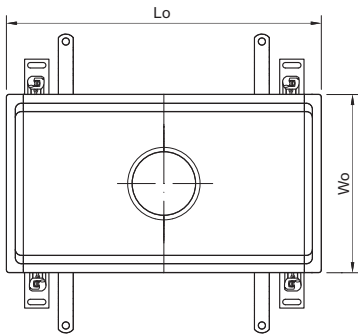
**Product information**

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Electropolished surface
- Registered logo design allows for easy manipulation during cleaning
- Range of gratings suitable for load class M 125 (EN 1253)
- High flow capacity
- Rounded corners
- Slip resistant
  - Low potential for slip according to BS 7976-2,
  - R11 according to DIN 51130



**Order information - Load class M 125**



Channel dimension		Grating dimension				Material	Item number	Quantity to fill channel
Wo [mm]	Lo [mm]	Frame height E [mm]	Bar height G [mm]	Width [mm]	Length [mm]			
200	530	20	20	168	499	1.4301	<b>446248</b>	1
						1.4404	<b>446249</b>	
	830	20	20	168	398	1.4301	<b>446252</b>	2
						1.4404	<b>446253</b>	
	1030	20	20	168	499	1.4301	<b>446248</b>	2
						1.4404	<b>446249</b>	
	1230	20	20	168	398	1.4301	<b>446252</b>	3
						1.4404	<b>446253</b>	
	1530	20	20	168	499	1.4301	<b>446248</b>	3
						1.4404	<b>446249</b>	
	2030	20	20	168	499	1.4301	<b>416802</b>	4
						1.4404	<b>416803</b>	

**Order information - Load class M 125**

Channel dimension		Grating dimension				Material	Item number	Quantity to fill channel
Wo [mm]	Lo [mm]	Frame height E [mm]	Bar height G [mm]	Width [mm]	Length [mm]			
300	330	20	20	268	298	1.4301	<b>446260</b>	1
						1.4404	<b>446261</b>	
	630	20	20	268	298	1.4301	<b>446260</b>	2
						1.4404	<b>446261</b>	
	1030	20	20	268	499	1.4301	<b>446256</b>	2
						1.4404	<b>446257</b>	
	1530	20	20	268	499	1.4301	<b>446256</b>	3
						1.4404	<b>446257</b>	
	2030	20	20	268	499	1.4301	<b>446256</b>	4
						1.4404	<b>446257</b>	
	3030	20	20	268	499	1.4301	<b>446256</b>	6
						1.4404	<b>446257</b>	
	4030	20	20	268	499	1.4301	<b>446256</b>	8
						1.4404	<b>446257</b>	

ACO channel

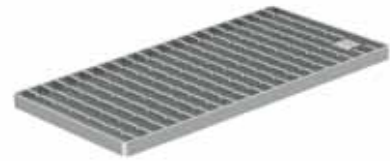


**ACO hygienic ladder grating**

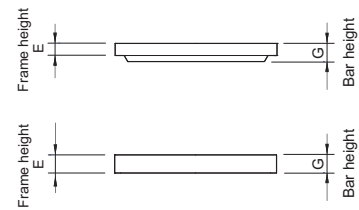
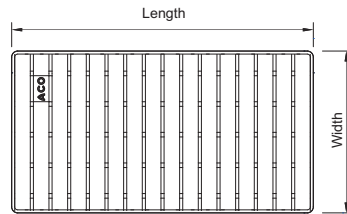
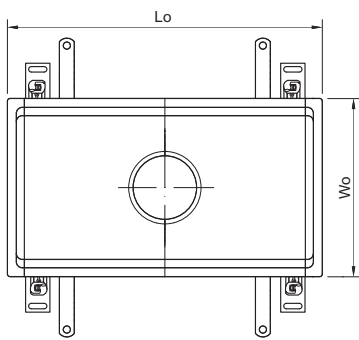
**Product information**

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Electropolished surface
- Registered logo design allows for easy manipulation during cleaning
- Range of gratings suitable for load classes R 50, M 125 and N 250 (EN 1253)
- Tested and certified according to NSF International
- High flow capacity
- Rounded corners
- Slip resistant
  - Low potential for slip according to BS 7976-2,
  - R11 according to DIN 51130



**Order information - Load class R 50**



Channel dimension		Grating dimension				Material	Item number	Quantity to fill channel
Wo [mm]	Lo [mm]	Frame height E [mm]	Bar height G [mm]	Width [mm]	Length [mm]			
200	530	20	20	168	499	1.4301	<b>416802</b>	1
						1.4404	<b>416803</b>	
	830	20	20	168	398	1.4301	<b>416808</b>	2
						1.4404	<b>416809</b>	
	1030	20	20	168	999	1.4301	<b>445948</b>	1
						1.4404	<b>445949</b>	
	1030	20	20	168	499	1.4301	<b>416802</b>	2
						1.4404	<b>416803</b>	
	1230	20	20	168	398	1.4301	<b>416808</b>	3
						1.4404	<b>416809</b>	
	1530	20	20	168	499	1.4301	<b>416802</b>	3
						1.4404	<b>416803</b>	
	2030	20	20	168	999	1.4301	<b>445948</b>	2
						1.4404	<b>445949</b>	
	2030	20	20	168	499	1.4301	<b>416802</b>	4
						1.4404	<b>416803</b>	

**ACO box channel**  
**ACO hygienic ladder grating**

**Order information - Load class R 50**

Channel dimension		Grating dimension				Material	Item number	Quantity to fill channel
Wo [mm]	Lo [mm]	Frame height E [mm]	Bar height G [mm]	Width [mm]	Length [mm]			
300	330	20	20	268	298	1.4301	<b>416812</b>	1
						1.4404	<b>416813</b>	
	630	20	20	268	298	1.4301	<b>416812</b>	2
						1.4404	<b>416813</b>	
	1030	20	20	268	999	1.4301	<b>445952</b>	1
						1.4404	<b>445953</b>	
	1030	20	20	268	499	1.4301	<b>416814</b>	2
						1.4404	<b>416815</b>	
	1530	20	20	268	499	1.4301	<b>416814</b>	3
						1.4404	<b>416815</b>	
	2030	20	20	268	999	1.4301	<b>445952</b>	2
						1.4404	<b>445953</b>	
	2030	20	20	268	499	1.4301	<b>416814</b>	4
						1.4404	<b>416815</b>	
3030	20	20	268	999	1.4301	<b>445952</b>	3	
					1.4404	<b>445953</b>		
3030	20	20	268	499	1.4301	<b>416814</b>	6	
					1.4404	<b>416815</b>		
4030	20	20	268	999	1.4301	<b>445952</b>	4	
					1.4404	<b>445953</b>		
4030	20	20	268	499	1.4301	<b>416814</b>	8	
					1.4404	<b>416815</b>		
400	430	30	30	368	398	1.4301	<b>416820</b>	1
						1.4404	<b>416821</b>	
	630	30	30	368	598	1.4301	<b>416822</b>	1
						1.4404	<b>416823</b>	
830	30	30	368	398	1.4301	<b>416820</b>	2	
					1.4404	<b>416821</b>		
500	530	30	30	468	499	1.4301	<b>416828</b>	1
						1.4404	<b>416829</b>	
	830	30	30	468	398	1.4301	<b>416830</b>	2
						1.4404	<b>416831</b>	
1030	30	30	468	499	1.4301	<b>416828</b>	2	
					1.4404	<b>416829</b>		
600	630	30	30	568	298	1.4301	<b>416838</b>	2
						1.4404	<b>416839</b>	
	930	30	30	568	298	1.4301	<b>416838</b>	3
						1.4404	<b>416839</b>	
1230	30	30	568	298	1.4301	<b>416838</b>	4	
					1.4404	<b>416839</b>		
800	830	30	30	768	398	1.4301	<b>416842</b>	2
						1.4404	<b>416843</b>	

ACO channel

**Order information - Load class M 125**

Channel dimension		Grating dimension				Material	Item number	Quantity to fill channel
Wo [mm]	Lo [mm]	Frame height E [mm]	Bar height G [mm]	Width [mm]	Length [mm]			
200	530	20	30	168	499	1.4301	<b>416804</b>	1
						1.4404	<b>416805</b>	
	830	20	30	168	398	1.4301	<b>416810</b>	2
						1.4404	<b>416811</b>	
	1030	20	20	168	999	1.4301	<b>445950</b>	1
						1.4404	<b>445951</b>	
	1030	20	30	168	499	1.4301	<b>416804</b>	2
						1.4404	<b>416805</b>	
	1230	20	30	168	398	1.4301	<b>416810</b>	3
						1.4404	<b>416811</b>	
	1530	20	30	168	499	1.4301	<b>416804</b>	3
						1.4404	<b>416805</b>	
2030	20	20	168	999	1.4301	<b>445950</b>	2	
					1.4404	<b>445951</b>		
2030	20	30	168	499	1.4301	<b>416804</b>	4	
					1.4404	<b>416805</b>		
300	330	20	30	268	298	1.4301	<b>416816</b>	1
						1.4404	<b>416817</b>	
	630	20	30	268	298	1.4301	<b>416816</b>	2
						1.4404	<b>416817</b>	
	1030	20	30	268	499	1.4301	<b>416818</b>	2
						1.4404	<b>416819</b>	
	1030	20	20	268	999	1.4301	<b>445954</b>	1
						1.4404	<b>445955</b>	
	1530	20	30	268	499	1.4301	<b>416818</b>	3
						1.4404	<b>416819</b>	
	2030	20	20	268	999	1.4301	<b>445954</b>	2
						1.4404	<b>445955</b>	
2030	20	30	268	499	1.4301	<b>416818</b>	4	
					1.4404	<b>416819</b>		
3030	20	30	268	999	1.4301	<b>445954</b>	3	
					1.4404	<b>445955</b>		
3030	20	30	268	499	1.4301	<b>416818</b>	6	
					1.4404	<b>416819</b>		
4030	20	20	268	999	1.4301	<b>445954</b>	4	
					1.4404	<b>445955</b>		
4030	20	30	268	499	1.4301	<b>416818</b>	8	
					1.4404	<b>416819</b>		

**Order information - Load class M 125**

Channel dimension		Grating dimension				Material	Item number	Quantity to fill channel
Wo [mm]	Lo [mm]	Frame height E [mm]	Bar height G [mm]	Width [mm]	Length [mm]			
400	430	30	30	368	398	1.4301	<b>416824</b>	1
						1.4404	<b>416825</b>	
	630	30	30	368	598	1.4301	<b>416826</b>	1
						1.4404	<b>416827</b>	
	830	30	30	368	398	1.4301	<b>416824</b>	2
						1.4404	<b>416825</b>	
500	530	30	30	468	499	1.4301	<b>416832</b>	1
						1.4404	<b>416833</b>	
	830	30	30	468	398	1.4301	<b>416834</b>	2
						1.4404	<b>416835</b>	
	1030	30	30	468	499	1.4301	<b>416832</b>	2
						1.4404	<b>416833</b>	

**Order information - Load class N 250**

Channel dimension		Grating dimension				Material	Item number	Quantity to fill channel
Wo [mm]	Lo [mm]	Frame height E [mm]	Bar height G [mm]	Width [mm]	Length [mm]			
200	530	20	30	168	499	1.4301	<b>416844</b>	1
						1.4404	<b>416845</b>	
	830	20	30	168	398	1.4301	<b>416846</b>	2
						1.4404	<b>416847</b>	
	1030	20	30	168	499	1.4301	<b>416844</b>	2
						1.4404	<b>416845</b>	
	1230	20	30	168	398	1.4301	<b>416846</b>	3
						1.4404	<b>416847</b>	
	1530	20	30	168	499	1.4301	<b>416844</b>	3
						1.4404	<b>416845</b>	
	2030	20	30	168	499	1.4301	<b>416844</b>	4
						1.4404	<b>416845</b>	
300	330	20	30	268	298	1.4301	<b>416850</b>	1
						1.4404	<b>416851</b>	
	630	20	30	268	298	1.4301	<b>416850</b>	2
						1.4404	<b>416851</b>	
	1030	20	30	268	499	1.4301	<b>416848</b>	2
						1.4404	<b>416849</b>	
	1530	20	30	268	499	1.4301	<b>416848</b>	3
						1.4404	<b>416849</b>	
	2030	20	30	268	499	1.4301	<b>416848</b>	4
						1.4404	<b>416849</b>	
	3030	20	30	268	499	1.4301	<b>416848</b>	6
						1.4404	<b>416849</b>	
	4030	20	30	268	499	1.4301	<b>416848</b>	8
						1.4404	<b>416849</b>	

**ACO hygienic cast grating**

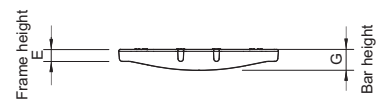
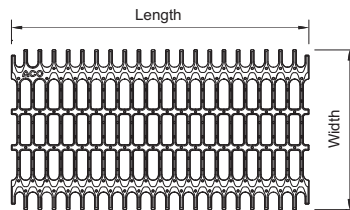
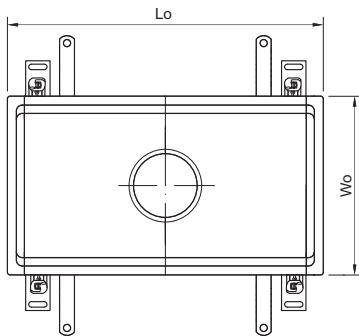
**Product information**

**HygieneFirst features**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Available in 1.4301 (304) grade of stainless steel
- Fully pickled and passivated
- Electropolished surface
- Frameless design for optimum drainability and cleanliness
- Tested and certified according to EN 1253
- Range of gratings suitable for load class M 125 (EN 1253)
- Slip resistant
  - Low potential for slip according to BS 7976-2,
  - R13 according to DIN 51130



**Order information - Load class M 125**

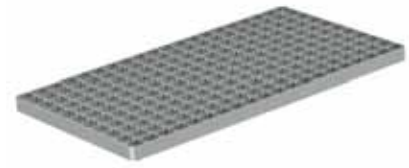


Channel dimension		Grating dimension				Material	Item number	Quantity to fill channel
Wo [mm]	Lo [mm]	Frame height E [mm]	Bar height G [mm]	Width [mm]	Length [mm]			
200	530	20	30	168	499	1.4301	<b>416947</b>	1
	830	20	30	168	398	1.4301	<b>416948</b>	2
	1030	20	30	168	499	1.4301	<b>416947</b>	2
	1230	20	30	168	398	1.4301	<b>416948</b>	3
	1530	20	30	168	499	1.4301	<b>416947</b>	3
	2030	20	30	168	499	1.4301	<b>416947</b>	4
300	330	20	30	268	298	1.4301	<b>416946</b>	1
	630	20	30	268	298	1.4301	<b>416946</b>	2
	1030	20	30	268	499	1.4301	<b>416945</b>	2
	1530	20	30	268	499	1.4301	<b>416945</b>	3
	2030	20	30	268	499	1.4301	<b>416945</b>	4
	3030	20	30	268	499	1.4301	<b>416945</b>	6
	4030	20	30	268	499	1.4301	<b>416945</b>	8

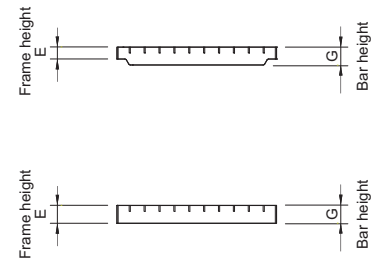
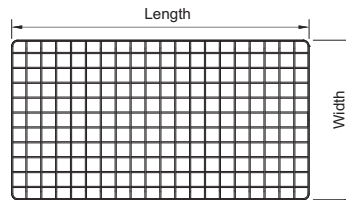
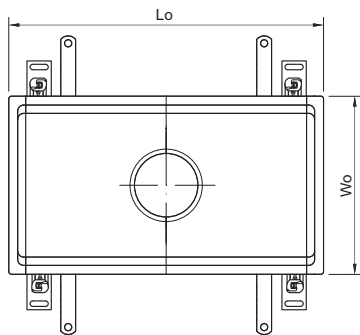
**ACO mesh grating**

**Product information**

- ACO mesh grating with slip resistant finish
- Tested and certified according to EN 1253
- Range of gratings suitable to load class L 15 (EN 1253)
- Surface - electropolished
- High flow capacity of grates
- Rounded corners
- Slip resistant
- Slip resistant low potential for slip according to BS 7976-2,
- R11 according to DIN 51130



**Order information - Load class L 15**



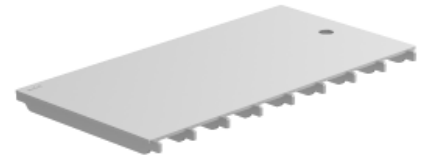
Channel dimension		Grating dimension				Material	Item number	Quantity to fill channel
Wo [mm]	Lo [mm]	Frame height E [mm]	Bar height G [mm]	Width [mm]	Length [mm]			
200	530	20	30	168	499	1.4301	<b>416860</b>	1
						1.4404	<b>416861</b>	
	830	20	30	168	398	1.4301	<b>416862</b>	2
						1.4404	<b>416863</b>	
	1030	20	30	168	999	1.4301	<b>413153</b>	1
						1.4404	<b>445957</b>	
	1030	20	30	168	499	1.4301	<b>416860</b>	2
						1.4404	<b>416861</b>	
	1230	20	30	168	398	1.4301	<b>416862</b>	3
						1.4404	<b>416863</b>	
	1530	20	30	168	499	1.4301	<b>416860</b>	3
						1.4404	<b>416861</b>	
	2030	20	30	168	999	1.4301	<b>413153</b>	2
						1.4404	<b>445957</b>	
	2030	20	30	168	499	1.4301	<b>416860</b>	4
						1.4404	<b>416861</b>	

Channel dimension		Grating dimension				Material	Item number	Quantity to fill channel
Wo [mm]	Lo [mm]	Frame height E [mm]	Bar height G [mm]	Width [mm]	Length [mm]			
300	330	20	30	268	298	1.4301	<b>416864</b>	1
						1.4404	<b>416865</b>	
	630	20	30	268	298	1.4301	<b>416864</b>	2
						1.4404	<b>416865</b>	
	1030	20	30	268	999	1.4301	<b>413154</b>	1
						1.4404	<b>445959</b>	
	1030	20	30	268	499	1.4301	<b>416866</b>	2
						1.4404	<b>416867</b>	
	1530	20	30	268	499	1.4301	<b>416866</b>	3
						1.4404	<b>416867</b>	
	2030	20	30	268	999	1.4301	<b>413154</b>	2
						1.4404	<b>445959</b>	
	2030	20	30	268	499	1.4301	<b>416866</b>	4
						1.4404	<b>416867</b>	
3030	20	30	268	999	1.4301	<b>413154</b>	3	
					1.4404	<b>445959</b>		
3030	20	30	268	499	1.4301	<b>416866</b>	6	
					1.4404	<b>416867</b>		
4030	20	30	268	999	1.4301	<b>413154</b>	4	
					1.4404	<b>445959</b>		
4030	20	30	268	499	1.4301	<b>416866</b>	8	
					1.4404	<b>416867</b>		
400	430	30	30	368	398	1.4301	<b>416868</b>	1
						1.4404	<b>416869</b>	
	630	30	30	368	598	1.4301	<b>416870</b>	1
						1.4404	<b>416871</b>	
830	30	30	368	398	1.4301	<b>416868</b>	2	
					1.4404	<b>416869</b>		
500	530	30	30	468	499	1.4301	<b>416872</b>	1
						1.4404	<b>416873</b>	
	830	30	30	468	398	1.4301	<b>416874</b>	2
						1.4404	<b>416875</b>	
	1030	30	30	468	499	1.4301	<b>416872</b>	2
						1.4404	<b>416873</b>	
600	630	30	30	568	298	1.4301	<b>416876</b>	2
						1.4404	<b>416877</b>	
	930	30	30	568	298	1.4301	<b>416876</b>	3
						1.4404	<b>416877</b>	
1230	30	30	568	298	1.4301	<b>416876</b>	4	
					1.4404	<b>416877</b>		
800	830	30	30	768	398	1.4301	<b>416878</b>	2
						1.4404	<b>416879</b>	

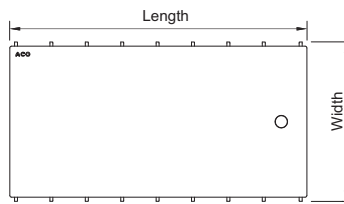
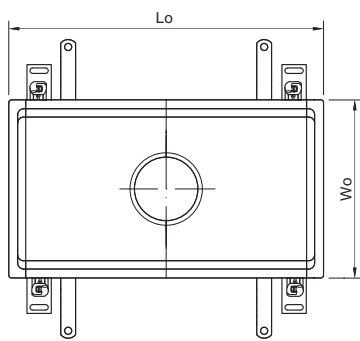
**ACO hygienic slot cover**

**Product information**

- Hygienic design following EN 1672, EN ISO 14159 and EHEDG document No. 8, 13 and 44
- Fully pickled and passivated
- Sandblasted surface
- Range of gratings suitable for load classes R 50, M 125 and N 250 (EN 1253)
- Rounded corners
- Slip resistant
  - Low potential for slip according to BS 7976-2,
  - R11 according to DIN 51130



**Order information - Load class R 50**



Channel dimension		Grating dimension				Material	Item number	Quantity to fill channel
Wo [mm]	Lo [mm]	Frame height E [mm]	Bar height G [mm]	Width [mm]	Length [mm]			
200	530	20	30	168	499	1.4301	<b>445756</b>	1
						1.4404	<b>445757</b>	
	830	20	30	168	398	1.4301	<b>445762</b>	2
						1.4404	<b>445763</b>	
	1030	20	30	168	499	1.4301	<b>445756</b>	2
						1.4404	<b>445757</b>	
	1230	20	30	168	398	1.4301	<b>445762</b>	3
						1.4404	<b>445763</b>	
	1530	20	30	168	499	1.4301	<b>445756</b>	3
						1.4404	<b>445757</b>	
	2030	20	30	168	499	1.4301	<b>445756</b>	4
						1.4404	<b>445757</b>	
300	330	20	30	268	298	1.4301	<b>445774</b>	1
						1.4404	<b>445775</b>	
	630	20	30	268	298	1.4301	<b>445774</b>	2
						1.4404	<b>445775</b>	
	1030	20	30	268	499	1.4301	<b>445768</b>	2
						1.4404	<b>445769</b>	
	1530	20	30	268	499	1.4301	<b>445768</b>	3
						1.4404	<b>445769</b>	
	2030	20	30	268	499	1.4301	<b>445768</b>	4
						1.4404	<b>445769</b>	
	3030	20	30	268	499	1.4301	<b>445768</b>	6
						1.4404	<b>445769</b>	



**Order information - Load class M 125**

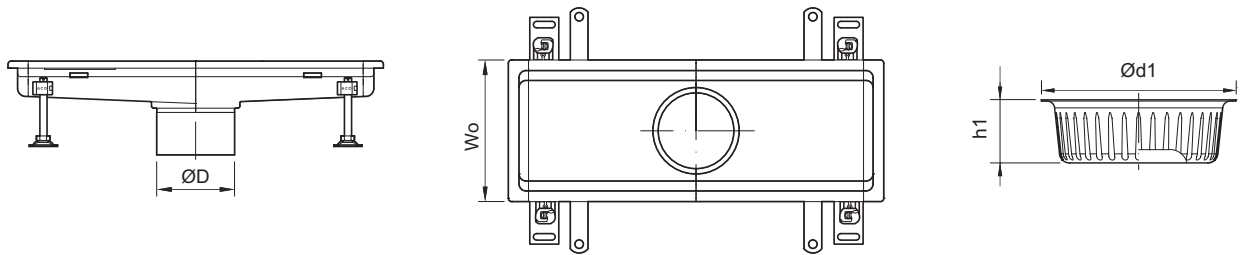
Channel dimension		Grating dimension				Material	Item number	Quantity to fill channel
Wo [mm]	Lo [mm]	Frame height E [mm]	Bar height G [mm]	Width [mm]	Length [mm]			
200	530	20	30	168	499	1.4301	<b>445758</b>	1
						1.4404	<b>445759</b>	
	830	20	30	168	398	1.4301	<b>445764</b>	2
						1.4404	<b>445765</b>	
	1030	20	30	168	499	1.4301	<b>445758</b>	2
						1.4404	<b>445759</b>	
	1230	20	30	168	398	1.4301	<b>445764</b>	3
						1.4404	<b>445765</b>	
	1530	20	30	168	499	1.4301	<b>445758</b>	3
						1.4404	<b>445759</b>	
	2030	20	30	168	499	1.4301	<b>445758</b>	4
						1.4404	<b>445759</b>	
300	330	20	30	268	298	1.4301	<b>445776</b>	1
						1.4404	<b>445777</b>	
	630	20	30	268	298	1.4301	<b>445776</b>	2
						1.4404	<b>445777</b>	
	1030	20	30	268	499	1.4301	<b>445770</b>	2
						1.4404	<b>445771</b>	
	1530	20	30	268	499	1.4301	<b>445770</b>	3
						1.4404	<b>445771</b>	
	2030	20	30	268	499	1.4301	<b>445770</b>	4
						1.4404	<b>445771</b>	
	3030	20	30	268	499	1.4301	<b>445770</b>	6
						1.4404	<b>445771</b>	

**Order information - Load class N 250**

Channel dimension		Grating dimension				Material	Item number	Quantity to fill channel
Wo [mm]	Lo [mm]	Frame height E [mm]	Bar height G [mm]	Width [mm]	Length [mm]			
200	530	20	30	168	499	1.4301	<b>445760</b>	1
						1.4404	<b>445761</b>	
	830	20	30	168	398	1.4301	<b>445766</b>	2
						1.4404	<b>445767</b>	
	1030	20	30	168	499	1.4301	<b>445760</b>	2
						1.4404	<b>445761</b>	
	1230	20	30	168	398	1.4301	<b>445766</b>	3
						1.4404	<b>445767</b>	
	1530	20	30	168	499	1.4301	<b>445760</b>	3
						1.4404	<b>445761</b>	
	2030	20	30	168	499	1.4301	<b>445760</b>	4
						1.4404	<b>445761</b>	
300	330	20	30	268	298	1.4301	<b>445778</b>	1
						1.4404	<b>445779</b>	
	630	20	30	268	298	1.4301	<b>445778</b>	2
						1.4404	<b>445779</b>	
	1030	20	30	268	499	1.4301	<b>445772</b>	2
						1.4404	<b>445773</b>	
	1530	20	30	268	499	1.4301	<b>445772</b>	3
						1.4404	<b>445773</b>	
	2030	20	30	268	499	1.4301	<b>445772</b>	4
						1.4404	<b>445773</b>	
	3030	20	30	268	499	1.4301	<b>445772</b>	6
						1.4404	<b>445773</b>	

**Accessories for ACO box channels**

**Silt baskets for ACO hygienic box channel**



Channel dimension		Direction of gully outlet	Silt basket dimension		Capacity [l]	Material	Item number	
Width Wo [mm]	Outlet øD [mm]		ød1 [mm]	h1 [mm]				
200, 300, 400, 500, 600, 800	125	vertical, horizontal	142	45	0.4	1.4301	<b>416900</b>	
						1.4404	<b>416901</b>	
200	142	vertical	142	45	0.4	1.4301	<b>416900</b>	
						1.4404	<b>416901</b>	
		horizontal	142	25	0.3	1.4301	<b>416902</b>	
						1.4404	<b>416903</b>	
	welded with ACO hygienic gully 142	vertical, horizontal	142	25	0.3	1.4301	<b>416902</b>	
						1.4404	<b>416903</b>	
300, 400, 500, 600, 800	142	vertical	159	50	0.6	1.4301	<b>416904</b>	
						1.4404	<b>416905</b>	
	or welded with ACO hygienic gully 157	horizontal	159	26	0.3	1.4301	<b>416906</b>	
						1.4404	<b>416907</b>	
	300, 400, 500, 600, 800	200	vertical	222	50	1.4	1.4301	<b>416908</b>
							1.4404	<b>416909</b>
or welded with ACO hygienic gully 218		horizontal	222	26	0.7	1.4301	<b>416910</b>	
						1.4404	<b>416911</b>	

**ACO customized box channel**

**Product information**

The dimensions of the ACO customized box channel for concrete, tiles and resin floor can be easily specified in respect of project requirements.

- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel, pickled and passivated
- Material thickness 1.5 mm or 2 mm
- Width – up to customer request
- Length – up to customer request
- Depth – up to customer request
- Variable shape of channel – T shape, L shape, ...
- Longitudinal slopes of the channel bottom 1-5 %
- Outlet position central or variable in longitudinal axis or eccentric outlet
- Adjustable EasyFix levelling feet
- Anchors for fixing in concrete
- Protective cover available for recommended channel widths. See page 232 for more details

**Instruction**

- Please define channel dimensions by filling out required entry fields.
- For technical support, please contact [customerservice@aco.cz](mailto:customerservice@aco.cz)
- For Industrial Drainage information, visit [ACO Building Drainage web](#)

These option buttons highlight hygienic design requirements

These option buttons highlight possible conflicts in hygienic design

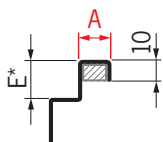
**Step 1 - Material**

Stainless steel grade 1.4301 (AISI 304)

Stainless steel grade 1.4404 (AISI 316L)

**Step 2 - Edge profile**

**Standard edge**



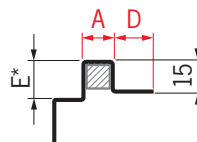
**Edge infill type**

- Rubber edge infill
- PUR edge infill
- Steel edge infill
- No edge infill

**Edge width (A)**

- 15 mm
- Custom:  \*\* mm

**Extended edge**



**Edge infill type**

- Rubber edge infill
- PUR edge infill
- Steel edge infill
- No edge infill

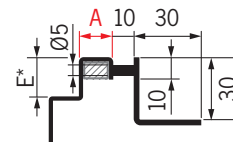
**Edge width (A)**

- 15 mm
- Custom:  \*\* mm

**Flange length (D)**

- 50 mm
- Custom:  mm

**L-profile edge**



**Edge infill type**

- Rubber edge infill
- PUR edge infill
- Steel edge infill
- No edge infill

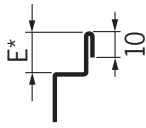
**Edge width (A)**

- 15 mm
- Custom:  \*\* mm

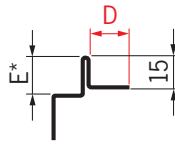
\* Sitting height for gratings (E) is defined in step 7  
\*\* For hygienic solution, check with technical support

**Step 2 - Edge profile**

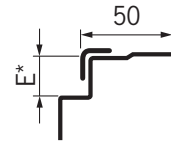
**Folded edge**



**Folded edge with flange**



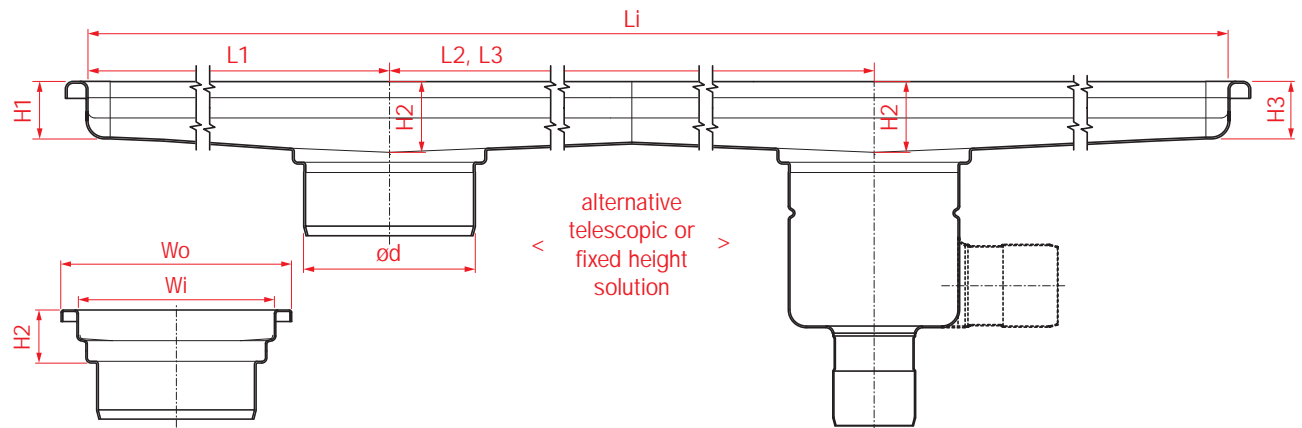
**Vinyl edge**

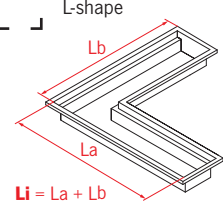
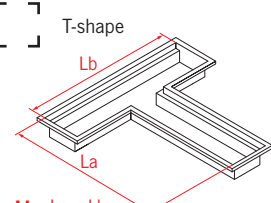


**Flange length (D)**

- 50 mm
- Custom:  mm

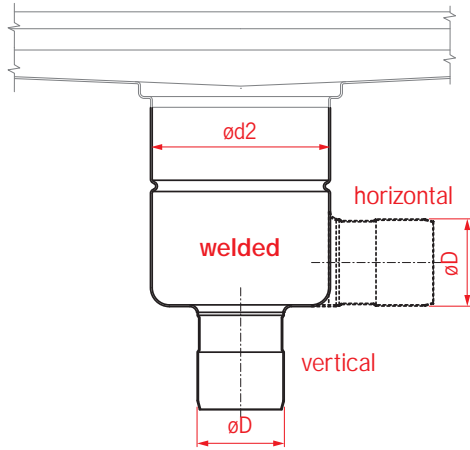
**Step 3 - Channel dimensions**



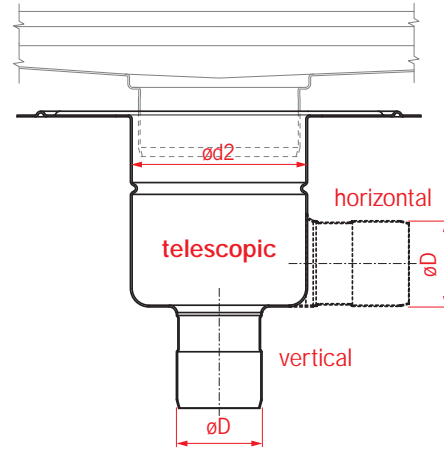
Width Overall (Wo) / Internal (Wi)	Channel height at outlet (H2)	Channel Length (Li)	Channel shape
<input type="checkbox"/> 150 mm / 118 mm <small>(valid for edge width 15 mm)</small>	<input style="width: 100px;" type="text"/> mm	<input style="width: 100px;" type="text"/> mm	<input type="checkbox"/> <input type="checkbox"/> L-shape  $L_i = L_a + L_b$
<input type="checkbox"/> 200 mm / 170 mm <small>(valid for edge width 15 mm)</small>	<b>Slope</b>	<b>Number of outlets and their spacing (L1, L2, L3, L4)</b>	
<input type="checkbox"/> 300 mm / 270 mm <small>(valid for edge width 15 mm)</small>	<input type="checkbox"/> No	<input type="checkbox"/> L1: <input style="width: 40px;" type="text"/> mm	<input type="checkbox"/> <input type="checkbox"/> T-shape  $L_i = L_a + L_b$
<input type="checkbox"/> 400 mm / 370 mm <small>(valid for edge width 15 mm)</small>	<input type="checkbox"/> Yes - 1%	<input type="checkbox"/> L2: <input style="width: 40px;" type="text"/> mm	
<input type="checkbox"/> 500 mm / 470 mm <small>(valid for edge width 15 mm)</small>	<input type="checkbox"/> Yes - height defined <small>(If you require values below 50 mm, please contact technical support)</small>	<input type="checkbox"/> L3: <input style="width: 40px;" type="text"/> mm	<input type="checkbox"/> <input type="checkbox"/> L-shape <input style="width: 40px;" type="text"/> mm <input style="width: 40px;" type="text"/> mm
<input type="checkbox"/> 600 mm / 570 mm <small>(valid for edge width 15 mm)</small>	H1: <input style="width: 40px;" type="text"/> mm	<input type="checkbox"/> L4: <input style="width: 40px;" type="text"/> mm	
<input type="checkbox"/> 800 mm / 770 mm <small>(valid for edge width 15 mm)</small>	H3: <input style="width: 40px;" type="text"/> mm	For higher number of outlets, please contact technical support	
<input type="checkbox"/> Custom: <small>(For channel with standard edge width of 15 mm subtract 30 mm from overall width as value for internal width)</small>			
Wo: <input style="width: 40px;" type="text"/> mm			La: <input style="width: 40px;" type="text"/> mm
Wi: <input style="width: 40px;" type="text"/> mm			Lb: <input style="width: 40px;" type="text"/> mm

**Step 4 - Gully construction**

**Welded gully**



**Telescopic gully**



**Outlet orientation and dimensions**

Vertical outlet (ød2 / øD)	Horizontal outlet (ød2 / øD)
<input type="checkbox"/> 142 / 75 (1.4 l/s)	<input type="checkbox"/> 142 / 75 (1.4 l/s)
<input type="checkbox"/> 142 / 110 (1.6 l/s)	<input type="checkbox"/> 142 / 110 (1.6 l/s)
<input type="checkbox"/> 157 / 75 (2.7 l/s)	<input type="checkbox"/> 157 / 75 (2.6 l/s)
<input type="checkbox"/> 157 / 110 (3.5 l/s)	<input type="checkbox"/> 157 / 110 (2.8 l/s)
<input type="checkbox"/> 218 / 110 (5.0 l/s)	<input type="checkbox"/> 218 / 110 (4.4 l/s)
<input type="checkbox"/> 218 / 160 (5.0 l/s)	

**Location flange**  
(For telescopic gully only)



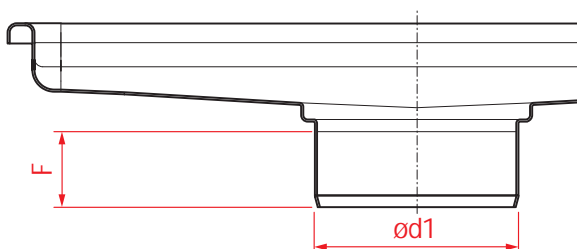
**Bonding flange**  
(For telescopic gully only)



**Mechanical clamping flange**  
(For telescopic gully only)



**Without gully (outlet pipe only)**



Outlet diameter (ød1)	Outlet length (F)
<input type="checkbox"/> 75 mm	<input type="checkbox"/> 36 mm
<input type="checkbox"/> 110 mm	<input type="checkbox"/> 58 mm
<input type="checkbox"/> 125 mm	<input type="checkbox"/> 150 mm
<input type="checkbox"/> 142 mm	<input type="checkbox"/> Custom: <input type="text"/> mm
<input type="checkbox"/> 200 mm	

**Step 5 - Accessories**

**Foul air trap included**

- Yes
- No



**Silt basket included**

- Yes
- No



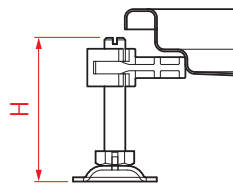
**Raising piece included**

- Yes
- No
- With Location flange
- With Bonding flange
- With Mechanical clamping flange



**ACO EasyFix levelling feet height (H)**

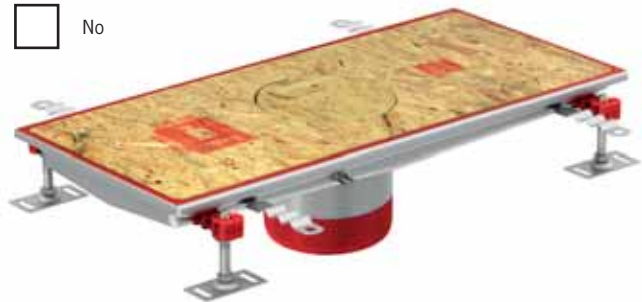
- 80 mm (standard)
- 110 mm
- 170 mm
- 200 mm
- 250 mm
- 300 mm



Channel with height at outlet above 200 mm are supplied with durable stainless steel levelling feet

**ACO Protective covers included**

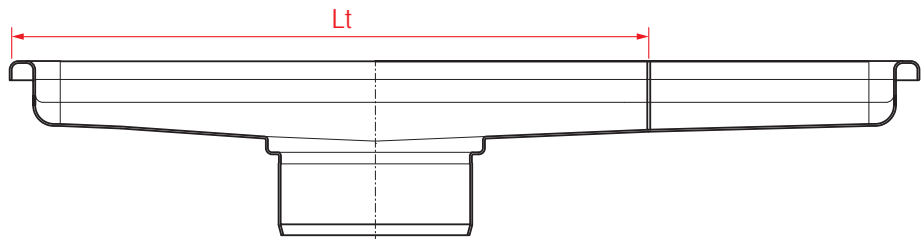
- Yes
- No



**Step 6 - Delivery requirements**

**Maximum transport length (Lt)**

- 6000 mm (standard)
- 3000 mm
- 2000 mm

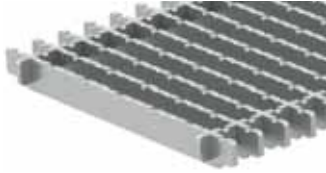


**Transport connection type**

- Welded on site
- Bolted on site

Step 7 - Gratings

**ACO frameless ladder grating**

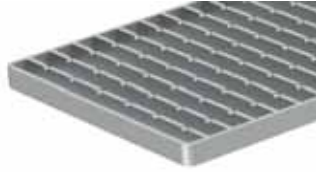


Slip resistant

**Load class**

- M 125**  
(valid up to  $W_o = 300$  mm)

**ACO hygienic ladder grating**



- Slip resistant
- Plain

**Load class**

- R 50**  
(valid up to  $W_o = 800$  mm)
- M 125**  
(valid up to  $W_o = 500$  mm)
- N 250**  
(valid up to  $W_o = 300$  mm)
- P 400**  
(Custom)

**ACO hygienic cast grating**

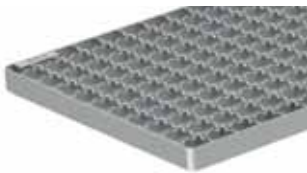


Slip resistant

**Load class**

- M 125** (max.  $W_o = 300$ )  
(valid up to  $W_o = 300$  mm)

**ACO mesh grating**



- Slip resistant
- Plain

**Load class**

- L 15**  
(valid up to  $W_o = 1000$  mm)
- R 50** (max.  $W_o = 300$ )  
(valid up to  $W_o = 500$  mm)
- M 125** (max.  $W_o = 300$ )  
(valid up to  $W_o = 300$  mm)

**ACO hygienic slot cover**

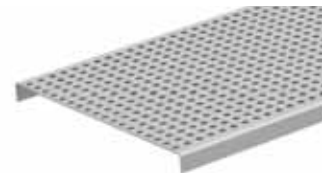


Slip resistant

**Load class**

- R 50**  
(valid up to  $W_o = 300$  mm)
- M 125**  
(valid up to  $W_o = 300$  mm)
- N 250**  
(valid up to  $W_o = 300$  mm)

**ACO perforated grating**

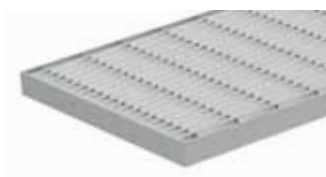


Plain

**Load class**

- L 15**  
(valid up to  $W_o = 300$  mm)
- R 50** (max.  $W_o = 300$ )  
(valid up to  $W_o = 300$  mm)

**ACO heelsafe grating**



Plain

**Load class**

- L 15** (max.  $W_o = 300$ )  
(valid up to  $W_o = 300$  mm)

**ACO multi-slot 5 grating**



Slip resistant

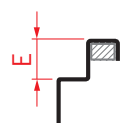
**Load class**

- L 15**  
(valid up to  $W_o = 300$  mm)
- R 50** (max.  $W_o = 300$ )  
(valid up to  $W_o = 300$  mm)

**Without gratings**

**Height of gratings (E)**

- 20 mm
- 25 mm
- 30 mm
- 40 mm



## Introduction

### ACO slot channel portfolio

---

The ACO slot channel range covers channels for all common applications and all common floor types (concrete, tiles, resin or vinyl). Selecting a channel from the range is easy. The unique variability of the whole portfolio allows choosing the right channel according to all customers' needs.

Channel's length, depth and outlet position are just a few of the parameters which can be varied and, regardless of the variations specified, there is no impact on delivery lead times.

### ACO slot channel ordering

---

The dimensions of the ACO slot channel can be easily specified in respect of project requirements. To specify the channel please use the Customization template (see page 119) which will help you to identify the information needed or contact our Sales/Technical department.

### ACO slot channel customization

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In addition all ACO slot channel can be designed with:

- Special outlet position
- Special depth
- Special slope
- Special slot channel width
- L-shape and T-shape layout
- Special side inlets

To request customised ACO slot channel, please contact our Sales/technical department.



**ACO slot channel system overview**

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**ACO slot channel - fixed height solution**

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**ACO slot channel - telescopic solution**

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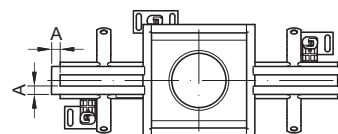
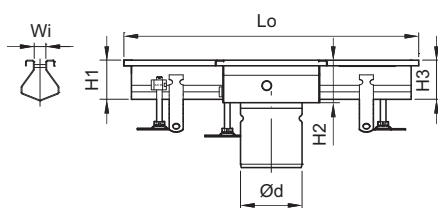
**ACO slot channel - semi-standard**

**Product information**

The dimensions of the ACO slot channel for concrete, tiles and resin floor can be easily specified in respect of project requirements.

- Tested and certified according to EN 1253
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel, pickled and passivated
- 1.5 mm material thickness
- ACO slot channel 8 or 20 mm
- Length – up to customer request
- Longitudinal slopes of the channel bottom 1-5 %
- Standardized widths
- Outlet position central or variable in longitudinal axis
- Adjustable EasyFix levelling feet
- Anchors for fixing in concrete
- Protective cover available. See page 232 for more details

**Order information**



External (overall) width Wi [mm]	Dimension of edge A [mm]	Length of channel Lo	Height at outlet of channel H2	Height at end of channel H1 and H3
20	15	Variable *	50-200	50-200
8	folded		50-200	50-200

\* The maximum transportable length of channel is 6 000 mm. Long channels over 6 000 mm are standardly divided in 6 m sections with transport joints.

**ACO customized slot channel**

**Product information**

The dimensions of the ACO customized slot channel for concrete, tiles and resin floor can be easily specified in respect of project requirements.

- Tested and certified according to EN 1253
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel, pickled and passivated
- 1.5 mm material thickness
- Slot of channel 8 or 20
- Length – up to customer request
- Longitudinal slopes of the channel bottom 1-5 %
- Outlet position central or variable in longitudinal axis
- Adjustable EasyFix levelling feet
- Anchors for fixing in concrete
- Protective covers available for gully tops. See page 232 for more details

**Instructions**

- Please define channel design by filling out required entry fields
- For technical support, please contact [customerservice@aco.cz](mailto:customerservice@aco.cz)
- For Industrial Drainage information, visit [ACO Building Drainage](#) web

**Hygienic design principles don't apply to slot channels.**

**Step 1 - Material**

Stainless steel grade 1.4301 (AISI 304)

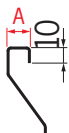
Stainless steel grade 1.4404 (AISI 316L)

**Step 2 - Edge profile**



Detail of the Edge profile

**Standard edge**



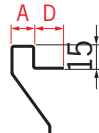
**Edge infill type**

- Rubber edge infill
- PUR edge infill
- Steel edge infill
- No edge infill

**Edge width (A)**

- 15 mm
- 25 mm

**Extended edge**



**Edge infill type**

- Rubber edge infill
- PUR edge infill
- Steel edge infill
- No edge infill

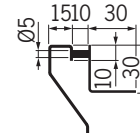
**Edge width (A)**

- 15 mm
- 25 mm

**Flange length (D)**

- 50 mm
- Custom:  mm

**L-profile edge**

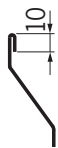


**Edge infill type**

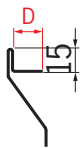
- Rubber edge infill
- PUR edge infill
- Steel edge infill
- No edge infill

**Step 2 - Edge profile**

**Folded edge**



**Folded edge with flange**



**Vinyl edge**

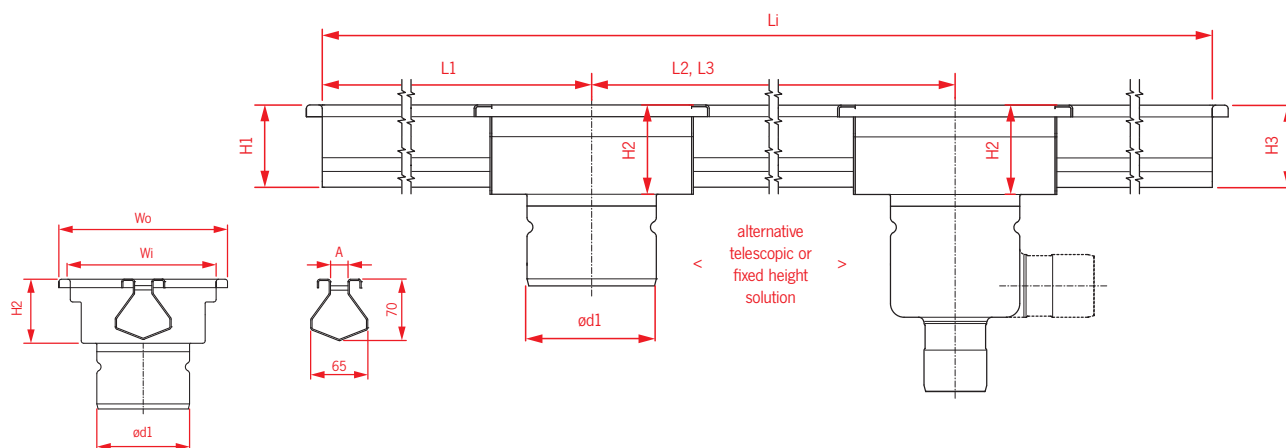


**Flange length (D)**

50 mm

Custom:  mm

**Step 3 - Channel dimensions**

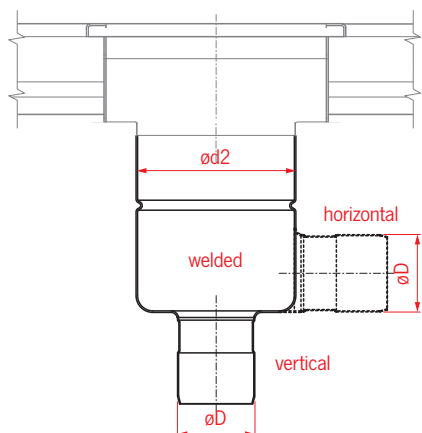


Gully top dimensions Gully top (Wo) / Outlet (ød2)	Slot width (A)	Channel height at outlet (H2)	Channel Length (Li)
<input type="checkbox"/> 200 x 200 mm / 75 mm (valid for edge width 15 mm)	<input type="checkbox"/> 8 mm	<input type="text"/> mm	<input type="text"/> mm
<input type="checkbox"/> 200 x 200 mm / 110 mm (valid for edge width 15 mm)	<input type="checkbox"/> 20 mm	<b>Slope</b>	
<input type="checkbox"/> 200 x 200 mm / 125 mm (valid for edge width 15 mm)		<input type="checkbox"/> No	<b>Number of outlets and their spacing (L1, L2, L3, L4)</b>
<input type="checkbox"/> 250 x 250 mm / 142 mm (valid for edge width 15 mm)		<input type="checkbox"/> Yes - 1%	
<input type="checkbox"/> 300 x 300 mm / 200 mm (valid for edge width 15 mm)		<input type="checkbox"/> Yes - height defined (If you require values below 50 mm, please contact technical support)	
<input type="checkbox"/> Custom: (For gully top with standard edge width of 15 mm subtract 30 mm from overall width as value for internal width)		H1: <input type="text"/> mm	
Wo: <input type="text"/> mm		H3: <input type="text"/> mm	<input type="checkbox"/> L1: <input type="text"/> mm
Wi: <input type="text"/> mm			<input type="checkbox"/> L2: <input type="text"/> mm
			<input type="checkbox"/> L3: <input type="text"/> mm
			<input type="checkbox"/> L4: <input type="text"/> mm

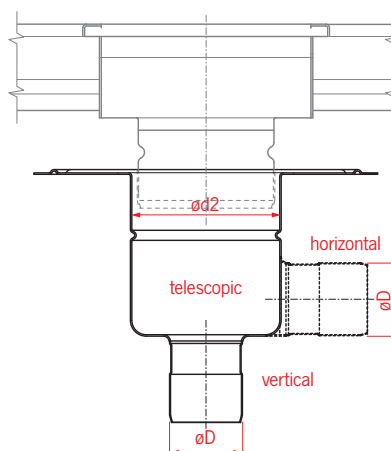
For higher number of outlets, please contact technical support

**Step 4 - Gully construction**

**Welded gully**



**Telescopic gully**



**Outlet orientation and dimensions**

**Vertical outlet**  
( $\varnothing d2$  /  $\varnothing D$ )

- 142 / 75 (1.4 l/s)
- 142 / 110 (1.6 l/s)
- 157 / 75 (2.7 l/s)
- 157 / 110 (3.5 l/s)
- 218 / 110 (5.0 l/s)
- 218 / 160 (5.0 l/s)

**Horizontal outlet**  
( $\varnothing d2$  /  $\varnothing D$ )

- 142 / 75 (1.4 l/s)
- 142 / 110 (1.6 l/s)
- 157 / 75 (2.6 l/s)
- 157 / 110 (2.8 l/s)
- 218 / 110 (4.4 l/s)

**Location flange**  
(For telescopic gully only)



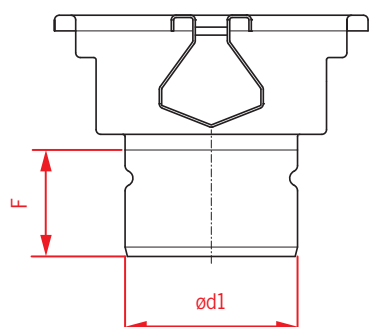
**Bonding flange**  
(For telescopic gully only)



**Mechanical clamping flange**  
(For telescopic gully only)



**Without gully (outlet pipe only)**



**Outlet diameter ( $\varnothing d1$ )**

- 75 mm  
(valid for gully top 200 x 200 mm)
- 110 mm  
(valid for gully top 200 x 200 mm)
- 125 mm  
(valid for gully top 200 x 200 mm)
- 142 mm  
(valid for gully top 250 x 250 mm)
- 200 mm  
(valid for gully top 300 x 300 mm)

**Outlet length (F)**

- 36 mm
- 58 mm
- 150 mm
- Custom:  mm

**Step 5 - Accessories**

**Foul air trap included**

- Yes
- No



**Silt basket included**

- Yes
- No



**Raising piece included**

- Yes
- No

With Location flange

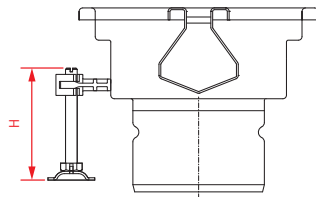
With Bonding flange

With Mechanical clamping flange



**ACO EasyFix levelling feet height (H)**

- 80 mm (standard)
- 110 mm
- 170 mm
- 200 mm



**ACO Protective covers included**

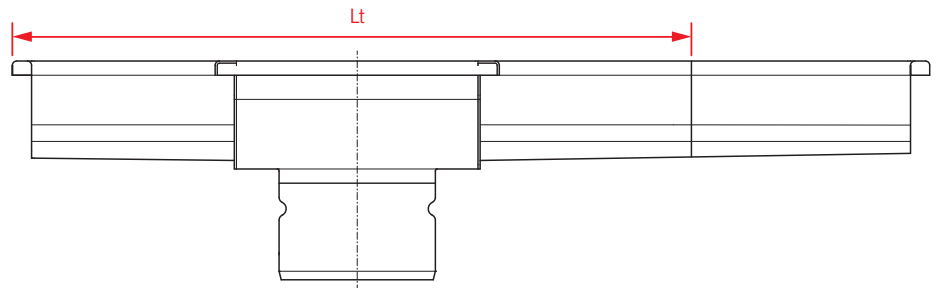
- Yes
- No



**Step 6 - Delivery requirements**

**Maximum transport length (Lt)**

- 6000 mm (standard)
- 3000 mm
- 2000 mm



Step 7 - Gratings

**ACO frameless ladder grating**

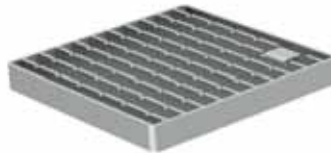


Slip resistant  Plain

**Load class**

**M 125**  
(valid up to  $W_o = 300$  mm)

**ACO hygienic ladder grating**



Slip resistant  Plain

**Load class**

**R 50**  
(valid up to  $W_o = 300$  mm)

**M 125**  
(valid up to  $W_o = 300$  mm)

**N 250**  
(valid up to  $W_o = 300$  mm)

**ACO hygienic cast grating**

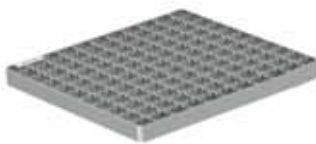


Slip resistant

**Load class**

**M 125**  
(valid up to  $W_o = 300$  mm)

**ACO mesh grating**



Slip resistant  Plain

**Load class**

**L 15**  
(valid up to  $W_o = 300$  mm)

**R 50**  
(valid up to  $W_o = 300$  mm)

**ACO hygienic slot cover**

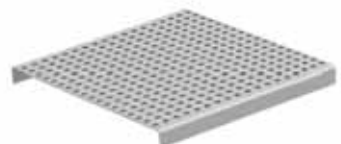


Slip resistant

**Load class**

**M 125**  
(valid up to  $W_o = 300$  mm)

**ACO perforated grating**



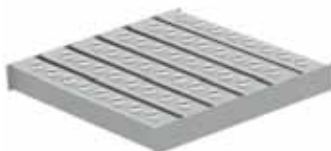
Plain

**Load class**

**L 15**  
(valid up to  $W_o = 300$  mm)

**R 50**  
(valid up to  $W_o = 300$  mm)

**ACO multi-slot 5 grating**



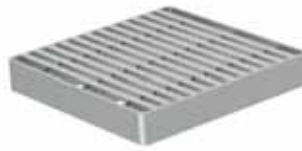
Slip resistant

**Load class**

**L 15**  
(valid up to  $W_o = 300$  mm)

**R 50**  
(valid up to  $W_o = 300$  mm)

**ACO heelsafe grating**



Plain

**Load class**

**L 15**  
(valid up to  $W_o = 300$  mm)

**Without gratings**

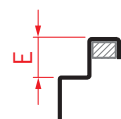
**Height of gratings (E)**

20 mm

25 mm

30 mm

40 mm



## Introduction

### ACO modular channel portfolio

The ACO modular channel range includes channels for all common applications and all common floor types (concrete, tiles, resin or vinyl). Selecting a channel from the range is easy. The unique variability of the whole portfolio makes it easy to choose the right channel according to a specific customer's needs.

Channel's length, depth and outlet position are just a few of the parameters which can be varied and, regardless of the variations specified, there is no impact on delivery lead times.

### ACO modular channel ordering

The dimensions of the ACO modular channel can be easily specified in respect of project requirements.

### ACO modular channel customization

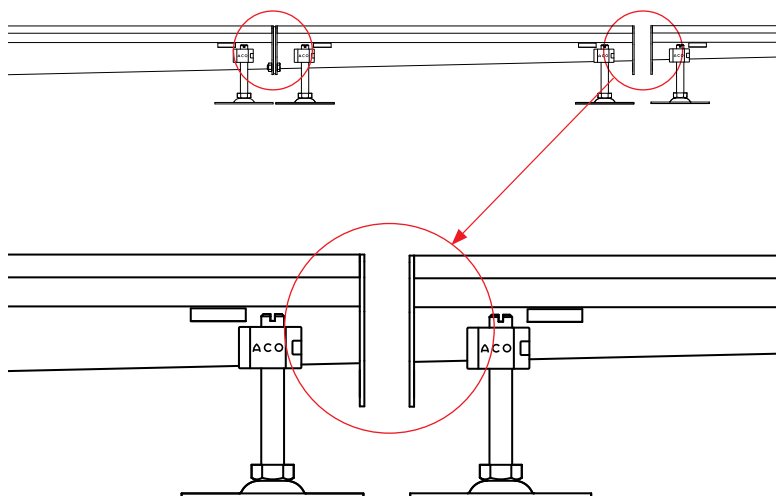
In addition, all ACO modular channels can be designed to a special length.

To request customised ACO modular channel, please contact our Sales/ Technical department.

### ACO modular sloped channel connection

Sloped channels are provided with rubber seal at the deep end of the channel only.

If your design plan includes channels connection at shallow ends, make sure that appropriate amount of rubber seals is included in your order.





**ACO modular channel system overview**

---



**ACO modular box channel 125**



**ACO modular box channel 200**

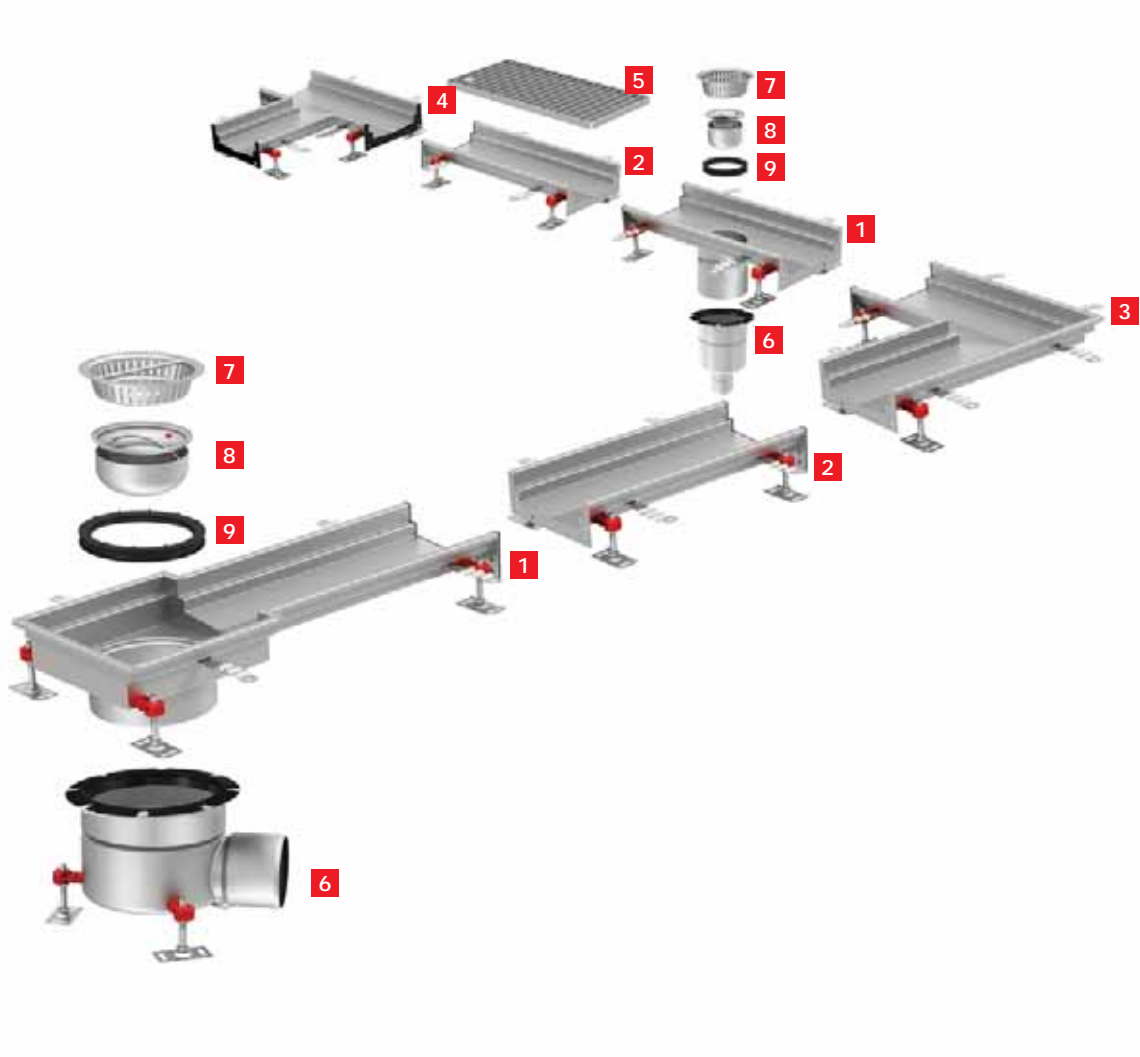


**ACO modular slot channel 20**



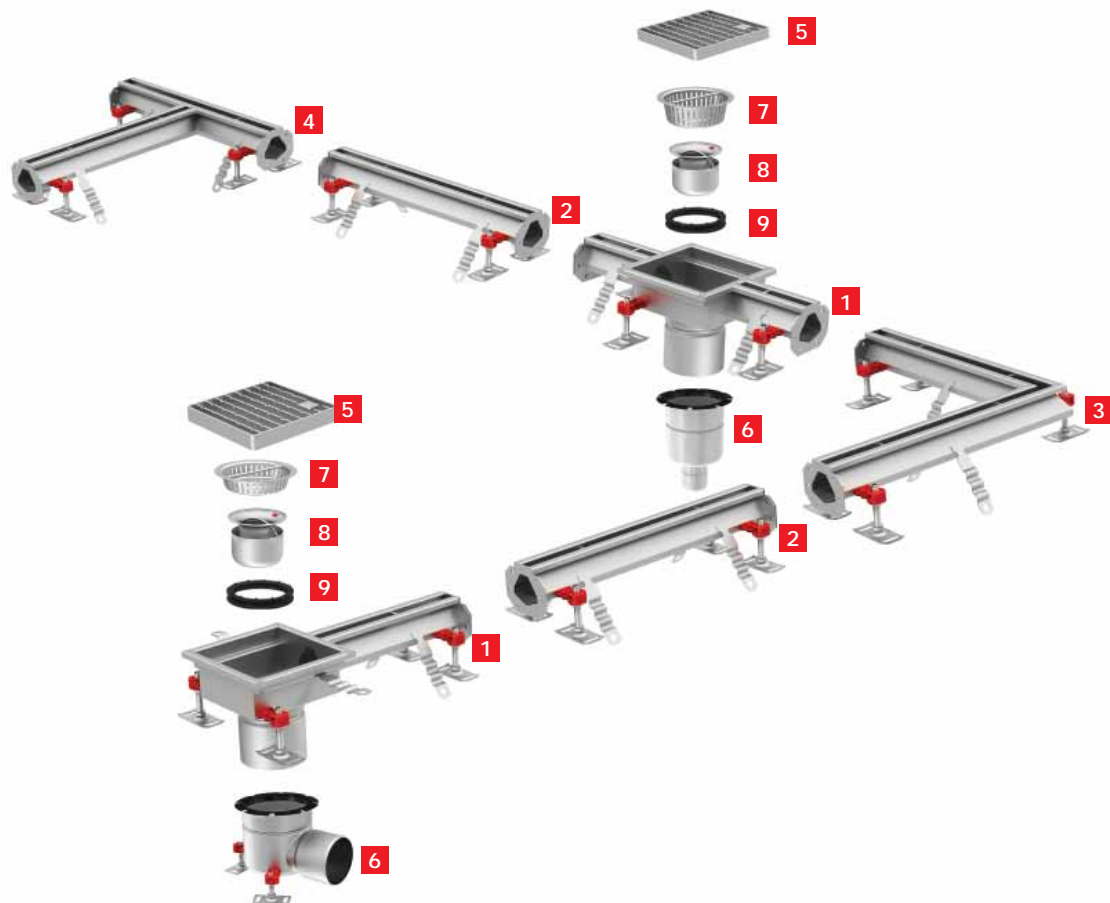
**ACO gully  
with accessories**

**ACO modular box channel system overview**



ACO channel

**ACO modular slot channel system overview**



- |  |                                |
|--|--------------------------------|
| <b>1</b> Outlet unit                             | <b>6</b> Gully                 |
| <b>2</b> Level invert and sloping invert channel | <b>7</b> Silt basket           |
| <b>3</b> Corner unit                             | <b>8</b> Foul air trap         |
| <b>4</b> Branch unit                             | <b>9</b> Foul air trap support |
| <b>5</b> Grating                                 |                                |

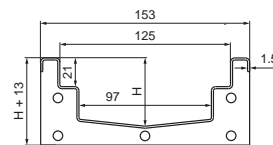
**ACO modular box channel 125 - standard articles**

**Product information**

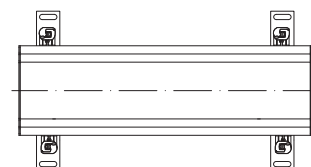
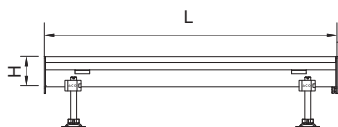
Modular concept allows specification of standard channel units to surround machinery and fit within existing tiling patterns.

Vee-bottomed (V) profiled channel for enhanced flow efficiency at low flow rates and for improved self cleaning performance.

- Fully compliant to EN 1253
- Fully tested and classified to EN 1433
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Easy and secure telescopic connection with gully
- Cut on demand items available to minimize works on site
- Wide range of gratings for load class up to C 250 (EN 1433)



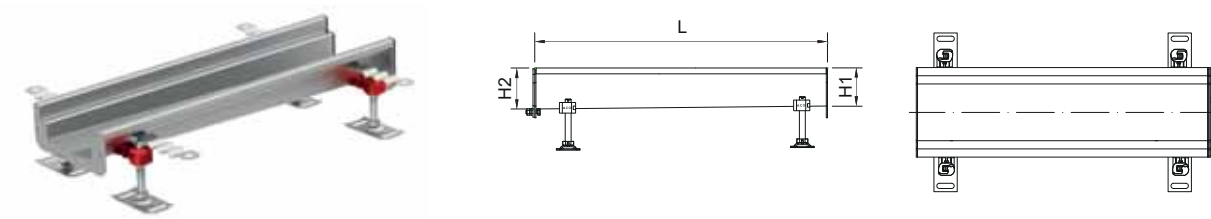
**Level invert channel**



L [mm]	Dimensions		Item number	
		H [mm]	1.4301	1.4404
500		50	105119	407211
		65	105120	407212
		80	105121	407213
		95	105122	407214
		110	105123	407215
		125	105124	407216
1000		50	105127	407217
		65	105128	407218
		80	105129	407219
		95	105130	407220
		110	105131	407221
		125	105132	407222
2000		50	105135	407223
		65	105136	407224
		80	105137	407225
		95	105138	407226
		110	105139	407227
		125	105140	407228
3000		50	105143	407229
		65	105144	407230
		80	105145	407231
		95	105146	407232
		110	105147	407233
		125	105148	407234

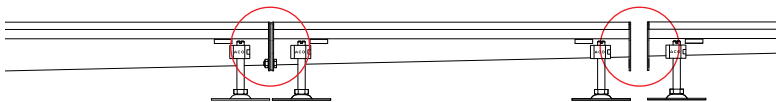
Note: Items are equipped with seal and connecting material on one side.

**Sloping invert channel**



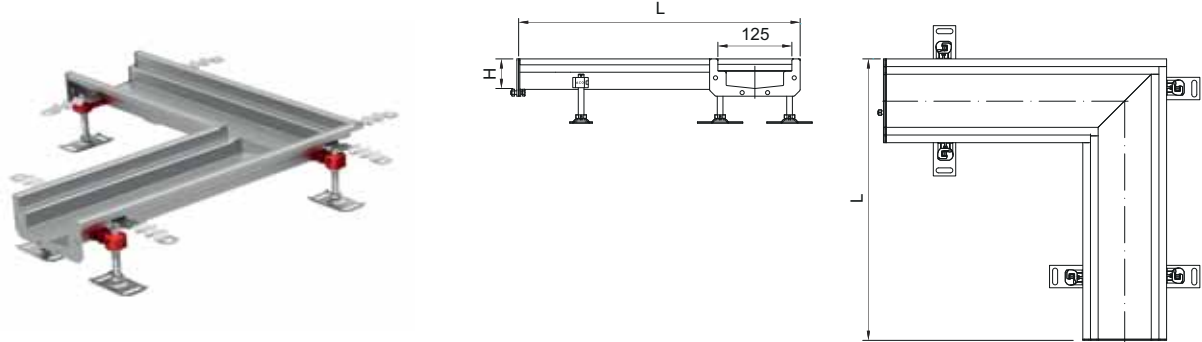
L [mm]	Dimensions		Item number	
	H1 [mm]	H2 [mm]	1.4301	1.4404
500	50	65	105151	407235
	65	80	105152	407236
1000	50	65	105155	407237
	65	80	105156	407238
	80	95	105157	407239
	95	110	105158	407240
2000	50	65	105161	407241
	65	80	105162	407242
	80	95	105163	407243
	95	110	105164	407244
	110	125	105165	407245
3000	50	65	105168	407246
	65	80	105169	407247
	80	95	105170	407248
	95	110	105171	407249
	110	125	105172	407250
6000	50	80	408821	408824
	65	95	408822	408825
	95	125	408823	408826

Note: Items are equipped with seal and connecting material on deeper side only. See page 116 for more details.



**ACO modular channel**  
**ACO modular box channel 125 - standard articles**

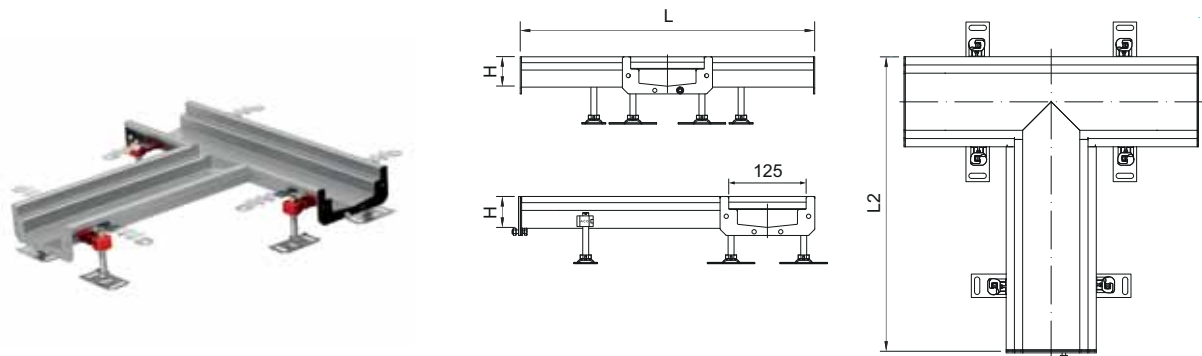
**Corner unit**



L [mm]	Dimensions		Item number	
	H [mm]	1.4301	1.4404	
515	50	409812	409818	
	65	409813	409819	
	80	409814	409820	
	95	409815	409821	
	110	409816	409822	
	125	409817	409823	

Note: Items are equipped with seal and connecting material on one side.

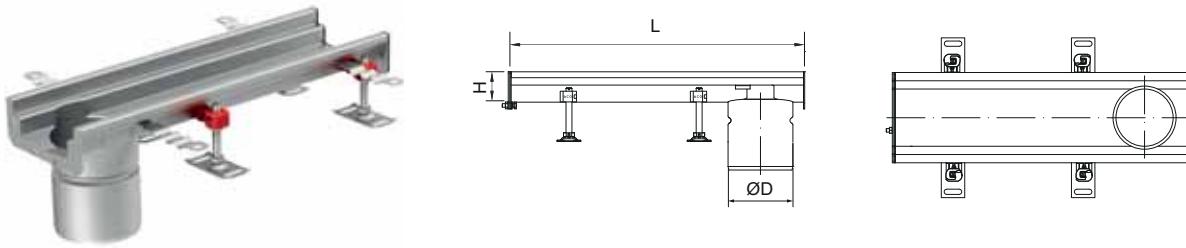
**Branch unit**



L1 [mm]	Dimensions		Item number	
	L2 [mm]	H [mm]	1.4301	1.4404
500	515	50	409824	409830
		65	409825	409831
		80	409826	409832
		95	409827	409833
		110	409828	409834
		125	409829	409835

Note: Items are equipped with seal and connecting material on one side.

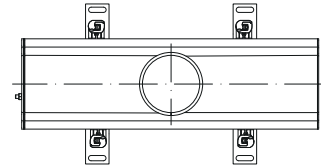
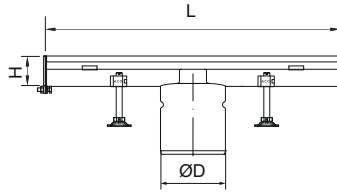
**End outlet**



Dimensions		Gully	Outlet diameter øD [mm]	Item number	
L [mm]	H [mm]			1.4301	1.4404
500	50	ACO gully EG150	110	105175	407251
	65			105176	407252
	80			105177	407253
	95			105178	407254
	110			105179	407255
	125			105180	407256
1000	50			105183	407257
	65			105184	407258
	80			105185	407259
	95			105186	407260
	110			105187	407261
	125			105188	407262
500	50	ACO hygienic gully 142	125	415946	415991
	65			415947	415992
	80			415948	415993
	95			415949	415994
	110			415950	415995
	125			415951	415996
1000	50			415952	415997
	65			415953	415998
	80			415954	415999
	95			415955	416000
	110			415956	416001
	125			415957	416002
500	50	ACO hygienic gully 157	142	409732	409733
	65			409736	409737
	80			409740	409741
	95			409744	409745
	110			409724	409725
	125			409728	409729
1000	50			409708	409709
	65			409712	409713
	80			409716	409717
	95			409720	409721
	110			409700	409701
	125			409704	409705

Note: Items are equipped with seal and connecting material on one side.

Centre outlet

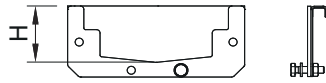


Dimensions		Gully	Outlet diameter øD [mm]	Item number	
L [mm]	H [mm]			1.4301	1.4404
500	50	ACO gully EG150	110	105191	407263
	65			105192	407264
	80			105193	407265
	95			105194	407266
	110			105195	407267
	125			105196	407268
1000	50			105199	407269
	65			105200	407270
	80			105201	407271
	95			105202	407272
	110			105203	407273
	125			105204	407274
500	50	ACO hygienic gully 142	125	415958	416003
	65			415959	416004
	80			415960	416005
	95			415961	416006
	110			415962	416007
	125			415963	416008
1000	50			415964	416009
	65			415965	416010
	80			415966	416011
	95			415967	416012
	110			415968	416013
	125			415969	416014
500	50	ACO hygienic gully 157	142	409734	409735
	65			409738	409739
	80			409742	409743
	95			409746	409747
	110			409726	409727
	125			409730	409731
1000	50			409710	409711
	65			409714	409715
	80			409718	409719
	95			409722	409723
	110			409702	409703
	125			409706	409707

Note: Items are equipped with seal and connecting material on one side.



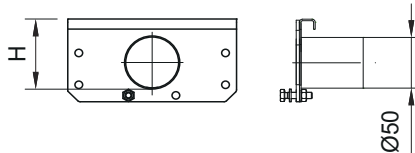
**End plate**



Dimensions H [mm]	Item number	
	1.4301	1.4404
50	105100	407196
65	105101	407197
80	105102	407198
95	105103	407199
110	105104	407200
125	105105	407201

Note: Items are equipped with seal and connecting material.

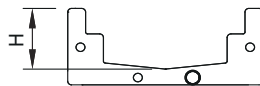
**End plate with 50 mm outlet**



Dimensions H [mm]	Item number	
	1.4301	1.4404
65	409114	409119
80	409115	409120
95	409116	409121
110	409117	409122
125	409118	409123

Note: Items are equipped with seal and connecting material.

**Seal rubber**



Dimensions H [mm]	Item number
	NBR
50	413587
65	413588
80	413589
95	413590
110	413591
125	413592

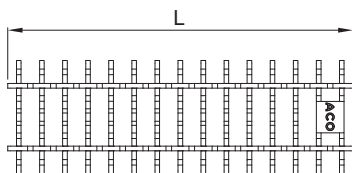
Note: Items include seal and connecting material.

**Gratings for ACO modular box channel 125**

**Product information**

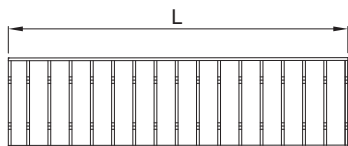
- Fully tested and classified to EN 1433
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Special length 375 mm for branches and corner units
- Slip resistant gratings available for added user safety
- Load classes A 15, B 125 and C 250

**ACO frameless ladder grating**



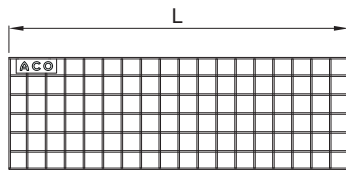
Length L [mm]	Load class	Slip resistant	Material	Item number
375	C 250	Yes	1.4301	446280
			1.4404	446281
500	C 250	Yes	1.4301	446276
			1.4404	446277

**ACO ladder grating**



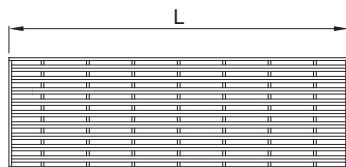
Length L [mm]	Load class	Slip resistant	Material	Item number
375	C 250	Yes	1.4301	414134
			1.4404	414184
500	C 250	Yes	1.4301	21740
			1.4404	21745
1000	C 250	Yes	1.4301	21741
			1.4404	21746

**ACO mesh grating**



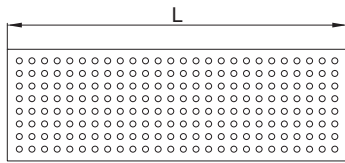
Length L [mm]	Load class	Slip resistant	Material	Item number	
375	A 15	No	1.4301	414132	
			1.4404	414182	
	Yes		1.4301	414130	
			1.4404	414180	
	C 250	No		1.4301	414133
				1.4404	414183
Yes			1.4301	414131	
500	A 15	No	1.4301	21720	
			1.4404	21725	
	Yes		1.4301	21710	
			1.4404	21715	
	C 250	No		1.4301	21920
				1.4404	21925
Yes			1.4301	21910	
1000	A 15	No	1.4301	21620	
			1.4404	21625	
	Yes		1.4301	21610	
			1.4404	21615	
	C 250	No		1.4301	21820
				1.4404	21825
Yes			1.4301	21810	
		1.4404	21815		

**ACO heelsafe grating**



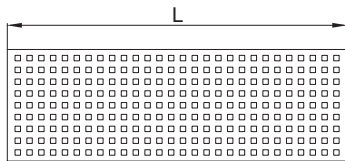
Length L [mm]	Load class	Slip resistant	Material	Item number
375	B 125	No	1.4301	414135
			1.4404	414185
500	B 125	No	1.4301	96819
			1.4404	401238
1000	B 125	No	1.4301	96818
			1.4404	401237

**ACO perforated grating**



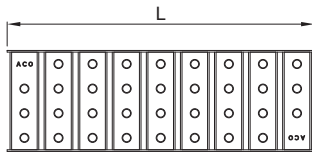
Length L [mm]	Load class	Slip resistant	Material	Item number
375	A 15	No	1.4301	414136
			1.4404	414186
	B 125	No	1.4301	414137
			1.4404	414187
500	A 15	No	1.4301	21760
			1.4404	21765
	B 125	No	1.4301	21960
			1.4404	21965
1000	A 15	No	1.4301	21660
			1.4404	21665
	B 125	No	1.4301	21860
			1.4404	21865

**ACO quadrato grating**



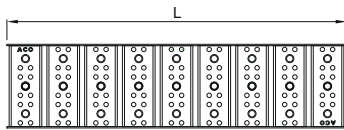
Length L [mm]	Load class	Slip resistant	With lock	Material	Item number
375	A 15	No	No	1.4301	414138
				1.4404	414188
500	A 15	No	No	1.4301	105530
				1.4404	413999
			Yes	1.4301	105528
				1.4404	407925
1000	A 15	No	No	1.4301	105529
				1.4404	413998
			Yes	1.4301	105527
				1.4404	407924

**ACO multi-slot 5 grating**



Length L [mm]	Load class	Slip resistant	Material	Item number
375	A 15	Yes	1.4301	414139
			1.4404	414189
500	A 15	Yes	1.4301	409290
			1.4404	409291
	B 125	Yes	1.4301	409294
			1.4404	409295
1 000	A 15	Yes	1.4301	409286
			1.4404	409287
	B 125	Yes	1.4301	409236
			1.4404	409237

**ACO multi-slot 8 grating**

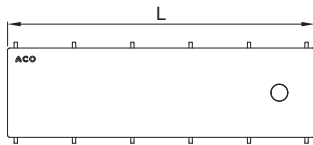


Length L [mm]	Load class	Slip resistant	Material	Item number
500	A 15	Yes	1.4301	415739
			1.4404	415740
	B 125	Yes	1.4301	415747
			1.4404	415748
	C 250	Yes	1.4301	415753
			1.4404	415754
1 000	A 15	Yes	1.4301	415735
			1.4404	415736
	B 125	Yes	1.4301	415743
			1.4404	415744
	C 250	Yes	1.4301	415751
			1.4404	415752

## ACO modular channel

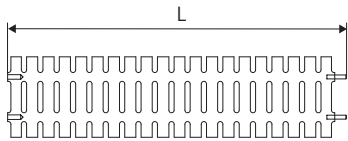
### Gratings for ACO modular box channel 125

#### ACO hygienic slot cover



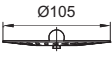
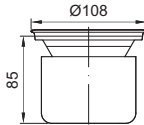
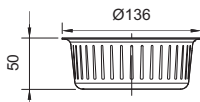
Length L [mm]	Load class	Slip resistant	Material	Item number
375	B 125	Yes	1.4301	445800
			1.4404	445801
	C 250	Yes	1.4301	445802
			1.4404	445803
500	B 125	Yes	1.4301	445792
			1.4404	445793
	C 250	Yes	1.4301	445794
			1.4404	445795
1 000	B 125	Yes	1.4301	445796
			1.4404	445797
	C 250	Yes	1.4301	445798
			1.4404	445799

#### ACO plastic grating



Length L [mm]	Load class	Slip resistant	Material	Item number
500	A 15	No	-	21790
1000	A 15	No	-	21690

**Accessories for ACO modular box channel 125**

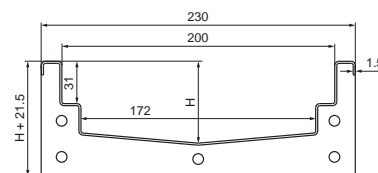
	<b>Description</b>	<b>Used with</b>	<b>Material</b>	<b>Item number</b>
	Sieve ■ Stainless steel	■ ACO modular box channel 125 with outlet 110 mm	1.4301	<b>97235</b>
			1.4404	<b>97285</b>
	Foul air trap ■ Stainless steel ■ Water seal 50 mm	■ ACO modular box channel 125 with outlet 110 mm	1.4301	<b>97217</b>
			1.4404	<b>97267</b>
	Silt basket ■ Stainless steel ■ 0.5 litre capacity	■ ACO modular box channel 125 with outlet 125 and 142 mm	1.4301	<b>414339</b>
			1.4404	<b>414340</b>

**ACO modular box channel 200 - standard articles**

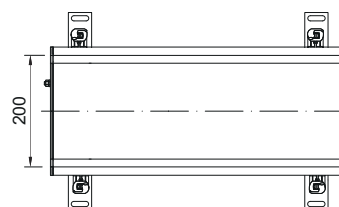
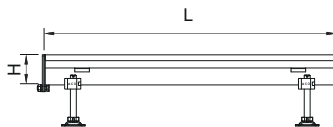
**Product information**

Modular concept allows specification of standard channel units to surround machinery and fit within existing tiling patterns.

- Fully compliant to EN 1253
- Fully tested and classified to EN 1433
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Fully pickled and passivated
- Easy and secure telescopic connection with gully
- Cut on demand items available to minimize works on site
- Wide range of gratings for load class up to C 250 (EN 1433)



**Level invert channel**

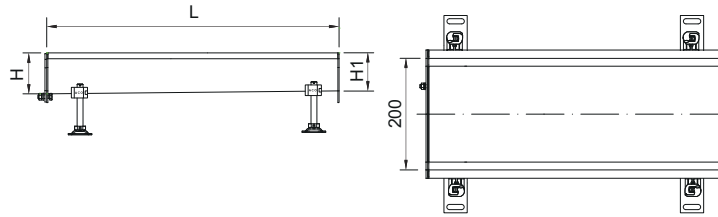


L [mm]	Dimensions		Item number	
		H [mm]	1.4301	1.4404
500		60	409072	409050
		70	409047	409051
		80	409048	409052
		100	409049	409053
1000		60	401859	401860
		70	409054	409057
		80	409055	409058
		100	409056	409059
2000		60	401875	401876
		70	409060	409063
		80	409061	409064
		100	409062	409065
3000		60	401895	401896
		70	409066	409069
		80	409067	409070
		100	409068	409071

Note: Items are equipped with seal and connecting material on one side.

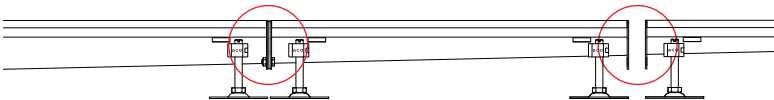


**Sloping invert channel**

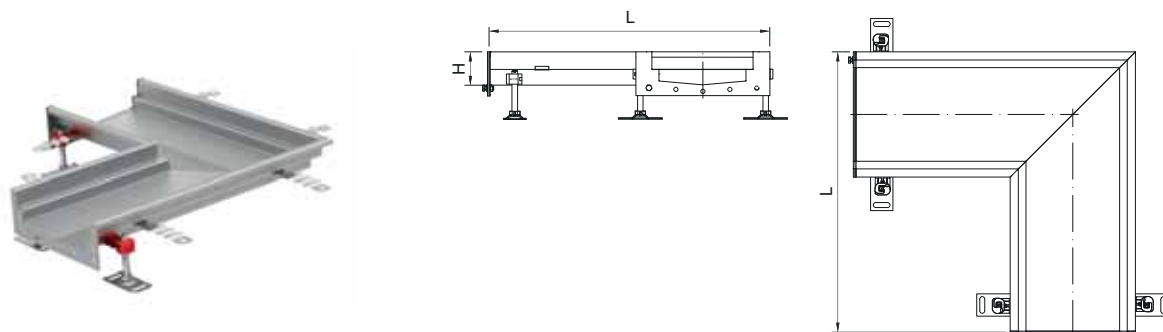


L [mm]	Dimensions		Item number	
	H1 [mm]	H2 [mm]	1.4301	1.4404
500	55	60	401855	401856
1000	60	70	401871	401872
	70	80	402464	402465
	80	90	402466	402467
	90	100	402468	402469
	100	110	402470	402471
	2000	60	70	401887
2000	70	80	402472	402473
	80	90	402474	402475
	90	100	402476	402477
	100	110	402478	402479
	110	120	402480	402481
	3000	60	80	402482
3000	80	100	402484	402485
	100	120	402486	402487
	120	140	402488	402489
6000	60	100	408827	408829
	100	140	408828	408830

Note: Items are equipped with seal and connecting material on deeper side only. See page 116 for more details.



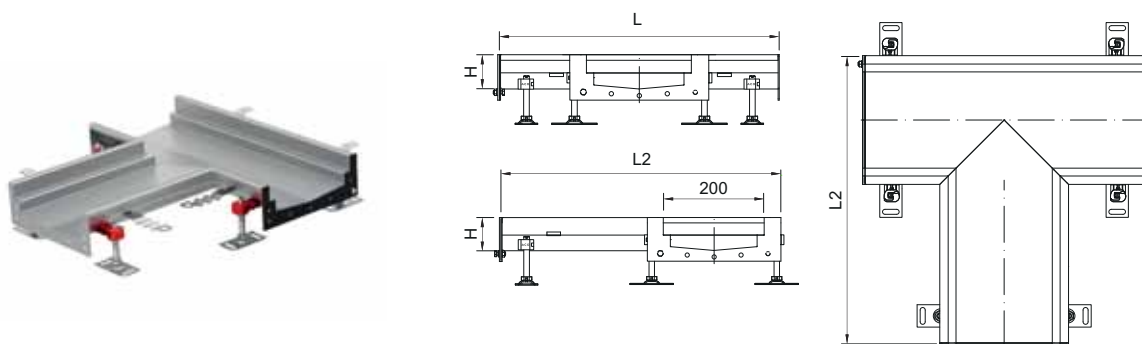
**Corner unit**



L [mm]	Dimensions		Item number	
	H [mm]		1.4301	1.4404
515	60		401921	401922
	80		402490	402491
	100		402492	402493

Note: Items are equipped with seal and connecting material on one side.

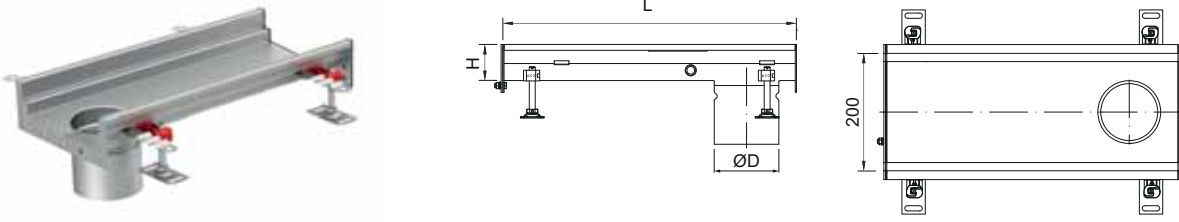
**Branch unit**



L [mm]	Dimensions		Item number	
	H1 [mm]	H2 [mm]	1.4301	1.4404
500	515	60	401933	401934
		80	402494	402495
		100	402496	402497

Note: Items are equipped with seal and connecting material on one side.

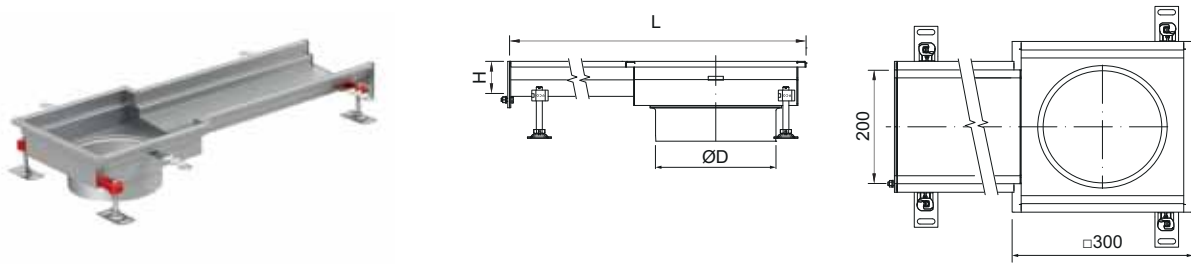
**End outlet**



Dimensions		Gully	Outlet diameter øD [mm]	Item number	
L [mm]	H [mm]			1.4301	1.4404
500	60	ACO gully EG150	110	414275	414283
	70			414276	414284
	80			414277	414285
	90			414278	414286
	100			414279	414287
	110			414280	414288
	120			414281	414289
	140			414282	414290
1000	60			414291	414299
	70			414292	414300
	80			414293	414301
	90			414294	414302
	100			414295	414303
	110			414296	414304
	120			414297	414305
	140			414298	414306
500	60	ACO hygienic gully 157	142	409900	409908
	70			409901	409909
	80			409902	409910
	90			409903	409911
	100			409904	409912
	110			409905	409913
	120			409906	409914
	140			409907	409915
1000	60			409932	409940
	70			409933	409941
	80			409934	409942
	90			409935	409943
	100			409936	409944
	110			409937	409945
	120			409938	409946
	140			409939	409947

Note: Note: Items are equipped with seal and connecting material on one side.

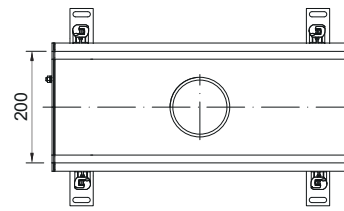
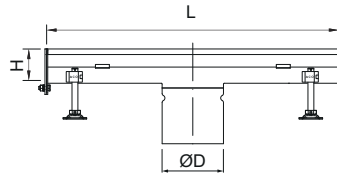
**End outlet**



Dimensions		Gully	Outlet diameter øD [mm]	Item number	
L [mm]	H [mm]			1.4301	1.4404
785	60	ACO hygienic gully 218	200	414259	414267
	70			414260	414268
	80			414261	414269
	90			414262	414270
	100			414263	414271
	110			414264	414272
	120			414265	414273
	140			414266	414274

Note: Items are equipped with seal and connecting material on one side.

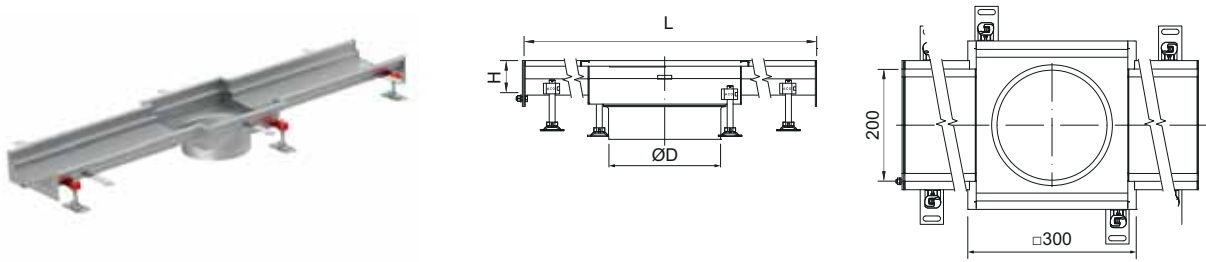
**Centre outlet**



Dimensions		Gully	Outlet diameter øD [mm]	Item number	
L [mm]	H [mm]			1.4301	1.4404
500	60	ACO gully EG150	110	414307	414315
	70			414308	414316
	80			414309	414317
	90			414310	414318
	100			414311	414319
	110			414312	414320
	120			414313	414321
	140			414314	414322
1000	60			414323	414331
	70			414324	414332
	80			414325	414333
	90			414326	414334
	100			414327	414335
	110			414328	414336
	120			414329	414337
	140			414330	414338
500	60	ACO hygienic gully 157	142	409916	409924
	70			409917	409925
	80			409918	409926
	90			409919	409927
	100			409920	409928
	110			409921	409929
	120			409922	409930
	140			409923	409931
1000	60			409948	409956
	70			409949	409957
	80			409950	409958
	90			409951	409959
	100			409952	409960
	110			409953	409961
	120			409954	409962
	140			409955	409963

Note: Items are equipped with seal and connecting material on one side.

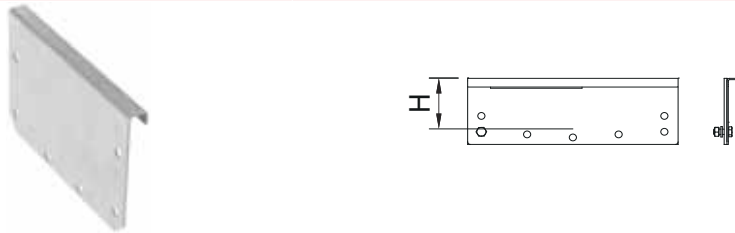
**Centre outlet**



Dimensions		Gully	Outlet diameter øD [mm]	Item number	
L [mm]	H [mm]			1.4301	1.4404
1270	60	ACO hygienic gully 218	200	414243	414251
	70			414244	414252
	80			414245	414253
	90			414246	414254
	100			414247	414255
	110			414248	414256
	120			414249	414257
	140			414250	414258

Note: Items are equipped with seal and connecting material on one side.

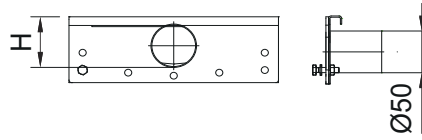
**End plate**



Dimensions [mm]	Item number	
	1.4301	1.4404
55	402683	402684
60	402028	402029
70	402030	402031
80	402514	402515
90	402032	402033
100	402516	402517
110	402518	402519
120	402036	402037
140	402520	402521

Note: Items are equipped with seal and connecting material.

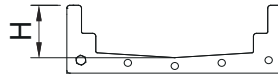
**End plate with 50 mm outlet**



Dimensions H [mm]	Item number	
	1.4301	1.4404
55	402001	402002
60	402003	402004
70	402005	402006
80	402034	402035
90	402007	402008
100	402024	402025
110	402020	402021
120	402022	402023
140	401999	402000

Note: Items are equipped with seal and connecting material.

**Seal rubber**



Dimensions H [mm]	Item number
	NBR
60	413593
70	413594
80	413595
90	413596
100	413597
110	413598
120	413599
140	413600

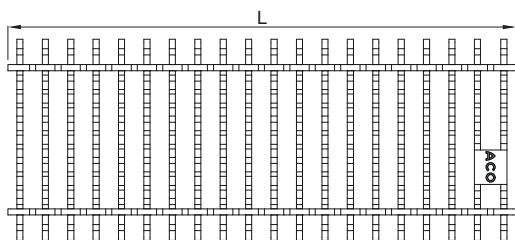
Note: Items include seal and connecting material.

**Gratings for ACO modular box channel 200**

**Product information**

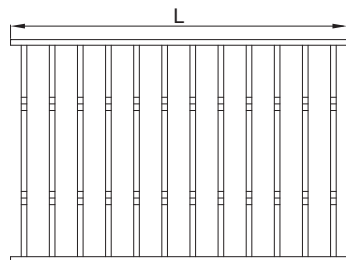
- Fully tested and classified to EN 1433
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel
- Special length 300 mm for branches and corner units
- Slip resistant gratings available for added user safety
- Load classes A 15, B 125 and C 250

**ACO frameless ladder grating**



Length L [mm]	Load class	Slip resistant	Material	Item number
300	C 250	Yes	1.4301	446288
			1.4404	446289
500	C 250	Yes	1.4301	446284
			1.4404	446285

**ACO ladder grating**

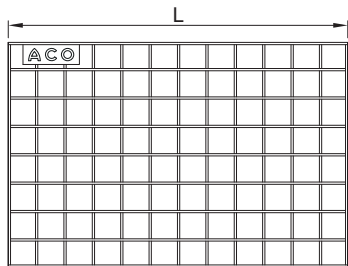


Length L [mm]	Load class	Slip resistant	Material	Item number
300	C 250	Yes	1.4301	414142
			1.4404	414192
500	C 250	Yes	1.4301	92214
			1.4404	92264
1000	C 250	Yes	1.4301	92215
			1.4404	92265

ACO channel

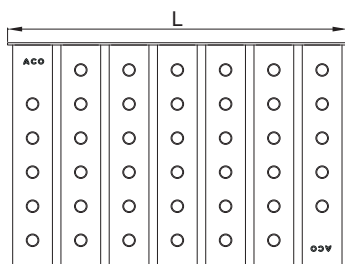


**ACO mesh grating**



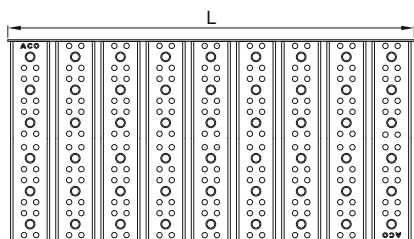
Length L [mm]	Load class	Slip resistant	Material	Item number
300	A 15	No	1.4301	414141
			1.4404	414191
		Yes	1.4301	414140
			1.4404	414190
500	A 15	No	1.4301	92207
			1.4404	92257
		Yes	1.4301	92200
			1.4404	92250
1000	A 15	No	1.4301	92208
			1.4404	92258
		Yes	1.4301	92201
			1.4404	92251

**ACO multi-slot 5 grating**



Length L [mm]	Load class	Slip resistant	Material	Item number
300	A 15	Yes	1.4301	414145
			1.4404	414195
500	A 15	Yes	1.4301	409292
			1.4404	409293
	B 125	Yes	1.4301	409296
			1.4404	409297
1000	A 15	Yes	1.4301	409288
			1.4404	409289
	B 125	Yes	1.4301	409240
			1.4404	409241

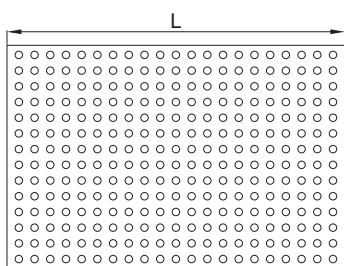
**ACO multi-slot 8 grating**



Length L [mm]	Load class	Slip resistant	Material	Item number
500	A 15	Yes	1.4301	415741
			1.4404	415742
	B 125	Yes	1.4301	415749
			1.4404	415750
1000	A 15	Yes	1.4301	415737
			1.4404	415738
	B 125	Yes	1.4301	415745
			1.4404	415746

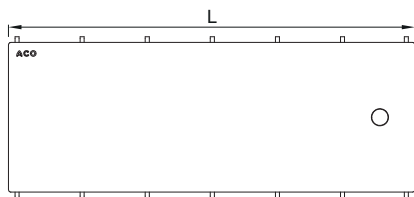
ACO channel

**ACO perforated grating**



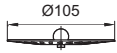
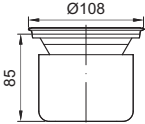
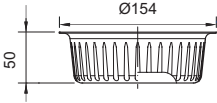
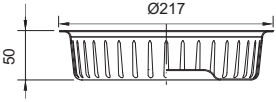
Length L [mm]	Load class	Slip resistant	Material	Item number
300	A 15	No	1.4301	414143
			1.4404	414193
500	A 15	No	1.4301	402689
			1.4404	405188
1000	A 15	No	1.4301	402688
			1.4404	405187

ACO hygienic slot cover



Length L [mm]	Load class	Slip resistant	Material	Item number
375	B 125	Yes	1.4301	445812
			1.4404	445813
	C 250	Yes	1.4301	445814
			1.4404	445815
500	B 125	Yes	1.4301	445804
			1.4404	445805
	C 250	Yes	1.4301	445806
			1.4404	445807
1 000	B 125	Yes	1.4301	445808
			1.4404	445809
	C 250	Yes	1.4301	445810
			1.4404	445811

**Accessories for ACO modular box channel 200**

	Description	Used with	Material	Item number
	Sieve ■ Stainless steel	■ ACO modular box channel 200 with outlet 110 mm	1.4301	<b>97235</b>
			1.4404	<b>97285</b>
	Foul air trap ■ Stainless steel ■ Water seal 50 mm	■ ACO modular box channel 200 with outlet 110 mm	1.4301	<b>97217</b>
			1.4404	<b>97267</b>
	Silt basket ■ Stainless steel ■ 0.6 litre capacity	■ ACO modular box channel 200 with outlet 142 mm	1.4301	<b>408202</b>
			1.4404	<b>408212</b>
	Silt basket ■ Stainless steel ■ 1.4 litre capacity	■ ACO modular box channel 200 with outlet 200 mm	1.4301	<b>408222</b>
			1.4404	<b>408232</b>

**ACO modular slot channel 20 - standard articles**

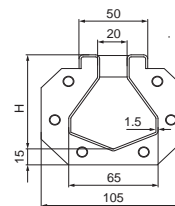
**Product information**

Ideal for wash-down applications or as a water break between designed wet and dry areas.

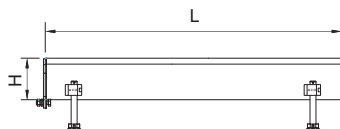
Modular concept allows specification of standard channel units to surround machinery and fit within existing tiling patterns.

Vee-bottomed (V) profiled channel for enhanced flow efficiency at low flow rates and for improved self cleaning performance.

- Fully compliant to EN 1253
- Fully tested and classified to EN 1433
- Available in 1.4301 (304) or 1.4404 (316L) grades of stainless steel, Fully pickled and passivated
- Wide range of gratings for load class up to C 250 (EN 1433)



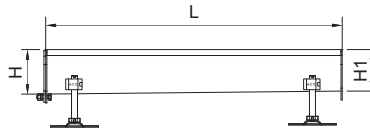
**Level invert channel**



L [mm]	Dimensions		Item number	
	H [mm]		1.4301	1.4404
500	70		92300	92350
	90		92301	92351
	120		92302	92352
1000	70		92305	92355
	90		92306	92356
	120		92307	92357
2000	70		92310	92360
	90		92311	92361
	120		92312	92362
3000	70		92316	92366
	90		92317	92367
	120		92318	92368

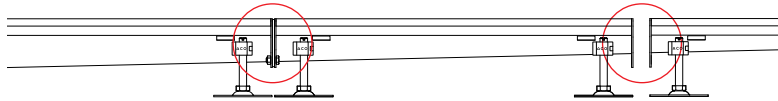
Note: Items are equipped with seal and connecting material on one side.

**Sloping invert channel**

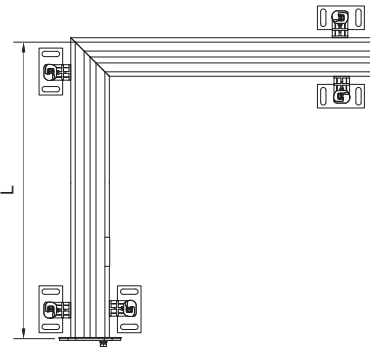
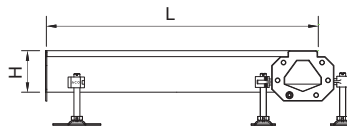


L [mm]	Dimensions		Item number	
	H1 [mm]	H2 [mm]	1.4301	1.4404
500	70	75	92303	92353
	75	80	92304	92354
1000	70	75	92308	92358
	75	80	92309	92359
2000	70	80	92313	92363
	80	90	92314	92364
	90	100	92315	92365
3000	70	80	92319	92369
	80	90	92320	92370
	90	100	92321	92371
	100	110	92322	92372
	110	120	92323	92373
6000	70	90	409014	409015
	90	110	409016	409017

Note: Items are equipped with seal and connecting material on deeper side only. See page 116 for more details.



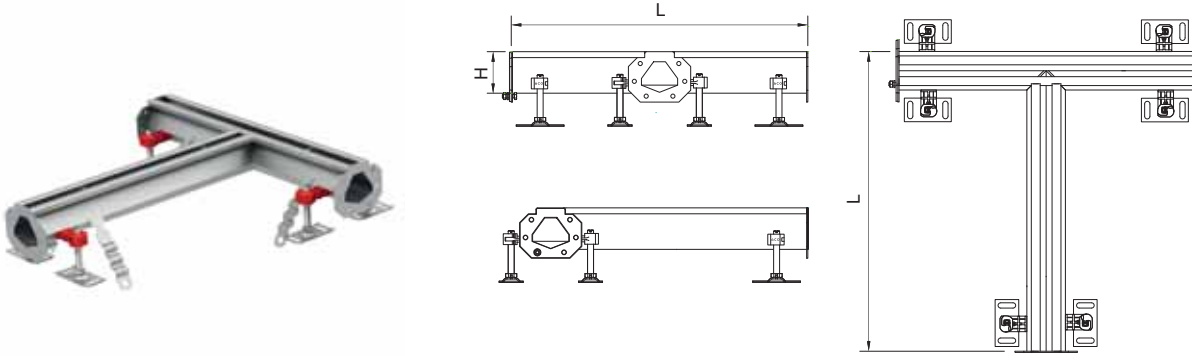
**Corner unit**



L [mm]	Dimensions		Item number	
	H [mm]		1.4301	1.4404
500	70		92338	92388
	75		92339	92389
	80		92340	92390
	90		92341	92391
	100		92342	92392
	110		92343	92393
	120		92344	92394

Note: Items are equipped with seal and connecting material on one side.

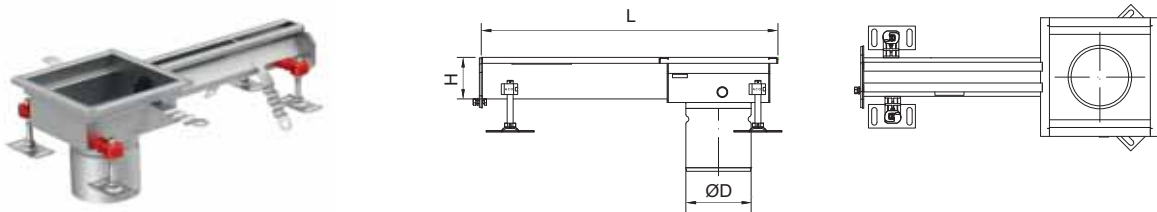
**Branch unit**



Dimensions		Item number	
L [mm]	H [mm]	1.4301	1.4404
500	70	92345	92395
	75	92346	92396
	80	92347	92397
	90	92348	92398
	100	92349	92399
	110	92400	92450
	120	92401	92451

Note: Items are equipped with seal and connecting material on one side.

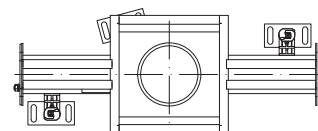
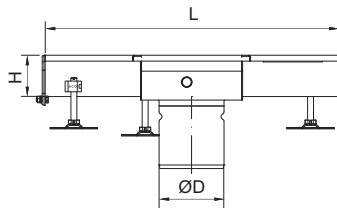
**End outlet**



Dimensions		Gully	Gully top [mm]	Outlet diameter øD [mm]	Item number	
L [mm]	H [mm]				1.4301	1.4404
500	70	ACO gully EG150	200 x 200	110	414341	414348
	75				414342	414349
	80				414343	414350
	90				414344	414351
	100				414345	414352
	110				414346	414353
	120				414347	414354
	70	ACO hygienic gully 142	200 x 200	125	415925	415970
	75				415926	415971
	80				415927	415972
	90				415928	415973
	100				415929	415974
	110				415930	415975
	120				415931	415976
	70	ACO hygienic gully 157	250 x 250	142	414201	414208
	75				414202	414209
	80				414203	414210
	90				414204	414211
	100				414205	414212
	110				414206	414213
	120				414207	414214

Note: Items are equipped with seal and connecting material on one side.

**Centre outlet**

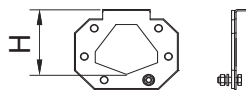


Dimensions		Gully	Gully top [mm]	Outlet diameter $\varnothing D$ [mm]	Item number	
L [mm]	H [mm]				1.4301	1.4404
500	70	ACO gully EG150	200 x 200	110	414355	414362
	75				414356	414363
	80				414357	414364
	90				414358	414365
	100				414359	414366
	110				414360	414367
	120				414361	414368
1000	70				414369	414376
	75				414370	414377
	80				414371	414378
	90				414372	414379
	100				414373	414380
	110				414374	414381
	120				414375	414382
500	70	ACO hygienic gully 142	200 x 200	125	415932	415977
	75				415933	415978
	80				415934	415979
	90				415935	415980
	100				415936	415981
	110				415937	415982
	120				415938	415983
1000	70				415939	415984
	75				415940	415985
	80				415941	415986
	90				415942	415987
	100				415943	415988
	110				415944	415989
	120				415945	415990
500	70	ACO hygienic gully 157	250 x 250	142	414215	414222
	75				414216	414223
	80				414217	414224
	90				414218	414225
	100				414219	414226
	110				414220	414227
	120				414221	414228
1000	70				414229	414236
	75				414230	414237
	80				414231	414238
	90				414232	414239
	100				414233	414240
	110				414234	414241
	120				414235	414242

Note: Items are equipped with seal and connecting material on one side.



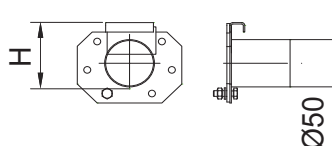
### End plate



Dimensions H [mm]	Item number	
	1.4301	1.4404
70	92324	92374
75	92325	92375
80	92326	92376
90	92327	92377
100	92328	92378
110	92329	92379
120	92330	92380

Note: Items are equipped with seal and connecting material.

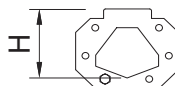
### End plate with 50 mm outlet



Dimensions H [mm]	Item number	
	1.4301	1.4404
70	92331	92381
75	92332	92382
80	92333	92383
90	92334	92384
100	92335	92385
110	92336	92386
120	92337	92387

Note: Items are equipped with seal and connecting material.

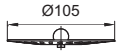
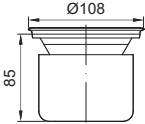
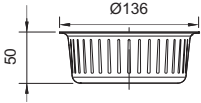
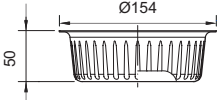
### Seal rubber



Dimensions H [mm]	Item number
	NBR
70	413601
75	413602
80	413603
90	413604
100	413605
110	413606
120	413607

Note: Items include seal and connecting material.

**Accessories for ACO modular slot channel 20**

	Description	Used with	Material	Item number
	Sieve ■ Stainless steel	■ ACO modular slot channel 20 with outlet 110 mm	1.4301	<b>97235</b>
			1.4404	<b>97285</b>
	Foul air trap ■ Stainless steel ■ Water seal 50 mm	■ ACO modular slot channel 20 with outlet 110 mm	1.4301	<b>97217</b>
			1.4404	<b>97267</b>
	Silt basket ■ Stainless steel ■ 0.5 litre capacity	■ ACO modular slot channel 20 with outlet 125 mm	1.4301	<b>414339</b>
			1.4404	<b>414340</b>
	Silt basket ■ Stainless steel ■ 0.6 litre capacity	■ ACO modular slot channel 20 with outlet 142 mm	1.4301	<b>408202</b>
			1.4404	<b>408212</b>

## ACO modular channel - semi-standard

### Product information

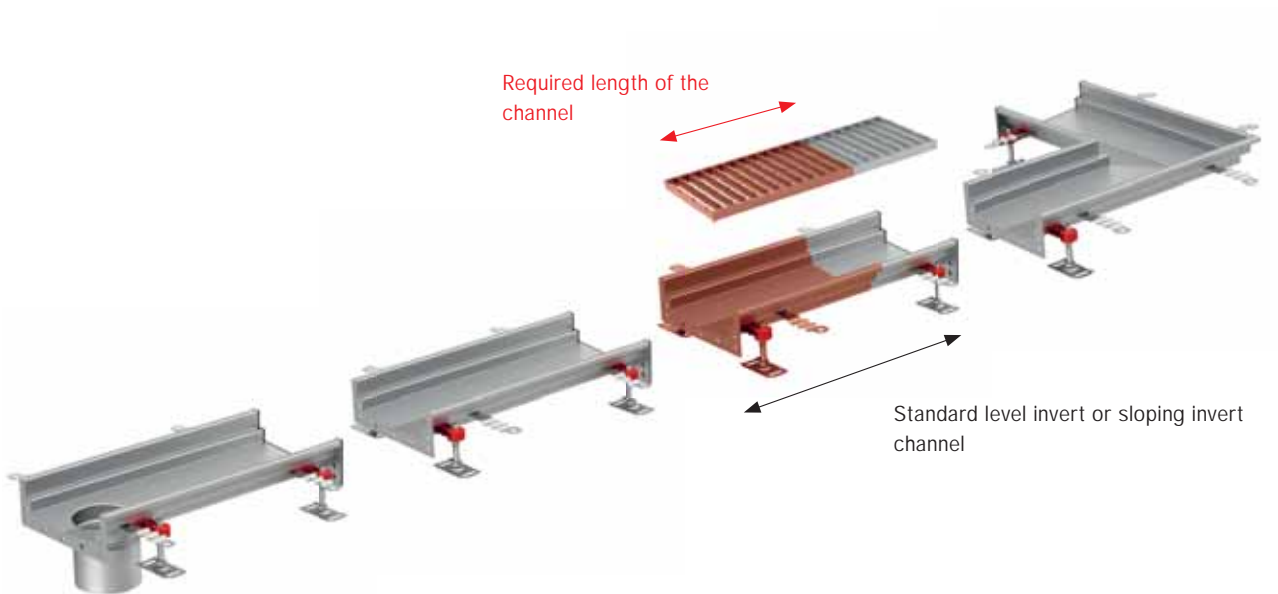
Semi-standard items offer/provide easy and fast way to get a slot or box channel of a special length to complete a linear drainage project with standard stock items. Simply specify the length you need.

#### How to specify semi-standard items:

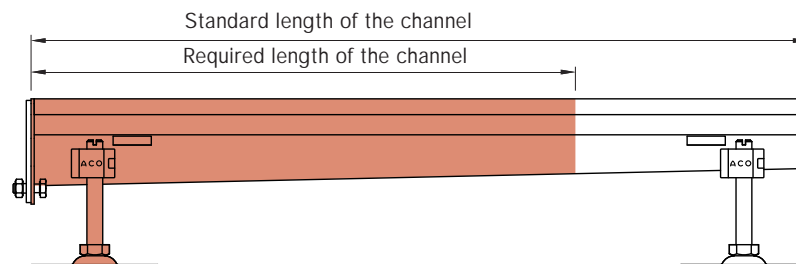
Specify the part number from which the semi-standard item will be produced.

#### How it works:

The semi-standard item is produced from a standard stock item (level invert and sloping invert channels only) which is shortened according to customer's need. The shortened item is then equipped with flange and sealing; to fit the following channel in the drainage project. Grating of the same length is also produced.



- Specify the required length of the item (length always starts at lower height of channel if channel with invert slope used).



**ACO design channel**

**Product information**

Even atypical solutions can be easily realised using stainless steel. The broad spectrum of finishes and shapes gives complete design freedom.

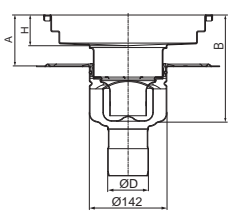
Customers' individual channel designs will be managed by our expert team with tailor-made services for specific projects with full proposal information, CAD layout drawings and assembly instructions. Contact our Sales/Technical department team and we will help you with your project.

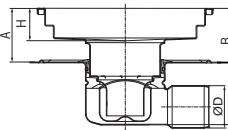
ACO channel



Flow rates and Construction heights

ACO channel, ACO hygienic gully 142

			
Outlet diameter	Outlet position	Flow rate [l/s]	
		H = 60 mm	
øD		A min. = 85	A max. = 115
		B min. = 194	B max. = 224
75	Vertical	1.4	1.7
110		1.6	1.9

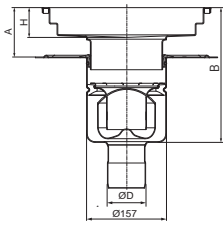
			
Outlet diameter	Outlet position	Flow rate [l/s]	
		H = 60 mm	
øD		A min. = 75	A max. = 115
		B min. = 185	B max. = 245
75	Horizontal	1.4	1.7
110		1.6	1.9

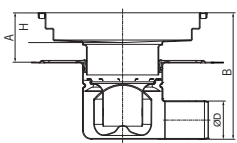
Notes:

A min. and B min. values can be reduced by 15 mm if earth screw is removed and channel outlet spigot shortened. Please be aware that channel outlet pipe shortening affects the A max. and B max. values.

Flow rates measured according to EN 1253. Flow rate performance without silt basket (flow rates with empty silt basket are approximately 15% lower than the values stated)

ACO channel, ACO hygienic gully 157

			
Outlet diameter	Outlet position	Flow rate [l/s]	
		H = 60 mm	
øD		A min. = 85	A max. = 115
		B min. = 232	B max. = 262
75	Vertical	2.9	3.1
110		3.9	4.2

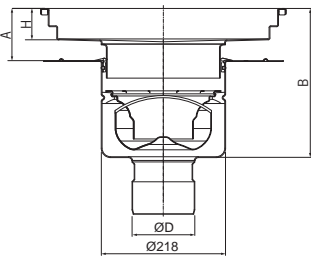
			
Outlet diameter	Outlet position	Flow rate [l/s]	
		H = 60 mm	
øD		A min. = 75	A max. = 115
		B min. = 242	B max. = 285
75	Horizontal	2.8	3.1
110		3.2	3.9

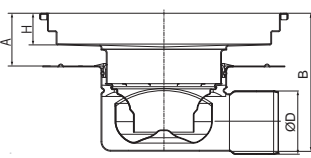
Notes:

A min. and B min. values can be reduced by 15 mm if earth screw is removed and channel outlet spigot shortened. Please be aware that channel outlet pipe shortening affects the A max. and B max. values.

Flow rates measured according to EN 1253. Flow rate performance without silt basket (flow rates with empty silt basket are approximately 15% lower than the values stated)

ACO channel, ACO hygienic gully 218

											
Outlet diameter	Outlet position	Flow rate [l/s]									
øD	Vertical	H = 60 mm		H = 80 mm		H = 100 mm		H = 150 mm		H = 200 mm	
		A min. = 75 [mm]	A max. = 115 [mm]	A min. = 95 [mm]	A max. = 135 [mm]	A min. = 115 [mm]	A max. = 155 [mm]	A min. = 165 [mm]	A max. = 205 [mm]	A min. = 215 [mm]	A max. = 255 [mm]
		B min. = 245 [mm]	B max. = 285 [mm]	B min. = 265 [mm]	B max. = 305 [mm]	B min. = 285 [mm]	B max. = 325 [mm]	B min. = 335 [mm]	B max. = 375 [mm]	B min. = 385 [mm]	B max. = 425 [mm]
110	Vertical	5.4	5.6	5.6	5.8	5.7	6.0	5.9	6.4	6.4	6.4
160		5.4	5.6	5.6	5.8	5.7	6.0	5.9	6.4	6.4	6.4

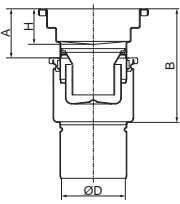
											
Outlet diameter	Outlet position	Flow rate [l/s]									
øD	Horizontal	H = 60 mm		H = 80 mm		H = 100 mm		H = 150 mm		H = 200 mm	
		A min. = 85 [mm]	A max. = 115 [mm]	A min. = 105 [mm]	A max. = 135 [mm]	A min. = 125 [mm]	A max. = 155 [mm]	A min. = 175 [mm]	A max. = 205 [mm]	A min. = 225 [mm]	A max. = 255 [mm]
		B min. = 235 [mm]	B max. = 265 [mm]	B min. = 255 [mm]	B max. = 285 [mm]	B min. = 275 [mm]	B max. = 305 [mm]	B min. = 325 [mm]	B max. = 355 [mm]	B min. = 375 [mm]	B max. = 405 [mm]
110	Horizontal	4.5	4.7	4.8	4.9	4.9	5.1	5.0	5.6	5.6	6.4

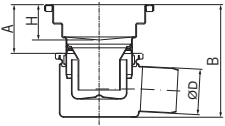
Notes:

A min. and B min. values can be reduced by 15 mm if earth screw is removed and channel outlet spigot shortened. Please be aware that channel outlet pipe shortening affects the A max. and B max. values.

Flow rates measured according to EN 1253. Flow rate performance without silt basket (flow rates with empty silt basket are approximately 15% lower than the values stated)

ACO channel, ACO gully EG150

			
Outlet diameter	Outlet position	Flow rate [l/s]	
ØD	Vertical	H = 60 mm	
		A min. = 60	A max. = 85
		B min. = 165	B max. = 190
75	Vertical	1.3	1.5
110		1.3	1.5

			
Outlet diameter	Outlet position	Flow rate [l/s]	
ØD	Horizontal	H = 60 mm	
		A min. = 60	A max. = 85
		B min. = 165	B max. = 190
75	Horizontal	1.3	1.5

Notes:

A min. and B min. values can be reduced by 15 mm if earth screw is removed and channel outlet spigot shortened. Please be aware that channel outlet pipe shortening affects the A max. and B max. values.

Flow rates measured according to EN 1253. Flow rate performance without silt basket (flow rates with empty silt basket are approximately 15% lower than the values stated)







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## Introduction

ACO pipe is the ideal system for gray and black water, rainwater and industrial waste water drainage applications. When used with ACO gully and ACO channel systems, ACO pipe provides a unique, complex building drainage solution.

ACO pipe and fittings are available in 40 mm, 50 mm, 75 mm, 110 mm, 125 mm, 160 mm, 200 mm, 250 mm and 315 mm external diameters with the standard lengths from 0.15 meter up to 6 meter for optimum practicality and ease of assembly.

### ACO pipe push-fit connection

Reliable for vacuum and gravity piping systems.

ACO pipe double lip seal delivers the ultimate system reliability. The unique and sophisticated design of lips and cavities provide tight connections.

#### Push-fit advantages

- Easy to assemble
- Time saving
- Cost saving
- Tight connection



System overview

Straight pipes



Fittings



Bends



Branches



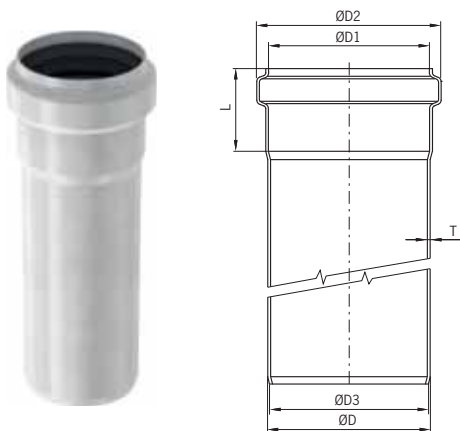
Accessories

**Straight pipes**

**Product information**

- Pipes are available in 40 mm, 50 mm, 75 mm, 110 mm, 125 mm, 160 mm, 200 mm, 250 mm and 315 mm external diameters
- Lengths from 0.15 meter up to 6 meter
- Available in 1.4301 (AISI 304) and 1.4404 (AISI 316L) grades stainless steel
- Push-fit system for quick assembly
- Superior seal security – components comprise a unique double lip sealing system, ideal for extraneous conditions
- Fully comply to EN 1124
- EPDM and Viton® seals available
- Fully pickled and passivated

**ACO pipe - straight pipe**



**ACO pipe - double socketed pipe**

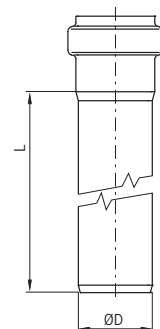


ACO pipe

Dimensions of socket and spigot					
øD [mm]	øD <sub>1</sub> [mm]	øD <sub>2</sub> [mm]	øD <sub>3</sub> [mm]	Socket length L [mm]	Wall thickness T [mm]
40	41	51.5	38	40	1.0
50	51	62.0	47	42	1.0
75	76	87.5	72	50	1.0
110	111	125.5	107	57	1.0
125	126	141.0	122	63	1.0
160	161	178.0	156	70	1.25
200	201	219.0	195	80	1.5
250	251	268.6	245	90	1.5
315	316.2	334.2	309	100	2.0

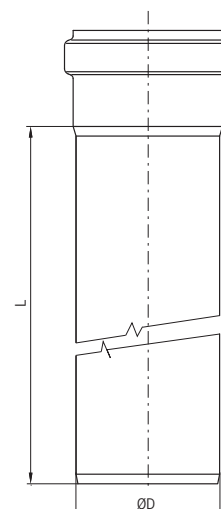
**ACO pipe - straight pipe 40 mm**

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	40	150	0.2	<b>417304</b>	<b>417320</b>
	40	250	0.3	<b>417306</b>	<b>417322</b>
	40	500	0.6	<b>417308</b>	<b>417324</b>
	40	750	0.8	<b>417310</b>	<b>417326</b>
	40	1000	1.1	<b>417312</b>	<b>417328</b>
	40	1500	1.6	<b>417314</b>	<b>417330</b>
	40	2000	2.1	<b>417316</b>	<b>417332</b>
	40	2500	2.8	<b>417260</b>	<b>417262</b>
	40	3000	3.1	<b>417318</b>	<b>417334</b>
	40	4000	4.1	<b>417264</b>	<b>417270</b>
	40	5000	5.1	<b>417266</b>	<b>417272</b>
	40	6000	6.1	<b>417268</b>	<b>417274</b>



ACO pipe - straight pipe 50 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	50	150	0.2	<b>98500</b>	<b>98550</b>
	50	250	0.4	<b>98502</b>	<b>98552</b>
	50	500	0.7	<b>98504</b>	<b>98554</b>
	50	750	1.0	<b>98506</b>	<b>98556</b>
	50	1000	1.3	<b>98508</b>	<b>98558</b>
	50	1500	1.9	<b>98510</b>	<b>98560</b>
	50	2000	2.6	<b>98512</b>	<b>98562</b>
	50	2500	3.2	<b>419274</b>	<b>419282</b>
	50	3000	3.8	<b>98514</b>	<b>98564</b>
	50	4000	5.0	<b>419458</b>	<b>419482</b>
	50	5000	6.3	<b>419466</b>	<b>419490</b>
50	6000	7.5	<b>419474</b>	<b>419498</b>	



ACO pipe - straight pipe 75 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	75	150	0.4	<b>98516</b>	<b>98566</b>
	75	250	0.6	<b>98518</b>	<b>98568</b>
	75	500	1.0	<b>98520</b>	<b>98570</b>
	75	750	1.5	<b>98522</b>	<b>98572</b>
	75	1000	2.0	<b>98524</b>	<b>98574</b>
	75	1500	2.9	<b>98526</b>	<b>98576</b>
	75	2000	3.6	<b>98528</b>	<b>98578</b>
	75	2500	4.8	<b>419276</b>	<b>419284</b>
	75	3000	5.7	<b>98530</b>	<b>98580</b>
	75	4000	7.6	<b>419460</b>	<b>419484</b>
	75	5000	9.4	<b>419468</b>	<b>419492</b>
75	6000	11.3	<b>419476</b>	<b>419500</b>	

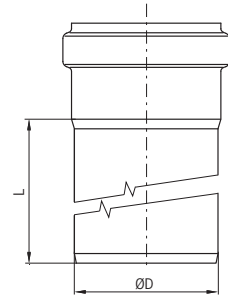
ACO pipe - straight pipe 110 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	110	150	0.6	<b>98532</b>	<b>98582</b>
	110	250	0.9	<b>98534</b>	<b>98584</b>
	110	500	1.5	<b>98536</b>	<b>98586</b>
	110	750	2.2	<b>98538</b>	<b>98588</b>
	110	1000	2.9	<b>98540</b>	<b>98590</b>
	110	1500	4.3	<b>98542</b>	<b>98592</b>
	110	2000	5.7	<b>98544</b>	<b>98594</b>
	110	2500	7.1	<b>419278</b>	<b>419286</b>
	110	3000	8.4	<b>98546</b>	<b>98596</b>
	110	4000	11.1	<b>419462</b>	<b>419486</b>
	110	5000	13.9	<b>419470</b>	<b>419494</b>
110	6000	16.7	<b>419478</b>	<b>419502</b>	



ACO pipe - straight pipe 125 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	125	150	0.7	<b>419692</b>	<b>419712</b>
	125	250	1.0	<b>419694</b>	<b>419714</b>
	125	500	1.7	<b>419696</b>	<b>419716</b>
	125	750	2.5	<b>419698</b>	<b>419718</b>
	125	1000	3.3	<b>419700</b>	<b>419720</b>
	125	1500	4.9	<b>419702</b>	<b>419722</b>
	125	2000	6.5	<b>419704</b>	<b>419724</b>
	125	2500	8.1	<b>419708</b>	<b>419728</b>
	125	3000	9.6	<b>419706</b>	<b>419726</b>
	125	6000	19.0	<b>419710</b>	<b>419730</b>



ACO pipe - straight pipe 160 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	160	150	1.1	<b>98548</b>	<b>98598</b>
	160	250	1.6	<b>98600</b>	<b>98650</b>
	160	500	2.9	<b>98602</b>	<b>98652</b>
	160	750	4.1	<b>98604</b>	<b>98654</b>
	160	1000	5.4	<b>98606</b>	<b>98656</b>
	160	1500	7.9	<b>98608</b>	<b>98658</b>
	160	2000	10.4	<b>98610</b>	<b>98660</b>
	160	2500	12.9	<b>419280</b>	<b>419288</b>
	160	3000	15.4	<b>98612</b>	<b>98662</b>
	160	4000	20.4	<b>419464</b>	<b>419488</b>
	160	5000	25.4	<b>419472</b>	<b>419496</b>
	160	6000	30.4	<b>419480</b>	<b>419504</b>

ACO pipe - straight pipe 200 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	200	500	4.5	<b>419383</b>	<b>419384</b>
	200	1000	8.3	<b>419387</b>	<b>419388</b>
	200	2000	15.8	<b>419391</b>	<b>419392</b>
	200	3000	23.2	<b>419395</b>	<b>419396</b>

ACO pipe - straight pipe 250 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	250	500	5.5	<b>417071</b>	<b>417072</b>
	250	1000	10.2	<b>417075</b>	<b>417076</b>
	250	2000	19.4	<b>417079</b>	<b>417080</b>
	250	3000	28.7	<b>417083</b>	<b>417084</b>

ACO pipe - straight pipe 315 mm

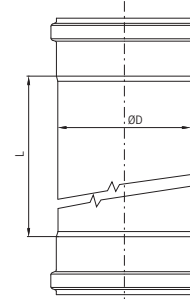
Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	315	500	9.8	<b>417238</b>	<b>417200</b>
	315	1000	17.7	<b>417239</b>	<b>417201</b>
	315	2000	33.5	<b>417240</b>	<b>417202</b>
	315	3000	49.3	<b>417241</b>	<b>417203</b>



**Double socketed pipes**

ACO pipe - double socketed pipe 40 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	40	250	0.2	<b>417276</b>	<b>417290</b>
	40	500	0.6	<b>417278</b>	<b>417292</b>
	40	750	0.9	<b>417280</b>	<b>417294</b>
	40	1000	1.2	<b>417282</b>	<b>417296</b>
	40	1500	1.8	<b>417284</b>	<b>417298</b>
	40	2000	2.4	<b>417286</b>	<b>417300</b>
	40	3000	3.6	<b>417288</b>	<b>417302</b>



ACO pipe - double socketed pipe 50 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	50	250	0.4	<b>419554</b>	<b>419594</b>
	50	500	0.7	<b>419556</b>	<b>419596</b>
	50	750	1.1	<b>419558</b>	<b>419598</b>
	50	1000	1.4	<b>419560</b>	<b>419600</b>
	50	1500	2.0	<b>419562</b>	<b>419602</b>
	50	2000	2.6	<b>419564</b>	<b>419604</b>
	50	3000	3.9	<b>419566</b>	<b>419606</b>

ACO pipe - double socketed pipe 75 mm

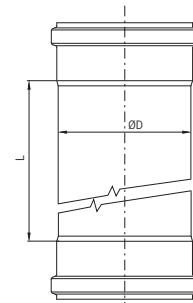
Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	75	250	0.7	<b>419568</b>	<b>419608</b>
	75	500	1.2	<b>419570</b>	<b>419610</b>
	75	750	1.6	<b>419572</b>	<b>419612</b>
	75	1000	2.1	<b>419574</b>	<b>419614</b>
	75	1500	3.0	<b>419576</b>	<b>419616</b>
	75	2000	4.0	<b>419578</b>	<b>419618</b>
	75	3000	5.8	<b>419580</b>	<b>419620</b>

ACO pipe - double socketed pipe 110 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	110	500	1.7	<b>419582</b>	<b>419622</b>
	110	750	2.4	<b>419584</b>	<b>419624</b>
	110	1000	3.0	<b>419586</b>	<b>419626</b>
	110	1500	4.4	<b>419588</b>	<b>419628</b>
	110	2000	5.7	<b>419590</b>	<b>419630</b>
	110	3000	8.4	<b>419592</b>	<b>419632</b>

ACO pipe - double socketed pipe 125 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	125	500	1.7	<b>419787</b>	<b>419799</b>
	125	750	2.5	<b>419789</b>	<b>419801</b>
	125	1000	3.3	<b>419791</b>	<b>419803</b>
	125	1500	4.9	<b>419793</b>	<b>419805</b>
	125	2000	6.5	<b>419795</b>	<b>419807</b>
	125	3000	9.6	<b>419797</b>	<b>419809</b>



ACO pipe - double socketed pipe 160 mm

Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	160	500	3.3	<b>419634</b>	<b>419646</b>
	160	750	4.5	<b>419636</b>	<b>419648</b>
	160	1000	5.8	<b>419638</b>	<b>419650</b>
	160	1500	8.2	<b>419640</b>	<b>419652</b>
	160	2000	10.7	<b>419642</b>	<b>419654</b>
	160	3000	15.7	<b>419644</b>	<b>419656</b>

ACO pipe - double socketed pipe 200 mm

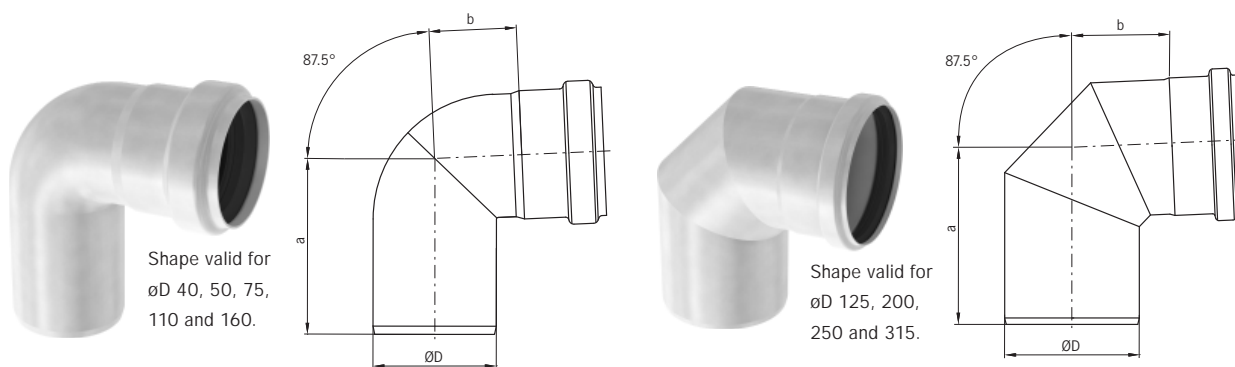
Seal material	Outlet diameter øD [mm]	Active length L [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	200	500	5.0	<b>419658</b>	<b>419659</b>
	200	1000	8.6	<b>419662</b>	<b>419663</b>
	200	2000	15.9	<b>419666</b>	<b>419667</b>
	200	3000	23.1	<b>419670</b>	<b>419671</b>

**Bends**

**Product information**

- Bends are available in 40 mm, 50 mm, 75 mm, 110 mm, 125 mm, 160 mm, 200 mm, 250 mm and 315 mm external diameters
- Available in 1.4301 (AISI 304) and 1.4404 (AISI 316L) grades stainless steel
- Push-fit system for quick assembly
- Superior seal security – components comprise a unique double lip sealing system, ideal for extraneous conditions
- Fully chemically pickled and passivated
- EPDM and Viton® seals available
- Fully comply to EN 1124

**ACO pipe - bend 87.5°**

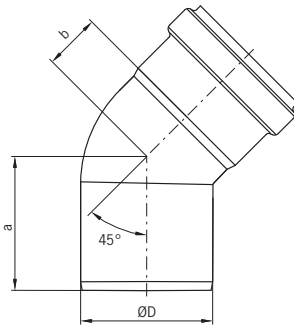


Seal material	Outlet diameter $\varnothing D$ [mm]	Dimensions		Weight [kg]	Item number	Item number
		a [mm]	b [mm]		1.4301	1.4404
EPDM	40	79	32	0.2	<b>417342</b>	<b>417350</b>
	50	86	40	0.2	<b>98700</b>	<b>98750</b>
	75	107	53	0.4	<b>98702</b>	<b>98752</b>
	110	134	67	0.7	<b>98704</b>	<b>98754</b>
	125	161	93	0.8	<b>419732</b>	<b>419734</b>
	160	181	105	1.7	<b>98706</b>	<b>98756</b>
	200	215	129	3.9	<b>419411</b>	<b>419413</b>
	250	297	198	5.1	-	<b>417088</b>
315	393	286	12.8	-	<b>417204</b>	

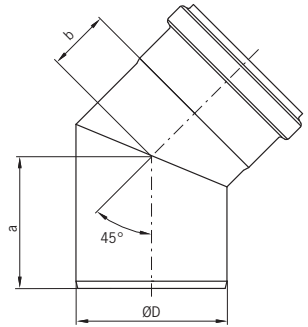
ACO pipe - bend 45°



Shape valid for  
øD 40, 50, 75,  
110 and 160.

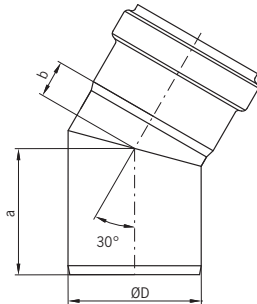


Shape valid for  
øD 125, 200,  
250 and 315.



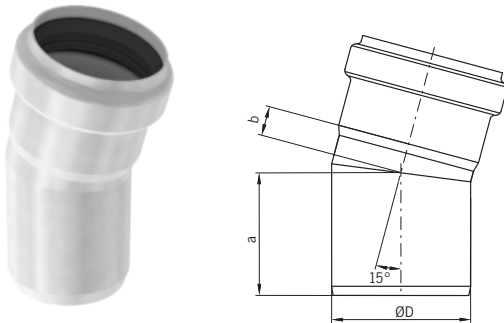
Seal material	Outlet diameter øD [mm]	Dimensions		Weight [kg]	Item number	
		a [mm]	b [mm]		1.4301	1.4404
EPDM	40	58	21	0.2	<b>417344</b>	<b>417352</b>
	50	62	24	0.2	<b>98708</b>	<b>98758</b>
	75	76	32	0.3	<b>98710</b>	<b>98760</b>
	110	93	42	0.5	<b>98712</b>	<b>98762</b>
	125	110	50	0.6	<b>419736</b>	<b>419738</b>
	160	131	55	1.3	<b>98714</b>	<b>98764</b>
	200	152	60	2.7	<b>419407</b>	<b>419409</b>
	250	177	76	4.1	-	<b>417092</b>
	315	199	91	7.2	-	<b>417205</b>

ACO pipe - bend 30°



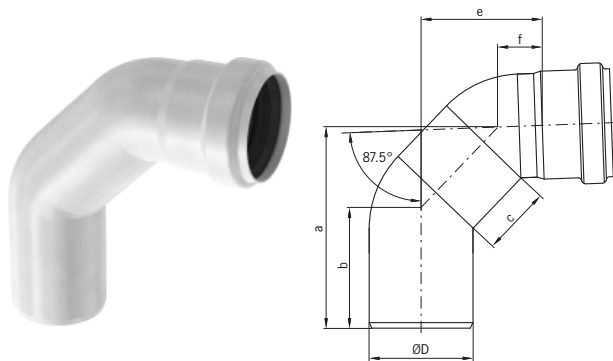
Seal material	Outlet diameter øD [mm]	Dimensions		Weight [kg]	Item number	
		a [mm]	b [mm]		1.4301	1.4404
EPDM	40	55	14	0.1	<b>417346</b>	<b>417354</b>
	50	57	16	0.2	<b>98716</b>	<b>98766</b>
	75	71	21	0.3	<b>98718</b>	<b>98768</b>
	110	85	27	0.5	<b>98720</b>	<b>98770</b>
	125	98	28	0.6	<b>419740</b>	<b>419742</b>
	160	110	40	1.2	<b>98722</b>	<b>98772</b>
	200	137	45	2.3	<b>419403</b>	<b>419405</b>
	250	153	58	2.9	-	<b>417096</b>
	315	172	68	5.8	-	<b>417206</b>

ACO pipe - bend 15°



Seal material	Outlet diameter ØD [mm]	Dimensions		Weight [kg]	Item number	
		a [mm]	b [mm]		1.4301	1.4404
EPDM	40	53	11	0.1	<b>417348</b>	<b>417356</b>
	50	54	12	0.1	<b>98724</b>	<b>98774</b>
	75	66	16	0.3	<b>98726</b>	<b>98776</b>
	110	78	15	0.4	<b>98728</b>	<b>98778</b>
	125	84	19	0.5	<b>419744</b>	<b>419746</b>
	160	99	29	1.0	<b>98730</b>	<b>98780</b>
	200	123	31	1.9	<b>419399</b>	<b>419401</b>
	250	136	40	2.5	-	<b>417100</b>
315	151	46	5.4	-	<b>417207</b>	

ACO pipe - long bend 87.5°



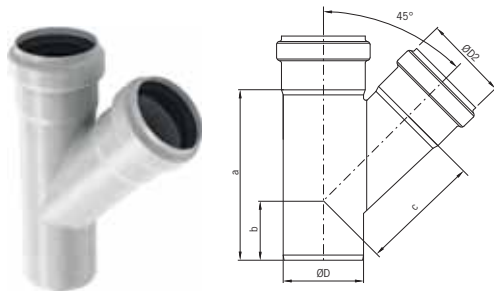
Seal material	Outlet diameter ØD [mm]	Dimensions					Weight [kg]	Item number	
		a [mm]	b [mm]	c [mm]	e [mm]	f [mm]		1.4301	1.4404
EPDM	40	105	64	50	67	40	0.2	<b>417340</b>	<b>417338</b>
	50	123	71	50	75	25	0.3	<b>419146</b>	<b>419000</b>
	75	146	87	50	88	32	0.5	<b>419148</b>	<b>419002</b>
	110	316	103	250	246	39	1.4	<b>419150</b>	<b>419004</b>
	160	360	126	250	270	92	2.2	<b>419152</b>	<b>419144</b>

Branches

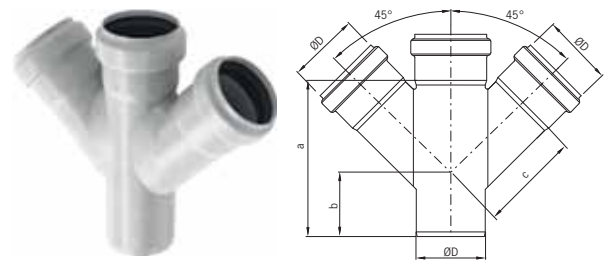
Product information

- Branches are available in 40 mm, 50 mm, 75 mm, 110 mm, 125 mm, 160 mm, 200 mm, 250 mm and 315 mm external diameters
- Available in 1.4301 (AISI 304) and 1.4404 (AISI 316L) grades stainless steel
- Push-fit system for quick assembly
- Superior seal security – components comprise a unique double lip sealing system, ideal for extraneous conditions
- Fully comply to EN 1124
- EPDM and Viton® seals available
- Fully pickled and passivated

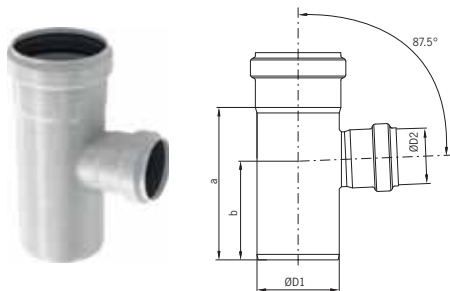
ACO pipe - single branch



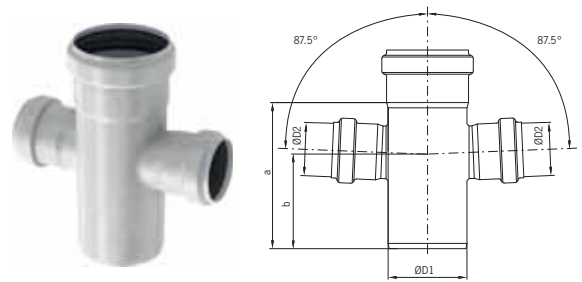
ACO pipe - double branch



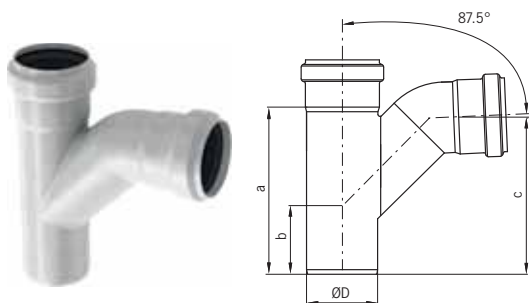
ACO pipe - single branch reduction



ACO pipe - double branch reduction

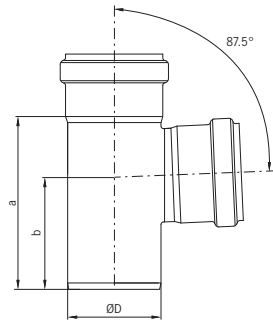


ACO pipe - swept single branch



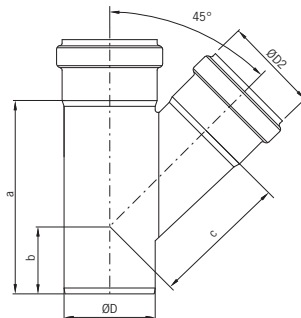
**Single branches**

ACO pipe - single branch 87.5°



Seal material	Outlet diameter ØD [mm]	Dimensions		Weight [kg]	Item number	
		a [mm]	b [mm]		1.4301	1.4404
EPDM	40	101	69	0.3	<b>417362</b>	<b>417368</b>
	50	106	71	0.3	<b>98732</b>	<b>98782</b>
	75	139	90	0.5	<b>98734</b>	<b>98784</b>
	110	183	117	0.8	<b>98736</b>	<b>98786</b>
	125	220	135	0.9	<b>419748</b>	<b>419750</b>
	160	288	184	2.3	<b>98738</b>	<b>98788</b>
	200	333	206	4.5	<b>419419</b>	<b>419421</b>
	250	363	215	5.5	-	<b>417104</b>
315	476	281	14.8	-	<b>417208</b>	

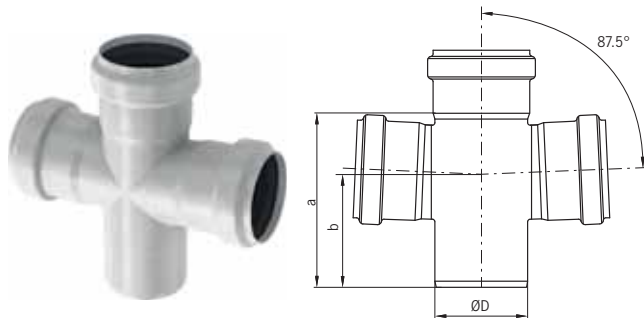
ACO pipe - single branch 45°



Seal material	Outlet diameter ØD [mm]	Dimensions			Weight [kg]	Item number	
		a [mm]	b [mm]	c [mm]		1.4301	1.4404
EPDM	40	118	58	63	0.3	<b>417366</b>	<b>417372</b>
	50	128	57	76	0.3	<b>98748</b>	<b>98798</b>
	75	179	74	110	0.5	<b>98800</b>	<b>98850</b>
	110	233	88	149	1.0	<b>98802</b>	<b>98852</b>
	125	273	103	170	1.1	<b>419760</b>	<b>419762</b>
	160	332	119	222	2.6	<b>98804</b>	<b>98854</b>
	200	415	151	274	5.7	<b>419427</b>	<b>419429</b>
	250	513	172	336	9.2	-	<b>417108</b>
315	616	195	521	20.6	-	<b>417209</b>	

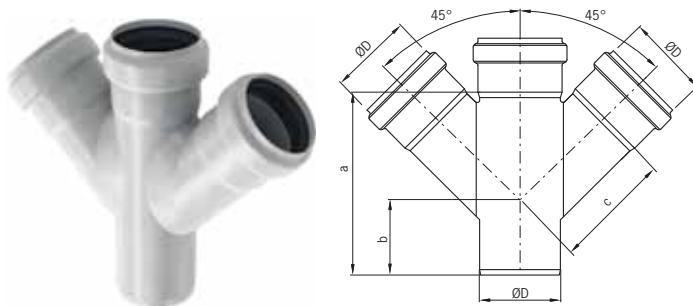
Double branches

ACO pipe - double branch 87.5°



Seal material	Outlet diameter ØD [mm]	Dimensions		Weight [kg]	Item number	
		a [mm]	b [mm]		1.4301	1.4404
EPDM	40	101	69	0.3	<b>417364</b>	<b>417370</b>
	50	106	71	0.3	<b>98740</b>	<b>98790</b>
	75	139	90	0.6	<b>98742</b>	<b>98792</b>
	110	183	117	0.9	<b>98744</b>	<b>98794</b>
	160	288	184	2.7	<b>98746</b>	<b>98796</b>

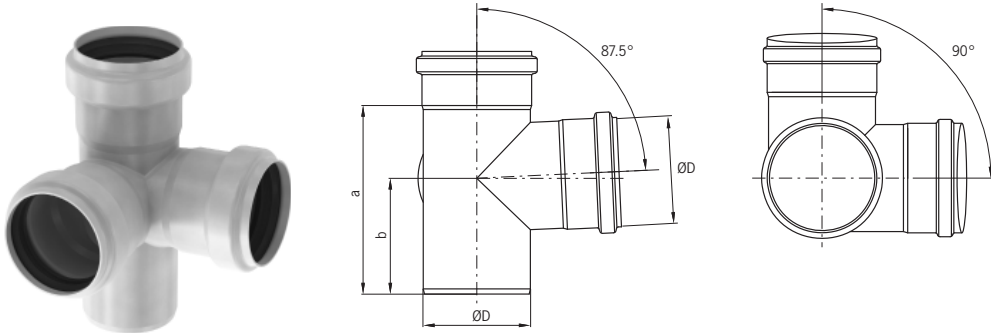
ACO pipe - double branch 45°



Seal material	Outlet diameter ØD [mm]	Dimensions			Weight [kg]	Item number	
		a [mm]	b [mm]	c [mm]		1.4301	1.4404
EPDM	40	118	58	63	0.4	<b>417374</b>	<b>417378</b>
	50	128	57	76	0.4	<b>98806</b>	<b>98856</b>
	75	179	74	110	0.7	<b>98808</b>	<b>98858</b>
	110	233	88	149	1.2	<b>98810</b>	<b>98860</b>
	160	332	184	222	3.5	<b>98812</b>	<b>98862</b>
	250	509	172	336	11	-	<b>417120</b>
	315	616	195	521	29.7	-	<b>417212</b>



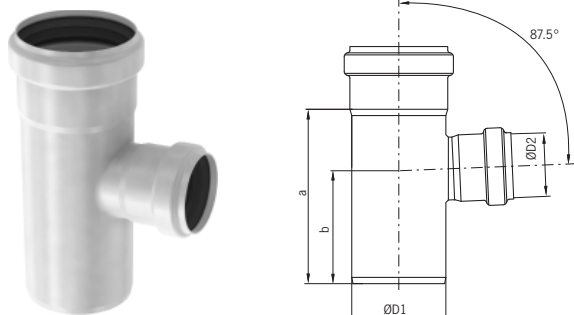
ACO pipe - corner branch 87.5°



Seal material	Outlet diameter ØD [mm]	Dimensions		Weight [kg]	Item number	
		a [mm]	b [mm]		1.4301	1.4404
EPDM	40	101	69	0.3	<b>417414</b>	<b>417415</b>
	50	106	71	0.4	<b>419162</b>	<b>419210</b>
	75	139	90	0.7	<b>419164</b>	<b>419212</b>
	110	183	117	1.1	<b>419166</b>	<b>419214</b>
	160	288	184	2.9	<b>419168</b>	<b>419216</b>

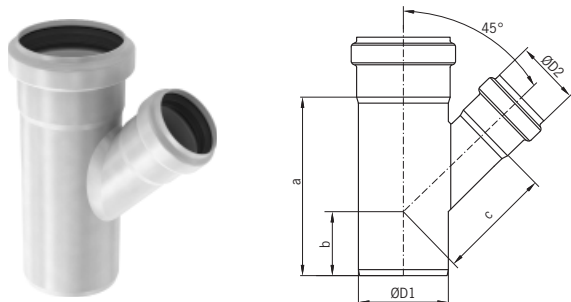
Single branch reductions

ACO pipe - single branch reduction 87.5°



Seal material	Outlet diameter		Dimensions		Weight [kg]	Item number	Item number
	ØD1 [mm]	ØD2 [mm]	a [mm]	b [mm]			
EPDM	50	40	106	98	0.3	1.4301	1.4404
	75	40	139	98	0.3	<b>417442</b>	<b>417443</b>
	75	50	139	90	0.3	<b>417444</b>	<b>417445</b>
	110	50	183	117	0.5	<b>98928</b>	<b>98930</b>
	110	75	183	117	0.8	<b>98932</b>	<b>98934</b>
	125	75	187	110	0.9	<b>98936</b>	<b>98938</b>
	125	110	205	127	0.9	<b>419752</b>	<b>419754</b>
	160	110	288	184	2.3	<b>419756</b>	<b>419758</b>
	200	160	293	186	3.7	<b>400691</b>	<b>400693</b>
	250	200	349	226	5.8	<b>419415</b>	<b>419417</b>
315	250	411	248	10.5	-	<b>417112</b>	
						-	<b>417210</b>

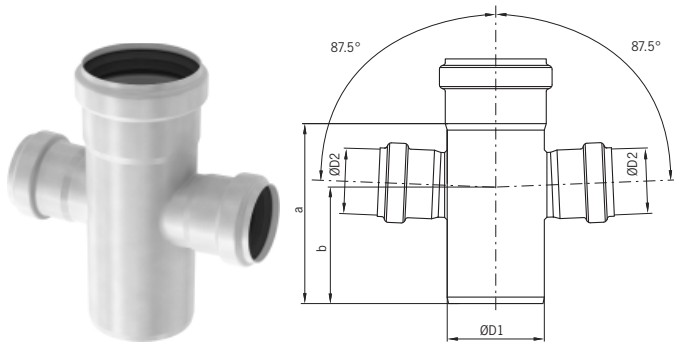
ACO pipe - single branch reduction 45°



Seal material	Outlet diameter		Dimensions			Weight [kg]	Item number	Item number
	ØD1 [mm]	ØD2 [mm]	a [mm]	b [mm]	c [mm]			
EPDM	50	40	119	55	71	0.3	1.4301	1.4404
	75	40	144	94	56	0.3	<b>417406</b>	<b>417408</b>
	75	50	144	56	94	0.3	<b>417446</b>	<b>417447</b>
	110	50	147	42	119	0.5	<b>400661</b>	<b>400663</b>
	110	75	182	60	135	1.0	<b>400665</b>	<b>400667</b>
	125	75	200	65	141	1.1	<b>400669</b>	<b>400671</b>
	125	110	250	90	160	1.1	<b>419764</b>	<b>419766</b>
	160	110	332	119	191	2.6	<b>419768</b>	<b>419770</b>
	200	160	359	123	250	4.7	<b>400699</b>	<b>400701</b>
	250	200	429	175	307	7.6	<b>419423</b>	<b>419425</b>
	315	250	513	149	382	14.0	-	<b>417116</b>
							-	<b>417211</b>

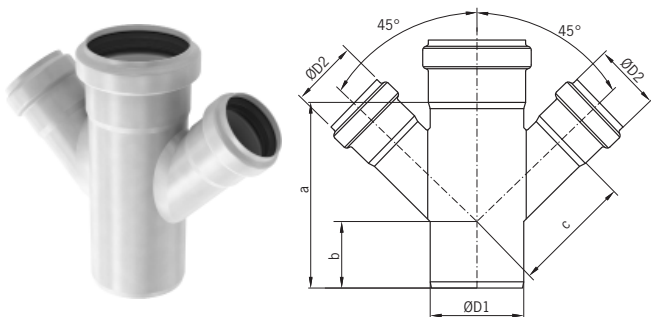
**Double branch reductions**

**ACO pipe - double branch reduction 87.5°**



Seal material	Outlet diameter		Dimensions		Weight [kg]	Item number	Item number
	ØD1 [mm]	ØD2 [mm]	a [mm]	b [mm]			
EPDM	50	40				1.4301	1.4404
	75	50	139	90	0.3	<b>417398</b>	<b>417399</b>
	110	50	183	117	0.6	<b>98940</b>	<b>98942</b>
	110	75	183	117	0.9	<b>98944</b>	<b>98946</b>
	160	110	288	184	2.7	<b>98900</b>	<b>98902</b>
						<b>400695</b>	<b>400697</b>

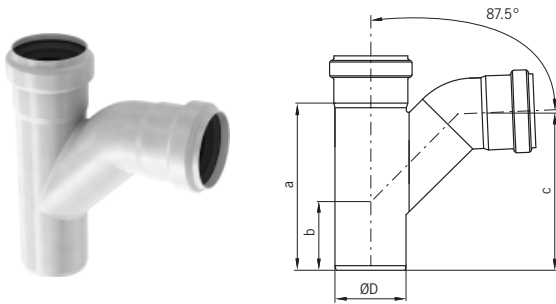
**ACO pipe - double branch reduction 45°**



Seal material	Outlet diameter		Dimensions			Weight [kg]	Item number	Item number
	ØD1 [mm]	ØD2 [mm]	a [mm]	b [mm]	c [mm]			
EPDM	50	40	119	55	71	0.3	1.4301	1.4404
	75	50	144	56	94	0.4	<b>417410</b>	<b>417412</b>
	110	50	147	42	119	0.7	<b>400673</b>	<b>400675</b>
	110	75	182	60	135	1.2	<b>400677</b>	<b>400679</b>
	160	110	332	119	190	3.5	<b>400681</b>	<b>400683</b>
	250	200	429	150	307	10.1	<b>400703</b>	<b>400705</b>
	315	250	513	149	382	17.8	-	<b>417124</b>
							-	<b>417213</b>

Swept single branch

ACO pipe - swept single branch 87.5°



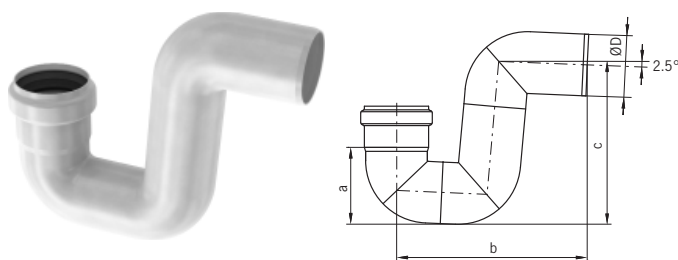
Seal material	Outlet diameter ØD [mm]	Dimensions			Weight [kg]	Item number	
		a [mm]	b [mm]	c [mm]		1.4301	1.4404
EPDM	40	115	55	105	0.3	<b>417376</b>	<b>417380</b>
	50	128	57	117	0.3	<b>98814</b>	<b>98864</b>
	75	179	74	157	0.6	<b>98816</b>	<b>98866</b>
	110	233	88	209	1.1	<b>98818</b>	<b>98868</b>
	160	332	184	302	2.8	<b>98820</b>	<b>98870</b>

**Accessories**

**Product information**

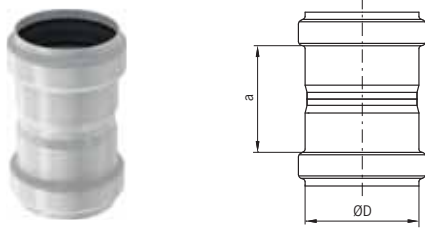
- Accessories are available in 40 mm, 50 mm, 75 mm, 110 mm, 125 mm, 160 mm, 200 mm, 250 mm and 315 mm external diameters
- Available in 1.4301 (AISI 304) and 1.4404 (AISI 316L) grades stainless steel
- Push-fit system for quick assembly
- Superior seal security – components comprise a unique double lip sealing system, ideal for extraneous conditions
- Fully comply to EN 1124
- EPDM and Viton® seals available
- Fully pickled and passivated

**"P" trap**



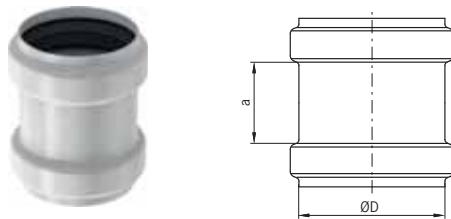
Seal material	Outlet diameter ØD [mm]	Dimensions			Weight [kg]	Item number	
		a [mm]	b [mm]	c [mm]		1.4301	1.4404
EPDM	50	68	187	149	0.5	<b>98822</b>	<b>98872</b>
	75	94	232	193	0.7	<b>98824</b>	<b>98874</b>
	110	132	300	254	1.3	<b>98826</b>	<b>98876</b>
	160	190	403	347	3.3	<b>98828</b>	<b>98878</b>

### Straight coupling



Seal material	Outlet diameter ØD [mm]	Dimensions a [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	40	51	0.1	<b>417392</b>	<b>417394</b>
	50	54	0.1	<b>98920</b>	<b>98970</b>
	75	75	0.2	<b>98922</b>	<b>98972</b>
	110	84	0.4	<b>98924</b>	<b>98974</b>
	125	140	0.4	<b>419813</b>	<b>419815</b>
	160	110	0.8	<b>98926</b>	<b>98976</b>
	200	136	1.8	<b>419431</b>	<b>419433</b>
	250	181	3.1	-	<b>417160</b>
315	179	5.2	-	<b>417225</b>	

### Repair coupling



Seal material	Outlet diameter ØD [mm]	Dimensions a [mm]	Weight [kg]	Item number 1.4301	Item number 1.4404
EPDM	40	57	0.1	<b>417388</b>	<b>417390</b>
	50	44	0.1	<b>98830</b>	<b>98880</b>
	75	46	0.2	<b>98832</b>	<b>98882</b>
	110	52	0.3	<b>98834</b>	<b>98884</b>
	125	70	0.3	<b>419772</b>	<b>419774</b>
	160	76	0.7	<b>98836</b>	<b>98886</b>
	200	100	1.5	<b>419435</b>	<b>419437</b>
	250	182	2.4	-	<b>417139</b>
315	179	4.9	-	<b>417220</b>	

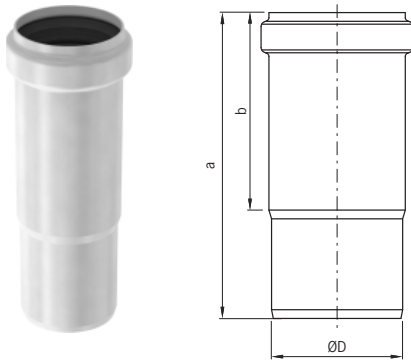
Note:

Repair couplings are used to aid a convenient repair to a damaged in-situ pipe. Unlike the standard straight coupling, there is no central registration to limit the insertion depth of the pipe. The repair coupling slides completely over a pipe joint and simply re-positioned to bridge the required pipe joint.

Installation tip:

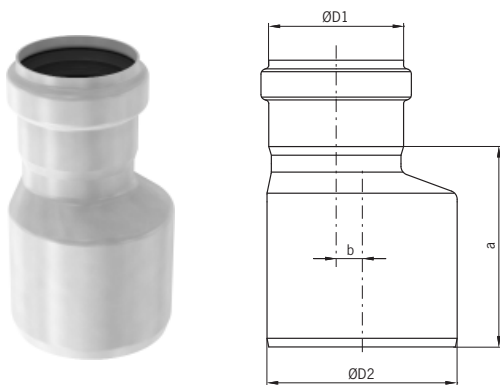
Mark the final position of the repair coupling on the installed pipe system to ensure the coupling seals are positioned symmetrically about the pipe joint.

**Expansion socket**



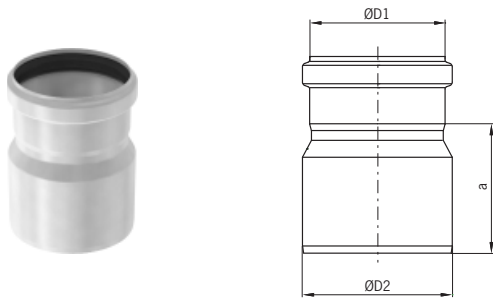
Seal material	Outlet diameter		Dimensions		Weight [kg]	Item number	
	ØD [mm]		a [mm]	b [mm]		1.4301	1.4404
EPDM	40		150	90	0.2	<b>417382</b>	<b>417384</b>
	50		159	102	0.2	<b>98664</b>	<b>98666</b>
	75		175	113	0.3	<b>98668</b>	<b>98670</b>
	110		200	121	0.5	<b>98672</b>	<b>98674</b>
	125		250	165	0.6	<b>419776</b>	<b>419778</b>
	160		292	170	1.4	<b>98676</b>	<b>98678</b>
	250		400	190	3.8	-	<b>417143</b>
	315		450	200	7.2	-	<b>417221</b>

**Eccentric increaser coupling**



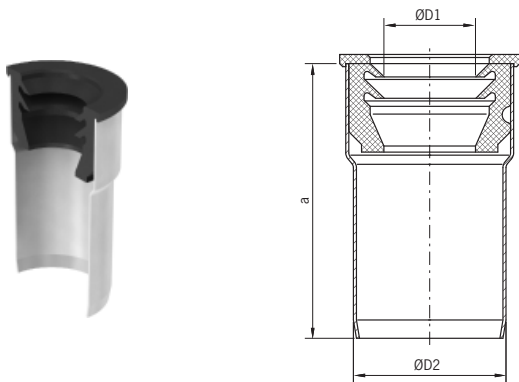
Seal material	Outlet diameter		Dimensions		Weight [kg]	Item number
	ØD1 [mm]	ØD2 [mm]	a [mm]	b [mm]		
EPDM	40	50	85	5	0.3	<b>417418</b>
	40	75	85	17	0.3	<b>417419</b>
	50	75	75	7	0.3	<b>98892</b>
	50	110	110	25	0.4	<b>98978</b>
	75	110	110	15	0.5	<b>98894</b>
	110	160	160	22	1.1	<b>98896</b>
	200	250	180	15	2.4	<b>417135</b>
	250	315	190	15	4.4	<b>417218</b>

Concentric increaser coupling



Seal material	Outlet diameter		Dimension a [mm]	Weight [kg]	Item number
	ØD1 [mm]	ØD2 [mm]			
EPDM	40	50			1.4404
	40	75	85	0.3	<b>417403</b>
	50	75	88	0.3	<b>419826</b>
	50	110	113	1.4	<b>417018</b>
	75	125	105	0.6	<b>419828</b>
	110	125	107	0.6	<b>419780</b>
	110	160	126	0.9	<b>419830</b>
	125	160	160	1.2	<b>419811</b>
	160	200	200	1.8	<b>419441</b>
	200	250	180	2.4	<b>417133</b>
315	250	190	4.4	<b>417217</b>	

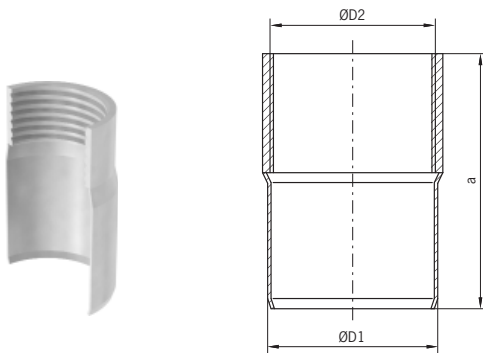
Increaser connector



Seal material	Outlet diameter		Dimensions a [mm]	Weight [kg]	Item number
	ØD1 [mm]	ØD2 [mm]			
NBR	32	50	90	0.2	<b>419373</b>
	40	50	90	0.2	<b>419374</b>

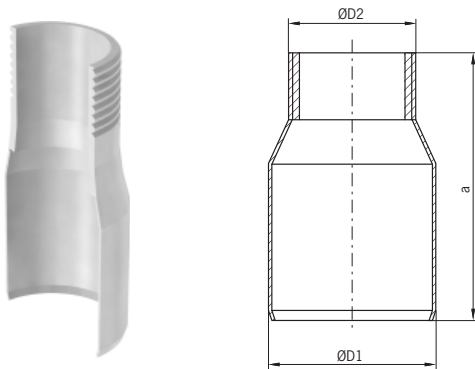


**Connector with internal screw thread and spigot**



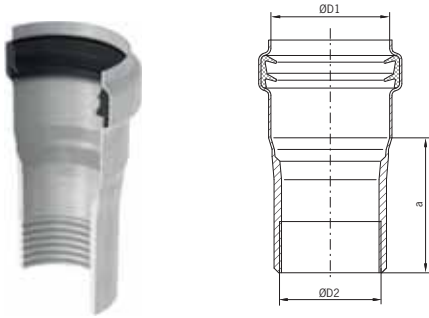
Outlet diameter		Dimensions a [mm]	Weight [kg]	Item number
ØD1 [mm]	ØD2 [mm]			
40	G 1¼"	70	0.2	<b>417337</b>
50	G 1¼"	72	0.2	<b>98956</b>
50	G 1½"	75	0.3	<b>98957</b>
50	G 2"	80	0.3	<b>98958</b>

**Connector with external screw thread and spigot**



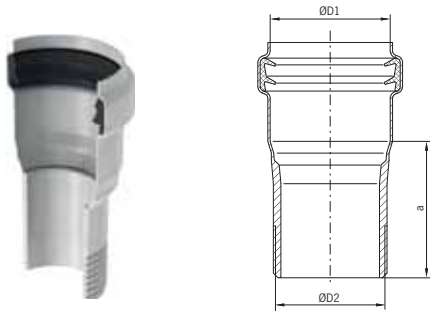
Outlet diameter		Dimensions a [mm]	Weight [kg]	Item number
ØD1 [mm]	ØD2 [mm]			
50	G 1¼"	100	0.2	<b>419330</b>
50	G 1½"	100	0.3	<b>419331</b>
50	G 2"	100	0.3	<b>419332</b>

Connector with socket and internal screw thread



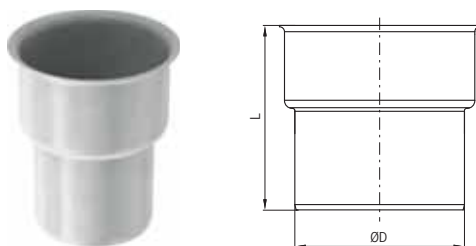
Seal material	Outlet diameter		Dimensions a [mm]	Weight [kg]	Item number
	ØD1 [mm]	ØD2 [mm]			
EPDM	40	G 1¼"	35	0.2	<b>417336</b>
	50	G 1¼"	58	0.2	<b>419333</b>
	50	G 1½"	58	0.3	<b>419335</b>
	50	G 2"	58	0.3	<b>419337</b>

Connector with socket and external screw thread



Seal material	Outlet diameter		Dimensions a [mm]	Weight [kg]	Item number
	ØD1 [mm]	ØD2 [mm]			
EPDM	50	G 1¼"	58	0.2	<b>419250</b>
	50	G 1½"	58	0.3	<b>419252</b>
	50	G 2"	58	0.3	<b>419254</b>

Connector cast iron spigot → ACO pipe socket

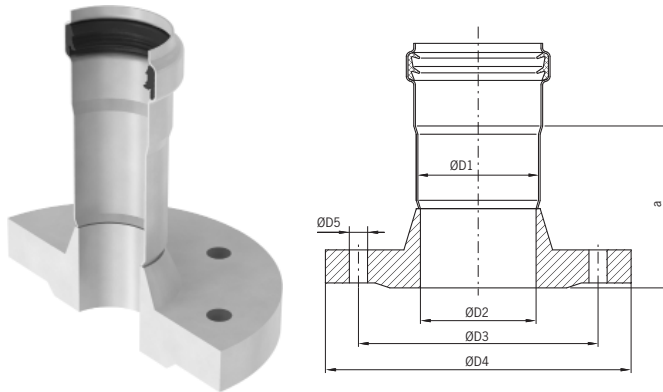


Outlet diameter ØD [mm]	Dimensions L [mm]	Weight [kg]	Item number
75	121	0.4	<b>98904</b>
110	137	0.6	<b>98906</b>
160	174	1.0	<b>98905</b>

Note:

To be used with reduction sealing item number 400580 for DN 75 and 400581 for DN 110

### Connector with socket and flange



Seal material	Outlet diameter				n x ØD5 [mm]	Dimensions a [mm]	Weight [kg]	Item number
	ØD1 [mm]	ØD2 [mm]	ØD3 [mm]	ØD4 [mm]				
EPDM	40	DN 40	110	150	4 × 18	100	2.0	1.4404 <b>417420</b>
	40	DN 40	110	150	4 × 18	100	2.0	<b>417421</b>
	50	DN 40	110	150	4 × 18	100	2.3	<b>419256</b>
	50	DN 50	125	165	4 × 18	100	2.7	<b>419258</b>
	75	DN 65	145	185	4 × 18	100	3.4	<b>419260</b>
	110	DN 100	180	220	8 × 18	100	4.9	<b>419262</b>
	200	DN 200	295	340	12 × 22	102	12.0	<b>419514</b>

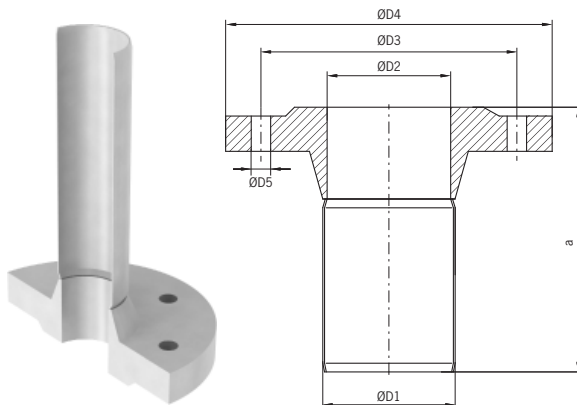
Note:

n – number of holes for screws in the flange.

Flange PN 16 DIN 2633.

Flange PN 6 and PN 10 available on request.

### Connector with flange and spigot



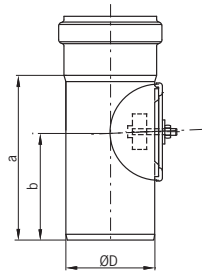
ØD1 [mm]	Outlet diameter			n x ØD5 [mm]	Dimensions a [mm]	Weight [kg]	Item number
	ØD2 [mm]	ØD3 [mm]	ØD4 [mm]				
40	DN 40	100	130	4 × 18	161	1.6	1.4404 <b>417430</b>
40	DN 50	100	130	4 × 18	161	1.6	<b>417431</b>
40	DN 40	110	150	4 × 18	165	2.0	<b>417422</b>
40	DN 50	110	150	4 × 18	165	2.0	<b>417423</b>
50	DN 40	110	150	4 × 18	192	2.3	<b>419264</b>
50	DN 50	125	165	4 × 18	192	2.7	<b>419265</b>
75	DN 65	145	185	4 × 18	245	3.4	<b>419266</b>
110	DN 100	180	220	8 × 18	259	4.9	<b>419267</b>
160	DN 150	240	285	8 × 22	200	8.5	<b>419540</b>
200	DN 200	295	240	12 × 22	240	12.3	<b>419541</b>

Note:

n – number of holes for screws in the flange.

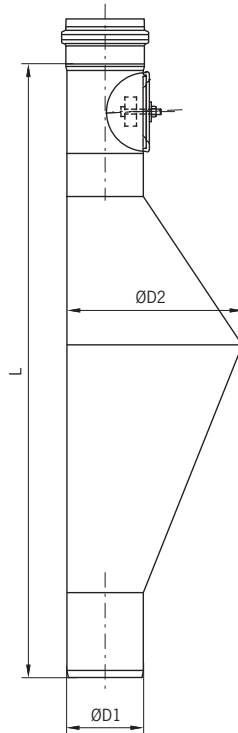
Flange PN 16 DIN 2633. | Flange PN 6 and PN 10 available on request.

Access unit



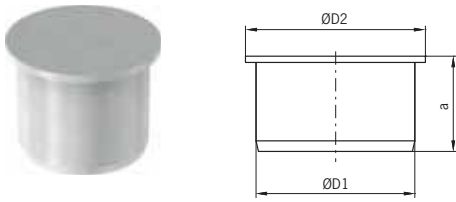
Seal material	Outlet diameter øD [mm]	Dimensions		Weight [kg]	Item number	
		a [mm]	b [mm]		1.4301	1.4404
EPDM	75	139	90	0.5	<b>98913</b>	<b>98963</b>
	110	183	117	0.8	<b>98915</b>	<b>98965</b>
	125	210	135	0.9	<b>419783</b>	<b>419785</b>
	160	288	184	2.3	<b>98917</b>	<b>98967</b>
	200	293	186	3.7	<b>419676</b>	<b>419678</b>
	250	290	184	3.8	-	<b>417128</b>
	315	340	228	8.9	-	<b>417214</b>

Rat-stop



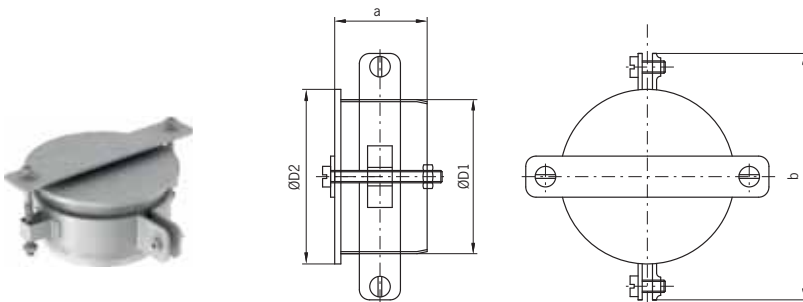
Seal material	Outlet diameter		Dimensions L [mm]	Weight [kg]	Item number	
	øD1 [mm]	øD2 [mm]			1.4301	1.4404
EPDM	110	250	864	3.8	<b>419268</b>	<b>419270</b>

Socket plug



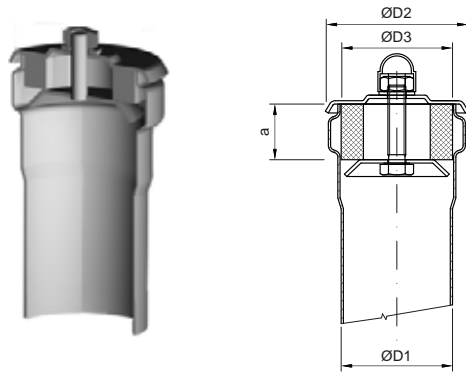
Outlet diameter		Dimensions	Weight	Item number
ØD1 [mm]	ØD2 [mm]			
40	35	50	0.1	<b>417405</b>
50	58	45	0.1	<b>98888</b>
75	85	45	0.3	<b>98889</b>
110	120	45	0.5	<b>98890</b>
125	135	50	0.6	<b>419782</b>
160	170	50	0.5	<b>98891</b>
200	210	50	0.7	<b>98994</b>
250	260	83	1.0	<b>417131</b>
315	325	73	2.2	<b>417215</b>

Socket plug with clamp



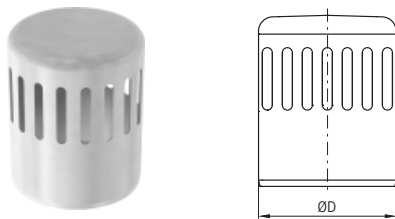
Outlet diameter		Dimensions		Weight	Item number
ØD1 [mm]	ØD2 [mm]	a [mm]	b [mm]		
40					<b>417402</b>
50	58	45	88	0.4	<b>419138</b>
75	85	45	120	0.6	<b>419139</b>
110	120	45	167	0.8	<b>419140</b>
160	170	50	214	1.1	<b>419141</b>
250	260	83	302	1.3	<b>417132</b>
315	325	130	371	3.7	<b>417216</b>

Drainplugs with screwed plug



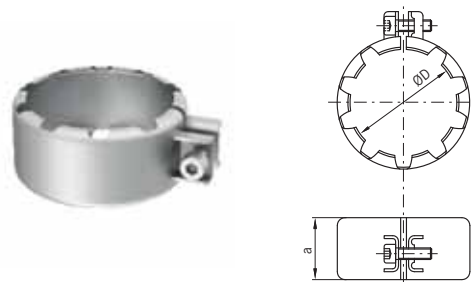
ØD1 [mm]	Outlet diameter		Dimensions a [mm]	Weight [kg]	Item number	
	ØD2 [mm]	ØD3 [mm]			1.4301	1.4404
40				0.1	<b>417404</b>	-
50	64	50	25	0.1	<b>419942</b>	<b>419948</b>
75	92	75	25	0.5	<b>419943</b>	<b>419949</b>
110	126	105	15	0.5	<b>419944</b>	<b>419950</b>
125	160	124	12	0.9	<b>419945</b>	<b>419951</b>
160	186	166	20	1.2	<b>419946</b>	<b>419952</b>

Vent cowl



Outlet diameter ØD [mm]	Weight [kg]	Item number
110	0.4	1.4404
		<b>98962</b>

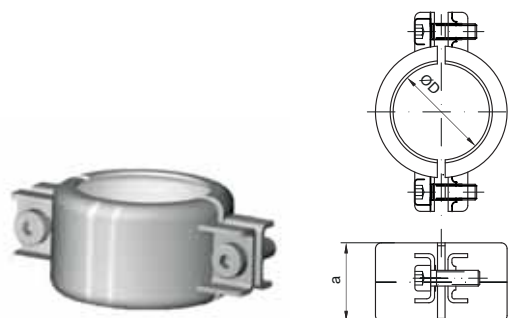
Socket clamp



Outlet diameter øD [mm]	Dimensions a [mm]	Weight [kg]	Item number
50	40	0.11	<b>417067</b>
75	43	0.16	<b>417069</b>
110	43	0.25	<b>417227</b>

Note: See page 193 for maximum operating pressures

Socket clamp - two parts



Outlet diameter øD [mm]	Dimensions a [mm]	Weight [kg]	Item number	Item number
40	36	0.10	<b>417396</b>	<b>417397</b>
50	40	0.14	<b>417024</b>	<b>417025</b>
75	40	0.25	<b>417026</b>	<b>417027</b>
110	43	0.34	<b>417028</b>	<b>417029</b>
125	45	0.38	<b>417016</b>	<b>417017</b>
160	45	0.48	<b>417030</b>	<b>417031</b>
200	45	0.51	-	<b>419983</b>
250	45	0.71	-	<b>417137</b>
315	48	0.9	<b>417219</b>	-

Note: See page 193 for maximum operating pressures

Seal



Outlet diameter øD [mm]	Weight [kg]	Item number EPDM	Item number NBR	Item number Viton®
40	0.01	<b>417400</b>	<b>417401</b>	-
50	0.01	<b>98400</b>	<b>417037</b>	<b>98404</b>
75	0.02	<b>98401</b>	<b>417038</b>	<b>98405</b>
110	0.05	<b>98402</b>	<b>417039</b>	<b>98406</b>
125	0.06	<b>419453</b>	<b>417041</b>	<b>419454</b>
160	0.08	<b>98403</b>	<b>417040</b>	<b>98407</b>
200	0.10	<b>98433</b>	<b>417042</b>	<b>98437</b>
250	0.12	<b>417146</b>	<b>417148</b>	<b>417147</b>
315	0.30	<b>417222</b>	<b>417223</b>	-

Note:

Detailed technical data sheet on page 228

Reduction sealing cast iron spigot → ACO pipe socket



Outlet diameter øD [mm]	Weight [kg]	Item number EPDM
DN 70/75	0.06	<b>400580</b>
DN 100/110	0.10	<b>400581</b>
DN 150/160	0.14	<b>400582</b>

Note:

While purchasing AP reduction sealing cast iron spigot → ACO pipe, it is necessary to order AP cast iron connector.

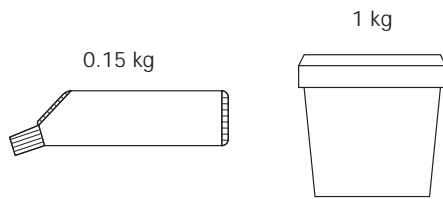
Reduction sealing ACO pipe spigot → cast iron socket



Outlet diameter øD [mm]	Weight [kg]	Item number EPDM
DN 70/75	0.05	<b>400586</b>
DN 100/110	0.08	<b>400587</b>
DN 150/160	0.12	<b>400588</b>

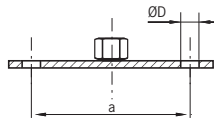


ACO Universal lubricant



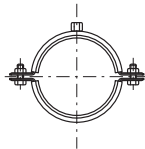
Weight [kg]	Item number
0.15	<b>E80350000</b>
1.00	<b>E80350001</b>

Fixing plate



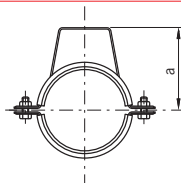
Outlet diameter $\varnothing D$ [mm]	Dimensions a [mm]	Weight [kg]	Item number Galvanised steel	Item number 1.4404
8.4	70	0.05	<b>400525</b>	<b>400521</b>

Support bracket with rubber infill



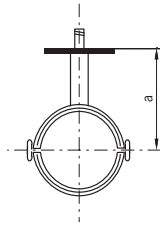
Outlet diameter $\varnothing D$ [mm]	Weight [kg]	Item number Galvanised steel	Item number 1.4404
40	0.12	<b>417434</b>	<b>417359</b>
50	0.14	<b>400533</b>	<b>400529</b>
75	0.23	<b>400534</b>	<b>400530</b>
110	0.33	<b>400535</b>	<b>400531</b>
125	0.36	<b>419854</b>	<b>419855</b>
160	0.39	<b>400536</b>	<b>400532</b>
200	0.44	<b>419451</b>	<b>419675</b>
250	0.60	-	<b>417149</b>
315	1.0	-	<b>417224</b>

Support bracket with rubber infill and stirrup



Outlet diameter $\varnothing D$ [mm]	Dimensions a [mm]	Weight [kg]	Item number Galvanised steel	Item number 1.4404
40			<b>417358</b>	<b>417360</b>
50	56	0.18	<b>400541</b>	<b>400537</b>
75	80	0.28	<b>400542</b>	<b>400538</b>
110	116	0.41	<b>400543</b>	<b>400539</b>
160	166	0.48	<b>400544</b>	<b>400540</b>

Support bracket with rubber infill and key



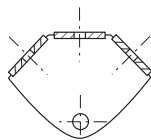
Outlet diameter $\varnothing D$ [mm]	Dimensions a [mm]	Weight [kg]	Item number Galvanised steel	Item number 1.4404
40			-	<b>417361</b>
50	120	0.16	<b>400549</b>	<b>400545</b>
75	133	0.26	<b>400550</b>	<b>400546</b>
110	150	0.38	<b>400551</b>	<b>400547</b>
160	175	0.44	<b>400552</b>	<b>400548</b>

Threaded support pole M8



$\varnothing D$ [mm]	L [mm]	Weight [kg]	Item number Galvanised steel	Item number 1.4404
M8	1000	0.39	<b>400557</b>	<b>400553</b>
M8	90	0.03	<b>400558</b>	<b>400554</b>
M8	40	0.016	<b>400559</b>	<b>400555</b>

Set for axial fixing



Weight [kg]	Item number Galvanised steel	Item number 1.4404
0.11	<b>400565</b>	<b>400561</b>

Joiner/disjoiner



$\varnothing D$ [mm]	Weight [kg]	Item number
100 - 400	25	<b>417070</b>

Electric cutter 50 – 110 mm



Note	Weight [kg]	Item number
in plastic case	20	400745

Note: Convenient tool for pipe cutting, suitable for larger projects

Manual cutter set 50-110 mm



Note	Weight [kg]	Item number
in plastic case	3.50	419363

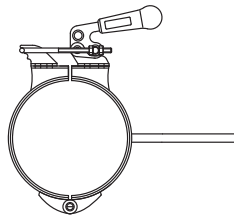
Manual cutter



øD [mm]	Weight [kg]	Item number
50-110	1.0	419364
110-160	2.0	400738
160-250	2.0	417228

Note:  
ACO pipe manual cutter should be ordered together with a holder for manual cutting.

**Holder for manual cutting**



<b>øD [mm]</b>	<b>Weight [kg]</b>	<b>Item number</b>
125	3.5	<b>419857</b>
160	4.0	<b>400742</b>
200	4.5	<b>400743</b>

Note: ACO pipe holder for manual cutting should be ordered together with ACO pipe manual cutter.

**Replacement discs for manual cutters**



<b>Note</b>	<b>Weight [kg]</b>	<b>Item number</b>
for cutter 419363	0.005	<b>419365</b>
for cutters 400738 and 419364	0.005	<b>400578</b>

Note:

Minimum order quantity – 10 pcs.

## Full bore flow rate tables for varying gradients

## For rainwater/storm drainage applications

Flow rates based on Colebrook-White formula.

Roughness coefficient  $k_s = 0.6 \text{ mm}$

Gradient [%]	Pipe ø 40 mm		Pipe ø 50 mm		Pipe ø 75 mm		Pipe ø 110 mm		Pipe ø 125 mm	
	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]
10.0	1.44	1.28	2.74	1.52	8.40	2.01	23.81	2.60	33.61	2.83
7.5	1.25	1.11	2.38	1.31	7.28	1.74	20.62	2.25	29.11	2.45
5.0	1.01	0.90	1.94	1.07	5.94	1.42	16.83	1.84	23.77	2.00
4.5	0.96	0.86	1.84	1.02	5.64	1.35	15.97	1.74	22.55	1.90
4.0	0.90	0.81	1.73	0.96	5.31	1.27	15.06	1.64	21.26	1.79
3.5	0.84	0.75	1.62	0.90	4.97	1.19	14.08	1.54	19.88	1.67
3.0	0.78	0.70	1.50	0.83	4.60	1.10	13.04	1.42	18.41	1.55
2.5	0.71	0.64	1.37	0.76	4.20	1.00	11.90	1.30	16.80	1.41
2.0	0.63	0.57	1.23	0.68	3.76	0.90	10.64	1.16	15.03	1.26
1.5	0.55	0.49	1.06	0.59	3.25	0.78	9.22	1.01	13.01	1.10
1.0	0.44	0.40	0.87	0.48	2.66	0.63	7.53	0.82	10.63	0.89

Gradient [%]	Pipe ø 160 mm		Pipe ø 200 mm		Pipe ø 250 mm		Pipe ø 315 mm	
	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]
10.0	64.15	3.31	116.89	3.83	218.31	4.45	401.51	5.15
7.5	55.56	2.87	101.22	3.32	188.95	3.85	347.54	4.46
5.0	45.36	2.34	82.65	2.71	154.13	3.14	283.52	3.64
4.5	43.03	2.22	78.40	2.57	146.17	2.98	268.90	3.45
4.0	40.57	2.10	73.92	2.43	137.77	2.81	253.45	3.25
3.5	37.95	1.96	69.14	2.27	128.82	2.63	236.99	3.04
3.0	35.13	1.81	64.01	2.10	119.20	2.43	219.31	2.82
2.5	32.07	1.66	58.43	1.92	108.74	2.22	200.09	2.57
2.0	28.68	1.48	52.26	1.71	97.18	1.98	178.83	2.30
1.5	24.84	1.28	45.26	1.48	84.05	1.71	154.70	1.99
1.0	20.28	1.05	36.95	1.21	68.48	1.40	126.07	1.62

Note:

The flow rates shown above assume an unrestricted discharge from the pipe. For installations without an unrestricted discharge, the flow rate will be affected by the downstream throttle.

For shallow gradients, the Colebrook-White formula underestimates flow rates (because when gradient tends towards zero %, velocity also tends to zero).

For level or nearly level installations (slope < 1 %), spatially varied flow tables should be used.

For soil/foul water drainage applications

Flow rates based on Colebrook-White formula.  
Roughness coefficient  $k_s = 0.6 \text{ mm}$

Gradient [%]	Pipe ø 40 mm		Pipe ø 50 mm		Pipe ø 75 mm		Pipe ø 110 mm		Pipe ø 125 mm	
	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]
10.0	1.21	1.08	2.30	1.27	7.14	1.71	20.45	2.23	28.97	2.44
7.5	1.04	0.93	1.99	1.10	6.19	1.48	17.71	1.93	25.09	2.11
5.0	0.85	0.76	1.63	0.90	5.05	1.21	14.46	1.58	20.49	1.72
4.5	0.81	0.72	1.54	0.85	4.79	1.14	13.72	1.50	19.43	1.64
4.0	0.76	0.68	1.46	0.80	4.52	1.08	12.94	1.41	18.32	1.54
3.5	0.71	0.64	1.36	0.75	4.23	1.01	12.10	1.32	17.14	1.44
3.0	0.66	0.59	1.26	0.70	3.91	0.93	11.20	1.22	15.87	1.34
2.5	0.60	0.54	1.15	0.64	3.57	0.85	10.23	1.12	14.49	1.22
2.0	0.53	0.48	1.03	0.57	3.19	0.76	9.15	1.00	12.96	1.09
1.5	0.46	0.42	0.89	0.49	2.77	0.66	7.92	0.86	11.22	0.94
1.0	0.37	0.34	0.73	0.40	2.26	0.54	6.47	0.71	9.16	0.77

Gradient [%]	Pipe ø 160 mm		Pipe ø 200 mm		Pipe ø 250 mm		Pipe ø 315 mm	
	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]	Flow rate Q [l/s]	Velocity v [m/s]
10.0	55.61	2.87	101.81	3.34	206.87	4.22	382.95	4.92
7.5	48.16	2.49	88.17	2.89	177.84	3.62	329.47	4.23
5.0	39.32	2.03	71.99	2.36	143.52	2.93	266.21	3.42
4.5	37.30	1.93	68.30	2.24	135.71	2.77	251.81	3.23
4.0	35.17	1.82	64.39	2.11	127.46	2.60	236.59	3.04
3.5	32.90	1.70	60.23	1.98	118.69	2.42	220.42	2.83
3.0	30.46	1.57	55.76	1.83	109.29	2.23	203.07	2.61
2.5	27.80	1.44	50.90	1.67	99.10	2.02	184.25	2.37
2.0	24.87	1.28	45.53	1.49	87.86	1.79	163.50	2.10
1.5	21.53	1.11	39.43	1.29	75.18	1.53	140.05	1.80
1.0	17.58	0.91	32.19	1.06	60.25	1.23	112.42	1.44

Note:

The flow rates shown above assume an unrestricted discharge from the pipe. For installations without an unrestricted discharge, the flow rate will be affected by the downstream throttle.

For shallow gradients, the Colebrook-White formula underestimates flow rates (because when gradient tends towards zero %, velocity also tends to zero). For level or nearly level installations (slope < 1 %), spatially varied flow tables should be used.

**Operating pressures**

The ACO pipe socketed stainless steel pipe systems are fitted with a unique, double lip seal manufactured from either EPDM or Viton®. The double lip seal arrangement provides added security for the ultimate long term reliability. The ACO pipe; socketed stainless steel pipe systems are tested and approved for operating pressures in gravity, siphonic and vacuum systems.

ACO pipe stainless steel pipe systems are designed for maximum working pressure 0.5 bar according to EN 1124. In case where higher pressure may apply, it is necessary to combine the system with socket clamps.

Pipe diameter [mm]	Operating pressure [bar]	
	Without socket clamp	With socket clamp
40	0.5	2.5
50	0.5	2.5
75	0.5	2.5
110	0.5	2.5
125	0.5	2.5
160	0.5	1.5
200	0.5	1.5
250	0.5	1.0
315	0.5	0.7

Vacuum applications	
Pipe diameter [mm]	Operating pressure [bar]
40	-0.8
50	-0.8
75	-0.8
110	-0.8
125	-0.8
160	-0.8
200	-0.8
250	-0.8
315	-0.8





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**Transport & handling information**

**ACO gully**

- ACO gullies are packed on framed pallets, protected by cardboard inserts and PE foil. Individual products are packed in protective plastic net.
- Outlet pipes are equipped with protective lids.
- Gully tops and flanges are covered with protective blisters, which also protect the inside areas during installation. Individual products are packed in plastic protective net.
- Handle the gully/ gully parts with care. Any rough manipulation (like dragging along the ground, dumping off the truck...) can cause deformation and potentially cause product malfunctions.
- Contact with carbon steel may cause stainless steel corrosion.

**ACO channel**

- The maximum transportable length of channel is 6 000 mm. In case of container or air transport, the recommended maximum transport length is 2 000 mm. Long channels over 6 000 mm are standardly divided in 6 m sections with transport joins.
- If one piece channel is required, the channel will have to be welded on site. Please contact our Sales/Technical department.
- ACO channel is for such requirement packed on framed/ non framed pallets fixed by plastic tape.
- Products are protected by wooden inserts and frames, in some cases PE foil or bubble foil is used.
- Articles are either wrapped seperately in ACO paper box or placed loose within EUR pallet space. It is strongly recommended that channels / channel parts / accessories are transported in their original packaging to avoid damage and / or loss of parts.
- Store preferably on dry and flat surface.
- Handle the channels/ channel parts/ accesories with care. Careful truck un/loading procedures are crucial. Any rough manipulation (like dragging along the ground, dumping off the truck etc...) can cause deformation and potentially cause product malfunctions.
- Contact with carbon steel may cause stainless steel corrosion.

### **ACO grating**

- Standard grating length for ACO hygienic box channel is 500 mm and 1 000 mm for ACO modular box channel.
- ACO grating is packed on framed pallets protected by cardboard inserts and PE foil.
- Articles are either wrapped separately in ACO paper box or placed loose within EUR pallet space.
- It is strongly recommended to transport gratings in their original packaging to avoid damage. Store preferably on dry and flat surface.
- Handle the gratings with care.
- Any rough manipulation (like dragging along the ground, dumping off the truck...) can cause deformation and potentially cause product malfunctions.
- Contact with carbon steel may cause stainless steel corrosion.

### **ACO pipe**

- Maximum transport length of straight pipes pallets is 6 080 mm and width 820 mm.
- Straight pipes are packed on framed/ non framed long pallets, protected by wooden inserts and supports.
- Articles are either wrapped in cardboard and stretch or PE foil. Fittings are packed in cardboard boxes and stacked on foiled EUR pallets.
- It is strongly recommended to transport and store the pipes and fittings in their original packaging to avoid damage and/or the loss of parts. Store preferably on dry and flat surface.
- Handle the pipes and fittings with care. Any rough handling (like dragging along the ground, dumping off the truck...) can cause deformation and potentially cause product malfunctions.
- Contact with carbon steel may cause stainless steel corrosion.

# ACO fire protective solution

## ACO gullies and ACO channels - Introduction

### ACO gullies and ACO channels - Introduction

ACO has developed a solution which prevents the spreading of fire and high temperatures within different building's floors where ACO hygienic gully, ACO hygienic channel and ACO pipe are installed.

The solution has been tested according to EN 1366-2 Fire resistance tests for service installations and classified according to EN 13501 Fire classifications of construction products and building elements. For classification details please see chart below.

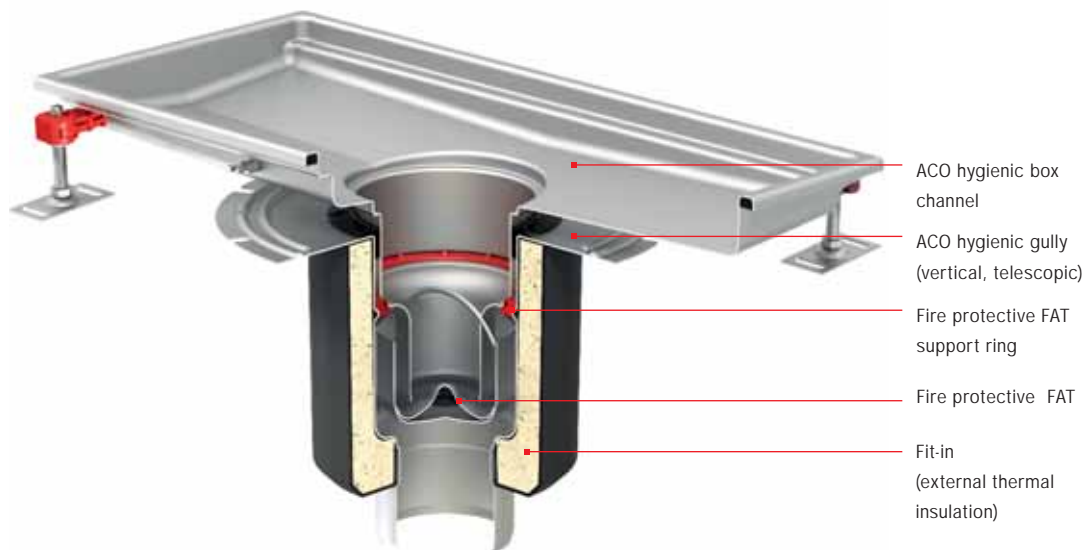
ACO fire protective kit can be used with telescopic vertical or fixed height vertical ACO hygienic gully and with ACO hygienic box channel, consisting of following items:

- External protection – Fit in
- Internal protection
  - Fire protective foul air trap
  - Fire protective foul air trap support

This solution has been designed and tested for use in either concrete or aerated concrete ceiling slabs with a minimum height of 150 mm.

ACO hygienic gully and ACO hygienic box channel installed with ACO fire protective kit can be connected to any kind of sewerage with ACO pipe regardless of its material, e.g. non combustible cast iron drain pipes SML, stainless steel ACO pipe (building material class A1) or plastic drain pipes (building material class B1/B2). All mentioned components of external and internal protection must be used to guarantee correct function of fire protection!

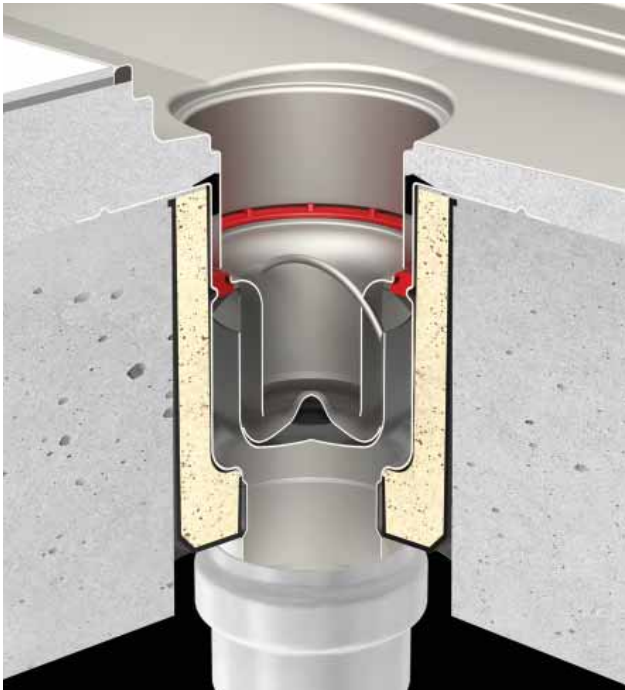
Tested at: PAVUS, a.s. protocol: No. Pr-13-2.061



Gully type	Outlet diameter	Classification
ACO hygienic gully 142	75	EI 180
	110	EI 120
ACO hygienic gully 157	75	EI 180
	110	EI 120
ACO hygienic gully 218	110	EI 180
	160	EI 90

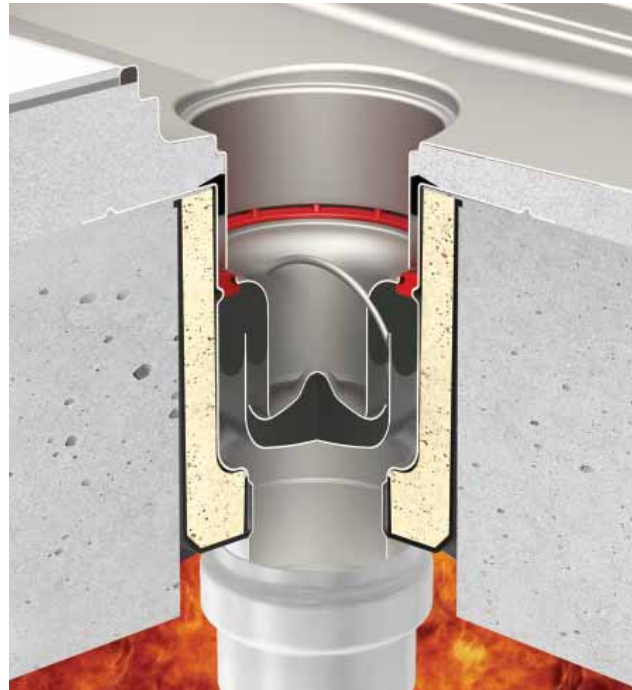
Classification according to EN 13 501, protocol: PK2-11-13-901-C-0

**ACO gullies and ACO channels - Installation and function**



**Before activation**

- Installation scheme with assembled fire protective solution in ceiling construction.



**Fire activation**

- Function of fire protective solution to prevent the spread of fire within storey structure by transmission (ACO gully).
- Time preventing the spread of fire is limited from 90 minutes to 180 minutes.

**ACO pipe - Installation and function**

ACO pipe push-fit system is classified and certified as a non-combustible product (as it is manufactured in compliance to EN 1124, part 1 & part 2). This standard classifies the ACO pipe systems as class A1 fire resistant (highest rating).

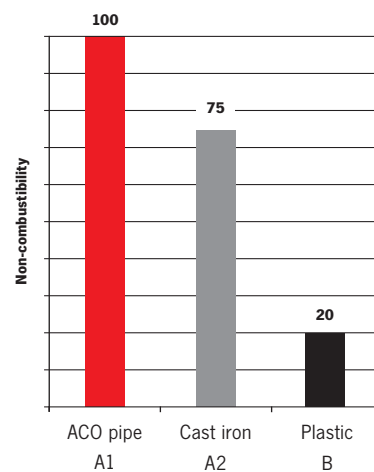
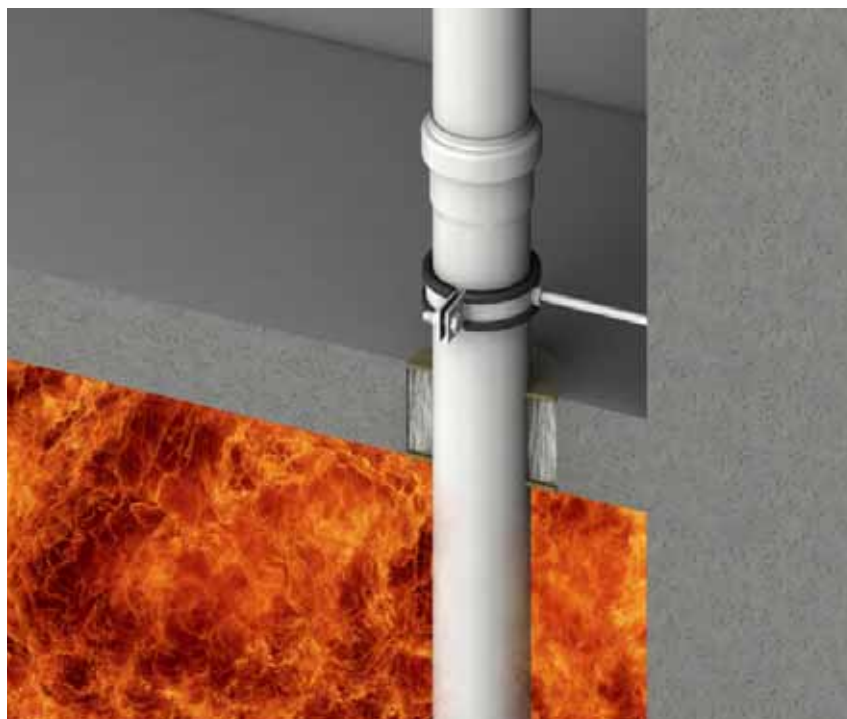
ACO pipe systems are certified also by SITAC authority as fire resistant (cert. no. 0410-01).

Special certificate of fire resistance for coated pipes (no. CSI PK-13-083) is available.

Fire certificates from marine authorities are available.

**Non combustibility:**

- Non combustible
- No additional fire collars needed at installation
- No toxic fumes emitted in case of fire
- EN 1124





**Introduction**

Drainage is a critical component affecting the hygienic performance of commercial food preparation business. Effective drainage helps to mitigate hazards from the external environment and is central to the safe and hygienic operation internally. Within the food production facility, surface liquids represent potential hazard of microbiological contamination. Liquids may be part of the cleaning process, or

may originate from specific equipment discharge points, or be simply the result of an accidental spillage. Quite often the liquids contains other components – organic matter being predominant. Floor drainage components cater for these situations through three core functions - interception, conveyance of fluids, and ability to act as a barrier.

Effective cleaning of drainage in commercial food preparation business reduces risk of contamination and spoiling of food during preparation, processing, and storage. The main objective of cleaning is to remove soil to obtain clean surface and thereby reduce number of microorganisms. A further reduction of microorganism can be obtained by disinfection step.

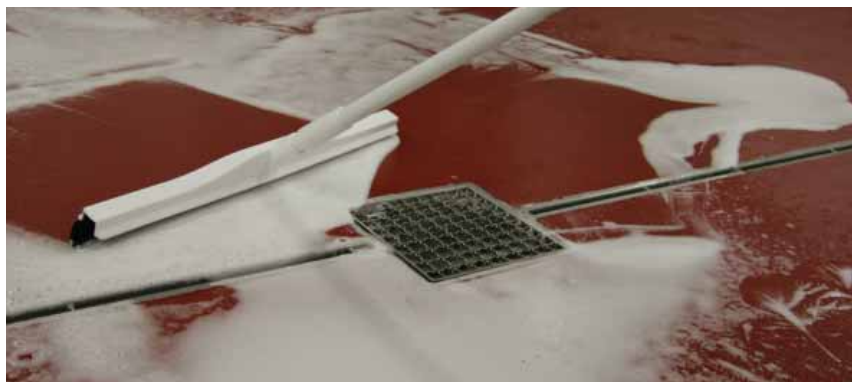


## Principles of cleaning

The principles of cleaning involve combination of thermal, kinetic and chemical energy. The cleaning processes are always combination of these factors and time of these to work. The key point to highlight is that all equipment – **including drainage** – in food processing plant should have hygienic design, which is easy to clean and disinfect. Otherwise the cleaning process is time and energy consuming and not cost effective. All surfaces of ACO stainless steel drainage are hygienically designed – no sharp corners, edges, dead spaces and crevices. ACO drainage is easily accessible for cleaning and visual inspection.

### The effectiveness of drainage cleaning depends on number of factors:

- Soil type and properties
- Material, design and surfaces
- Water quality
- Cleaning chemicals
- Cleaning procedure
- Cleaning parameters; like temperature, time, flow velocity and concentration of chemicals



### There are two different types of surface to be cleaned:

#### Product contact surface

All equipment that intentionally or unintentionally (e.g. due to splashing) comes to contact with final product or from which product or condensate may drain, drop or be drawn into the main product or product container.

#### Non product contact surface

All other exposed surfaces, including surfaces associated with equipment, such as support structures, control panels and external surfaces. It also includes surfaces related to the manufacturing environment, such as floors, walls and drain channels.

### We also differentiate cleaning process as whether it is applied dry or wet.

#### Dry cleaning

Dry cleaning is essentially a mechanical removal of soils using sweeping, brushing, wiping and vacuuming. Environments typically to be cleaned by dry methods include plants which are producing flour, cocoa, dry milk products, dry soups and dry infant formulas.

#### Wet cleaning

Wet cleaning involves application of fluids (usually water based) to achieve the desired cleaning result. This can be applied to Open Plant Cleaning (OPC): surfaces to be cleaned have to be accessible to fluids. In addition, some components may be physically removed from production area and cleaned separately – Cleaning out of place (COP). Drainage systems require wet cleaning.

### The last is a distinction between whether the cleaning process is done manually or automatically.

#### Manual cleaning

Manual cleaning is generally considered as labour intensive and, therefore often expensive. The manual tools should be hygienic – resistant to applied chemicals and suitable for a specific operation. On top of it; operators should be properly trained to be able to perform cleaning as expected to achieve clean surfaces. ACO drainage has all elements of hygienic design that makes cleaning of ACO drainage much easier and faster when compared to competitive products.

#### Automatic cleaning

Utensils and dismantled parts of equipment are cleaned and disinfected automatically in industrial washing machines, tray or tunnel washers (automatic COP). CIP is also defined as automatic cleaning system.

**Cleaning chemicals**

**There are three main classes of cleaning compounds:**

- detergents
- alkalis
- acids
- disinfectants/sanitizers

**Detergents**

This broad group of chemicals is widely used in households and in food industries brings different type of soil from surfaces into cleaning foams and emulsions that could be easily rinsed off.

**Alkalies**

Alkaline compounds are effective for dissolution of proteins and removal of fats. Example of alkalies are sodium hydroxide (caustic soda) and potassium hydroxide. These compounds are hazzardeous to personnel and mostly used in CIP – automatic dosing system is recommended.

**Acids**

Acids, both organic and inorganic, are commonly used for removal of mineral deposits, such as: hard water scale or milkstone. Acids are potentially corrosive to construction materials and must be used with care.

When chemical cleaning is performed, it is neccesseray to use low-pressure sprays, foam or gel. Foam and gel are more viscous than sprayed agents and preferred as they are not prone to aerosol formation. Selection of the correct detergent for given application should be always done in co-operation with the detergent supplier.

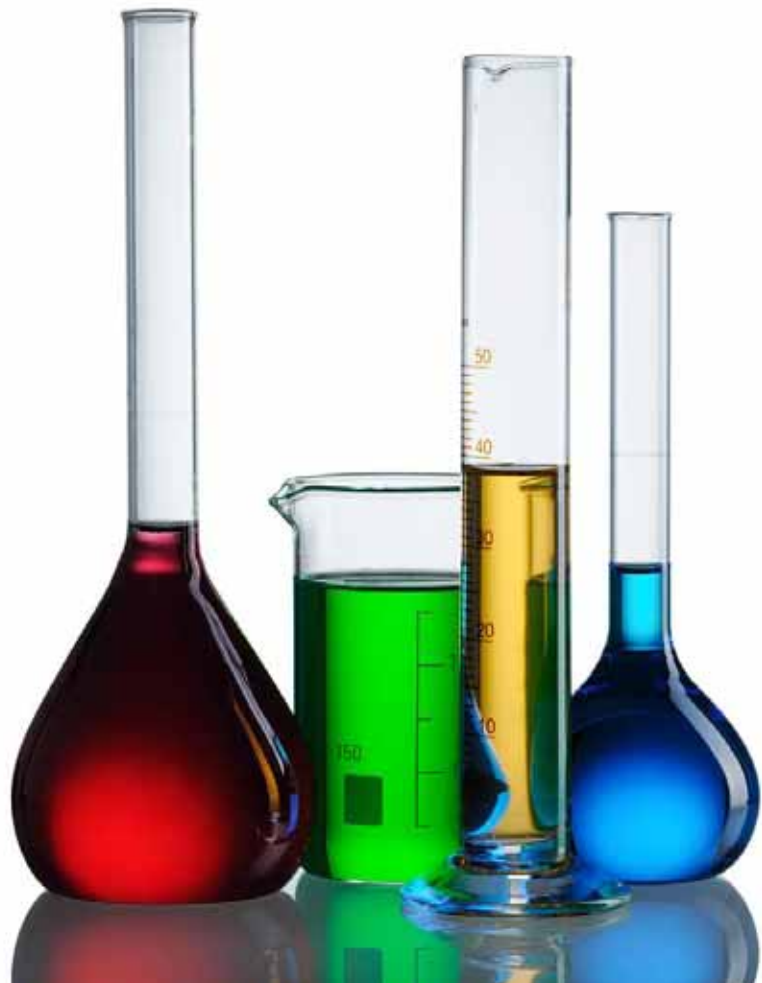
**Disinfectants/sanitizers**

In case of high risk area's or production areas with microbiological sensitive products, the floors and drain systems should be sprayed with disinfectants/sanitizers, which will reduce the contamination risk even more. The disinfectants/sanitizers will kill remaining micro-organisms, according to the required specifications.

**The plant downtime and labour associated with cleaning is major cost of any food processing operation.**

**Sources of soil**

Primary source of soil is from processed food product itself. Microbiological bio-films mainly contribute to the soil build ups on drainage surfaces. These films vary in their solubility depending upon such factors as heat effect, age, dryness, time, etc. It is essential that personel involved in the cleaning process design have understanding of the nature of the soil to be removed before selecting a detergent and cleaning method. The rule of thumb is that acid cleaners dissolve alkalaine soils (minerals), and and detergents dissolve acid soils and food wastes (proteins).



**Manual cleaning of drainage**



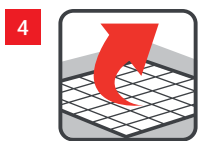
Remove all present grocery, raw materials, wrapping materials and tools.



Cover all equipment that could be contaminated.



Remove excess dirt from floor and gratings, and place into designated container.



Remove gratings.



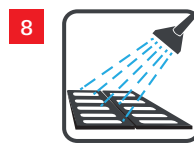
Remove and empty silt basket and foul air trap.



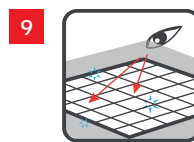
Place collected waste and dirt into designated container. Rinse grating, silt basket and foul air trap with clean water. Then place foul air trap into its original position.



Wash all surfaces with designated detergent and designated hand brush.



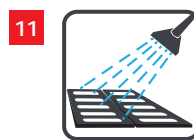
Rinse all surfaces with clean water.



Visually check surface cleanliness - repeat cleaning process if necessary.



Place silt basket and grating to its original position.





Rinse the entire equipment with clean water.


## Cleaning procedures


### Chemical cleaning of drainage


#### Chemical cleaning of drainage


- 


1 Remove all present grocery, raw materials, wrapping materials and tools.
- 


2 Cover all equipment that could be contaminated.
- 


3 Remove excess dirt from floor and gratings; and place into designated container.
- 

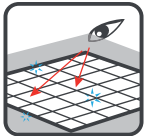
4 Remove gratings.
- 


5 Remove and empty silt basket and foul air trap.
- 


6 Place collected waste and dirt into designated container. Rinse grating, silt basket and foul air trap with clean water. Then place foul air trap into its original position.
- 

7 Apply foam to all surfaces.
- 

8 Leave foam for 15 minutes.
- 

9 Rinse off foam with clean water.
- 

10 Visually check surface cleanliness - repeat cleaning process if necessary.
- 

11 Place silt basket and grating to its original position.
- 

12 Rinse the entire equipment with clean water.

Overview with recommended cleaning procedures for drainage

These instructions are for guidance only. **Always follow manufacturer’s instructions.**  
 All procedures have to be verified and adjusted to the application specifics.

Frequency	Procedure	Physical agents	Chemical agents	Examples of chemical cleaning agents suitable for ACO stainless steel drainage
Daily	Removal of organic deposits (fats, proteins, saccharides and polysaccharides)	<ul style="list-style-type: none"> <li>▪ Steam</li> <li>▪ Medium pressure water to max 25 bar</li> <li>▪ Mechanical / kinetic energy (brushes, CIP medium velocity)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Caustics (sodium hydroxide, potassium hydroxide)</li> <li>▪ Detergents / surfactants</li> </ul>	Standard chemical agents used for floor cleaning should be sufficient (should be validated) Oxofoam, Endorochlor (Diversey)
Weekly	Removal of inorganic deposits that could promote very resistant biofilms	Mechanical abrasive methods – polishing	<ul style="list-style-type: none"> <li>▪ Nitric acid for stainless steel passivation where chlorine attack could be expected</li> <li>▪ Inorganic acids (phosphoric acid)</li> <li>▪ Weak organic acids</li> </ul>	<ul style="list-style-type: none"> <li>▪ Acifoam (Diversey)</li> <li>▪ Acigel (Diversey)</li> <li>▪ Super Dilac (Diversey)</li> </ul>
Note	Removal of rinse water residues	Removal of excess water with a squeegee	Alcohols (isopropylalcohol, ethanol)	Chlorine tablets (Suma Tab D4 by Diversey) are often added to the water in foul trap in microbial sensitive production areas

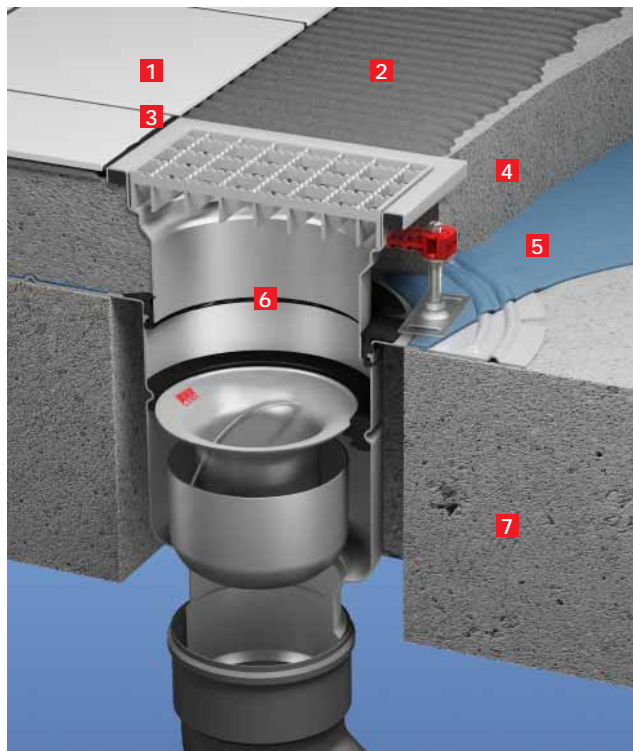
Any cleaning procedures, including those recommended by equipment suppliers, must be properly validated at the equipment, where it will be applied and on the soil that could be expected even after certain time of usage.

**Always follow manufacturer’s instructions to avoid damage to the equipment.**

**ACO hygienic gully**

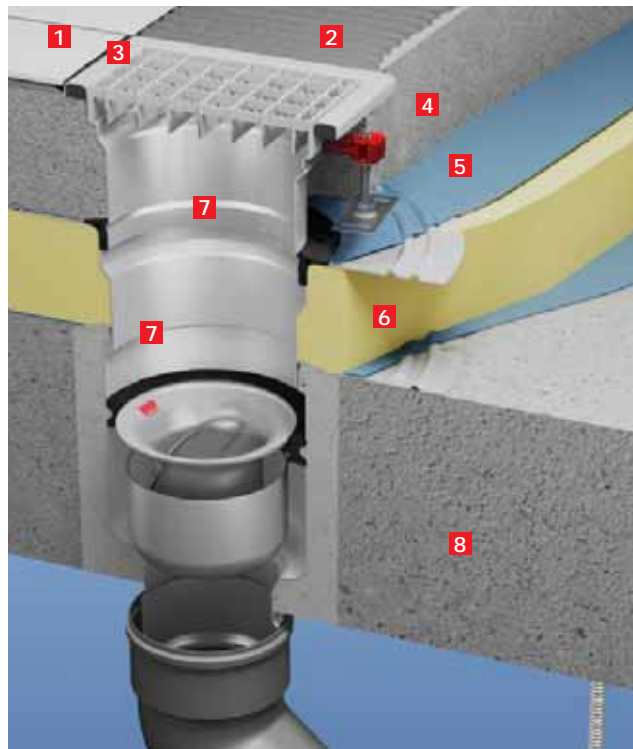
ACO hygienic gully – telescopic flanged gully installed in suspended concrete slab construction

- 1** Ceramic tiles
- 2** Tile cement
- 3** Mastic sealant
- 4** Floor screed
- 5** Water proof membrane (WPM)
- 6** Gully
- 7** Suspended concrete slab core-boarded to accept gully body



ACO hygienic gully – telescopic flanged gully and raising flanged piece installed in suspended concrete slab construction

- 1** Ceramic tiles
- 2** Tile cement
- 3** Mastic sealant
- 4** Floor screed
- 5** Water proof membrane (WPM)
- 6** Insulation
- 7** Double flange gully
- 8** Suspended concrete slab core-boarded to accept gully body



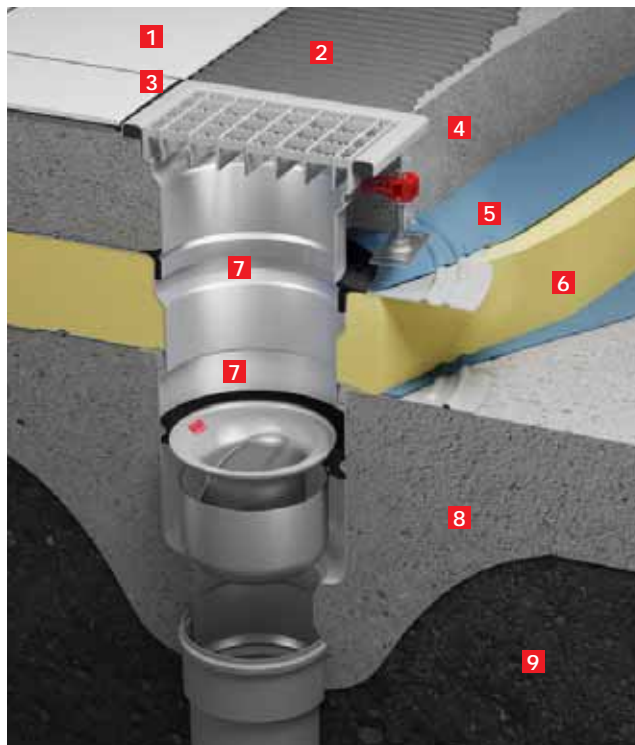
ACO hygienic gully – telescopic flanged gully installed in solid concrete floor

- 1 Ceramic tiles
- 2 Tile cement
- 3 Mastic sealant
- 4 Floor screed
- 5 Water proof membrane (WPM)
- 6 Flange gully
- 7 Solid concrete floor slab
- 8 Compacted soil



ACO hygienic gully – telescopic flanged gully and raising piece installed in solid concrete floor

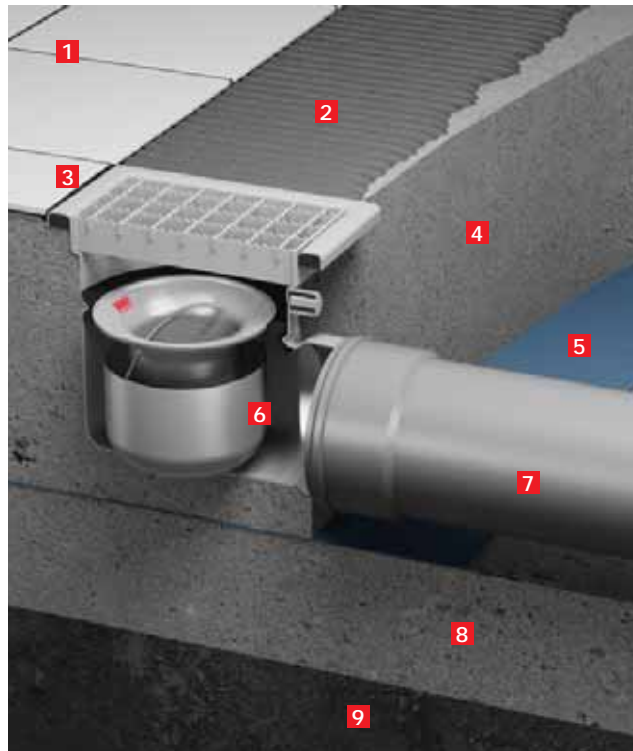
- 1 Ceramic tiles
- 2 Tile cement
- 3 Mastic sealant
- 4 Floor screed
- 5 Water proof membrane (WPM)
- 6 Insulation
- 7 Double flange gully
- 8 Solid concrete floor slab
- 9 Compacted soil





**ACO hygienic gully – fixed height gully installed in solid concrete floor**

- 1** Ceramic tiles
- 2** Tile cement
- 3** Mastic sealant
- 4** Floor screed
- 5** Damp proof membrane (DPM)
- 6** Gully
- 7** Outlet pipe
- 8** Floor slab
- 9** Compacted soil

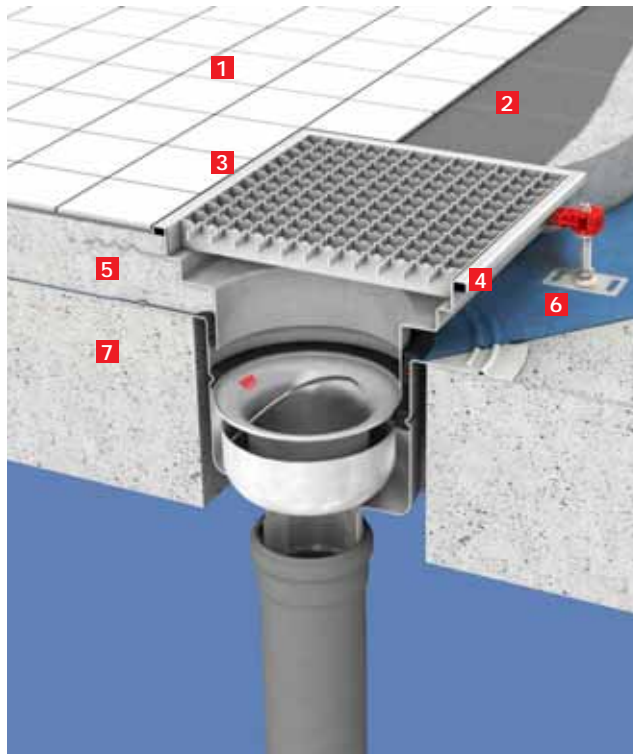




ACO hygienic box channel

ACO hygienic box channel standard type – ACO hygienic gully with adhesive bonding flange (Tiled floor)

- 1 Ceramic tiles
- 2 Tile cement
- 3 Mastic sealant
- 4 Rubber infill
- 5 Floor screed
- 6 Water proof membrane
- 7 Solid concrete floor slab



ACO hygienic box channel standard type – ACO hygienic gully with mechanical clamping flange (Tiled floor)

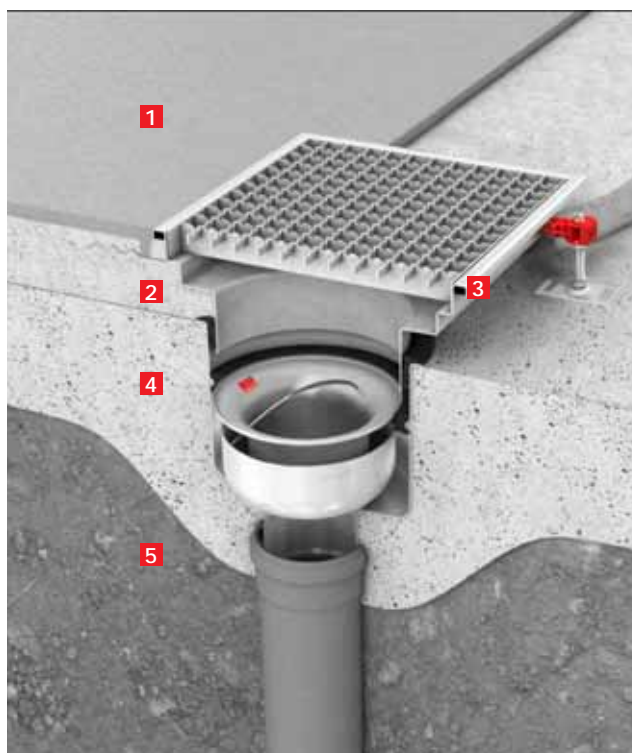
- 1 Ceramic tiles
- 2 Tile cement
- 3 Mastic sealant
- 4 Rubber infill
- 5 Floor screed
- 6 Water proof membrane
- 7 Solid concrete floor slab
- 8 Compacted soil



## Typical installation examples ACO hygienic box channel

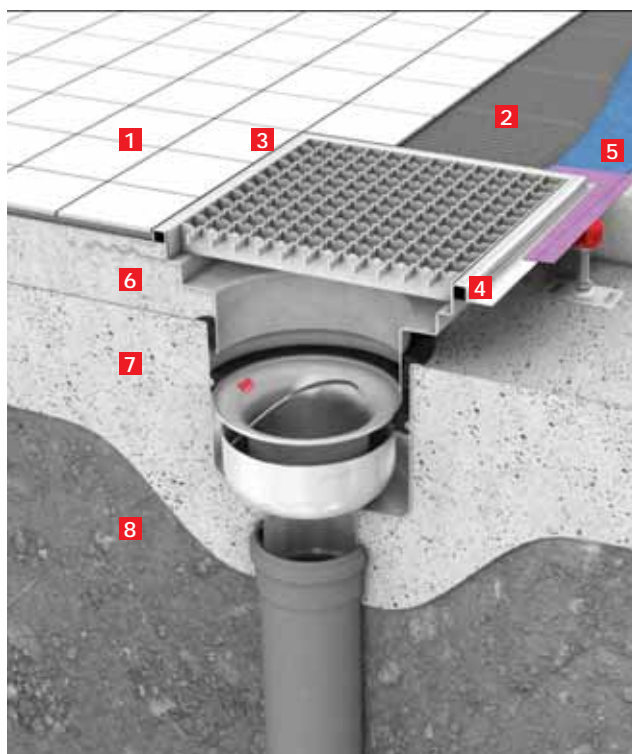
### ACO hygienic box channel standard type – ACO hygienic gully with location flange (Resin floor)

- 1 Epoxy/resin floor
- 2 Floor screed
- 3 Rubber infill
- 4 Solid concrete floor slab
- 5 Compacted soil



### ACO hygienic box channel extendend type – ACO hygienic gully with location flange (Tiled floor)

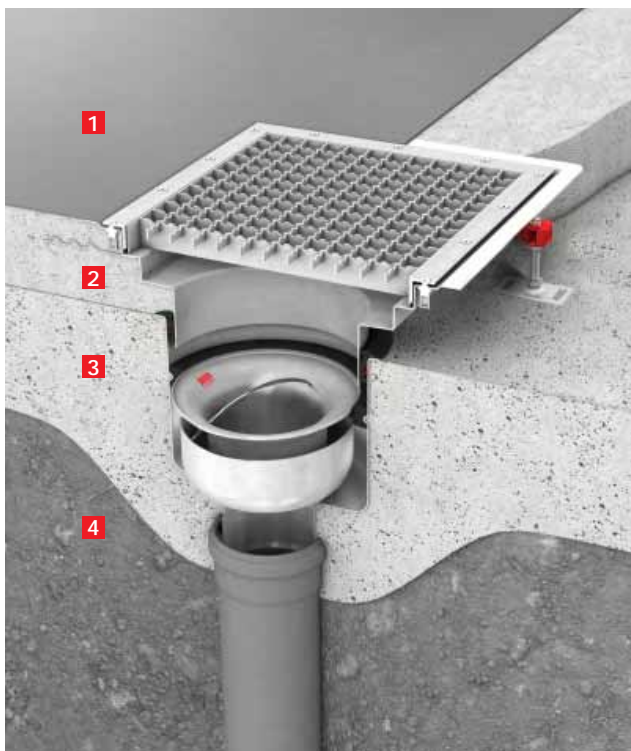
- 1 Ceramic tiles
- 2 Tile cement
- 3 Mastic sealant
- 4 Rubber infill
- 5 Water proof membrane
- 6 Floor screed
- 7 Solid concrete floor slab
- 8 Compacted soil



ACO vinyl box channel

ACO vinyl box channel – ACO hygienic gully with location flange (Vinyl floor)

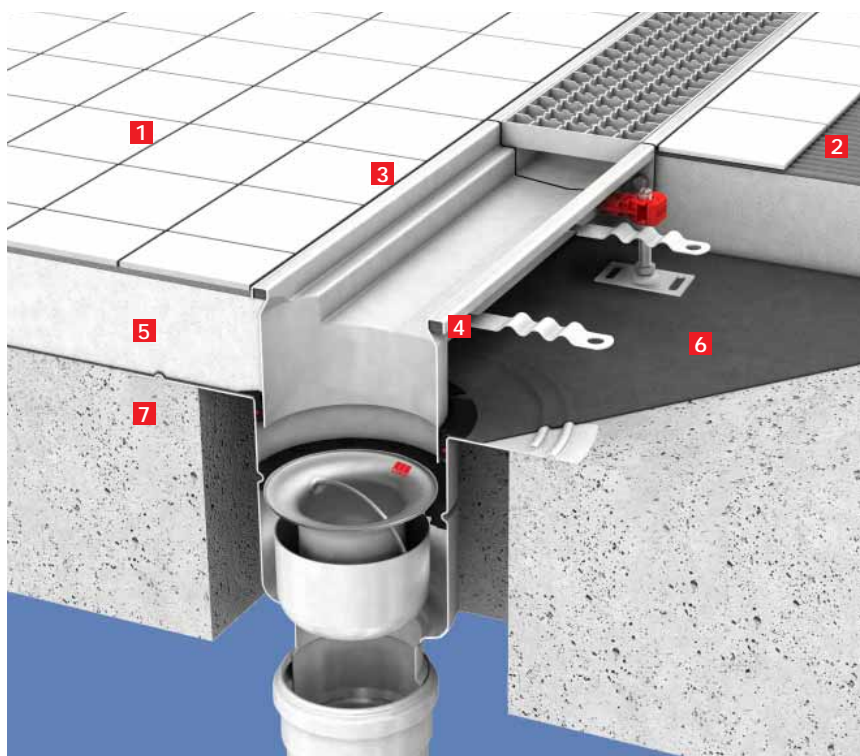
- 1 Vinyl floor
- 2 Floor screed
- 3 Solid concrete floor slab
- 4 Compacted soil



**ACO modular box channel**

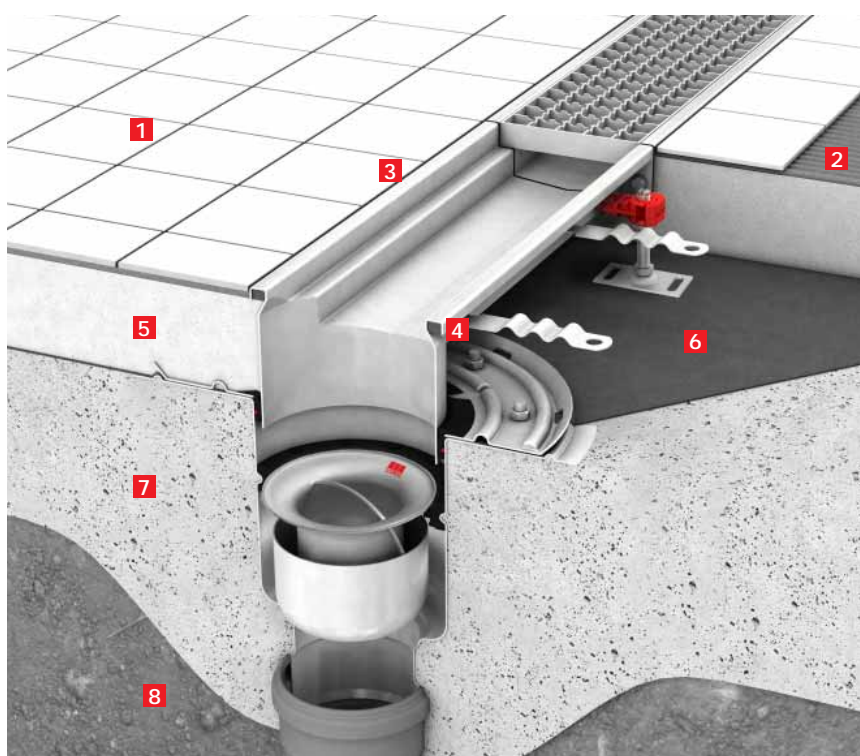
ACO modular box channel standard type – ACO hygienic gully with adhesive bonding flange (Tiled floor)

- 1** Ceramic tiles
- 2** Tile cement
- 3** Mastic sealant
- 4** Rubber infill
- 5** Floor screed
- 6** Water proof membrane
- 7** Solid concrete floor slab



ACO modular box channel standard type – ACO hygienic gully with mechanical clamping flange (Tiled floor)

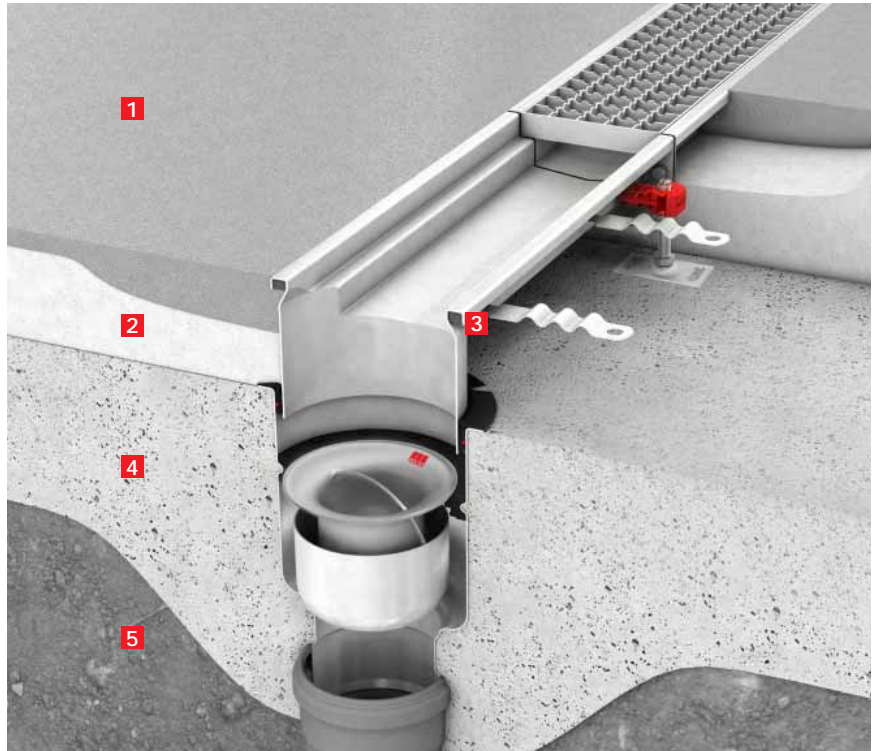
- 1** Ceramic tiles
- 2** Tile cement
- 3** Mastic sealant
- 4** Rubber infill
- 5** Floor screed
- 6** Water proof membrane
- 7** Solid concrete floor slab
- 8** Compacted soil





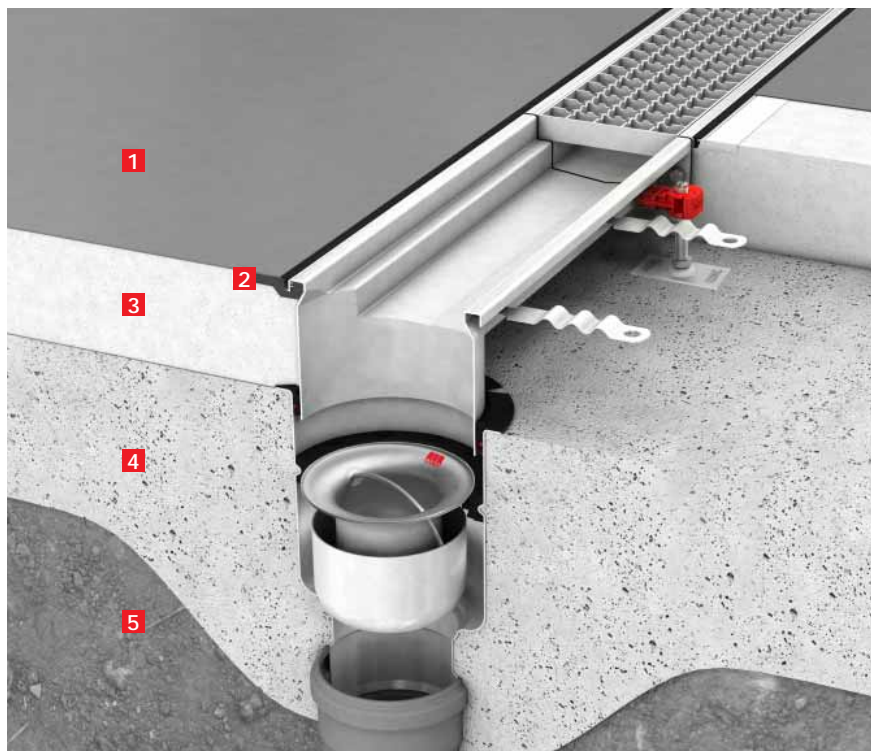
**ACO modular box channel standard type – ACO hygienic gully with location flange (Resin floor)**

- 1 Epoxy/resin floor
- 2 Floor screed
- 3 Rubber infill
- 4 Solid concrete floor slab
- 5 Compacted soil



**ACO modular box channel vinyl type – ACO hygienic gully with location flange (Vinyl floor)**

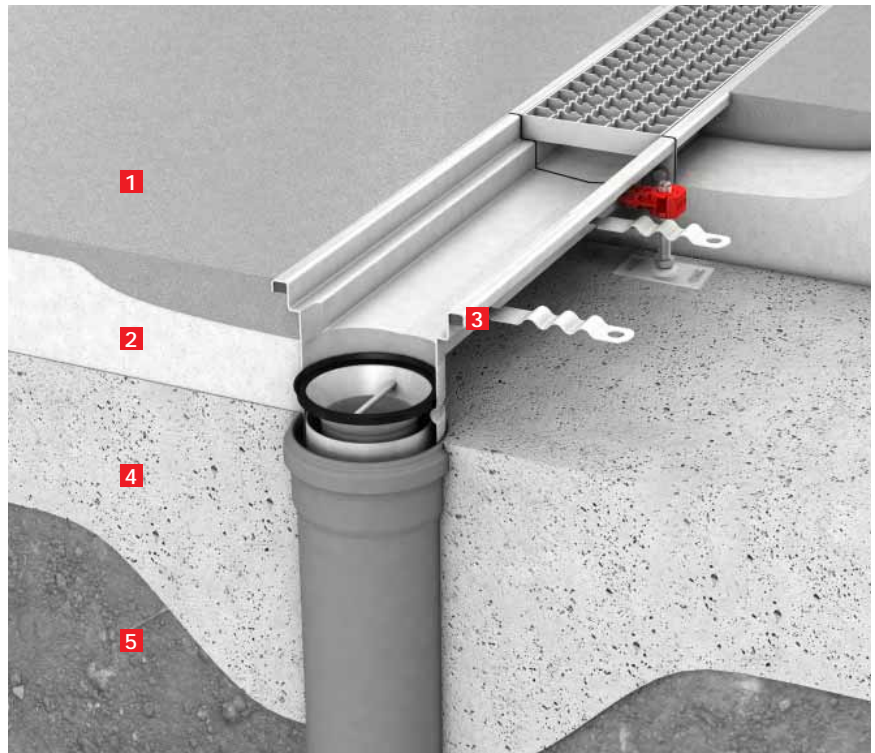
- 1 Vinyl floor
- 2 Vinyl seal
- 3 Floor screed
- 4 Solid concrete floor slab
- 5 Compacted soil



## Typical installation examples ACO modular box channel

### ACO modular box channel standard type – direct connection to sewage pipe system (Resin floor)

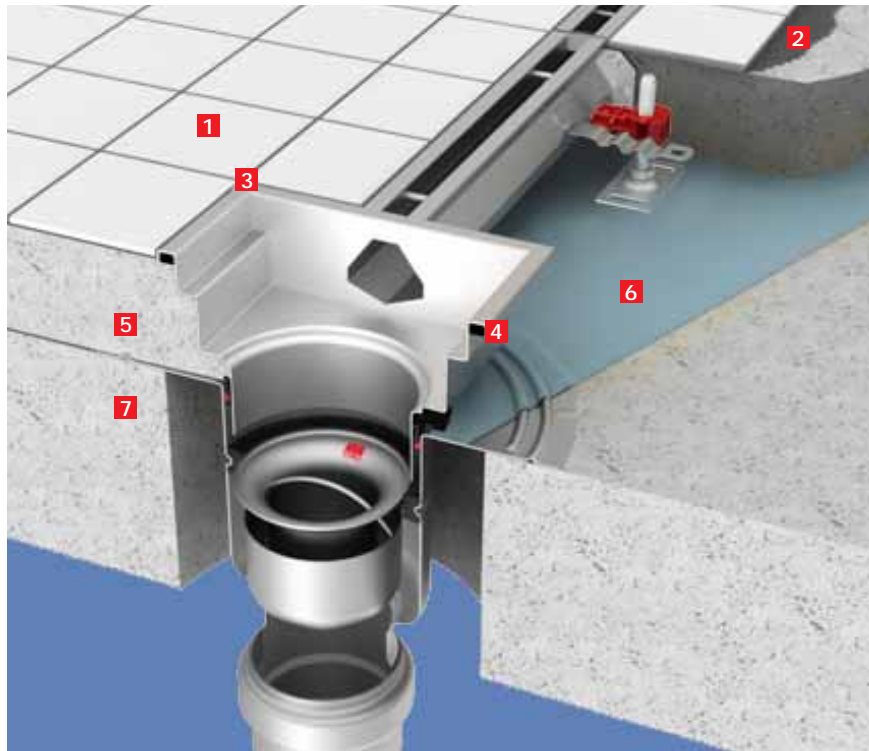
- 1 Epoxy/resin floor
- 2 Floor screed
- 3 Rubber infill
- 4 Solid concrete floor slab
- 5 Compacted soil



ACO modular slot channel

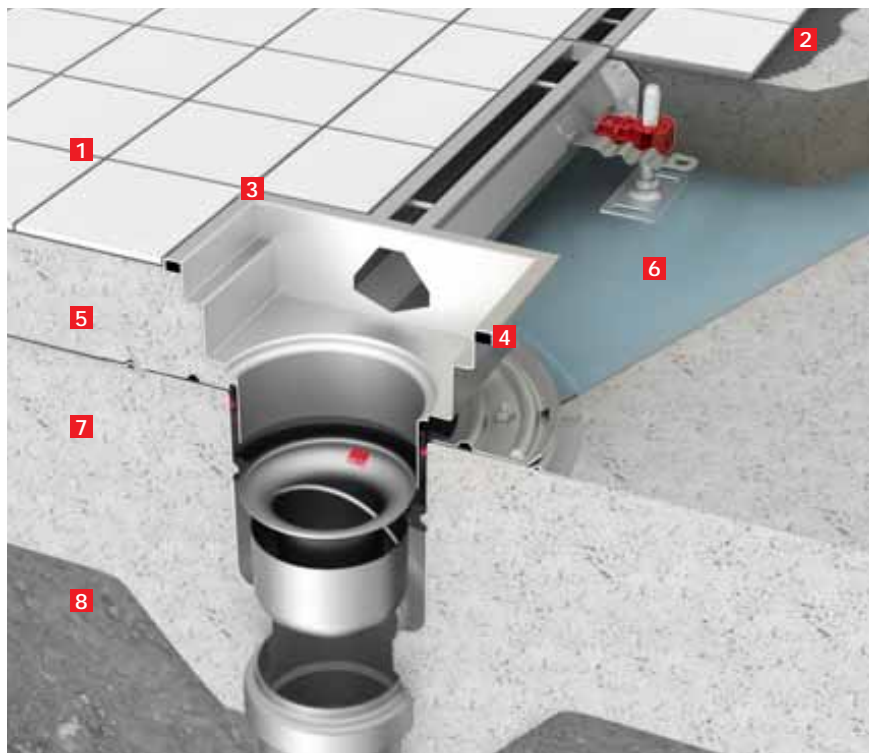
ACO modular slot channel standard type – ACO hygienic gully with adhesive bonding flange (Tiled floor)

- 1 Ceramic tiles
- 2 Tile cement
- 3 Mastic sealant
- 4 Rubber infill
- 5 Floor screed
- 6 Water proof membrane
- 7 Solid concrete floor slab



ACO modular slot channel standard type – ACO hygienic gully with mechanical clamping flange (Tiled floor)

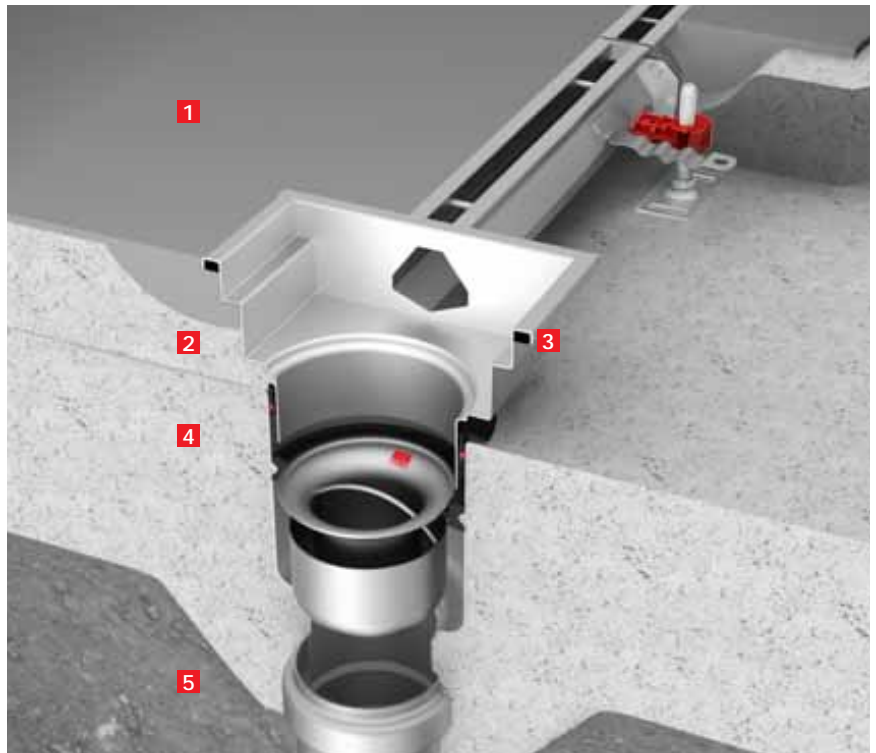
- 1 Ceramic tiles
- 2 Tile cement
- 3 Mastic sealant
- 4 Rubber infill
- 5 Floor screed
- 6 Water proof membrane
- 7 Solid concrete floor slab
- 8 Compacted soil



## Typical installation examples ACO modular slot channel

### ACO modular slot channel standard type – ACO hygienic gully with location flange (Resin floor)

- 1 Epoxy/resin floor
- 2 Floor screed
- 3 Rubber infill
- 4 Solid concrete floor slab
- 5 Compacted soil





## ACO pipe

### Generally

The following standards will help designers to select the correct size of pipe system for a particular application: EN 12056: gravity drainage systems inside buildings. EN 752: drain and sewer systems outside buildings. Installation should be in accordance with the manufacturer's recommendations as well as with EN 12056-2, EN 12056-3 and EN 752.

#### Pipe cutting

If it is necessary to adapt or shorten pipe lengths where tools are used, the cut must be square, clean and chamfered.

Suitable cutters are available from ACO.

These tools are designed to form the edge bevel on the male spigoted end of the pipe. Carbon steel cutting wheels are not suitable.

#### Pipe jointing

The assembly of pipe joints is quick and straightforward requiring only a light application of lubricant available from ACO to the chamfered pipe end. Ensure that the matching ends of the pipes and fittings are clean and free from contamination. Push-fit the pipe end into the socket, but do not push fully into the socket recess so as to allow for thermal expansion within the system.



### Vertical pipe stacks

The load applied with a fluid in the pipe is vertically down. Position the highest bracket adjacent to the top inlet of the pipe, then mount brackets at 3 meter spacings. At the bottom of the vertical pipe, use a bracket within 200 mm of the bottom. Fit brackets at each change of pipework is direction or junction points. Pipework should be at least 30 mm from the wall to facilitate maintenance and painting.

#### Pipe weights

Engineers should be aware of minimum and maximum weights when designing vertical stack and horizontal pipe run systems. Generally, when the pipe is completely full of water, then the vertical deflection of the pipe between brackets should not exceed 1.5 mm. The discretion of the installer should be applied in each instance to ensure that the pipe is adequately supported.



### Horizontal pipe runs

As a guide, use the table below for bracket spacing on horizontal pipes.

#### Pipe diameter bracket spacing

Pipe ø [mm]	Length [m]
40	2.0
50	2.0
75	2.3
110	2.5
125	3.0
200	3.0
250	3.0

Recommended distances; for installation follow your local standards.



Horizontal pipework should be supported by pipe brackets in 3 meter intervals maximum. One bracket should be within 300 mm of the pipe joint and the other approximately at the midpoint of the pipe length, but not more than 3 metres from the next bracket (depending on the pipe diameter- refer to the upper table).

Additional brackets should be used at changes of direction and at junction points

immediately downstream of the fitting. Horizontal pipe runs may be installed at a fall of 1 in 50 and feeder connections should be achieved using 45° branches. Where long pipe runs occur i.e. greater than 15 meters, a fixing arm should be attached to the bracket to prevent pendulum movement within the system.

## Below ground installation

### Back-filling

Back-filling around the pipe can only start when the position of the pipe has been checked and approved.

### Compression

Care should be taken to avoid distortion of both the pipe run and the pipe itself during back-filling and compaction. Avoid tipping backfill material directly onto the pipe system. If mechanical compaction is used, the weight and resultant compressive force must be taken into account to avoid distortion. Back-fill materials should be compacted to a minimum of 93%.

### Filling in the excavation

Soil from the excavation can be used for filling, but larger stones and blocks should not be used. Compression of the filling material outside reinforced areas is not necessary if the settling will not cause problems or damage.

### Local standards

It is recommended to install pipes according to local standards.



**ACO protective covers**

**Description**

**Features and benefits:**

- Protection from building material debris
- Eliminates cleaning of drainage after installation
- Prevents injuries on worksite
- Certified according to EN 12811-1 for scaffolding load class 3
- Eco friendly and easily disposable

**ACO protective covers made from OSB are available for:**

- All ACO hygienic gullies and ACO hygienic box channels, standard, semi-standard and customized
- ACO vinyl box channels, standard, semi-standard and customized
- Gully tops on ACO slot channels, semi-standard and customized

**Order information:**

- For standard articles, add **\_C** at the end of product article number (example: 111111\_C)
- For semi-standard and customized articles, specify this option in the order process



Load area	Maximum load capacity	Maximum pressure
200 x 200 mm	max. 100 kg	max. 2.5 N/cm <sup>2</sup>
500 x 500 mm	max. 150 kg	max. 0.6 N/cm <sup>2</sup>
1000 x 1000 mm	max. 200 kg	max. 0.2 N/cm <sup>2</sup>

Classification according to EN 12811-1 for scaffolding load class 3



## Material Resistance of Material

### Resistance of Material

1 = Very good service to operating limit of material 2 = Moderate service 3 = Limited or variable service 4 = Unsatisfactory	AISI 316 L Stainless	AISI 304 Stainless	EPDM	NBR	FPM	TPEV
Acetone	1	1	1	4	4	1
Acetic acid (diluted) 30%	1	1	1	2	2	1
Acetic acid 100%	1	1	1	3	3	1
Acetic acid anhydride	1	1	2	3	4	2
Aluminium chloride	4	4	1	1	1	1
Aluminium sulfate	1	4	1	1	1	1
Ammonium carbonate	1	1	1	4	2	1
Ammonium chloride	2	3	1	1	1	1
Ammonium hydroxide	1	1	1	4	2	1
Amyl chloride	1	1	4	4	1	4
Anilin	1	1	2	4	3	1
Anilin hydrochloride	4	4	2	2	2	2
Barium chloride	2	2	1	1	1	1
Barium hydroxide	1	1	1	1	1	1
Benzaldehyde	1	1	1	4	4	1
Benzene	1	1	4	4	1	4
Benzoic acid	1	1	4	4	1	1
Borax	1	1	1	2	1	1
Boric acid	1	1	1	1	1	1
Bromine	4	4	4	4	1	4
Bromine chloride acid	4	4	1	2	1	2
Bromine hydrogen acid	4	4	1	4	1	2
Bromoethylene	1	1	-	-	-	-
Butanol	1	1	4	1	1	3
Butyl acetat	1	1	2	2	4	3
Butyric acid	1	1	2	4	4	3
Calcium bisulfate el sulfite	1	1	4	1	1	1
Calcium chloride	2	2	1	1	1	1
Calcium hydroxide	1	1	1	1	1	1
Calcium hypoklorite	2	3	1	3	1	3
Carbon disulfide	1	1	4	4	1	3
Carbon tetrachloride	1	1	4	3	1	4
Chloracetic acid (mono)	4	4	2	4	4	2
Chloride	4	4	-	-	-	-
Chloril acid	4	4	1	4	-	3
Chlorine (dry)	1	1	1	2	1	4
Chlorobenzene	1	1	4	4	1	4
Chloroform	2	2	4	4	1	4
Chlorosulfonic acid	2	3	4	4	3	4
Copper chloride	2	2	1	1	1	1
Copper nitrate	1	1	1	1	1	1
Copper sulfate	1	1	1	1	1	1
Ether	1	1	3	4	3	3
Ethyl chloride	1	1	1	1	1	3
Fatty acid	1	1	4	2	1	1
Fluorine (dry)	1	1	-	-	-	-
Fluorine hydrogen acid	4	4	2	4	1	4
Formaldehyde	1	1	1	2	1	1
Formic acid	1	1	1	2	3	2
Furfural	1	1	2	4	4	4
Gallic acid	1	1	2	2	1	2
Hydrochloric acid	4	4	1	4	1	1
Hydrogen peroxide	1	1	3	4	2	3
Iodine (wet)	4	4	2	2	1	2
Lead acetate	1	1	1	2	4	1

#### Note:

Concentration levels and length of exposure have a direct influence on the resistance of stainless steel to certain chemicals. Each application should therefore be carefully reviewed to determine the suitability of stainless steel.

#### Assumptions:

Data presented are used as a guide only, for detailed information please contact our Sales/Technical department.

1 = Very good service to operating limit of material 2 = Moderate service 3 = Limited or variable service 4 = Unsatisfactory	AISI 316 L Stainless	AISI 304 Stainless	EPDM	NBR	FPM	TPEV
Magnesium chloride	2	2	1	1	1	1
Magnesium sulfate	1	1	1	1	1	1
Mercury	1	1	1	1	1	1
Methanol	1	1	1	1	3	1
Methyl chloride	1	1	3	4	1	3
Methylene chloride	2	2	4	4	2	4
Natphalene	1	1	4	4	1	1
Nickel chloride	2	2	1	1	1	1
Nickel sulfate	1	1	1	1	1	1
Nitric acid	3	3	3	4	1	4
Oxalic acid	3	3	1	2	1	2
Perchloric acid	4	4	2	4	1	1
Phosphoric acid	1	1	2	4	1	1
Picric acid	1	1	2	2	1	2
Potassium bromide	1	1	1	1	1	1
Potassium carbonate	1	1	1	2	1	1
Potassium chlorate	1	1	1	1	1	1
Potassium cyanide	1	1	1	1	1	1
Potassium hydroxide	1	1	1	2	2	1
Potassium nitrate	1	1	1	1	1	1
Potassium permanganate	1	1	1	3	1	1
Potassium sulfate	1	1	1	1	1	1
Potassium sulfide	1	1	1	1	1	1
Potassiumchloride	2	2	1	1	1	1
Propylene dichloride	1	1	4	4	1	4
Sal ammoniac	2	3	1	1	1	1
Silver nitrate	1	1	1	2	1	1
Soda (ash)	1	1	1	1	1	1
Sodium acetate	1	1	1	2	4	1
Sodium bicarbonate	1	1	1	1	1	1
Sodium bisulfate	1	3	1	2	1	1
Sodium bisulfite	1	1	1	1	1	1
Sodium bromide	2	2	1	3	1	2
Sodium chlorate	1	1	1	2	1	1
Sodium chloride	4	4	1	1	1	1
Sodium cyanide	1	1	1	1	1	1
Sodium fluoride	1	1	1	1	1	1
Sodium hydroxide	1	1	1	2	2	1
Sodium hypochlorite	4	4	2	2	1	1
Sodium nitrate	1	1	1	2	2	1
Sodium sulfate	1	1	1	1	1	1
Sodium sulfide	1	1	1	1	1	1
Sodium sulfite	1	1	1	1	1	1
Stannous chloride	2	3	2	1	1	2
Sulfur	1	1	1	4	1	1
Sulfur chloride	1	1	4	3	1	3
Sulfur dioxide	1	2	1	4	1	1
Sulfuric acid	4	4	2	4	1	3
Sulfurous acid	1	3	2	2	1	2
Tionyl chloride	1	1	4	4	1	4
Toluene (toluol)	1	1	4	4	1	4
Trichloroethylene	1	1	4	3	1	4
Turpentine	1	1	4	1	1	4
Xylene (xylol)	1	1	4	4	2	4
Zinc sulfate	1	1	1	1	1	1

**Note:**

Concentration levels and length of exposure have a direct influence on the resistance of stainless steel to certain chemicals. Each application should therefore be carefully reviewed to determine the suitability of stainless steel.

**Assumptions:**

Data presented are used as a guide only, for detailed information please contact our Sales/Technical department.

**Sealing material information**

**Sealing material information**

**EPDM**

**(ethylene propylene diene monomer)**

Black sealing rubber ring, which is suitable for most applications where there are no oil or petrol residues in the waste water.

**NBR**

**(acryl nitrile-butadiene rubber)**

Black sealing rubber ring which is suitable for waste water applications where there are petrol or oil residues. NBR is not resistant to solvents and high temperatures.

**FPM**

**(fluoroelastomer) – Viton®**

Green sealing rubber ring which is suitable for special applications where oil, solvents and strong acids are present in waste water; and for applications with higher temperatures. Viton® seal has limited resistance to chemicals like acetone, methyl alcohol.

**TPEV**

**(thermoplastic elastomer vulkanized)**

Sealing rubber with excellent heat resistance, physical and mechanical properties. Suitable for pharmaceutical, medical, food and beverage applications. TPEV has limited resistance in oil or petrol residues in waste water.

Rubber type	Sealing materials			
	EPDM	NBR	FPM (Viton®)	TPEV
Colour	black	black	green	red
Temperature range	-50 / +130 / +150 °C	-30 / +80 / +100 °C	-20 / +200 / +300 °C	-35 / +120 / +140 °C
Resistance				
Water	excellent	good	good	excellent
Chemicals				
Acids	good	fair	excellent	good
Bases	good	fair	excellent	excellent
Benzene/Petrol	unsatisfied	excellent	excellent	limited
Oils				
ASTM Oil No. 1	unsatisfied	excellent	excellent	limited
ASTM Oil No. 3	unsatisfied	excellent	excellent	limited
Ozone & weather stresses	good	limited	good	good

To be sure of suitability for special applications please consult exact seal material features within ACO installation guide.





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**ACO. creating the future of drainage**

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