

ACO ShowerDrain
Technical informationen about ACO bath drainage







Bath drainage at its best

In 2050 over 2 billion people on this earth will be aged 60 or over. This is already changing the requirements which apply to residential construction.

The concept of lack of barriers to access is all-pervasive and increasingly affects our day-to-day decisions. As a result, many constructors and architects want to have generous bathrooms which are all of a piece, including floor-level solutions with a design which will last for generations and without any steps or barriers.

The concept of universal design is gaining rapidly in social importance and has come to mean "usability for all". This includes comfortable bathrooms, which are fully functional and at the same time very aesthetically appealing.

Meeting these requirements and in addition ensuring safe and practical methods of installation which will last for decades; that is what the ACO ShowerDrain prod-

uct range claims to give you.





ACO Bath drainage

Areas of application

Floor gullies drain off the grey water from floor areas into the drainage system without risk to humans and without damage to buildings. They should be provided wherever grey water can collect on floor areas and needs to be safely drained off.

Line and point drainage

ACO ShowerDrain solutions provide the inspiration for creative bathroom design. But above all, they should be able to adapt to everyone's wishes. This is why our product range includes:

- oversize products
- modern stainless steel and glass covers
- optically integrated, tileable covers In larger bathrooms or similar areas you can combine both line and point drainage. As a quality brand, ACO will ensure that the product range you choose is consistent and remains available in future.

Standard	Subject area
DIN EN 1253	Product standard and requirements
DIN EN 12056-1	General application and implementation requirements
DIN EN 12056-2	Sanitary pipework, layout and calculation
DIN EN 12056-5	Installation and testing, instructions for operation, maintenance and user
DIN 1986-100	Drainage systems for buildings and private ground (supplementary provisions to DIN EN 752 and DIN EN 12056)
DIN 1986-3	Specifications for service and maintenance
DIN 4102	Fire Behaviour of Building Materials and Building Components
DIN 4109	Sound insulation requirements and testing
VDI 4100	Improved sound insulation for multi-storey dwellings

Differences between line and point drainage

Line drainage	Point drainage
Mono-directional gradient (one angle)	Multi-directional gradient (four angles)
Can be used with large floor tiles	Recommended with smaller tiles
Individual shower channels possible	Grating sizes 126 diameter, 140 x 140, 95 x 95
Grating fixed by clips	Grating fixed with an optional lock
Flow volume 0.6 l/s (36 l/min)	Flow volume from 0.8 l/s (48 l/min) under DIN EN 1253
Drain sockets DN 40/50	Drain sockets DN 40/50/70/100
Vertical flange option	Vertical flange not an option
Minimum installation height to flange for E-line: 64 mm (water trap 25 mm) 90 mm (water trap 50 mm) C-line: 80 mm (water trap 50 mm)	Minimum installation height 89 mm (Easyflow Flatline with top section 100 x 100)
Optional lighting blue, red, green, white, rainbow	Optional lighting blue, red, green, warm white





Materials used

High-quality stainless steel has been adopted in many different areas of application, wherever stringent requirements apply in relation to hygiene, operational safety and material stability. It is being used increasingly, not just in the food-processing industry and restaurants, but also in the sanitary sphere. ACO uses the high-alloy stainless steel 1.4301 (X5Cr-Ni18-10).

Due its high level of stability, ease of shaping, resistance to corrosion and its consistently attractive-looking surface, stainless steel is much appreciated as a particularly valuable and hygienic material. It also enables the production of custom dimensions to the same quality as mass production. To make cleaning easier, and to prevent dirt adhering in the first place, the surfaces of all ACO products are produced without any seams or cracks. Flat welded joints avoid the presence of any corners which could collect dirt.

All ACO shower channels are made from a single material, so that all the individual components can be welded to each other. This guarantees that the shower channel is completely watertight.

Electro-polished surface

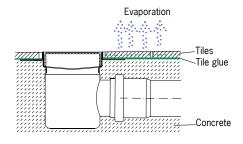
To avoid dirt and to provide a highly appealing appearance to their surface, the designer gratings for the E-line series are electro-polished. In this process, any surface irregularities are removed by a multi-step etching process to the point where a highly reflective surface is produced. No organic or inorganic protective layers are then needed. Damage to the surface by detaching or infiltration is now impossible. At the same time it becomes difficult for dirt, bacteria or germs to adhere to it. This results in a low cost of maintenance thanks to rapid and simple cleaning, and an extremely long useful lifetime. As well as improving hygiene, which is an advantage in shower areas in hospitals, it offers a superb appearance for the luxury hotel sector and for house-owners seeking high quality.

Water-proofing for shower channels

1. Channels without flange

Seepage water may penetrate through the tile joints. Normally, concrete slab is water-tight and the penetrated water will evaporate. With non-water-resistant slabs such as wood, this method is not applicable. Channels with flange and water-proofing shall be used in this case.

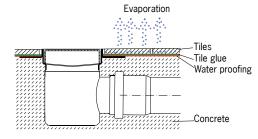
Available for ShowerDrain C



2. Channels with flange without seepage drainage

Seepage water may penetrate through the tile joints and is retained between the thin-bed sealing and the tiles. The penetrated water will evaporate.

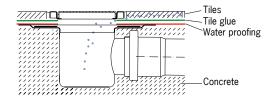
Available for ShowerDrain E and ShowerDrain C



3. Channels with flange and seepage drainage

Seepage water is drained via the thin-bed sealing into the channel body.

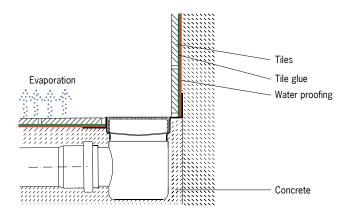
Available for ShowerDrain F



4. Channels with wall flange (vertical flanges)

Shower channels with wall flanges provide an additional protection against leaking problems in the very sensitive wall and floor joints.

Available for ShowerDrain E and ShowerDrain C





Technical bases for line drainage

Build-ups and gradients

DIN EN 1253-1 defines the minimum flow rates for floor gullies. For a DN 50 floor gully this is defined as 0.8 l/s (48 l/min). This value needs to be achieved by a build-up of 20 mm above the grating. This build-up is generally easy to achieve, as the gradient is created from all four sides into the floor gully. For shower channels in practice a build-up of 20 mm is rarely possible, which is why drainage flow rates here are measured without any build-up.

If shower channels are set in a shower area without a glass separator then drainage flow rates without a build-up should be used, to avoid the water overflowing. If the shower channel is mounted along the wall, then depending on the depth of the shower area a build-up can be expected. If for example a shower area one metre deep and with a gradient of 20 mm is installed with the shower channel next to the wall, with a build-up of 5 mm the water is 25 mm above the area.

Flow performance tested to DIN EN 1253

When selecting a shower channel the flow rates of the shower head are used as the starting point. This value for a standard shower head is often 0.15 l/s (9 l/min). The ACO ShowerDrain channel already has minimum flow value of 0.4 l/s (26 l/min) without build-up and so can be used even to drain wastewater from high performance shower heads. And for shower heads with higher flows the ACO ShowerDrain product range can offer individually tailored solutions. See Page 22.

	1000 mm
	250 mm
Į	5 mm

Water build-up when installing the shower channel along the wall

Number of	Build-up level (I/s)					
gullies	0 mm	20 mm				
1 gully	0.4 (24 l/min)	0.6 (36 l/min)				
2 gullies	0.7 (42 l/min)	1.0 (60 l/min)				
3 gullies	1.0 (60 l/min)	1.4 (84 l/min)				

Several drains for increased outflow performance

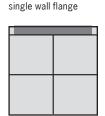
Tile patterns with line drainage

Suggested installations on an area 900 x 900 mm

These suggested installations are intended as guidance. Actual tile dimensions, joint widths and the choice of a channel can have an impact on the appearance.

When installing a shower channel a onesided gradient is created towards the channel, so that the grey water flows directly into the drainage channel. With large floor tiles the slope is easy to apply. Inserting along the wall is the most common solution.

Building in the centre of the room highlights the ACO ShowerDrain better.



tiles 450 x 450 mm

800 mm length

tiles 300 x 300 mm 800 mm length single wall flange



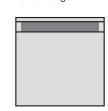








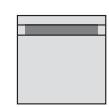
800 mm length no wall flange



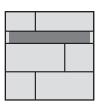
tiles 450 x 900 mm 800 mm length double wall flange



700 mm length no wall flange



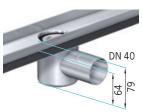
tiles 300 x 600 mm 800 mm length no wall flange



ACO ShowerDrain E-line – product features

Low installation height

Thanks to its low installation height the ACO ShowerDrain E-line is suitable for both new builds and also renovations, where typically only minimal build-up heights are available. For the channel version with a 50 mm water trap the total installation height is only 105 mm. For the channel version with 25 mm water trap the installation height is 79 mm and the outlet socket used is DN 40. A DN 50 adaptor is included in the package.



Deeper gullies when needed

Wall flange

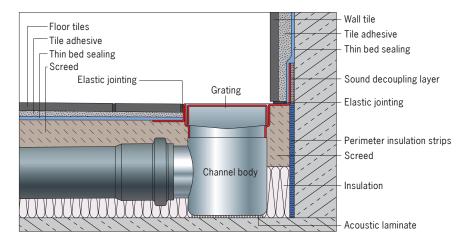
Depending on the installation situation various different wall flanges are required. You can see all the different variants on page 11. The ACO ShowerDrain E-line plus the right flanges provides a totally secure installation of the shower channel along the wall and in corners. The flanges are also available in any special lengths. Thanks to the flange which is factory shaped to fit we can guarantee that no leaks can spring up in any of the corners. The seal is made on flat surface areas. In addition this form of installation enables fitting the shower channel flush to the wall, without leaving a gap. This means that there is no need to cut tiles to size for the gap between the wall and the shower channel, which is particularly unattractive for large format tiles.

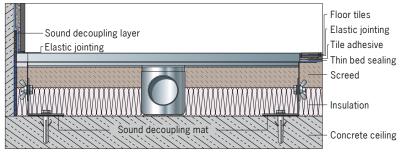


The right flange for every bathroom

Sound protection

The sound protection requirements set out in DIN 4109 relate to the noise situation after work has been completed. Sound protection is particularly important in multi-occupancy buildings as most people regard their home as an oasis of quiet and a place of privacy. The ACO ShowerDrain E-line meets the minimum requirements and the higher-level sound protection requirements in DIN 4109 (version A1:2001). And in addition we meet the requirements for sound protection level SST II under VDI 4100 (2007 version). The testing was carried out by the Fraunhofer Institute for Building Physics, which is accredited by the DAP (German Accreditation System for Testing Ltd) under EN ISO/ICE 17025. This means that we are below, and in some cases well below, the threshold levels for sound protection levels (SSTs) I and II for residences in single- and multiple-unit dwellings as well as for semi-detached and terrace houses in VDI 4100 (2007 version, Tables 2-4) and also of the more stringent sound protection requirements for technical installations in residential buildings under DIN 4109 (Version A1:2001).





Suggestions for inbuilt sound decoupling materials



ACO ShowerDrain E-line – inbuilt benefits

Delivered ready to install

The one-piece installation method for the channel avoids the costly and time-consuming pre-assembly of individual components on site. You can make an immediate start on installing the channel.



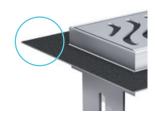
Simple to adjust the height

With just two adjusting screws the channel can be quickly and easily adapted to fit the required floor level.



Thin bed flange made from stainless steel

Because the shower area is regularly covered in shower water a reliable seal of the floor structure is an absolute must. Otherwise there could be gradual damage to the underlying structure.



Increased flow rate

When needed, additional gully bodies can

be added on-site to provide greater flow

rate. This approach is used in shower ar-

eas which handle large quantities of wa-

Each gully body is provided with a remov-

provided for connection to a DN 50 drain-

pipe. The positions of the drainpipes can be defined to suit the individual installa-

able odour trap. The outlet sockets are

The thin bed sealing combined with a surrounding flange for channels or floor gullies creates a reliable and durable seal. All ACO Shower-Drain E-line series products are therefore manufactured with a surrounding thin bed flange.

The surface of the thin bed flange has been created and tested specifically to ensure a reliable insertion of the channel into the floor structure using the thin bed process.

Personalised solutions

Sometimes there is no suitable product in the standard range for a particular installation, so ACO offers a wide variety of personalised solutions. Specific lengths up to 2,400 mm allow adjustment of the shower channel to suit any application this is available for all versions of the ACO ShowerDrain E-line product range. It is also possible to modify channels in various ways.



Increased flow rate by using multiple gully bodies

tion

Natural stone floors

To allow perfect laying of natural stone floors (e.g. marble) it is possible to have the shower channel manufactured with a deeper surrounding tile frame.

The tile frame can be produced on request for floor coverings with thicknesses from 15 to 30 mm.



Frame height adjusted to match the floor covering

ACO ShowerDrain E-line - product benefits

Welded-on gully bodies

The individual components of the ACO ShowerDrain E-line are solidly welded together. This means that there can be no leaks – either from extreme loads or by wear and tear over time.

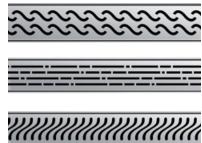
Replaceable grating designs

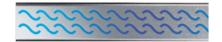
The different grating designs available allow refreshing the appearance of the room after a while by simply replacing the electro-plated gratings.

Illumination for shower channels

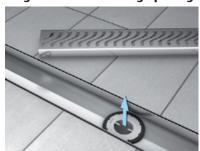
The Lightline lighting set includes LED modules and rechargeable batteries which can be added at any time. For shower channels with a stainless steel designer grating there are four different colours available (Page 24).







Large diameter cleaning opening

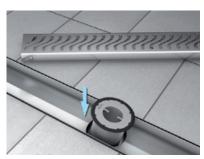


To clean the ACO ShowerDrain gully the designer grating is first removed using a lifting aid.

Then the two-part odour trap can be lifted out.



Now you have direct access to the pipework. The functional drain can be cleaned quickly and simply.



After cleaning, the odour trap and the designer grating are replaced.

Hair strainer

To prevent pipes being obstructed by hair, the plastic hair strainer can be inserted. It fits all odour traps used with ACO E-line ShowerDrains.

Art. no. 9010.72.00



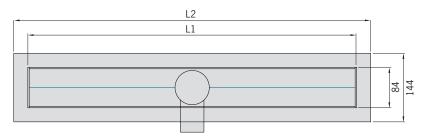


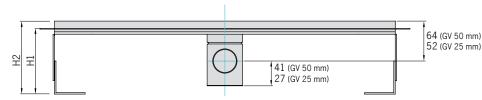
The straight solution

Product features installation height 79 mm

- drainage channel for the shower area
- installation height 79–134 mm (water trap 25 mm)
- minimum installation height to surface flange 64 mm
- all-round stainless-steel thin bed flange
- welded full body made from stainless steel, material grade 304
- tested for load capacity K3 and flow rate as per DIN EN 1253
- flow rate standard version: 0.4 l/s (24 l/min) without build-up, 0.6 l/s (36 l/min) with 20 mm build-up as per DIN EN 1253
- channel width 84 mm
- channel body with lateral gradient
- removable 2-part foul air trap
- outflow suitable for all push-fit pipe socket connections
- drain sockets DN 40/50, socket inclination 1.5°
- sound insulation tested to DIN EN 4109 (sound protection kit for more stringent requirements included with product)
- electro-polished surface







H2 = 105-160 mm with foul air trap (GV) of 50 mm

H2 = 79-134 mm with foul air trap (GV) of 25 mm

 $\mbox{H1} = 90\mbox{-}145$ mm with foul air trap (GV) of 50 mm

H1 = 64-119 mm with foul air trap (GV) of 25 mm

Product features installation height 105 mm

- drainage channel for the shower area
- installation height 105–160 mm (water trap 50 mm)
- minimum installation height to surface flange 90 mm
- all-round stainless-steel thin bed flange
- welded full body made from stainless steel, material grade 304
- tested for load capacity K3 and flow rate as per DIN EN 1253
- flow rate standard version: 0.4 l/s (24 l/min) without build-up, 0.6 l/s (36 l/min) with 20 mm build-up as per DIN EN 1253
- channel width 84 mm
- channel body with lateral gradient
- removable 2-part foul air trap
- outflow suitable for all push-fit pipe socket connections
- drain sockets DN 50, socket inclination 1.5°
- sound insulation tested to DIN EN 4109 (sound protection kit for more stringent requirements included with product)
- electro-polished surface

Installation sizes

L1 (mm)	700	800	900	1000	1200
L2 (mm)	760	860	960	1060	1260

- You will find order data for channel bodies on Page 18
- You will find suitable **designer** gratings on Page 20

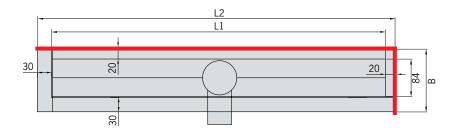


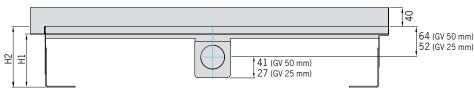
Straight line solution with wall flange

Product features installation height 79 mm

- drainage channel for the shower area
- installation height 79–134 mm (water trap 25 mm)
- minimum installation height to surface flange 64 mm
- stainless steel thin bed flange with 40 mm wall flange
- welded full body made from stainless steel, material grade 304
- tested for load capacity K3 and flow rate as per DIN EN 1253
- flow rate standard version: 0.4 l/s (24 l/min) without build-up, 0.6 l/s (36 l/min) with 20 mm build-up as per DIN EN 1253
- channel width 84 mm
- channel body with lateral gradient
- removable 2-part foul air trap
- outflow suitable for all push-fit pipe socket connections
- drain sockets DN 40/50, socket inclination 1.5°
- sound insulation tested to DIN EN 4109 (sound protection kit for more stringent requirements included with product)
- electro-polished surface







H2 = 105-160 mm with foul air trap of 50 mm

H2 = 79-134 mm with foul air trap of 25 mm

H1 = 90-145 mm with foul air trap of 50 mm

H1 = 64-119 mm with foul air trap of 25 mm

Product features installation height 105 mm

- drainage channel for the shower area
- installation height 105–160 mm (water trap 50 mm)
- minimum installation height to surface flange 90 mm
- stainless steel thin bed flange with 40 mm wall flange
- welded full body made from stainless steel, material grade 304
- tested for load capacity K3 and flow rate as per DIN EN 1253
- flow rate standard version: 0.4 l/s (24 l/min) without build-up, 0.6 l/s (36 l/min) with 20 mm build-up as per DIN EN 1253
- channel width 84 mm
- channel body with lateral gradient
- removable 2-part foul air trap
- outflow suitable for all push-fit pipe socket connections
- drain sockets DN 50, socket inclination 1.5°
- sound insulation tested to DIN EN 4109 (sound protection kit for more stringent requirements included with product)
- electro-polished surface

Installation sizes

L1 (mm)		700	800	900	1000	1200	B (mm)
	without wall flange	760	860	960	1060	1260	144
	right	749	849	949	1049	1249	144
	left	749	849	949	1049	1249	144
1.2 (2000)	left and right	738	838	938	1038	1238	144
L2 (mm)	rear	760	860	960	1060	1260	133
	rear and left	749	849	949	1049	1249	133
	rear and right	749	849	949	1049	1249	133
	rear, left and right	738	838	938	1038	1238	133

- You will find order data for channel bodies on Page 18
- You will find suitable **designer** gratings on Page 20



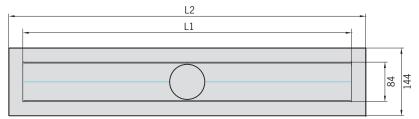


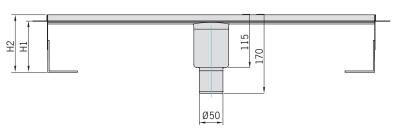
A straight solution with vertical drain body

Product features

- drainage channel for the shower area
- installation height 30–134 mm
- minimum installation height to surface flange 15 mm
- all-round stainless-steel thin bed flange
- welded full body made from stainless steel, material grade 304
- tested for load capacity K3 and flow rate as per DIN EN 1253
- flow rate standard version: 0.4 l/s (24 l/min) without build-up, 0.6 l/s (36 l/min) with 20 mm build-up as per DIN EN 1253
- channel width 84 mm
- channel body with lateral gradient
- removable 2-part foul air trap
- outflow suitable for all push-fit pipe socket connections
- drain sockets DN 50, socket inclination 90°
- sound insulation tested to DIN EN 4109 (sound protection kit for more stringent requirements included with product)
- electro-polished surface







H2 = 30-134 mm with foul air trap of 50 mm H1 = 15-119 mm with foul air trap of 50 mm

Installation sizes

L1 (mm)	700	800	900	1000	1200
L2 (mm)	760	860	960	1060	1260



- You will find order data for channel bodies on Page 18
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Suggested installation: ACO ShowerDrain with vertical drain



Fire prevention solution

When a building catches fire, this generally spreads through the building service ducts. This makes drainage systems a particularly critical point, because they can allow fire and smoke to spread to the next floor when a fire breaks out. Preventive fire protection is therefore required by national regulations in public buildings.

Using the ACO ShowerDrain shower channel with fire protection is a way for an aesthetically appealing shower channel to offer this further feature. If temperature changes are caused from below, then the water present in the foul odour trap prevents the shower channel from filling with fire and smoke. The removable fire protection bell foul air trap is classified as R 30 to R 120 for fire resistance.





Suggested installation: ACO ShowerDrain fire protection shower channel without Fit-in

With ACO Fit-in

For renovations or changes of use for existing buildings, when fire protection floor gullies are inserted in ceilings, core bores are frequently used. As it is necessary to close up the cavity again after inserting the floor gullies into the core bore, the use of ACO Fit-in is recommended here.

ACO Fit-in for ACO ShowerDrain shower channels with fire protection offers the optimum way to fill in core bores in all ceilings.

Without ACO Fit-in

If the installation does not make use of ACO Fit-in, then the core bore has to be filled in with concrete. It takes considerable time and effort for professional filling to carry this out correctly.

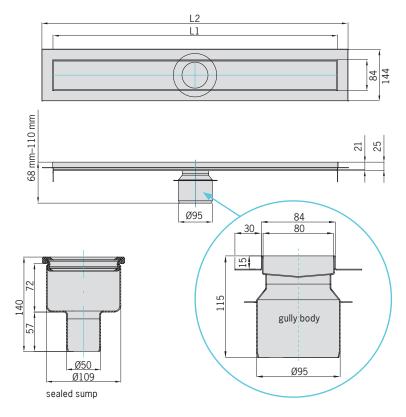


Fire protection solution without Fit-in



Product features

- drainage channel for the shower area
- installation height 68–110 mm
- minimum installation height to surface flange 90 mm
- all-round stainless-steel thin bed flange
- welded full body made from stainless steel, material grade 304
- fire resistance class R 30–R 120
- tested for load capacity K3 and flow rate as per DIN EN 1253
- flow rate standard version: 0.5 l/s (30 l/min) without build-up
- channel width 84 mm
- channel body with lateral gradient
- removable 2-part foul air trap
- outflow suitable for all push-fit pipe socket connections
- drain sockets DN 50, socket inclination 90°
- sound insulation tested to DIN EN 4109 (sound protection kit for more stringent requirements included with product)
- electro-polished surface
- Wall flanges on request



- You will find order data for **channel bodies** on Page 18
- You will find suitable **designer gratings** on Page 20



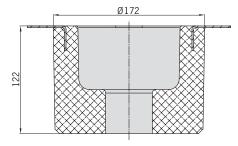
Fire protection solution with Fit-in



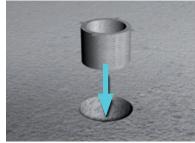
Product features

- drainage channel for the shower area
- installation height 68–110 mm
- minimum installation height to surface flange 90 mm
- all-round stainless-steel thin bed flange
- welded full body made from stainless steel, material grade 304
- fire resistance class R 30–R 120
- tested for load capacity K3 and flow rate as per DIN EN 1253
- flow rate standard version: 0.5 l/s (30 l/min) without build-up
- channel width 84 mm
- channel body with lateral gradient
- removable 2-part foul air trap
- outflow suitable for all push-fit pipe socket connections
- drain sockets DN 50, socket inclination 90°
- electro-polished surface
- sound insulation tested to DIN EN 4109 (sound protection kit for more stringent requirements included with product)
- including ACO ShowerDrain Fit-in

Wall flanges on request



Installation of fire protection channel with Fit-in



Fit-in is inserted in the core bore with a diameter of 182 mm



Afterwards the gully body for the fire protection channel is inserted without costly scaling or concreting work.

- You will find order data for **channel bodies** on Page 18
- You will find suitable **designer gratings** on Page 20





Order data - channel bodies

With/without wall flange	Length L1 (mm)		Installation height 79 mm Art. no.	Installation height 105 mm Art. no.	vertical drainage Art. no.	Fire protection Art. no.	Fire protection solution with Fit-in Art. no.
L2	700	760	0153.76.44	0153.73.36	9010.66.30	9010.56.58	9010.58.59
	800	860	0153.76.45	0153.73.38	9010.66.31	9010.56.59	9010.58.60
144	900	960	0153.76.46	0153.73.39	9010.66.32	9010.56.60	9010.58.61
	1000	1060	0153.76.47	0153.73.40	9010.66.33	9010.56.61	9010.58.62
Without wall flange	1200	1260	0153.76.48	0153.73.41	9010.66.34	9010.56.62	9010.58.63
L2 L1	700	750	9010.55.53	9010.55.18	9010.66.35	on request	on request
	800	850	9010.55.54	9010.55.19	9010.66.36	on request	on request
441	900	950	9010.55.55	9010.55.20	9010.66.37	on request	on request
	1000	1050	9010.55.56	9010.55.21	9010.66.38	on request	on request
right	1200	1250	9010.55.57	9010.55.22	9010.66.39	on request	on request
L2	700	750	9010.55.58	9010.55.23	9010.66.40	on request	on request
	800	850	9010.55.59	9010.55.24	9010.66.41	on request	on request
84 144	900	950	9010.55.60	9010.55.25	9010.66.42	on request	on request
	1000	1050	9010.55.61	9010.55.26	9010.66.43	on request	on request
left	1200	1250	9010.55.62	9010.55.27	9010.66.44	on request	on request
L2 L1	700	740	9010.55.63	9010.55.28	9010.66.45	on request	on request
	800	840	9010.55.64	9010.55.29	9010.66.46	on request	on request
144	900	940	9010.55.65	9010.55.30	9010.66.47	on request	on request
	1000	1040	9010.55.66	9010.55.31	9010.66.48	on request	on request
left and right	1200	1240	9010.55.67	9010.55.32	9010.66.49	on request	on request
L2 L1	700	760	9010.55.68	9010.55.33	9010.66.50	on request	on request
	800	860	9010.55.69	9010.55.34	9010.66.51	on request	on request
134 84	900	960	9010.55.70	9010.55.35	9010.66.52	on request	on request
1	1000	1060	9010.55.71	9010.55.36	9010.66.53	on request	on request
rear	1200	1260	9010.55.72	9010.55.37	9010.66.54	on request	on request
L2 L1	700	750	9010.55.73	9010.55.38	9010.66.60	on request	on request
	800	850	9010.55.74	9010.55.39	9010.66.61	on request	on request
134	900	950	9010.55.75	9010.55.40	9010.66.62	on request	on request
1	1000	1050	9010.55.76	9010.55.41	9010.66.63	on request	on request
rear and left	1200	1250	9010.55.77	9010.55.42	9010.66.64	on request	on request
L2 L1	700	750	9010.55.78	9010.55.43	9010.66.55	on request	on request
	800	850	9010.55.79	9010.55.44	9010.66.56	on request	on request
84 L 134 L 1	900	950	9010.55.80	9010.55.45	9010.66.57	on request	on request
	1000	1050	9010.55.81	9010.55.46	9010.66.58	on request	on request
rear and right	1200	1250	9010.55.82	9010.55.47	9010.66.59	on request	on request
L2 L1	700	740	9010.55.83	9010.55.48	9010.66.65	on request	on request
-	800	840	9010.55.84	9010.55.49	9010.66.66	on request	on request
134	900	940	9010.55.85	9010.55.50	9010.66.67	on request	on request
	1000	1040	9010.55.86	9010.55.51	9010.66.68	on request	on request
rear, left and right	1200	1240	9010.55.87	9010.55.52	9010.66.69	on request	on request







Design gratings for the linear solution

Order data – stainless steel designer grating

Order data – Stainless Steel designer	-		
Design	Can be lighted using Lightline	Length (mm)	Art. no.
		700	0153.73.42
1009332901111111111111111111111111111111		800	0153.73.43
######################################	$\overline{}$	900	0153.73.44
		1000	0153.73.45
Wave		1200	0153.73.46
		700	0153.73.59
		800	0153.73.60
	$\overline{}$	900	0153.73.61
		1000	0153.73.62
Quadrato		1200	0153.73.63
		700	0153.73.69
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		800	0153.73.70
uuuuuuuu	\checkmark	900	0153.73.71
		1000	0153.73.72
Flag		1200	0153.73.73
		700	9010.55.93
		800	9010.55.94
		900	9010.55.95
		1000	9010.55.96
Chain		1200	9010.55.97
		700	9010.55.98
University Control of the Control of	≋	800	9010.55.99
		900	9010.56.00
		1000	9010.56.01
Hawaii		1200	9010.56.02
		700	9010.56.03
	,	800	9010.56.04
	■	900	9010.56.05
NA:		1000	9010.56.06
Mix		1200	9010.56.07
		700	9010.56.08
	,	800	9010.56.09
	\vee	900	9010.56.10
Divid		1000	9010.56.11
Pixel		1200	9010.56.12
		700	9010.59.22
		800	9010.59.23
	_	900	9010.59.24
Calid		1000	9010.59.25
Solid		1200	9010.59.26
		700	0153.81.87
		800	0153.81.88
	-	900	0153.81.89
Tile (internal height of grating 10 mm,		1000	0153.81.90
internal width 64 mm)		1200	0153.81.91

Order data – glass covering

Design	Can be lighted using Lightline	Length (mm)	Art. no.
		700	9010.56.67
		800	9010.56.68
	_	900	9010.56.69
		1000	9010.56.70
Glass, black		1200	9010.56.71
		700	9010.56.72
		800	9010.56.73
	_	900	9010.56.74
		1000	9010.56.75
Glass, white		1200	9010.56.76
		700	9010.56.77
	-	800	9010.56.78
		900	9010.56.79
		1000	9010.56.80
Glass, grey		1200	9010.56.81
		700	9010.56.82
	_	800	9010.56.83
		900	9010.56.84
21		1000	9010.56.85
Glass, brown		1200	9010.56.86
		700	9010.57.12
Me Dres - Divis		800	9010.57.13
100	_	900	9010.57.14
		1000	9010.57.15
Glass, black with floral sand-blasted pattern		1200	9010.57.16
		700	9010.57.17
100 11000 3000		800	9010.57.18
	-	900	9010.57.19
		1000	9010.57.20
Glass, white with black floral motif		1200	9010.57.21



Inlet cross-section and flow rate

Inlet cross-sec	tion and	flow rate						
		Inlet	with foul air trap 50 mm water trap vertical DN 50 sockets		25 mm wa	with foul air trap 25 mm water trap vertical DN 40 sockets		r trap ter trap N 50 sockets
Design	Length	diameter	Flow volumes without build-up	Flow volumes with 20 mm build-up based on DIN EN 1253	Flow volumes without build-up	Flow volumes with 20 mm build-up based on DIN EN 1253	Flow volumes without build-up	Flow volumes with 20 mm build-up based on DIN EN 1253
	(mm)	(cm ²)	(l/s)/(l/m)	(l/s)/(l/m)	(l/s)/(l/m)	(l/s)/(l/m)	(l/s)/(l/m)	(l/s)/(l/m)
without grating			0.45/27	0.6/36	0.45/27	0.6/36	0.45/27	0.6/36
11111111111	700	87,77						
	800	100,11						
	900	112,25	0.4/24	0.6/36	0.4/24	0.6/36	0.4/24	0.6/36
Wave	1000	124,55						
wave	1200	149,17						
	700	99,50						
	800	114,50						
	900	129,50	0.4/24	0.6/36	0.4/24	0.6/36	0.4/24	0.6/36
Quadrato	1000	144,50						
Quadrato	1200	174,50						
	700	132,78						
ווווווווו	800	154,88						
Mana	900	169,62	0.4/24	0.6/36	0.4/24	0.6/36	0.4/24	0.6/36
Flag	1000	191,71						
Tiag	1200	235,92						
	700	96,54	-					
	800	106,70	0.4.04	0.6.06	0.4.04	0.6.00	0.4/04	0.6.406
550	900	121,94	0.4/24	0.6/36	0.4/24	0.6/36	0,.4/24	0.6/36
Chain	1000	137,19	_					
Onam	1200	167,67						
	700	101,74						
CCCC	800	113,04	0.4.04	0.6.406	0.4.04	0.6.00	0.4.04	0.6.406
CCCC	900	130,00	0.4/24	0.6/36	0.4/24	0.6/36	0.4/24	0.6/36
Hawaii	1000	146,96						
Hawan	1200	175,22						
	700	116,55	_					
======	800	133,75	0.4/04	0.6./06	0.4.04	0.6.406	0.4.04	0.6.406
	900	149,98	0.4/24	0.6/36	0.4/24	0.6/36	0.4/24	0.6/36
Mix	1000	167,38	-					
	1200	202,77						
	700	110,59						
	800	125,63	0.4/04	0.6/26	0.4/04	0.0.00	0.4/04	0.000
•••••	900	143,25	0.4/24	0.6/36	0.4/24	0.6/36	0.4/24	0.6/36
Pixel	1000 1200	157,54	_					
		190,19						
	700	111,55	_					
	800	126,55	0.4/24	0.6/26	0.4/24	0.6/26	0.4/24	0.6726
	900 1000	141,55 156,55	0.4/24	0.6/36	0.4/24	0.6/36	0.4/24	0.6/36
Solid			-					
	1200	186,55						
	700	91,68	_					
	800 900	103,68 115,68	0.4/24	0.6/36	0.4/24	0,.6/36	0.4/24	0.6/36
	1000		0.4/24	0.0/30	0.4/24	0,.0/30	0.4/24	0.0/30
Tile	1000	127,68	-					
	1200	151,68 111,55						
7 - 1	700 800	111,33	-					
	900	126,55	0.4/24	0.6/36	0.4/24	0.6/36	0.4/24	0.6/36
	1000	141,55 156,55	0.4/24	0.0/30	0.4/24	0.0/30	0,.4/24	0.0/30
Glass	1200	186,55						
	1200	100,00						

Flow rates are identical with and without Lightline





Product features

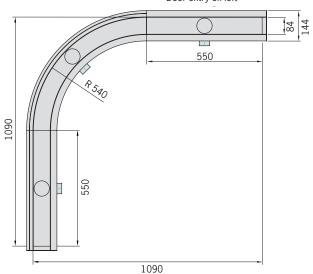
- drainage channel DN 50 for shower area as a curved solution
- installation height 105–160 mm
- minimum installation height to surface flange 64 mm
- made from stainless steel, material grade 304
- tested for load capacity K3 and flow rate as per DIN EN 1253
- flow rate standard version: 0.6 l/s (36 l/min) without build-up
- channel width 84 mm
- external radius 540 mm
- leg length 550 mm
- incl. designer grating
- 3 DN 50 gullies suitable for all push-fit pipe socket connections
- removable 2-part foul air trap
- socket inclination 1.5°
- electro-polished surface
- all-round moulded-on thin bed flange with wall flange on both front edges
- integrated groove for shower separation

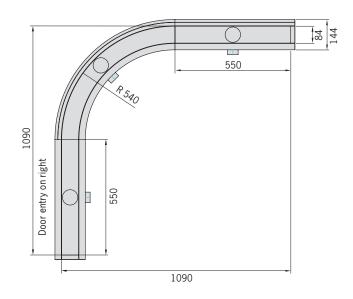


The illustrations show the entry on the left and the entry on the right with the appropriate groove for the shower partition

One of the two legs can be manufactured with a length other than the standard dimension of 550 mm

Door entry on left









red<mark>dot</mark> design award winner 2009





The round version of the ACO ShowerDrain received the iF product and the red dot design awards in 2009, and in 2010 was awarded two universal design awards



Glass shower partition

Self-supporting shower partitions made of transparent glass with polished metal fittings can be obtained from Glamü who is an ACO partner. The Glamü compound safety glass is resistant to knocks and blows and has polished edges. Individually designed glass (various types of glass, shapes and patterns are possible) can be inserted into the groove in the ACO ShowerDrain and so guarantee stability and an attractive look.

Order data – channel bodies and stainless steel designer grating (leg length $550\ \text{mm}$)

Design	Can be lighted using Lightline	Entry on left Art. no.	Entry on right Art. no.
Quadrato	V	9010.55.04	9010.55.14
WWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW	\	9010.55.06	9010.55.16
Hawaii	√	9010.56.15	9010.59.15
Pixel	√	9010.56.17	9010.59.17
Tile (internal height of grating 10 mm, internal width 64 mm)	-	9010.55.07	9010.55.17

■ The **hair strainer** is Item no. 9010.72.00

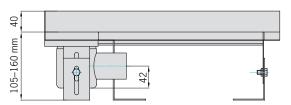


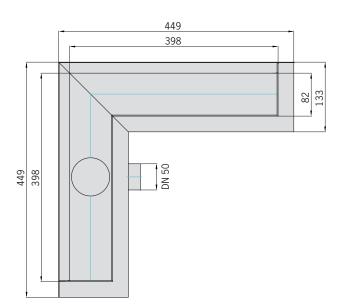
Solution with corners



Product features

- drainage channel DN 50 for shower area as a square solution
- installation height 105–160 mm
- minimum installation height to surface flange 64 mm
- made from stainless steel, material grade 304
- tested for load capacity K3 and flow rate as per DIN EN 1253
- flow rate standard version: 0.4 l/s (24 l/min) without build-up
- channel width 84 mm
- leg length 400 mm
- DN 50 gully suitable for all push-fit pipe socket connections
- channel body with lateral gradient
- removable 2-part foul air trap
- socket inclination 1.5°
- electro-polished surface
- all-round moulded-on thin bed flange with wall flange on both legs







Order data – channel bodies

Length	Art. no.	
398 x 398	0153.97.29	

Order data – stainless steel designer grating

	Can be lighted	
Design	using Lightline	Art. no.
Wave	\	0153.97.07
Quadrato	\	0153.97.02
PUUUUUUUUUUUUU	√	0153.97.03
Chain	\	9010.56.19
Hawaii	\	9010.56.20
Mix	\	9010.56.21
Pixel	\	9010.56.22
Tile (internal height of grating 10 mm, internal width 64 mm)	-	0153.97.28

■ The **hair strainer** is Item no. 9010.72.00