BLÜCHER® Channel

BLÜCHER®

KEEPING UP THE FLOW

STAINLESS STEEL DRAINAGE SYSTEMS

BLÜCHER® CHANNEL

BLÜCHER® stainless steel drainage systems

Founded in Denmark in 1965, BLUCHER has developed into a leading manufacturer of stainless steel drainage systems including channels, drains, pipework, access covers and grease separators.

Today BLUCHER is an international company with around 300 employees and with subsiduaries and representatives worldwide.

For more information visit www.blucher.co.uk

Channels for commercial and industrial applications

Contents

BLUCHER CHANNEL

Stainless steel drainage systems

With over 40 years experience in the production and supply of stainless steel floor drainage solutions BLÜCHER has incorporated the very best features into the BLÜCHER® Channel range to provide an easy to use, high-performance solution for drainage channels.

To our customers this means easy selection, fast delivery and competitive prices combined with optimum quality.

BLÜCHER channels are manufactured using the latest technologies and are produced from AISI 304 grade stainless steel as standard or optionally AISI 316L. Stainless steel is the ideal material for manufacturing drainage systems because of its numerous qualities including:

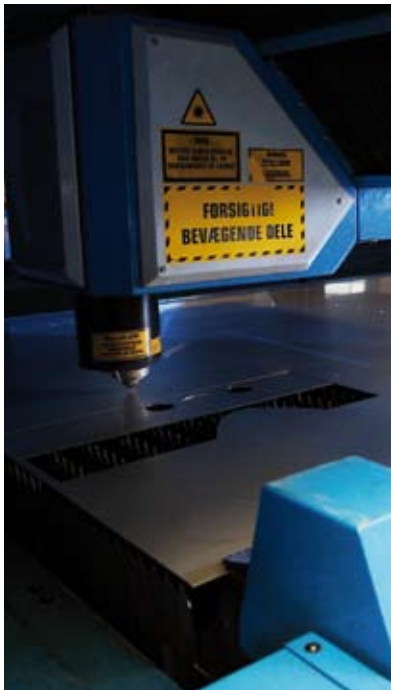
- Smooth hygienic surface
- Corrosion resistant
- Fire resistant
- High strength relative to its low weight
- Resistant to impacts and thermal stress
- Minimal maintenance required

The BLÜCHER® channel system combines the inherent qualities of stainless steel with careful product design to produce a range of stainless steel channels that can offer:

- Reliability
- Ease of installation
- Long product life expectancy
- Excellent hygienic properties
- Excellent flow properties

Asthetically, all BLÜCHER channels are chemically de-scaled and passivated to provide a uniform matt silver finish

Picture shows 150mm wide 670 style channel with cast stainless steel grating



Stainless steel being cut with a laser in the Danish factory

For more information visit www.blucher.co.uk

Selecting a channel system:

- **Water load**
  - continuous water flow
  - intermittent discharge
  - washdown

  It is important to ensure that the lower part and trap arrangement has adequate flow capacity for the application.

- **Waste products**
  When chosing a grating consideration should be taken to ensure that any solids in waste water can pass through the chosen grate.

- **Loading**
  This can influence the choice of channel width as well as determining the most appropriate grating for the application.

- **Stainless steel grade**
  AISI 304 (EN 1.4301)
  AISI 316L (EN1.4404)

- **Floor covering**
  Concrete/tiles/in-situ (e.g. epoxy resin) or flexible sheet (e.g. vinyl).

- **Membrane type**
  Where required liquid or dry membrane application will determine the choice of lower part.

See also technical information on page 29.

Floor drainage methods

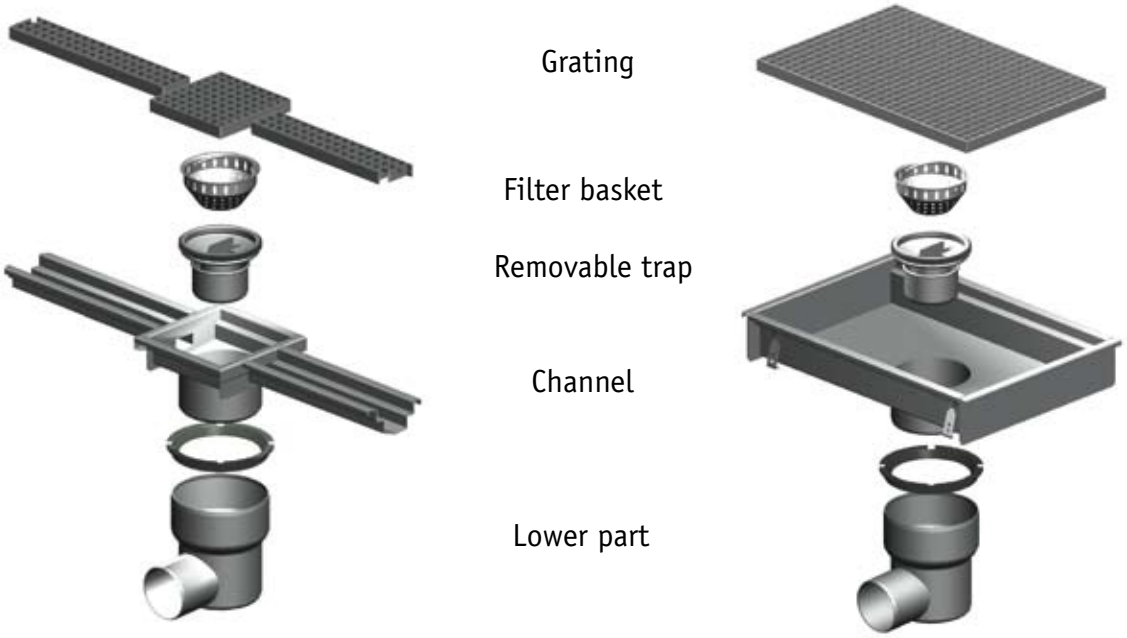
Choice of channel or industrial drain

To choose between a channel or a floor drain it is necessary to consider the room's use and design. For example the number and location of discharge points, frequency of discharge, the volume of water, the size of the room and the nature of the traffic in the room.

The following factors indicate that channels should be considered:

- Many discharge points. It is possible to install a channel network so that individual discharge points are utilised and water does not cover the entire floor and cause a safety hazard.
- Large floor area. Installing a channel in a large room allows the floor to be laid with less fall.
- Large quantities of surface water. The water holding capacity of a large channel acts as a buffer and reduces slip hazards.
- Breakwater. A channel in a door opening will segregate designated wet and dry areas.

Complete channel and kitchen drain



Complete channel or kitchen drain

1. **Channel or kitchen drain**

2. **Grating**
   Select your grating dependant upon the load class and area the channel will be installed in.

3. **Trap**
   Removable trap or P - trap.

4. **Filter**
   Filter basket or sand bucket.

5. **Lower part**
   Choose from a range of lower parts as detailed on page 22.

Custom or standard channel?

Custom range

The BLÜCHER custom range of channels can be manufactured to the exact lengths and angles required. As a general rule we try to ensure that the lead time for our standard channels is within a two week period. Manufactured from either grade AISI 304 or AISI 316L stainless steel, the custom range of channels is ideal for projects where the length of channel is longer than 3 metres, or if there are junctions and/or angles. There is also the flexability to have additional outlets and associated falls built into the channels.

Standard range

Benefitting from "off-the-shelf " availability, channel types 670, 671 and 673 can be ordered with end outlets only and in lengths of 1, 1.5, 2 and 3 metres which can then be married with one of the range of grates and choice of applicable lower parts and traps. The standard range is ideal where lead time is paramount and where there is flexability in the exact length of the channel. As well as the lead time, the cost is also reduced as standard channels are produced in quantity, rather than to bespoke requirements.

Channel range overview

Channel Type 670:

Widths: 147,197,297,397mm
Outlet: 110mm or 160mm (above 147mm width)
Min. depth at outlet: 90mm

Application:

For discharge directly into the channel
For waste water with solids
Where the channels water content is required as a buffer

Typical applications:

Shower areas, kitchens, food and beverage production, chemical plants and abbatiors.

BLÜCHER®

Channel Type 671:

Widths: 147mm with outlet box nom 200 x200mm
Outlet: 110mm or 160mm
Min. depth at outlet: 90mm

Application:

- For discharge directly into the channel
- For waste water with solids
- Where the channels water content is required as a buffer

Typical applications:

Kitchens, food and beverage production, chemical plants and abbatiors.

* The use of the 671 style channel allows a nominal 150mm wide channel to be used in conjuction with the lower parts and p traps as described in the accesories and lower parts section

Channel Type 671 multi:

Widths: 77mm with outlet box nom 200 x200mm
Outlet: 110mm or 160mm
Min. depth at outlet: 63mm

Application:

- For discharge directly into the channel
- For waste water with solids
- Low floor constructions - the reduced channel invert means that the channel can be installed within restricted thickness floor construction

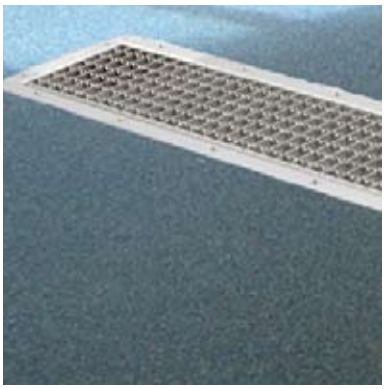
Typical applications:

Shower areas, kitchens, food and beverage production, chemical plants, swimming pools, breakwaters

* The use of the 671 style channel allows a nominal 150mm wide channel to be used in conjuction with the lower parts and p traps as described in the accesories and lower parts section

Channel Type 672 (vinyl):

Widths: 147, 297, 397, 497mm
Outlet: 110mm or 160mm
Min. depth at outlet: 90mm



Application:

- For vinyl floors with vinyl thickness 2-4mm
- Where the channel's water content is required as a buffer
- For discharge directly into the channel
- For waste water with solids present

Typical applications:

Shower areas, kitchens, laboratories, doorways

Channel Type 673 (slot):

Widths: 20mm slot with nom 200x200mm box outlet
Outlet: 110mm or 160mm
Min. depth at outlet: 78mm

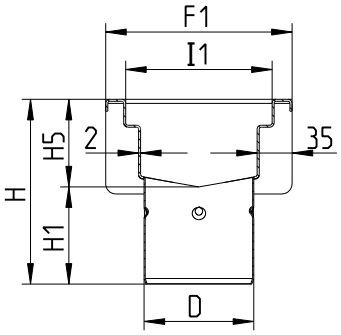
Application:

- As a breakwater to separate designated wet and dry areas
- Washdown areas where wastewater contains low solid content
- Low floor constructions - the reduced channel invert means that the slot channel can be installed within restricted thickness floor construction

Typical applications:

Shower areas, beverage production, chemical plants, swimming pools, breakwaters

Channel type 670



Type No	Nom Width	D	F1	H	H1	H5	I1
670	150MM WIDE	110	187	186	98	90	147
670	200MM WIDE	110/160	237	186	98	90	197
670	300MM WIDE	110/160	337	186	98	90	297
670	400MM WIDE	110/160	437	186	98	90	397

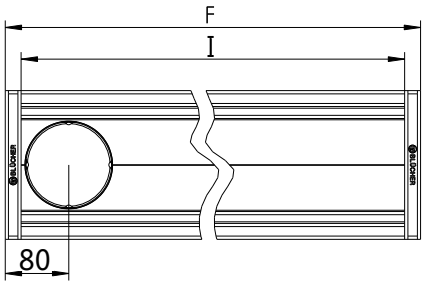
All dims in mm

Custom channel

Custom channels can be produced in any configuration, including length, outlet position, number of outlets, tees, and H5 dimension. Falls can be built in or manufactured as level invert.

Standard channel

Standard Channels available Ex Stock as per the dimensions above and below using ordering code.

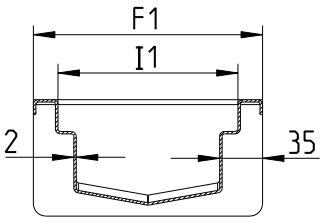


Ordering code	Nom Width	I	F
670.150.100	150MM	1000	1040
670.150.150	150MM	1500	1540
670.150.200	150MM	2000	2040
670.150.300	150MM	3000	3040
670.200.100	200MM	1000	1040
670.200.150	200MM	1500	1540
670.200.200	200MM	2000	2040
670.200.300	200MM	3000	3040

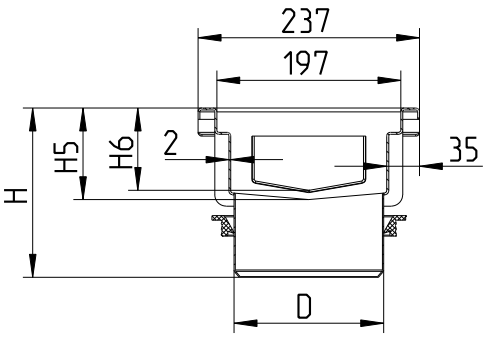
All dims in mm

Channel type 671

Channel



Box



Type No	Nom Width	D	F1	H	H5	H6	I1
671	150MM WIDE	160	187	181	98	90	147
671	200MM WIDE	160	237	181	98	90	197

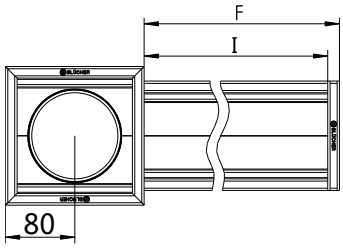
All dims in mm

Custom channel

Custom channels can be produced in any configuration, including length, outlet position, number of outlets, tees, and H6 dimension. Falls can be built in or manufactured as level invert.

Standard channel

Standard Channels available Ex Stock as per the dimensions above and below using ordering code.



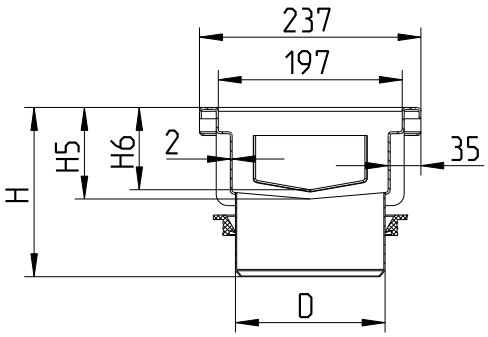
Ordering code	Nom Width	I	F
671.150.100	150MM	1000	1020
671.150.150	150MM	1500	1520
671.150.200	150MM	2000	2020
671.150.300	150MM	3000	2980

All dims in mm

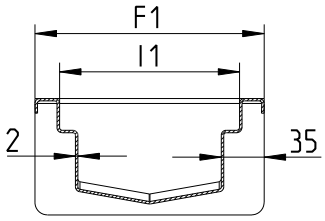
Channel type 671 multi

Custom range made to any configuration

Box



Channel



Type No	Nom Width	D	F1	H	H5	H6	I1
671 multi	77MM WIDE	160	117	186	98	90	77

All dims in mm

Custom channel

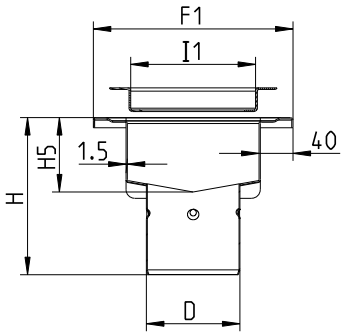
Custom channels can be produced in any configuration, including length, outlet position, number of outlets, tees, and H5 dimension. Falls can be built in or manufactured as level invert.

Standard channel

Channel type 671 multi is not part of the standard range.

Channel type 672

Custom range made to any configuration



Type No	Nom Width	D	F1	H	H5	I1
672	150MM WIDE	110	235	186	90	147
672	200MM WIDE	110/160	285	171	90	197

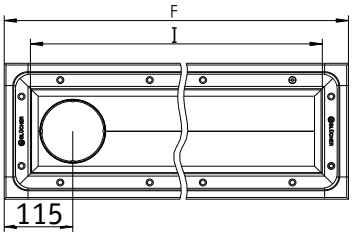
All dims in mm

Custom channel

Custom channels can be produced in any configuration, including length, outlet position, number of outlets, tees, and H5 dimension. Falls can be built in or manufactured as level invert.

Standard channel

Standard Channels available Ex Stock as per the dimensions above and below using ordering code.



Ordering code	Nom Width	I	F
672.150.100	150MM	1000	1088
672.150.150	150MM	1500	1588
672.150.200	150MM	2000	2088
672.150.300	150MM	3000	3088
672.200.100	200MM	1000	1088
672.200.150	200MM	1500	1588
672.200.200	200MM	2000	2088
672.200.300	200MM	3000	3088

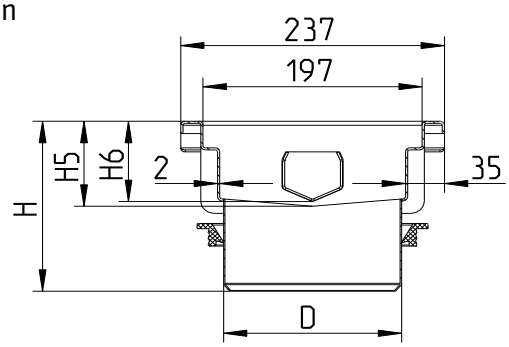
All dims in mm

Channel dimensions

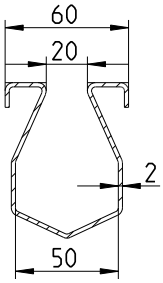
Channel type 673

Custom range made to any configuration

Box



Channel



Type No	Nom Width	D	H	H5	H6
673	150MM WIDE	160	166	85	78

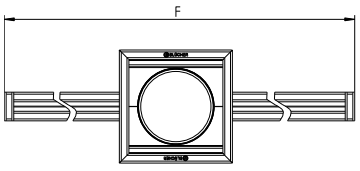
All dims in mm

Custom channel

Custom channels can be produced in any configuration, including length, outlet position, number of outlets, tees, and H5 dimension. Falls can be built in or manufactured as level invert.

Standard channel

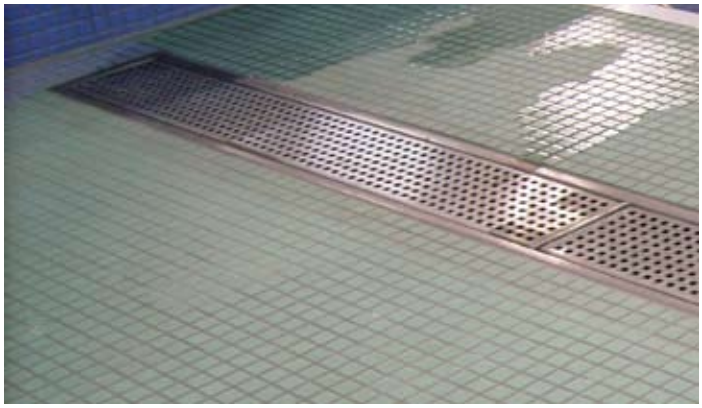
Standard Channels available Ex Stock as per the dimensions above and below using ordering code.



Ordering code	F	Grate codes
673.000.300	3217	Mesh .22
673.000.400	4237	Ladder .25
673.000.500	5237	Cast .60
673.000.600	6197	
673.000.700	7241	

All dims in mm

To add a grate to your order simply suffix the appropriate grate code to the channel ordering code. For example 673.000.030**.22**



Shower grating

2mm thick stainless steel sheet

Aperature size: 8 x 8mm

Suitability: Swimming pools
Showers
Bare foot traffic
Leisure centres

Type No	Width	Length	Depth	DIN (loading class)
697.015.075.99	74mm	998mm	25mm	K 300kg
697.015.150.99	144mm	998mm	25mm	K 300kg

For definition of load classes see page 18

Annular grating

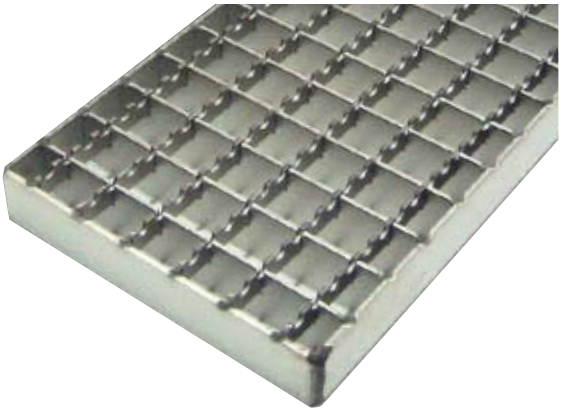
10 mm thick stainless steel plate

Aperature size: 8mm

Suitability: Heavy traffic areas
Breakwaters
Hygienic areas
Food production

Type No	Width	Length	Depth	DIN (loading class)
697.200.075.99*	75mm	998mm	25mm	L 3500kg
697.200.150.99*	145mm	998mm	25mm	L 3500kg
697.200.200.99	195mm	998mm	25mm	L 7000kg

For definition of load classes see page 18



Mesh grating

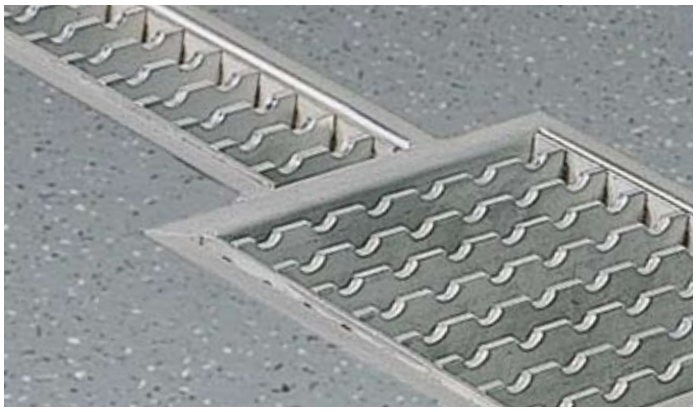
25x2mm and 10x2mm flat steel with non-skid surface

Aperature size: 22 x 22mm

Suitability: Kitchens
Food production
Plant rooms

Type No	Width	Length	Depth	DIN (loading class)
696.223.074.99	74mm	998mm	25mm	L 2000kg
696.223.144.99	144mm	998mm	25mm	L 1800kg
696.223.194.99	194mm	998mm	25mm	L 1350kg
696.223.294.99	294mm	998mm	25mm	L 1600kg
696.223.394.99	394mm	998mm	25mm	L 1250kg

For definition of load classes see page 18



Ladder grating

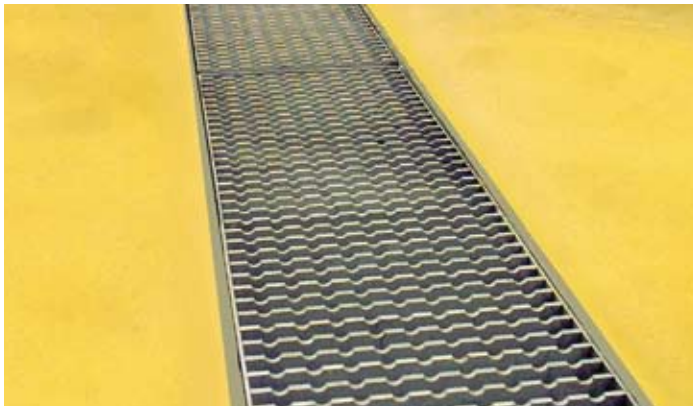
25x5mm spot welded flat steel with 19mm distance between bars. Non skid

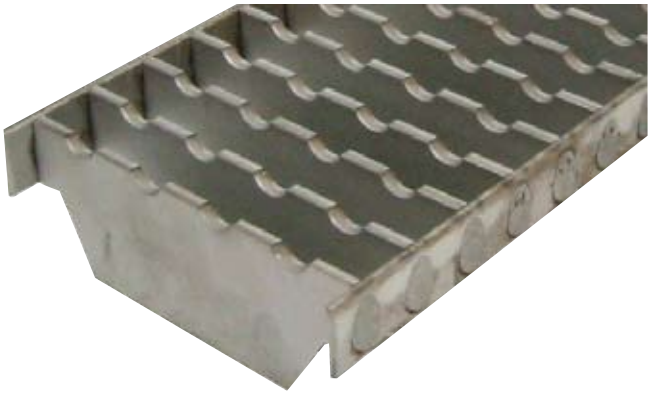
Aperature size: 19mm

Suitability: Heavy traffic areas
Breakwaters
Hygienic areas
Food production

Type No	Width	Length	Depth	DIN (loading class)
697.125.075.50	75mm	499mm	25mm	L 4500kg
697.125.150.50	145mm	499mm	25mm	L 5000kg
697.125.200.50	200mm	499mm	25mm	L 5000kg

For definition of load classes see page 18





Deep ladder grating

50x5mm spot welded flat steel with distance between bars of 19mm. Non skid

Aperature size: 19mm

Suitability: Heavy traffic areas
Breakwaters
Food production

Type No	Width	Length	Depth	DIN (loading class)
697.150.150.50	145mm	499mm	25/50mm	M 8400kg
697.150.200.50	195mm	499mm	25/50mm	M 8400kg
697.150.300.50	295mm	499mm	25/50mm	M 8400kg
697.150.400.50	395mm	499mm	25/50mm	M 8400kg

For definition of load classes see page 18

Plain ladder grating

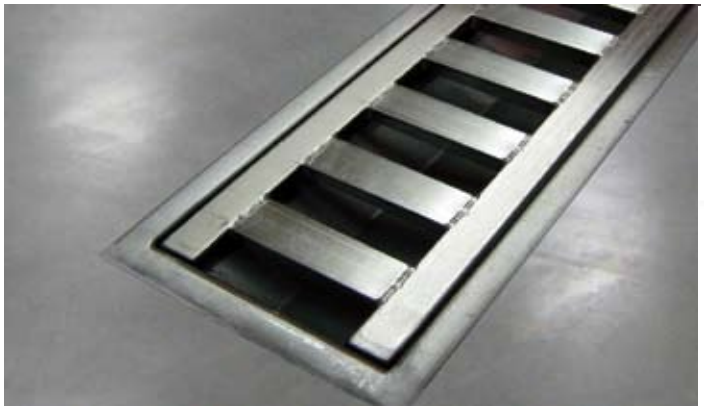
Fully welded flat bar with distance between bars of 18mm

Aperature size: 8mm

Suitability: Heavy traffic areas
Breakwaters
Hygienic areas
Food production

Type No	Width	Length	Depth	DIN (loading class)
697.225.300.99	294mm	998mm	25mm	M 8400kg
697.225.400.99	394mm	998mm	25mm	M 8400kg

For definition of load classes see page 18



Box section grating

25x25x2mm stainless steel box section

Aperature size: 25mm

Suitability: Heavy loading
Hygeinic areas

Type No	Width	Length	Depth	DIN (loading class)
697.225.200.99	194mm	998mm	25mm	Heavy duty loading Contact Technical Dept 01937 838 000

For definition of load classes see page 18

Wedgewire grating

V bars nom 5x3mm on nom 13x3mm support bars

Suitability: Public areas
Showers
Swimming pools
fire channels

Type No	Width	Length	Depth	DIN (loading class)
697.630.150.99	144mm	998mm	25mm	Pedestrian duty
697.630.200.99	194mm	998mm	25mm	Contact technical dept 01937 838 000

For definition of load classes see page 18

Cast stainless grating

non slip cast grate. ditance between bars of 16-19mm

Aperature size: 19mm

Suitability: Heavy traffic areas
Breakwaters
Food production

Type No	Width	Length	Depth	DIN (loading class)
697.250.075.50	75mm	499mm	25mm	M 8400kg
697.250.150.50	145mm	499mm	25mm	L 6000kg
697.250.200.50	195mm	499mm	25mm	M 8400kg

Description of load classes

The gratings load class can be specified under various standards and and testing methods. The following are relevant to BLUCHER's specification of load classes:

DIN 19 599: Gullies and manhole tops for use in buildings.

The grating is tested with a piston , the size of wqhich depends on the grating width (defined as the largest free opening in the outlet/ channel). The free opening is the diameter of the largest circle which can exist between grating supports. As the grating is subjected to various pisto nsizes, it is not always possible to compare the various widths (e.g. a grating with a width of 300mm can be in a higher load class than a grating with a width of 200mm).

The maximum permitted deflection similarly depends on the free opening and is set at 2/500 of the area of the free opening to a maximum of 2mm.

The specified loading in kg for each grating corresponds to the max. loading under the DIN standard.

Description of loading classes:

K (K300) The grating is loaded with 2/3 of 300kg (200kg) five times, with the pressure maintained for 5 min. on the final occasion. The deflection is then measured.
Finally the grating is loaded with 300kg. There is no deflection standard on this occasion but the grating must not break and should still be removable.

L (L1500) The grating is loaded with 2/3 of 1500kg (1000kg) five times, with the pressure maintained for 5 min. on the final occasion. The deflection is then measured.
Finally the grating is loaded with 1500kg. There is no deflection standard on this occasion, but the grating must not break and should still be removable.

M (M12500) The grating is loaded with 2/3 of 12500kg (8333kg) five times, with the pressure maintained for 5 min. on the final occasion. The deflection is then measured.
Finally the grating is loaded with 12500kg. There is no deflection standard on this occasion but the grating must not break and should still be removable.

Barefoot area

Pallet trucks

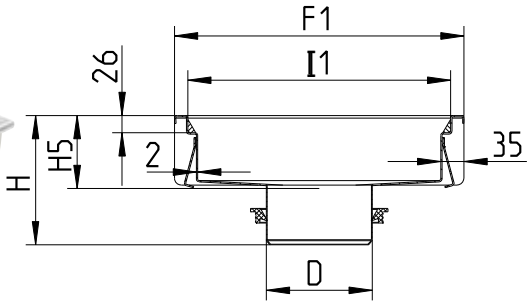
Fork lift trucks

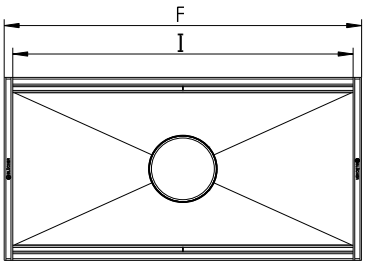
Pedestrian traffic

Delivery vans / trucks

Kitchen channel range dimensions

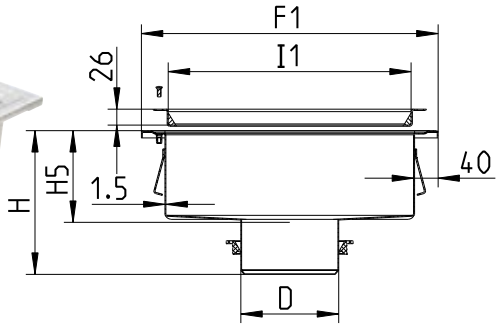
Kitchen channel type 660

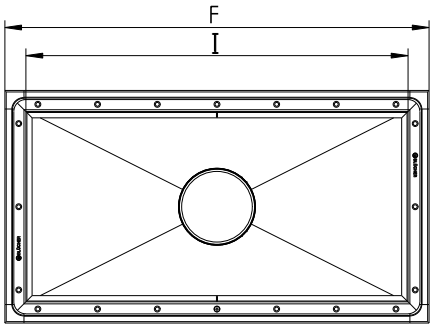




Type No	Nom Width	D	F	F1	H	H5	I	I1
660FH004-06	400 X 400	110	437	437	163	60	397	397
660FH004-11	400 X 400	110	437	437	213	110	397	397
660FH004-15	400 X 400	110	437	437	253	150	397	397
660FH008-06	400 X 800	110	837	437	163	60	797	397
660FH008-11	400 X 800	110	837	437	213	110	797	397
660FH008-15	400 X 800	110	837	437	253	150	797	397
660FK004-06	400 X 400	160	437	437	145	60	397	397
660FK004-11	400 X 400	160	437	437	195	110	397	397
660FK004-15	400 X 400	160	437	437	235	150	397	397
660FK006-11	400 X 600	160	637	437	195	110	597	397
660FK008-06	400 X 800	160	837	437	145	60	797	397
660FK008-11	400 X 800	160	837	437	195	110	797	397
660FK008-15	400 X 800	160	837	437	235	150	797	397
660GH005-06	500 X 500	110	537	537	163	60	497	497
660GH005-11	500 X 500	110	537	537	213	110	497	497
660GH005-15	500 X 500	110	537	537	253	150	497	497
660GH010-06	500 X 1000	110	1037	537	163	150	997	497
660GK005-06	500 X 500	160	537	537	145	60	497	497
660GK005-11	500 X 500	160	537	537	195	110	497	497
660GK005-15	500 X 500	160	537	537	235	150	497	497
660GK010-06	500 X 1000	160	1037	537	145	60	997	497
660GK010-06	500 X 1000	160	1037	537	195	110	997	497
660GK010-06	500 X 1000	160	1037	537	235	150	997	497

Kitchen channel type 662

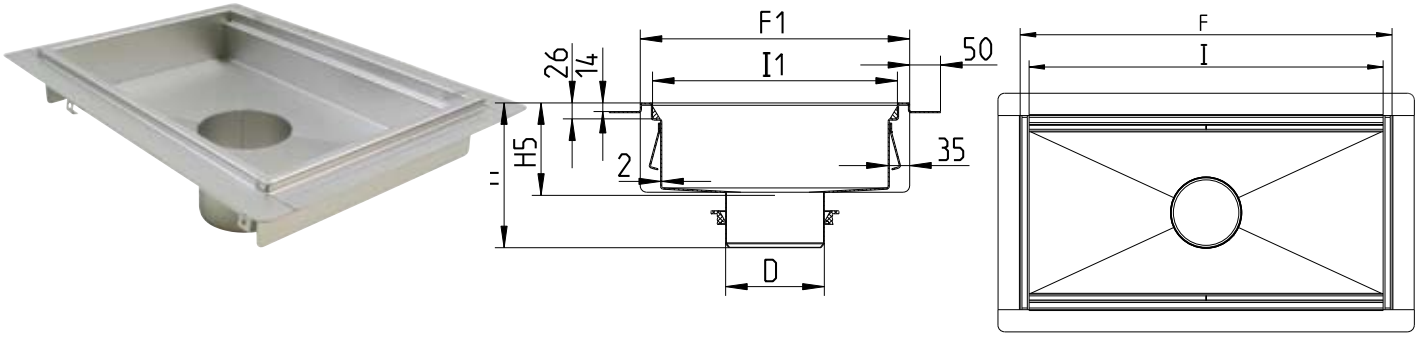




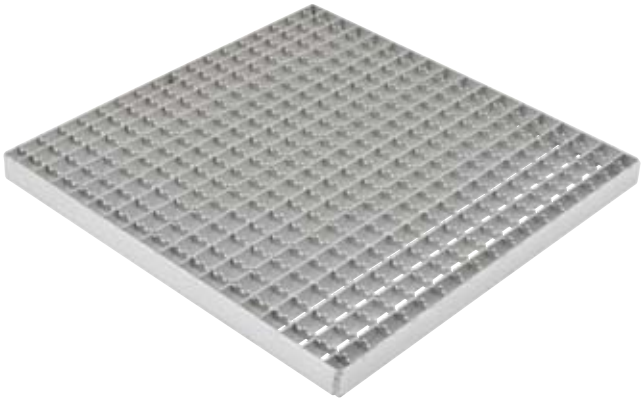
Type No	Nom Width	D	F	F1	H	H5	I	I1
662FH004-06	400 X 400	110	437	437	163	60	397	397
662FH004-15	400 X 400	110	437	437	253	150	397	397
662FH008-06	400 X 800	110	837	437	163	60	797	397
662FH008-15	400 X 800	110	837	437	253	150	797	397
662FK004-06	400 X 400	160	437	437	145	60	397	397
662FK004-15	400 X 400	160	437	437	235	150	397	397
662FK006-11	400 X 600	160	637	437	195	110	597	397
662GH005-06	500 X 500	110	537	537	163	60	497	497
662GH005-15	500 X 500	110	537	537	253	150	497	497
662GH010-06	500 X 1000	110	1037	537	163	60	997	497
662GH010-15	500 X 1000	110	1037	537	163	150	997	497
662GK005-15	500 X 500	160	537	537	235	150	497	497
662GK010-06	500 X 1000	160	1037	537	145	60	997	497

Kitchen channel range dimensions

Kitchen channel type 664



Type No	Nom Width	D	F	F1	H	H5	I	I1
664FH004-15	400 X 400	110	437	437	253	150	397	397
664FH008-15	400 X 800	110	837	437	253	150	797	397
664FK004-06	400 X 400	160	437	437	145	60	397	397
664FK004-11	400 X 400	160	437	437	195	110	397	397
664FK004-15	400 X 400	160	437	437	235	150	397	397
664FK006-11	400 X 600	160	637	437	195	110	597	397
664FK008-06	400 X 800	160	837	437	145	60	797	397
664GH005-15	500 X 500	110	537	537	213	150	497	497
664GH005-15	500 X 1000	110	1037	537	253	150	997	497
664GK005-06	500 X 500	160	537	537	145	60	497	497
660GK005-15	500 X 500	160	537	537	235	150	497	497
660GK010-06	500 X 1000	160	1037	537	145	60	997	497



Mesh grating

25x2mm and 10x2mm flat steel with non-skid surface

Aperature size: **22 x 22mm**

Type No	Width	Length	Depth
696.223.394.395	394mm	394mm	25mm
696.223.494.495	494mm	494mm	25mm

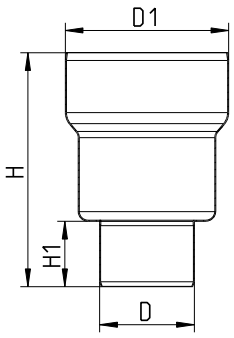
Ladder grating

25x5mm spot welded flat steel with 19mm distance between bars. Non skid

Aperature size: **19mm**

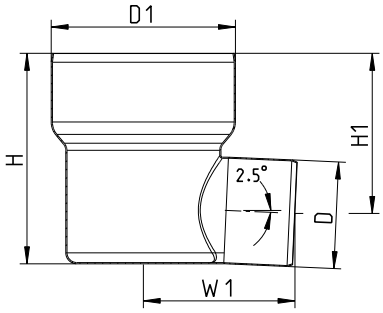
Type No	Width	Length	Depth
697.124.400.395	392mm	395mm	25mm
697.125.500.495	492mm	495mm	25mm

Vertical lower part without membrane flange



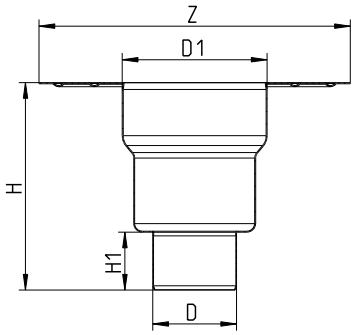
Type No	D	D1	H	H1
760.072.110 S	110	190	272	76

Horizontal lower part without membrane flange



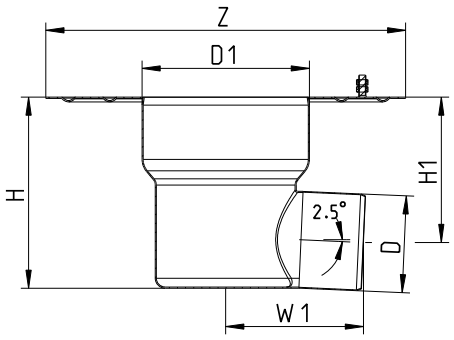
Type No	D	D1	H	H1	W1
763.002.075 S	75	190	217	184	253
763.002.110 S	110	190	217	165	156

Vertical lower part with paint on membrane flange



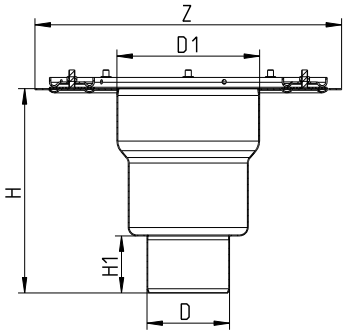
Type No	D	D1	H	H1	Z
774.072.075 S	75	190	261	65	409
774.072.110 S	110	190	272	76	409

Horizontal lower part with paint on membrane flange



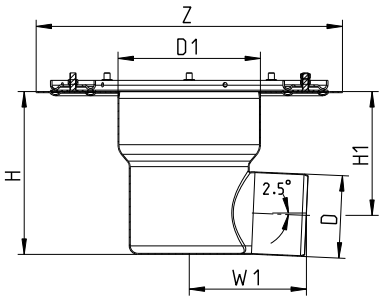
Type No	D	D1	H	H1	W1	Z
769.002.075 S	75	190	217	184	253	409
763.002.110 S	110	190	217	165	156	409

Vertical lower part without membrane flange



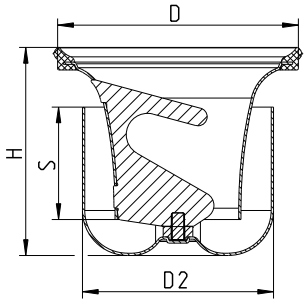
Type No	D	D1	H	H1
760.072.110 S	110	190	272	76

Horizontal lower part without membrane flange



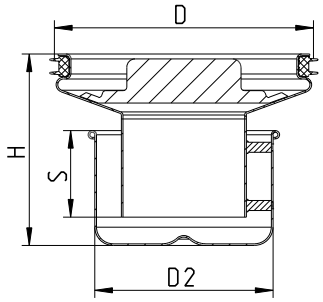
Type No	D	D1	H	H1	W1
763.002.075 S	75	190	217	184	253
763.002.110 S	110	190	217	165	156

REMOVABLE TRAP FOR 110MM OD OUTLET



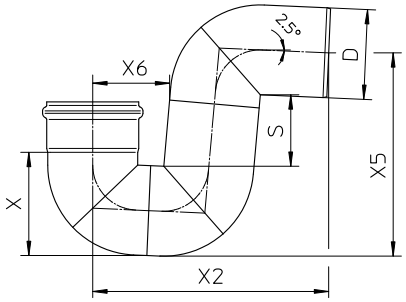
Type No	D	D2	H	S	Flow (l/s)
502.050.110	108	85	93	50	1.4-1.7

REMOVABLE TRAP FOR 160MM OUTLET



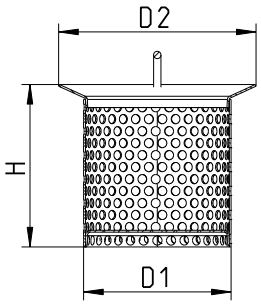
Type No	D	D2	H	S	Flow (l/s)
562.002.000 S	157	107	115	52	2.8-3.3
562.003.000 S	257	197	128	52	3.0-7.8

P-TRAP



Type No	D	S	X	X2	X5	X6	Flow (l/s)
525.090.075 S	75	81	89	222	189	74	2.5
525.090.110 S	110	89	126	289	249	94	3.4
525.090.160 S	160	105	178	388	338	121	7.5

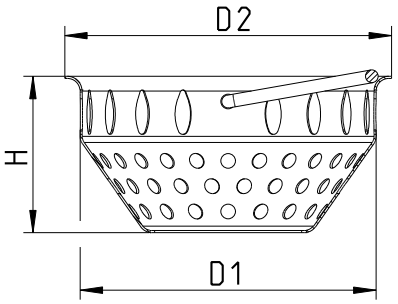
REMOVABLE FILTER BASKET FOR 110MM OD OUTLET



Type No	D	D2	H
780.107.110.05 S	80	107	88

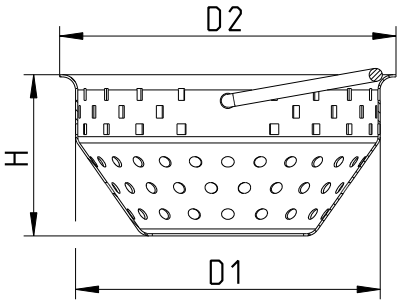
Cannot be used in conjunction with the 502.050.110 S removable trap

REMOVABLE FILTER BASKET FOR 160MM OD OUTLET (8MM HOLES)



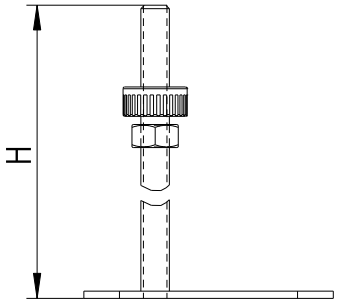
Type No	D	D2	H
780.002.000.05 S	140	155	74
780.003.000.05 S	238	253	75

REMOVABLE FILTER BASKET FOR 160MM OD OUTLET (6MM HOLES)



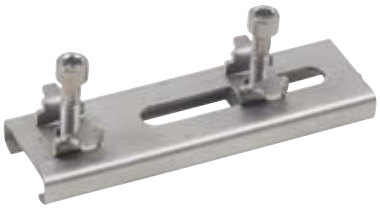
Type No	D1	D2	H
780.002.003.05	140	155	74
780.003.003.05	238	253	75

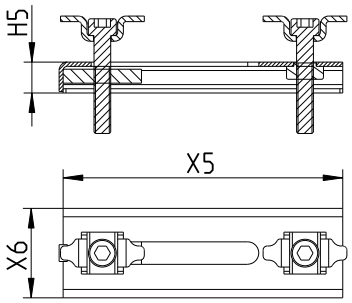
ADJUSTABLE LEGS



Type No	H	OD (rod)
670.000.01	150mm	M8 threaded

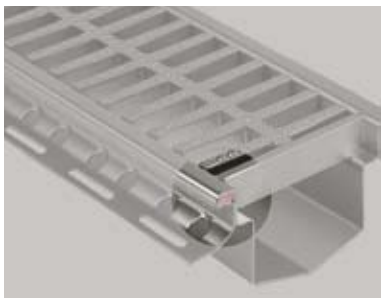
SCREW LOCK GRATING SYSTEM





Type No	H5	X5	X6
670.000.003 s	11mm	100mm	32mm

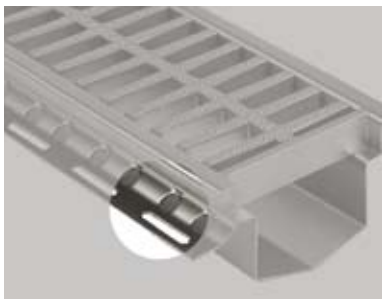
Channel and kitchen channel options and extras



Edge infill

Edge infill – For optimum channel strength it is important that the channel is properly embedded in concrete. This is particularly necessary with regards to the underside of the channel edge profile. Whilst this can be filled on site it is also possible to have the filling carried out under factory conditions as part of the production process.

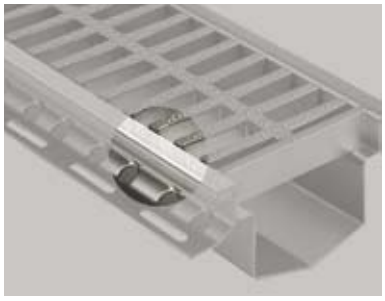
In addition to providing greater rigidity to the channel, the edge infill also eliminates voids and any potential for bacterial growth.



Stabiliser angle

The stabiliser angle is longitudinally welded to the channel wall supporting the channel and in contact with the concrete throughout the channel's length. The stabiliser angle is therefore recommended for use where the channel is subjected to heavy wheel loadings.

Adjustable legs can be added to the stabiliser angle to aid the adjustment of the channel to the required finished level before casting.



Protective strip

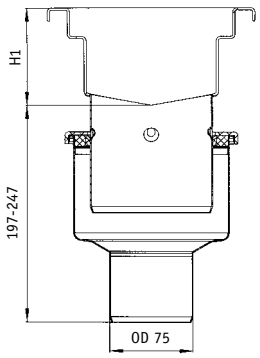
The edge profile can be supplied with a protective strip which adheres lightly and is easily removed. This is to protect the edge profile during installation leaving a perfect visible edge once the installation is complete.

Technical Details

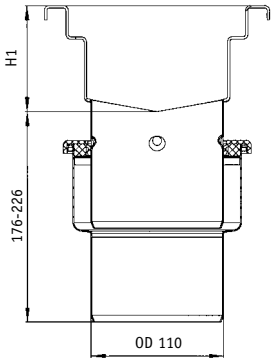
Installation heights

Dimensioned sketch for channels with OD 110 mm outlet

These drawings show the position of the outlet relative to the finished floor. The dimension H1 corresponds to the channel's depth (90 or 120 mm) at the outlet. Please note that the channel can be adjusted up to 50 mm relative to the lower part.



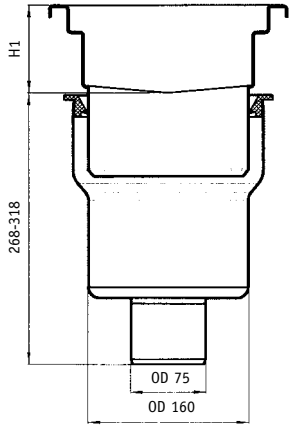
150.000.075



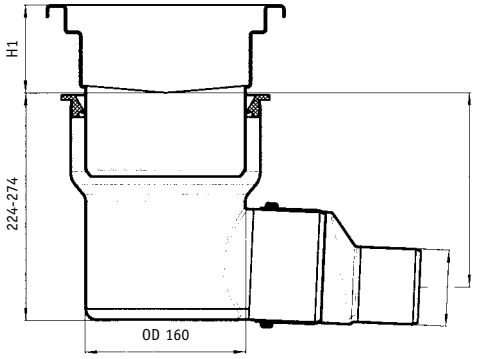
150.000.110

Dimensioned sketch for channels with OD 160 mm outlet

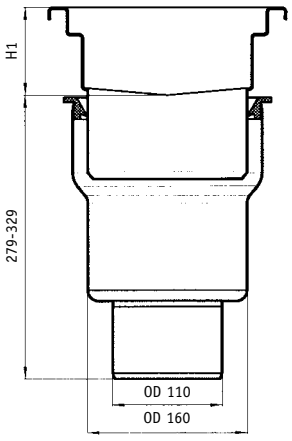
These drawings show the position of the outlet relative to the finished floor. The dimension H1 corresponds to the height of the outlet box = 85 (type 673 only), 100 or 120 mm (depending on the channel depth selected). Note that the outlet box/ channel can be adjusted up to 50 mm relative to the lower part.



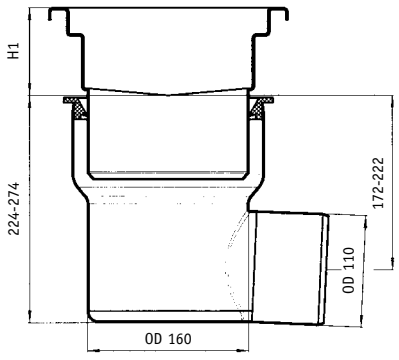
760.072.075



763.002.075



760.072.110



763.002.110

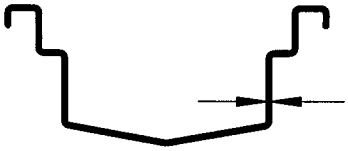
Material quality

- Unless otherwise stated, the standard channel range is made in AISI 304 (EN 1.4301). On request, the channels and most of the gratings and accessories can be supplied in AISI 316L (EN 1.4404) as an option.
- All channels are chemically pickled and passivated to provide a clean hygienic surface finish.

Material thickness

- Channels for concrete, in-situ or tiled floors: 2 mm, ensuring the channel can be used where there are heavy loads.
- Channels for sheet vinyl floor covering: 1.5 mm – vinyl covered floors are not exposed to heavy loads.

Material thickness



Anchor tangs

Anchor tangs are positioned every 500 mm along the channel wall and should be bent out 90° before casting. Anchor tangs are generally suitable where the channel is not subjected to excessive weight or thermal loadings (e.g. medium/light industrial). Adjustable legs can be added to the anchor tangs.

Anchor tang

Grating support

- 26 mm shoulder depth ensures that 25 mm gratings do not protrude above the channel.
- 15 mm shoulder width ensures that there is adequate support for the various grating types. Keeping this shoulder to a minimum is important for hygiene reasons to prevent bacterial growth on the horizontal surface.

Cross bars

- 8 x 20 mm flat bar placed at 1000 mm gaps (1008mm centres) to provide grate location spacers in channels.
- 8 mm OD bars are placed at 500 mm centres in slot channels.

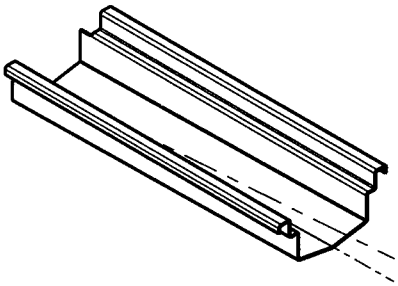
Cross-bars reinforce the channel and ensure that the sides are not pressed together whilst embedding the channels in concrete. Cross-bars also ensure that the grates are not displaced longitudinally.

Cross-bars

Longitudinal fall

- In Slot channels the longitudinal fall is 0.5-0.6%; for all other channel types the fall is 1%.

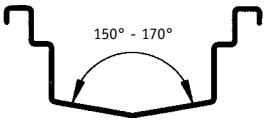
Longitudinal fall



Cross fall

- Together with the longitudinal fall, cross fall ensures that the waste water and solids flow to the outlet without leaving deposits. The cross fall corresponds to an angle of 130° in Slot channels and 150-170° for all other channel types.

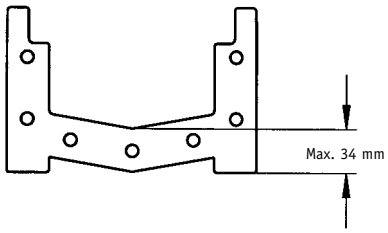
Cross fall



Flanged joint

- Channels with a total length exceeding 6 metres are made in two or three sections which can be bolted together with flanged joints. The flanges are 5 mm thick and finish flush with all internal surfaces. One of the two mating flanges is supplied with a 2 mm thick EPDM seal.
- The flanges are tightened (30 Nm) together with the 8 mm OD nuts and bolts supplied.
- After jointing, it may be necessary to cut away any excess seal inside the channel. This can be done with a sharp thin bladed knife. Approx. 2 mm of the seal will remain visible after making a flanged joint. Each flange protrudes 34 mm from the channel bottom.

Flanged joint



Outlet

- Channels are provided with either a plain spigot outlet or an outlet box. The outlet fits either directly into the interconnecting pipework or into an adjustable lower part.

The outlet size determines the size and types available of removable water trap and/or filter basket or sand bucket.

Outlet box

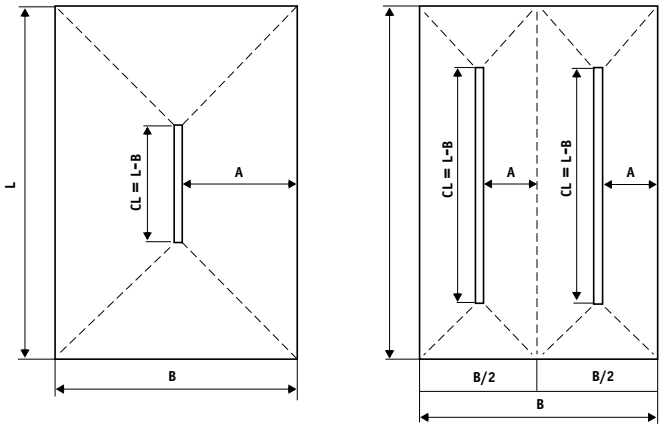
Plain spigot

Calculation of channel length

Where there are no special circumstances to be taken into account, the diagrams below can be used as a guide for establishing the correct location and design of channels so that a constant fall is achieved to the drainage channel

As most floors with channels are laid to falls, account must be taken at the planning stage to ensure the fall (A) does not exceed 1-2% (depending on floor type).

Room length	=	L
Room width	=	B
Channel length	=	CL



References

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