



GRASPOINTNER
Sustainable innovation.



Austria Center – Uno City, Vienna

Technology
in harmony
with nature.



light
tec
pro
green

Drainage systems

We always
do the same:
forge new paths.





What do you do when a material doesn't have the desired properties?

– You develop the technology to adapt it. –

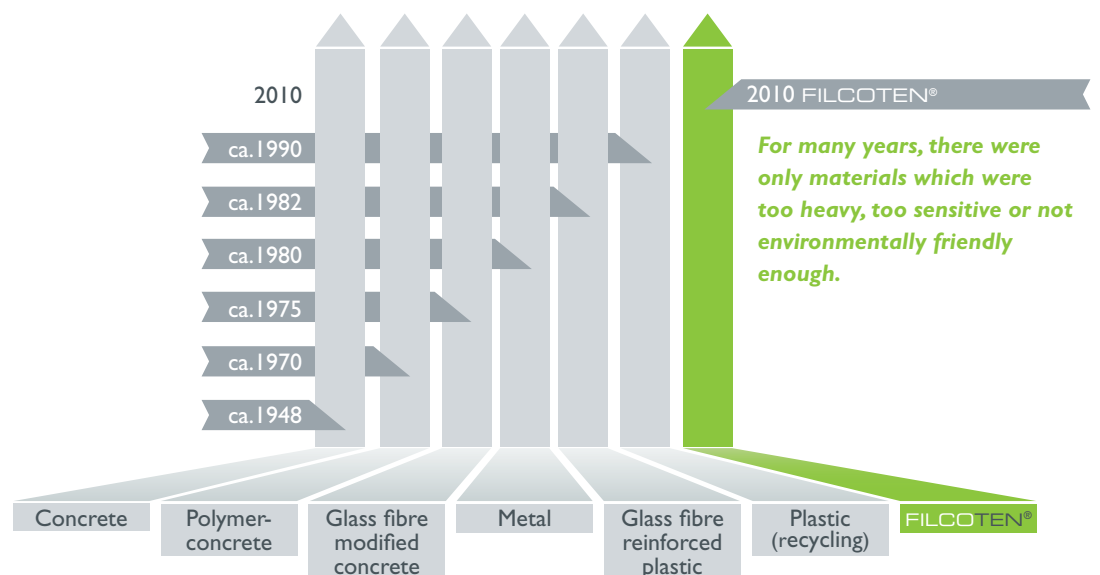
For decades, drainage systems have been manufactured from concrete, polymer concrete, steel or plastic, and none of the materials was ever able to meet our high requirements. They were either too heavy, too sensitive or not sufficiently environmentally friendly.

But after reading a specialist magazine in 2002, Friedrich Graspöckner announced:

„Our dream of both light and stable concrete channels can become a reality!“

After that, we were the only representative of our industry to invest in research and development of a substance which would ultimately combine the properties of cement and resin bonded cements with one another. Eight years and countless hours of hard work later, we had finally reached our goal: FILCOTEN® was born, and to this day continues to be the only material of its type.

The material history of channel manufacture



Innovation without sustainability is not innovation.



Our products are in direct contact with the earth's water cycle.

We have been asking ourselves the question of how advancement and sustainability can be combined for many years. We therefore set one additional goal when developing FILCOTEN®:

„It should be really environmentally friendly.“

We are very proud of the fact that we were very much able to achieve this. FILCOTEN® is completely neutral for the environment from the manufacture through to full recycling, and does not have any negative effects on humans or nature.

Our energy mix also makes clear that we are serious when it comes to sustainability. We don't use fossil fuels for the most part, relying instead on renewable energies.

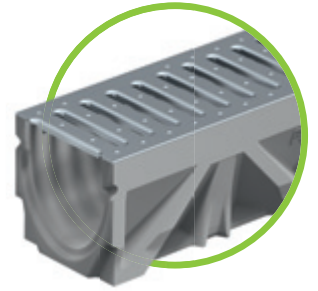


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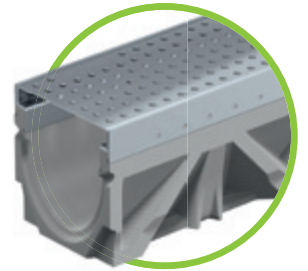
BG energy mix:

▶ 1,23 %	other eco-energy
▶ 2,59 %	oil and its products
▶ 3,18 %	natural gas
▶ 3,53 %	solid or liquid biomass
▶ 4,23 %	wind energy
▶ 85,24 %	water power

*It's not just FILCOTEN® which is environmentally friendly -
our energy mix is too.*



FILCOTEN® light
page 8-17



FILCOTEN® tec
page 18-31



FILCOTEN® pro
page 32-61



- 100 % recyclable
(tested by the soil and building materials testing facility in Linz)

- no harmful effects to humans or nature
- long service life, thereby conserving resources

- Economical handling of mineral raw materials

- Not using plastic resins, hardening agent or solvents
- no chemical harm to employees or the environments
- low exposure to dust and noise

- better carbon footprint for each channel achieved by a low weight (comparable with concrete)



Strong but gentle to the environment:



Impact strength and environment-friendliness are just two of the many features which make FILCOTEN® unique.

The material combines the positive features of stable concrete channels with the construction of resin-bonded cements (light construction), and years after its introduction onto the market it is still unrivalled. FILCOTEN® complies with the EN 1433 standard.



Temperature, frost and UV-resistant

Since FILCOTEN® channels are made of cement-bonded fibre composites, they react to changes in temperature in the same way as the surrounding concrete bedding. This achieves a continuous unit and a long service life for the channel system. Resistance to frost and de-icing salt down to -40° has been demonstrated (taking into account EN 1433).



Improved impact stability

The high impact stability of FILCOTEN® ensures greater safety when handling and installing the channels.



100 % recyclable

The manufacturing and processing focus is on the conservation of resources. There is none of the high energy consumption which is required, for example, to heat the tools in the production of plastic products.

Better still, FILCOTEN® is 100 % recyclable.

Tested by the soil and building materials testing facility in Linz.



Lower transport costs, swifter installation

Depending on the type of channel, FILCOTEN® channels are up to 70 % lighter than conventional concrete channels. This huge saving in terms of weight decreases the consumption of fuel, conserves resources and decreases the proportional CO₂ emissions. The lower weight also facilitates installation on site.



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Adapted surface properties

The particularly flat inner surface of FILCOTEN® channels achieves the best flow characteristics and a high self-cleaning effect. The textured outer surface ensures perfect cohesion with the concrete bed.

Surface properties:

36µm	Polymer concrete
Glass fibre modified concrete	100µm
Concrete	170µm
*	FILCOTEN®

* This value is based on initial results. Final details will be published after completion of testing.

High compressive strength

The cement-bonded material with a high proportion of fibres enables thin-walled channels with particularly high compressive strength. FILCOTEN® channels are therefore lighter yet highly resilient.

Compressive strength

Polymer concrete	90 N/mm ²
Glass fibre modified concrete	70 N/mm ²
Concrete	65 N/mm ²
FILCOTEN®	90 N/mm ²



0 % harmful substances

FILCOTEN® is free from artificial resins and solvents. This means that it is harmless to the environment and our employees even during production. FILCOTEN® channel bodies have been bioconstructively tested and are recommended on this basis by the IBR (Institut für Baubiologie Rosenheim GmbH).



Non-flammable

While plastics are flammable, the purely mineral mix of materials means that FILCOTEN® does not have a fire load.

Fire protection classes:

▶ Polymer concrete: B1 difficult to ignite
▶ Plastic: B2 normal combustibility
▶ Glass fibre reinforced plastic: B2 normal combustibility
▶ FILCOTEN®: A1 non-combustible

As light as it is **stable.**



FILCOTEN[®] light

Robust, dimensionally stable and yet still light enough for construction in urban green and open spaces – FILCOTEN[®] light is the compact, cost effective channel system for many different areas of use. It offers you all of the advantages of FILCOTEN[®] and is suitable to be laid with block paving stones, tiles and other surfaces.

FILCOTEN[®] light is resilient up to class C 250 (in accordance with EN 1433) and is also available in a smaller 'mini' version, with a lower construction height.

Slot inlays

Optionally for slot width 18 mm to the optical design.

Smooth surface

The surface of FILCOTEN[®] is smoother than concrete, ensuring the best flow and self-cleaning characteristics.

Safety seam

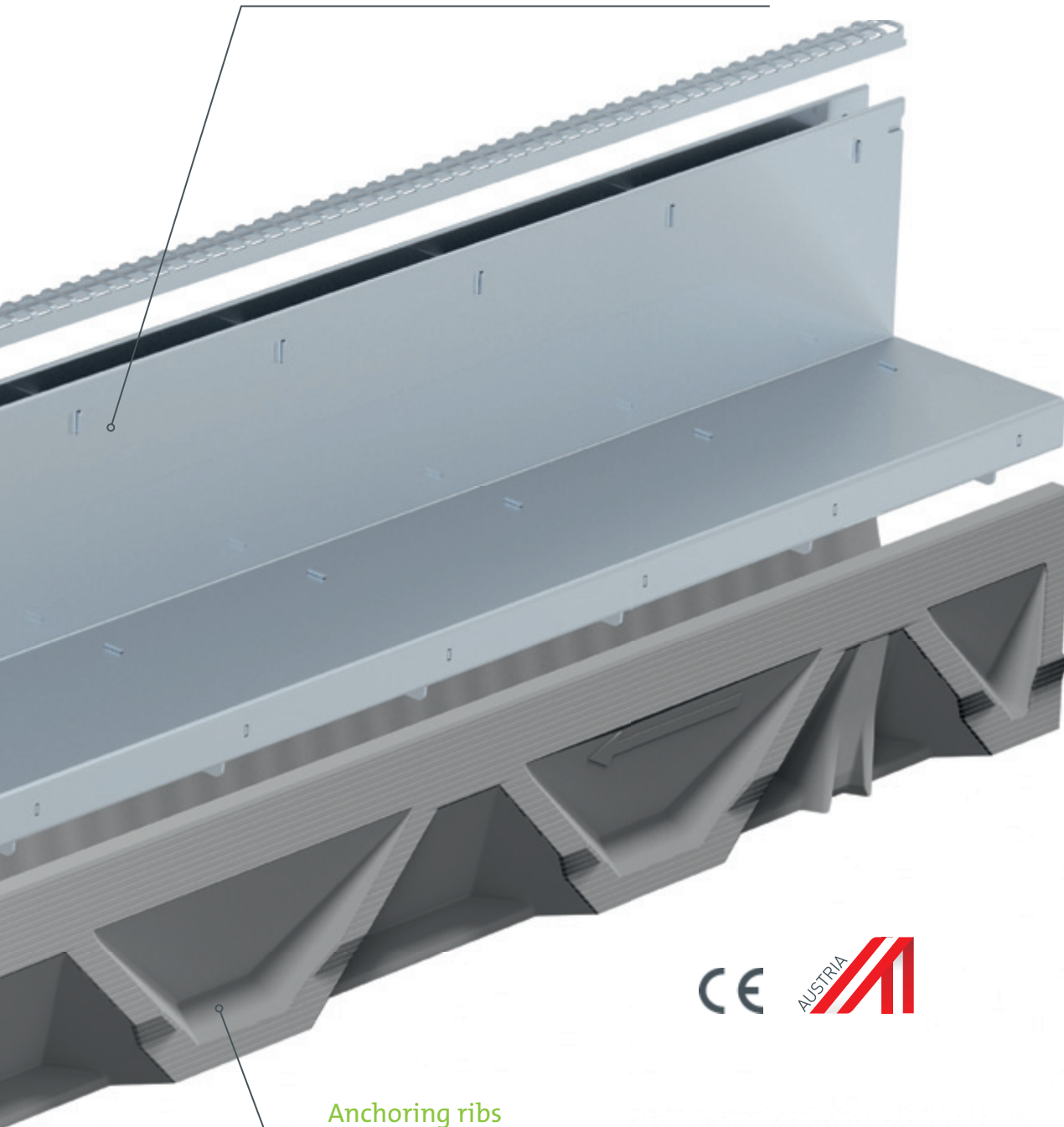
A sealable safety seam enables a sealed connection between the individual modules.



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FILCOTEN® slot top

If the design is as important as the function, then the slot top is our first choice. This is suitable for architecturally demanding surfaces, and with a slot width of 12,5 or 18 mm it can be perfectly fitted into the alignment of slots on the surface.



Anchoring ribs

The innovative FILCOTEN® production and moulding technology made designing anchoring ribs, therefore ensuring a secure bonding with the surrounding concrete bed.

Areas of use

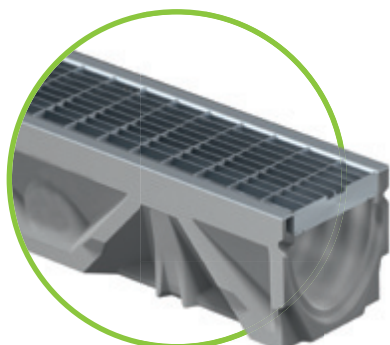
Particularly suitable for landscaping projects, terraces, balconies, garages, pavements, sports facilities, driveways, pedestrian areas and similar surfaces.

Load class C 250

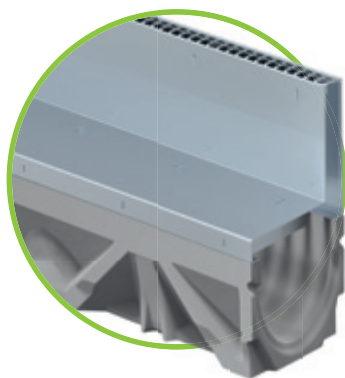
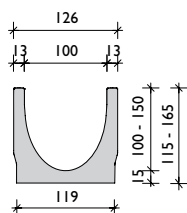


FILCOTEN[®] light

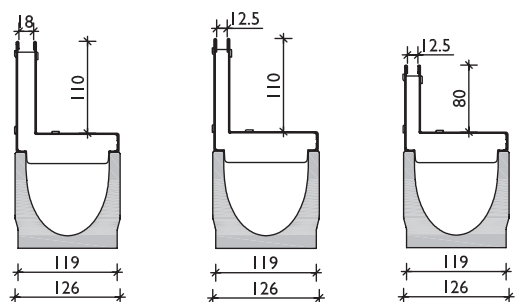
Nominal width 100 - load class C 250



FILCOTEN[®] light 100



FILCOTEN[®] light 100
incl. slot top



Channel body FILCOTEN[®] light 100.

Item no.	Channel type	Slope/ outlet	Height at channel end	Weight
10311000	100/0	0 %	115 mm	10,7 kg
10311061	100/5-0	0 %	140 mm	13,4 kg
10311062	100/10-0	0 %	165 mm	16,0 kg
10311001	100/1	0,5 %	120 mm	11,1 kg
10311002	100/2	0,5 %	125 mm	11,6 kg
10311003	100/3	0,5 %	130 mm	12,1 kg
10311004	100/4	0,5 %	135 mm	12,7 kg
10311005	100/5	0,5 %	140 mm	13,2 kg
10311006	100/6	0,5 %	145 mm	13,6 kg
10311007	100/7	0,5 %	150 mm	14,0 kg
10311008	100/8	0,5 %	155 mm	14,4 kg
10311009	100/9	0,5 %	160 mm	14,9 kg
10311010	100/10	0,5 %	165 mm	15,5 kg
10311070	101/0	0 % / DN100	115 mm	10,3 kg
10311071	101/5-0	0 % / DN100	140 mm	13,0 kg
10311072	101/10-0	0 % / DN100	165 mm	15,6 kg
10311050	100/0	0 % / L=500	115 mm	5,4 kg
10311051	100/5-0 for drilling 1)	0 % / L=500	140 mm	8,7 kg
10311052	100/10-0	0 % / L=500	165 mm	8,1 kg

1) for side and bottom drilling - details on side 34

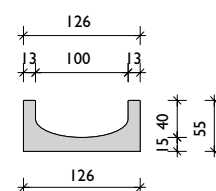


Channel body FILCOTEN® light mini 100.

Item no.	Channel type	Slope/ outlet	Height at channel end	Weight
10110000	mini	0 %	55 mm	7,7 kg
10110070	mini	0 % / DN100	55 mm	7,5 kg

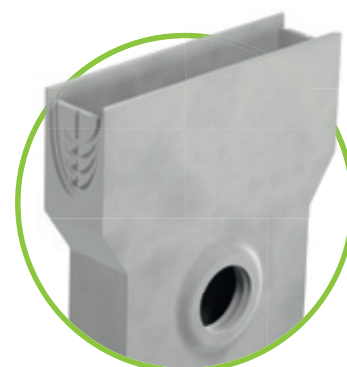


FILCOTEN® light mini 100

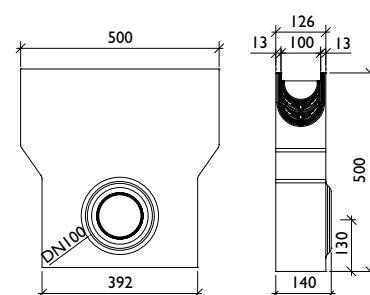


Accessories FILCOTEN® light 100.

Item no.	Accessories	Material	Weight
10310093	Sump unit 500/140/500 with pipe coupling DN 100	FILCOTEN	24,9 kg
22515	Sediment bucket for sump unit	plastic	0,2 kg
30056	Drain trap for sump unit DN 100 for backfitting	plastic	0,1 kg
30019	Drain trap for bottom outlet DN 100	plastic	0,2 kg
19010200	Front/end cap (light mini)	galvan. steel	0,1 kg
19010300	Front/end cap (light mini)	stainless steel V2A	0,1 kg
19010230	Front/end cap	galvan. steel	0,3 kg
19010232	End cap with outlet DN 100	galvan. steel	0,4 kg
19010330	Front/end cap	stainless steel V2A	0,3 kg
19010332	End cap with outlet DN 100	stainless steel V2A	0,4 kg
32080	Locking clip for mesh gratings	galvan. steel	0,1 kg
32067	Locking clip for ductile iron mesh gratings	black coated	0,1 kg
32068	Fixing clip for ductile iron mesh gratings	black coated	0,1 kg



FILCOTEN® light
sump unit 100



Accessory details including additional images = page 16



FILCOTEN[®] light

Nominal width 100 - load class C 250

Gratings FILCOTEN[®] light 100.

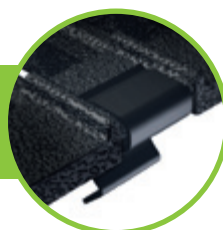
Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/pc.	Inlet cross-section
17010200	1. Slotted grating	galvanised steel	1000/124/2	A 15 kN	SW 8/80	1,6 kg	225 cm ² /m
17010201		galvanised steel	500/124/2	A 15 kN	SW 8/80	0,8 kg	265 cm ² /m
17010300		stainless steel V2A	1000/124/2	A 15 kN	SW 8/80	1,6 kg	140 cm ² /m
17010301		stainless steel V2A	500/124/2	A 15 kN	SW 8/80	0,8 kg	160 cm ² /m
17010210	2. Mesh grating	galvanised steel	1000/124/2	B 125 kN	MW 30/10	2,6 kg	795 cm ² /m
17010211		galvanised steel	500/124/2	B 125 kN	MW 30/10	1,3 kg	795 cm ² /m
17010310		stainless steel V2A	1000/124/2	B 125 kN	MW 30/10	2,6 kg	795 cm ² /m
17010311		stainless steel V2A	500/124/2	B 125 kN	MW 30/10	1,3 kg	795 cm ² /m
17010100	3. Ductile iron mesh	ductile iron	500/124/5	C 250 kN	MW 15/25	2,6 kg	455 cm ² /m
17010150	grating	ductile iron-KTL	500/124/5	C 250 kN	MW 15/25	2,6 kg	455 cm ² /m

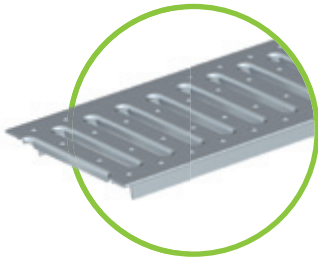
Slot tops asymmetric FILCOTEN[®] light 100.

Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/pc.	Inlet cross-section
17110237	4. Slot tops SH 80mm	galvanised steel	1000/123/103	B 125 kN	SW 12,5	4,4 kg	125 cm ² /m
17110238		galvanised steel	500/123/103	B 125 kN	SW 12,5	2,2 kg	125 cm ² /m
17110337		stainless steel V2A	1000/123/103	B 125 kN	SW 12,5	4,4 kg	125 cm ² /m
17110338		stainless steel V2A	500/123/103	B 125 kN	SW 12,5	2,2 kg	125 cm ² /m
17110243	4. Slot tops SH 110mm	galvanised steel	1000/123/133	C 250 kN	SW 12,5	5,4 kg	125 cm ² /m
17110244		galvanised steel	500/123/133	C 250 kN	SW 12,5	2,7 kg	125 cm ² /m
17110343		stainless steel V2A	1000/123/133	C 250 kN	SW 12,5	5,4 kg	125 cm ² /m
17110344		stainless steel V2A	500/123/133	C 250 kN	SW 12,5	2,7 kg	125 cm ² /m
17110233		galvanised steel	1000/123/133	C 250 kN	SW 18	5,4 kg	180 cm ² /m
17110234		galvanised steel	500/123/133	C 250 kN	SW 18	2,7 kg	180 cm ² /m
17110333		stainless steel V2A	1000/123/133	C 250 kN	SW 18	5,4 kg	180 cm ² /m
17110334		stainless steel V2A	500/123/133	C 250 kN	SW 18	2,7 kg	180 cm ² /m
37951	Slot inlays SW 18mm	galvanised steel	L = 1000	square perforation 8/8 mm		0,2 kg	
37956		stainless steel V2A	L = 1000	square perforation 8/8 mm		0,2 kg	
17110297	Maintenance unit SH80mm	galvanised steel	500/123/103	B 125 kN	SW 12,5	4,1 kg	125 cm ² /m
17110397		stainless steel V2A	500/123/103	B 125 kN	SW 12,5	4,1 kg	125 cm ² /m
17110281	Maintenance unit SH110mm	galvanised steel	500/123/133	C 250 kN	SW 12,5	5,0 kg	125 cm ² /m
17110381		stainless steel V2A	500/123/133	C 250 kN	SW 12,5	5,0 kg	125 cm ² /m
17110295		galvanised steel	500/123/133	C 250 kN	SW 18	5,0 kg	180 cm ² /m
17110395		stainless steel V2A	500/123/133	C 250 kN	SW 18	5,0 kg	180 cm ² /m



The retaining spring in the ductile iron mesh grating ensures a secure hold of the grate in the channel body.





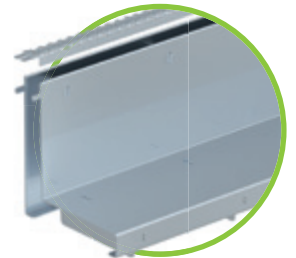
1. Slotted grating cl. A
SW 8/80
galvanised or stainless steel V2A



2. Mesh grating
MW 30/10 - cl. B -
galvanised or stainless steel V2A



3. Ductile iron
mesh grating
MW 15/25 - cl. C



4. Slot top
cl. B or cl. C
SW 12,5 or 18 mm
SH 80 or 110 mm
galvanised or stainless steel V2A

FILCOTEN® slot tops

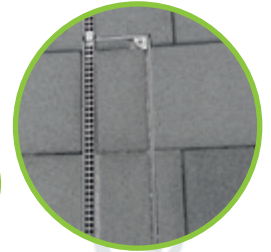
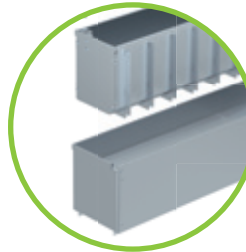
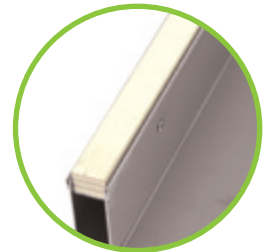
Slot tops are particularly suitable for architecturally challenging surfaces in which the design is just as important as the function.

The narrow slot width of 12,5 mm or 18 mm means that they can be perfectly fitted into the alignment of slots on the surface.

During the entire period of construction, the installation slot protection should remain in the slot top as this prevents deformation or contamination of the system.

The maintenance units are integrated into the channel thread. This does not damage the optics of the thread profile.

The recessed cover of the maintenance unit can quickly and easily be removed for cleaning purposes using a lifting grip.



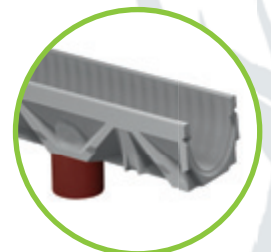
In-/Outlet cross-section

If channels have a length of more than 2 meters, the water flows just as well with a slot top off as with a classic cover.

The reason:

The inlet cross-section of the slot top is - as the inlet cross-section of a classic cover - larger than the flow cross-section of the connected sewer pipe.

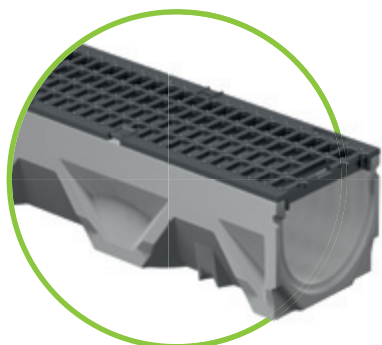
So always flows from the end only the amount of water, which allows the PVC pipe, regardless of the cover.





FILCOTEN® light

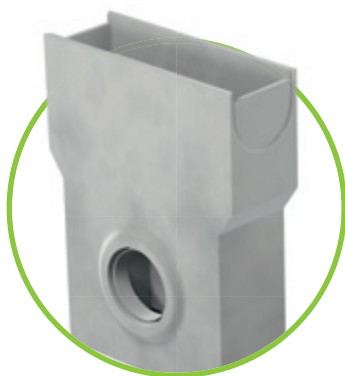
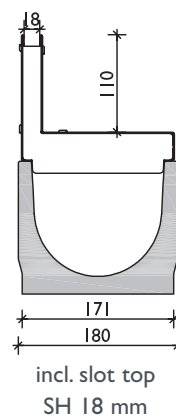
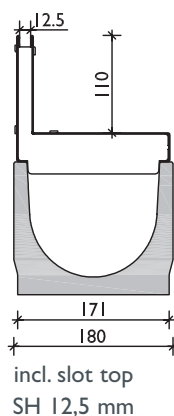
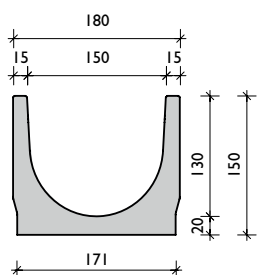
Nominal width 150 - load class C 250



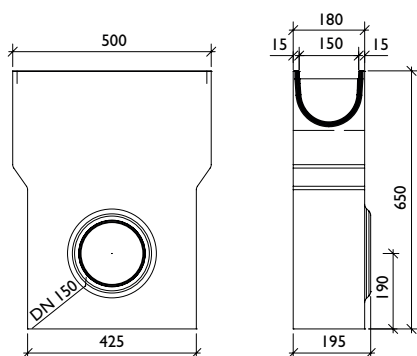
Channel body FILCOTEN® light 150.

Item no.	Channel type	Slope/ outlet	Height at channel end	Weight
I03I5000	I50/0	0 %	150 mm	19,7 kg
I03I5070	I51/0	0 % / DN150	150 mm	18,7 kg
I03I5050	I50/0	0 % / L=500	150 mm	9,9 kg

FILCOTEN® light 150



FILCOTEN® light sump unit 150



Accessories FILCOTEN® light 150.

Item no.	Accessories	Material	Weight
I03I5091	Sump unit 500/195/650 with pipe coupling DN 150	FILCOTEN	45,0 kg
22516	Sediment bucket for sump unit	plastic	0,3 kg
30030	Odour trap made of PVC bends DN 150/87°	plastic	3,9 kg
30057	Drain trap for sump unit DN 150 for backfitting	plastic	0,2 kg
I90I5230	Front/end cap	galvan. steel	0,5 kg
I90I5232	End cap with outlet DN 100	galvan. steel	0,4 kg
I90I5330	Front/end cap	stainless steel V2A	0,5 kg
I90I5332	End cap with outlet DN 100	stainless steel V2A	0,4 kg
32080	Locking clip for mesh gratings	galvan. steel	0,1 kg
32067	Locking clip for ductile iron mesh gratings	black coated	0,1 kg
32068	Fixing clip for ductile iron mesh gratings	black coated	0,1 kg



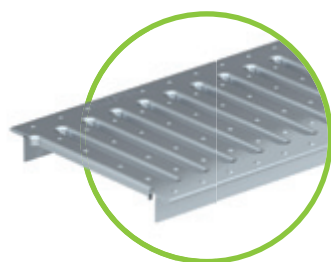
Accessory details including additional images = page 16

Gratings FILCOTEN® light 150.

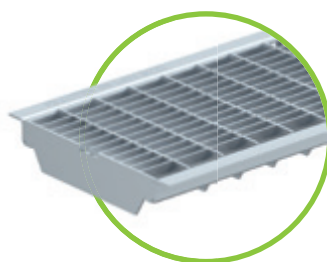
Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/ pc.	Inlet cross-section
17015200	1. Slotted grating	galvanised steel	1000/178/3	A 15 kN	SW 8/130	2,9 kg	390 cm²/m
17015201		galvanised steel	500/178/3	A 15 kN	SW 8/130	1,5 kg	390 cm²/m
17015210	2. Mesh grating	galvanised steel	1000/178/2	B 125 kN	MW 30/10	4,6 kg	1195 cm²/m
17015211		galvanised steel	500/178/2	B 125 kN	MW 30/10	2,3 kg	1195 cm²/m
17015100	3. Ductile iron mesh gr.	ductile iron	500/178/7	C 250 kN	MW 15/28	4,6 kg	740 cm²/m

Slot tops asymmetric FILCOTEN® light 150.

Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/ pc.	Inlet cross-section
17115243	4. Slot tops SH 110mm	galvanised steel	1000/173/143	C 250 kN	SW 12,5	6,7 kg	125 cm²/m
17115244		galvanised steel	500/173/143	C 250 kN	SW 12,5	3,3 kg	125 cm²/m
17115343		stainless steel V2A	1000/173/143	C 250 kN	SW 12,5	6,7 kg	125 cm²/m
17115344		stainless steel V2A	500/173/143	C 250 kN	SW 12,5	3,3 kg	125 cm²/m
17115233		galvanised steel	1000/173/143	C 250 kN	SW 18	6,7 kg	180 cm²/m
17115234		galvanised steel	500/173/143	C 250 kN	SW 18	3,3 kg	180 cm²/m
17115333		stainless steel V2A	1000/173/143	C 250 kN	SW 18	6,7 kg	180 cm²/m
17115334		stainless steel V2A	500/173/143	C 250 kN	SW 18	3,3 kg	180 cm²/m
37951	Slot inlays SW 18mm	galvanised steel	L = 1000	square perforation 8/8 mm		0,2 kg	
37956		stainless steel V2A	L = 1000	square perforation 8/8 mm		0,2 kg	
17115281	Maintenance unit SH 110mm	galvanised steel	500/173/143	C 250 kN	SW 12,5	6,0 kg	125 cm²/m
17115381		stainless steel V2A	500/173/143	C 250 kN	SW 12,5	6,0 kg	125 cm²/m
17115295		galvanised steel	500/173/143	C 250 kN	SW 18	6,0 kg	180 cm²/m
17115395		stainless steel V2A	500/173/143	C 250 kN	SW 18	6,0 kg	180 cm²/m



1. Slotted grating
cl. A - SW 8/130
galvanised steel



2. Mesh grating
MW 30/10 - cl. B -
galvanised steel



3. Ductile iron
mesh grating
MW 15/28 - cl. C



4. Slot top
cl. C - SH 110 mm
SW 12,5 or 18 mm,
galvanised or
stainless steel V2A

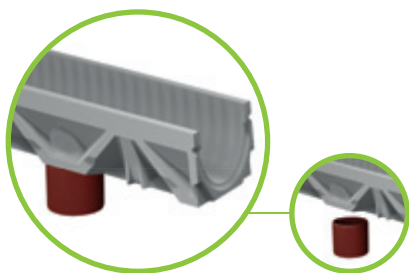


Special slot tops on request!

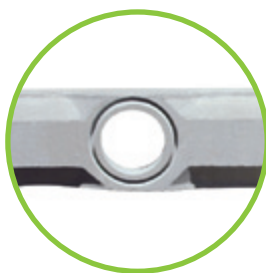


FILCOTEN[®] light

Accessories



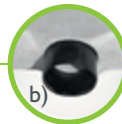
Bottom outlet made of PVC sewer pipes - on site installation



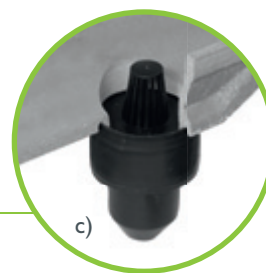
Prefabricated DN 100 outlet opening



a) Odour trap for bottom outlet consisting of 3 pieces



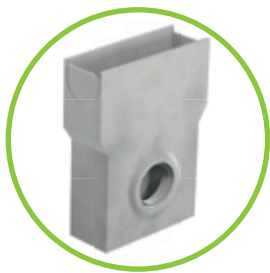
b) Outlet pipe of foul-air trap is inserted into outlet opening from below before installation.



c) The two remaining parts complete the foul-air trap - finished!



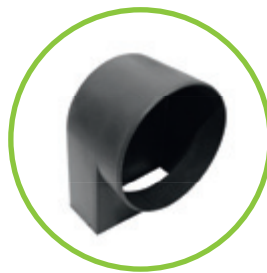
Positioning of outlet opening: channel end to outlet centre = 250 mm



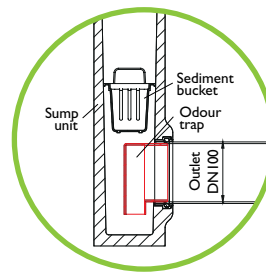
FILCOTEN light sump unit L=500 mm, to fit NW



Sediment bucket in plastic for sump unit to fit NW - acts as a dirt trap



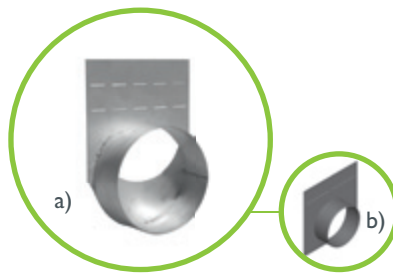
Retrofittable odour trap for sump unit DN 100 or 150
Installation: Insert the odour trap from the inside and connect with the sewage pipe.



Odour trap made of PVC bends for sump units - suitable for sump units with outlets DN 150/200



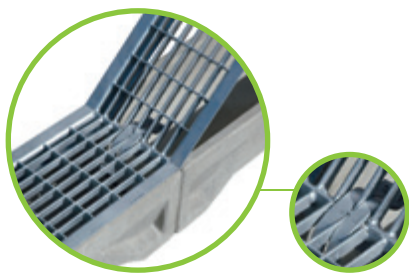
Front- /end cap NW 100/150



a) End cap with outlet NW 100
b) End cap with outlet NW 150



Front- /end cap FILCOTEN light mini



Adjustment of the mesh gratings with locking clip



Locking clip for ductile iron mesh gratings

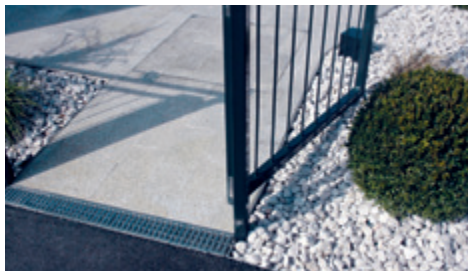


Locking clip for mesh gratings



Fixing clip for ductile iron mesh gratings

References



Additional **safety aspects** for channel & grate: **FILCOTEN**[®] tec

The FILCOTEN[®] tec channel system offers the superior characteristics of FILCOTEN[®] and supplements these with additional safety aspects. Anchoring ribs ensure a secure bonding with the surrounding concrete bed. The special design of the galvanised steel rails allows for secure grating locking with the fiX self-locking system. Adjacent covering surfaces can easily be attached to the edges of the rails. The FILCOTEN[®] tec mini is the shallow channel for limited heights applications. The channel system is resilient up to class C 250 (in accordance with EN 1433)

Areas of use

Optimal for installation in pedestrianised areas, parks, sports and leisure facilities, car parks and similar surfaces.

Load class C 250

Galvanised steel rails

The special design of the galvanised steel rails allows for secure grating locking with the fiX self-locking system.

Smooth surface

The surface of FILCOTEN[®] is smoother than concrete, ensuring the best flow and self-cleaning characteristics.

Safety seam

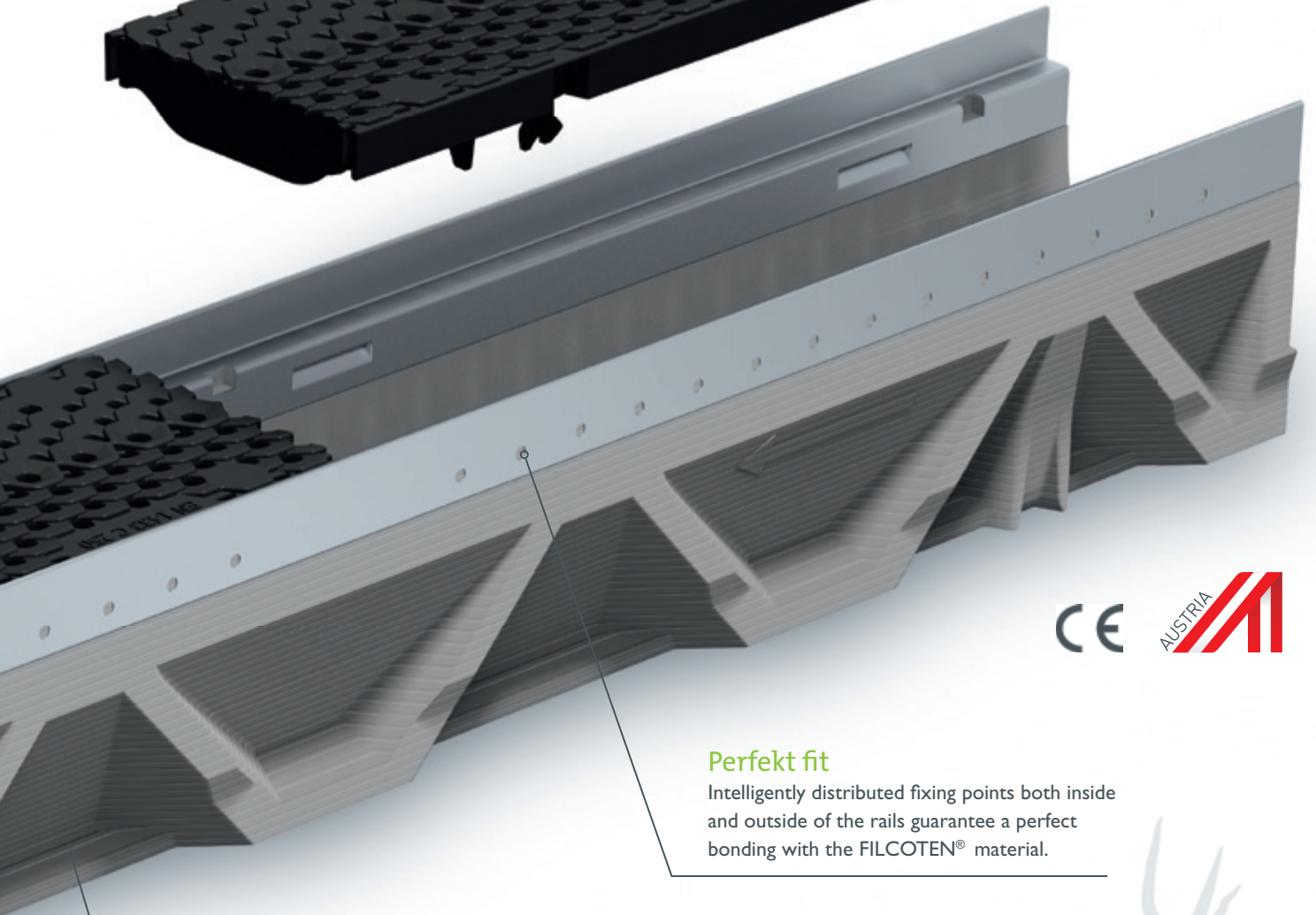
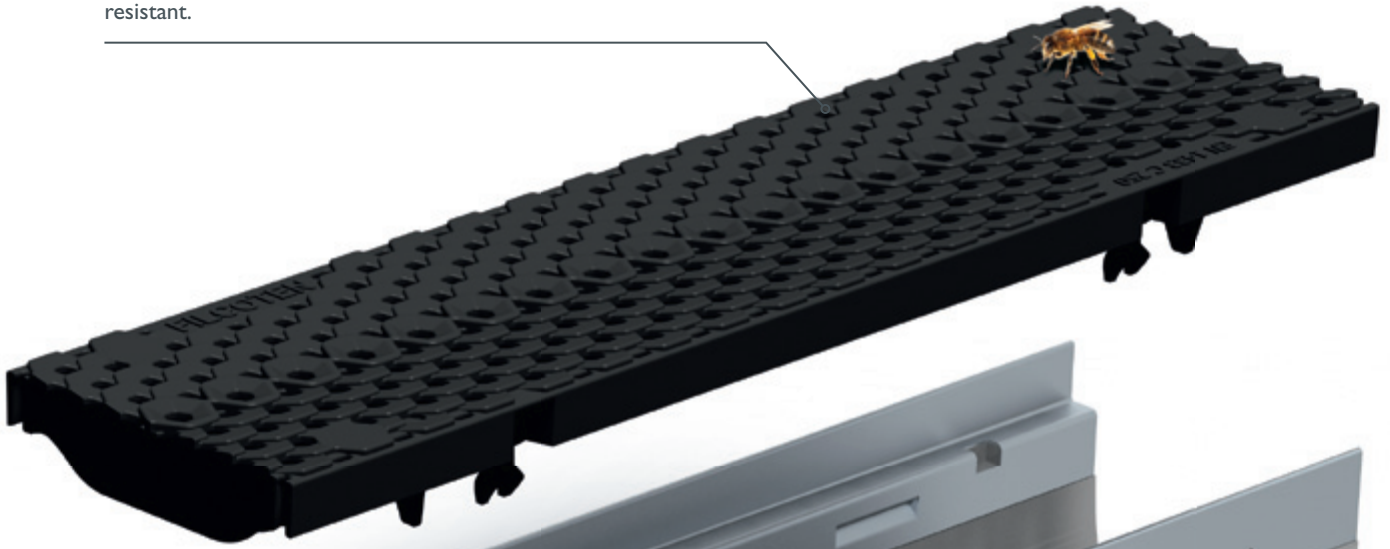
A sealable safety seam enables a sealed connection between the individual modules.



GRASPOINTNER
Sustainable innovation.

COMBee-design grating

Unique honeycomb and scaled surface structure design with central marking line, makes this grating ideal for aesthetic applications. Hydraulically optimized inlet sections and heel-proof for pedestrian areas. The Filcoten composite grating is 100% corrosion resistant, can be fully recycled and is UV, frost and heat resistant.



Perfekt fit

Intelligently distributed fixing points both inside and outside of the rails guarantee a perfect bonding with the FILCOTEN® material.

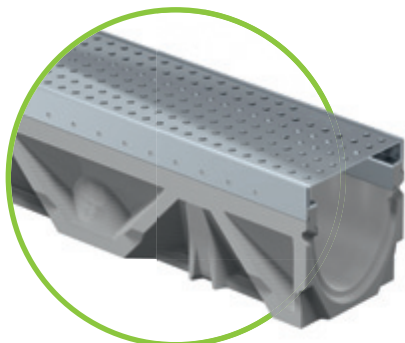
Anchoring ribs

The innovative FILCOTEN® production and moulding technology made designing anchoring ribs, therefore ensuring a secure bonding with the surrounding concrete bed.

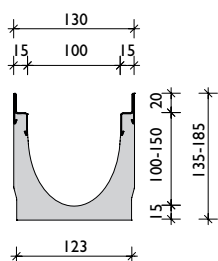


FILCOTEN[®] tec

Nominal width 100 - load class C 250



FILCOTEN[®] tec 100

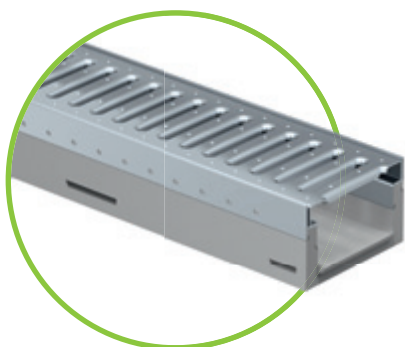


Channel body FILCOTEN[®] tec 100.

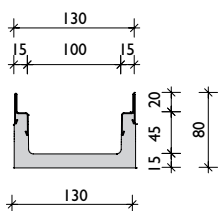
Item no.	Channel type	Slope/ outlet	Height at channel end	Weight
I04I0200	I00/0	0 %	I35 mm	I3,0 kg
I04I026I	I00/5-0	0 %	I60 mm	I6, I kg
I04I0262	I00/I0-0	0 %	I85 mm	I8,7 kg
I04I020I	I00/I	0,5 %	I40 mm	I3,4 kg
I04I0202	I00/2	0,5 %	I45 mm	I4, I kg
I04I0203	I00/3	0,5 %	I50 mm	I4,8 kg
I04I0204	I00/4	0,5 %	I55 mm	I5,4 kg
I04I0205	I00/5	0,5 %	I60 mm	I5,9 kg
I04I0206	I00/6	0,5 %	I65 mm	I6,4 kg
I04I0207	I00/7	0,5 %	I70 mm	I6,8 kg
I04I0208	I00/8	0,5 %	I75 mm	I7,4 kg
I04I0209	I00/9	0,5 %	I80 mm	I8,0 kg
I04I02I0	I00/I0	0,5 %	I85 mm	I8,5 kg
I04I0270	I0I/0	0 % / DN I00	I35 mm	I2,7 kg
I04I027I	I0I/5-0	0 % / DN I00	I60 mm	I5,8 kg
I04I0272	I0I/I0-0	0 % / DN I00	I85 mm	I8,4 kg
I04I0250	I00/0	0 % / L=500	I35 mm	6,6 kg
I04I025I	I00/5-0 for drilling I)	0 % / L=500	I60 mm	9,4 kg
I04I0252	I00/I0-0	0 % / L=500	I85 mm	9,4 kg

I) for side and bottom drilling - details on side 34

Channel body FILCOTEN[®] tec mini 100.



FILCOTEN[®] tec mini 100



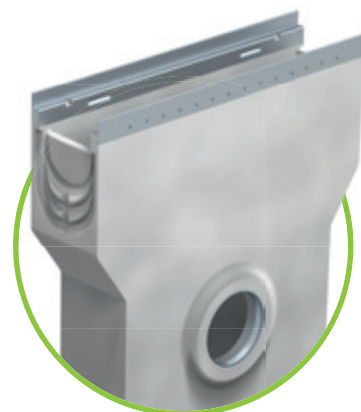
Item no.	Channel type	Slope/ outlet	Height at channel end	Weight
I02I020I	mini	0 %	80 mm	9, I kg
I02I027I	mini	0 % / DN I00	80 mm	8,8 kg

Accessories FILCOTEN® tec 100.

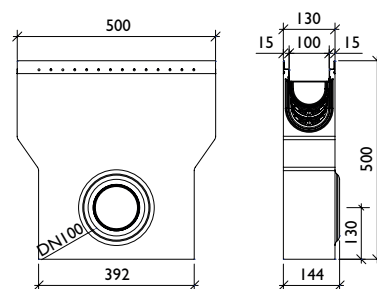
Item no.	Accessories	Material	Weight
10410291	Sump unit V 500/144/500 with pipe coupling DN 100	FILCOTEN	24,0 kg
22515	Sediment bucket for sump unit	plastic	0,2 kg
30030	Odour trap made of PVC bends DN 150/87°	plastic	3,9 kg
30056	Drain trap for sump unit DN 100 for backfitting	plastic	0,1 kg
30019	Drain trap for bottom outlet DN 100	plastic	0,2 kg
19010200	Front/end cap (tec mini)	galvan. steel	0,1 kg
19010230	Front/end cap	galvan. steel	0,3 kg
19010231	End cap with outlet DN 100	galvan. steel	0,4 kg
32087	Anti-vandalism locking device NW 100		0,1 kg



Accessory details including additional images = page 30



FILCOTEN® tec sump unit 100





FILCOTEN[®] tec

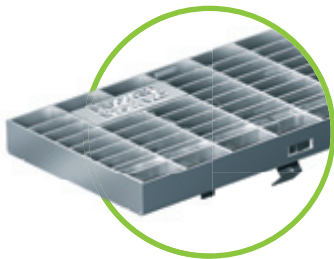
Nominal width 100 - load class C 250

Gratings FILCOTEN[®] tec 100 with fiX self-locking system.

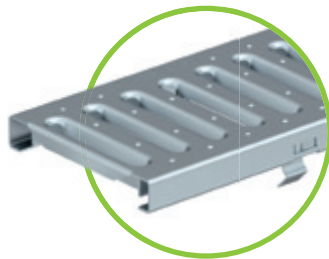
Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/ pc.	Inlet cross-section
17010220	1. Mesh grating	galvanised steel	1000/122/20	B 125 kN	MW 30/10	2,8 kg	980 cm ² /m
17010221		galvanised steel	500/122/20	B 125 kN	MW 30/10	1,4 kg	950 cm ² /m
17010222		galvanised steel	1000/122/20	C 250 kN	MW 30/10	3,3 kg	910 cm ² /m
17010223		galvanised steel	500/122/20	C 250 kN	MW 30/10	1,6 kg	885 cm ² /m
17010202	2. Slotted grating	galvanised steel	1000/122/20	A 15 kN	SW 8/80	1,5 kg	225 cm ² /m
17010203		galvanised steel	500/122/20	A 15 kN	SW 8/80	0,8 kg	225 cm ² /m
17010206		galvanised steel	1000/122/20	C 250 kN	SW 8/80	4,5 kg	225 cm ² /m
17010207		galvanised steel	500/122/20	C 250 kN	SW 8/80	2,2 kg	275 cm ² /m
17010204	3. Perforated grat.	galvanised steel	1000/122/20	A 15 kN	Ø 6,0 mm	1,9 kg	170 cm ² /m
17010205		galvanised steel	500/122/20	A 15 kN	Ø 6,0 mm	1,0 kg	170 cm ² /m
17010228		galvanised steel	1000/122/20	C 250 kN	Ø 6,0 mm	3,3 kg	170 cm ² /m
17010229		galvanised steel	500/122/20	C 250 kN	Ø 6,0 mm	1,7 kg	170 cm ² /m
	4. Design grating	on request	walkable and accessible for wheelchair				
17010402	5. COMBee grating	Polyamide	500/123/20	C 250 kN	Ø 7,3 mm	1,1 kg	290 cm ² /m
17010101	6. Ductile iron bar gr.	ductil iron	500/122/20	C 250 kN	MW 29/13	3,2 kg	505 cm ² /m
17010106		ductil iron	500/122/20	C 250 kN	MW 29/6	3,6 kg	320 cm ² /m

Slot tops asymmetric FILCOTEN[®] tec 100.

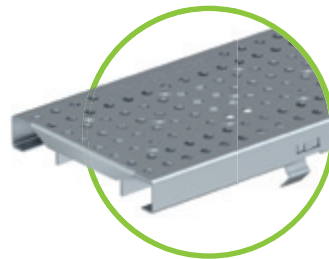
Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/ pc.	Inlet cross-section
17110237	7. Slot tops SH 80mm	galvanised steel	1000/123/103	B 125 kN	SW 12,5	4,4 kg	125 cm ² /m
17110238		galvanised steel	500/123/103	B 125 kN	SW 12,5	2,2 kg	125 cm ² /m
17110243	7. Slot tops SH 110mm	galvanised steel	1000/123/133	C 250 kN	SW 12,5	5,4 kg	125 cm ² /m
17110244		galvanised steel	500/123/133	C 250 kN	SW 12,5	2,7 kg	125 cm ² /m
17110343		stainless steel V2A	1000/123/133	C 250 kN	SW 12,5	5,4 kg	125 cm ² /m
17110344		stainless steel V2A	500/123/133	C 250 kN	SW 12,5	2,7 kg	125 cm ² /m
17110233		galvanised steel	1000/123/133	C 250 kN	SW 18	5,4 kg	180 cm ² /m
17110234		galvanised steel	500/123/133	C 250 kN	SW 18	2,7 kg	180 cm ² /m
17110333		stainless steel V2A	1000/123/133	C 250 kN	SW 18	5,4 kg	180 cm ² /m
17110334		stainless steel V2A	500/123/133	C 250 kN	SW 18	2,7 kg	180 cm ² /m
37951	Slot inlays SW 18mm	galvanised steel	L = 1000	square perforation 8/8 mm		0,2 kg	
37956		stainless steel V2A	L = 1000	square perforation 8/8 mm		0,2 kg	
17110297	Maintenance unit SH80mm	galvanised steel	500/123/103	B 125 kN	SW 12,5	4,1 kg	125 cm ² /m
17110281	Maintenance unit SH110mm	galvanised steel	500/123/133	C 250 kN	SW 12,5	5,0 kg	125 cm ² /m
17110381		stainless steel V2A	500/123/133	C 250 kN	SW 12,5	5,0 kg	125 cm ² /m
17110295		galvanised steel	500/123/133	C 250 kN	SW 18	5,0 kg	180 cm ² /m
17110395		stainless steel V2A	500/123/133	C 250 kN	SW 18	5,0 kg	180 cm ² /m



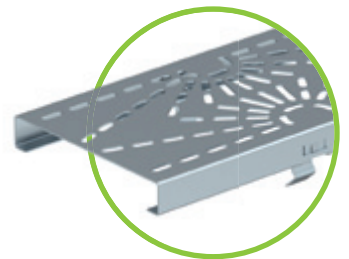
1. Mesh grating MW 30/10
cl. B or cl. C -
galvanised steel



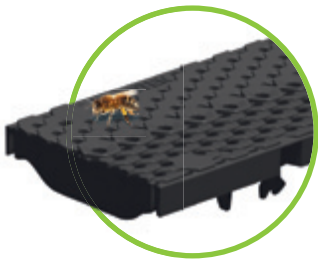
2. Slotted grating SW 8/80
cl. A or cl. C -
galvanised steel



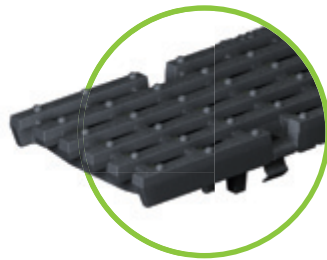
3. Perforated grating hole
diameter 6,0 mm, cl A or cl. C
galvanised steel



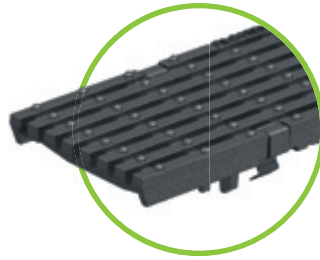
4. Design grating
different designs
on request



5. COMBee-design grating
hole diameter 7,3 mm
cl. C



6. Ductile iron elongated
bar grating
MW 29/13, cl. C



6. Ductile iron elongated
bar grating, MW 29/6,
narrow SW, Kl. C



7. Slot top, cl. C
SH 80 or 110 mm,
SW 12,5 or 18mm,
galvanised or
stainless steel V2A

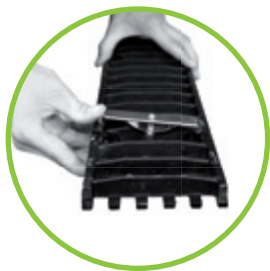
i Special slot tops
on request!

A connection, that keeps our promises.

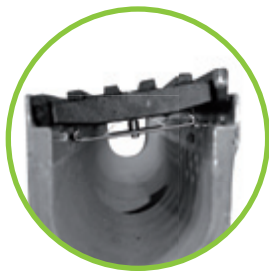
The various different fixing options for our grates meet the requirements of channel standard EN 1433. Furthermore, they also allow you to adapt the safety measures to your own specification.

The new fiX connection ensures a rapid, secure fixing of the grating while the option for protection against vandalism goes one step further.

More security on request: optional system to protect against vandalism (for NW 100, 150 and 200)



Step 1: Push the system to protect against vandalism into the fitting springs provided for this purpose until it snaps into place.



Step 2: Attach the grating as described for the fiX-connection below into the FILCOTEN tec/pro channel.



Step 3: Push the grating firmly into the channel until it snaps into place.



Step 4: Lock the system to protect against vandalism by twisting the bolt.



You can find a video on how to use this system on: www.bg-company.com

Simply secure: the four-point fiX connection

The new 'fiX-connection' enables a four-point quick release safety device for the grating in the channel. The fitting springs for each grate variant engage in the indent in the rail provided for this, and the grating is simply and securely mounted.

- The gratings are initially inserted on one side of the channel with an exact fit and are locked by means of a simple turning of the grate.
- When doing this, look out for the openings in the rail (see A) in which the studs of the system to protect against slipping engage.
- The fiX-connection fixes the gratings in the rail. These connections can be detached by tugging.
- The fiX-connection can be used with ductile iron and mesh grates.



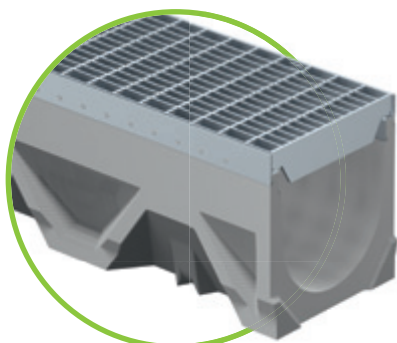
References



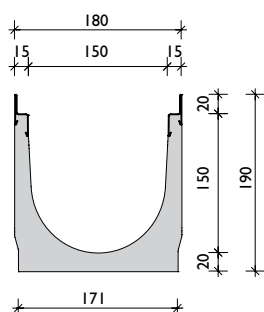


FILCOTEN[®] tec

Nominal width 150 - load class C 250

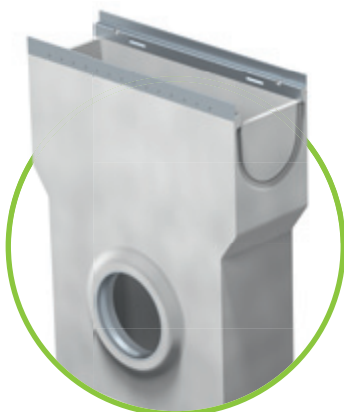


FILCOTEN[®] tec 150

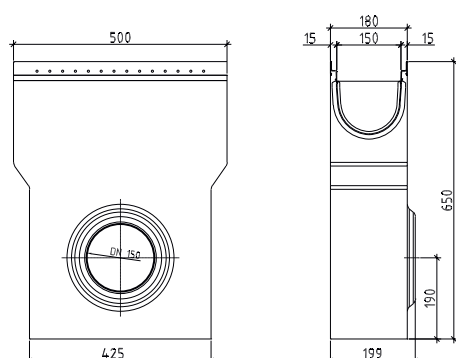


Channel body FILCOTEN[®] tec 150.

Item no.	Channel type	Slope/ outlet	Height at channel end	Weight
I04I5200	I50/0	0 %	190 mm	22,2 kg
I04I5270	I51/0	0 % / DN150	190 mm	21,2 kg
I04I5250	I50/0	0 % / L=500	190 mm	11,2 kg



FILCOTEN[®] tec sump unit 150



Accessories FILCOTEN[®] tec 150.

Item no.	Accessories	Material	Weight
I04I5291	Sump unit V 500/199/650 with pipe coupling DN 150	FILCOTEN	40,0 kg
22516	Sediment bucket for sump unit	plastic	0,3 kg
30030	Odour trap made of PVC bends DN 150/87°	plastic	3,9 kg
30057	Drain trap for sump unit DN 150 for backfitting	plastic	0,2 kg
I90I5230	Front/end cap	galvan. steel	0,5 kg
I90I5231	End cap with outlet DN 150	galvan. steel	0,6 kg
32088	Anti-vandalism locking device NW 150		0,1 kg



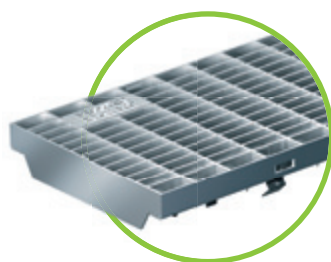
Accessory details including additional images = page 30

Gratings FILCOTEN® tec 150 with fix self-locking system.

Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/ pc.	Inlet cross-section
17015220	1. Mesh grating	galvanised steel	1000/172/20	B 125 kN	MW 30/10	4,6 kg	1330 cm²/m
17015221		galvanised steel	500/172/20	B 125 kN	MW 30/10	2,4 kg	1285 cm²/m
17015222		galvanised steel	1000/172/20	C 250 kN	MW 30/10	6,9 kg	1280 cm²/m
17015223		galvanised steel	500/172/20	C 250 kN	MW 30/10	3,6 kg	1240 cm²/m
17015101	2. Ductile iron bar gr.	ductile iron	500/172/20	C 250 kN	MW 29/13	4,9 kg	710 cm²/m

Slot tops asymmetric FILCOTEN® tec 150.

Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/ pc.	Inlet cross-section
17115243	3. Slot tops SH 110mm	galvanised steel	1000/173/143	C 250 kN	SW 12,5	6,7 kg	125 cm²/m
17115244		galvanised steel	500/173/143	C 250 kN	SW 12,5	3,3 kg	125 cm²/m
17115343		stainless steel V2A	1000/173/143	C 250 kN	SW 12,5	6,7 kg	125 cm²/m
17115344		stainless steel V2A	500/173/143	C 250 kN	SW 12,5	3,3 kg	125 cm²/m
17115233		galvanised steel	1000/173/143	C 250 kN	SW 18	6,7 kg	180 cm²/m
17115234		galvanised steel	500/173/143	C 250 kN	SW 18	3,3 kg	180 cm²/m
17115333		stainless steel V2A	1000/173/143	C 250 kN	SW 18	6,7 kg	180 cm²/m
17115334		stainless steel V2A	500/173/143	C 250 kN	SW 18	3,3 kg	180 cm²/m
37951	Slot inlays SW 18mm	galvanised steel	L = 1000	square perforation 8/8 mm		0,2 kg	
37956		stainless steel V2A	L = 1000	square perforation 8/8 mm		0,2 kg	
17115281	Maintenance unit SH 110mm	galvanised steel	500/173/143	C 250 kN	SW 12,5	6,0 kg	125 cm²/m
17115381		stainless steel V2A	500/173/143	C 250 kN	SW 12,5	6,0 kg	125 cm²/m
17115295		galvanised steel	500/173/143	C 250 kN	SW 18	6,0 kg	180 cm²/m
17115395		stainless steel V2A	500/173/143	C 250 kN	SW 18	6,0 kg	180 cm²/m



1. Mesh grating MW 30/10
cl. B or cl. C -
galvanised steel



2. Ductile iron
bar grating
MW 29/13, cl. C



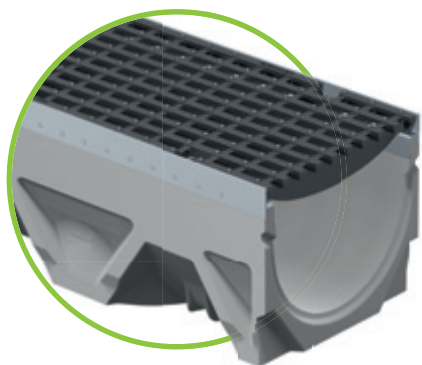
3. Slot top, cl. C
SW 12,5 or 18 mm
SH 110 mm, galvanised or
stainless steel V2A

i Special slot tops
on request!

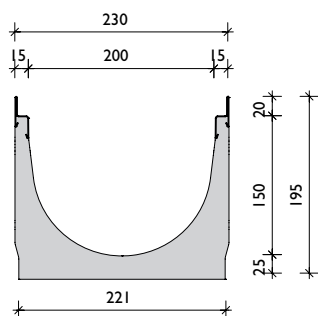


FILCOTEN[®] tec

Nominal width 200 - load class C 250

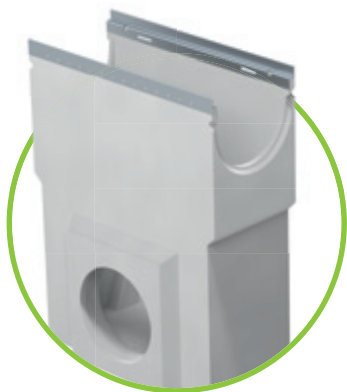


FILCOTEN[®] tec 200

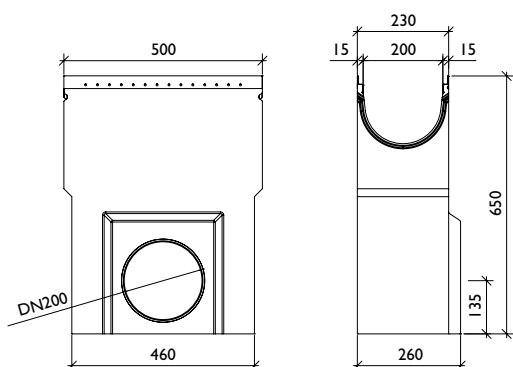


Channel body FILCOTEN[®] tec 200.

Item no.	Channel type	Slope/ outlet	Height at channel end	Weight
I0220200	200/H=195	0 %	195 mm	28,8 kg
I0220270	201/H=195	0 % / DN200	195 mm	27,0 kg
I0220250	200/H=195	0 % / L=500	195 mm	14,5 kg



FILCOTEN[®] tec sump unit 200



Accessories FILCOTEN[®] tec 200.

Item no.	Accessories	Material	Weight
I0220291	Sump unit V 500/260/650 with pipe coupling DN 200	FILCOTEN	48,0 kg
22512	Sediment bucket for sump unit	plastic	0,7 kg
30040	Odour trap made of PVC bends DN 200/87°	plastic	7,4 kg
I9020230	Front/end cap	galvan. steel	0,8 kg
I9020231	End cap with outlet DN 200	galvan. steel	1,1 kg
32089	Anti-vandalism locking device NW 200		0,1 kg



Accessory details including additional images = page 30

Gratings FILCOTEN® tec 200 with fiX self-locking system.

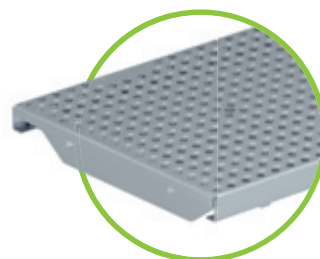
Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/pc.	Inlet cross-section
17020220	1. Mesh grating	galvanised steel	1000/222/20	B 125 kN	MW 30/10	6,0 kg	1775 cm ² /m
17020221		galvanised steel	500/222/20	B 125 kN	MW 30/10	3,1 kg	1720 cm ² /m
17020222		galvanised steel	1000/222/20	C 250 kN	MW 30/10	8,8 kg	1650 cm ² /m
17020223		galvanised steel	500/222/20	C 250 kN	MW 30/10	4,5 kg	1595 cm ² /m
17020101	2. Ductile iron bar gr.	ductile iron	500/222/20	C 250 kN	MW 29/13	7,3 kg	955 cm ² /m
17020228	3. Perforated grating	galvanised steel	1000/222/20	C 250 kN	Ø 6,0 mm	13,5 kg	265 cm ² /m
17020229		galvanised steel	500/222/20	C 250 kN	Ø 6,0 mm	6,7 kg	260 cm ² /m



1. Mesh grating MW 30/10
cl. B or cl. C
galvanised steel



2. Ductile iron
bar grating
MW 29/13, cl. C



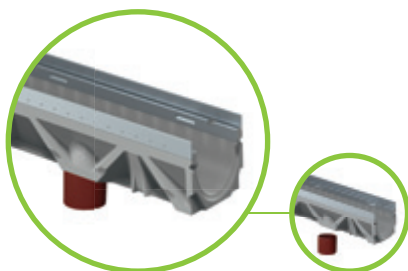
3. Perforated grating
Ø 6,0 mm, cl. C
galvanised steel



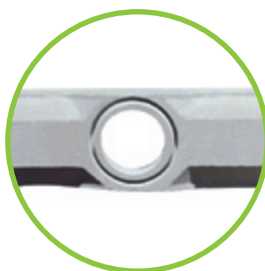


FILCOTEN[®] tec

Accessories



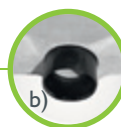
Bottom outlet made of PVC sewer pipes - on site installation



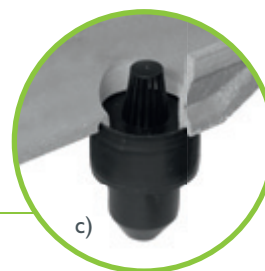
Prefabricated DN 100 outlet opening



a) Odour trap for bottom outlet consisting of 3 pieces



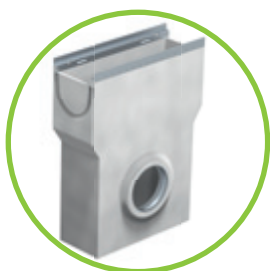
b) Outlet pipe of foul-air trap is inserted into outlet opening from below before installation.



c) The two remaining parts complete the foul-air trap - finished!



Positioning of outlet opening: channel end to outlet centre = 250 mm



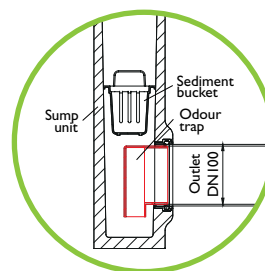
FILCOTEN tec sump unit, L=500 mm, to fit NW



Sediment bucket in plastic for sump unit to fit NW - acts as a dirt trap



Retrofittable odour trap for sump unit DN 100 or 150
Installation: Insert the odour trap from the inside and connect with the sewage pipe.



Odour trap made of PVC bends for sump units - suitable for sump units with outlets DN 150/200



Front- /end cap for all NW



End cap with outlet for all NW



Front- /end cap
FILCOTEN tec mini



Anti-vandalism locking device for all gratings - except slotted gratings.
Required per grating: 2 pcs.



Detailed Description page 24

References



Only a heavyweight when it comes to features:

With our FILCOTEN® channel, you don't have compromise quality or durability. It's stable yet lightweight, and can be adapted to suit your needs. FILCOTEN® is available with galvanized or stainless steel rails up to class E 600 (acc. to EN 1433). The cast-iron rail model is tested up to class F 900 (acc. to EN 1433). FILCOTEN® channels are also available in a shallow version with a lower overall height.

Load class E 600 / F 900

Applications

Because FILCOTEN® can handle a high load capacity, it is especially suitable for installation in industrial areas such as in factories, warehouses and garages. However, with its sleek good looks in can just as easily be used in public places like railway stations, and pedestrian or residential areas.

Rail variants

The FILCOTEN® pro channel system is available with various integral rails made of galvanised steel, stainless steel or cast iron.

Channel geometry / smooth surface

The optimised channel geometry and the smooth surface ensure maximum flow and self-cleaning effects.

Vertical outlet on every channel

Every channel body has a vertical outlet possibility.

Sealant groove

Sealant groove for waterproof installation.



GRASPOINTNER
Sustainable innovation.

Bolted iron grip

As an alternative to the fiX closure, the bar grating can include up to cl. E 600 kN, and the slotted grating can include up to cl. F 900 kN, with 4 point bolting in to the cast iron rail. Corresponding gratings are available depending on the diameter. All fittings are supplied as a kit.

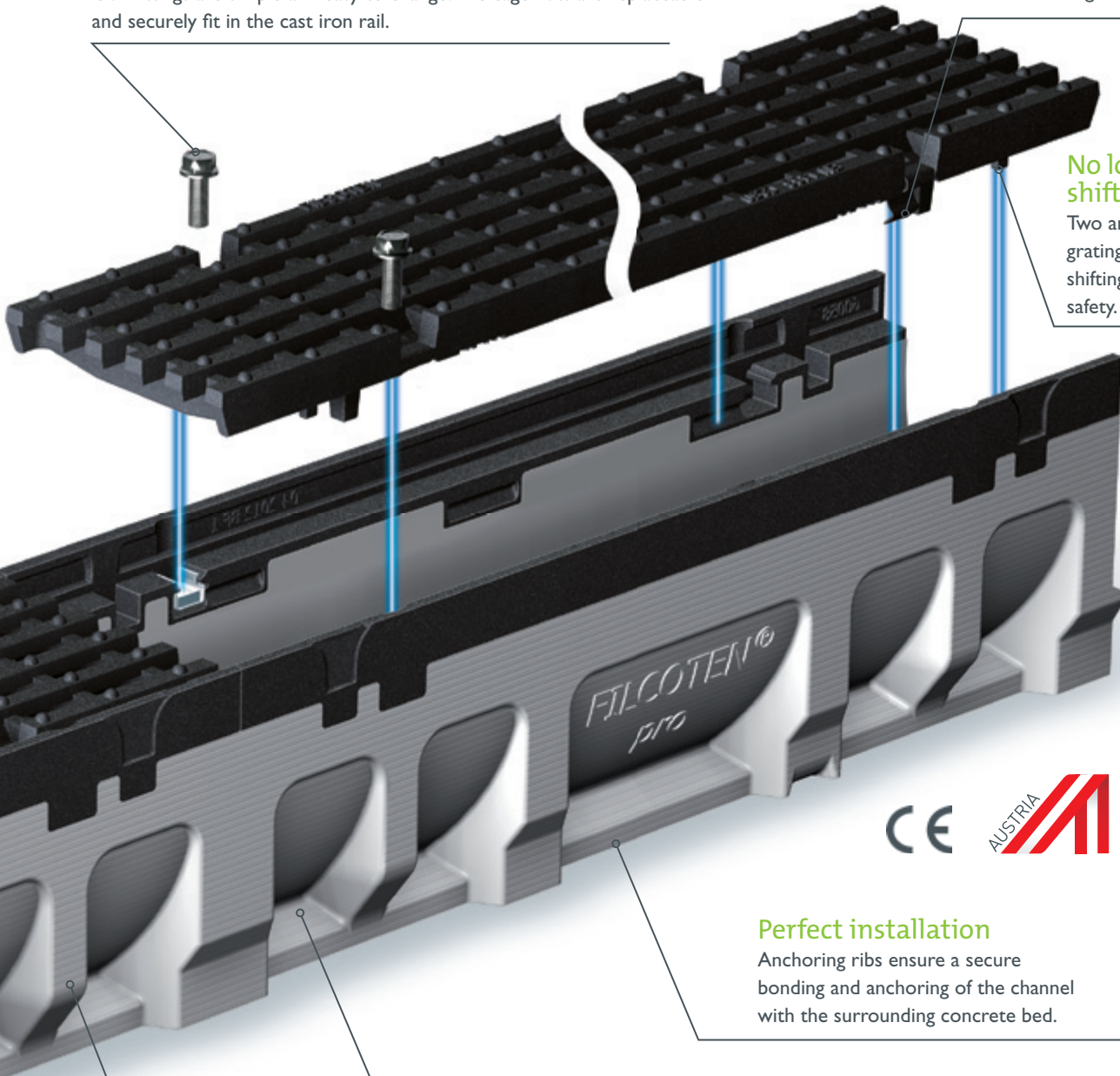
Our fittings are simple and easy to change. The cage nuts are replaceable and securely fit in the cast iron rail.

Safe purchase for the grate

The intelligent fiX connection enables a simple four-point quick-release safety device for the grate in the channel.

No longitudinal shift of grating

Two anti-sliding lugs secure the grating against any longitudinal shifting and provides additional safety.



Perfect installation

Anchoring ribs ensure a secure bonding and anchoring of the channel with the surrounding concrete bed.

Innovative production technology

The innovative FILCOTEN® production and moulding technology made designing anchoring ribs, therefore ensuring a secure bonding with the surrounding concrete bed.

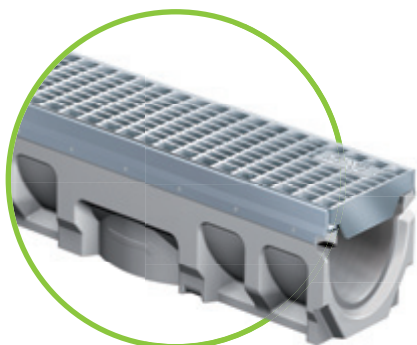
Stable thanks to the FEM analysis

The FEM analysis is a computer-assisted process which simulates exactly which constructions withstand which loads. The more accurately the effect of the forces is known, the easier it is to choose the optimal solution.

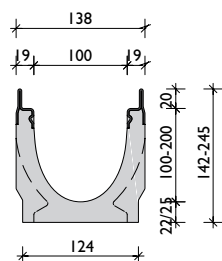


FILCOTEN[®] pro

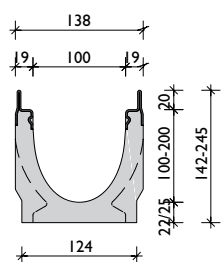
Nominal width 100 - load class E / F



FILCOTEN[®] pro V/E 100
incl. galvanised- or stainless steel edges



FILCOTEN[®] pro G 100
incl. cast iron edges



Channel body FILCOTEN[®] pro 100.

Channel type	Slope/ outlet	Height at channel end	Weight	1) Item no. cast iron edges	2) Item no. galvaniz. edges	2) Item no. stainl. steel edges
100/0	0 %	142 mm	19,1 kg	10610100	10610200	10610300
100/5-0	0 %	170 mm	22,6 kg	10610161	10610261	10610361
100/10-0	0 %	195 mm	26,1 kg	10610162	10610262	10610362
100/20-0	0 %	245 mm	26,9 kg	10610164	10610264	10610364
100/1	0,5 %	150 mm	19,5 kg	10610101	10610201	10610301
100/2	0,5 %	155 mm	20,2 kg	10610102	10610202	10610302
100/3	0,5 %	160 mm	20,9 kg	10610103	10610203	10610303
100/4	0,5 %	165 mm	21,6 kg	10610104	10610204	10610304
100/5	0,5 %	170 mm	22,3 kg	10610105	10610205	10610305
100/6	0,5 %	175 mm	23,0 kg	10610106	10610206	10610306
100/7	0,5 %	180 mm	23,3 kg	10610107	10610207	10610307
100/8	0,5 %	185 mm	24,0 kg	10610108	10610208	10610308
100/9	0,5 %	190 mm	24,7 kg	10610109	10610209	10610309
100/10	0,5 %	195 mm	25,4 kg	10610110	10610210	10610310
101/0	0 % / DN100	142 mm	18,7 kg	10610170	10610270	10610370
101/5-0	0 % / DN100	170 mm	22,2 kg	10610171	10610271	10610371
101/10-0	0 % / DN100	195 mm	25,7 kg	10610172	10610272	10610372
101/20-0	0 % / DN100	245 mm	26,5 kg	10610174	10610274	10610374
100/0	0 % / L=500	142 mm	9,7 kg	10610180	10610280	10610380
100/5-0 for drilling 3)	0 % / L=500 DN100	170 mm	13,5 kg	10610181	10610281	10610381
100/10-0	0 % / L=500	195 mm	11,6 kg	10610182	10610282	10610382

1) With cast-iron edges, tested up to cl. F 900 kN acc. to EN 1433.

Installation according to the manufactures installation instructions!

2) With galvanized or stainless steel edges, tested according to EN 1433 cl. E 600 kN.

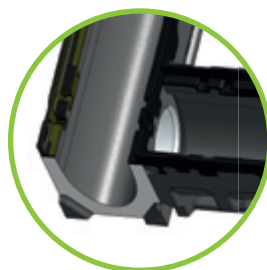
3) for side and bottom drilling - details below

Channel body with lateral outlet

A drain hole DN 100 is possible at any point.

The position of sided drilling (left / right) can be selected.

Different diameters depending on the nominal width:



max. sided drilling diameter	
NW 100	ø 86 mm
NW 150	ø 130 mm
NW 200	ø 180 mm

T-pieces or train crossings can be produced easily and quickly.



For questions, please contact our application engineering department.

Channel body FILCOTEN® pro mini 100.

Channel type	Slope/outlet	Height at channel end	Weight	1) Item no. cast iron edges	2) Item no. galvaniz. edges	2) Item no. stainl. steel edges
mini	0 %	60 mm	9,1 kg		I05I0200	I05I0300
mini	0 %	80 mm	11,1 kg	I05I0101	I05I0201	I05I0301
mini	0 % / DN100	60 mm	8,9 kg		I05I0270	I05I0370
mini	0 % / DN100	80 mm	10,9 kg	I05I0171	I05I0271	I05I0371

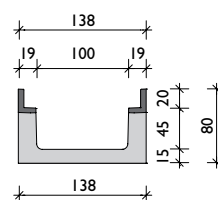
1) With cast-iron edges, tested up to cl. F 900 kN acc. to EN 1433.

Installation according to the manufactures installation instructions!

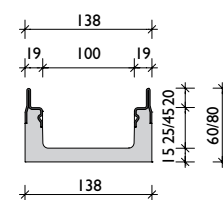
2) With galvanized or stainless steel edges, tested according to EN 1433 cl. E 600 kN.



FILCOTEN® pro mini
G/V/E 100



incl. cast iron edges



incl. galvanised or
stainless steel edges

Accessories FILCOTEN® pro 100.

Item no.	Accessories	Material	Weight
I06I0190	Sump unit G 500/145/600 with pipe coupling DN 100	FILCOTEN	32,9 kg
I06I0290	Sump unit V 500/145/600 with pipe coupling DN 100	FILCOTEN	32,4 kg
I06I0390	Sump unit E 500/145/600 with pipe coupling DN 100	FILCOTEN	32,4 kg
22515	Sediment bucket for sump unit	plastic	0,2 kg
30030	Odour trap made of PVC bends DN 150/87°	plastic	3,9 kg
30056	Drain trap for sump unit DN 100 for backfitting	plastic	0,1 kg
30019	Drain trap for bottom outlet DN 100	plastic	0,2 kg
I90I0200	Front/end cap (pro mini)	galvan. steel	0,1 kg
I90I0300	Front/end cap (pro mini)	stainless steel V2A	0,1 kg
I90I0230	Front/end cap (0-10-0)	galvan. steel	0,3 kg
I90I0231	End cap with outlet DN 100 (0-10-0)	galvan. steel	0,4 kg
I90I0330	Front/end cap (0-10-0)	stainless steel V2A	0,3 kg
I90I0331	End cap with outlet DN 100 (0-10-0)	stainless steel V2A	0,4 kg
I90I0215	Front/end cap (20-0)	galvan. steel	0,3 kg
I90I0216	End cap with outlet DN 100 (20-0)	galvan. steel	0,4 kg
I90I0315	Front/end cap (20-0)	stainless steel V2A	0,3 kg
I90I0316	End cap with outlet DN 100 (20-0)	stainless steel V2A	0,4 kg
32087	Anti-vandalism locking device NW 100		0,1 kg
32103*	Bolts/nuts for class E ductile iron bar grating (8 pcs. required per m)		
32109*	Bolts/nuts (stainless steel) for class E ductile iron bar grating (8 pcs. required per m)		

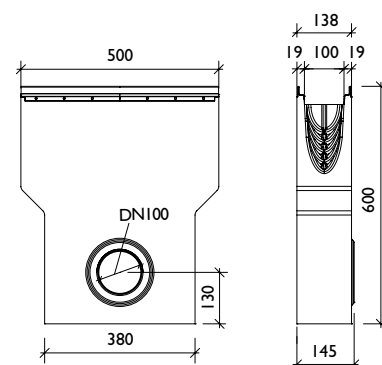
* 4-point bolting only available in cast-iron edge



Accessory details including additional images = page 54



FILCOTEN® pro sump unit G/V/E 100





Nominal width 100 - load class E / F

Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/ pc.	Inlet cross-section
17010220	1. Mesh grating	galvanised steel	1000/122/20	B 125 kN	MW 30/10	2,8 kg	980 cm²/m
17010221		galvanised steel	500/122/20	B 125 kN	MW 30/10	1,4 kg	950 cm²/m
17010222		galvanised steel	1000/122/20	C 250 kN	MW 30/10	3,3 kg	910 cm²/m
17010223		galvanised steel	500/122/20	C 250 kN	MW 30/10	1,6 kg	885 cm²/m
17010322		stainless steel V2A	1000/122/20	C 250 kN	MW 30/10	3,3 kg	910 cm²/m
17010323	2. Mesh grating	stainless steel V2A	500/122/20	C 250 kN	MW 30/10	1,6 kg	885 cm²/m
17010226		galvanised steel	1000/122/20	D 400 kN	MW 25/10	7,4 kg	765 cm²/m
17010227		galvanised steel	500/122/20	D 400 kN	MW 25/10	3,7 kg	760 cm²/m
17010326		stainless steel V2A	1000/122/20	D 400 kN	MW 25/10	7,4 kg	765 cm²/m
17010327		stainless steel V2A	500/122/20	D 400 kN	MW 25/10	3,7 kg	760 cm²/m
17010206	3. Slotted grating	galvanised steel	1000/122/20	C 250 kN	SW 8/80	4,5 kg	275 cm²/m
17010207		galvanised steelt	500/122/20	C 250 kN	SW 8/80	2,2 kg	275 cm²/m
17010306		stainless steel V2A	1000/122/20	C 250 kN	SW 8/80	4,5 kg	275 cm²/m
17010307		stainless steel V2A	500/122/20	C 250 kN	SW 8/80	2,2 kg	275 cm²/m
17010228	4. Perforated grat.	galvanised steel	1000/122/20	C 250 kN	Ø 6,0 mm	3,3 kg	170 cm²/m
17010229		galvanised steel	500/122/20	C 250 kN	Ø 6,0 mm	1,7 kg	170 cm²/m
17010328		stainless steel V2A	1000/122/20	C 250 kN	Ø 6,0 mm	3,3 kg	170 cm²/m
17010329		stainless steel V2A	500/122/20	C 250 kN	Ø 6,0 mm	1,7 kg	170 cm²/m
	5. Design grating	on request	walkable and accessible for wheelchair				
17010402	6. COMBee grating	Polyamide	500/123/20	C 250 kN	Ø 7,3 mm	1,1 kg	290 cm²/m
17010101	7. Ductile iron bar gr.	ductile iron	500/122/20	C 250 kN	MW 29/13	3,2 kg	505 cm²/m
17010106		ductile iron	500/122/20	C 250 kN	MW 29/6	3,6 kg	320 cm²/m
17010104		ductile iron	500/122/20	D 400 kN	MW 29/13	3,4 kg	495 cm²/m
17010110		ductile iron	500/122/20	D 400 kN	MW 28/9	3,4 kg	470 cm²/m
17010105	8. Ductile iron slot. gr.	ductile iron	500/122/20	E 600 kN	SW 14/100	3,8 kg	465 cm²/m

[illegible]

Slot tops asymmetric FILCOTEN® pro 100.

Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/pc.	Inlet cross-section
171 10243	II. Slot tops SH I 10mm	galvanised steel	1000/123/133	C 250 kN	SW 12,5	5,4 kg	125 cm²/m
171 10244		galvanised steel	500/123/133	C 250 kN	SW 12,5	2,7 kg	125 cm²/m
171 10343		stainless steel V2A	1000/123/133	C 250 kN	SW 12,5	5,4 kg	125 cm²/m
171 10344		stainless steel V2A	500/123/133	C 250 kN	SW 12,5	2,7 kg	125 cm²/m
171 10233		galvanised steel	1000/123/133	C 250 kN	SW 18	5,4 kg	180 cm²/m
171 10234		galvanised steel	500/123/133	C 250 kN	SW 18	2,7 kg	180 cm²/m
171 10333		stainless steel V2A	1000/123/133	C 250 kN	SW 18	5,4 kg	180 cm²/m
171 10334		stainless steel V2A	500/123/133	C 250 kN	SW 18	2,7 kg	180 cm²/m
37951	Slot inlays SW 18mm	galvanised steel	L = 1000	square perforation 8/8 mm		0,2 kg	
37956		stainless steel V2A	L = 1000	square perforation 8/8 mm		0,2 kg	
171 10281	Maintenance unit SH I 10mm	galvanised steel	500/123/133	C 250 kN	SW 12,5	5,0 kg	125 cm²/m
171 10381		stainless steel V2A	500/123/133	C 250 kN	SW 12,5	5,0 kg	125 cm²/m
171 10295		galvanised steel	500/123/133	C 250 kN	SW 18	5,0 kg	180 cm²/m
171 10395		stainless steel V2A	500/123/133	C 250 kN	SW 18	5,0 kg	180 cm²/m

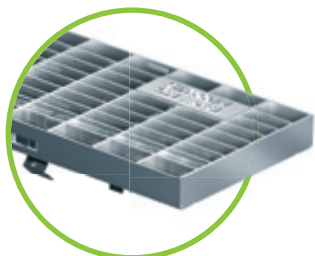


Special slot tops and slot tops for cl. D 400 kN on request!

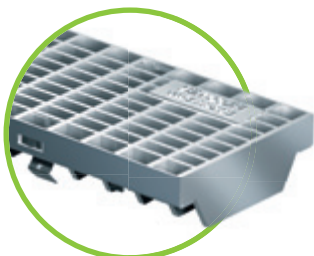


FILCOTEN[®] pro

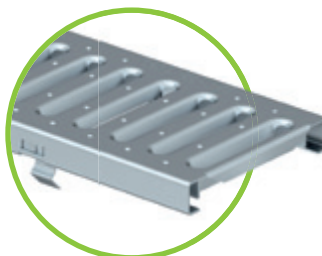
Nominal width 100 - load class E / F



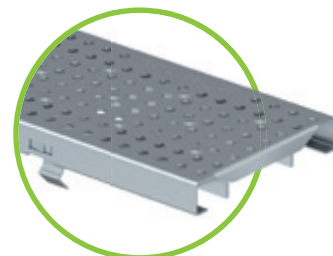
1. Mesh grating MW 30/10
cl. B galvanised steel, cl. C galvaniz.
or stainless steel V2A



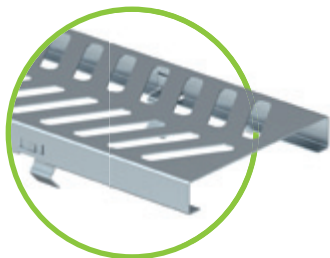
2. Mesh grating MW 25/10
cl. D galvanised or
stainless steel V2A



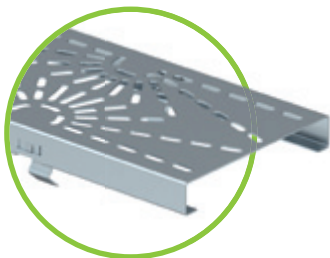
3. Slotted grating SW 8/80
cl. C galvaniz. or
stainless steel V2A



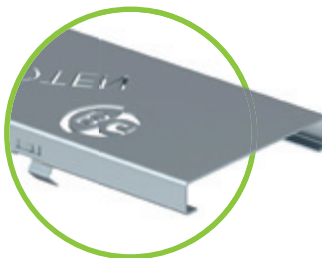
4. Perforated grating
Ø 6,0 mm, cl. C
galvaniz. or stainless steel V2A



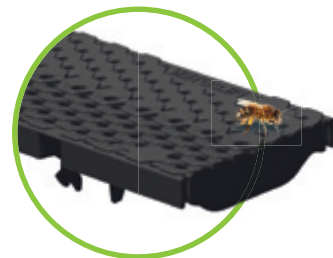
5. Design grating „Rallye“
on request



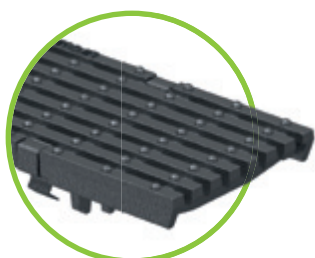
5. Design grating „Rays“
on request



5. Design grating
„your design“
on request



6. COMBee-design grating
hole diameter 7,3 mm
cl. C



7. Ductile iron elongated
bar grating, narrow slot
MW 29/6, cl. C



7. Ductile iron elongated
bar grating
MW 29/13, cl. C or cl. D



7. Ductile iron elongated
bar grating
MW 28/9, cl. D



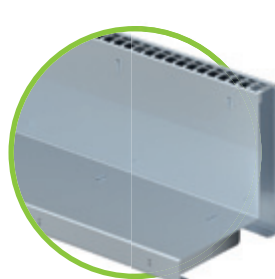
8. Ductile iron
slotted grating
SW 14/100, cl. E



9. Ductile iron elongated
bar grating
MW 22/13, cl. E
*4-point bolting, only
available in cast iron edge



10. Ductile iron slot. gr.
SW 14/100, cl. F
*4-point bolting, only
available in cast iron edge



11. Slot top, cl. C (cl. D on request)
SW 12,5 mm / 18 mm, SH 110 mm
galvanised or stainless steel V2A

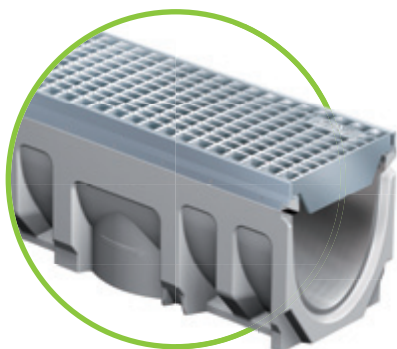
References



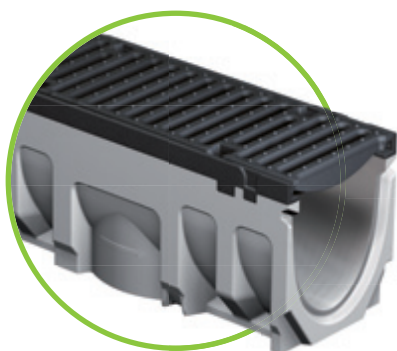
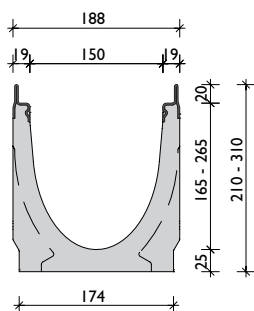


FILCOTEN[®] pro

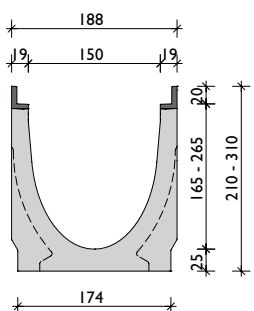
Nominal width 150 - load class E / F



FILCOTEN[®] pro V/E 150
incl. galvanised- or stainless steel edges



FILCOTEN[®] pro G 150
incl. cast iron edges



Channel body FILCOTEN[®] pro 150.

Channel type	Slope/ outlet	Height at channel end	Weight	1) Item no. cast iron edges	2) Item no. galvaniz. edges	2) Item no. stainl. steel edges
150/0	0 %	210 mm	31,8 kg	10615100	10615200	10615300
150/5-0	0 %	235 mm	35,6 kg	10615161	10615261	10615361
150/10-0	0 %	260 mm	38,8 kg	10615162	10615262	10615362
150/20-0	0 %	310 mm	48,7 kg	10615164	10615264	10615364
150/1	0,5 %	215 mm	32,5 kg	10615101	10615201	10615301
150/2	0,5 %	220 mm	33,2 kg	10615102	10615202	10615302
150/3	0,5 %	225 mm	33,9 kg	10615103	10615203	10615303
150/4	0,5 %	230 mm	34,6 kg	10615104	10615204	10615304
150/5	0,5 %	235 mm	35,3 kg	10615105	10615205	10615305
150/6	0,5 %	240 mm	35,9 kg	10615106	10615206	10615306
150/7	0,5 %	245 mm	36,6 kg	10615107	10615207	10615307
150/8	0,5 %	250 mm	37,2 kg	10615108	10615208	10615308
150/9	0,5 %	255 mm	37,9 kg	10615109	10615209	10615309
150/10	0,5 %	260 mm	38,5 kg	10615110	10615210	10615310
151/0	0 % / DN150	210 mm	30,7 kg	10615170	10615270	10615370
151/5-0	0 % / DN150	235 mm	34,5 kg	10615171	10615271	10615371
151/10-0	0 % / DN150	260 mm	37,7 kg	10615172	10615272	10615372
151/20-0	0 % / DN150	310 mm	47,6 kg	10615174	10615274	10615374
150/0	0 % / L=500	210 mm	15,7 kg	10615180	10615280	10615380
150/5-0 for drilling 3)	0 % / L=500 DN150	235 mm	21,2 kg	10615181	10615281	10615381
150/10-0	0 % / L=500	260 mm	19,8 kg	10615182	10615282	10615382

1) With cast-iron edges, tested up to cl. F 900 kN acc. to EN 1433.

Installation according to the manufactures installation instructions!

2) With galvanised or stainless steel edges, tested according to EN 1433 cl. E 600 kN.

3) for side and bottom drilling - details on side 34

Channel body FILCOTEN® pro mini 150.

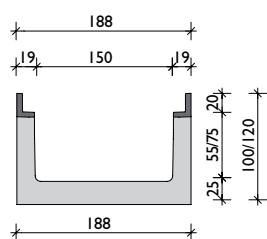
Channel type	Slope/outlet	Height at channel end	Weight	1) Item no. cast iron edges	2) Item no. galvaniz. edges	2) Item no. stainl. steel edges
mini	0 %	100 mm	18,8 kg	10515102	10515202	10515302
mini	0 % / DN150	100 mm	18,0 kg	10515172	10515272	10515372
mini	0 %	120 mm	21,0 kg	10515100	10515200	10515300
mini	0 % / DN150	120 mm	20,2 kg	10515170	10515270	10515370
mini	0 %	170 mm	24,8 kg	10515101	10515201	10515301
mini	0 % / DN150	170 mm	23,9 kg	10515171	10515271	10515371

1) With cast-iron edges, tested up to cl. F 900 kN acc. to EN 1433.

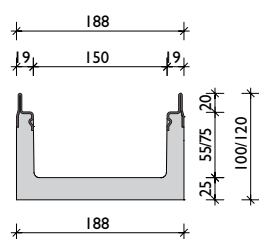
Installation according to the manufactures installation instructions!

2) With galvanized or stainless steel

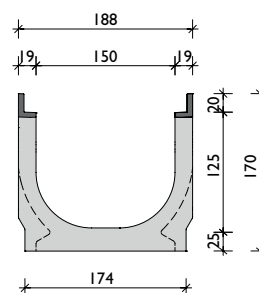
edges, tested according to EN 1433 cl. E 600 kN.



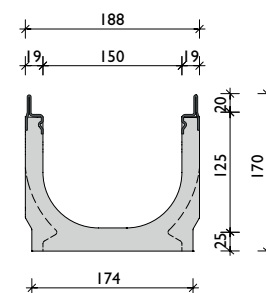
incl. cast iron edges



incl. galvanised or stainless steel edges



incl. cast iron edges
H=170 mm

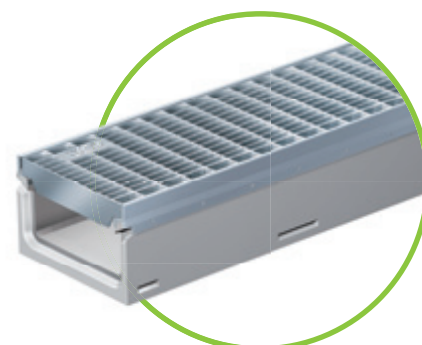


incl. galvanised or stainless steel edges, H=170 mm

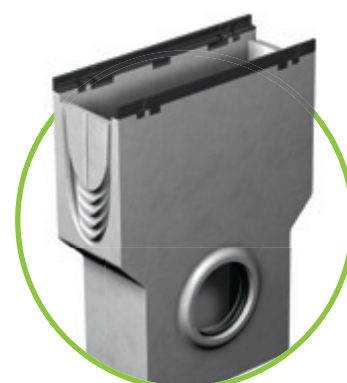
Accessories FILCOTEN® pro 150.

Item no.	Accessories	Material	Weight
10615190	Sump unit G 500/200/690 with pipe coupling DN 150	FILCOTEN	45,0 kg
10615290	Sump unit V 500/200/690 with pipe coupling DN 150	FILCOTEN	44,5 kg
10615390	Sump unit E 500/200/690 with pipe coupling DN 150	FILCOTEN	44,5 kg
22516	Sediment bucket for sump unit	plastic	0,3 kg
30030	Odour trap made of PVC bends DN 150/87°	plastic	3,9 kg
30057	Drain trap for sump unit DN 150 for backfitting	plastic	0,2 kg
19015200	Front/end cap (pro mini)	galvan. steel	0,1 kg
19015300	Front/end cap (pro mini)	stainless steel V2A	0,1 kg
19015230	Front/end cap (0-10-0 und BH 170)	galvan. steel	0,5 kg
19015231	End cap with outlet DN 150 (0-10-0 und BH 170)	galvan. steel	0,6 kg
19015330	Front/end cap (0-10-0 und BH 170)	stainless steel V2A	0,5 kg
19015331	End cap with outlet DN 150 (0-10-0 und BH 170)	stainless steel V2A	0,6 kg
19015215	Front/end cap (20-0)	galvan. steel	0,6 kg
19015216	End cap with outlet DN 150 (20-0)	galvan. steel	0,7 kg
19015315	Front/end cap (20-0)	stainless steel V2A	0,6 kg
19015316	End cap with outlet DN 150 (20-0)	stainless steel V2A	0,7 kg
32088	Anti-vandalism locking device NW 150		0,1 kg
32103*	Bolts/nuts for class E ductile iron bar grating (8 pcs. required per m)		
32109*	Bolts/nuts (stainless steel) for class E ductile iron bar grating (8 pcs. required per m)		

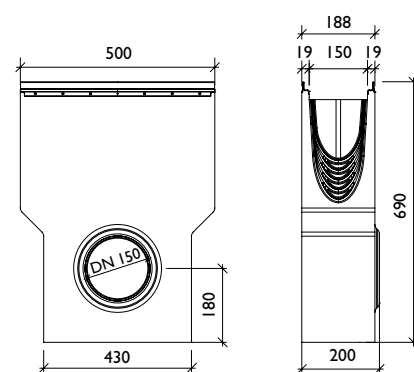
* 4-point bolting only available in cast-iron edge



FILCOTEN® pro mini
G/V/E 150



FILCOTEN® pro sump unit G/V/E 150





FILCOTEN[®] pro

Nominal width 150 - load class E / F

Gratings FILCOTEN[®] pro 150 with fiX self-locking system.

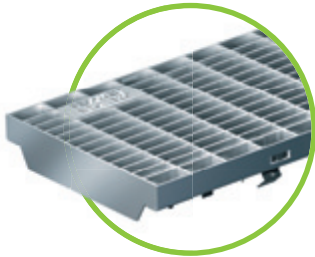
Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/ pc.	Inlet cross-section
17015220	1. Mesh grating	galvanised steel	1000/172/20	B 125 kN	MW 30/10	4,6 kg	1330 cm ² /m
17015221		galvanised steel	500/172/20	B 125 kN	MW 30/10	2,4 kg	1285 cm ² /m
17015222		galvanised steel	1000/172/20	C 250 kN	MW 30/10	6,9 kg	1280 cm ² /m
17015223		galvanised steel	500/172/20	C 250 kN	MW 30/10	3,6 kg	1240 cm ² /m
17015322		stainless steel V2A	1000/172/20	C 250 kN	MW 30/10	6,9 kg	1280 cm ² /m
17015323		stainless steel V2A	500/172/20	C 250 kN	MW 30/10	3,6 kg	1240 cm ² /m
17015226	2. Mesh grating	galvanised steel	1000/172/20	D 400 kN	MW 25/10	10,4 kg	1080 cm ² /m
17015227		galvanised steel	500/172/20	D 400 kN	MW 25/10	5,3 kg	1075 cm ² /m
17015101	3. Ductile iron bar gr.	ductile iron	500/172/20	C 250 kN	MW 29/13	4,9 kg	710 cm ² /m
17015104		ductile iron	500/172/20	D 400 kN	MW 29/13	5,2 kg	710 cm ² /m
17015105	4. Ductile iron slot. gr.	ductile iron	500/172/20	E 600 kN	SW 14/150	7,0 kg	710 cm ² /m

Gratings FILCOTEN[®] pro 150 4-point bolting.

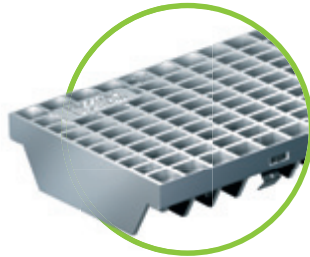
Item no.	Gratings 4-point bolting	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/ pc.	Inlet cross-section
17015103*	5. Ductile iron bar gr.	ductile iron	500/172/20	E 600 kN	MW 22/13	7,2 kg	640 cm ² /m
17015107*	6. Ductile iron slot. gr.	ductile iron	500/172/20	F 900 kN**	SW 14/150	7,3 kg	710 cm ² /m
** For class F 900 kN installation (e.g airport terminals), a final release of the installation details by the manufacturer must be followed!							

Slot tops asymmetric FILCOTEN[®] pro 150.

Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/ pc.	Inlet cross-section
17115243	7. Slot tops SH 110mm	galvanised steel	1000/173/143	C 250 kN	SW 12,5	6,7 kg	125 cm ² /m
17115244		galvanised steel	500/173/143	C 250 kN	SW 12,5	3,3 kg	125 cm ² /m
17115343		stainless steel V2A	1000/173/143	C 250 kN	SW 12,5	6,7 kg	125 cm ² /m
17115344		stainless steel V2A	500/173/143	C 250 kN	SW 12,5	3,3 kg	125 cm ² /m
17115233		galvanised steel	1000/173/143	C 250 kN	SW 18	6,7 kg	180 cm ² /m
17115234		galvanised steel	500/173/143	C 250 kN	SW 18	3,3 kg	180 cm ² /m
17115333		stainless steel V2A	1000/173/143	C 250 kN	SW 18	6,7 kg	180 cm ² /m
17115334		stainless steel V2A	500/173/143	C 250 kN	SW 18	3,3 kg	180 cm ² /m
37951	Slot inlays SW 18mm	galvanised steel	L = 1000	square perforation 8/8 mm		0,2 kg	
37956		stainless steel V2A	L = 1000	square perforation 8/8 mm		0,2 kg	
17115281	Maintenance unit SH 110mm	galvanised steel	500/173/143	C 250 kN	SW 12,5	6,0 kg	125 cm ² /m
17115381		stainless steel V2A	500/173/143	C 250 kN	SW 12,5	6,0 kg	125 cm ² /m
17115295		galvanised steel	500/173/143	C 250 kN	SW 18	6,0 kg	180 cm ² /m
17115395		stainless steel V2A	500/173/143	C 250 kN	SW 18	6,0 kg	180 cm ² /m



1. Mesh grating MW 30/10
cl. B galvanised steel
cl. C galvaniz. or stainless steel V2A



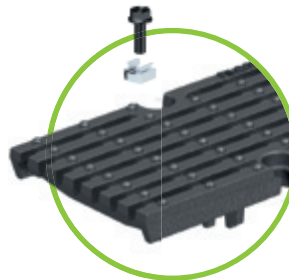
2. Mesh grating MW 25/10
cl. D galvanised steel



3. Ductile iron elongated
bar grating
MW 29/13,
cl. C or cl. D



4. Ductile iron
slotted grating
SW 14/150, cl. E



5. Ductile iron elongated
bar grating
MW 22/13, cl. E
*4-point bolting, only
available in cast iron edge



6. Ductile iron slot. grating
SW 14/150, cl. F
*4-point bolting, only
available in cast iron edge

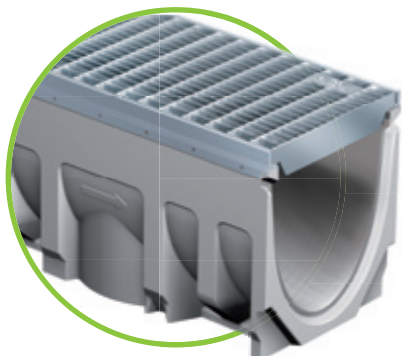


7. Slot top, cl. C (cl. D on request)
SW 12,5 mm / 18 mm, SH 110 mm
galvanised or stainless steel V2A

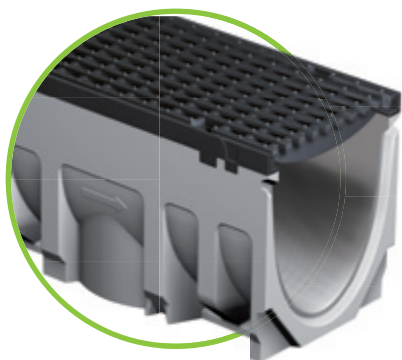
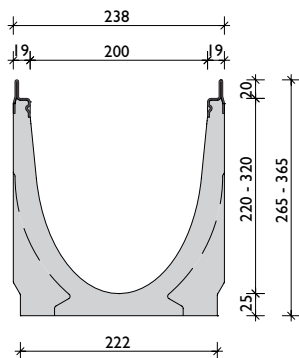


FILCOTEN[®] pro

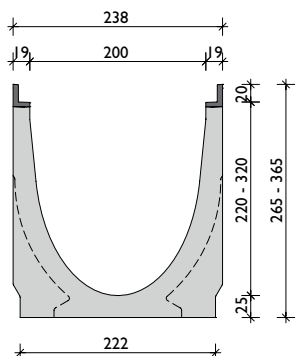
Nominal width 200 - load class E / F



FILCOTEN[®] pro V/E 200
incl. galvanised- or stainless steel edges



FILCOTEN[®] pro G 200
incl. cast iron edges



Channel body FILCOTEN[®] pro 200.

Channel type	Slope/ outlet	Height at channel end	Weight	1) Item no. cast iron edges	2) Item no. galvaniz. edges	2) Item no. stainl. steel edges
200/0	0 %	265 mm	45,0 kg	I0620100	I0620200	I0620300
200/5-0	0 %	290 mm	50,3 kg	I0620161	I0620261	I0620361
200/10-0	0 %	315 mm	55,3 kg	I0620162	I0620262	I0620362
200/20-0	0 %	365 mm	65,6 kg	I0620164	I0620264	I0620364
200/1	0,5 %	270 mm	45,5 kg	I0620101	I0620201	I0620301
200/2	0,5 %	275 mm	46,5 kg	I0620102	I0620202	I0620302
200/3	0,5 %	280 mm	47,5 kg	I0620103	I0620203	I0620303
200/4	0,5 %	285 mm	48,6 kg	I0620104	I0620204	I0620304
200/5	0,5 %	290 mm	49,6 kg	I0620105	I0620205	I0620305
200/6	0,5 %	295 mm	50,7 kg	I0620106	I0620206	I0620306
200/7	0,5 %	300 mm	51,7 kg	I0620107	I0620207	I0620307
200/8	0,5 %	305 mm	52,8 kg	I0620108	I0620208	I0620308
200/9	0,5 %	310 mm	53,8 kg	I0620109	I0620209	I0620309
200/10	0,5 %	315 mm	54,9 kg	I0620110	I0620210	I0620310
201/0	0 % / DN200	265 mm	42,1 kg	I0620170	I0620270	I0620370
201/5-0	0 % / DN200	290 mm	47,1 kg	I0620171	I0620271	I0620371
201/10-0	0 % / DN200	315 mm	52,1 kg	I0620172	I0620272	I0620372
201/20-0	0 % / DN200	365 mm	62,4 kg	I0620174	I0620274	I0620374
200/0	0 % / L=500	265 mm	22,6 kg	I0620180	I0620280	I0620380
200/5-0 for drilling 3)	0 % / L=500 DN200	290 mm	30,1 kg	I0620181	I0620281	I0620381
200/10-0	0 % / L=500	315 mm	27,5 kg	I0620182	I0620282	I0620382

1) With cast-iron edges, tested up to cl. F 900 kN acc. to EN 1433.

Installation according to the manufactures installation instructions!

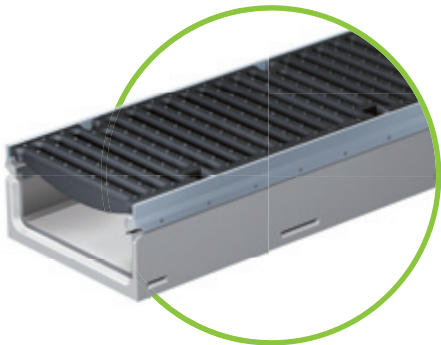
2) With galvanized or stainless steel edges, tested according to EN 1433 cl. E 600 kN.

3) for side and bottom drilling - details on side 34

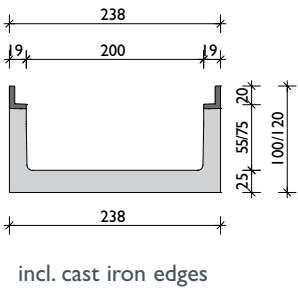
Channel body FILCOTEN® pro mini 200.

Channel type	Slope/outlet	Height at channel end	Weight	1) Item no. cast iron edges	2) Item no. galvaniz.edges	2) Item no. stainl. steel edges
mini	0 %	100 mm	21,6 kg	I0520102	I0520202	I0520302
mini	0 % / DN200	100 mm	20,2 kg	I0520172	I0520272	I0520372
mini	0 %	120 mm	24,0 kg	I0520100	I0520200	I0520300
mini	0 % / DN200	120 mm	22,6 kg	I0520170	I0520270	I0520370
mini	0 %	200 mm	31,2 kg	I0520101	I0520201	I0520301
mini	0 % / DN200	200 mm	29,8 kg	I0520171	I0520271	I0520371

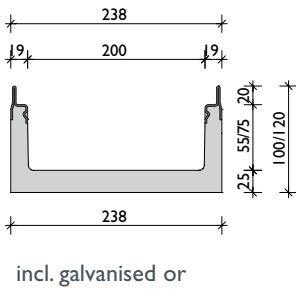
- 1) With cast-iron edges, tested up to cl. F 900 kN acc. to EN 1433.
Installation according to the manufactures installation instructions!
- 2) With galvanized or stainless steel edges, tested according to EN 1433 cl. E 600 kN.



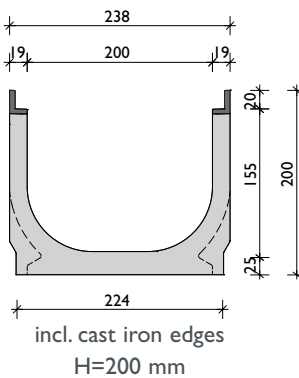
FILCOTEN® pro mini
G/V/E 200



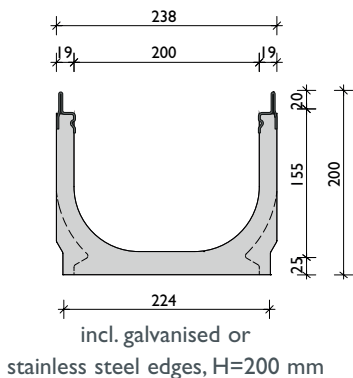
incl. cast iron edges



incl. galvanised or
stainless steel edges



incl. cast iron edges
H=200 mm

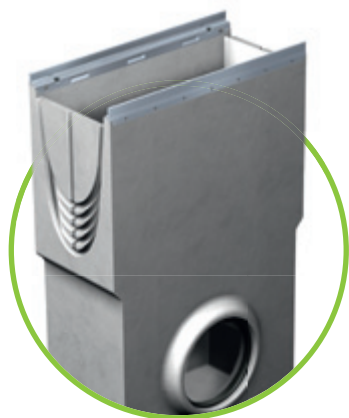


incl. galvanised or
stainless steel edges, H=200 mm

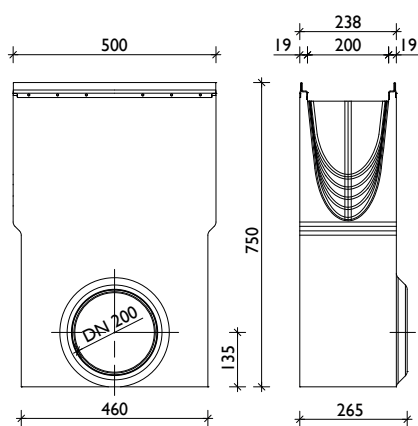


FILCOTEN[®] pro

Nominal width 200 - load class E / F



FILCOTEN[®] pro sump unit G/V/E 200



Accessories FILCOTEN[®] pro 200.

Item no.	Accessories	Material	Weight
I0620190	Sump unit G 500/265/750 with pipe coupling DN 200	FILCOTEN	48,4 kg
I0620290	Sump unit V 500/265/750 with pipe coupling DN 200	FILCOTEN	48,0 kg
I0620390	Sump unit E 500/265/750 with pipe coupling DN 200	FILCOTEN	48,0 kg
22512	Sediment bucket for sump unit	plastic	0,7 kg
30040	Odour trap made of PVC bends DN 200/87°	plastic	7,4 kg
I9015200	Front/end cap (pro mini H=100 and H=120)	galvan. steel	0,3 kg
I9015300	Front/end cap (pro mini H=100 and H=120)	stainless steel V2A	0,3 kg
I9020230	Front/end cap (0-10-0 and BH 200)	galvan. steel	0,8 kg
I9020231	End cap with outlet DN 200	galvan. steel	1,1 kg
I9020232	End cap with outlet DN 150 (pro mini H=200mm)	galvan. steel	0,5 kg
I9020330	Front/end cap (0-10-0 and BH 200)	stainless steel V2A	0,8 kg
I9020331	End cap with outlet DN 200	stainless steel V2A	1,1 kg
I9020332	End cap with outlet DN 150 (pro mini H=200mm)	stainless steel V2A	0,5 kg
I9020215	Front/end cap (20-0)	galvan. steel	0,9 kg
I9020216	End cap with outlet DN 200 (20-0)	galvan. steel	1,2 kg
I9020315	Front/end cap (20-0)	stainless steel V2A	0,9 kg
I9020316	End cap with outlet DN 200 (20-0)	stainless steel V2A	1,2 kg
32089	Anti-vandalism locking device NW 200		0,1 kg
32103*	Bolts/nuts for class E ductile iron bar grating (8 pcs. required per m)		
32109*	Bolts/nuts (stainless steel) for class E ductile iron bar grating (8 pcs. required per m)		

* 4-point bolting only available in cast-iron edge



Accessory details including additional images = page 54

References





FILCOTEN[®] pro

Nominal width 200 - load class E / F

Gratings FILCOTEN[®] pro 200 with fiX self-locking system.

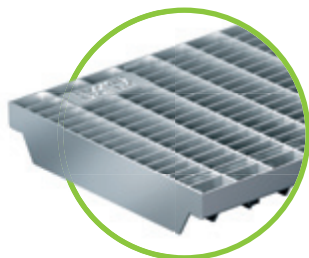
Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/ pc.	Inlet cross-section
I 7020220	1. Mesh grating	galvanised steel	1000/222/20	B 125 kN	MW 30/10	6,0 kg	1775 cm ² /m
I 7020221		galvanised steel	500/222/20	B 125 kN	MW 30/10	3,1 kg	1720 cm ² /m
I 7020222		galvanised steel	1000/222/20	C 250 kN	MW 30/10	8,8 kg	1650 cm ² /m
I 7020223		galvanised steel	500/222/20	C 250 kN	MW 30/10	4,5 kg	1595 cm ² /m
I 7020322		stainless steel V2A	1000/222/20	C 250 kN	MW 30/10	8,8 kg	1650 cm ² /m
I 7020323		stainless steel V2A	500/222/20	C 250 kN	MW 30/10	4,5 kg	1595 cm ² /m
I 7020226	2. Mesh grating	galvanised steel	1000/222/20	D 400 kN	MW 25/10	15,7 kg	1400 cm ² /m
I 7020227		galvanised steel	500/222/20	D 400 kN	MW 25/10	8,0 kg	1390 cm ² /m
I 7020228	3. Perforated gr.	galvanised steel	1000/222/20	C 250 kN	Ø 6,0 mm	13,5 kg	265 cm ² /m
I 7020229		galvanised steel	500/222/20	C 250 kN	Ø 6,0 mm	6,7 kg	260 cm ² /m
I 7020328		stainless steel V2A	1000/222/20	C 250 kN	Ø 6,0 mm	13,5 kg	265 cm ² /m
I 7020329		stainless steel V2A	500/222/20	C 250 kN	Ø 6,0 mm	6,7 kg	260 cm ² /m
I 7020101	4. Ductile iron bar gr.	ductile iron	500/222/20	C 250 kN	MW 29/13	7,3 kg	955 cm ² /m
I 7020104		ductile iron	500/222/20	D 400 kN	MW 29/13	7,7 kg	940 cm ² /m
I 7020105	5. Ductile iron slot. gr.	ductile iron	500/222/20	E 600 kN	SW 14/200	8,9 kg	965 cm ² /m

Gratings FILCOTEN[®] pro 200 4-point bolting.

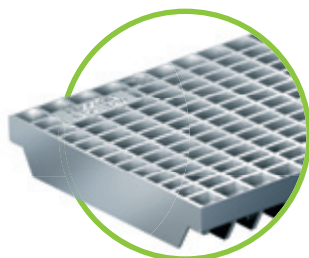
Item no.	Gratings 4-point bolting	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/ pc.	Inlet cross-section
I 7020103*	6. Ductile iron bar gr.	ductile iron	500/222/20	E 600 kN	MW 22/13	8,8 kg	780 cm ² /m
I 7020107*	7. Ductile iron slot. gr	ductile iron	500/222/20	F 900 kN**	SW 14/95	12,3 kg	860 cm ² /m

** For class F 900 kN installation (e.g airport terminals), a final release of the installation details by the manufacturer must be followed!

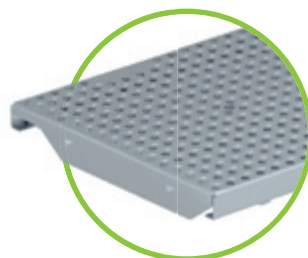




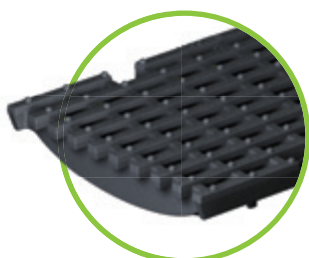
1. Mesh grating MW 30/10
cl. B galvanised steel
cl. C galvaniz. or stainless steel V2A



2. Mesh grating MW 25/10
cl. D galvanised steel



3. Perforated grating Ø 6,0 mm
cl. C galvaniz. or stainless steel V2A



4. Ductile iron elongated
bar grating
MW 29/13,
cl. C or cl. D



5. Ductile iron
slotted grating
SW 14/200, cl. E



6. Ductile iron elongated
bar grating
MW 22/13, cl. E
*4-point bolting, only
available in cast iron edge

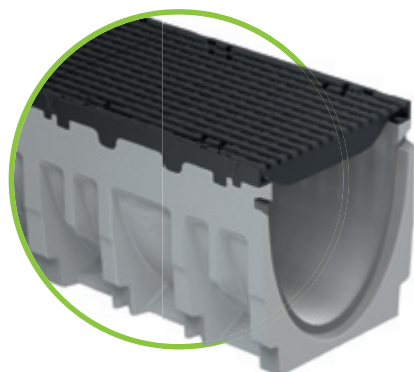


7. Ductile iron slot. grating
SW 14/95, cl. F
*4-point bolting, only
available in cast iron edge

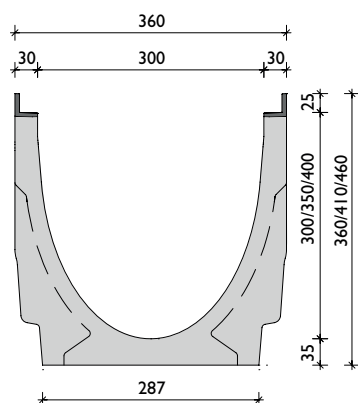


FILCOTEN[®] pro

Nominal width 300 - load class E / F



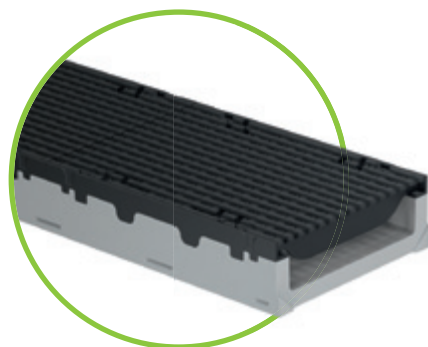
FILCOTEN[®] pro G 300
incl. cast iron edges



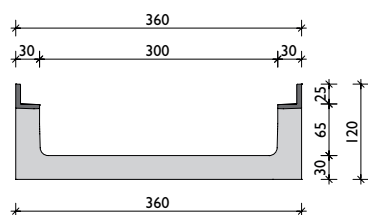
Channel body FILCOTEN[®] pro 300.

Channel type	Slope/outlet	Height at channel end	Weight	1) Item no. cast iron edges
300/0	0 %	360 mm	77,3 kg	10630100
300/10-0	0 %	410 mm	90,3 kg	10630162
300/20-0	0 %	460 mm	110,7 kg	10630164
301/0	0 % / DN200	360 mm	73,5 kg	10630170
301/10-0	0 % / DN200	410 mm	86,5 kg	10630172
301/20-0	0 % / DN200	460 mm	106,9 kg	10630174
300/0	0 % / L=500 mm	360 mm	38,8 kg	10630180

1) With cast-iron edges, tested up to cl. F 900 kN acc. to EN 1433.
Installation according to the manufactures installation instructions!



FILCOTEN[®] pro mini G 300



incl. cast iron edges

Channel body FILCOTEN[®] pro mini 300.

Channel type	Slope/outlet	Height at channel end	Weight	1) Item no. cast iron edges
mini	0 %	120 mm	37,9 kg	10530100
mini	0 % / DN200	120 mm	36,2 kg	10530170

1) With cast-iron edges, tested up to cl. F 900 kN acc. to EN 1433.
Installation according to the manufactures installation instructions!

Accessories FILCOTEN® pro 300.

Item no.	Accessories	Material	Weight
I0630190	Sump unit G 560/520/950, 2-parts, with pipe coupling DN 200	FILCOTEN	124 kg
22213	Sediment bucket for sump unit	galvanised steel	3,2 kg
30040	Odour trap made of PVC bends DN 200/87°	plastic	7,4 kg
I9030210	Front/end cap (pro mini)	galvanised steel	0,5 kg
I9030213	Front/end cap	galvanised steel	1,7 kg
I9030214	End cap with outlet DN 200	galvanised steel	1,6 kg
32112*	Bolts/nuts for class C mesh gratings (4 pcs. required per m)		
32110*	Bolts/nuts for class E ductile iron bar grating (8 pcs. required per m)		
32122*	Bolts/nuts V2A for class E ductile iron bar grating (8 pcs. required per m)		

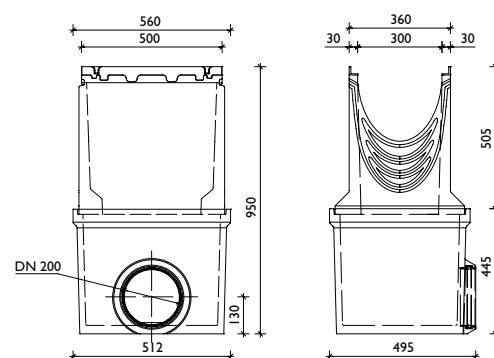
* 4-point bolting



Accessory details including additional images = page 54

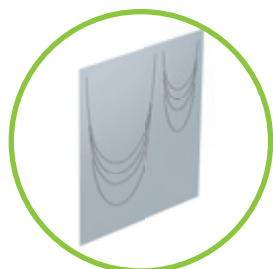


FILCOTEN® pro sump unit G 300

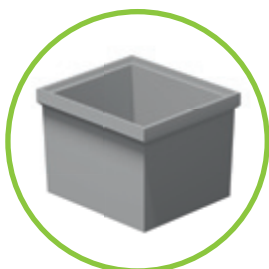


Point drainage FILCOTEN® pro 300.

Item no.	Accessories	Material	Weight
I0630190	Sump unit G 560/520/950, 2-parts, with pipe coupling DN 200	FILCOTEN	124 kg
I9060020	Sump unit middle part 560/500/415	FILCOTEN	42,5 kg
I9030290	Adapter plate NW 300, to connect pro NW 100/200	galvanised steel	1,7 kg



Adapter plate for front connecting



Middle part for building variable heights





FILCOTEN[®] pro

Nominal width 300 - load class E / F

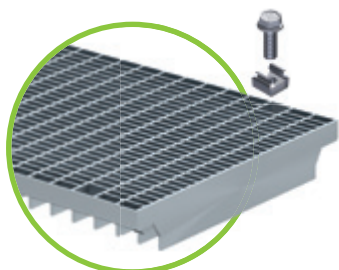
Gratings FILCOTEN[®] pro 300 with fiX self-locking system and additional 4-point bolting.

Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/ pc.	Inlet cross-section
I7030222* 1.	Mesh grating	galvanised steel	1000/347/25	C 250 kN	MW 30/10	23,1 kg	2325 cm ² /m
I7030223*		galvanised steel	500/347/25	C 250 kN	MW 30/10	11,6 kg	2325 cm ² /m
I7030102* 2.	Ductile iron bar gr.	ductile iron	500/347/25	D 400 kN	MW 29/13	15,2 kg	1465 cm ² /m
I7030103*		ductile iron	500/347/25	E 600 kN	MW 29/13	17,9 kg	1465 cm ² /m

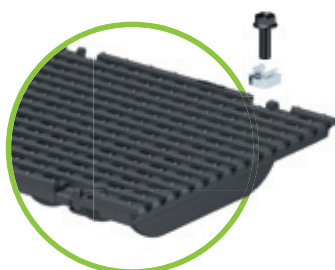
Gratings FILCOTEN[®] pro 300 4-point bolting.

Item no.	Gratings	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/ pc.	Inlet cross-section
I7030107* 3.	Ductile iron slot. gr	ductile iron	500/347/25	F 900 kN**	SW 16/140	22,3 kg	1190 cm ² /m

**** For class F 900 kN installation (e.g airport terminals), a final release of the installation details by the manufacturer must be followed!**



1. Mesh grating MW 30/10
cl. C galvanised
*4-point bolting



2. Ductile iron bar grating
MW 29/13, cl. D or cl. E
*4-point bolting



3. Ductile iron slotted grating
SW 16/140, cl. F
*4-point bolting

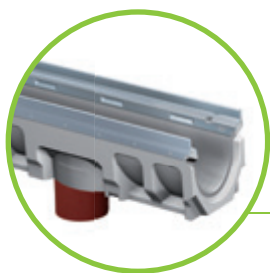
References



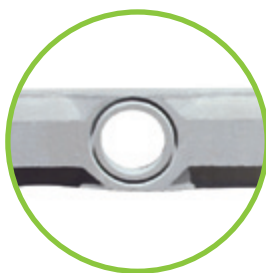


FILCOTEN[®] pro

Accessories



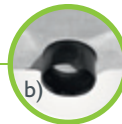
Bottom outlet made of PVC sewer pipes - on site installation



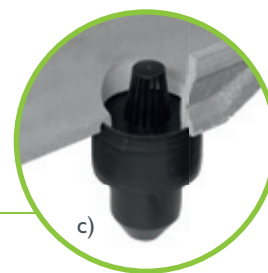
Prefabricated DN 100 outlet opening



a) Odour trap for bottom outlet consisting of 3 pieces



b) Outlet pipe of foul-air trap is inserted into outlet opening from below before installation.



c) The two remaining parts complete the foul-air trap - finished!



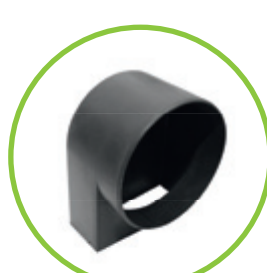
Positioning of outlet opening: channel end to outlet centre = 250 mm



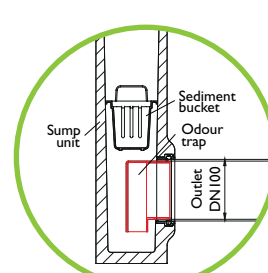
FILCOTEN pro sump unit, L=500 mm, to fit NW



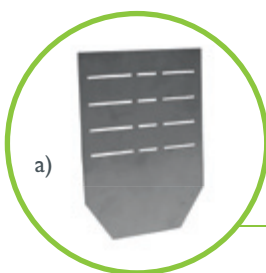
Sediment bucket in plastic for sump unit to fit NW - acts as a dirt trap



Retrofittable odour trap for sump unit DN 100 or 150
Installation: Insert the odour trap from the inside and connect with the sewage pipe.



Odour trap made of PVC bends for sump units - suitable for sump units with outlets DN 150/200



a) Front- /end cap for all NW



b) End cap with outlet for all NW



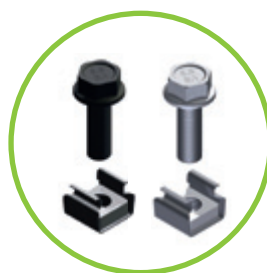
Front- /end cap
FILCOTEN pro mini



Anti-vandalism locking device for all gratings - except slotted gratings. Required per grating: 2 pcs.



Detailed Description page 24



Bolting kits:
Bolts/nuts
galvanised or stainless steel V2A

for ductile iron bar gratings
cl. E (only available in cast iron edge)
for all NW and
for mesh gratings cl. C
(FCT pro 300)



M8 at NW 100-200 / M10 at NW 300

References



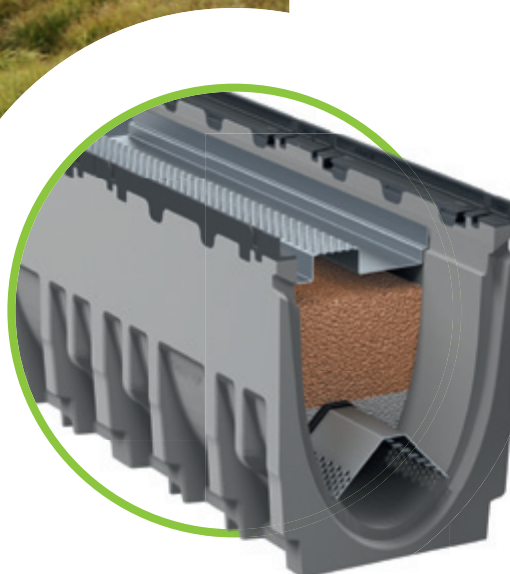
The **greener** solution
with the



GRASPOINTNER
Sustainable innovation.

FILCOTEN® channels are continuously being developed. Our new FILCOTEN® green channel system is not only particularly environmentally friendly in terms of its manufacture and during operation, but it is also able to free rainwater, which in many places is polluted, from harmful substances as far as possible, before it re-enters the water cycle. This is a solution which has been desirable for quite some time, as rainwater which seeps into the ground in the area is the best for the environment.

Thanks to an ingenious multi-layer system made up of substrates and mechanical elements, FILCOTEN® green simply filters out everything that doesn't belong in the water cycle. To do this, FILCOTEN® green uses well-engineered substrate technology – the result of many years of research and development. In this way, each channel becomes a little sewage treatment plant in which organic and inorganic impurities are broken down or held back in the substrate. The channel system is based on our FILCOTEN® pro 300 and is resilient up to class F 900 kN (acc. to EN 1433).



FILCOTEN® green

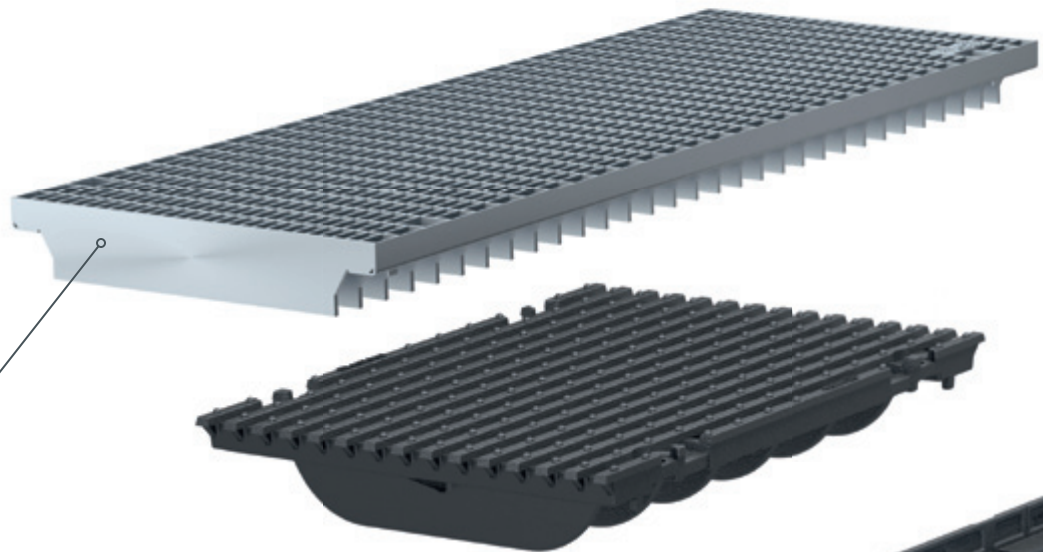
Substrate channels

FILCOTEN[®] green

FILCOTEN[®] green filters organic and inorganic impurities out of rainwater before they re-enter the water cycle through the floor drainage. You can find details about construction and how it all works on the next page.

Grates

A selection of galvanised steel mesh gratings and ductile iron gratings are available. The gratings are available with bolted locking or with fiX self-locking system.



End cap

For waterproof closure of the channel. Available with horizontal outlet connection or closed endcap.



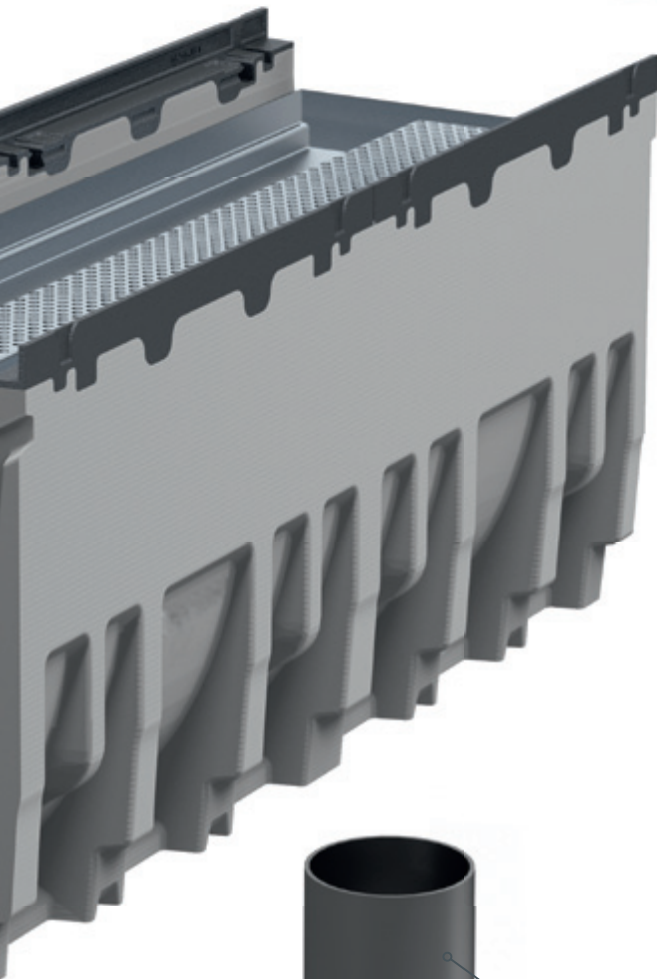
Front cap

The front cap close the channel run.



Advantages at a glance

- sustainable protection for groundwater and soil
- holds back 99% of heavy metals, organic substances and particles
- oil residues are broken down biologically
- reduces pollutant load for sewage plant
- up to 20 years service life
- suited to be integrate in sewage water network
- resilient up to class F 900
- can be inspected and cleaned
- low investment and follow-up costs
- easy maintenance and replacement of the substrate agent



Vertical outlet

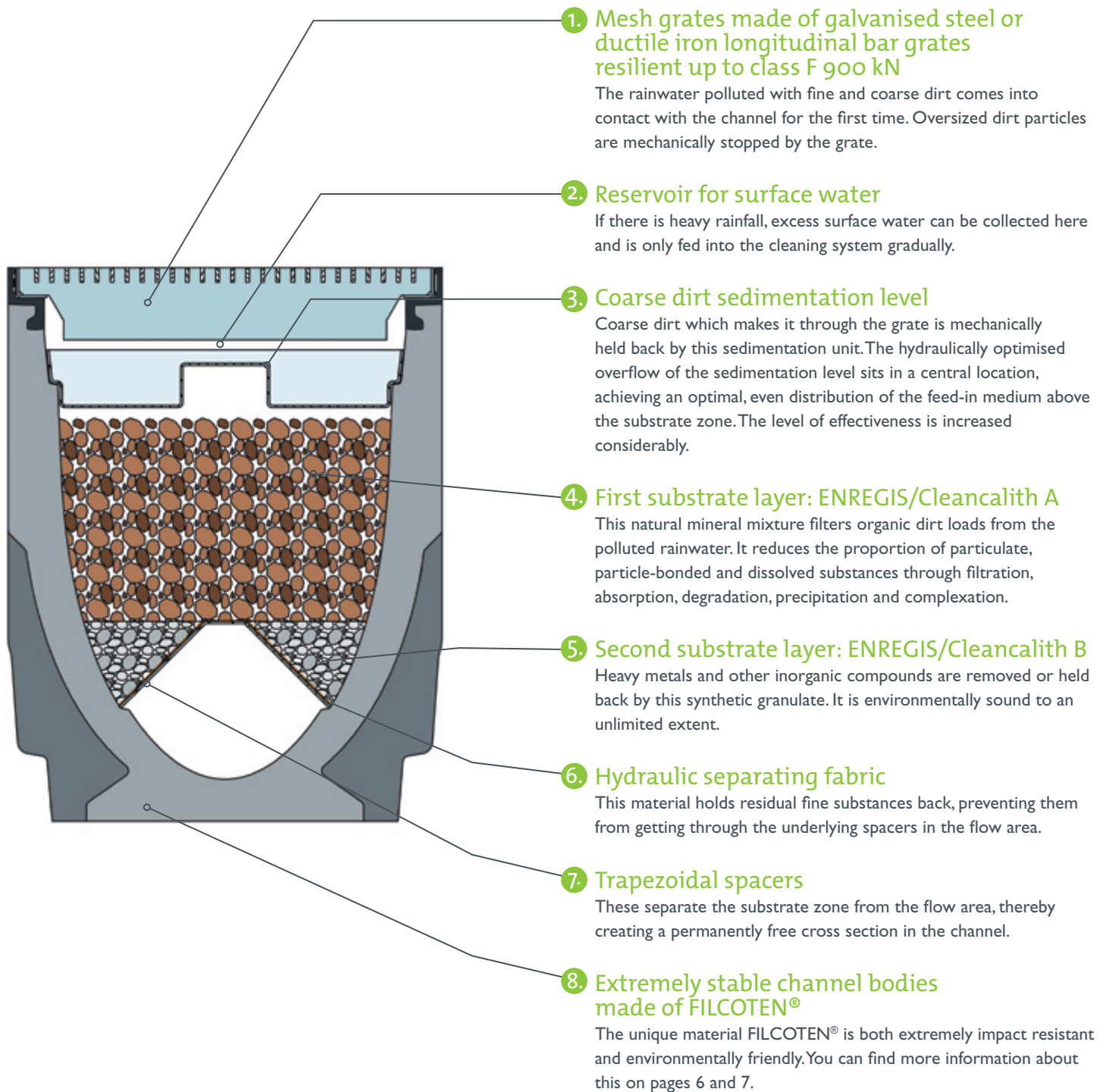
The outlet re-enter the cleaned water into the water cycle.





FILCOTEN[®] green

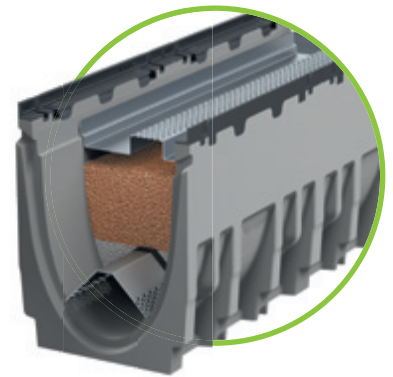
The **technology** behind it



Channel body FILCOTEN® green.

Channel type	Slope/outlet	Height at channel end	Weight	1) Item no. cast iron edges
300/20-0	0 %	460 mm	110,7 kg	10630164
301/20-0	0 % / DN 200	460 mm	106,9 kg	10630174

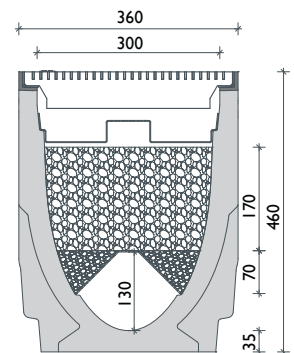
1) With cast-iron edges, tested up to cl. F 900 kN acc. to EN 1433.
Installation according to the manufactures installation instructions!



Accessories FILCOTEN® green 300.

Item no.	Accessories	Material	Weight
19530950	ENREGIS filtration unit consisting off: brace out of stainless steel, preinstalled separating fleece incl. edge protector and channel-substrat ENREGIS/Cleancalith A+B, coarse dirt tray/sedimentation-step, stainless steel	1 Set per channel meter required	80 kg / 1fm channel
19530951	ENREGIS filtration unit consisting off: brace out of stainless steel, preinstalled separating fleece incl. edge protector and channel-substrat ENREGIS/Cleancalith A+B, WITHOUT coarse dirt tray/sedimentation-step	1 Set per channel meter required	79 kg / 1fm channel
19530911	Coarse dirt tray / sedimentation-step, stainless steel	stainl. steel V2A	1,0 kg
19030313	Front/end cap - closed	stainl. steel V2A	1,7 kg
19030350	End cap with outlet DN 150	stainl. steel V2A	3,0 kg
32112*	Bolts/nuts for class C mesh gratings (4 pcs. required per m)		
32110*	Bolts/nuts for class E ductile iron elongated bar grating (8 pcs. required per m)		
32122*	Bolts/nuts V2A for class E ductile iron elongated bar grating (8 pcs. required per m)		

FILCOTEN® green
incl. cast iron edges

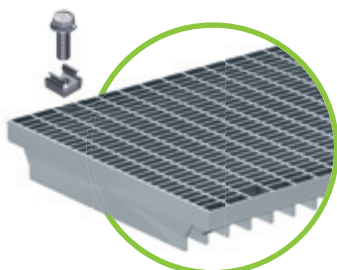


Gratings FILCOTEN® green 300 4-point bolting.

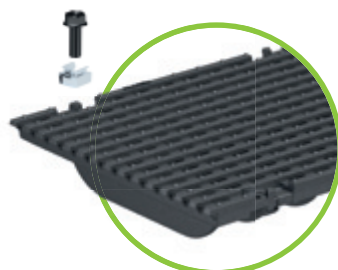
Item no.	Gratings 4-point bolting	Material	Dimensions in mm	Load class as per EN-standard	Slot-/mesh-width in mm	Weight/ pc.	Inlet cross-section
17030222*	1. Mesh grating	galvanised steel	1000/347/25	C 250 kN	MW 30/10	23,1 kg	2325 cm²/m
17030223*		galvanised steel	500/347/25	C 250 kN	MW 30/10	11,6 kg	2325 cm²/m
17030102*	2. Ductile iron bar gr.	ductile iron	500/347/25	D 400 kN	MW 29/13	15,2 kg	1210 cm²/m
17030103*		ductile iron	500/347/25	E 600 kN	MW 29/13	17,9 kg	1210 cm²/m
17030107*	3. Ductile iron slot gr.	ductile iron	500/347/25	F 900 kN**	SW 16/140	22,3 kg	1190 cm²/m

** For class F 900 kN installation (e.g airport terminals), a final release of the installation details by the manufacturer must be followed!

i Individual solutions on request.
For questions, please contact our application engineering department.



1. Mesh grating MW 30/10
cl. C galvanised
*4-point bolting



2. Ductile iron bar grating
MW 29/13, cl. D or cl. E
*4-point bolting

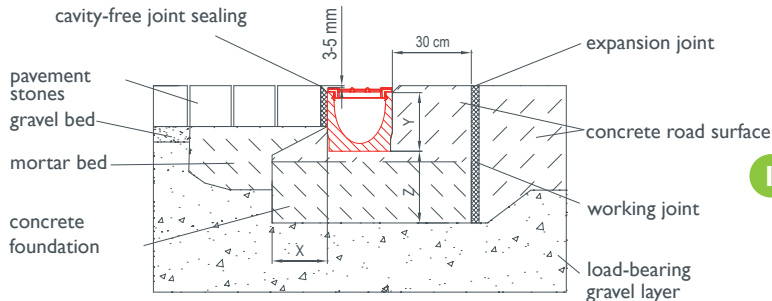


3. Ductile iron slot grating
SW 16/140, Kl. F
*4-point bolting



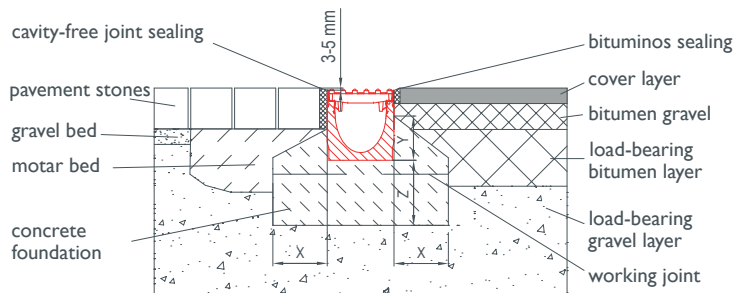
FILCOTEN®

Installation guidelines



The following installation guidelines and examples are designed to use for an accepted standard. The load class and the installation location according to EN 1433 have to be adapted to the location conditions from the planner. Consider the common known technical rules and guidelines which are accepted among experts.

1 BG concrete drains are set up in a concrete foundation according to Ö-Norm B4710-I or in drainage-concrete according to RVS 08.18.01. Mind the slope of the channel while excavating. Each channel is marked with an arrow showing the direction of flow – see the table below for details and measurements.

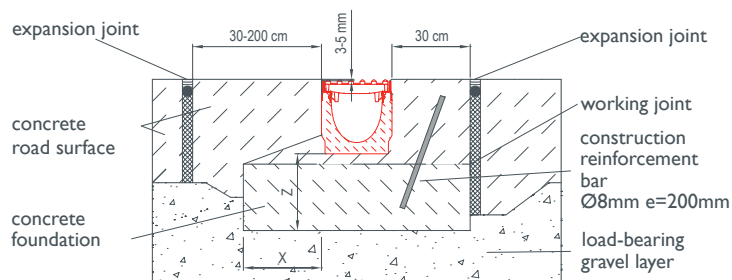


2 For a traffic-safe fastening of the grates we recommend, depending on the application area, to use grates with a quick-locking system or in conjunction with locking- or fixing-clips. According to Ö-Norm EN1433 from cl. D 400 kN there is to use preferably a locking device e.g. bolting material.

3 The rebated joint between the channel bodies can be sealed and cemented with appropriate sealing compounds - for description of material and quantity calculation see - BG sealing system.

4 Before assembling the adjacent cover layer make sure that the gratings are inserted and if necessary fixed or the channels are braced adequate against compression. Pay attention not to damage the channels while compacting the superstructure and the pavement (asphalt, pavement, concrete).

5 If there are occurring horizontally forces (e.g. due to concrete areas, gradients,...) you have to build out an adequate running joint at an interval of 30 - 200 cm from the channel. In a concrete area where there are running joints crossing the channel line they have to be arranged to go through a rebated joint of the line.



6 All adjacent surfaces should be permanently 3-5mm higher than the surface of the channel/grate to avoid mechanical damage (e.g. snow clearing) and to guarantee the water drainage.

7 In areas that were enhanced chemical attacks (eg, de-icing salts, acids, bases, etc.) can be expected, we recommend to install drainage channels with stainless steel edge or to use steel-channels out of stainless steel with high quality.

8 Drainage channels are not suitable to use across the road on motorways and highways.

load class	A 15 kN	B 125 kN	C 250 kN	D 400 kN	E 600 kN	F 900 kN
concrete quality - base according to Ö-Norm B4710-I*	C16/20	C20/25	C20/25	C25/30	C25/30	C25/30
X	≥ 8 cm	≥ 10 cm	≥ 15 cm	≥ 15 cm	≥ 15 cm	≥ 20 cm
Y	min. channel height -8 cm			min. channel height -5 cm		channel height
Z	≥ 8 cm	≥ 10 cm	≥ 15 cm	≥ 20 cm	≥ 20 cm	≥ 25 cm
reinforcement bar	unnecessary				Ø 8 mm all 20 cm	Ø 8 mm all 20 cm

*Required minimum quality strength concrete, which has to be adapted to the local requirements.

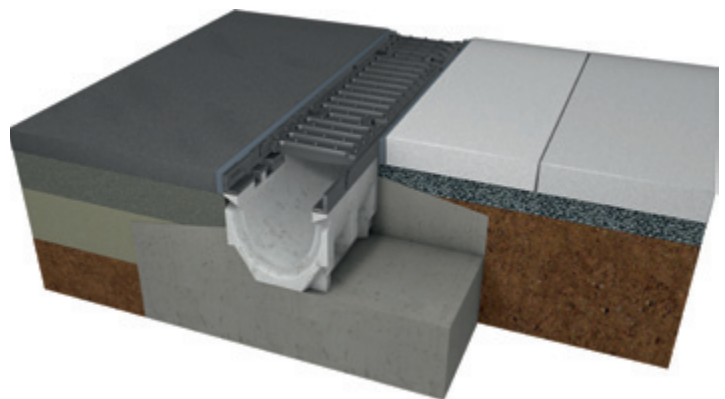
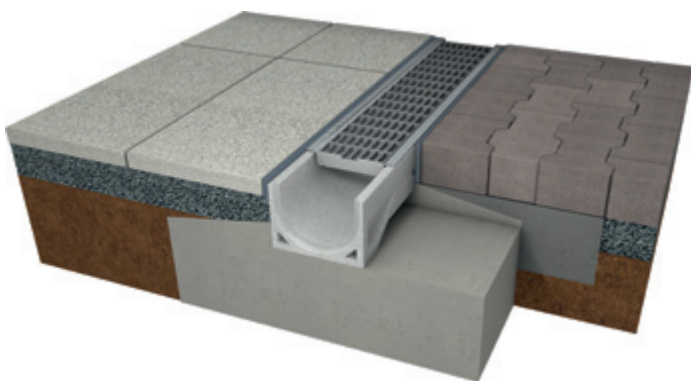
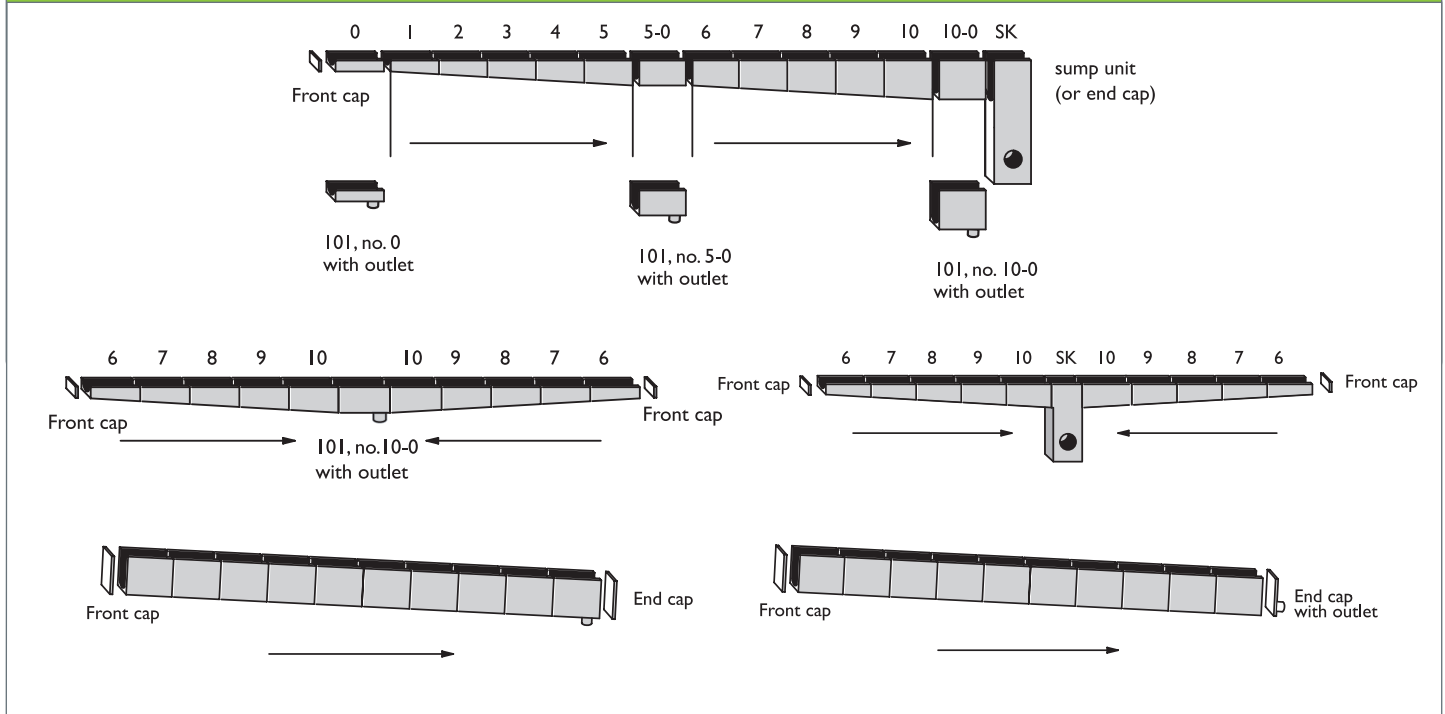
ATTENTION: Acceleration, braking and torque forces must be taken in consideration for product selection and installation. Installation must be performed according to the installation instruction. Technical specifications are subject to change without further notice.

For further information visit us at www.bg-company.com or contact our technical support team.



The installation instructions also apply to sump units.

INSTALLATION EXAMPLES



FILCOTEN light:

- load class C 250 kN
- Paving stones or plates can be laid directly up to the channel body and no concrete edges are visible
- The grates can be fixed with locking- and fixing clips.

FILCOTEN tec/pro:

- load class C 250 kN (tec) or E 600 kN / F 900 kN (pro) - depending on the channel type
- Optimum machining of adjacent coating surfaces to the edge
- If there are occurring horizontally forces you have to build out an adequate running joint at an interval of 30 - 200 cm from the channel.
- According to Ö-Norm EN1433 you have to use preferably a locking device e.g. bolting material for grates up to cl. D 400 kN.



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