

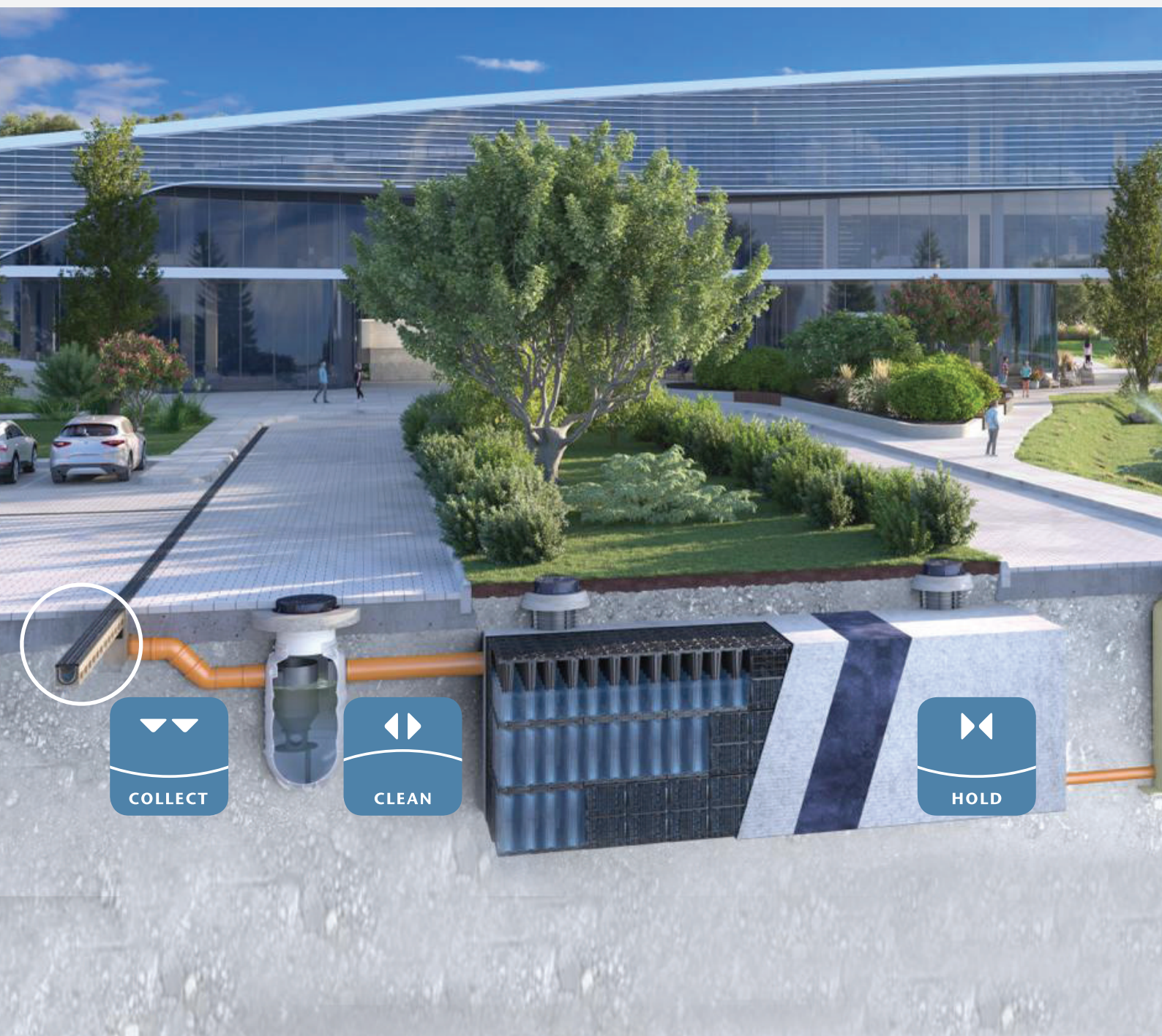


ACO External Drainage

Brickslot + Euroline • Multiline, Monoblock, Stormbrixx

ACO. we care for water





Note

Any more questions?
ask ACO – your local
ACO team is proud to offer
experience and service

www.aco-malaysia.com



1

ACO. we care for water

ACO Group

04

Load Classification EN 1433

05

2

ACO Euroline

ACO E100

07

ACO E200

08

3

ACO Multiline

ACO V100

11

ACO V150

12

ACO V200

13

ACO V300

14

4

ACO Brickslot

16

5

ACO Monoblock

ACO Monoblock RD

19

ACO Monoblock PD

20

ACO Kerbdrain

21

6

ACO Stormbrixx

23

7

Project Reference

26

8

ACO Product Overview

27

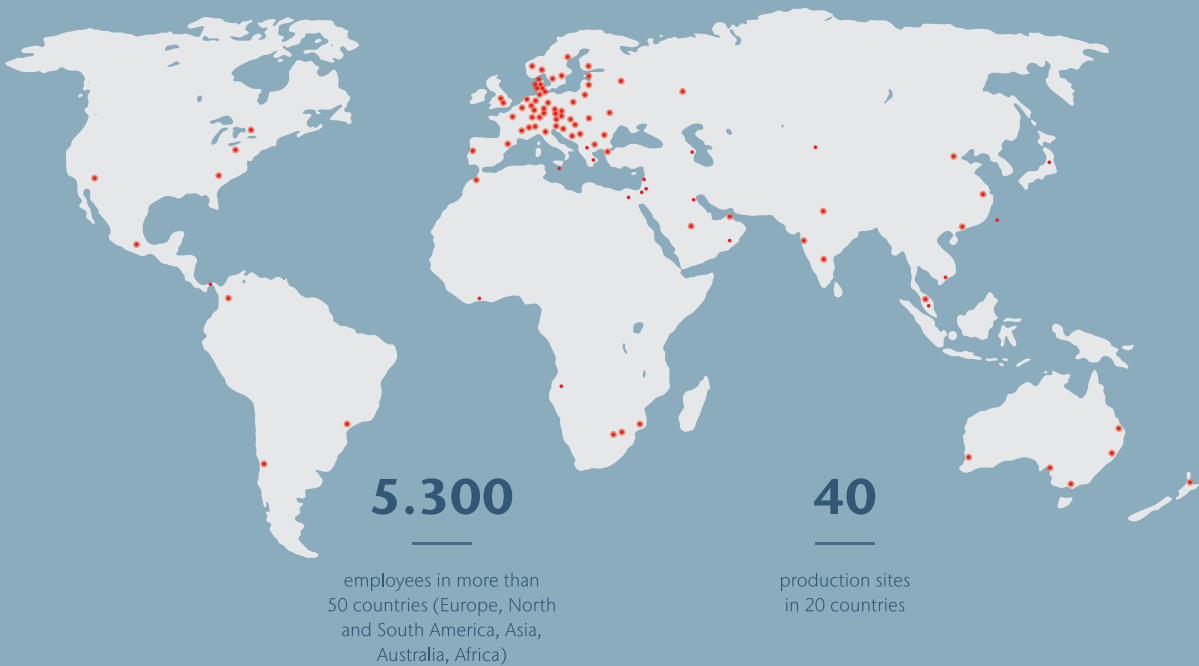
ACO. we care for water

The worldwide ACO Group. A strong family you can build on

The ACO Group is a world market leader in drainage technology. Climate change sets us a challenge to react effectively with innovative solutions to new environmental conditions. With its integrated approach, ACO stands for professional drainage, efficient cleaning, and the controlled discharge or reuse of water. Products include drainage channels and drains, oil and grease separators, backflow stop systems, pumps and pressure-water-tight cellar windows and light shafts.

The family-owned company headquartered in Rendsburg/Büdeltsdorf, Germany, was founded in 1964 on the site of Carlshütte foundry - Schleswig-Holstein's first industrial company. It still has very strong roots in the region. The innovation strength of the ACO Group is built on intense research and development, and its technical expertise in processing polymer concrete, plastic, cast iron, stainless steel and reinforced concrete.

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4



Holder
Iver and Hans-Julius Ahlmann



Headquarters of the ACO Group
in Rendsburg/Büdeltsdorf

Load Classification EN 1433



A15, 15kN
Pedestrian,
cycleways



B125, 125kN
Light vehicles,
car parks



C250, 250kN
Commercial, street



D400, 400kN
Commercial & Light Industrial area



E600, 600kN
Industrial & container yards



F900, 900kN
Airport, race tracks







A15



B125



C250

Load class	
■ Domestic and light vehicle traffic applications – A15, B125, C250	
Width	
■ 100 mm	■ 200 mm
Applications	
■ Driveways	
■ Parking with slow traffic	
■ Terraces	
■ Garages	
■ Around commercial complexes	

ACO Euroline is made to withstand the weight of automobiles and is intended for usage in gardens and houses. By keeping rain and wastewater out of entrances, walkways, garage forecourts, and terraces, it safeguards the structure of the building. The channel is safer and more durable due to its improved channel body and new locking mechanism, which also makes installation simpler



ACO Euroline specifications



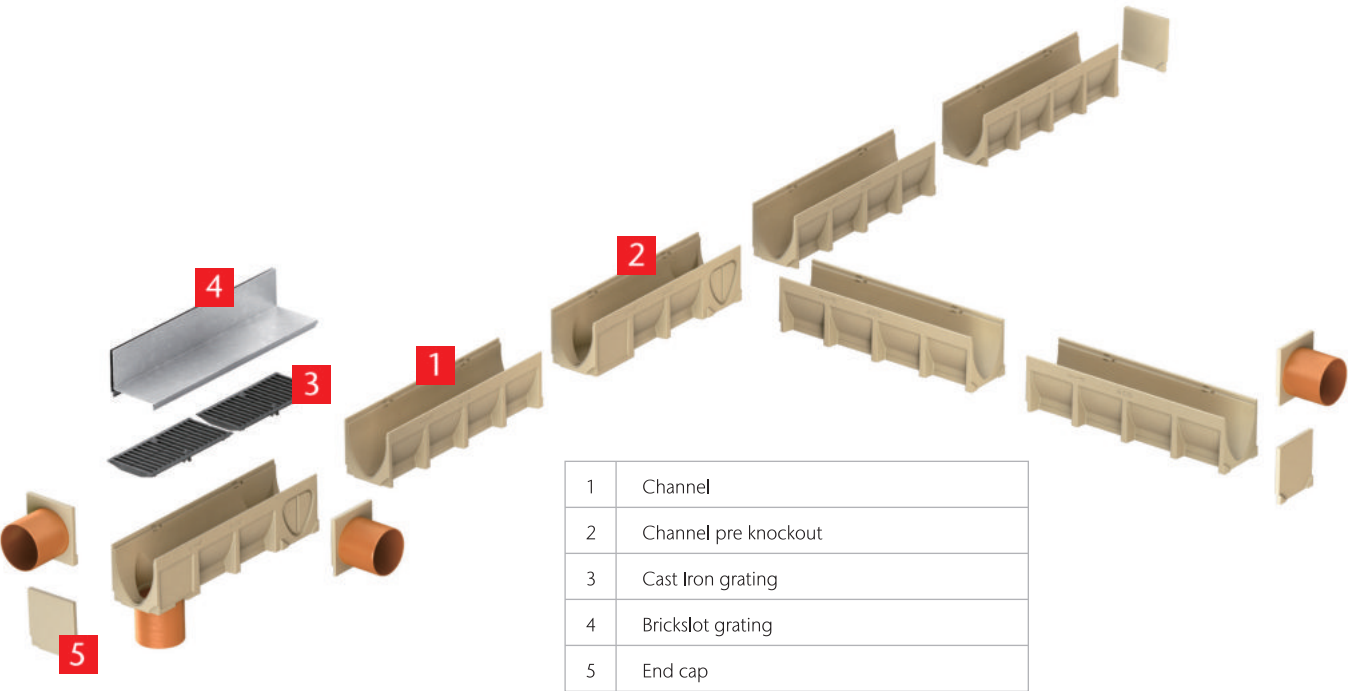
- Basic elements from polymer concrete
- Frost resistant
- High strength at low weight

V profile and SF groove for 100% sealed channel



- Smooth surface for rapid water flow and self-cleaning capabilities
- V-profile
- Free access to the trough for easy cleaning

Channels with outlet DN 110 in bottom can be equipped foul air trap with coarse dirt strainer



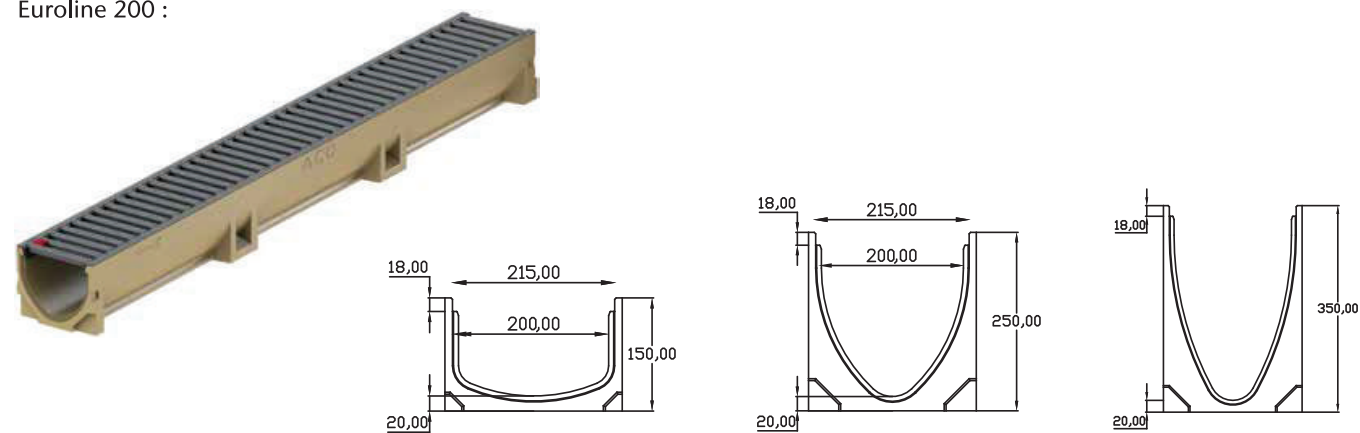
1	Channel
2	Channel pre knockout
3	Cast Iron grating
4	Brickslot grating
5	End cap

ACO Euroline Channel

Euroline 100 :



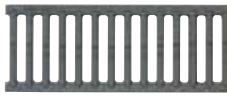
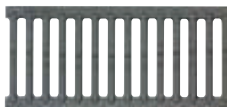



Euroline 200 :



Type	Product Type	Loadclass	mm	mm	mm	kg	Art. Nr
			Length	Width	Height	Weight	
Channel	Euroline E100	B125	1000	118	50	4.4	312845
	Euroline E100	B125	1000	118	97	6.8	38506
End cap	Euroline E100	B125	15	118	100	0.4	312849C
Channel	Euroline E200	C250	1000	235	150	18.7	860000
	Euroline E200	C250	1000	235	250	27.9	860020
	Euroline E200	C250	1000	235	350	36.2	312970
Channel Pre-Knockout	Euroline E200	C250	1000	235	150	19.3	312951
	Euroline E200	C250	1000	235	250	32.2	312981
	Euroline E200	C250	1000	235	350	42.6	312971
End cap	Euroline E200	C250	20	235	150	1.5	860210
	Euroline E200	C250	20	235	250	2.5	860230
	Euroline E200	C250	20	235	350	3.5	312979

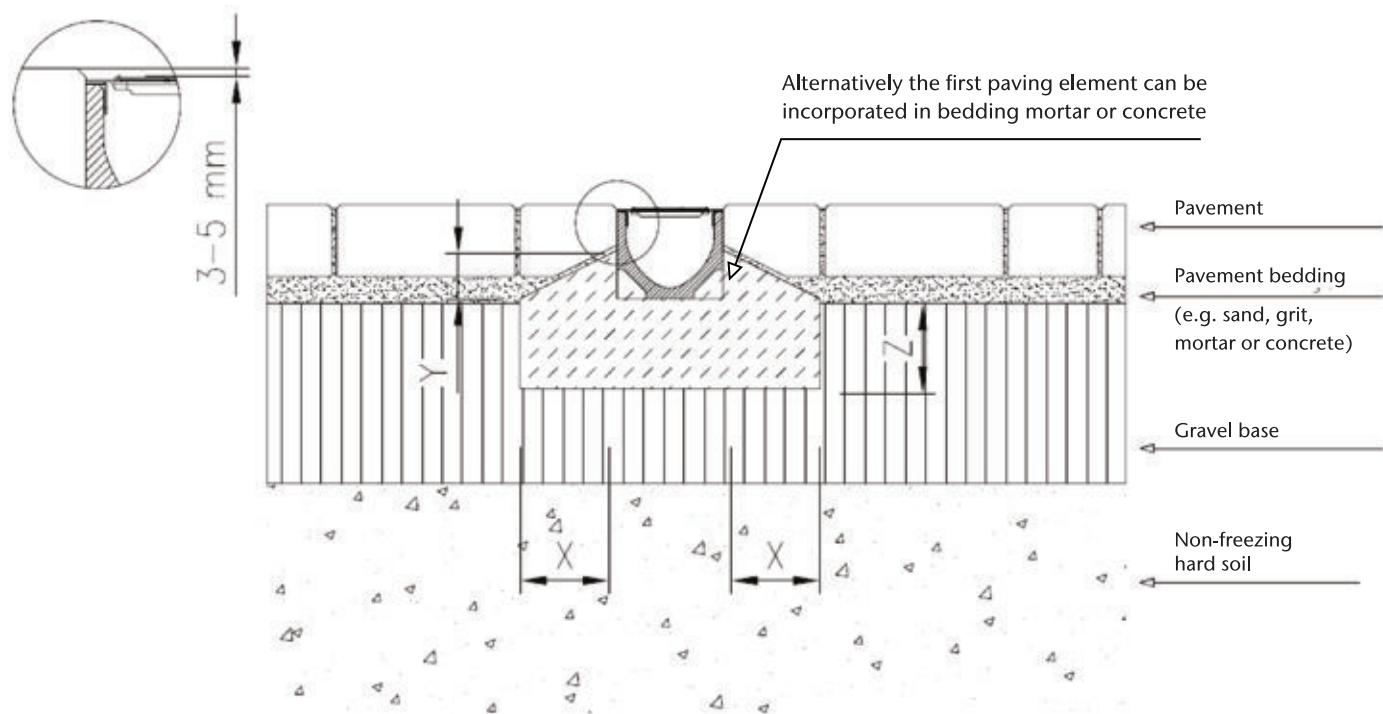
ACO Euroline Grating

Type			Loadclass	mm	mm	mm	kg	Art. Nr
				Length	Width	Height	Weight	
Euroline E100		Polypropylen with Microgrip	A15	1000	118	-	0.6	319250
		Galvanised slotted grating	B125	1000	118	-	1.2	38516
		Powder-coated slotted grating, black	B125	1000	118	-	1.3	10305
Euroline E100		Cast iron grating	C250	500	118	-	2.5	310309
Euroline E200			C250	500	235	-	6.8	860106
Euroline E100		Brickslot	B125	1000	118	50		S511291
		Brickslot Inspection unit		500	118	50		S621291
Euroline E200		Brickslot	C250	1000	235	50		S551391
		Brickslot Inspection unit		500	235	50		S661391



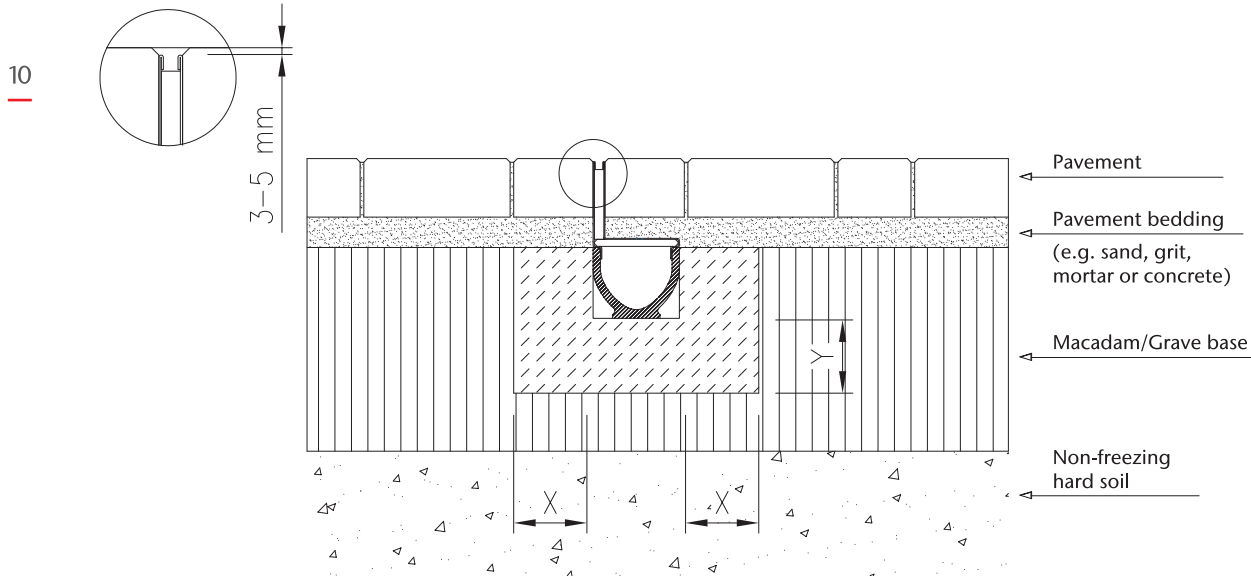
Installation of ACO® Euroline channel

ACO Euroline installation in pavement



Load class	A 15	B 125	C 250
X	≥100	≥100	≥150
Y	0	≥50	≥50
Z	≥100	≥100	≥150

ACO Euroline with Brickslot - installation in pavement



Load class	A 15	B 125	C 250
X	≥100	≥100	≥150
Y	≥100	≥100	≥150



ACO Multiline



Load class	
■ A15 - E600 load class	
Width	
■ 100 mm	■ 200 mm
■ 150 mm	■ 300 mm
Material	
■ Cast Iron	
■ Stainless Steel	
Applications	
■ Parking areas with high and constant traffic	
■ Roads and highways	
■ Viaducts	
■ Petrol stations	
■ Industrial areas	

ACO DRAIN® Multiline

ACO DRAIN® Multiline is based on a system idea which provides advantages for everyone: planners, dealers, contractors and building owners. Five load classes, six nominal widths, three frame designs - an innovative concept. Planners save time during the tendering process because the Multiline system idea enables a high degree of standardisation of the interfaces. Dealers benefit from the extremely tight product range. And building owners are always very pleased about sophisticated solutions for design and construction. Multiline combines creative diversity, high functionality and extreme durability.



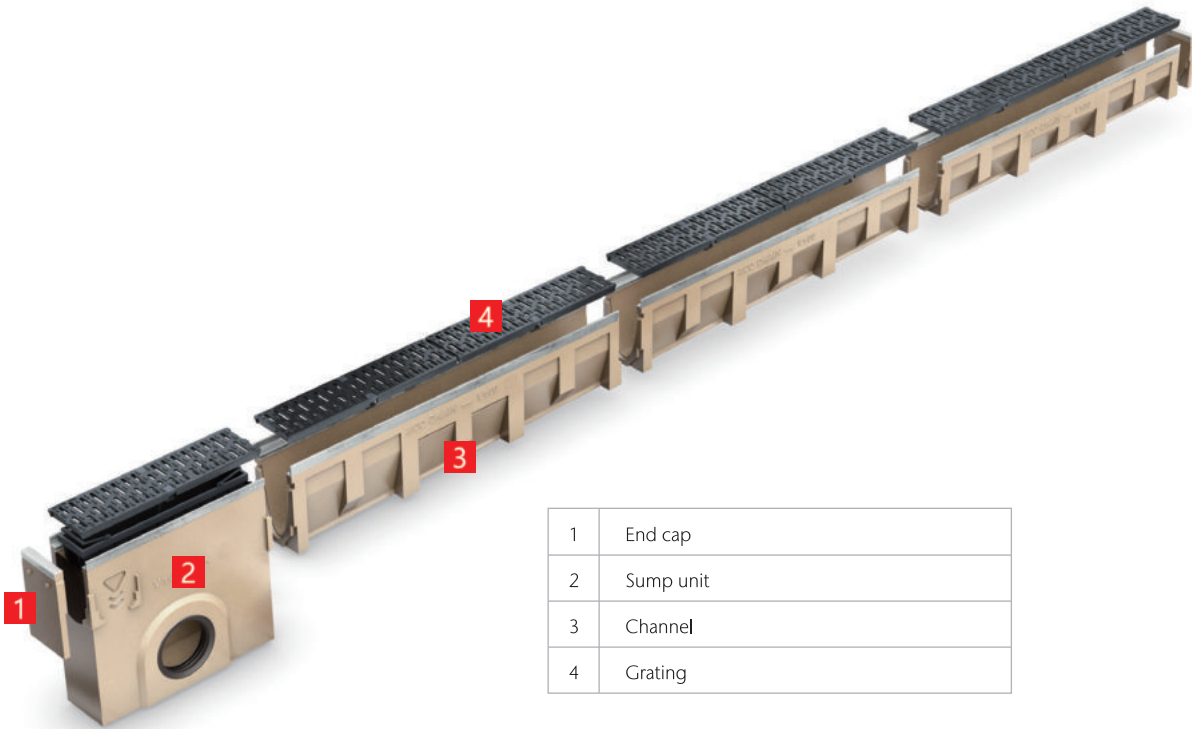
ACO Multiline specifications



- Anti shunt feature holds grating securely in place
- ACO Drainlock™ grating - this bar-less locking device improves hydraulic capacity and provides for quick and simple installation of gratings

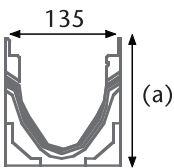
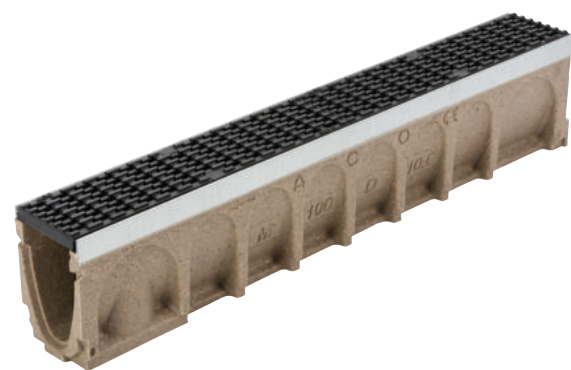


- Innovative V profile
- Pre knockout for connection
- Male and Female channel connections to aid fast installation

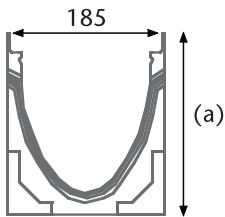


1	End cap
2	Sump unit
3	Channel
4	Grating

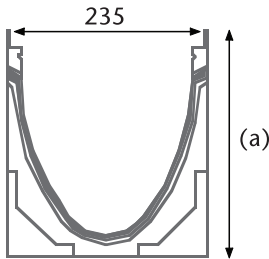
ACO Multiline Channel



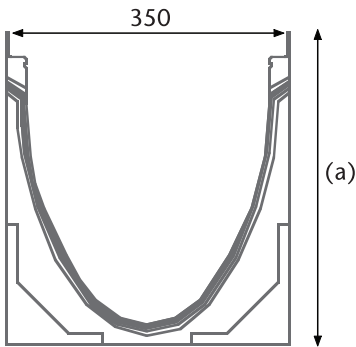
Multiline V100



Multiline V150





Multiline V200



Multiline V300

Product Type		Loadclass	mm	mm	mm	kg	Art. Nr
			Length	Width	Height (a)	Weight	
Multiline V100	0.0	E600	1000	135	150	16.8	312845
	10.0	E600	1000	135	200	21.1	38506
	20.0	E600	1000	135	250	24.9	312849C
Multiline V150	0.0	E600	1000	185	210	29.2	860000
	20.0	E600	1000	185	310	38.4	860020
Multiline V200	0.0	E600	1000	235	265	39.3	312970
	10.0	E600	1000	235	315	43.9	312951
	20.0	E600	1000	235	365	47.6	312981
Multiline V300	0.0	E600	1000	350	385	64	312971
	20.0	E600	20	350	485	76.5	860210

ACO Multiline Grating

Product Type		Loadclass		mm	mm	mm	kg	Art. Nr
				Length	Width	Height	Weight	
Cast iron grating 	V100	B125		500	123	-	2.3	12676
		C250		500	123	-	3.4	12670
		D400		500	123	-	3.8	23408
		E600		500	123	-	4.4	12671
	V150	C250		500	173	-	5.3	13070
		D400		500	173	-	6.4	23164
	V200	C250		500	223	-	7.6	13470
		D400		500	223	-	9.8	23224
	V300	C250		500	338	-	16.8	13870
		E600		500	338	-	23.5	13871
Brickslot  * refer to page 16	V100	Brickslot	D400	500	135	50		S311491
		Brickslot Inspection		500	135	50		S421491
	V150	Brickslot	D400	500	185	50		S331491
		Brickslot Inspection		500	185	50		S441491
	V200	Brickslot	D400	500	235	50		S351491
		Brickslot Inspection		500	235	50		S461491
	V300	Brickslot	C250	500	350	50		S371391
		Brickslot Inspection		500	350	50		S481391





ACO Brickslot



A15



B125



C250

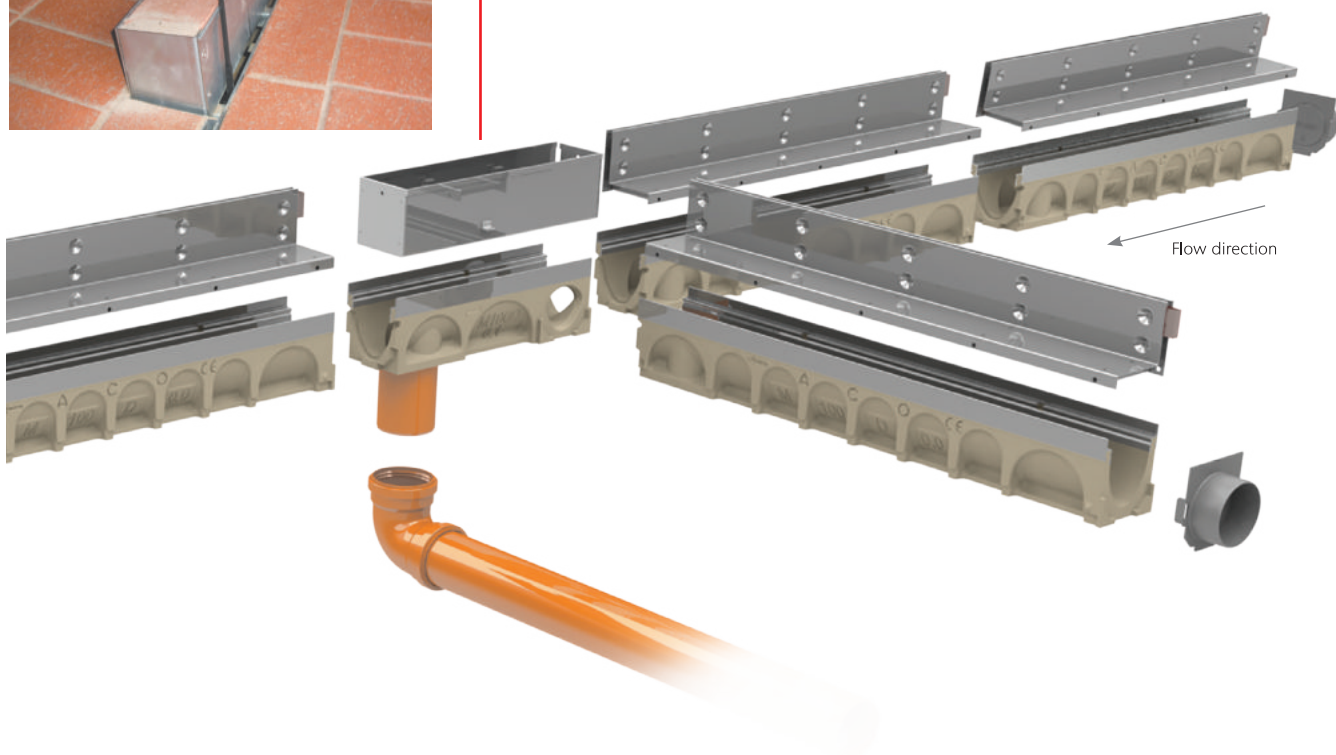
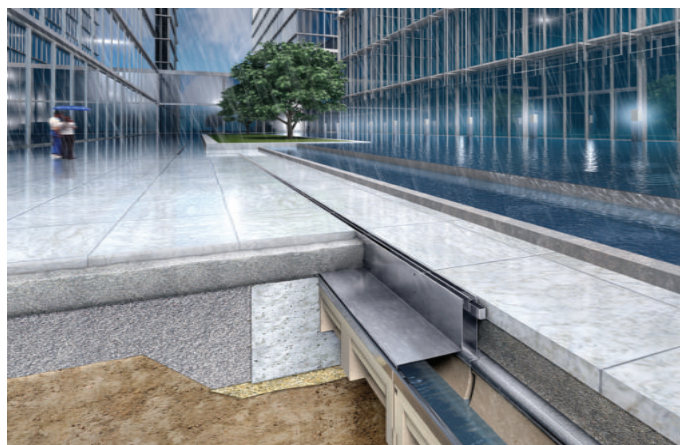
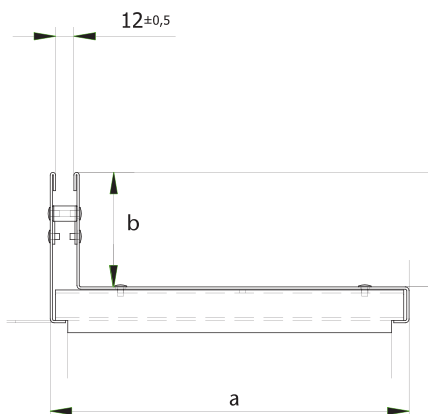
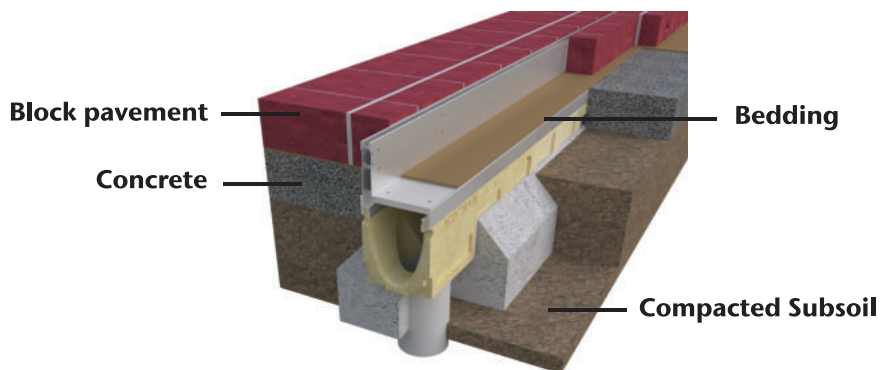


D400

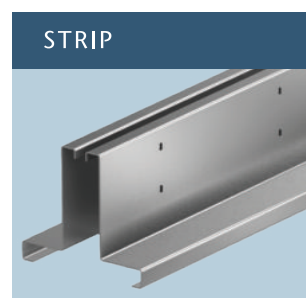
Load class	
■ A15 - D400 load class	
Width	
■ 100 mm	■ 200 mm
■ 150 mm	■ 300 mm
Material	
■ Stainless Steel	
Applications	
■ Pedestrian areas	
■ Cycle paths	
■ Gardens	
■ Multi-level car parking	

The slotted gratings of the ACO Brickslot range enable particularly subtle drainage of your outdoor living areas. They blend discreetly into stylishly designed patios and maintain the architectural aesthetics through efficient rainwater drainage. The system prevents ponding and keep all surfaces clean and moisture-free. The slotted tops are available in stainless steel and plastic.

The Connector Clip ensures a harmonious appearance for the galvanized steel and stainless-steel versions. In one simple step, the slotted frames are optimally aligned during installation. This gives you a continuous line for optimal function at all times.



ACO Brickslot



Product Type	Function	Loadclass	mm	mm	mm	Art. Nr
			Length	Width (a)	Height (b)	
Euroline E100	Brickslot	B125	1000	118	50	S511291
	Inspection unit		500	118	50	S621291
	Brickslot		1000	118	75	S511293
	Inspection unit		500	118	75	S621293
	Brickslot		1000	118	105	S511295
	Inspection unit		500	118	105	S621295
	Brickslot	C250	1000	118	50	S511391
	Inspection unit		500	118	50	S621391
	Brickslot		1000	118	75	S511393
	Inspection unit		500	118	75	S621393
	Brickslot		1000	118	105	S511395
	Inspection unit		500	118	105	S621395
Euroline E200	Brickslot	B125	1000	235	50	S551291
	Inspection unit		500	235	50	S661291
	Brickslot		1000	235	75	S551293
	Inspection unit		500	235	75	S661293
	Brickslot		1000	235	105	S551295
	Inspection unit		500	235	105	S661295
	Brickslot	C250	1000	235	50	S551391
	Inspection unit		500	235	50	S661391
	Brickslot		1000	235	75	S551393
	Inspection unit		500	235	75	S661393
	Brickslot		1000	235	105	S551395
	Inspection unit		500	235	105	S661395
Multiline V100	Brickslot	D400	1000	130	50	S311491
	Inspection unit		500	130	50	S421491
	Brickslot		1000	130	75	S311493
	Inspection unit		500	130	75	S421493
	Brickslot		1000	130	105	S311495
	Inspection unit		500	130	105	S421495
Multiline V150	Brickslot	B125	1000	185	50	S331291
	Inspection unit		500	185	50	S441291
	Brickslot	C250	1000	185	50	S331391
	Inspection unit		500	185	50	S441391
	Brickslot	D400	1000	185	50	S331491
	Inspection unit		500	185	50	S441491
Multiline V200	Brickslot	D400	1000	230	50	S351491
	Inspection unit		500	230	50	S461491
	Brickslot		1000	230	50	S351491
	Inspection unit		500	230	50	S461491
Multiline V300	Brickslot	B125	1000	350	50	S371291
	Inspection unit		500	350	50	S481291
	Brickslot	C250	1000	350	50	S371391
	Inspection unit		500	350	50	S481391



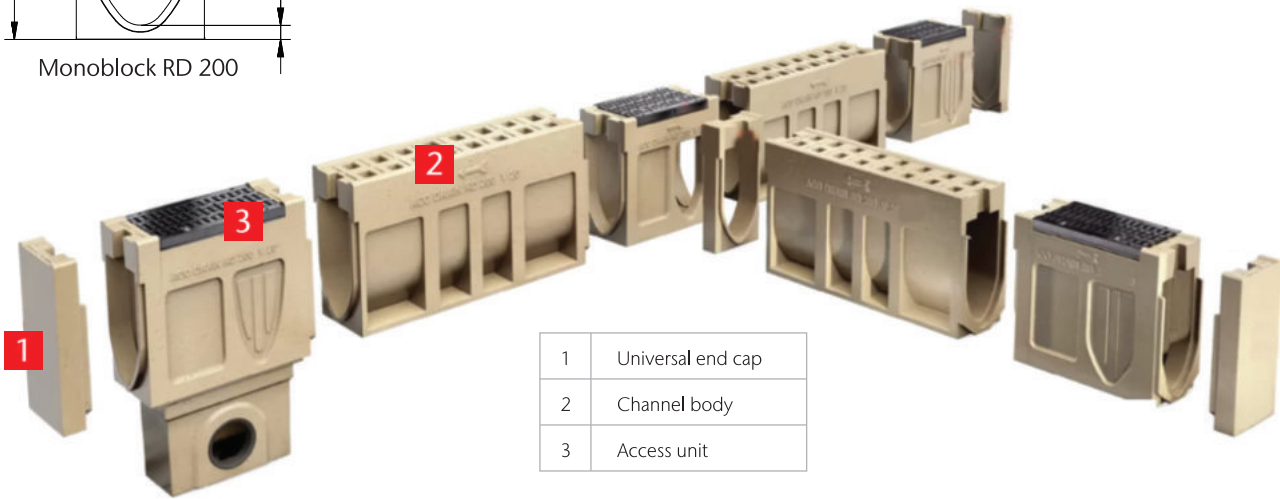
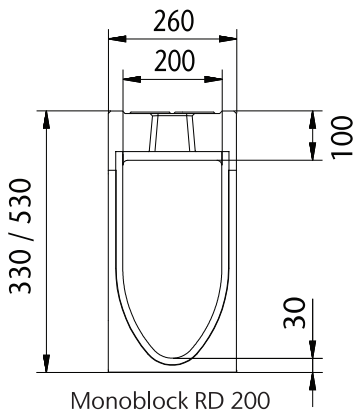
ACO Monoblock RD



Load class
<ul style="list-style-type: none"> F900 load class
Depth
<ul style="list-style-type: none"> 330 mm 530 mm
Material
<ul style="list-style-type: none"> Polymer Concrete
Applications
<ul style="list-style-type: none"> Airport Race track Industrial sites Container yard, port Truck Parking Lot

ACO Monoblock is a drainage system in a monolithic design: channel and cover are made of polymer concrete in one casting. The result is an extremely stable unit without loose parts, there is also no need for bonded joints.

The unique monocast construction is a guarantee for maximum safety and stability in large-scale drainage - an ideal alternative to conventional solutions. Due to its monolithic design, the Monoblock always remains stable even under extreme loads.



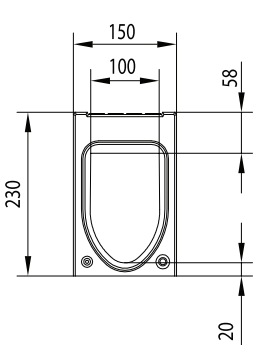
ACO Monoblock PD



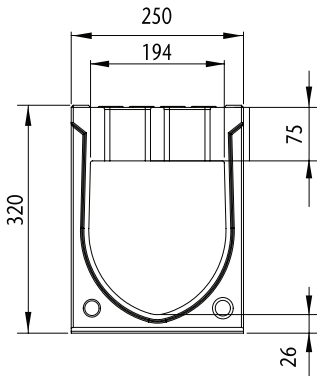
Load class
<div>■</div> D400 load class
Type
<div>■</div> Parkdrain 100
<div>■</div> Parkdrain 200
Material
<div>■</div> Polymer Concrete
Applications
<div>■</div> Street
<div>■</div> Squares and shopping centers
<div>■</div> Parking areas
<div>■</div> Courtyards

ACO Monoblock PD is a simple yet versatile channel drainage system for surface water conveyance which has been specifically developed to meet the demands of contractors and clients alike.

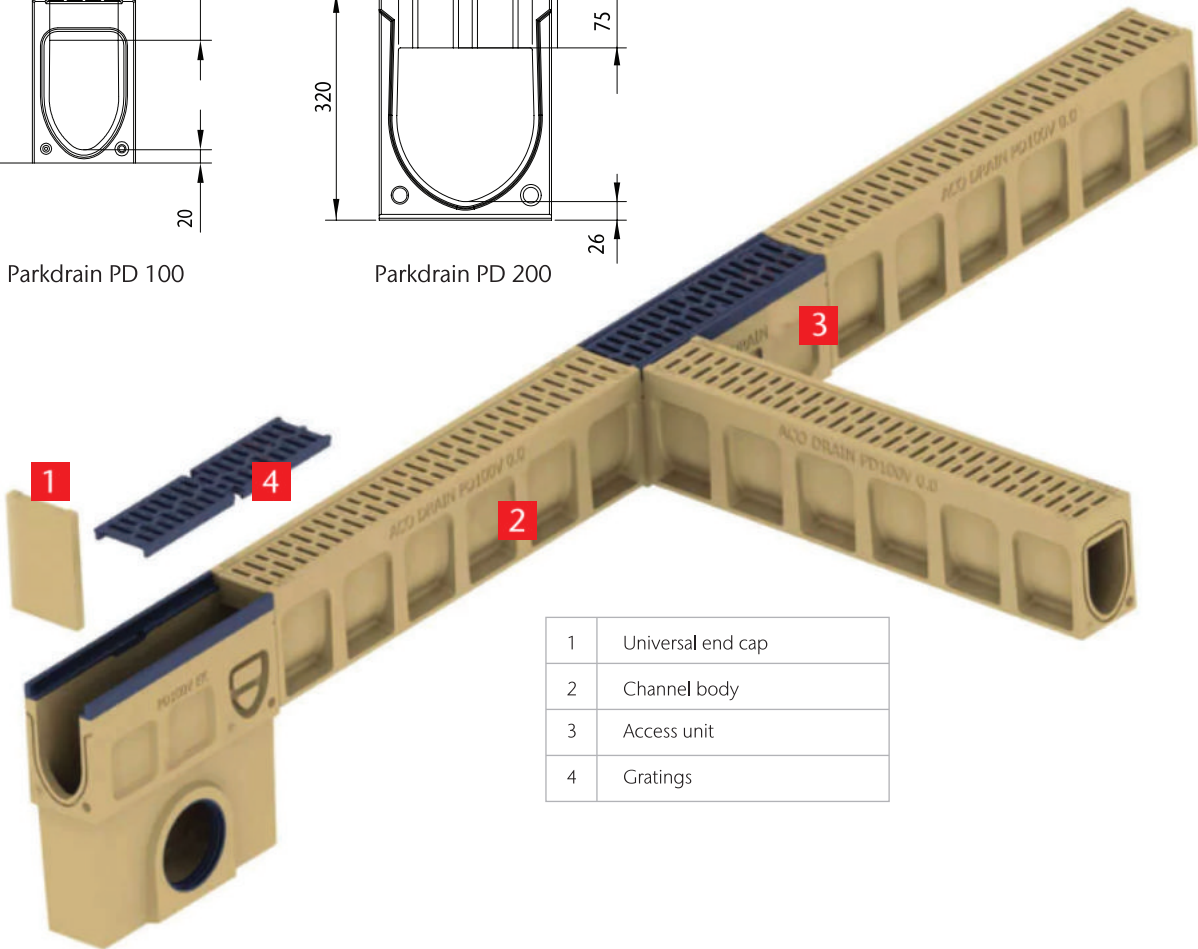
Designed to maintain the long term performance and appearance of the installation, its robust one-piece construction removes the risks associated with dislodged or stolen gratings – providing a highly effective alternative to traditional two-part channel and grate systems



Parkdrain PD 100



Parkdrain PD 200

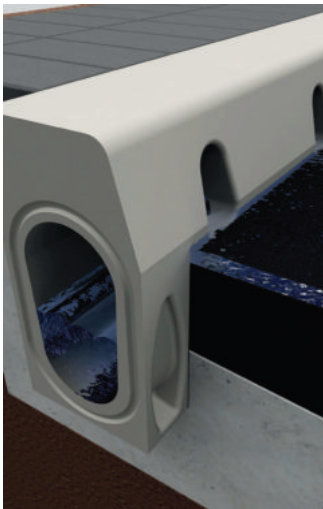
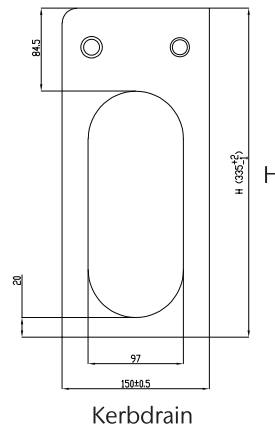


1	Universal end cap
2	Channel body
3	Access unit
4	Gratings

Load class
■ D400 load class
Depth
■ 335 mm
■ 510 mm
Material
■ Polymer Concrete
Applications
■ Road & highways
■ Tunnel

ACO DRAIN® KerbDrain is a one-piece manufactured polymer concrete kerbstone and at the same time a drainage channel. The system provides excellent hydraulic drainage over the entire length of the kerb, providing ideal drainage planning for areas such as roadways, roundabouts and car parks.

Since the KerbDrain is coloured like standardised concrete kerbstones, its use therefore supports a uniform, aesthetic appearance. Due to the low weight, the integration of the drainage channel in the kerbstone and the easy cleaning, there are cost advantages from installation up to, and including, utilisation.





Product Type		Loadclass	mm	mm	mm	kg	Art. Nr
			Length	Width	Height	Weight	
Roadrain RD 200	Channel	F900	1000	260	330	92	130004
			1000	260	530	111	130006
	Inspection unit		660	260	330	51.6	130016C
			660	260	530	67.6	130017C
Parkdrain PD 100	Channel	D400	1000	150	230	32.8	10832C
	Inspection unit		500	150	230	17.8	10836
	Endcap		20	150	230	1.4	10833C
Parkdrain PD 200	Channel		1000	250	320	78	11026
			1000	250	370	82	11027
			1000	250	420	86	11028
	Inspection unit		500	250	320	25	11029
			660	250	530	67.6	130017C
Parkdrain 200 / Roadrain 200	Endcap		50	260	330	8.4	11467D
			50	260	530	15.1	11466D
Kerbdrain 335	Channel	D400	1000	150	335	53.5	312780C
	Inspection unit		1000	150	335	54.7	312781C
Kerbdrain 510	Channel		1000	150	510	65.5	312782C
	Inspection unit		1000	150	510	66.7	312783C

ACO Stormbrixx

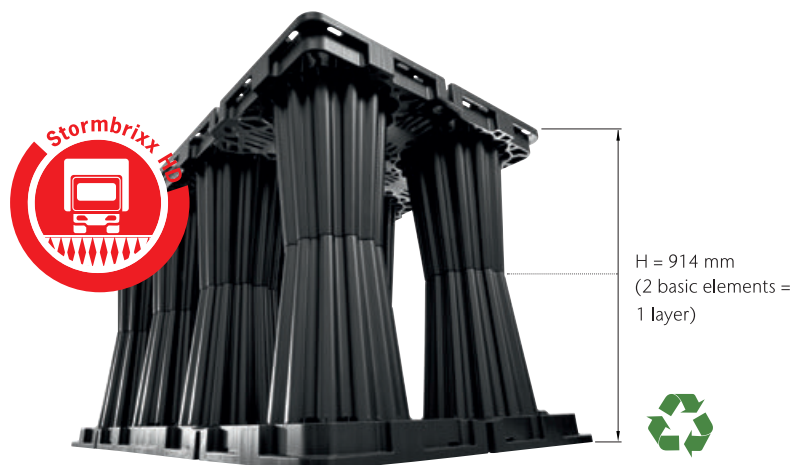
ACO has innovated an exceptional system known as StormBrixx—a patented stormwater management solution constructed from plastic geocellular materials.

Designed to address sustainable surface water needs, it provides effective solutions for detention, retention, infiltration, and the potential for water reuse. ACO StormBrixx stands out as the fastest, easiest, and most versatile underground water tank to install, much like the simplicity of building LEGO bricks. Its versatility makes it suitable for application in various construction environments.



Parameters of SD

- Single layer height : 914 mm
- Main element/m³ : 3
- Volume/main element : 319 L
- Water storage rate in space : 97 %
- Min. depth of cover: 0.8 m
- **Max. depth of cover: 2.0 m**
- Passed the test of MFPA in Leipzig



Parameters of HD

- Single layer height : 914 mm
- Main element/m³ : 3
- Volume/main element : 319 L
- Water storage rate in space : 97 %
- Min. depth of cover: 0.8 m
- **Max. depth of cover: 4.2 m**
- Passed the test of MFPA in Leipzig



50 YEARS
OF ACO RELIABILITY

Product testing

According to the installation conditions ACO Stormbrixx systems provide a product safety, which is designed for 50 years in accordance with DIBt guidelines.

ACO Stormbrixx HD is DIBt-certified. ACO Stormbrixx SD has been tested by the Gesellschaft für Materialforschung und Prüfanstalt für das Bauwesen Leipzig mbH, Germany.

Regular material and product tests ensure continuous quality.



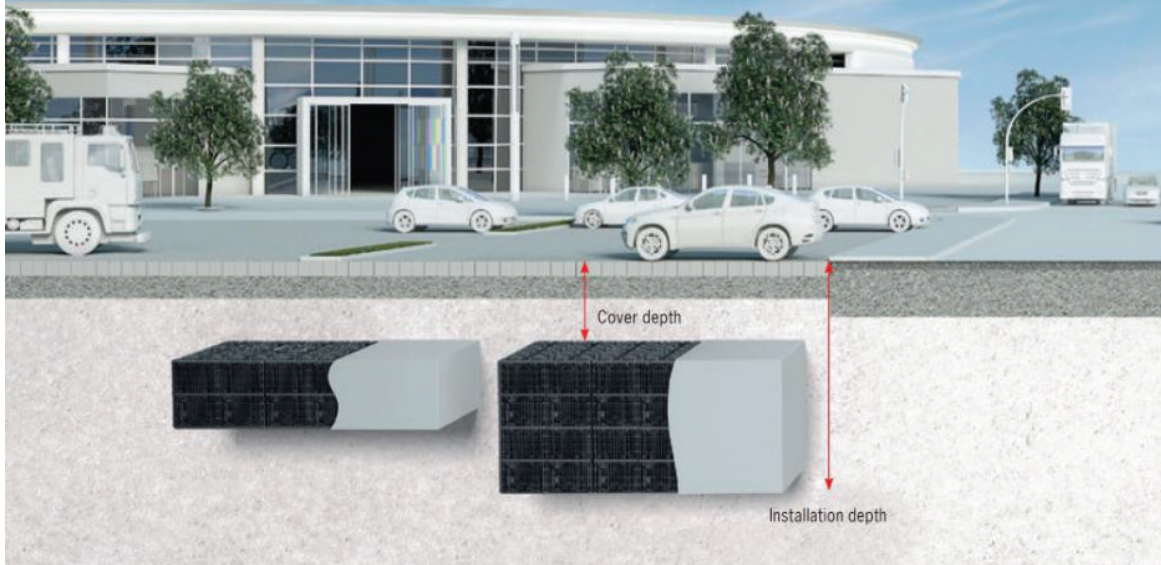
Deutsches
Institut
für
Bautechnik

DIBt

Stormbrixx SD

Application overview –

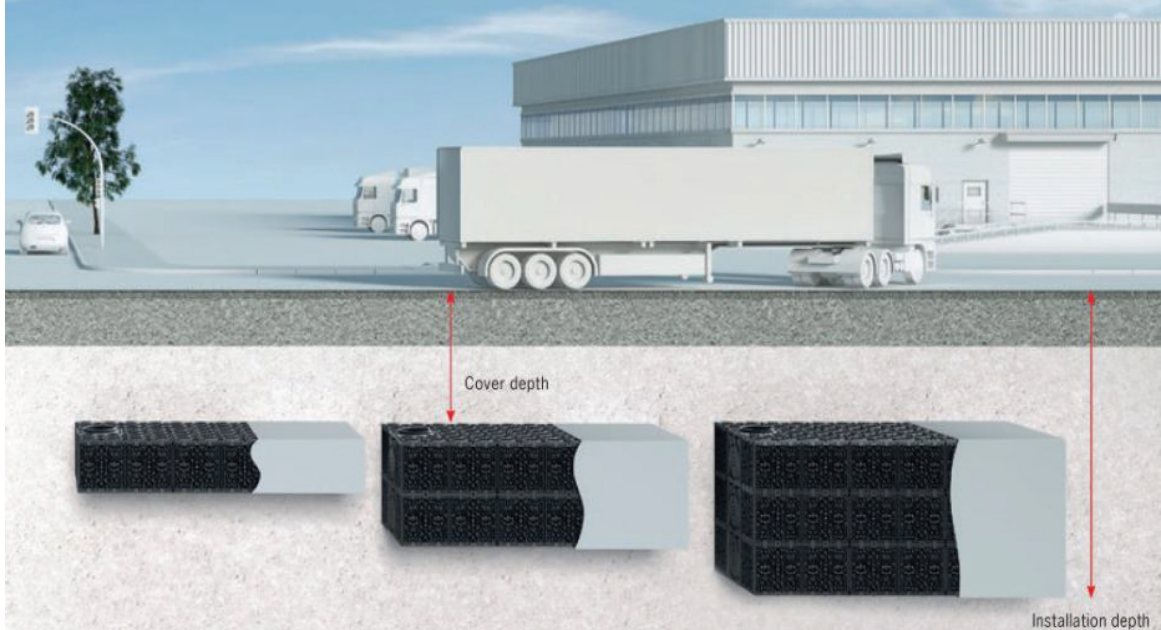
Find the appropriate Stormbrixx construction



Layers	Walkable			Trafficable		
	Cover depth		Installation depth	Cover depth		Installation depth
	minimal (mm)	maximal (mm)	maximal (mm)	minimal (mm)	maximal (mm)	maximal (mm)
1	800	2000	2914	800*	2000	2914
2	800	2000	3828	800*	2000	3828

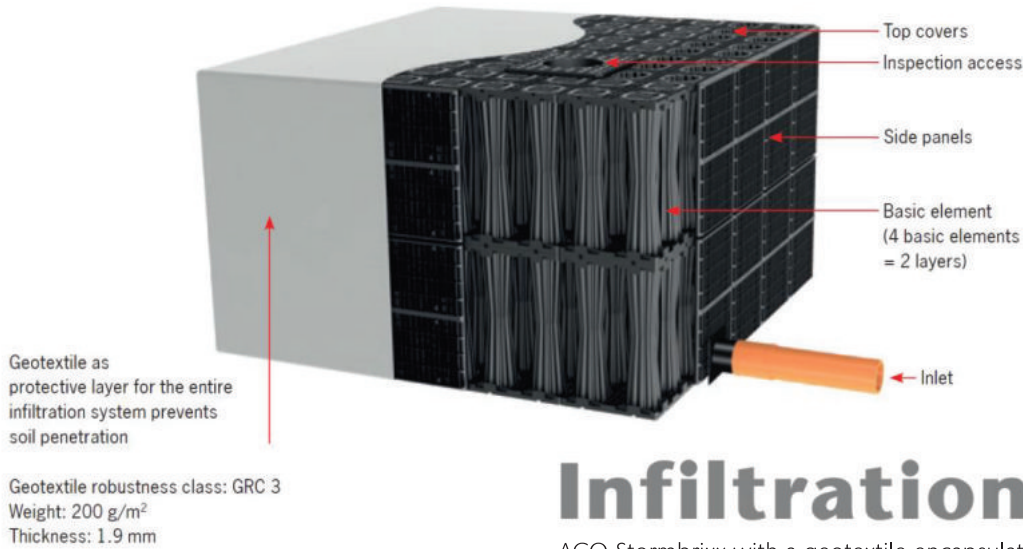
Stormbrixx HD

Heavy Duty: Suitable for occasional heavy traffic use



Layers	Walkable and trafficable			Trafficable with heavy traffic		
	Cover depth		Installation depth	Cover depth		Installation depth
	minimal (mm)	maximal (mm)	maximal (mm)	minimal (mm)	maximal (mm)	maximal (mm)
1	800*	3400	4010	1000	4200	5114
2	800*	3400	4620	1000	4200	6028
3	800*	3400	5230	1000	4200	6942
4	Please contact ACO Application engineering in your country					

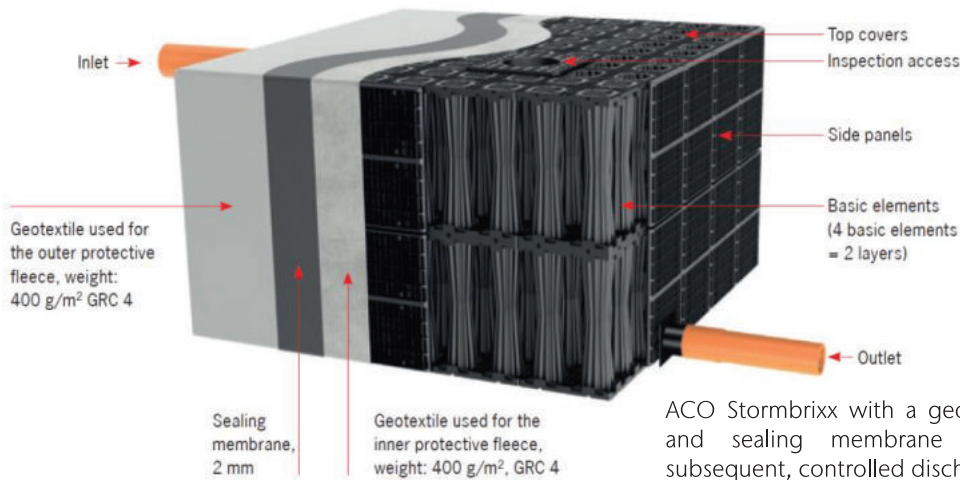
Functions of ACO Stormbrixx



Infiltration

ACO Stormbrixx with a geotextile encapsulation for intermediate storage capacity and subsequent infiltration of rainwater.

Attenuation



ACO Stormbrixx with a geotextile encapsulation and sealing membrane for retention and subsequent, controlled discharge of rainwater.



1 instead of 4 trucks

Project Reference



Kuala Lumpur City Centre (KLCC)



TRX Residences



Capella Sentosa Singapore



Johor Premium Outlet (JPO)



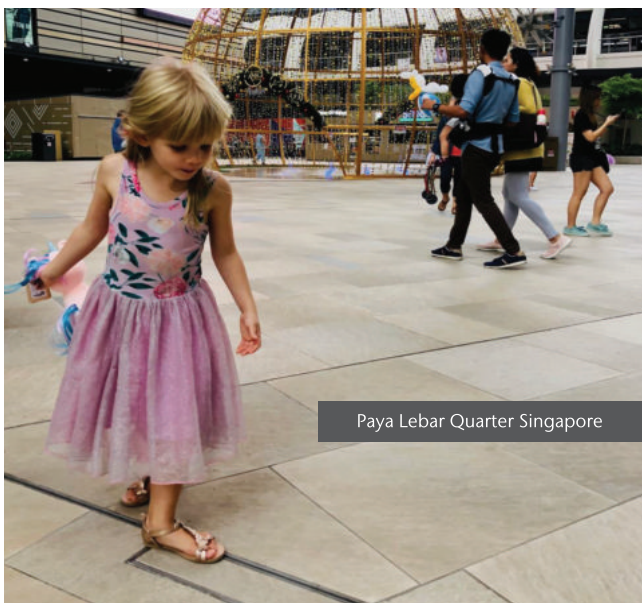
Marina Bay Sands Skypark



Parliament Kuala Lumpur



Double Tree Hotel



Paya Lebar Quarter Singapore

Product Overview



ACO Qmax



ACO Powerdrain



**ACO Access Cover
Servokat SMART**



ACO Roofdrain



ACO Stormclean



**ACO Light Oil
Separator**



**ACO Grease
Separators**



**ACO Grease
Capture**



**ACO Hygienic
Gully**



**ACO Modular
Slot Channel**



**ACO Hygienic
Box Channel**



ACO Pipe

Every ACO product
supports the ACO WaterCycle



- Floor drainage
- Bathroom drainage
- Parking deck drainage
- Roof drainage
- Balcony and terrace drainage
- Pipe systems
- Wall protection
- Grease separators
- Starch separators
- Light oil separators
- Process technology
- Backflow systems
- Lifting stations
- Pumping stations

ACO Southeast Asia

ACO Water Management Sdn Bhd.
Malaysia (1476245-T)

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59200, Kuala Lumpur,
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www.aco-malaysia.com



ACO. we care for water



Every ACO product
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