

MEADRAIN[®]

The professional's choice in surface drainage



MEADRAIN® Drainage Systems

Economical and dependable -- surface drainage for every situation

Whether in the public, industrial or private sector, surface drainage is becoming increasingly important. When installing suitable drainage systems, both safety and aesthetic aspects need to be satisfied. A wide range of different terrain, loading, technical and visual factors need to be taken into account. By offering a comprehensive range with many possible combinations, the MEADRAIN modular construction system provides an optimum individual and economical solution for every field of application and every problem.



Channels and accessories – advanced design makes assembly easy

MEADRAIN drainage systems are quick, simple and straightforward to install. The shallow installation depth requires less time and effort spent on excavation. The channel sections have a low net weight. The tongue and groove system - also called an interlocking joint system - enables an exact fitting of the channel joints and prevents alateral, vertical displacement of the channel unit. The recesses for vertical discharges are pre-shaped as standard. The installation direction and channel numbers are clearly marked.

**Polymer concrete –
light, sturdy and resistant**

The channel units are constructed from polymer concrete. Polyester resin, used as a bonding agent, together with mineral aggregates make polyester concrete an extremely compression-proof building material; not only able to withstand heavy loads, but also extremely durable and long lasting.

Polymer concrete is resistant to abrasive and aggressive materials and is unaffected by the freeze/thaw cycle or de-icing salts. The smooth, rounded internal base of the channel facilitates high flow rates and, by doing so, creates an optimal self-cleaning action - reducing maintenance work and expense to a minimum. Polymer concrete is recyclable and can be partially reused in the manufacturing process.

MEADRAIN – a system that proves itself

Whether in freight forwarding yards, exhibition halls, production complexes, traffic networks or in pedestrian zones, the installed MEADRAIN drainage system will, in every case, ensure efficient, safe and reliable drainage. As the design and colour of gratings can be matched to aesthetic requirements, gratings make a considerable contribution to the overall appearance of areas.

Constant improvement

We are continually striving to further expand and improve our range of products in line with the latest developments in construction technology and the requirements of installers. For this reason we reserve the right to make design changes.

MEA Polymer Concrete

Material properties:

Compression resistance:	approx. 95-100 N/mm ²
Flexural strength:	approx. 25 N/mm ²
Water absorption:	less than 0.05%
Density:	2.25 kg/dm ³
Modulus of elasticity:	25-35 kN/mm ²

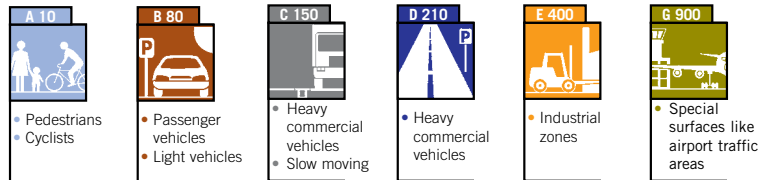


MEADRAIN® Channel types

Channel types



Channel Load Classes AS 3996



	A 10	B 80	C 150	D 210	E 400	G 900	
Z 1000	●	●	●	●			Ref Page 7
LZ 1000 / LS 1000	●	●	●	●			Ref Page 10
S 1000	●	●	●	●			Ref Page 7
U 1000	●	●	●				Ref Page 7
C 1000 BOLTED	●	●	●	● 1)	●	●	Ref Page 17
D 1000				●	●	●	Ref Page 20
Z 2000	●	●	●	●			Ref Page 12
C 2000 BOLTED	●	●	●	● 1)	●	●	Ref Page 18
D 2000				●	●	●	Ref Page 20
U 3000	●	●	●				Ref Page 13
C 3000 BOLTED	●	●	●	● 1)	●	●	Ref Page 19

1) Class D 210: not for cross-drainage of public roads and motorways



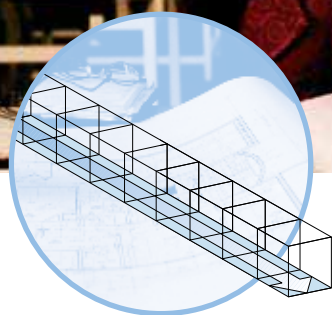
The right solution whatever the terrain

MEA provides a rapid, reliable and cost-effective way of draining all types of surfaces, taking into account variables such as surface type, average rainfall and local incline.

MEADRAIN®, provides a practical solution, right from the outset. In

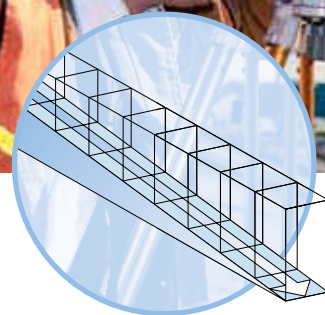
fact, with its three fall options and a multitude of different combinations, you'll always arrive at the perfect solution for every situation: exact accommodation of the terrain and an optimal flow rate. And with MEA's experience, we are pleased to provide a hydraulic design service which is Free of Charge and without obligation

MEA offer a full free of charge technical design service providing hydraulic calculations, CAD layout drawings, quantity schedules and product specifications.



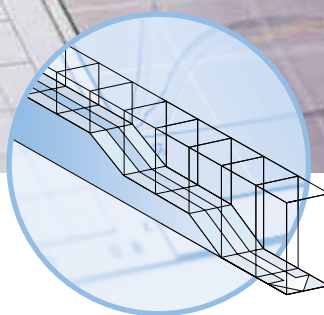
Constant depth

The constant depth channel run is used wherever fall is not required or the natural incline suffices. A choice of different channel heights and nominal widths ranging from 100mm to 300mm is available.



Built in fall

Channel runs with a built in fall, achieved by a continuous gradient of 0.5%, ensure reliable discharge. The 100mm channel can be used to construct runs with a linear fall that extend up to 60 metres for individual lengths with a centre discharge point.



Stepped fall

Channel runs with a stepped fall provide for cost-effective, free-flowing and even discharge. This type of fall can be attained with channels 100mm, 200mm and 300mm.

MEADRAIN Z 1000 CLIPFIX®

The elegant solution with narrow steel edging

For loading classes

A 10 - D 210 to AS 3996 (NZ)

The integrated frame in galvanised steel provides the best possible edge protection and forms an attractive contrast to the adjacent paving. The smooth lateral connecting surface offers an optimal joint for bordering paved surfaces.

Channel units

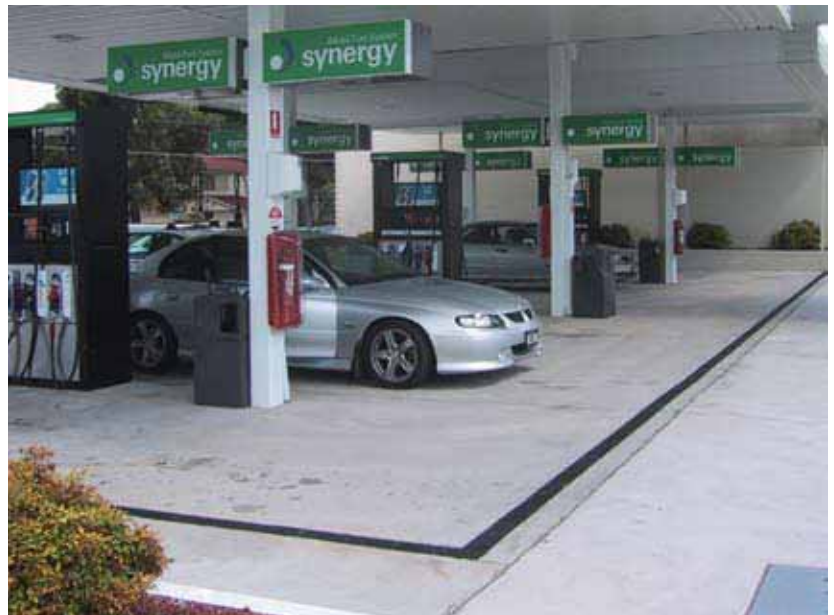
clear width 100mm:

The galvanised steel edge is integrally cast with the channel unit making the attachment of the protective edging solid and secure.

Since the grating and channel edging are made of metal, a high degree of strength and durability is a feature of the system.

Locking recesses, reinforced by the integrated edges, provide for a secure attachment for the gratings.

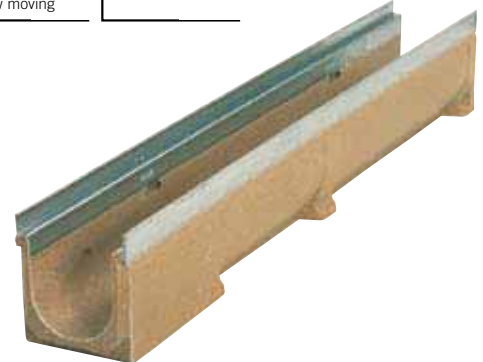
Galvanising protects the material against corrosion.



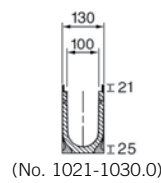
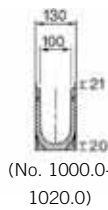
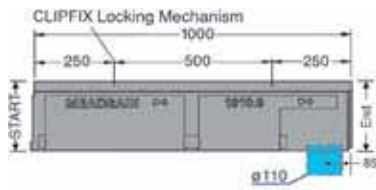
MEADRAIN Z 1000 CLIPFIX – classic linear drainage with boltless locking system.

Channel Load Classes

<p>A 10</p>	<p>B 80</p>	<p>C 150</p>	<p>D 210</p>
<ul style="list-style-type: none"> • Pedestrians • Cyclists 	<ul style="list-style-type: none"> • Passenger vehicles • Light vehicles 	<ul style="list-style-type: none"> • Heavy commercial vehicles • Slow moving 	<ul style="list-style-type: none"> • Heavy commercial vehicles



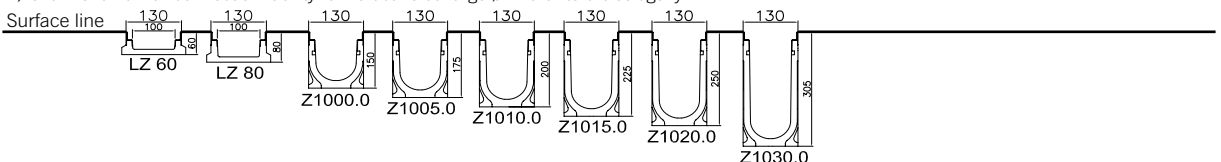
MEADRAIN® Z 1000 CLIPFIX® & Bolted System Overview



NOTE: The channel is available with three types of edge rail:
Z = zinc (galvanised)
S = stainless steel
U = unedged
 Just replace the first letter of the code:
 eg. **Z**1000.0 to **S**1000.0

Product description	Product code	Order No. EDP No.	Total length mm	Total height		Invert fall %	Type of fall	kg/unit
				Start mm	End mm			
MEADRAIN® Z 1000 Channel units from polymer concrete with integrated galvanised steel edge, suitable for MEADRAIN® 1000 standard gratings	Z 1000.0 ¹⁾	155401	1000	150	150	0.0	●	13.5
	Z 1001	155405	1000	150	155	0.5	●	13.8
	Z 1002	155407	1000	155	160	0.5	●	14.2
	Z 1003	155409	1000	160	165	0.5	●	14.6
	Z 1004	155411	1000	165	170	0.5	●	15.1
	Z 1005 ¹⁾	155413	1000	170	175	0.5	●	15.3
	Z 1005.0 ¹⁾	155415	1000	175	175	0.0	●	15.5
	Z 1006	155419	1000	175	180	0.5	●	15.4
	Z 1007	155421	1000	180	185	0.5	●	15.8
	Z 1008	155423	1000	185	190	0.5	●	16.2
	Z 1009	155425	1000	190	195	0.5	●	16.6
	Z 1010 ¹⁾	155427	1000	195	200	0.5	●	17.1
	Z 1010.0 ¹⁾	155429	1000	200	200	0.0	●	17.2
	Z 1011	155433	1000	200	205	0.5	●	17.3
	Z 1012	155435	1000	205	210	0.5	●	17.7
	Z 1013	155437	1000	210	215	0.5	●	18.1
	Z 1014	155439	1000	215	220	0.5	●	18.5
	Z 1015 ¹⁾	155441	1000	220	225	0.5	●	19.0
	Z 1015.0 ¹⁾	155443	1000	225	225	0.0	●	19.5
	Z 1016	155447	1000	225	230	0.5	●	19.7
	Z 1017	155449	1000	230	235	0.5	●	20.1
	Z 1018	155451	1000	235	240	0.5	●	20.5
	Z 1019	155453	1000	240	245	0.5	●	20.9
	Z 1020 ¹⁾	155455	1000	245	250	0.5	●	21.5
	Z 1020.0 ¹⁾	155457	1000	250	250	0.0	●	21.7
	Z 1021	155501	1000	250	255	0.5	●	22.3
	Z 1022	155503	1000	255	260	0.5	●	22.6
	Z 1023	155505	1000	260	265	0.5	●	22.9
	Z 1024	155507	1000	265	270	0.5	●	23.0
	Z 1025 ¹⁾	155509	1000	270	275	0.5	●	24.1
Z 1026	155511	1000	275	280	0.5	●	24.3	
Z 1027	155513	1000	280	285	0.5	●	24.5	
Z 1028	155515	1000	285	290	0.5	●	24.9	
Z 1029	155517	1000	290	295	0.5	●	25.3	
Z 1030 ¹⁾	155519	1000	295	300	0.5	●	26.0	
Z 1030.0 ¹⁾	155521	1000	300	300	0.0	●	27.0	
MEADRAIN® Z 1000 Connecting units for stepped fall	Z 1000-5	155461	1000	150	175	2.5	●	14.6
	Z 1005-10	155463	1000	175	200	2.5	●	16.3
	Z 1010-15	155465	1000	200	225	2.5	●	18.1
	Z 1015-20	155467	1000	225	250	2.5	●	20.6

1) Channel unit with connection facility for vertical discharge \varnothing 110 or to silt box/gully



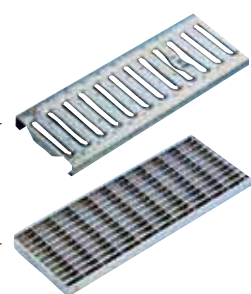
MEADRAIN® 1000

Standard Gratings

System Overview

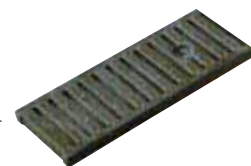
Standard gratings suitable for loading class A 10
 (installation of locking mechanisms to AS 3996)
 Please note all grating should be locked down

Product description	Order No. EDP No.	Width mm	Length mm	Weight kg	Inlet sectional area cm ² /m
Slotted galvanised steel grating (1)	152101	123	1000	2.3	280
Slotted stainless steel grating (2)	152201	123	1000	2.3	280
Galvanised steel mesh grating, 30/10 mm mesh (3)	152801	123	1000	2.2	790
Stainless steel mesh grating, 30/10 mm mesh (4)	152901	123	1000	2.2	790
Heelguard stainless steel grating, 5/30 mm	147937	123	1000	5.0	700



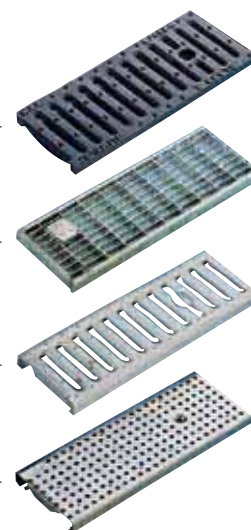
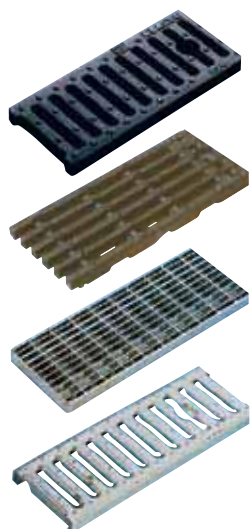
Standard gratings suitable for loading class B 80 & C 150
 (installation of locking mechanisms is necessary to AS 3996)

Product description	Order No. EDP No.	Width mm	Length mm	Weight kg	Inlet sectional area cm ² /m
Plastic slotted grey slot 10/80mm	141709	123	500	2.5	380
Composite heelguard grate slot 5/80mm	147214	123	500	3.0	175



Standard gratings suitable for loading class D 210 & E 400
 (installation of locking mechanisms is necessary to AS 3996)

Product description	Order No. EDP No.	Width mm	Length mm	Weight kg	Inlet sectional area cm ² /m
Slotted cast iron grating, 10/80 mm slots	152411	123	500	4.2	350
Heelguard slotted cast iron grating, 5/80 mm slots	152541	123	500	4.1	175
Intercept Grates 40/10 mm	101intercept	123	500	5.4	270
Galvanised steel mesh grating, 30/15 mm mesh	152503	123	1000	4.9	865
Stainless steel mesh grating, 30/10 mm mesh	152513	123	1000	4.5	765
Reinforced galvanised steel slotted grating	152711	123	1000	5.4	280
Reinforced stainless steel slotted grating	152755	123	1000	5.2	280
Galvanised steel perforated grating	152771	123	1000	5.0	170



MEADRAIN® 1000 Accessories System Overview

Locking mechanisms suitable for MEADRAIN® standard gratings loading classes A 10 to E 400

(installation of locking mechanisms is highly recommended)

Product description	Order No. EDP No.	Weight kg
Stainless steel locking mechanism for slotted gratings Packs of Two Lock Downs	152211	0.2
Stainless steel locking mechanism for mesh and perforated gratings	152531	0.2
Clipfix® to suit cast iron grates	152403	0.2
Clipfix® to suit galvanised slotted grates	152404	0.2
Clipfix® to suit galvanised mesh grates	152409	0.2
Stainless steel locking mechanism for w/w S1000 Packs of Two Lock Downs	147110	0.2
Stainless steel locking mechanism for w/w LS1000 Packs of Two Lock Downs	154523	0.2

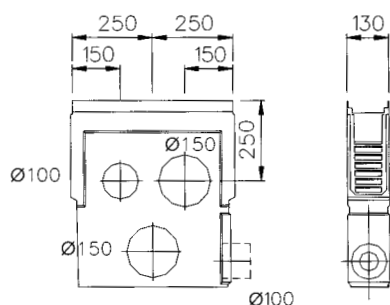


MEADRAIN® End caps

Product description	Channel Type		
	Z 1000	S 1000	C 1000
Order No. / EDP No.			
End cap for channel start and end	galvanised steel	stainless steel	galvanised steel
Typ 1030.SE	151471	151671	153371

MEADRAIN® Silt boxes from polymer concrete

Product description	Length mm	Width mm	Height mm	Weight kg	Sewer-connection	Order No. EDP No.
Z 1000.EK with galvanised steel edge protection	500	130	580	24.5	ø110/160 mm	155484
S 1000.EK with stainless steel edge protection	500	130	580	24.5	ø110/160 mm	151684



The silt box, having the same width as the channel, has cast iron edge protection and bolted, cast iron gratings to satisfy load requirements. A galvanised sediment bucket prevents the bottom pipe from becoming blocked.

Both the edge and the sediment bucket of silt boxes are made of stainless steel. Knockouts for ø 110/160 mm outlets are provided.

MEADRAIN® 2000

Overview of the Z 2000 system

Suitable for drainage of large surface areas.

Large areas in industrial complexes and car parks require a surface drainage system that can cope with substantial quantities of rainwater and easily accommodate the construction of longer line lengths. MEADRAIN 2000, with a clear width of 200 mm, and overall heights of 280 to 380 mm is the ideal channel system for this. The channel bodies in highly robust polymer concrete are available with edge protection, and for all classes A 10 - D 210. The system can be installed with no fall or a stepped fall.



NOTE: The channel is available with three types of edge rail:
Z = zinc (galvanised)
S = stainless steel
U = unedged
 Just replace the first letter of the code:
 eg. **Z**1000.0 to **S**1000.0

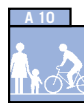
MEADRAIN® Z 2000

Clear width 200 mm
 Total width 254 mm
 Classes A 10, B 80, C 210

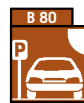


MEADRAIN® Z 2000 Channel units and gratings

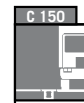
Product description	Product code	Order No. EDP No.	Total length mm	Total height Start/end mm	Total width mm	kg/unit
Z 2000/C 250 Channel units in polymer concrete	Z 2000.0	154202	1000	280/280	230	37.5
	Z 2010.0	154206	1000	330/330	230	43.0
	Z 2020.1	154210	1000	380/380	230	48.5
Heelguard Ductile Cast Iron Grate	D 210kn	160030H	500		223	9
Galvanised Steel Heelguard Grate	B 80kn	160020	1000		251	22
Grating lock for Z 2000 (2 pcs./metre)		161000			0.2	



- Pedestrians
- Cyclists



- Passenger vehicles
- Light vehicles



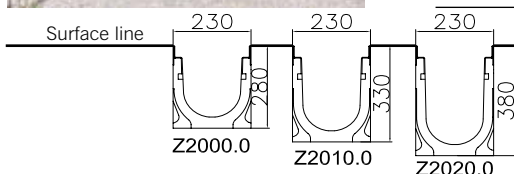
- Heavy commercial vehicles
- Slow moving



- Heavy commercial vehicles

MEADRAIN® Z 2000 Accessories

Product description	Order No. EDP No.	kg/unit
End cap for channel start/end, in stainless steel	Z 2000.S 160100	3.7
End cap for channel start/end, in galvanised steel	Z 2000.F 160200	3.7



MEADRAIN® 3000

Overview of the U 3000 system

Maximum drainage capacity

MEADRAIN U 3000 satisfies the demand for maximum drainage capacity and longer channel lengths. A clear height of 300 mm and an overall height of 390 mm produce a flow profile which is able to drain quickly and reliably even the largest volumes of water. If MEADRAIN U 3000 is installed in naturally sloping terrain, the maximum drainage capacity is substantially increased.



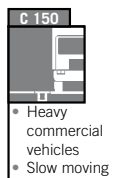
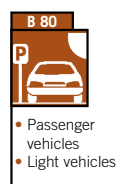
MEADRAIN® U 3000

Clear width 300 mm
Total width 354 mm
Classes A 10, B 80, C 150, D 210

MEADRAIN® U 3000 Channel units and gratings

Product description	Product code	Order No. EDP No.	Total length mm	Total height Start/end mm	Total width mm	kg/unit
U 3000	U 3000.0	154801	1000	390/390	354	63.0
Galvanised steel overlay mesh grating 20x30 mm mesh	C250	154833	1000		351	30.5
Grating lock for U 3000 (4 pcs./metre)		154127				0.2

ø 200 mm outlet connections in the gully bottom section ensure effective drainage - even of large quantities of water. Short or long sediment buckets are available, depending on the height of the gully assembly, i.e. for either a 2 or 3 section gully.



MEADRAIN® U 3000 Gully

Product description	Product code	Order No. EDP No.	Total length mm	Total height mm	Total width mm	kg/unit
Gully Top section	U 3000 SK-OT	154861	500	440	354	32.0
Gully Middle section	U 3000 SK-ZT	154709	524	350	344	22.0
Gully Bottom section	U 3000 SK-UT	154711	524	310	344	24.0
Sediment bucket galvanised short for U 3000 gully		154713				3.5
Sediment bucket galvanised short for U 3000 gully		154715				6.0

End caps available.

MEADRAIN® Shallow Channel System Overview

Linear drainage for restricted depth installations

If the installation depth is restricted, the MEADRAIN shallow channel range is ideal. 60 or 80 mm high channels are available with a galvanised or stainless steel edge. Ideal for suspended concrete floors, roof drains and balconies.



MEADRAIN Product description	Order No. EDP No.	Length cm	Height cm	Fall type	kg / Unit	Units / Pal.
Channel with integrated galvanised steel edge LZ 1000.0/60 ¹⁾	155561	100.0	6.0		8.3	80
Channel with integrated galvanised steel edge LZ 1000.0/80 ¹⁾	155571	100.0	8.0		8.6	70
Channel with integrated stainless steel edge LS 1000.0/60 ¹⁾	155549	100.0	6.0		8.3	80
Channel with integrated stainless steel edge LS 1000.0/80 ¹⁾	155555	100.0	8.0		8.6	70

1) Channel with 110 mm connection facility (via 110 mm knockout in base)

2) Stainless steel locking mechanism to suit for w/w S1000 and w/w LS1000 - Packs of Two Lock Downs

NOTE: Available with both stainless steel and galvanised edge protection.

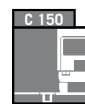
Channel Load Classes



- Pedestrians
- Cyclists



- Passenger vehicles
- Light vehicles



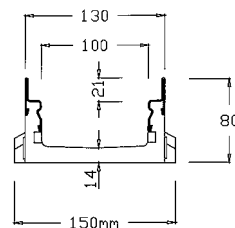
- Heavy commercial vehicles
- Slow moving



- Heavy commercial vehicles

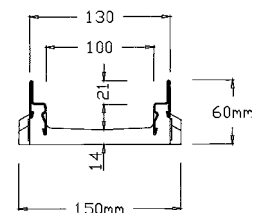


Refer to page 8 for a full selection of grates.



LZ 80

Available in galvanised or stainless steel



LZ 60

Available in galvanised or stainless steel

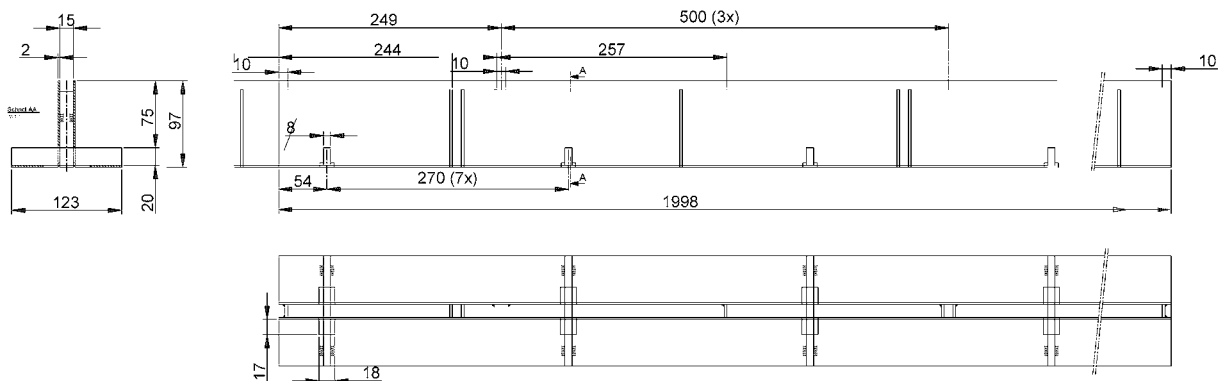
MEADRAIN® Topslot™ System Overview

Meadrain® Topslot™ for architecturally sensitive areas.

Meadrain® Topslot™ was designed for the architect in mind. Designed to blend into the pavement, with a slot of 10mm it is safe for all pedestrian walkways and is wheelchair and disability friendly and meets AS 1324.

More importantly it overcomes the need for unsightly pit grates and the problems of pooling around these types of drainage designs. The sub drain can be pre sloped. This enables the design to keep the surface of the drain on a level plane. The system is a very cost effective way to make your drainage an invisible option.

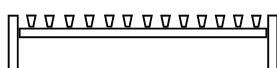
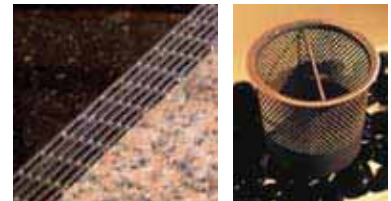
Equivalent intake area of a 300 x 300 sump every 2 metres the Topslot™ has a deceptively high water intake ability.



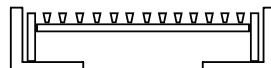
Stainless Steel System Overview

When required for specific applications we are to supply a full range of stainless steel channel troughs and grating, in 304, 316 grade light duty to heavy duty. Please ask your local MEA representative to fax or email details.

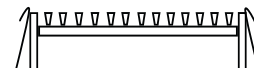
These can be both off the shelf items or made to order to your design with a wide range of grating types available.



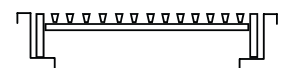
Grate



Grate/Frame



Pressed edge Trough & Grate



Folded edge Trough & Grate

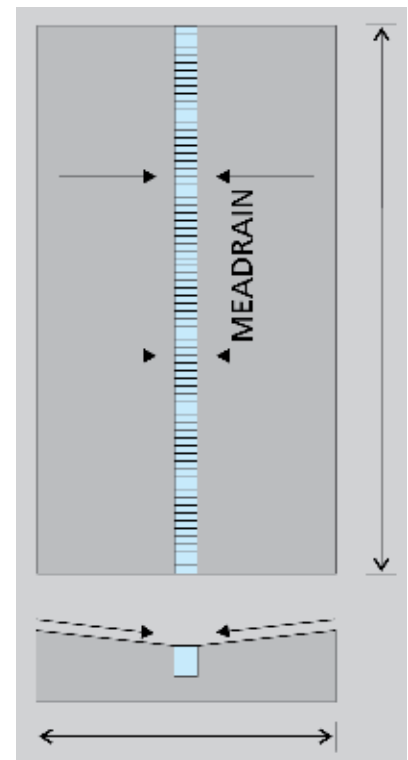
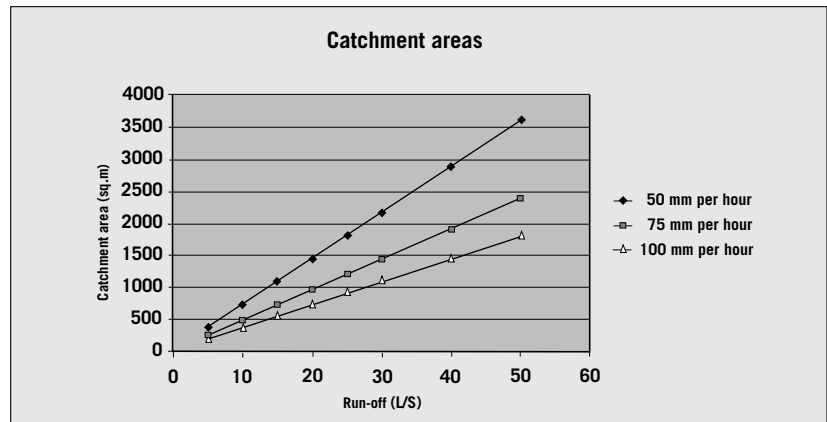
MEADRAIN® Linear Drainage

Hydraulic calculations -

When drawing up an individual design based on the given requirements, MEA drains solutions provide quick, reliable and economical drainage of surface water. Whether in the public, industrial or private sector, linear drainage is the optimal solution as water can drain into the installed channel along the entire length. Several factors are important if accurate calculations are to be made: the size and surface features of the site to be drained must be taken into account, along with the average amount of water deposited in this area.

The Institute of Water Technology at the University of Stuttgart performs detailed hydraulic calculations for MEADRAIN drainage channels. Using experimental investigations and empirically corrected calculation formulae, the performance of different channel systems is assessed. The length and fall of the line as well as the geometrical shape of the individual channel units are taken into account in these calculations. By taking all the above factors into consideration, the type and length of the required channel line and the number of collection points needed in practice can then be specified in the form of tables and diagrams.

MEA offer a full free of charge technical design service providing hydraulic calculations, CAD layout drawings, quantity schedules and product specifications.



To calculate the site's hydraulic requirements, the following steps should be followed:

- 1) Multiply the catchment length by the catchment width to give the surface area to be drained by the channels.
- 2) Multiply the catchment area by the chosen rainfall intensity (80 mm per hour being the most commonly used). The calculated figure is the litres per hour that the channel must cope with.
- 3) Divide by 3600 to calculate the site requirements in litres per second.
- 4) Divide by the channel length (in metres) to give the flow rate (litres per second per metre).
- 5) Cross-reference flow rate with MEA's hydraulic data to determine channel required.
- 6) Check the outlet has sufficient discharge capacity to deal with the requirements.

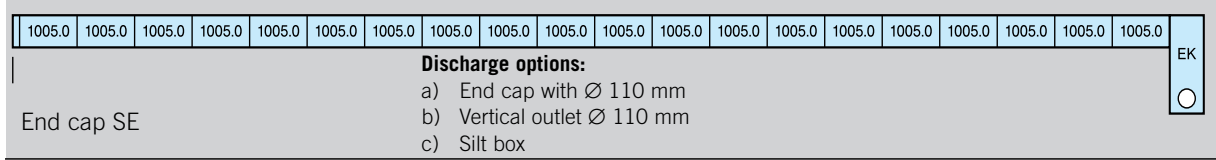


MEADRAIN® 1000

Channel run information

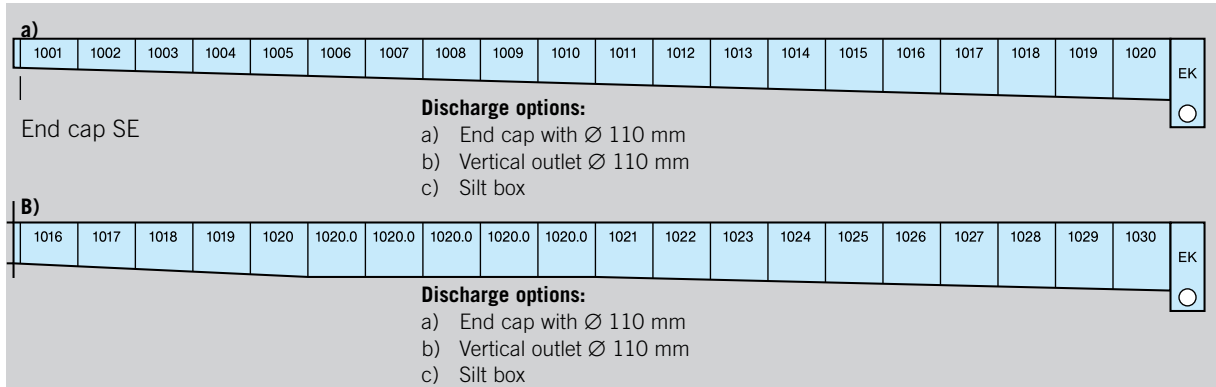
1) Channel without fall

The flat channel is installed if no fall is required, or the natural gradient is adequate. The channels are available in six different heights.



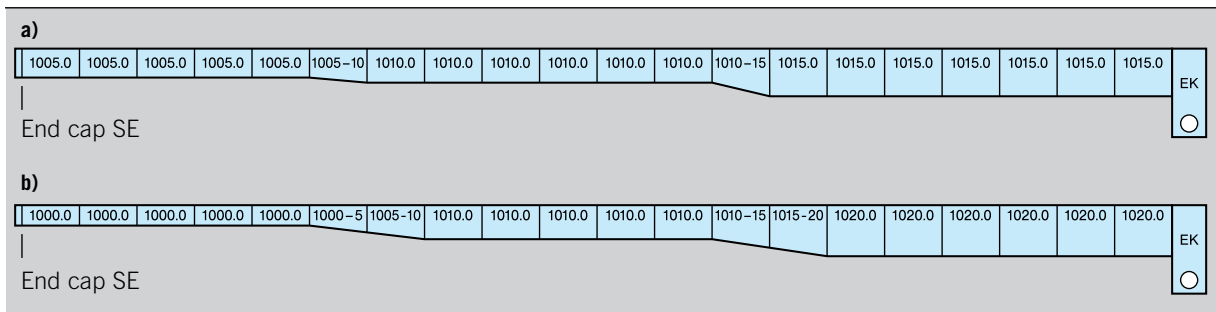
2) Channel with built-in fall

This channel type is available in designs 1001-1030. If the line is to be extended, level invert sections can be inserted.



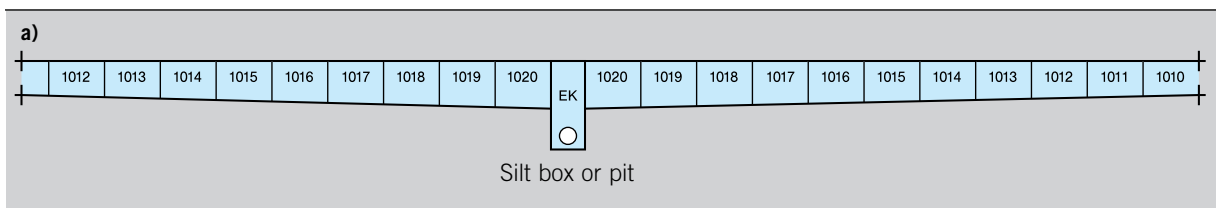
3) Channel with stepped fall

To achieve this type of fall, channel sections with up to five heights can be combined.



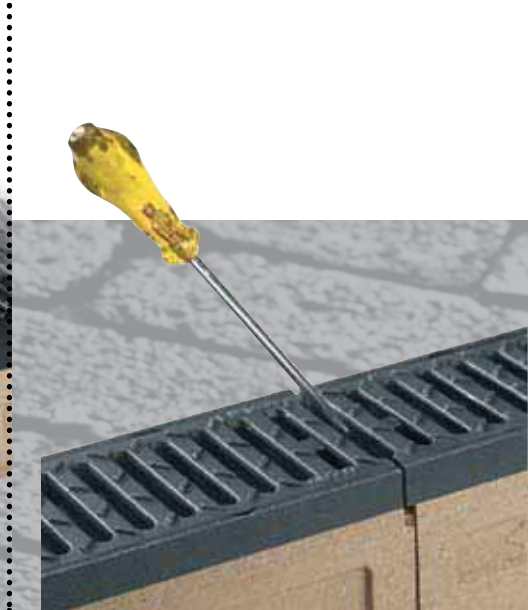
4) Channel with counter-directional fall

This method of construction is particularly suited to the formation of long channel runs.



MEADRAIN®

The heavy duty drainage channel made from high-strength polymer concrete



C 150

- Heavy commercial vehicles
- Slow moving

D 210

- Heavy commercial vehicles

E 400

- Industrial zones

G 900

- Special surfaces like airport traffic areas

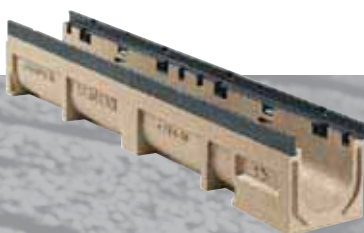
For everyone who appreciates fast, simple and convenient installation

It's professionals who fit PROFIX! And it's never been easier: lay the grating into the channel – push in – finished. The grating's 4-point spring steel locking system automatically secures the grating in the channel, and what about removal? Simply use a screwdriver to lever the grating up, or alternatively grates can be bolted down at 8 points per metre using high tensile bolts.

Whether inserting gratings for the first time or cleaning the channel: compared with conventional methods of channel securement, PROFIX releases you from the arduous task of unbolting gratings and guarantees the grating to be rattle-free when driven over by vehicles.



MEADRAIN® C 1000



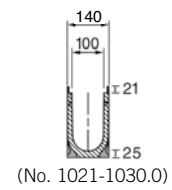
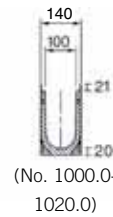
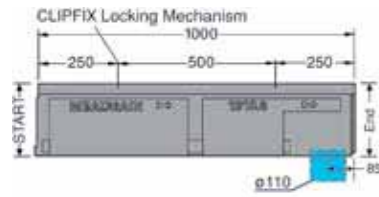
MEADRAIN® C 2000



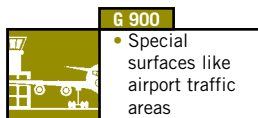
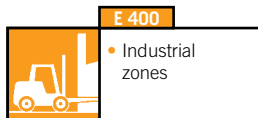
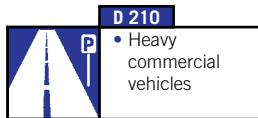
MEADRAIN® C 3000



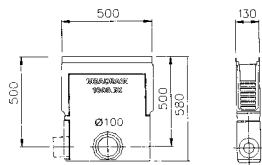
MEADRAIN® C 1000 PROFIX® & Bolted System Overview



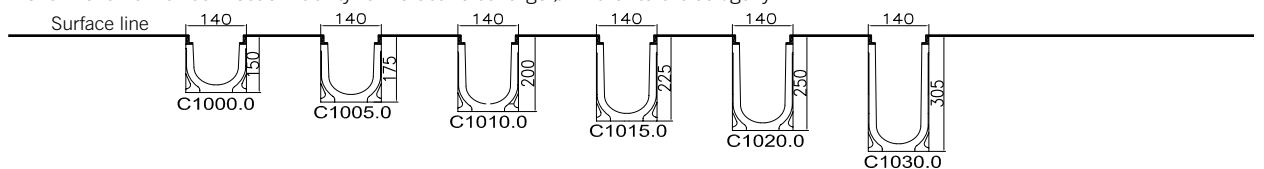
Product description	Product code	Order No. EDP No.	Total length mm	Total height			Type of fall		kg/unit
				Start mm	End mm				
MEADRAIN C 1000 PROFIX® Channel units in polymer concrete with integrated cast ductile iron edge incl. class F 900 cast ductile iron gratings with PROFIX® boltless locking system or 8 bolts per metre	C 1000.0 ¹⁾	153601	1000	150	150	00	●		29.7
	C 1001	153605	1000	150	155	05		●	29.0
	C 1002	153607	1000	155	160	05		●	29.9
	C 1003	153609	1000	160	165	05		●	29.9
	C 1004	153611	1000	165	170	05		●	30.7
	C 1005 ¹⁾	153613	1000	170	175	05		●	30.9
	C 1005.0 ¹⁾	153615	1000	175	175	00	●		31.2
	C 1006	153619	1000	175	180	05		●	31.3
	C 1007	153621	1000	180	185	05		●	32.3
	C 1008	153623	1000	185	190	05		●	32.5
	C 1009	153625	1000	190	195	05		●	33.1
	C 1010 ¹⁾	153627	1000	195	200	05		●	33.8
	C 1010.0 ¹⁾	153629	1000	200	200	00	●		33.7
	C 1011	153633	1000	200	205	05		●	33.9
	C 1012	153635	1000	205	210	05		●	33.1
	C 1013	153637	1000	210	215	05		●	34.1
	C 1014	153639	1000	215	220	05		●	34.5
	C 1015 ¹⁾	153641	1000	220	225	05		●	35.1
	C 1015.0 ¹⁾	153643	1000	225	225	00	●		34.9
C 1016	153647	1000	225	230	05		●	35.5	
C 1017	153649	1000	230	235	05		●	36.0	
C 1018	153651	1000	235	240	05		●	35.9	
C 1019	153653	1000	240	245	05		●	37.5	
C 1020 ¹⁾	153655	1000	245	250	05		●	38.0	
C 1020.0 ¹⁾	153657	1000	250	250	00	●		38.2	
C 1021	153701	1000	250	255	05		●	36.8	
C 1022	153703	1000	255	260	05		●	36.9	
C 1023	153705	1000	260	265	05		●	37.0	
C 1024	153707	1000	265	270	05		●	38.9	
C 1025 ¹⁾	153709	1000	270	275	05		●	39.5	
C 1026	153711	1000	275	280	05		●	40.4	
C 1027	153713	1000	280	285	05		●	41.5	
C 1028	153715	1000	285	290	05		●	39.1	
C 1029	153717	1000	290	295	05		●	40.3	
C 1030 ¹⁾	153719	1000	295	300	05		●	41.7	
C 1030.0 ¹⁾	153721	1000	300	300	00	●		41.7	



C 1000.EK Silt Box
EDP Order N° 153691
Weight 32.3kg



¹⁾ Channel unit with connection facility for vertical discharge \varnothing 110 or to silt box/gully



MEADRAIN®

Overview of the C 2000 system

Large area surface drainage in heavy-load industrial areas.

The high level of mechanical stability demanded by lorry traffic and forklift truck operation in industrial areas is met by the MEADRAIN C 2000 system. The cast-iron edge protection and cast-iron grating provide a durable, stable and corrosion-resistant solution.

* Available in both PROFIX® and Bolted Locking systems



NOTE: C2000 grates are available in slotted Heelguard grating upon request.

MEADRAIN C 2000/G 900

Clear width 200 mm
Total width 254 mm
Classes D 210¹⁾, E 400, G 900

Level invert channels have pre-formed vertical knockouts to accept a Ø 160 mm pipe.

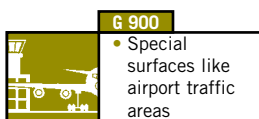
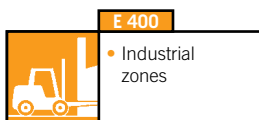
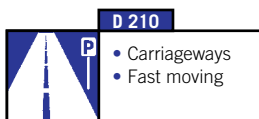
For information on the MEADRAIN C 2000 gully, see page 19.

MEADRAIN® C 2000/G 900

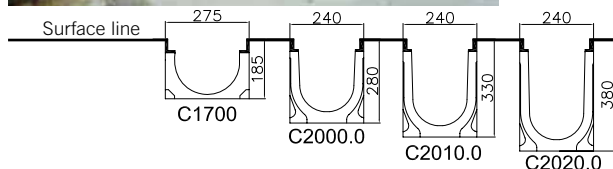
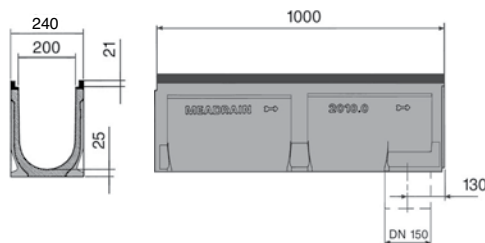
Channel unit incl. grating with bolt fixings, 8 pcs./metre

Product description	Product code	Order No. EDP No.	Total length mm	Total height Start/end mm	Type of fall	Inlet sectional area mm ² /m	kg/unit
MEADRAIN® C 2000/G 900	C 1700.0	154450	1000	185/185		962	61.5
	C 2000.0	154451	1000	280/280		962	70.5
	C 2010.0	154455	1000	330/330		962	76.5
	C 2020.0	154459	1000	380/380		962	80.5

¹⁾ Class D 210: except transverse drainage of motorways and fast traffic roads



MEADRAIN® C 2000 channels are fitted with a tongue and groove system to ensure the channel rebate can be fully sealed.



MEADRAIN® 3000

Overview of the C 3000 PROFIX® & Bolted system

MEADRAIN C 3000

The locking system holds gratings securely in place and allows their quick removal and installation. Corrosion-free locking bars as well as four positioning lugs per grating facilitate reliable operation - even under extreme loads and soiling. Alternatively, the system can be bolted.

NOTE: C3000 grates are available in slotted Heelguard grating upon request.



MEADRAIN C 3000/G 900

Clear width 30.0 cm
Total width 35,4 cm
Classes D 210¹⁾, E 400, G 900

	D 210 • Heavy commercial vehicles
	E 400 • Industrial zones
	G 900 • Special surfaces like airport traffic areas

MEADRAIN C 3000/G 900

Product description	Product code	Order No. EDP No.	Total length mm	Total height Start/ end mm	kg/unit
MEADRAIN®	C 3000.0	154812	1000	390/390	113
Extra Depth Channel	C 3020.0	153591	1000	500	147

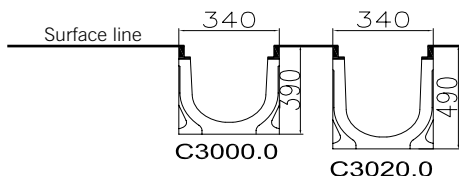
1) Extra depth channel Class E 400: not for cross-drainage of public roads and motorways.

MEADRAIN® C 3000 Accessories

Product description	Order No. EDP No.	kg/unit
End cap for 3000 channel	C 3000.S 154841	4.3

MEADRAIN® C 3000 Gully

Product description	Order No. EDP No.	Total length mm	Total width mm	Total height mm	kg/unit
Top Gully C2000 Top	157549	500	240	430	40.0
Top section SK-OT C3000	153577	500	340	540	45.0
Middle section C 3000 SK-ZT	154709	524	344	350	22.0
Long Gully Bottom	154719	524	344	460	34.0
Bottom section Short C 3000 SK-UT	154711	524	344	310	24.0
Sediment bucket, galvanised, short, for C 3000 gully	154713				3.5



MEADRAIN® D 1000/D 2000

Overview of the D 1000 system

For classes E 400 to G 900 bearing high dynamic loads.

MEADRAIN D 1000/D 2000 channel systems comprise polymer concrete channel bodies with a clear width of 100/200 mm and integrated polymer concrete gratings, developed specially for longitudinal and transverse drainage of traffic lanes subject to heavy dynamic loads such as motorways. However, these heavy-duty channel systems are also ideally suited for drainage of military and civil airports. High safety standards are met since the grating and channel body are made from a single construction material. The dynamic loads resulting from fast-moving heavy traffic are safely absorbed and dispersed. Where road surfaces are finished with porous asphalt to minimise the risk of aquaplaning, the polymer concrete gratings are produced with side inlets. Rainwater passes through the lateral openings in the channel system grating at the level of the base layer. MEADRAIN D 1000 PA is available with openings on one or two sides. System accessories include matching connections and end caps for channel ends. These are available with or without PVC connectors.



MEADRAIN D 1000
Transverse and longitudinal linear drainage for motorways and fast traffic roads.



The silt box is designed to match the respective channel width. A galvanised sediment bucket prevents the bottom pipe from becoming blocked. A special channel-top frame in coated steel, which accepts a grating with PROFIX® locking, is used for maintenance access to the channel. This allows the cover to be removed and replaced both easily and quickly.

For full specification and design details please phone your local MEA representative.



MEADRAIN D 1000.EK
silt box with channel-top frame and PROFIX cast ductile iron grating class G 900.



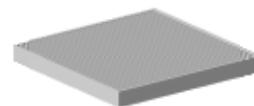
MEADRAIN D 1000
The drainage system at Dunlop's tyre test track.

MEADRAIN® Drainage and Electrical Sump and Riser Details



MEADRAIN® Light Duty Stainless Steel Heelguard Grates

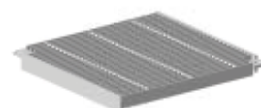
Part Number	For Sump No.	Dimensions (l x w x d)	Class	Weight (Kg)
GSS30L	P30	300 x 300 x 25	Light Duty	4.2
GSS45L	P45	450 x 450 x 25	Light Duty	8.4
GSS60L	P60	600 x 600 x 25	Light Duty	17.7
GSS96L	P96	900 x 600 x 25	Light Duty	24.5
GSS90L	P90	900 x 900 x 32	Light Duty	35.7



Stainless steel heelguard grate (Light Duty)

MEADRAIN® Medium Duty Galvanised Steel Heelguard Grates

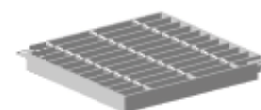
Part Number	For Sump No.	Dimensions (l x w x d)	Class	Weight (Kg)
GHG30M	P30	300 x 300 x 25	Medium Duty	6.3
GHG45M	P45	450 x 450 x 25	Medium Duty	28.3
GHG60M	P60	600 x 600 x 25	Medium Duty	49.0
GHG96M	P96	900 x 600 x 25	Medium Duty	75.2
GHG90M	P90	900 x 900 x 32	Medium Duty	114.0



Galvanised steel heelguard grate (Medium Duty)

MEADRAIN® Light Duty Galvanised Grates

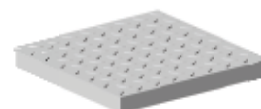
Part Number	For Sump No.	Dimensions (l x w x d)	Class	Weight (Kg)
G30L	P30	300 x 300 x 25	Light Duty	5.3
G45L	P45	450 x 450 x 25	Light Duty	11.5
G60L	P60	600 x 600 x 25	Light Duty	18.9
G96L	P96	900 x 600 x 25	Light Duty	27.5
G90L	P90	900 x 900 x 32	Light Duty	48.9



Galvanised steel grate

MEADRAIN® Heavy Duty Galvanised Grates

Part Number	For Sump No.	Dimensions (l x w x d)	Class	Weight (Kg)
G30H	P30	300 x 300 x 32	Heavy Duty	6.7
G45H	P45	450 x 450 x 50	Heavy Duty	20.2
G60H	P60	600 x 600 x 50	Heavy Duty	45.6
G96H	P96	900 x 600 x 50	Heavy Duty	66.3
G90H	P90	900 x 900 x 65	Heavy Duty	124.3



Galvanised checker plate cover

MEADRAIN® Galvanised Checker Plate Covers

Part Number	For Sump No.	Dimensions (l x w x d)	Class	Weight (Kg)
C30	P30	300 x 300	Light Duty	4.5
C45	P45	450 x 450	Light Duty	9.5
C60	P60	600 x 600	Light Duty	23.4
C96	P96	900 x 600	Light Duty	34.0
C90	P90	900 x 900	Light Duty	52.0



Riser

MEADRAIN® Drain Sump Details

Part Number	Dimensions (l x w x d)	Weight (Kg)
P30	300 x 300 x 450	22.5
P45	450 x 450 x 600	43.0
P60	600 x 600 x 600	60.5
P96	900 x 600 x 600	81.0
P90	900 x 900 x 600	135.0

MEADRAIN® Riser Details

Part Number	Dimensions (l x w x d)	Weight (Kg)
R30	300 x 300 x 300	13.6
R45	450 x 450 x 300	20.0
R60	600 x 600 x 300	28.0
R96	900 x 600 x 300	35.0
R90	900 x 900 x 300	70.0

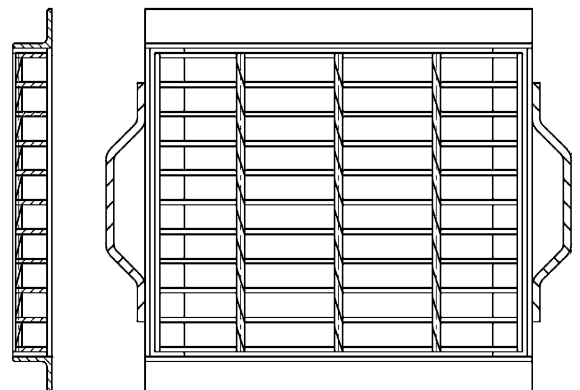
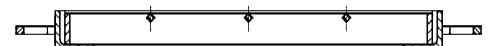


Sump

MEADRAIN® Galvanised steel grates and frames

Product Code	Load Bar	Description	Load	C/O width	C/O length	O/A Frame Width	O/A Frame Length
SG30/30HD	3253/30/100	300X 300 sump grate and Frame	Heavy	315	315	395	395
SG45/45LD	2353/30/100	450X 450 sump grate and Frame	Light	465	465	525	525
SG45/45HD	3853/30/100	450X 450 sump grate and Frame	Heavy	465	465	525	525
SG60/60LD	2553/30/100	600X 600 sump grate and Frame	Light	615	615	675	675
SG60/60HD	6574/30/100	600X 600 sump grate and Frame	Heavy	615	615	675	675
SG60/90LD	2553/30/100	600X 900 sump grate and Frame	Light	615	917	675	975
SG60/90HD	6574/30/100	600X 900 sump grate and Frame	Heavy	615	917	675	975
SG90/90LD	2553/30/100	900X 900 sump grate and Frame	Light	915	917	975	975
SG90/90HD	7574/30/100	900X 900 sump grate and Frame	Heavy	915	917	975	975
TG20HD	2553/30/100	200 Wide trench grate and Frame	Heavy	200	2000	272	2000
TG30HD	3853/30/100	300 Wide trench grate and Frame	Heavy	315	2000	405	2000
TG45HD	5053/30/100	450 Wide trench grate and Frame	Heavy	465	2000	575	2000
TG60HD	6574/30/100	600 Wide trench grate and Frame	Heavy	615	2000	715	2000

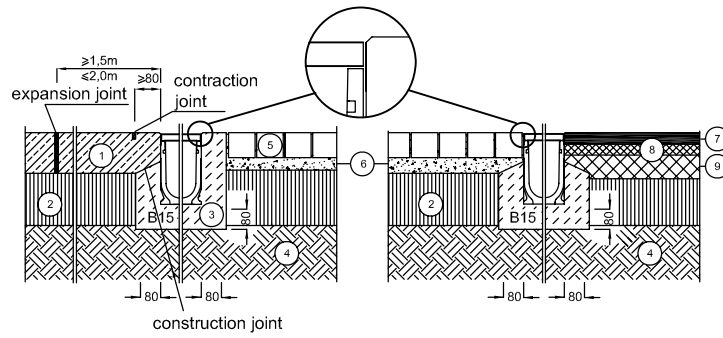
- Bike safe
- Galvanised to AS 1650
- Heelsafe grates available
- Hydraulically efficient



MEADRAIN® Drainage Systems Installation Examples

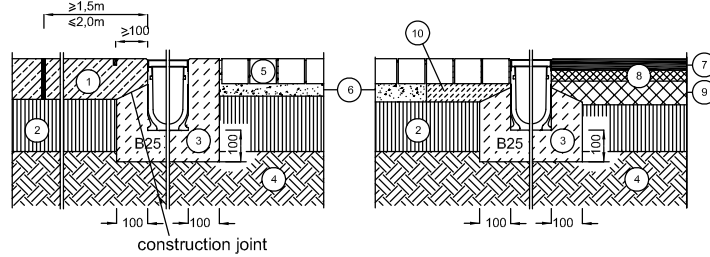
A 10

- Pedestrians
- Cyclists



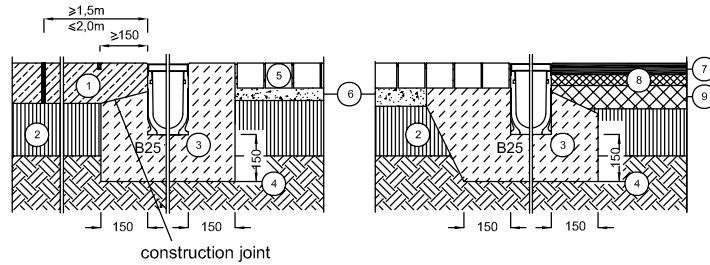
B 80

- Passenger vehicles
- Light vehicles



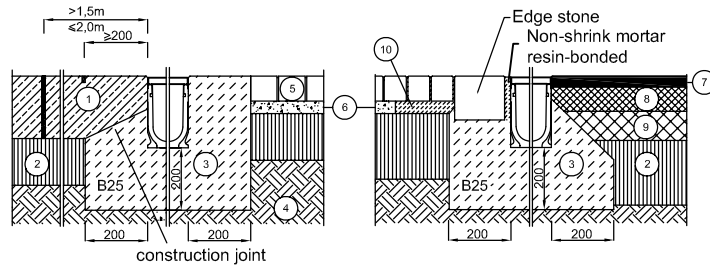
C 150

- Heavy commercial vehicles
- Slow moving



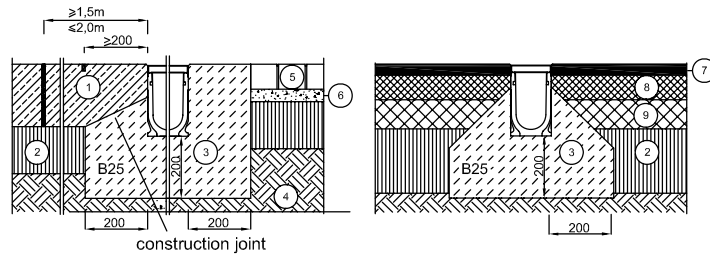
D 210

- Heavy commercial vehicles



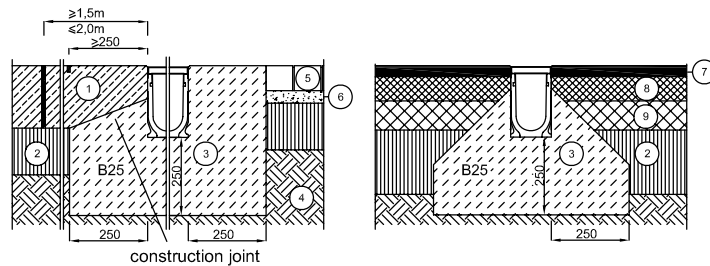
E 400

- Industrial zones

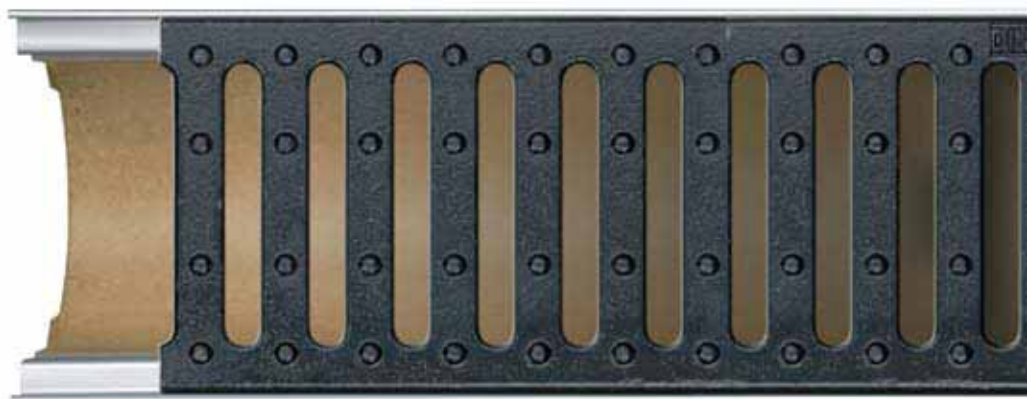


G 900

- Special surfaces like airport traffic areas



- | | |
|-------------------|--------------------------|
| ① Concrete | ⑥ Sand layer |
| ② Sub base | ⑦ Asphalt |
| ③ Concrete haunch | ⑧ Base course |
| ④ Earth | ⑨ Bituminous base course |
| ⑤ Block paviers | ⑩ Mortar |



For further information and technical assistance:

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