

# MEADRAIN®

Everything for professional surface drainage



MEADRAIN® Supreme

MEADRAIN® Solution

MEADRAIN® Classic

MEADRAIN® Top

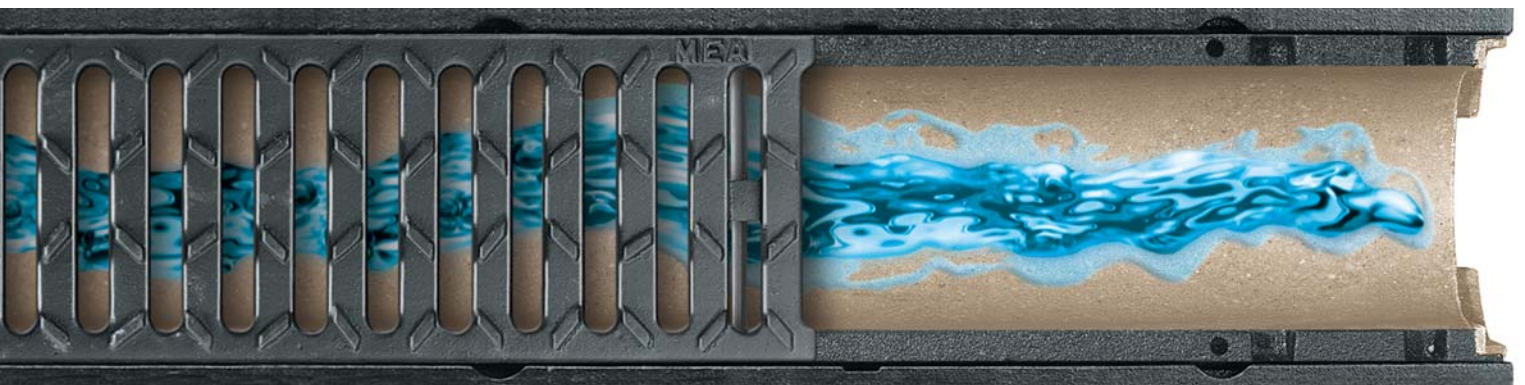
MEADRAIN® Traffic

Complies with  
European standard  
**EN 1433**

# MEADRAIN®

## Line drainage systems

With **MEADRAIN®** the success of your next drainage system is guaranteed. In pedestrian areas, parks, city and suburban roads or even special areas such as industrial estates or airports, with **MEADRAIN®** there is a system to suit all applications. It doesn't matter whether you decide to use our comprehensive range of polymer concrete channels or even the standard concrete Classic range. You can have confidence in a system that has been optimised for stability, discharge capacity and longevity, and with well thought out accessories that offer a complete solution for professional drainage for all load



classes from A 15 to F 900. The edge protection of our channels brings together both safety requirement and visual aesthetics to the finished scheme. This also applies to our **MEADRAIN® Top** gratings, which you can have in different materials and designs as well as four different locking options: standard, bolted, or either the innovative CLIPFIX® - and PROFIX® boltless locking systems.

*All our products offer full compliance with European standards*

# Polymer concrete or concrete?

## With MEADRAIN® you have the choice

### Polymer concrete - strong material, light component parts, ecologically sound solutions

The MEA polymer concrete has excellent physical and chemical characteristics: the material has very few pores, is impervious to fluids and is age resistant. It has extremely high resistance to pressure and bending. Its outstanding resistance against liquid chemicals is particularly important when it comes to the protection of the groundwater against hazardous materials. The material also enables an optimised production process and thus components with up to 75% less weight than normal concrete channels. This permits installation without heavy equipment and saves money.

#### Ageless: concrete the natural material

High stability and longevity are the most salient characteristics of the MEADRAIN® **Classic** concrete channels. This also underlines the concrete quality of at least B 40 and C 35/45 respectively as well as the high quality of the MEA concrete, which makes the Classic channels waterproof.

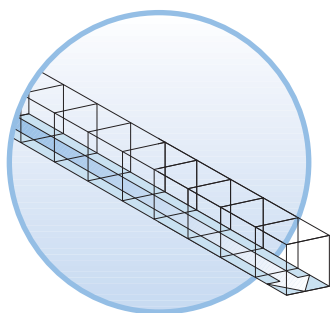
### Planning with the outstanding characteristics of polymer concrete :

<b>Compressive resistance</b>	> 90 N/mm <sup>2</sup>
<b>Bending strength</b>	> 22 N/mm <sup>2</sup>
<b>Water absorption</b>	under 0.05%
<b>Modulus of elasticity</b>	25-35 kN/mm <sup>2</sup>
<b>Density</b>	2,1 - 2,3 kg/dm <sup>3</sup>
<b>Water penetration depth</b>	0 mm
<b>Material structure</b>	capillary
<b>Channel body weight</b>	up to 75% less than normal concrete channels
<b>Acid resistance</b>	very resistant to chemical liquids (pH range 3-9)
<b>Machining</b>	problem free with abrasive cutting wheel, stone drill or chisel
<b>Environmental-friendliness</b>	environmentally compatible construction material with mineral aggregates
<b>Resistance to ageing</b>	absolutely frost proof, abrasion proof and maintenance free

### Tried and tested - the MEA concrete:

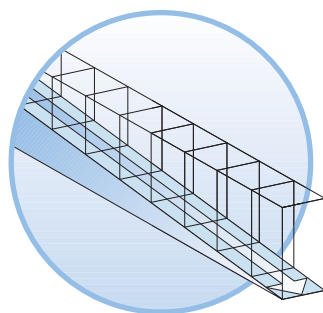
<b>Pressure strength</b>	concrete quality at least B 40 or C 35/45 respectively
<b>Composition</b>	high quality Portland cement, sand, gravel, water
<b>Quality inspection</b>	in accordance with EN 1433
<b>Density</b>	2,2 – 2,3 kg/dm <sup>3</sup>
<b>Water penetration depth</b>	< 16 mm, waterproof
<b>Temperature stability</b>	up to 250 °C
<b>Resistance to ageing</b>	frost and de-icing salt resistant, resistant to abrasion, maintenance free

### MEADRAIN®: Flexible, can be used whatever the terrain



#### Level – No fall

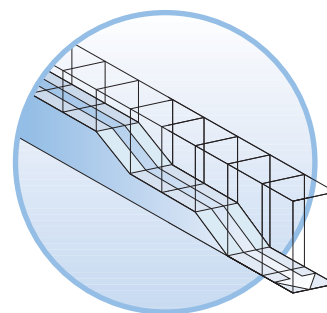
A straight channel run, when no fall is needed or the natural fall suffices.



#### Linear fall

Channel runs with an integrated linear fall at a continuous gradient of 0.5%. Standard runs with lengths of up to 20 metres are possible.

*Runs up to 30 metres with fall are available on request.*



#### Stepped fall

Channel runs for cost-effective, efficient and uniform drainage are constructed by combining no fall channel elements of different heights with fall channels.

# MEADRAIN® Supreme

## Professional drainage made easy

### MEADRAIN® Supreme Z / S

Are you looking for a functionally and optically perfect solution for the drainage of pedestrian areas, parks or parking lots? Then you can't miss with **MEADRAIN® Supreme Z / S**. Because our City-Cannels with their channel bodies manufactured from polymer concrete for reliable ground-water protection and with edges made of galvanized steel or V2A stainless steel provide an excellent match to all adjacent pavement surfaces. Gratings in various designs also allow for many different configurations.



**Clear width:** 100/200 mm  
**Total width:** 130/254 mm  
**Overall height:** from 150 mm to 380 mm  
 (depending upon nominal width)

- Channel body with linear fall (base fall 0.5%), level fall and stepped fall
- **MEADRAIN® Supreme Z** with galvanized steel edge
- **MEADRAIN® Supreme S** with V2A stainless steel edge
- Suitable for **MEADRAIN® Top** Standard and **CLIPFIX®** gratings
- Load classes A 15 to C 250

### MEADRAIN® Supreme EN

The heavy load channels made from high-strength polymer concrete demonstrate the advantages of polymer concrete in heavy load areas. The durable and practically wear free construction of **MEADRAIN® Supreme EN** channel bodies ensures maximum efficiency and reliability. We recommend that these systems are used in particularly critical areas such as petrol stations, airport traffic areas or within industrial areas.



**Clear width:** 100/150/200/300/400 mm  
**Total width:** 140/190/240/354/494 mm  
**Overall height:** 150 mm to 760 mm  
 (depending upon nominal width)

- EN 1000 with linear fall (base fall 0.5%) and constant depth fall
- EN 1500 and EN 2000 for constant depth or stepped fall
- EN 3000/4000 with constant depth fall
- Also with preformed knockouts for connectors
- Possibility for corner, T and cross connections with all 500 mm elements
- EN 1000 suitable for Standard, bolted, **CLIPFIX®** and **PROFIX®** gratings
- EN 1500/2000/3000 for bolted and **PROFIX®** gratings  
 Load classes A 15 to F 900
- EN 4000: bolted locking system only.  
 Load classes A 15 to F 900

### MEADRAIN® Solution LZ / LS

With these shallow channels it is possible to provide particularly attractive solutions for special situations (e.g. shopping malls) as well as extreme reliability. **MEADRAIN® Solution LZ / LS** is visually attractive with its edge protection of either galvanized steel or stainless steel and **MEADRAIN® Top** gratings in different designs. The channel bodies are manufactured from polymer concrete providing the highest requirements for performance, longevity and the protection of the environment.



**Clear width:** 100 mm  
**Total width:** 150 mm  
**Overall height:** 60 mm and 80 mm

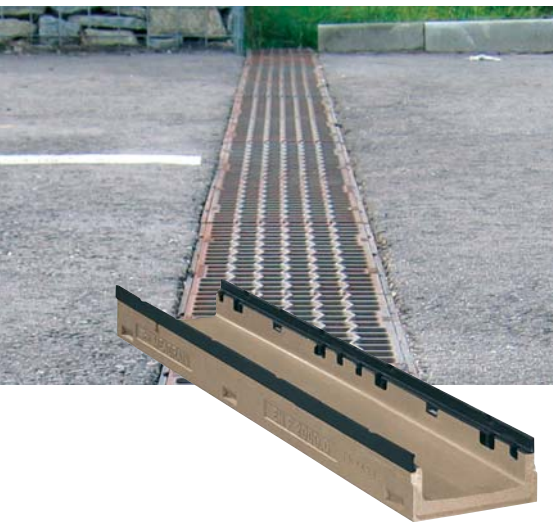
- **MEADRAIN® Solution LZ** galvanized steel edge protection
- **MEADRAIN® Solution LS** with stainless steel edge protection
- Channel body with sealable rebate
- Channel body without fall
- Accessories: end caps for channel start and end
- Suitable for **MEADRAIN® Top** **CLIPFIX®** and Standard gratings (H=80mm)
- Load classes A 15 to C 250

# MEADRAIN® Solution

## Shallow channels for special situations

### MEADRAIN® Solution ENF

The heavy duty channel with low overall height is the ideal solution when high wheel loads (e.g. at loading docks or wholesale markets) and low installation height requirements meet. To enable you to combine both high performance and an extremely durable drainage system, **MEADRAIN® Solution ENF** offers the excellent characteristics of polymer concrete, cast iron edge protection as well as suitable top gratings with the boltless PROFIX® locking system.



- Clear width:** 100/200 mm  
**Total width:** 140/240 mm  
**Overall height:** 80/100 mm
- Channel body with integrated cast iron edge and sealable rebate
  - Also with preformed knockout
  - Channel body without fall
  - Accessories: end caps for channel start and end
  - Suitable for **MEADRAIN® Top** bolted and PROFIX® gratings
  - Load classes A 15 to F 900

### MEADRAIN® Solution TopSlot

**MEADRAIN® Solution TopSlot** meets the highest requirements on special design for trafficked areas. This narrow slot makes a clear, but discrete groove in the blockpaving surface and many creative application possibilities revealing themselves. Depending on which application the topslot element will be used, we have stainless steel or galvanized steel in symmetrical version for drainage of blockpaving areas or as asymmetrical design for façade or side drainage.



- Clear width:** 100/150 mm  
**Total width:** 154/204 mm  
**Overall height:** 225 mm to 470 mm (depending upon nominal width)
- U 1000 channel element for linear fall up to 30 m, stepped fall and no fall
  - U 1500 channel element for stepped fall and no fall
  - Topslot element or stainless steel or galvanized steel
  - Load classes A 15 to C 250

### MEADRAIN® Solution PG

We have developed the **MEADRAIN® Solution PG**, a shallow channel with the channel and cover all in one unit, especially for the requirements of multi-storey car parks and industrial halls. Due to the innovative comb profile made from polymer concrete you do not need a separate grating. Instead you receive a driveable, pedestrian, and wheelchair safe complete solution, with an overall height of only 50 mm, which is suitable for practically all installation situations.



- Clear width:** 150/300 mm  
**Overall height:** 50 mm
- Evaporation groove and drain
  - Channel body with sealable rebate
  - Channel body without fall
  - Available with preformed knockout
  - Accessories: end caps for channel start and end, cleaning tools
  - Load classes A 15 to C 250

# MEADRAIN® Classic: Concrete channels for all load classes

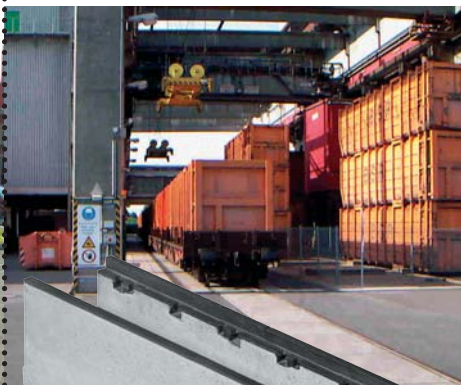
## MEADRAIN® Classic BGU-Z

Very stable, very long lasting and very versatile. These are the strengths of **MEADRAIN® Classic BGU-Z**, our concrete channels with integrated cataphoretic painted cast iron edge protection. Suitable for any type of fall and numerous situations in the city and suburbs, this is a solution that has proven itself over time. There is a full range of co-ordinated accessories as well as an extensive selection of channel covers.

## MEADRAIN® Classic BGZ-S

Suitable for all load classes, types of falls and rainfall situations is **MEADRAIN® Classic BGZ-S**. The heavy duty concrete channel has an integrated cataphoretic painted cast iron frame. They provide stability even when subjected to extreme loads. A further advantage of this system is that with clear widths of up to 400 mm it is possible to create systems with unbeatable drainage capacities.

**An economic and reliable drainage system for all areas: MEADRAIN® Classic, the time proven universal channel.**



**Clear width:** 100/150/200 mm  
**Total width:** 163/213/263 mm  
**Overall height:** from 165 mm to 330 mm  
 (depending upon nominal width)

- Channel body with cataphoretic painted cast iron edge protection
- Channel body for linear fall (invert fall 0.5%), constant depth fall
- Available with prefabricated discharge opening
- Suitable for **MEADRAIN® Top PROFIX®** gratings
- Load classes A 15 to E 600

**Clear width:** 100/150/200/300/400 mm  
**Total width:** 198/248/298/402/502 mm  
**Overall height:** from 185 to 495 mm  
 (depending upon nominal width)

- Channel body with cataphoretic painted cast iron edge protection
- BGZ-S 100, 150, 200 channel body with / without fall (0.5%), for linear fall (invert fall 0.5%), constant depth fall
- Available with prefabricated discharge opening
- BGZ-S 100, 150 and 200 suitable for **MEADRAIN® Top BG PROFIX®** gratings and bolted variation for F 900 classification
- BGZ-S 300 and 400: bolted variation only
- Load classes A 15 to F 900

# MEADRAIN® Traffic Polymer concrete channels for public roads

## MEADRAIN® D 1000 / D 2000

When designing drainage for motorways, highways or airport access areas you need a system that brings together three essential requirements: reliable transmission of the dynamic loads of fast moving heavy traffic, the rapid discharge of large amounts of rainwater and the greatest economy. **MEADRAIN® D 1000 / D 2000** is the solution. This one piece monolithically bonded channel system manufactured from polymer concrete was conceived especially for the drainage of large areas.

Design your scheme using a channel which dramatically increases road safety by generous intake cross sections and is certified for load classes D 400 to F 900 for both longitudinal and transverse drainage of highways and motorways. For porous asphalt select the D-system with side inlets thereby reducing the danger of aquaplaning. These lightweight systems are also installed without the use of heavy equipment creating extensive cost savings.

## MEAKERB®

Combining both drainage and curbing in one system - this is **MEAKERB®**. This clever combination enables more creative design, particularly for major highway, motorway and service area use. The **MEAKERB®** component system offers everything that you need: standard elements, elements for radii, drops and low curbs for entrances as well as a complete range of accessories. The system is available in one and two piece construction.



**Clear width:** 100 mm  
**Total width:** 154 mm  
**Overall height:** from 250 mm to 350 mm  
 (depending upon nominal width)

- Channel body with linear fall (invert fall 0.5%), constant depth fall and stepped fall
- Load classes A 15 to F 900; D 400 also suitable for transverse drainage of highways and motorways

### D 1000 DAL / DAR:

- Special version with side inlets for drainage asphalt
- Load classes A 15 to D 400

**Clear width:** 200 mm  
**Total width:** 254 mm  
**Overall height:** from 406 mm to 506 mm  
 (depending upon nominal width)

- Channel bodies with constant depth falls and stepped fall
- Load classes A 15 to F 900; D 400 also suitable for transverse drainage of highways and motorways

### D 2000 DAL / DAR:

- Special version with side inlets for drainage asphalt
- Load classes A 15 to D 400

**MEAKERB® two piece**  
**Upper section height:** 190 mm  
**Lower section height:** 130 mm / 310 mm

- With channels for outer and inner radii, busstop elements
- With two-piece construction fast, economical repair of damaged curbs
- Load classes A 15 to C 250

### MEAKERB® one piece

**Overall height:** 320 mm / 500 mm







- With channels for outer and inner radii, busstop elements
- Load classes A 15 to D 400

# MEADRAIN®

## Application areas

Type of channel

Classes according to EN 1433

						
	A 15	B 125	C 250	D 400	E 600	F 900
	<ul style="list-style-type: none"> <li>• Pedestrians</li> <li>• Cyclists</li> <li>• Green areas</li> </ul>	<ul style="list-style-type: none"> <li>• Passenger car parking lots and parking decks</li> <li>• Delivery vans</li> </ul>	<ul style="list-style-type: none"> <li>• Trucks</li> <li>• Hard shoulder</li> <li>• Verge</li> </ul>	<ul style="list-style-type: none"> <li>• Roadways</li> </ul>	<ul style="list-style-type: none"> <li>• Industrial areas</li> </ul>	<ul style="list-style-type: none"> <li>• Special surfaces such as air traffic areas</li> </ul>
<b>MEADRAIN® Supreme</b>						
Z 1000/2000	●	●	●			
S 1000/2000	●	●	●			
U 1000/1500/2000/3000	●	●	●			
EN 1000/1500/2000/3000	●	●	●	●*	●	●
EN 4000	●	●	●	●*	●	●
<b>MEADRAIN® Solution</b>						
ENF 1000/2000	●	●	●	●*	●	●
LZ 1000	●	●	●			
LS 1000	●	●	●			
PG 1500 / 3000	●	●	●			
<b>MEADRAIN® Classic</b>						
BGU-Z 100/150/200	●	●	●	●*	●	
BGZ-S 100/150/200	●	●	●	●*	●	●
BGZ-S 300/400	●	●	●	●*	●	
<b>MEADRAIN® Traffic</b>						
D 1000 D 400	●	●	●	●		
D 1000 F 900	●	●	●	●	●	●
D 1000 DAL / DAR	●	●	●	●		
D 2000	●	●	●	●	●	●
D 2000 DAL / DAR	●	●	●	●		
MEAKERB two-piece	●	●	●			
MEAKERB one-piece	●	●	●	●*		

\*Class D 400 not for cross drainage of highways and motorways.



# MEADRAIN® system accessories

The accessories are an integral component of the **MEADRAIN®** system design. With only a few accessories we provide all you need for the planning and realisation of professional surface drainage. The most important accessories are the silt box and gully as well as the end caps (made for individual channel types).

## Silt box (illustrated: EN 1000)

The inlet box fits exactly within the channel width and is equipped with a sediment bucket which protects the underground pipeline against blockages.



## End caps with/without outlet connection

The end caps have a durable edge protection made from cast iron or galvanized steel. They are available with or without outlets.



## Gully (illustrated: EN 1500)

The alternative to the silt box is equipped with cast iron edge protection as well as a sediment bucket (depending upon channel, steel or galvanized), which protects the underground pipeline effectively against blockages.

Slotted grating

Mesh grating

Perforated grating

Slotted grating  
ductile iron

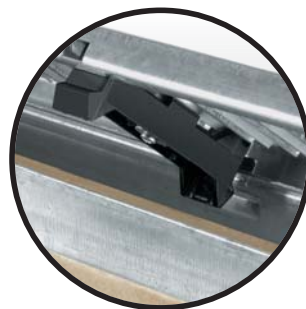
Wave  
ductile iron

Closed Cover  
ductile iron



# MEADRAIN® Top always fits

Whichever **MEADRAIN®** channel you decide upon, **MEADRAIN® Top** and **TOP BG** especially for the concrete channel program Classic BG covers it. With a range of alternatives to suit all locations you can select between different materials and slotted, mesh, perforated, wave design or the closed variations. With **MEADRAIN® Top** and **TOP BG** you not only have flexibility in the selection, but also during installation and maintenance, because our channel covers are available with the innovative quick locking systems **CLIPFIX®** and/or **PROFIX®** for nearly all **MEADRAIN®** channels. With these you not only save unnecessary handling but above all, lots of time. At the same time they create a freely accessible channel run, which facilitates simple cleaning.



## MEADRAIN CLIPFIX®: the quick-locking mechanism for load classes A 15 to C 250

Special recesses in the frame are the secret of **MEADRAIN CLIPFIX®**. The grate snaps into these recesses and reliably adjusts itself. To remove the grate simply lever up with a screwdriver.



## MEADRAIN PROFIX®: for a professional installation

Insert the grate into the channel body, push, finished. The 4-Point spring steel locking system ensures that the grate sits firmly and does not rattle when driven over. For removal you simply take a screwdriver and lever the grate up. This grate locking system also guarantees lasting functionality under extreme conditions.

**For enquiries in the UK and Ireland:**

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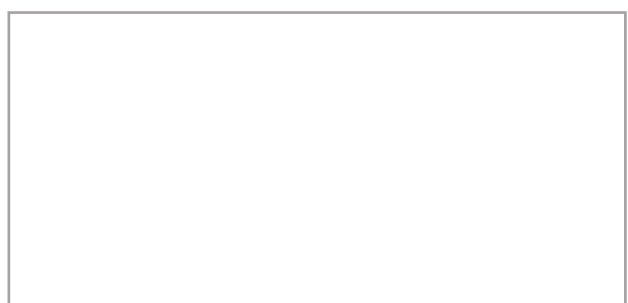
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