

# MEADRAIN<sup>®</sup> Supreme

The city channels in polymer concrete



Z 1000

Z 2000

S 1000

S 2000

Satisfies  
European standard  
**EN 1433**

# MEADRAIN® Supreme: Satisfies the most stringent requirements concerning safety and design

When it comes to the drainage of pedestrian areas, parks and car parks, **MEADRAIN® Supreme** is the ideal solution in terms of functionality and visual appeal. The system satisfies the new European standard EN 1433 for drainage channels set in traffic surfaces, for example the standard specifies more stringent guidelines for environmental protection. But **MEADRAIN® Supreme** also satisfies every wish when it comes to design considerations and, with its slender frame, guarantees a perfect butt joint with adjoining slab and paved surfaces. For loading classes A 15 to C 250 you can choose between four elegant






## Loading classes:

The right solution, if functionality, safety and aesthetics are important to you:

**MEADRAIN® Supreme**, the channel system made of polymer concrete in accordance with *European standard EN 1433*.

Particularly suitable for:

- A 15 (15 kN test load)
- B 125 (125 kN test load)
- C 250 (250 kN test load)

	<b>A 15</b> <ul style="list-style-type: none"> <li>• Pedestrians</li> <li>• Cyclists</li> <li>• Green spaces</li> </ul>
	<b>B 125</b> <ul style="list-style-type: none"> <li>• Car parks and parking decks</li> <li>• Delivery vans</li> </ul>
	<b>C 250</b> <ul style="list-style-type: none"> <li>• Trucks</li> <li>• Roadside kerbs</li> <li>• Road shoulders</li> </ul>

alternatives: the Z 1000/2000 channel with a galvanized steel edge protection or the S 1000/2000 variant with a stainless steel V2A edge protection. The edge rails are embedded in the channel body made from environmentally compatible, high strength polymer concrete, which protects groundwater from aggressive liquids. What about the channel covering? Here, all roads lead to **MEADRAIN® Top** – the universal grating for all **MEADRAIN®** channels. It comes in various designs and features the innovative **MEADRAIN CLIPFIX®** grating securement system for the Z/S 1000 system. Regarding functionality, safety and design **MEADRAIN® Supreme** is simply unsurpassable.

# Polymer concrete: the basis of modern drainage

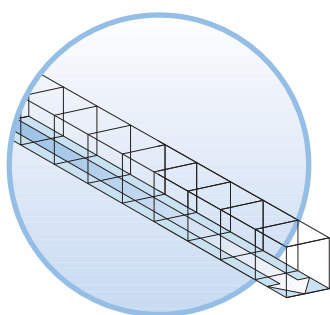
MEA polymer concrete consists predominantly of natural, mineral raw materials – such as quartz, basalt and granite – which are bound by a resinous mixture. It is a material that is particularly suitable for channels by virtue of its physical and chemical properties: it is impervious to liquids, resistant to ageing and has few pores. It possesses an extremely high flexural tensile and compressive strength as well as outstanding resistance to chemical liquids, which also qualifies **MEADRAIN® Supreme** as a dependable solution for the protection of groundwater.

Furthermore, MEA polymer concrete allows for the material optimised production of structural components that are up to 75% lighter than conventional concrete channels. A benefit that pays dividends during installation, which can be accomplished without heavy equipment, saving both time and money. And should disposal become necessary one day, this too presents no problem – because MEA polymer concrete is an environmentally compatible building material that may be disposed of as rubble.

MEADRAIN® Supreme	
Compressive strength	≥ 90 N/mm <sup>2</sup>
Flexural tensile strength	≥ 22 N/mm <sup>2</sup>
Water adsorption	below 0.05%
Modulus of elasticity	25-35 kN/mm <sup>2</sup>
Density	2.1-2.3 kg/dm <sup>3</sup>
Water ingress depth	0 mm
Material structure	capillary free – for the rapid discharge of water and dirt
Channel body weight	up to 75% lighter than conventional concrete channels
Resistance to acids	very resistant to chemical liquids (pH range 3-9)
Workability	easily worked with grinding disks, masonry drills and chisels
Environmental compatibility	environmentally friendly building material with mineral admixtures
Ageing resistance	entirely frost proof, maintenance free and unsusceptible to wear

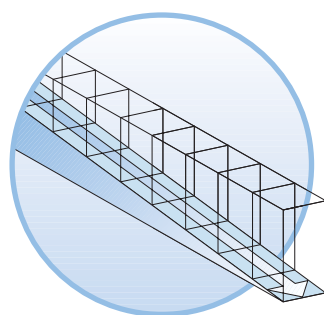


## MEADRAIN® Supreme: the flexible solution for all terrains



### Level fall

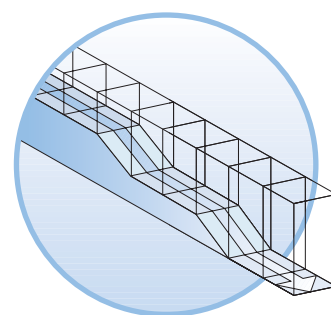
*A straight channel run, when no fall is needed or the natural fall suffices.*



### 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 channel elements of different heights.*

# MEADRAIN® Supreme: Channel bodies and system accessories

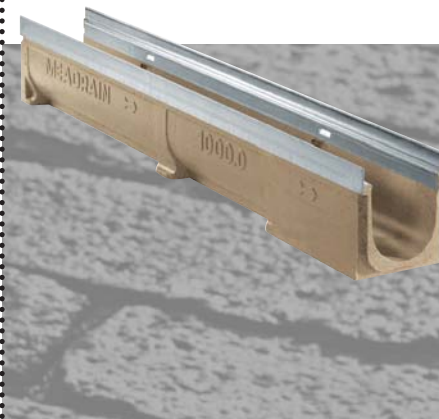
## Stylish edging, enduring strength

No matter whether you opt for the **MEADRAIN® Supreme Z** system with galvanized steel edge protection, or the **S** system with stainless steel V2A edge protection: you are assured of advanced functionality and attractive looks in a single solution. The outstanding hydraulic properties of the proven 'U-shaped cross section' of our channel bodies are one example of this. The edge rails, which are embedded in the channel element and not only look superior but also offer reliable and sturdy edge protection, are a further case in point. When combined with **MEADRAIN® Top** gratings in galvanized steel, stainless steel or ductile iron, the system has eye-catching appeal but also satisfies the most stringent requirements concerning longevity and dependability in surface drainage. Integral locking hollows in the edge rails, into which **Top 1000** gratings can be inserted easily using the innovative **MEADRAIN CLIPFIX®** securement system, give the system additional rigidity.



*The 1/2 metre element ensures trouble free corner and cross connection.*

## MEADRAIN® Supreme Z/S 1000

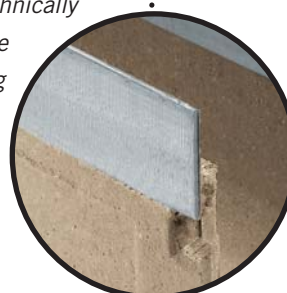


- **Opening width:** 100 mm
- **Channel width:** 130 mm
- **Channel height:** from 150 mm to 305 mm

- Channel bodies for linear fall (base fall 0,5%), level fall and stepped fall
- Z 1000 with galvanized steel edge protection
- S 1000 with stainless steel V2A edge protection

### Bonded securely: Edging and channel body

*MEADRAIN® Supreme is a technically robust and visually attractive solution in which the edging is permanently embedded within the channel body.*

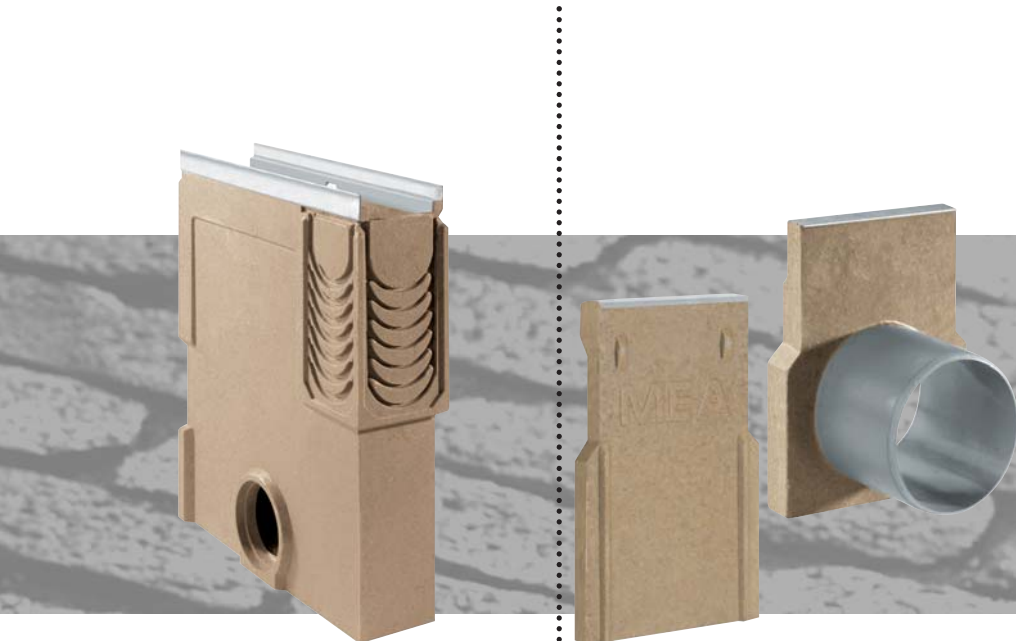


## MEADRAIN® Supreme Z/S 2000



- **Opening width:** 200 mm
- **Channel width:** 254 mm
- **Channel height:** from 280 mm to 380 mm

- Channel bodies for level fall and stepped fall
- Z 2000 with galvanized steel edge protection
- S 2000 with stainless steel V2A edge protection



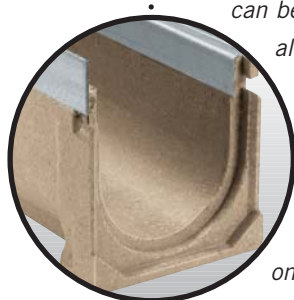
**MEA Service – at your service**

**MEADRAIN® Supreme** includes everything for your perfect drainage system. Two channel systems, accessories that fit precisely, a large selection of gratings and the many years of experience of one of the leading experts in professional surface drainage. This is available to you as tender texts, data sheets, hydraulic performance calculations, parts lists and precise installation plans, as well as in a personal capacity by way of advice from our experienced experts, but also via a few mouse clicks at [www.mea-group.com](http://www.mea-group.com).

**Silt box**

*The silt box is designed to accommodate the exact Z/S 1000 channel width and height. It is fitted with galvanized or stainless steel edge protection and comes with a sediment bucket which effectively protects storm water mains against blockages.*

*For the Z/S 2000 channels MEA designed a 3 part gully system, which can easily discharge the higher drainage capacity of this channel system.*



**End caps with / without connector**

*The end caps either have a galvanized or stainless steel edge protection. They are available with or without an outlet.*

**A system that meets the most stringent requirements:**

**MEADRAIN® Supreme satisfies EN 1433**

*In practical terms, this means that the channel elements with their sealable joint can be connected with one another to be watertight. The special edge shape allows the entire system to be made watertight up the upper surface of the channel, and the sealing joint to be continued right up to the grating bearing surface – **an innovation for drainage channels!***

***MEADRAIN® Supreme** naturally also satisfies every other new requirement of the European standard, for example, in respect of edge protection, covers and maximum dimensions. This is documented by the CE marking on the channels.*

# MEADRAIN® Top 1000: Pleasing in design, simple to fit

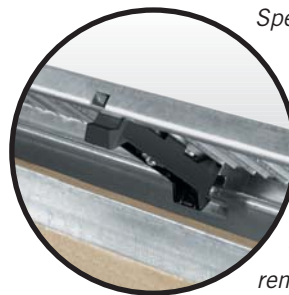
An attractive contrast or a harmonious transition to the adjoining slab or paved brick surface. **MEADRAIN® Top** avails you of every option when it comes to design. And a securement method that allows every step to be completed in a flash when it comes to grating fitting and removal:

**MEADRAIN CLIPFIX®**, the innovative alternate to grating securement using bolts. Simply place the grating in the channel body, step on the grating, finished.

Special **MEADRAIN CLIPFIX®** hollows in the edging guarantee a secure hold! The result will convince you entirely: the securement method for loading classes A 15 to C 250 saves time and money, facilitates optimal water discharge and will last reliably for decades.

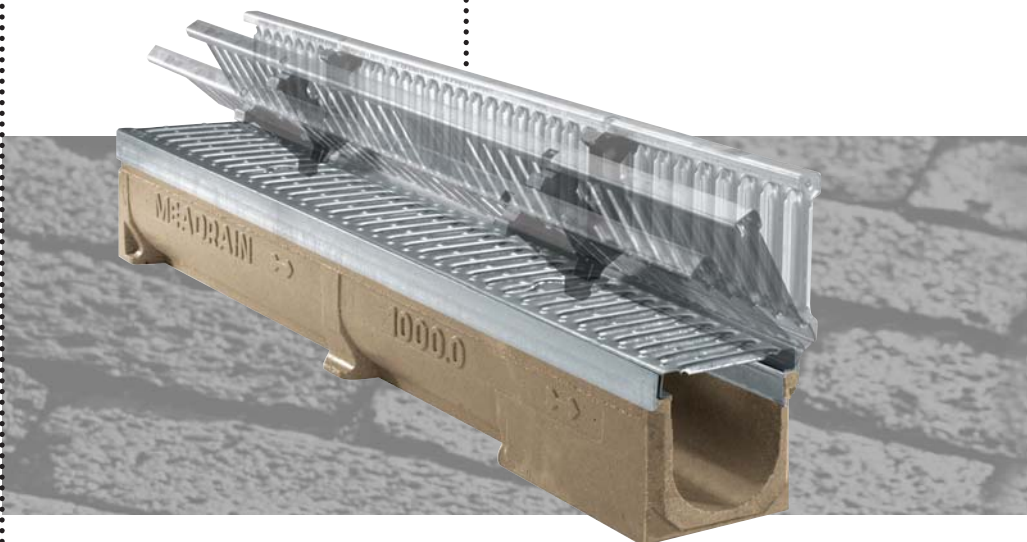
## Detailed view:

### **MEADRAIN CLIPFIX® hollows**



*Special hollows integrated in the edge rail are the secret behind **MEADRAIN CLIPFIX®**. They ensure that the grating locks into position reliably and securely, but similarly facilitate grating removal in a matter of seconds.*

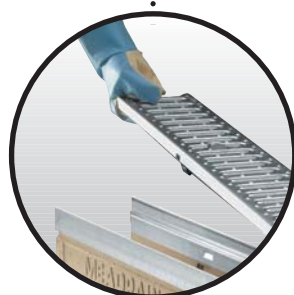
## **MEADRAIN CLIPFIX®**



### **The gratings with MEADRAIN CLIPFIX® rapid locking**

*The specially designed **MEADRAIN CLIPFIX®** system allows for the gratings to be “snapfixed” into conveniently positioned hollows in the edge rail of the channel. And this is how **MEADRAIN CLIPFIX®** functions: Place the grating in the channel body, step on the grating, finished.*

*It's not only installation that's a breeze thanks to this innovative grating securement system. **MEADRAIN CLIPFIX®** also pays handsome dividends when it comes to channel cleaning. Because the grating removes to reveal an entirely unobstructed channel cross section which can be cleaned without the hindrance of cross members.*



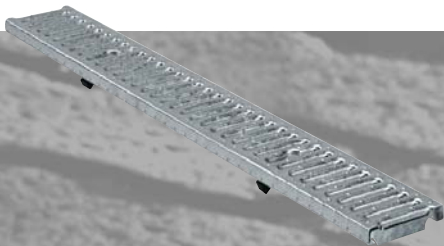
### **Grating removal can be as simple as this:**

*All that you will need are work gloves and a screwdriver. Use this to lever the first grating of the channel run. All the remaining gratings can now be removed easily by hand. It's all down to **MEADRAIN CLIPFIX®**.*

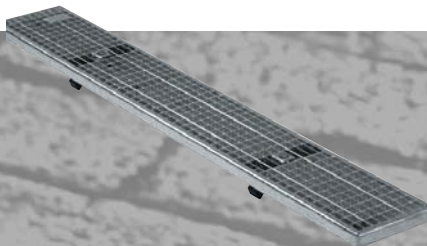
## Grating overview:

<b>Gratings Z 1000</b>	<b>MEADRAIN CLIPFIX®</b>	
<b>Class A 15</b>	slotted grating, galvanized	slot width 8.5/10 mm
	mesh grating, galvanized	MW 30/10 mm
<b>Class B 125</b>	mesh grating, galvanized	MW 30/10 mm
<b>Class C 250</b>	slotted grating, ductile iron	slot width 10/90 mm
	slotted grating, ductile iron	slot width 5/90 mm
	mesh grating, galvanized	MW 20/10 mm
	slotted grating, galvanized	slot width 10/95 mm
	cover, ductile iron	closed
<b>bolted grating securement</b>		
<b>Class A 15</b>	perforated grating, galvanized	hole diameter 6.25 mm
<b>Class C 250</b>	perforated grating, galvanized	hole diameter 6.25 mm
<b>Gratings Z 2000</b>	<b>bolted grating securement</b>	
<b>Class C 250</b>	mesh grating, galvanized	MW 20/30 mm

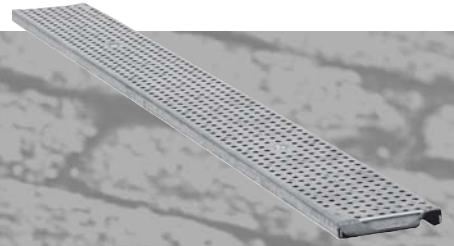
### Slotted grating



### Mesh grating



### Perforated grating



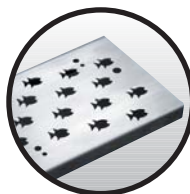
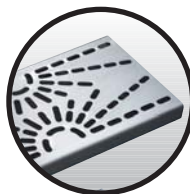
### Flexible planning with MEADRAIN® Top

Remain flexible when planning your next drainage system: with the **MEADRAIN® Top** range. For the Z 1000 and S 1000 channels, the range is comprised of gratings with slotted, mesh and perforated designs in the materials of galvanized and stainless steel. Additional ductile iron gratings with either a closed or slotted design are also available for use with the Z 1000 channel.

Irrespective of which design variant you opt for, you'll get superlative quality right down to the smallest detail with **MEADRAIN® Supreme** and **MEADRAIN® Top**.

The Z/S 2000 channel is completed with the channel cover mesh grating galvanized.

<b>Gratings S 1000</b>	<b>bolted grating securement</b>	
<b>Class A 15</b>	slotted grating, stainless steel	slot width 8.5/10 mm
	mesh grating, stainless steel	MW 30/10 mm
	perforated grating, stainless steel	hole diameter 6.25 mm
<b>Class C 250</b>	mesh grating, stainless steel	MW 30/10 mm
	slotted grating, stainless steel	slot width 10/90 mm
	perforated grating, stainless steel	hole diameter 6.25 mm
<b>Gratings S 2000</b>	<b>bolted grating securement</b>	
<b>Class C 250</b>	mesh grating, galvanized	MW 20/30 mm



### Bespoke design gratings: various shapes, reliable function

Placing your individual marquee in line drainage can be so easy when you're planning our design gratings into the channel run. For aesthetically important solutions we offer you a wide range made from highly durable stainless steel, or steel with your own suggested colour.

Give your next project an individual note, for example with the designs "Fish" or "Sunshine Rays".

These are just two of many vivacious samples. Please let us advise you and contact our salesman.

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