

MEADRAIN S

PROFESSIONAL ALL-ROUND
TALENT MADE OF POLYMERE
CONCRETE



DRAINAGE SYSTEM MADE OF HIGH-QUALITY POLYMER CONCRETE

PROFESSIONAL DRAINAGE SOLUTIONS UP TO LOADING CLASS E 600

MEADRAIN SV / SVF / SE / SEF / SG



I MEADRAIN S
UNIVERSAL RAIN WATER
DRAINAGE SYSTEM





MEADRAIN SV/SE SYSTEM OVERVIEW



MEADRAIN SV/SE 1000

Clear width: 100 mm
Total width: 133 mm
Total heights: from
150 up to 305 mm

- > Drainage channel body for linear fall (0.5%), stepped fall with transition piece and without fall
- > Also with integrated drain connection
- > Loading classes A 15 to E 600**
- > Edge made of galvanised steel (SV) or stainless steel (SE)



MEADRAIN SV/SE 1500

Clear width: 150 mm
Total width: 183 mm
Total heights: from
220 up to 320 mm

- > Drainage channel body for linear fall (0.5%), stepped fall with transition piece and without fall
- > Also with integrated drain connection
- > Loading classes A 15 to E 600**
- > Edge made of galvanised steel I (SV) or stainless steel (SE)



MEADRAIN SV/SE 2000

Clear width: 200 mm
Total width: 233 mm
Total heights: from
280 up to 380 mm

- > Drainage channel body for linear fall (0.5%), stepped fall with transition piece and without fall
- > Also with integrated drain connection
- > Loading classes A 15 to E 600**
- > Edge made of galvanised steel (SV) or stainless steel (SE)



MEADRAIN SV/SE 3000

Clear width: 300 mm
Total width: 333 mm
Total height: 300 mm

- > Drainage channel body without fall
- > Also with integrated drain connection
- > Loading classes A 15 to E 600**
- > Edge made of galvanised steel (SV) or stainless steel (SE)

**From loading class D 400 not suitable for cross drainage of high speed roads and motorways.

MEADRAIN SG SYSTEM OVERVIEW



MEADRAIN SG 1000

Clear width: 100 mm
Total width: 133 mm
Total heights: from
150 up to 305 mm

- > Drainage channel body for linear fall (0.5%), stepped fall with transition piece and without fall
- > Also with integrated drain connection
- > Loading classes A 15 to E 600**
- > Edge made of ductile iron



MEADRAIN SG 1500

Clear width: 150 mm
Total width: 183 mm
Total heights: from
220 up to 320 mm

- > Drainage channel body for linear fall (0.5%), stepped fall with transition piece and without fall
- > Also with integrated drain connection
- > Loading classes A 15 to E 600**
- > Edge made of ductile iron



MEADRAIN SG 2000

Clear width: 200 mm
Total width: 233 mm
Total heights: from
280 up to 380 mm

- > Drainage channel body without fall
- > Also with integrated drain connection
- > Loading classes A 15 to E 600**
- > Edge made of ductile iron



MEADRAIN SG 3000

Clear width: 300 mm
Total width: 333 mm
Total height: 300 mm

- > Drainage channel body without fall
- > Also with integrated drain connection
- > Loading classes A 15 to E 600**
- > Edge made of ductile iron

**From loading class D 400 not suitable for cross drainage of high speed roads and motorways.





MEADRAIN SVF/SEF

SYSTEM OVERVIEW FLAT CHANNELS



MEADRAIN SVF/SEF 1000

Clear width: 100 mm
Total width: 133 mm
Total height: 80 mm

- > Drainage channel body without fall
- > Also with integrated drain connection
- > Loading classes A 15 to E 600**
- > Edge made of galvanised steel (SVF) or stainless steel (SEF)



MEADRAIN SVF/SEF 1500

Clear width: 150 mm
Total width: 183 mm
Total height: 120 mm

- > Drainage channel body without fall
- > Also with integrated drain connection
- > Loading classes A 15 to E 600**
- > Edge made of galvanised steel (SVF) or stainless steel (SEF)



MEADRAIN SVF/SEF 2000

Clear width: 200 mm
Total width: 233 mm
Total height: 100 mm

- > Drainage channel body without fall
- > Also with integrated drain connection
- > Loading classes A 15 to E 600**
- > Edge made of galvanised steel (SVF) or stainless steel (SEF)

**From loading class D 400 not suitable for cross drainage of high speed roads and motorways.

MEADRAIN S DRAINAGE SOLUTION

UNIVERSAL DRAINAGE SYSTEMS

MEA Water Management is one of the market leaders in the field of rain water harvesting (collecting, retaining, treating and reusing rainwater), providing solid and intelligent solutions for all possible fields of applications.

Our MEADRAIN S channel product portfolio has been designed to provide a maximum of flexibility in using rain water drainage channel for loading classes up to E 600**. Our "universal" drainage channel made of polymer concrete cover all possible application fields, from landscaping to industrial areas with maximum traffic and charges.

The MEADRAIN S drainage channels are available with edges made of galvanised and stainless steel as well as of ductile iron, providing a solution for every type of project. The system is available in 4 different widths: 100, 150, 200 and 300 mm

and various heights (from flat to high capacity channels).

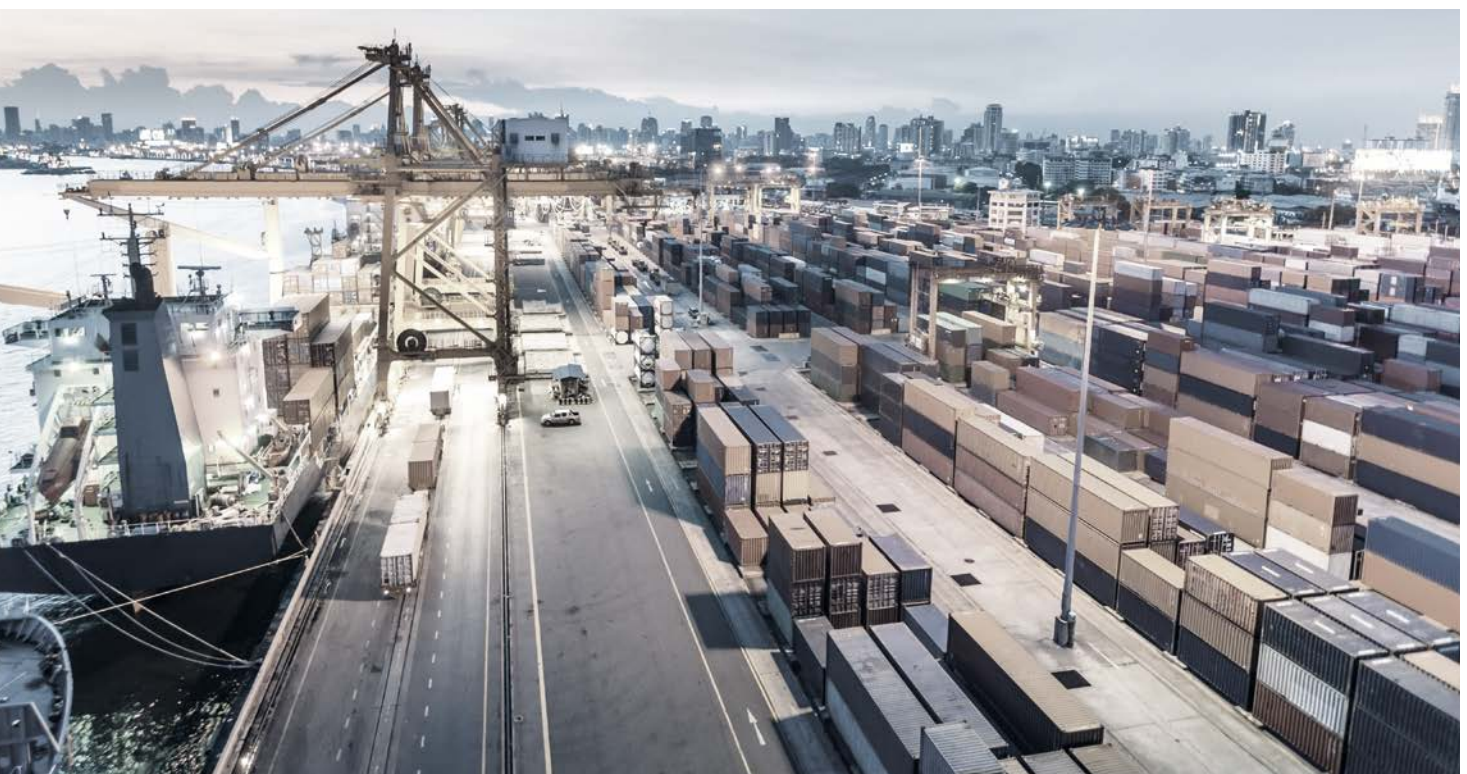
The package is completed with a large choice of gratings in different designs and materials.

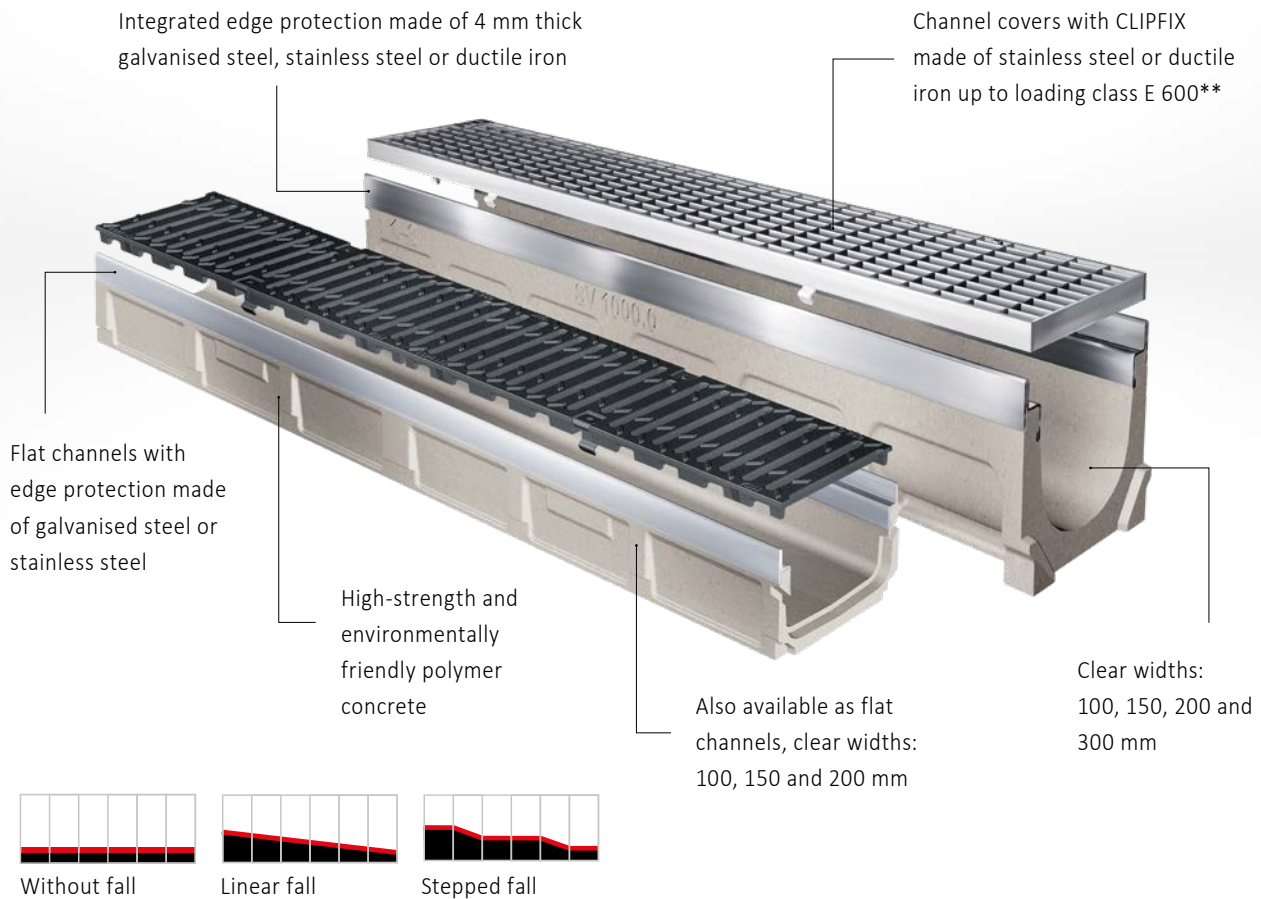
MEADRAIN SV/SVF/SE/SEF/SG: Our drainage channel system for all applications.

MEADRAIN S

- > The universal drainage system made of polymer concrete
- > Loading classes A 15 to E 600**

**From loading class D 400 not suitable for cross drainage of high speed roads and motorways.





MEADRAIN SV/SE/SG AND SVF/SEF FOR MAXIMUM FLEXIBILITY

The MEADRAIN SV/SE/SG and SVF/SEF drainage channels made of polymer concrete are the perfect allrounder of the MEA product portfolio.

They are made for:

- > Landscaping
- > Cities, roads and parking areas
- > Industrial and logistic areas

The MEADRAIN SV/SVF/SE/SEF/SG drainage channels with 4 mm edges made of galvanised steel, stainless steel and ductile iron have been designed for maximum stability and easy installation. Loading class up to E 600**.

- > ADA die-cast gratings for a handicapped accessible construction
- > Die-cast grating heelguard for a safe access with high heels
- > High-quality die-cast grating
- > Mesh and slotted gratings with a longitudinal shift protection
- > Slotted grating made of galvanised steel or PAG
- > Longitudinal bar grating

**From loading class D 400 not suitable for cross drainage of high speed roads and motorways.



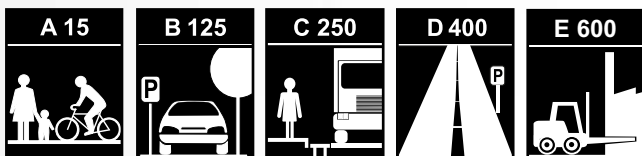
COMPLETE SYSTEM

WITH SMART ACCESSORIES

The innovative CLIPFIX grate protection system speeds up the installation and maintenance. This saves time and money.

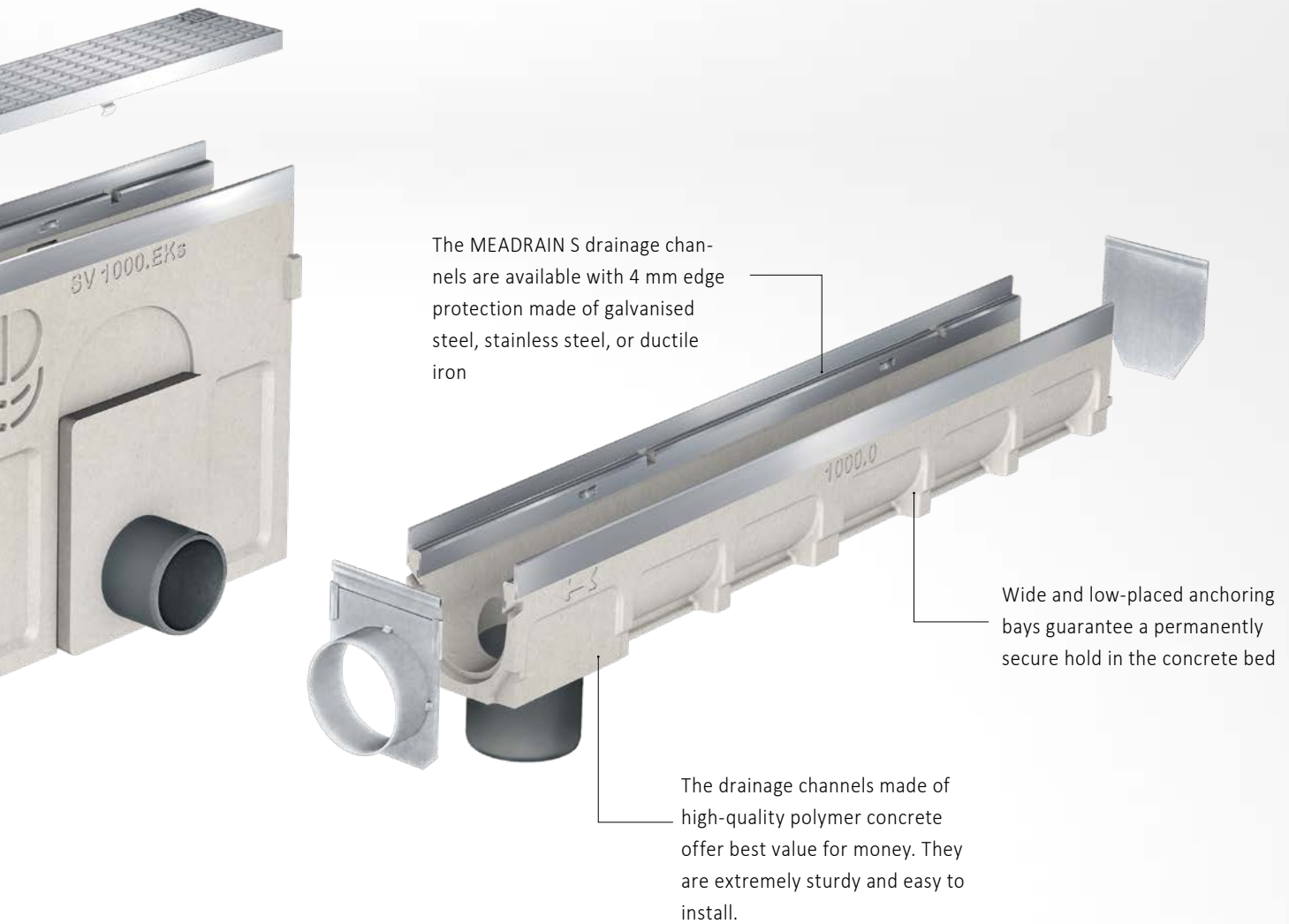


The channel body is also available as flat channel, with 4 mm edge protection made of galvanised steel or stainless steel.



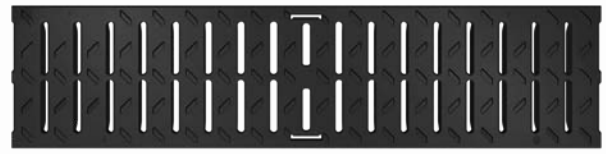
MEADRAIN S SYSTEM

- > Certified compliant to EN 1433 and CE
- > The complete system is equipped with the CLIPFIX locking mechanism
- > Fitting gratings with longitudinal shift protection





Slotted grating made of galvanised steel



Plastic slotted grating



Mesh grating made of galvanised steel and stainless steel



Ductile iron grating WAVE



Longitudinal bar grating made of galvanised steel, stainless steel and ductile iron



Ductile iron grating BAVARIA



Ductile iron slotted grating



Ductile iron grating HONEYCOMB

CLIPFIX UNIVERSAL CHANNEL COVERS

MEA offers a wide range of covers for the MEADRAIN S channels system that are not just functional, but also especially set accents in the field of product design. From efficient mesh grates to classic slotted grates and ductile iron grates, MEA stands for quality, innovation and creativity.

Slotted gratings made of galvanised steel or PAG:

- > The intelligent slot/grating design is a visual alternative to mesh grates. Particularly stable and weather resistant
- > Loading classes A 15 to C 250

Mesh gratings:

- > Gratings made of galvanised or stainless steel
- > Loading classes A 15 to D 400

Longitudinal bar gratings:

- > The aesthetic solution made of galvanised steel, stainless steel or ductile iron
- > Loading classes A 15 to E 600

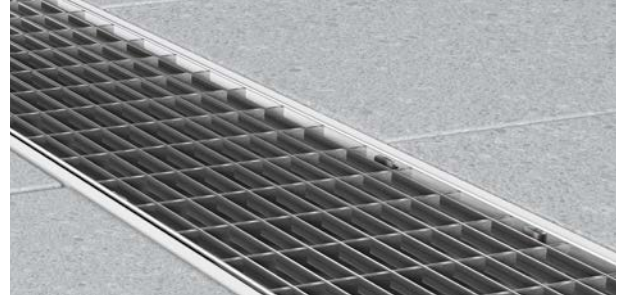
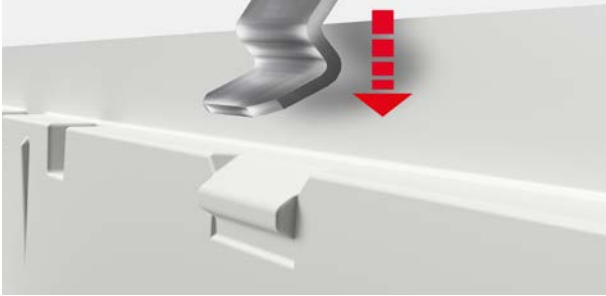
Ductile iron slotted gratings:

- > Especially suitable for extreme loads and heavily frequented areas.
- > Loading classes C 250 to E 600

Ductile iron design gratings:

- > Visually appealing gratings
- > Loading class up to D 400

CLIPFIX UNIVERSAL GRATING FIXING MECHANISM



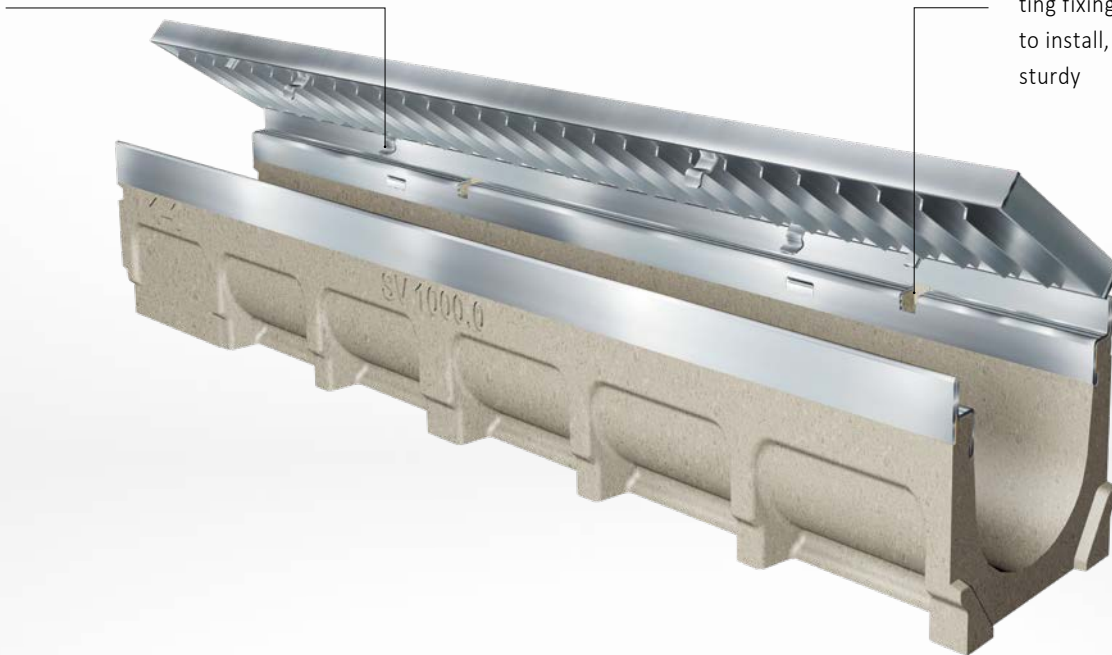
The MEADRAIN S channels have been designed and optimised for our universal CLIPFIX grating fixing mechanism with longitudinal shift protection.

The advantage: a large choice of gratings and an easy to understand product program.

Thanks to the CLIPFIX system. The channels and the gratings offer an aesthetically pleasing solution when mounted, because no locking devices or screws are apparent on the outside.

Longitudinal shift protection system for maximum security

Universal CLIPFIX grating fixing system: easy to install, aesthetic, sturdy



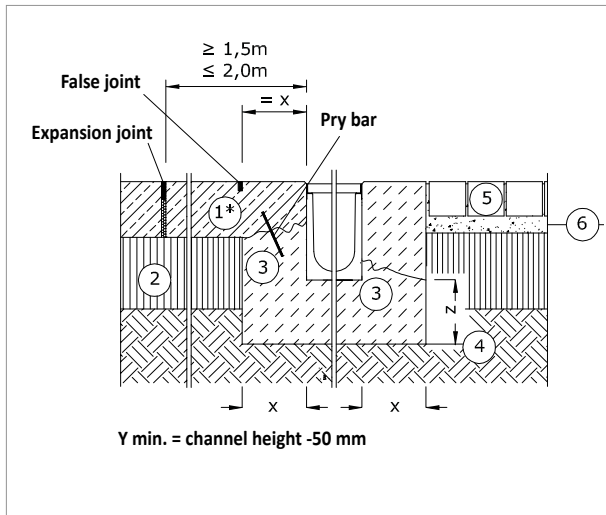
IMEA CLIPFIX ANTI-THEFT PROTECTION

- > With the newly developed screwable MEA CLIPFIX anti-theft protection, your gratings are safely protected against theft and vandalism.
- > The anti-theft protection is available in nominal widths 100, 150 and 200 and is easy to install.

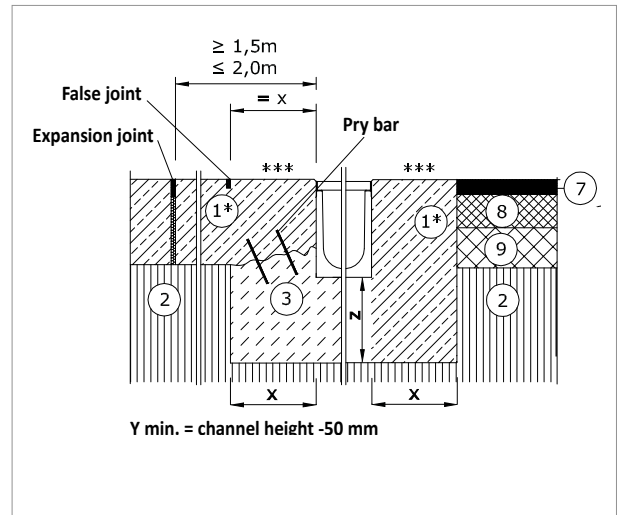


INSTALLATION INSTRUCTIONS

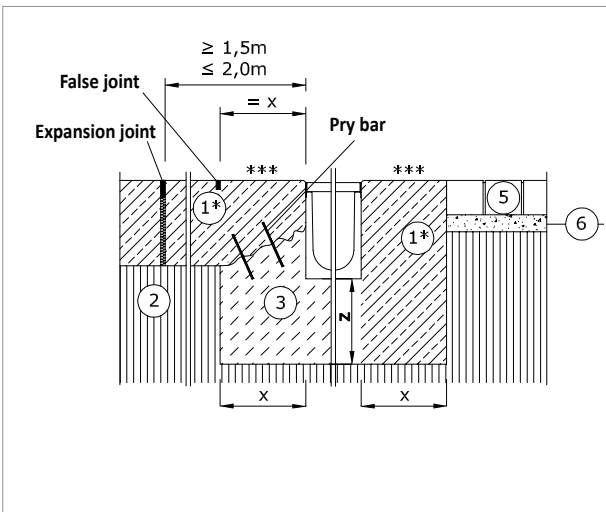
Floor channel area and untraveled road shoulders and similar. (Test force 250 kN)



Lanes of roadways (also pedestrian roads), shoulders of roads and parking areas approved for all types of road vehicles. (Test force 400 kN)



Areas that are driven upon by high wheel loads, e.g. harbours and dock facilities. (Test force 600 kN)



- | | |
|---------------------------------|-------------------------|
| ① Road concrete | ⑥ Pavement base |
| ② Base course according to RstO | ⑦ Bituminous base cover |
| ③ Concrete coating | ⑧ Binder layer |
| ④ Grown soil | ⑨ Bituminous base layer |
| ⑤ Pavement | ⑩ Mortar bed |

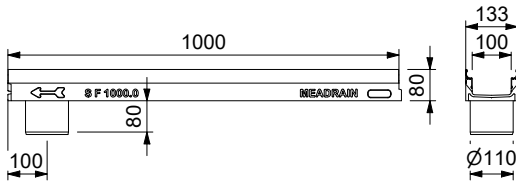
*Reinforcement of the exposure class as specified by the responsible planner.

***Drainage of highly dynamically loaded surfaces, e.g. cross drainage of highways, motorways and railway crossings, exclusively when installing our DM drainage channel systems and after consultation with our application technology. Inspection parts and inlet boxes must always be positioned outside dynamically loaded surfaces.

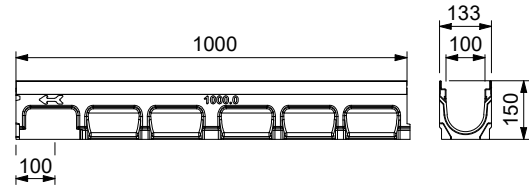
Settlement-free, frost-resistant base layers must be laid in accordance with RStO.

The adjacent covering must be designed in such a way that no horizontal forces act on the channel elements. After the installation, the drainage channel bodies must be fitted with covers to achieve the stiffening.

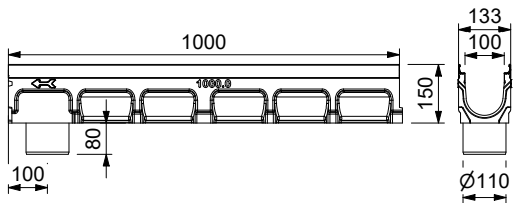
TECHNICAL DETAILS



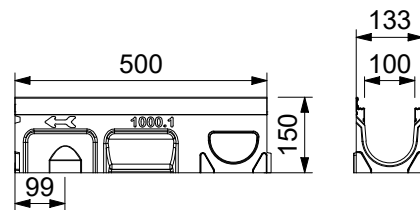
MEADRAIN SVF 1000.0 A/80 Channel ⁸⁾



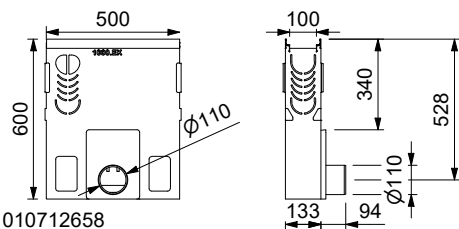
MEADRAIN SV 1000.0 Channel ⁴⁾



MEADRAIN SV 1000.0/A Channel with vertical outlet Ø 110 mm ⁸⁾



MEADRAIN SV 1000.1 Channel ^{4) 14)}



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MEADRAIN SV 1000.EK 110 silt box with outlet connector
Ø 110 mm

> REMARK

- 4) Connection option for the vertical discharge
Ø 110 mm; End cap with connector or gully
- 8) With tight formed-in drain socket Ø 110 mm
- 14) Connection possibility for corner, T- and crossing
element

FOUNDATIONS

The requirements for the concrete with regard to durability against environmental influences must generally be specified by the planner by specifying the corresponding exposure class.

For instance: exposure class for pavement concrete for cross drainage of expressways and highways-C30/37 (LP), XF4, XM2 (source: Cement Data Sheet Concrete Technology B9 3.2006, www.beton.org).

Loading classes according to EN 1433	A 15 kN	B 125 kN	C 250 kN	D 400 kN	E 600 kN
Foundation dimension X (mm)	> 80	> 100	> 150	> 200	> 200
Foundation dimension Z(mm)	> 80	> 100	> 150	> 200	> 200
Reinforcement of the concrete casing (3) as specified by the responsible planner	no	no	no	yes	yes
Concrete quality DIN EN 206-1/DIN 1045-2 For road concrete (1) ≥ C 30/37 with reinforcement	≥ C 12/15	≥ C 20/25	≥ C 20/25	≥ C 25/30	≥ C 25/30

The max. loading class for the selected drainage channel system can be found in brochure documents, data sheets and price lists and may not be exceeded.



I POLYMER CONCRETE

THE QUALITY MATERIAL

MEA POLYMER CONCRETE

The special polymer concrete from MEA is remarkable for its outstanding physical and chemical properties. These make it an extremely reliable and versatile material in even the toughest conditions.

MEA polymer concrete channels are particularly eco-friendly. Mostly made out of minerals, polymer concrete channels are easy to recycle. Because of the quality material channels have a particularly long lifetime, saving future investments and unnecessary new building sites.

Polymer concrete channels are the more extremely resistant to liquid chemicals and acids, making them the perfect protection devices for the environment and ground waters.

Last but not least, polymer concrete channels are significantly lighter than comparable concrete channels, making them considerably easier to install.

MATERIAL CHARACTERISTICS

Compressive strength	> 90 N/mm ²
Flexural tensile strength	> 22 N/mm ²
Water adsorption	Below 0.05 %
Modulus of elasticity	25-35 kN/mm ²
Density	2.1 - 2.3 kg/dm ³
Water ingress depth	0 mm
Material structure	Capillary-free – ideal for the rapid discharge of water and dirt particles
Channel body weight	Significantly lighter than conventional concrete channels
Workability	Suitable for grinding disks, rock drills and chisels
Environmental compatibility	Eco-friendly building material with mineral admixtures
Ageing resistance	Entirely frost proof, wear-resilient, and maintenance-free. Highly resistant to liquid chemicals (pH range 3 to 9)

THE ADDITIONAL PRODUCT PORTFOLIO OF MEA WATER MANAGEMENT



MEARIN PG EVO

Drainage solution for multi-storey car parks



MEATEC

Professional drainage system for facades and terraces



MEARIN

Professional lightweight drainage system made of GRP



MEADRAIN TRAFFIC

Professional drainage systems for streets and motorways



BUILDING SUCCESS

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Business unit MEA Water Management