

ANRIN

LEADING WATER



Technical data sheet

Reinforced edge channels
KF-100

Technical data sheet

ANRIN DRAIN Reinforced edge channels KF-100

Channel drainage for the load classes A 15 to E 600¹

According to DIN 19580 / EN 1433 "Drainage channels for vehicular and pedestrian areas", these surfaces are as-signed to specific load classes depending on the use. Accordingly, the respective suitable ANRIN reinforced edge system can be selected with the corresponding cover grating.

Product specifications

Product specifications	
Material	Resin concrete
Length	50 cm and 100 cm
Width	14.4 cm
Height	6.0 cm, 8.0 cm, 10.0 cm, 15.0 – 25.0 cm
Edge type	Black cast iron edge rail, 8 mm edge width
Nominal width	100 mm
Load class	A 15 - E 600 according DIN 19580 / EN 1433 (D400 and E600 Exception: Cross-road drainage of busy roads)
Slope type	Sloping invert 0,5% or Stepped invert or Constant invert
Joint type	UNILINK®-joint
Fastening	TwistLock fastening / RapidLock fastening

General type approval: For use in facilities of the storage, filling and handling of water polluting substances. Approval no. Z-74.4-30

Material properties

Channel / component body	
Polymer concrete	polyester resin-based with mineral aggregates, additives
Compressive strength	≥ 90 N/mm ²
Bending tensile strength	≥ 22 N/mm ²
Modulus of elasticity	ca. 25 kN/mm ²
Density	2.1 – 2.3 g/dm ³
Heat resistance	100° C (permanent loading)
Frost resistance	- 50° C
Water penetration depth	0 mm
Water absorption:	0,05 %
Edge protection	
Edge protection	Schwarze Gusszarge, profile thickness 8 mm
Channel cover	
Channel cover	Galvanised steel, V2A stainless steel, GJS cast-iron, PA plastic

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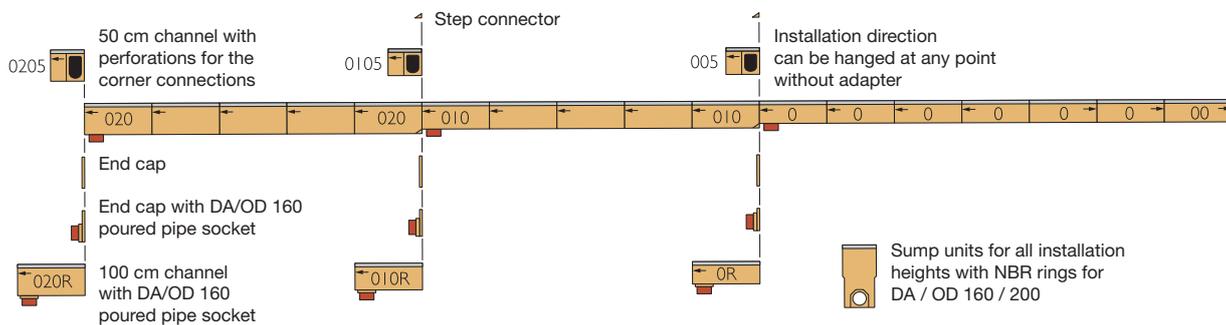
ANRIN DRAIN Reinforced edge channels

Slope types

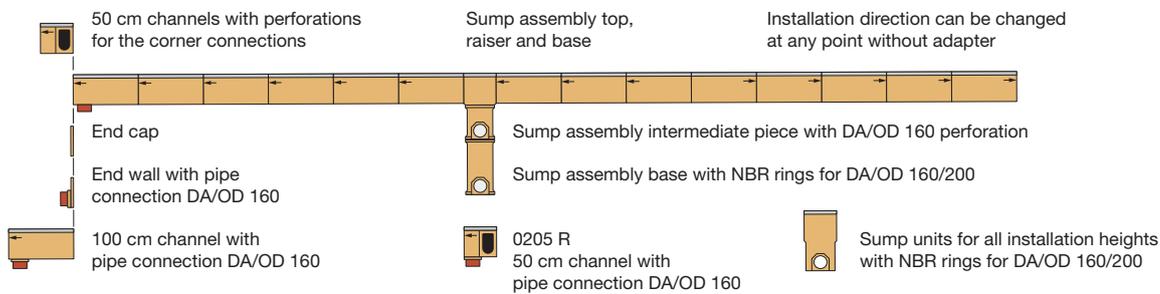
Area drainage with channel runs is normally made according to 3 different principles. The slope of water surface is achieved by the natural fall of the land. The water flows downwards with the gradient of the water level. A stepped invert is realised by an artificial gradient which is formed by the installation of stepped-height channels and connectors. The high flow rate with self-cleaning effect can be achieved with channels in natural slope.

All slope types can be combined according to hydraulic requirements and topographical conditions.

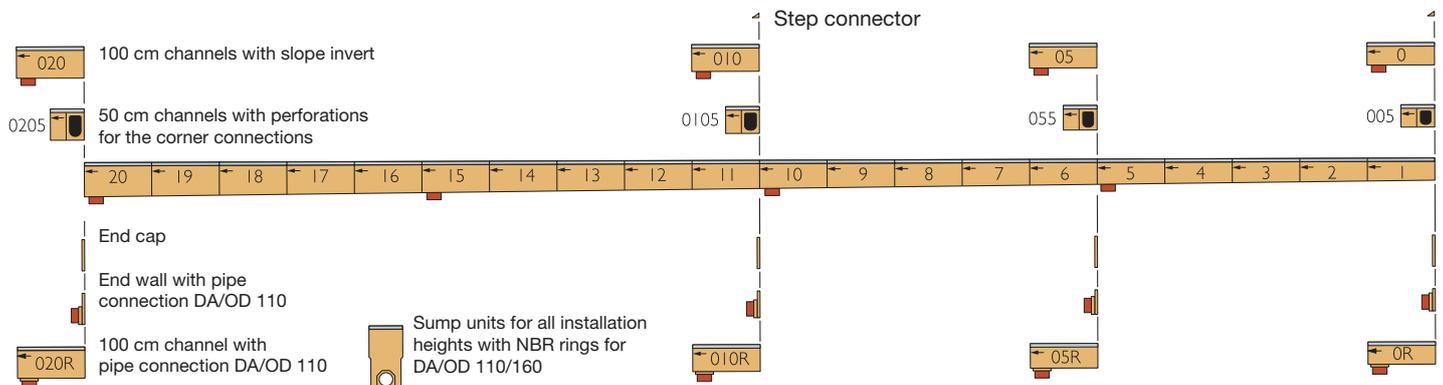
Stepped invert



Constant invert



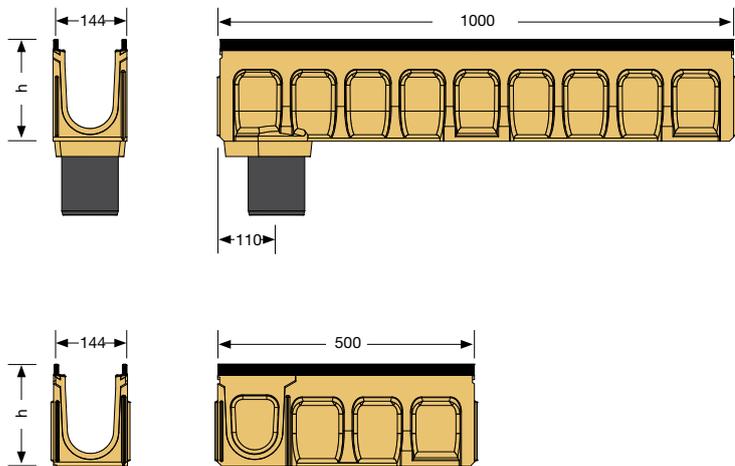
Slope invert



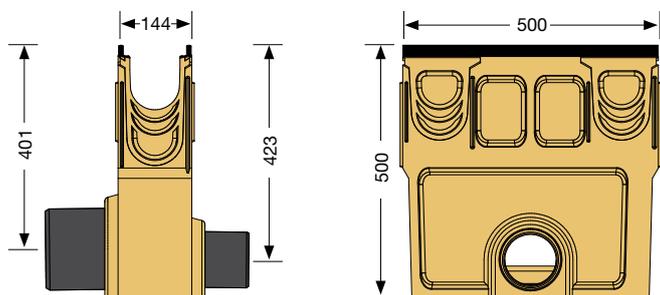
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Channel dimensions



Accessories dimensions



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ANRIN DRAIN Reinforced edge channels KF-100

Channel types – KF-100 with black cast iron edge rail GJS

Article no.	EAN	Designation		Slope %	Length cm	Width cm	Height cm	Weight kg
01600000	4026857027478	KF-100 Channel No.	0*	0	100	14,4	15.0	19.4
01600410	4026857027485	KF-100 Channel No.	0R***	0	100	14.4	15.0	19.6
01600450	4026857027492	KF-100 Channel No.	005**/*	0	50	14.4	15.0	10.5
01600010	4026857027508	KF-100 Channel No.	1	0.5	100	14.4	15.5	19.7
01600020	4026857027515	KF-100 Channel No.	2	0.5	100	14.4	16.0	20.0
01600030	4026857027522	KF-100 Channel No.	3	0.5	100	14.4	16.5	20.3
01600040	4026857027539	KF-100 Channel No.	4	0.5	100	14.4	17.0	20.6
01600050	4026857027546	KF-100 Channel No.	5*	0.5	100	14.4	17.5	20.9
01600060	4026857027553	KF-100 Channel No.	6	0.5	100	14.4	18.0	21.2
01600070	4026857027560	KF-100 Channel No.	7	0.5	100	14.4	18.5	21.5
01600080	4026857027577	KF-100 Channel No.	8	0.5	100	14.4	19.0	21.8
01600090	4026857027584	KF-100 Channel No.	9	0.5	100	14.4	19.5	22.1
01600100	4026857027591	KF-100 Channel No.	10*	0.5	100	14.4	20.0	22.4
01601000	4026857027607	KF-100 Channel No.	010*	0	100	14.4	20.0	22.2
01601010	4026857027614	KF-100 Channel No.	010R***	0	100	14.4	20.0	23.0
01601050	4026857027621	KF-100 Channel No.	0105**/*	0	50	14.4	20.0	12.4
01602000	4026857027638	KF-100 Channel No.	020*	0	100	14.4	25.0	21.5
01602010	4026857027645	KF-100 Channel No.	020R***	0	100	14.4	25.0	21.7
01602050	4026857027652	KF-100 Channel No.	0205**/*	0	50	14.4	25.0	14.4
01603000	4026857027690	KF-100 Channel No.	0100*	0	100	14.4	10.0	16.8
01603010	4026857027676	KF-100 Channel No.	0100R***	0	100	14.4	10.0	17.0

* Channel with mouldings for vertical outlet DA/OD 160

** Channel with sidewise perforations for the connection of t-junctions, elbow joints and cross- over joints and vertical outlet

*** Channel with vertical pipe socket DA/OD 160

**** Channel with mouldings for vertical outlet DA/OD 110

***** Channel with vertical pipe socket DA/OD 110

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Accessories – KF-100 with black cast iron edge rail GJS

Article no.	EAN	Designation		Length cm	Width cm	Height cm	Weight kg
01606000	4026857027706	KF-100 Sump unit		50	14.4	50	36.0
01006800	4026857000549	Pipe socket DA/OD 110					0.2
01006810	4026857000556	Pipe socket DN 150					0.6
01607000	4026857027713	KF-100 Closed end cap for channel No.	0-0205				1.6
01607900	4026857027744	KF-100 Closed end cap for channel No.	0100				1.2
01608000	4026857027751	KF-100 end cap with pipe socket DA/OD 110 for No.	0				1.0
01608100	4026857027768	KF-100 end cap with pipe socket DA/OD 110 for No.	10, 010				1.2
01608200	4026857027775	KF-100 end cap with pipe socket DA/OD 110 for No.	20, 020				1.4
01608900	4026857027799	KF-100 end cap with pipe socket DA/OD 50 for No.	0100				0.4
01607500	4026857027805	KF-100 Step connector for compensating level differences					0.5

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Cover gratings – KF-100



Slotted plastic grating Oval Grip Design

plastic (gray)
Länge: 50 cm,
SW 8 mm

Load classes:
B125



Perforated grating

stainless steel (galvanised)
Length: 50 cm, 100 cm,
MW 25 x 10 mm,
Ø 6 mm

Load classes:
A15, C250



Slotted steel grating
Double slotted steel grating
stainless steel (galvanised)
Length: 50 cm, 100 cm,
SW 10 mm

Load classes:
A15, C250



Slotted plastic grating Oval Grip Design

plastic (black)
Length: 50 cm,
SW 8 mm

Load classes:
C250



Slotted grating SW 10

cast iron (coated in black)
Length: 50 cm,
SW 10 mm

Load classes:
C250



Design grating CELTIC,

cast iron (uncoated)
Length: 50 cm,
SW 10 mm,

Load classes:
C250



Design grating LEAF

cast iron (uncoated)
Length: 50 cm,
SW 5 - 9 mm

Load classes:
C250



Mesh grating

stainless steel (galvanised)
Length: 50 cm, 100 cm
MW 30 x 14 mm

Load classes:
B125, C250



Longitudinal profile grating

stainless steel
Length: 50 cm, 100 cm
SW 5 mm

Load classes:
B125, D400*

* Exception: Cross-road drainage of busy roads SW = slot width / MW = mesh width

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Abdeckroste – KF-100



Slotted grating HEELGUARD,

cast iron (coated in black)
Length: 50 cm,
SW 6 mm
Load classes:
D400*



Longitudinal-bar grating

cast iron (cataphoretic dip coating)
Length: 50 cm,
MW 25 x 10 mm
Load classes:
D400*



Slotted grating Oval Grip Design

cast iron (cataphoretic dip coating)
Length: 50 cm,
SW 10 mm
Load classes:
C250, E600*



Slotted steel grating MASSIV 32

cast iron (uncoated)
Length: 50 cm,
SW 11 mm
Load classes:
E600*

* Exception: Cross-road drainage of busy roads SW = slot width / MW = mesh width

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Cover gratings cl. **A15** with TwistLock fastening

Article no.	EAN	Designation	Length cm	Width cm	Inlet Ø cm ² /m	Weight kg
01004200	4026857000327	Slotted steel grating, galvanised, SW 10 mm	100	12.3	280	2.4
01004220	4026857000334	Slotted steel grating, galvanised, SW 10 mm	50	12.3	280	1.2
01004300	4026857000358	Slotted steel grating, stainless steel, SW 10 mm	100	12.3	280	2.4
01004320	4026857000365	Slotted steel grating, stainless steel, SW 10 mm	50	12.3	280	1.2
01004440	4026857019084	Perforated grating, galvanised steel	100	12.3	178	1.2
01004460	4026857019091	Perforated grating, galvanised steel	50	12.3	178	0.6
01004441	4026857030492	Perforated grating, stainless steel	100	12.3	178	1.2

Cover gratings cl. **B125** with TwistLock fastening

Article no.	EAN	Designation	Length cm	Width cm	Inlet Ø cm ² /m	Weight kg
01004100	4026857000303	Mesh grating, galvanised, MW 30 x 14 mm	100	12.3	870	2.8
01004120	4026857000310	Mesh grating, galvanised, MW 30 x 14 mm	50	12.3	870	1.5
01004250	4026857032601	Longitudinal profile grating, stainless steel, SW 5 mm	100	12.3	532	4.1
01004270	4026857031956	Longitudinal profile grating, stainless steel, SW 5 mm	50	12.3	532	2.1
01004140	4026857021759	Slotted plastic grating, Oval Grip Design, color gray, SW 8 mm	50	12.3	338	1.1

Cover gratings cl. **C250** with TwistLock fastening

Article no.	EAN	Designation	Length cm	Width cm	Inlet Ø cm ² /m	Weight kg
01004600	4026857000419	Double slotted steel grating, galvanised steel, SW 10 mm	100	12.3	280	5.0
01004620	4026857000426	Double slotted steel grating, galvanised steel, SW 10 mm	50	12.3	280	2.5
01004640	4026857000433	Double slotted steel grating, stainless steel, SW 10 mm	100	12.3	280	5.0
01004660	4026857000440	Double slotted steel grating, stainless steel, SW 10 mm	50	12.3	280	2.5
01004500	4026857000396	Mesh grating, galvanised steel, MW 30 x 10 mm	100	12.3	770	4.2
01004520	4026857000402	Mesh grating, galvanised steel, MW 30 x 10 mm	50	12.3	770	2.2
01004540	4026857009030	Mesh grating, stainless steel, MW 20 x 14 mm	100	12.3	770	4.2
01004560	4026857009047	Mesh grating, stainless steel, MW 20 x 14 mm	50	12.3	770	2.1
01005020	4026857000495	Slotted cast iron grating, GJS, SW 10 mm	50	12.3	350	5.8
01005060	4026857019121	Slotted cast iron grating, Oval Grip Design, SW 10 mm	50	12.3	420	3.6
01004510	4026857021766	Slotted plastic grating, Oval Grip Design, color black, SW 8 mm	50	12.3	338	1.1
01004700	4026857000457	Perforated grating, galvanised steel	100	12.3	178	4.6
01004720	4026857000464	Perforated grating, galvanised steel	50	12.3	178	2.3
01004740	4026857009054	Perforated grating, stainless steel	100	12.3	178	4.9
01004760	4026857009061	Perforated grating, stainless steel	50	12.3	178	2.4
01004470	4026857029090	Design grating, LEAF, cast iron, uncoated	50	12.3	114	4.1
01004480	4026857029083	Design grating, CELTIC, cast iron, uncoated	50	12.3	222	3.9

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ANRIN DRAIN Reinforced edge channels KF-100

Cover gratings cl. D400¹ with TwistLock fastening

Article no.	EAN	Designation	Length cm	Width cm	Inlet Ø cm ² /m	Weight kg
01004930	4026857031994	Longitudinal profile grating, stainless steel, SW 5 mm	100	12.3	505	5.2
01004931	4026857032007	Längsprofilrost, Edelstahl, SW 5 mm	50	12.3	505	2.6
01004900	4026857022459	Maschenrost, Stahl verz., MW 20 x 14 mm	100	12.3	720	5.2
01004920	4026857022442	Maschenrost, Stahl verz., MW 20 x 14 mm	50	12.3	720	2.6
01004940	4026857022466	Maschenrost, Edelstahl, MW 20 x 14 mm	100	12.3	720	4.2
01004960	4026857022473	Maschenrost, Edelstahl, MW 20 x 14 mm	50	12.3	720	2.7
01004970	4026857026211	Längsstabrost, Guss GJS, SW 10 mm	50	12.3	420	4.1
01004980	4026857029038	Stegrost, HEELGUARD, Guss GJS, SW 6 mm	50	12.3	360	3.8

¹ Exception: Cross-road drainage of busy roads

Cover gratings cl. E600¹ with TwistLock fastening

Article no.	EAN	Designation	Length cm	Width cm	Inlet Ø cm ² /m	Weight kg
01005120	4026857000501	Slotted cast iron grating, Oval Grip Design, SW 10 mm	50	12.3	420	5.0
01005130	4026857029106	Slotted steel grating, MASSIV 32, cast iron, uncoated	50	12.3	370	5.8

¹ Exception: Cross-road drainage of busy roads

Cover gratings with TwistLock fastening - Accessories

Article no.	EAN	Designation	Length cm	Width cm	Inlet Ø cm ² /m	Weight kg
01004230	4026857000341	KE-/KF-/KS-100 TwistLock fastening, single				

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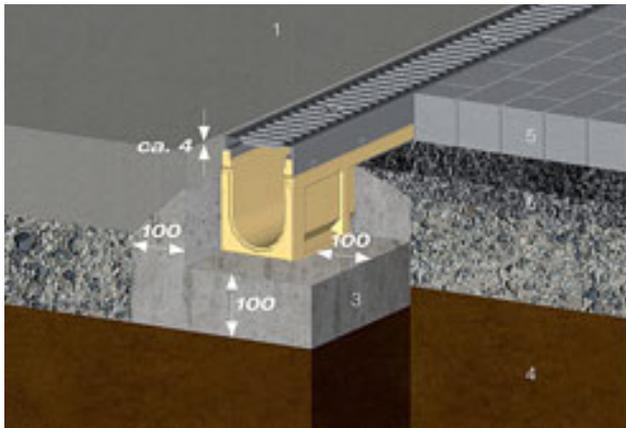
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Example installations

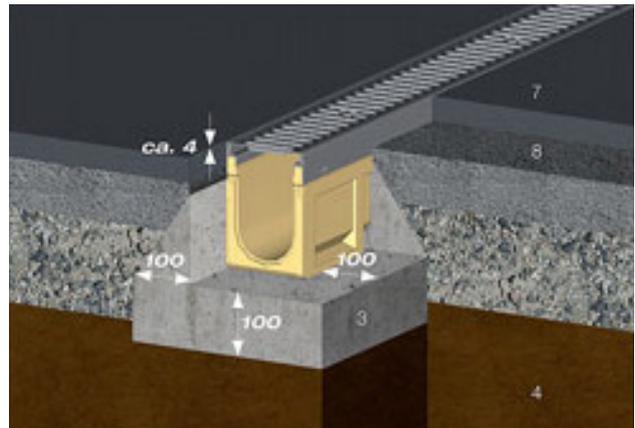
The following installation guidelines are schematic representations. These are provided as examples and are non-binding. The information provided here is based on our long-term experience in excavation and road construction as well as the state-of-the-art technology. Despite this, designers and planners are always obligated to check the products and the installation instructions for their appropriateness. The example details are simplified recommendations for execution. Constructions are to be re-created on a project-specific basis.

Important: Insert gratings for the installation.

Load class A 15

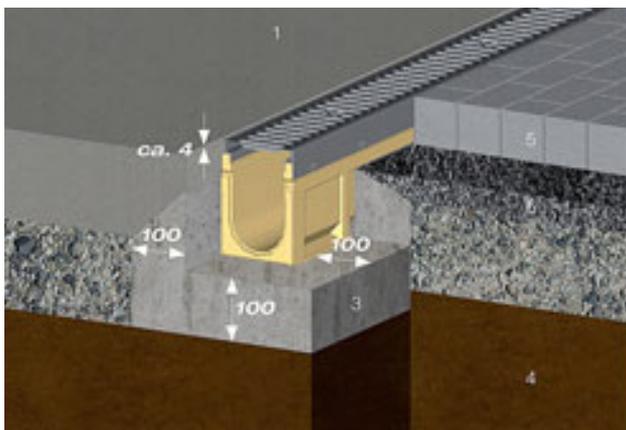


Road concrete and / or concrete sheets or paving bed

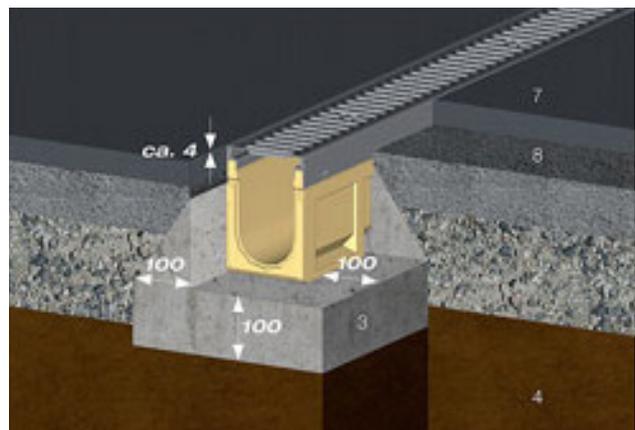


Cast asphalt

Load class B125



Road concrete and / or concrete sheets or paving bed



Cast asphalt

- 1 In-situ road concrete
- 2 Base course
- 3 Concrete cladding of the channel body B 25
Concrete class C12/15 (A 15 – C 250)
Concrete class C12/25 (D 400 – E 600)
- 4 Foundation, mature soil
- 5 Prefabricated concrete sheets and / or stone systems

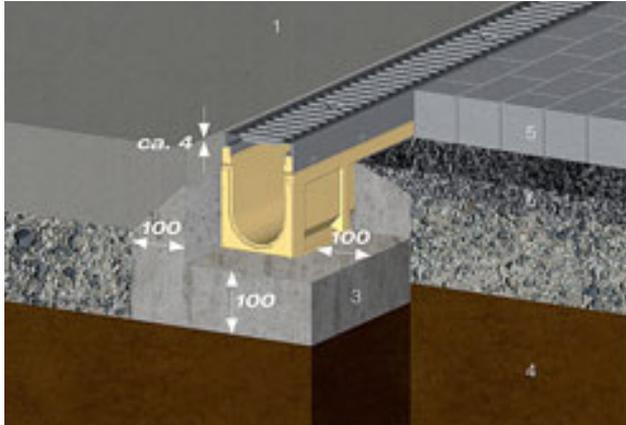
- 6 Paving bed
- 7 Wearing course
- 8 Bonding course
- 9 Bitumen base course

All length specifications in millimetres

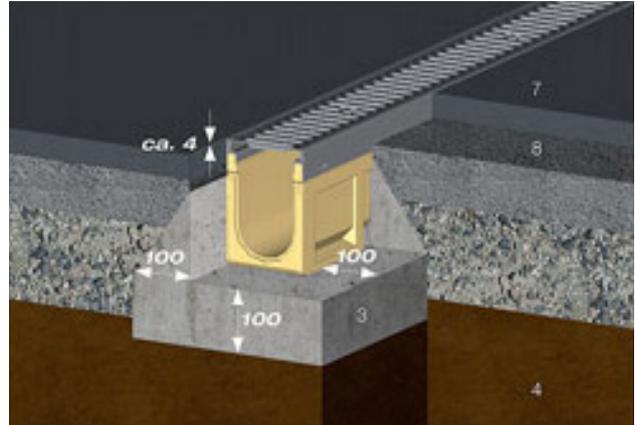
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Load class **C250**

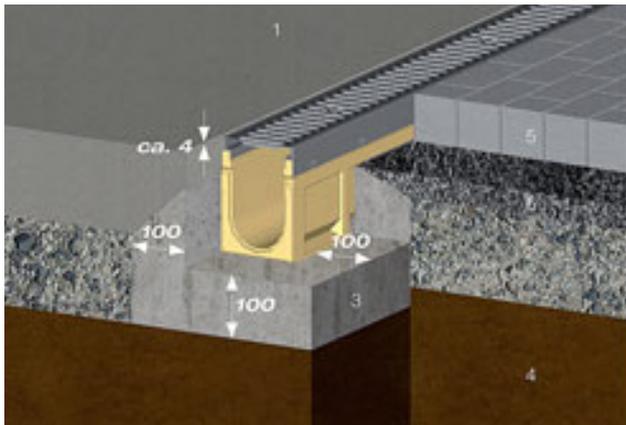


Road concrete and / or concrete sheets or paving bed

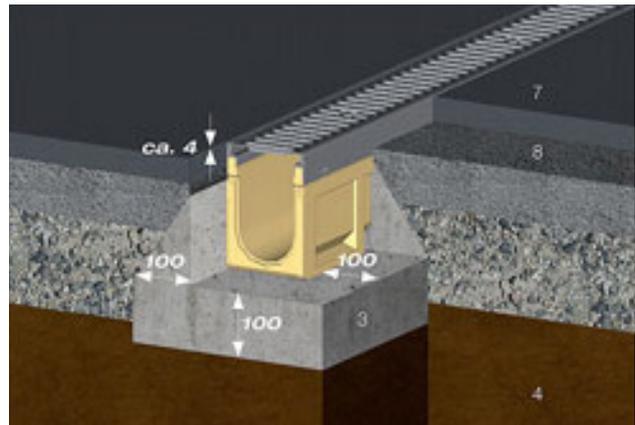


Cast asphalt

Load class **D400*** - **E600*** (Exception: Cross-road drainage of busy roads)



Road concrete and / or concrete sheets or paving bed



Cast asphalt

- 1 In-situ road concrete
- 2 Base course
- 3 Concrete cladding of the channel body B 25
Concrete class C12/15 (A 15 – C 250)
Concrete class C12/25 (D 400 – E 600)
- 4 Foundation, mature soil
- 5 Prefabricated concrete sheets and / or stone systems

- 6 Paving bed
- 7 Wearing course
- 8 Bonding course
- 9 Bitumen base course

All length specifications in millimetres

Guidelines and regulations

DIN EN 1433	"Drainage channels for vehicular and pedestrian areas"
DIN 19580	"Drainage channels for vehicular and pedestrian areas ..."
RStO	"Guidelines for the standardisation of the superstructure of vehicular areas"
DIN EN 206-1	"Concrete. Specification, performance, production and conformity"
DIN EN 1045-2	"Concrete, reinforced and prestressed concrete structures. Part 2: Concrete – Specification, properties, production and conformity; Application rules for DIN EN 206-1"



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