

ANRIN

LEADING WATER



Technical data sheet

Reinforced edge channels
KC-100

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Reinforced edge channels KC-100

Channel drainage for the load classes A 15 to C 250

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	13.0 cm
Height	10.0 cm, 15.0 cm
Weight	5.8 - 12.4 kg
Edge type	Steel edge rail, 2 mm edge width; galvanised steel
Nominal width	100 mm
Load class	A15 to C250*
Slope type	Constant invert
Joint type	UNILINK®-joint
Fastening	TwistLock fastening

Material properties

Channel / component body	
Polymer concrete	polyester resin-based with mineral aggregates, additives
Compressive strength	$\geq 90 \text{ N/mm}^2$
Bending tensile strength	$\geq 22 \text{ N/mm}^2$
Modulus of elasticity	ca. 25 kN/mm^2
Density	$2.1 - 2.3 \text{ g/dm}^3$
Heat resistance	100° C (permanent loading)
Frost resistance	- 50° C
Water penetration depth	0 mm
Water absorption	0.05 %
Edge protection	
Edge protection	Galvanised steel
Channel cover	
Channel cover	Galvanised steel, GJS ductile-iron, PA plastic

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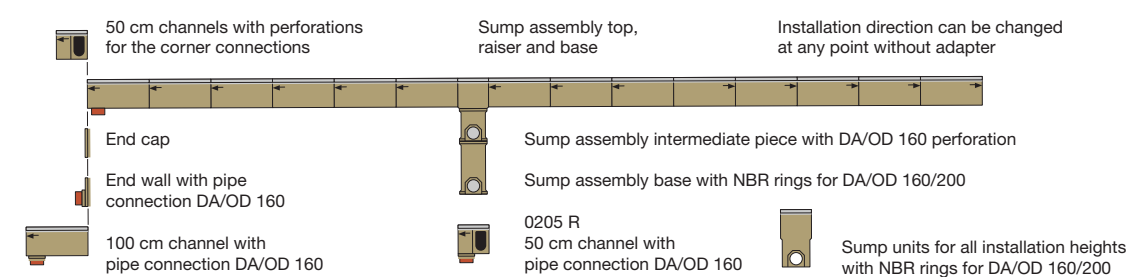
Reinforced edge channels

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.

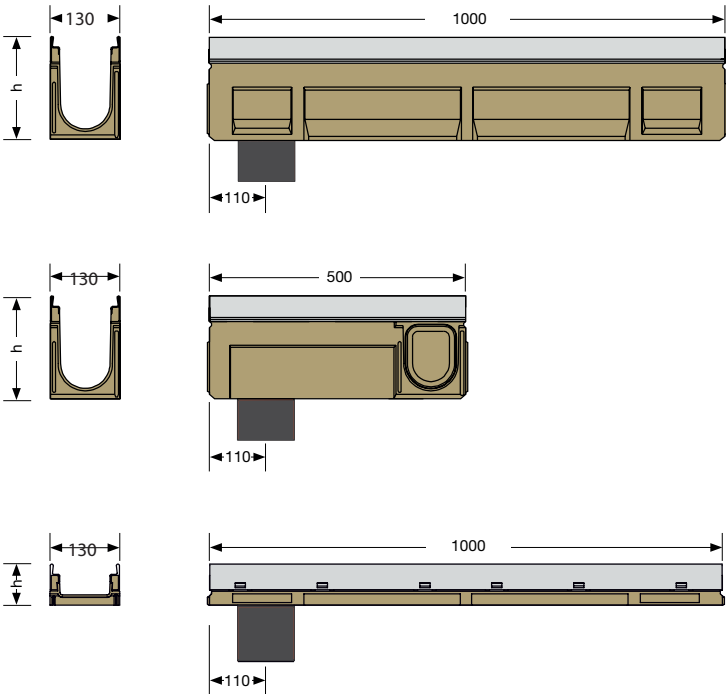
Constant invert



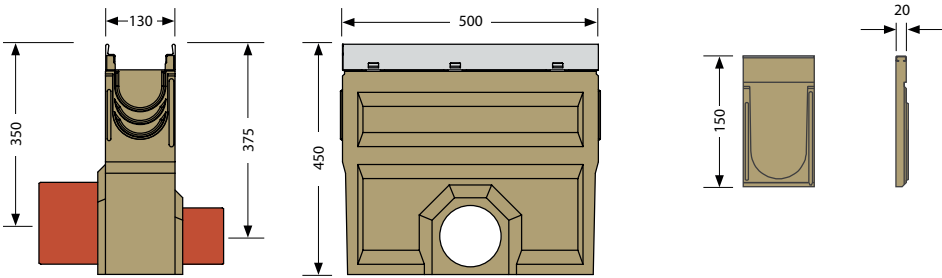
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Channel dimensions



Accessories dimensions



Technical data sheet

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Channel types - KC-100 with galvanised steel edge rail

Article no.	EAN	Designation		Slope%	Length cm	Widthcm	Height cm	weight kg
01800000	4026857032694	KC-100 Channel No.	0*	0	100	13.0	15.0	12.4
01803000	4026857028437	KC-100 Channel No.	0100*	0	100	13.0	10.0	8.3
01800330	4026857035848	KC-100 Channel No.	0RV***	0	100	13.0	15.0	12.4
01800450	4026857033929	KC-100 Channel No.	005	0	50	13.0	15.0	5.8
01803330	4026857028437	KC-100 Channel No.	0100RV***	0	100	13.0	10.0	8.3

* Channel with mouldings for vertical outlet DA/OD 110

*** Channel with moulded-in Venturi Socket

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ANRIN DRAIN Reinforced edge channels KC-100

Accessories - KC-100 with galvanised steel edge rail

Article no.	EAN	Designation		Length cm	Width cm	Height cm	Weight kg
01806000	4026857033011	KC-100 Sump unit low height		50	13.0	45	19.3
01006800	4026857000549	Pipe socket DA/OD 110					0.2
01006810	4026857000556	Pipe socket DA/OD 160					0.6
01807000	4026857032700	KC-100 closed end cap for channel no.0	0				1.6
01807900	4026857028444	KC-100 closed end cap for channel no. 0100	0100				0.9
01808000	4026857033028	KC-100 end cap with pipe socket DA/OD 110 for channel no.0	0				1.0

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ANRIN DRAIN Reinforced edge channels KC-100

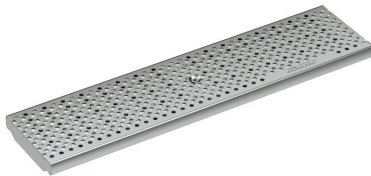
Cover gratings – KC-100



Slotted plastic grating Oval Grip Design

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

Load classes:
B125



Perforated grating

steel (galvanised),
Length: 50 cm, 100 cm,
MW 25 x 10 mm,
Ø 6 mm
Load classes:
A15, C250



Double slotted steel grating

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

ductile iron (coated in
black) Length: 50 cm,
SW 10 mm
Load classes:
C250



Design grating CELTIC

ductile iron (uncoated)
Length: 50 cm,
SW 10 mm,
Load classes:
C250



Design grating, LEAF

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

Load classes:
C250



Mesh grating

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

Load classes:
B125, C250



Slotted grating Oval Grip
ductile iron (cataphoretic dip
coating)
Length: 50 cm,
SW 10 mm
Load classes:
C250, E600*

* Exception: C oss-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 cm²/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
01004440	4026857019084	Perforated grating, galvanised steel	100	12.3	178	1.2
01004460	4026857019091	Perforated grating, galvanised steel	50	12.3	178	0.6

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

Article no.	EAN	Designation	Length cm	Width cm	Inlet Ø cm²/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
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 cm²/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
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
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
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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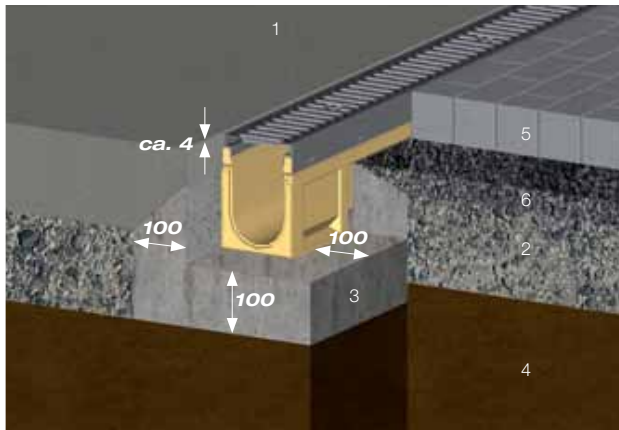
ANRIN DRAIN Reinforced edge channels

Example installations

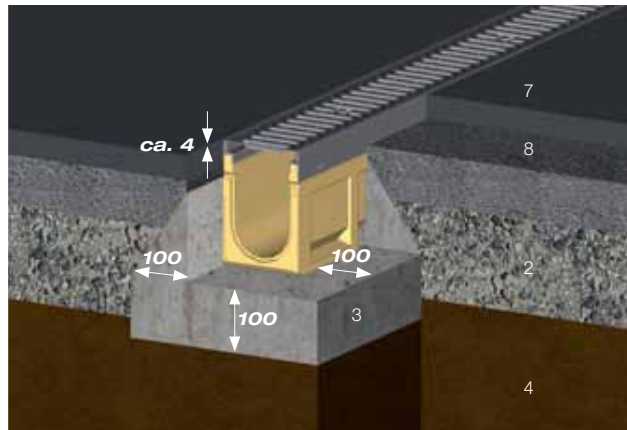
The following installation guidelines are schematic representations. These are provided as examples and are **non-binding**. The provided here is based on our long-term experience in excavation and road construction as well as the state-of-the-art technology. Despite this, designers and planners are 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**

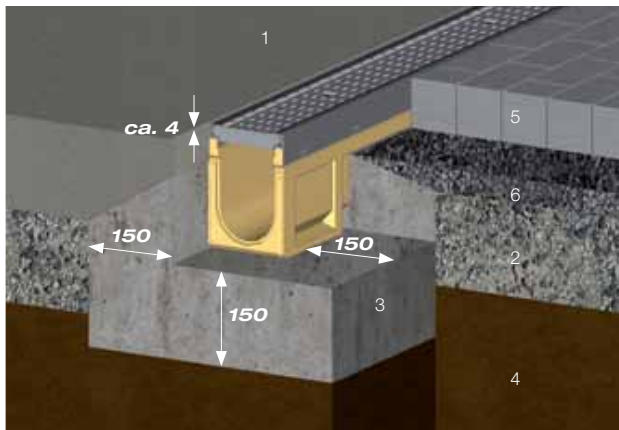


Road concrete and / or concrete sheets or paving bed

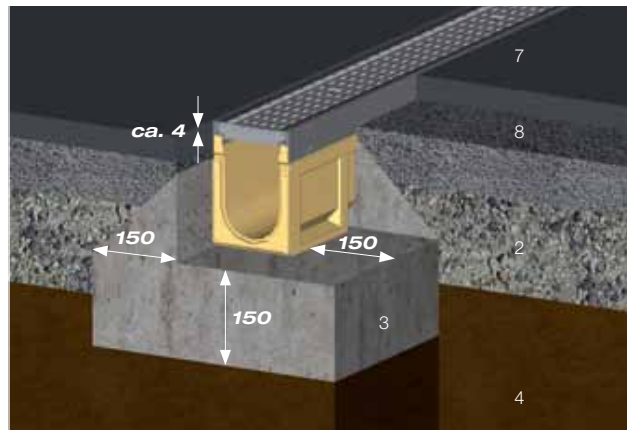


Cast asphalt

Load class **B 125**



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

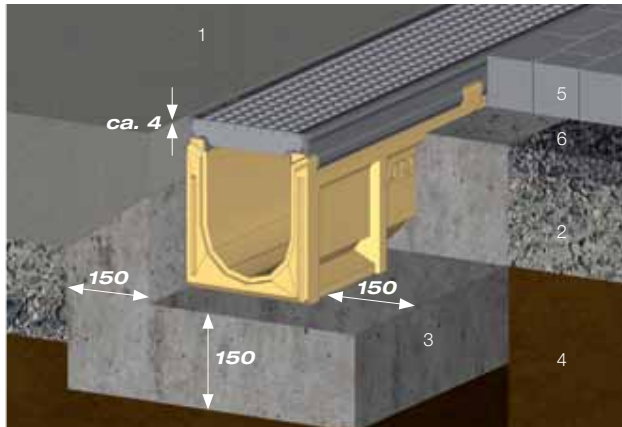
- 6 Paving bed
- 7 Wearing course
- 8 Bonding course
- 9 Bitumen base course

All length specifications in millimetres

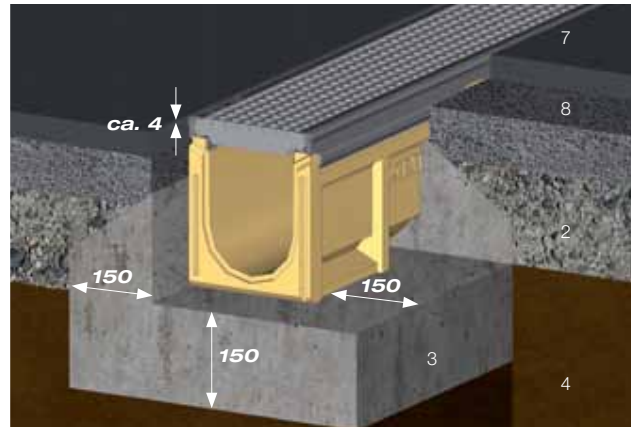
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ANRIN DRAIN Reinforced edge channels

Load class **C 250**



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
Application rules for DIN EN 206-1"



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