

ANRIN

LEADING WATER



Technical data sheet

Reinforced edge channels
KE-300

Technical data sheet

ANRIN DRAIN Reinforced edge channels KE-300

Channel drainage for the load classes A 15 to E 600

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	100 cm
Width	36.4 cm
Height	29.0 cm, 39.0 cm
Edge type	Steel edge rail, 6 mm edge width; galvanised steel
Nominal width	300 mm
Load class	A15 to E600*
Slope type	Constant invert
Joint type	UNILINK®-joint
Fastening	SnapLock-Fastening

Material properties

Channel / component body	
Resin 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 under continuous load)
Frost resistance	- 50° C
Water penetration depth	0 mm
Water absorption	0.05 %

Edge protection	
Edge protection	Galvanised steel, profile thickness 6 mm

Channel cover	
Channel cover	GJS ductile-iron

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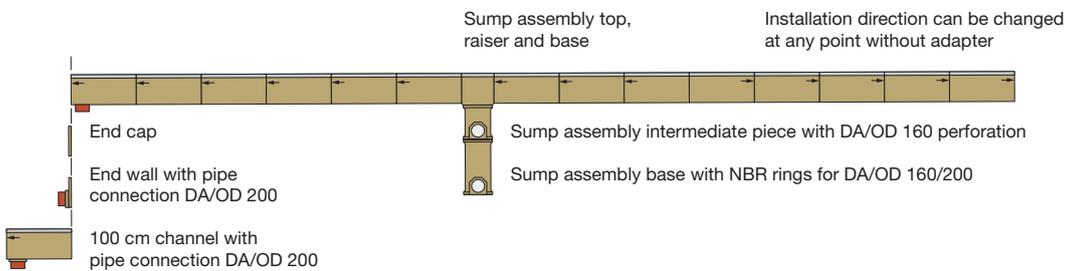
ANRIN DRAIN Reinforced edge channels

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.

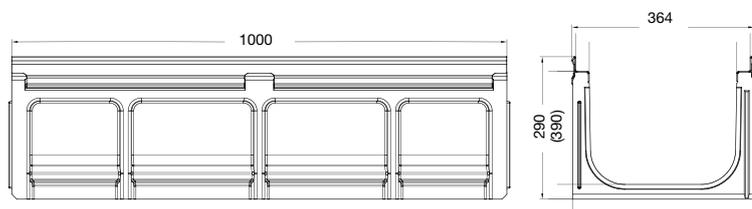
Constant invert



Technical data sheet

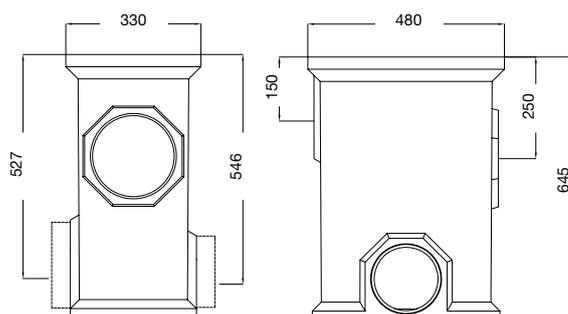
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Channel dimensions



Accessories dimensions

Sump assembly base



Channel No. 0R,
with vertical pipe socket DA/OD 200



Channel No. 0SK,
with vertical outlet as Sump assembly top

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ANRIN DRAIN Reinforced edge channels KE-300

Channel types – KE-300 with galvanised steel edge rail

Article no.	EAN	Designation		Slope %	Length cm	Width cm	Height cm	Weight kg
01130000	4026857035107	KE-300 Channel No.	0	0	100	36.4	29.0	49.7
01130010	4026857035213	KE-300 Channel No.	0R***	0	100	36.4	29.0	48.4
01130060	4026857035282	KE-300 Channel No.	0SK*	0	100	36.4	29.0	48.4
01132000	4026857035138	KE-300 Channel No.	020	0	100	36.4	39.0	58.8
01132010	4026857035244	KE-300 Channel No.	020R***	0	100	36.4	39.0	57.5
01132060	4026857035299	KE-300 Channel No.	020SK*	0	100	36.4	39.0	57.5
03236160	4026857012696	Sump Assembly	Base	0	48	33.0	64.5	43.2

* Channel with vertical outlet as Sump assembly top

*** Channel with vertical pipe socket DA/OD 200

Accessories – KE-300 with galvanised steel edge rail

Article No.	EAN	Designation		Length cm	Width cm	Height cm	Weight kg
03237010	4026857029540	KE/SF-300 Closed end cap, with ductile iron edge					5.5
03238010	4026857029564	KE/SF-300 End cap with pipe socket DA/OD 200, with ductile iron edge					9.4
01138000	4026857035343	KE-300 End cap with pipe socket DA/OD 200, with ductile iron edge, for No.	0				9.9

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ANRIN DRAIN Reinforced edge channels KE-300

Cover gratings – KE-300 cl. **D400**¹ with SnapLock- fastening

Article No.	EAN	Designation	Length cm	Width cm	Inlet Ø cm ² /m	Weight kg
01135220	4026857011798	Slotted ductile iron grating with OvalGrip Design, ductile iron GJS	50	35.1	1400	18.0
01135240	4026857035619	Slotted ductile iron grating with HEELGUARD Design, ductile iron GJS, SW 6mm	50	35,1	791	17,9

¹ Exception: Cross-road drainage of busy roads



Slotted ductile iron grating, OvalGrip Design

Ductile iron GJS, cataphoretic dip coating
(coated in black)

Length: 50 cm,
SW 12 mm

Load class:
D400*



Slotted ductile iron grating, HEELGUARD Design

Ductile iron GJS, cataphoretic dip coating
(coated in black)

Length: 50 cm,
SW 6 mm

Load class:
D400*

Technical data sheet

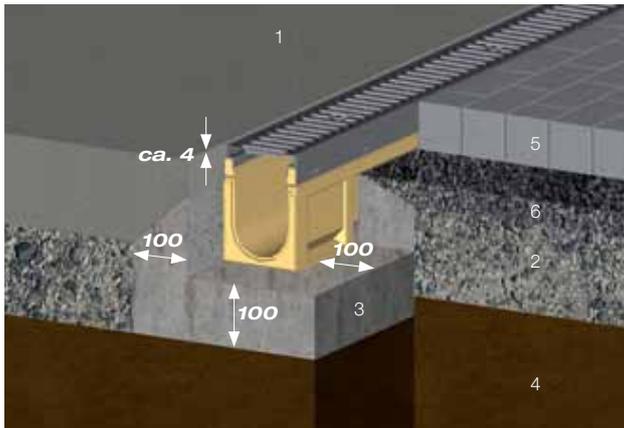
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Example installations

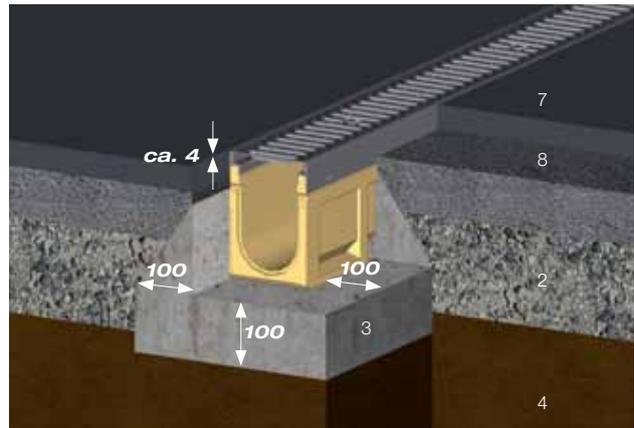
The following installation guidelines are schematic representations. These are provided as examples and are non-binding. The information provided here is based on our long-term experience in excavation and road construction as well as the state-of-the-art technology. Despite this, designers and planners 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 A15

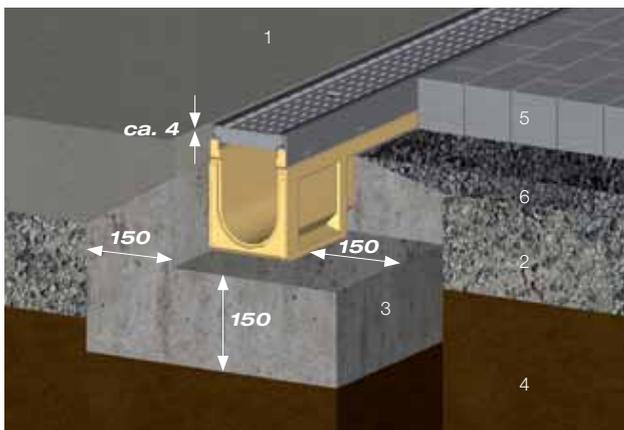


Road concrete and / or concrete sheets or paving bed

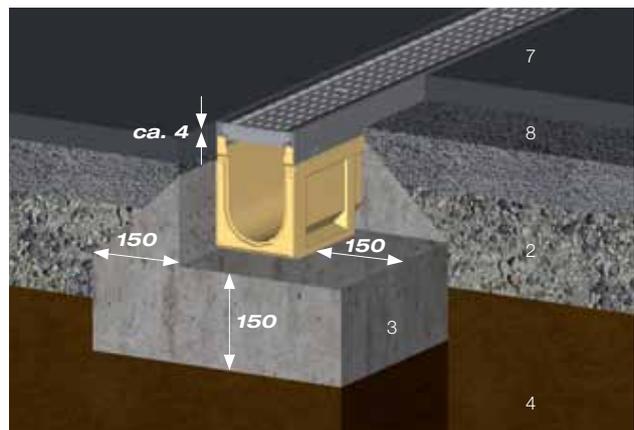


Cast asphalt

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

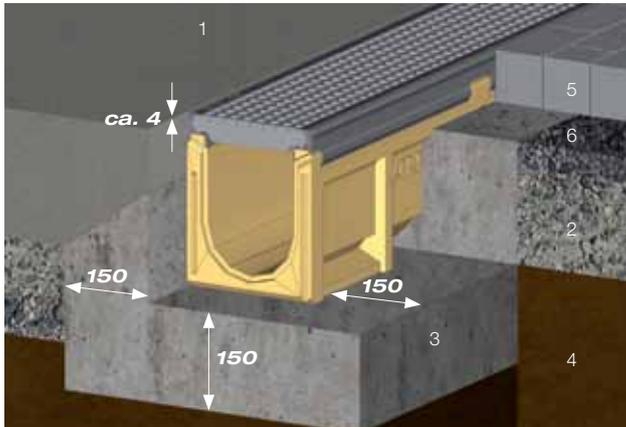
- 6 Paving bed
- 7 Wearing course
- 8 Bonding course
- 9 Bitumen base course

All length specifications in millimetres

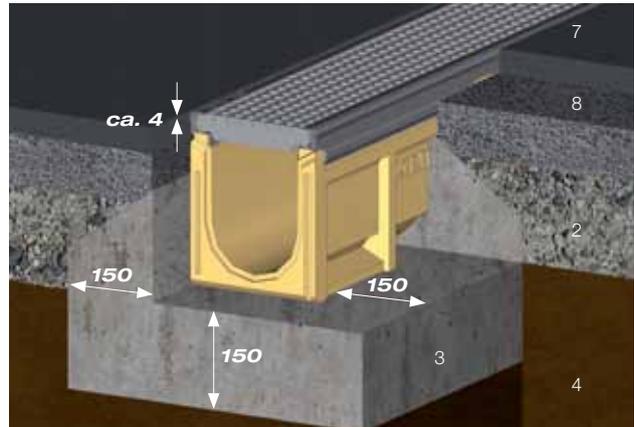
Technical data sheet

ANRIN DRAIN Reinforced edge channels KE-300

Load class **C250**

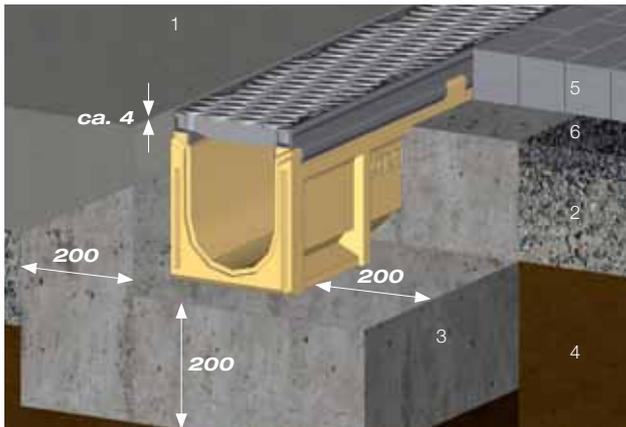


Road concrete and / or concrete sheets or paving bed

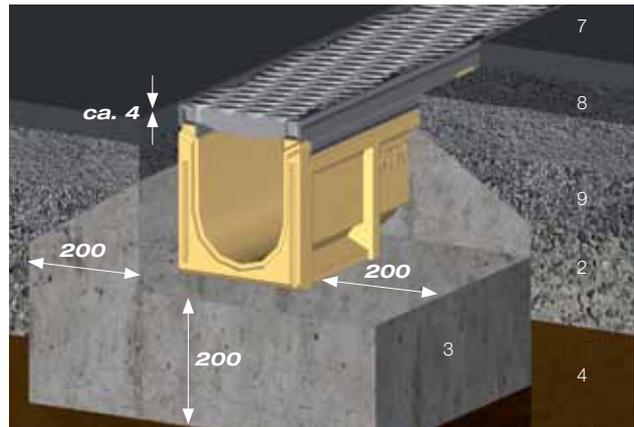


Cast asphalt

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
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- 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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