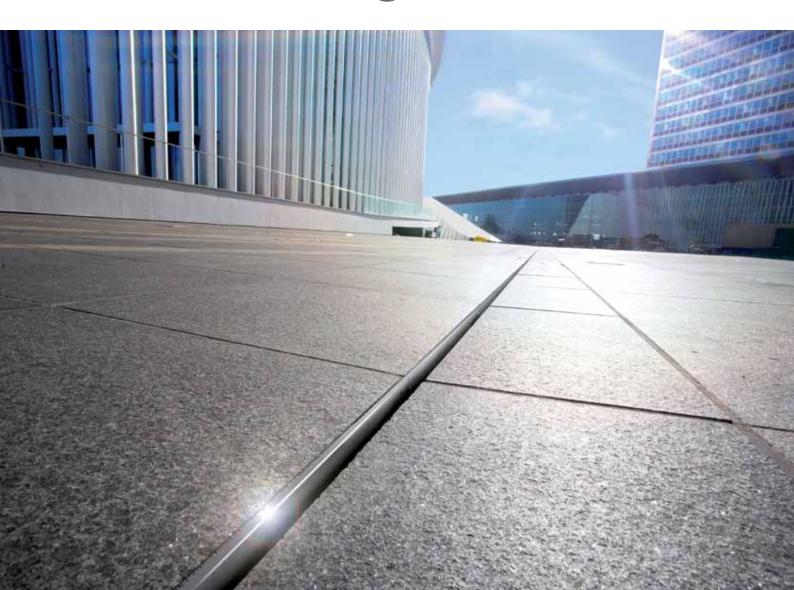


Z-100, Z-150

Channel drainage for decorative surface design



04 ANRIN Slotted Top Systems

Material/composition/properties

06 Applications

Overview of the load classes

08 Slotted Top Channel Z-100

Product specifications/accessories

10 Slotted Top Channel Z-150

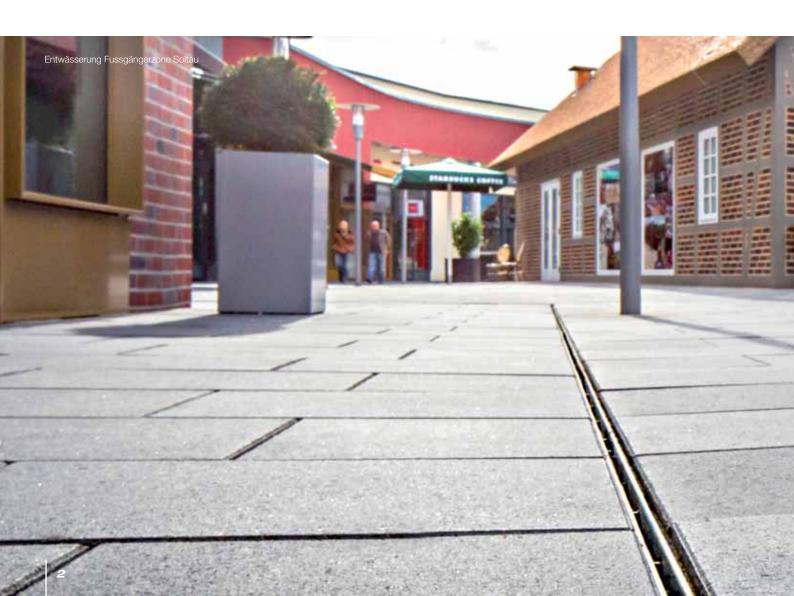
Product specifications/accessories

12 UNILINK[®] Joint

Joint system/sealing technology

14 Example installations

Load classes A15, B125, C250, D400



ANRIN - The Drainage System

At our production and logistics centre located in Anröchte, North Rhine Westphalia, we have been developing and producing pioneering drainage channels made of resin concrete and cover gratings for all physical and artistic demands of modern channel drainage since 1972.

Thanks to our especially efficient distribution, we are able to supply any construction site in Germany in less than 48 hours as well as many other countries within just a few days. Always new, creative and patented channel and grating systems give our demanding construction managers, architects, tradesmen and specialist dealers the safe and secure feeling that they have made the right choice for the long term.

Millions of installed metres of channel and certification according to DIN EN ISO 9001 serve as assurance of the high quality of our owner-operated family company. We place a special emphasis on technical and application-based consultation, with the goal of continuously finding the best solution for your individual construction project. Put our expertise to the test and contact us.



ANRIN slotted top systems made of resin concrete

The material comprised of naturally occurring mineral quartzes and resin is distinguished by its structural and environmental benefits.

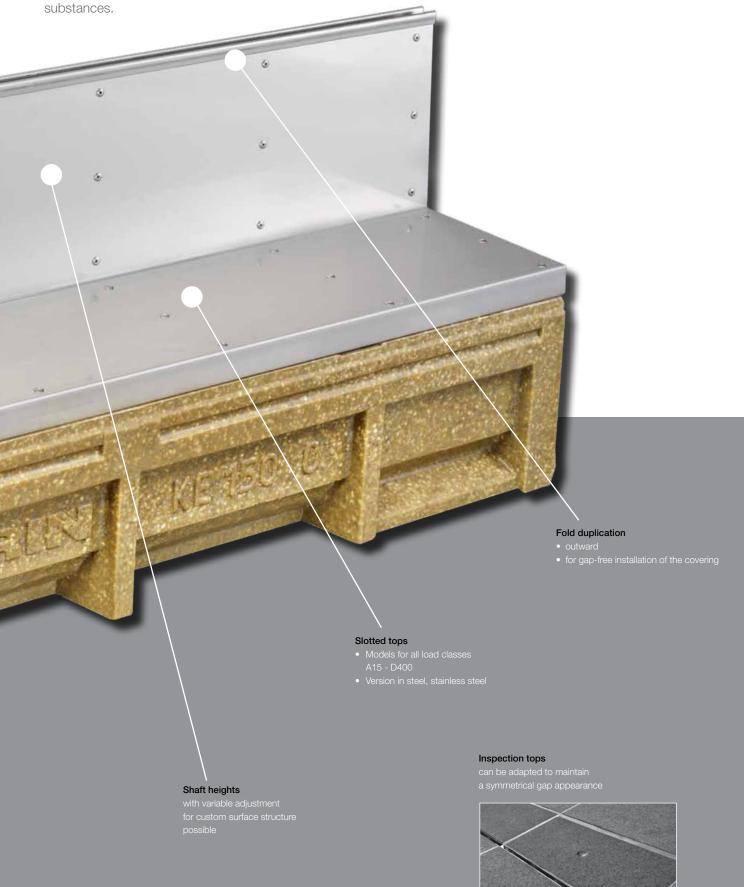
In comparison with conventional, cement-bound materials, resin concrete allows for unit weights which are much easier to handle. By processing the material on the construction site, time and money are saved.



The high quality of the individual components as well as the closed material matrix make the ANRIN resin concrete impermeable to liquid and highly resistant to corrosion as well as a number of

As a result, decorative surfaces can be designed which purposefully drain off rainwater and the ground water can be reliably protected against environmental pollution.

Our drainage systems (KE and SF) are tested and certified in accordance with DIN EN 1433 and KIWA BRL 5211.

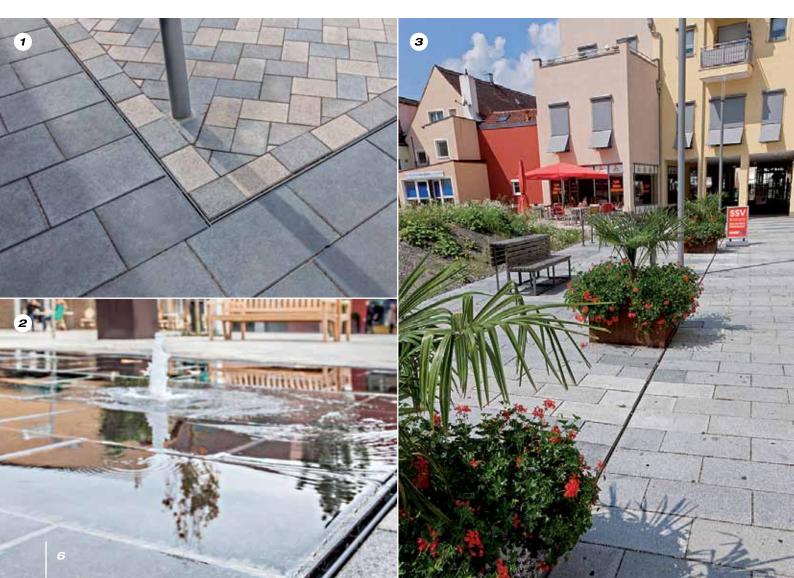


Channel drainage for the load classes A15 to D400

According to DIN 19580/EN 1433 "Drainage channels for vehicular and pedestrian areas", these surfaces are assigned to specific load classes depending on the use.

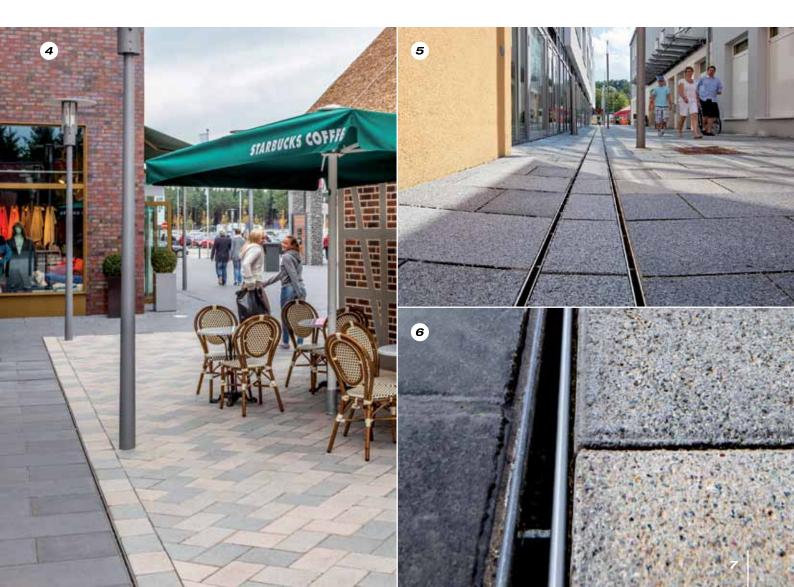
Then the respective appropriate ANRIN slotted top system can be selected. The following table includes a list of typical areas of application and the channel systems which can be used.

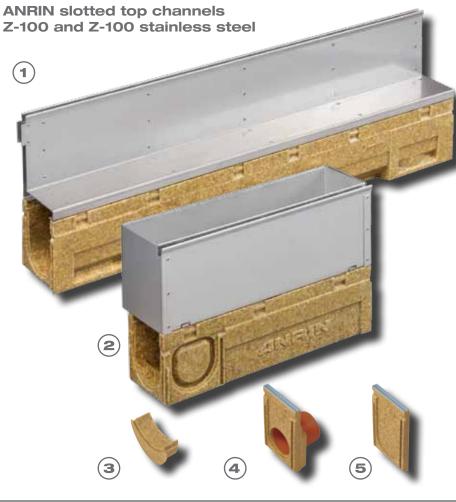
- Designer Outlet Center Soltau, pedestrian zone
- 2 Designer Outlet Center Soltau, bridge area
- 3 Dingolfing, Spitalplatz 4 Designer Outlet Center Soltau, restaurant
- 5 Dingolfing, Spitalplatz Passage
- 6 Installation detail in paved surface



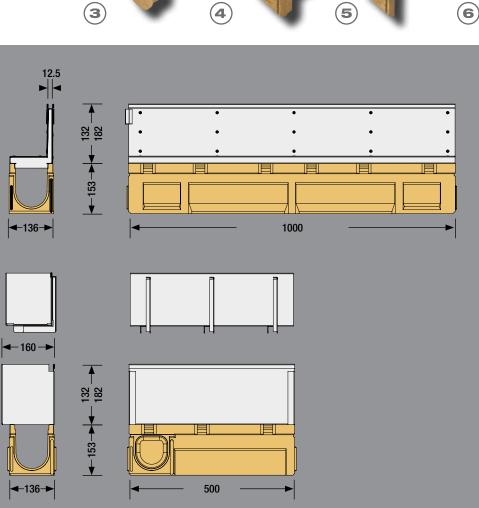
| Load classes ¹ | Areas of application | Z-100 | Z-150 |
|---------------------------|---|-------|-------|
| A15 (test force 15 kN) | Cycle path and footpaths | | |
| | School yards | | |
| | Green areas, Gala-Bau | | |
| B125 (test force 125 kN) | Walkways, pedestrian zones | | |
| (| Parking lots, parking decks | | |
| | Garage entrances, courtyards | | |
| C250 (test force 250 kN) | Road edge drainage | | |
| | Channels and shoulders | | |
| D400 (test force 400 kN) | Roads | | |
| | Parking lots, federal motorway parking lots | | |
| | Pedestrian roads | | |

¹ according to DIN 19580



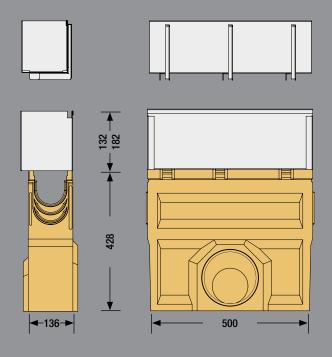


- 1 **Z-100** 100 cm
- **2 Z-100** 50 cm
- 3 Step connector
- (4) End cap with DA/OD 110 pipe socket
- 5 End cap
 - Sump unit
 DA/OD 110 and 160 drains,
 with moulded-in NBR rings,
 with dirt trap bucket.



| Product specifications Z-100 | Lower channel section | Sump unit | Slotted top |
|------------------------------|-----------------------|----------------|----------------------------|
| Material | Resin concrete | Resin concrete | Galvanised/stainless steel |
| Length | 50 cm and 100 cm | 50 cm | 50 cm and 100 cm |
| Width | 13.6 cm | 13.6 cm | 13.6 cm and 16.0 cm |
| Height | 15.3 cm | 42.8 cm | 13.2 cm and 18.2 cm |
| Slot width SW | | | 1.25 cm |
| Shaft height SH | | | 11 cm / 16 cm |
| Nominal width | 100 mm | 100 mm | |
| Load class | A15 to C250 | A15 to C250 | |
| Slope type | Constant invert | | |
| Joint type | UNILINK® joint | UNILINK® joint | |
| Profile version | | | laterally flush slot |

Product benefits + optimised self-cleaning with smooth-walled, downward-flaring shaft + rounded stabilisation bars + outward fold duplication for gap-free installation of the covering + variable surface design + optimal installation with UNILINK® joint system



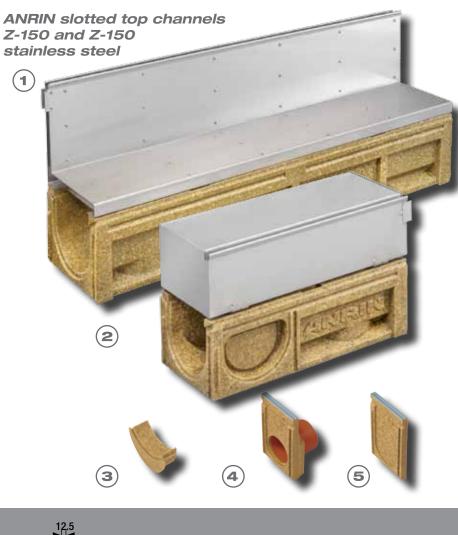


SERVICE

ANRIN provides custom solutions and possibilities for the contract business. Here you benefit from reliable cooperation with our technical office staff and good contact with the field staff. ANRIN is certified according to DIN EN ISO 9001.



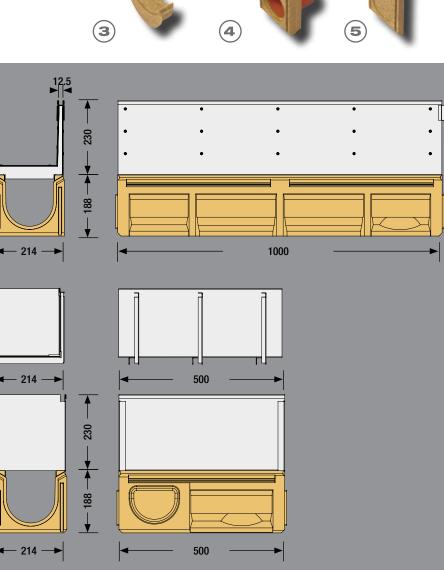
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- 1 **Z-150** 100 cm
- **2 Z-150** 50 cm
- 3 Step connector
- 4 End cap with DA/OD 110 pipe socket
- 5 End cap

6

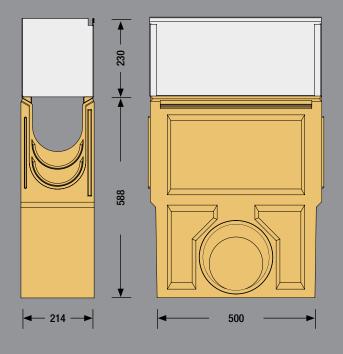
DA/OD 160 and 200 drains, with moulded-in NBR rings, with dirt trap bucket.



| Product specifications Z-150 | Lower channel section | Sump unit | Slotted top |
|------------------------------|-----------------------|----------------|----------------------------|
| Material | Resin concrete | Resin concrete | Galvanised/stainless steel |
| Length | 50 cm and 100 cm | 50 cm | 50 cm and 100 cm |
| Width | 21.4 cm | 21.4 cm | 21.4 cm |
| Height | 18.8 cm | 58.8 cm | 23.0 cm |
| Slot width SW | | | 1.25 cm |
| Shaft height SH | | | 20.0 cm |
| Nominal width | 150 mm | 150 mm | |
| Load class | A15 to D400 | A15 to D400 | |
| Slope type | Constant invert | | |
| Joint type | UNILINK® joint | UNILINK® joint | |
| Profile version | | | laterally flush slot |

Product benefits optimised self-cleaning with smooth-walled, downward-flaring shaft rounded stabilisation bars

- + outward fold duplication for gap-free installation of the covering
- + variable surface design
- + optimal installation with UNILINK® joint system





SERVICE

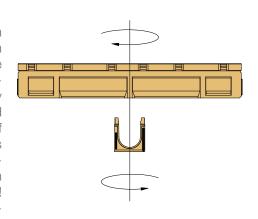
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ANRIN UNILINK® joint

The optimised UNILINK® joint system eliminates the traditional differentiation between the beginning and end of the channel. Elements of an equal installation height can be joined in any arbitrary direction. The symmetrically divided half-joints enable the optional sealing of the splicing. Vertically aligned grooves and springs support an efficient installation: In the process, the installation alignment can be chosen arbitrarily! The flexibility in the design and installation phases enters a new dimension with the UNILINK® joint!





ANRIN sealing technology

The tightness of the channel joints plays an essential role for the functionality. With the ANRIN joint seal set, comprised of a sealer (poly sulphide based two-component sealant), a primer, a mixer column, incl. spiral and a hand pump sprayer, water-tight channel joints for special installation situations, such as petrol stations and facilities for the storage, filling and handling of water polluting substances can be made easily, quickly and safely.





ANRIN Installation information

With ANRIN drainage systems, accumulating rainwater should be drained safely and quickly. Moreover, the structural elements have the task of accommodating dynamic loads arising from traffic-related demands and dispersing

them to the area of the foundation. 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

- 1 Paver surface/paving
- 2 Mortar bedding
- 3 Base course with hydraulic binder
- 4 Gravel base (frost-protection layer)
- 5 C12/15 concrete

All length specifications in millimetres

on stair and façade connections with paver covering in paved surface

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 re-created on a project-specific basis. Special local conditions must be reviewed by the planner and the appropriate installation types must

be taken into account. The indicated concrete qualities are minimum values. Requirements on frost and melt salt resistance must be factored in with the appropriate selection of concrete in accordance with DIN 1045 and/or 206-1.

The current guidelines and regulations of the state-of-the-art technology must be observed for the installation. For example, these are:

DIN EN 1433 "Drainage channels for vehicular and pedestrian areas" **DIN EN 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", to be observed, in particular:

ZTV concrete StB 07 for the construction of base courses with hydraulic binders and concrete

road wearing courses.

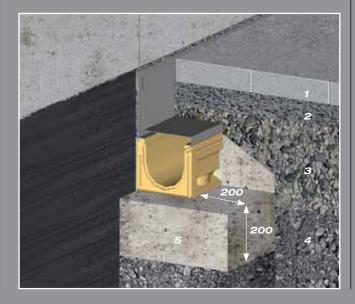
(VOB) Part C DIN 18318 "Construction work on roadways"

DIN EN 1045-2 "Concrete, reinforced and prestressed concrete structures. Part 2: Concrete – Specification,

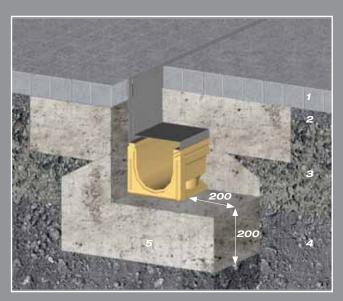
properties, production and conformity; Application rules for DIN EN 206-1"

Z-150 Z-150

on stair and façade connections with paver covering



in paved surface







We invite you to discover more.

Whether you are already planning a specific project or simply want to learn more about the general possibilities: Put our expertise to the test and contact us.

ANRIN GmbH Siemensstraße 1 D-59609 Anröchte

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