

8.2 Schlüter®-KERDI-DRAIN



DRAINAGE

FLOOR DRAINS FOR BONDED WATERPROOF MEMBRANES

Application and Function

Schlüter®-KERDI-DRAIN is a floor drain system for the simple and secure connection of bonded waterproofing membranes to the drainage system of buildings.

Bonded waterproof layers, which are recognised by the ZDB (German Contractors Association) notification as current state of technology, are increasingly used for ceramic tile and natural stone coverings.

Schlüter®-KERDI Collar is adhered to the large, trapezoid-perforated bonding flange, which is covered with a fleece webbing, to form a waterproof connection to the surface waterproof layer.

Schlüter®-KERDI-DRAIN are constructed modularly and can be configured for every requirement. This allows for the combination of different vertical/horizontal drain casing sizes and a variety of diameters.

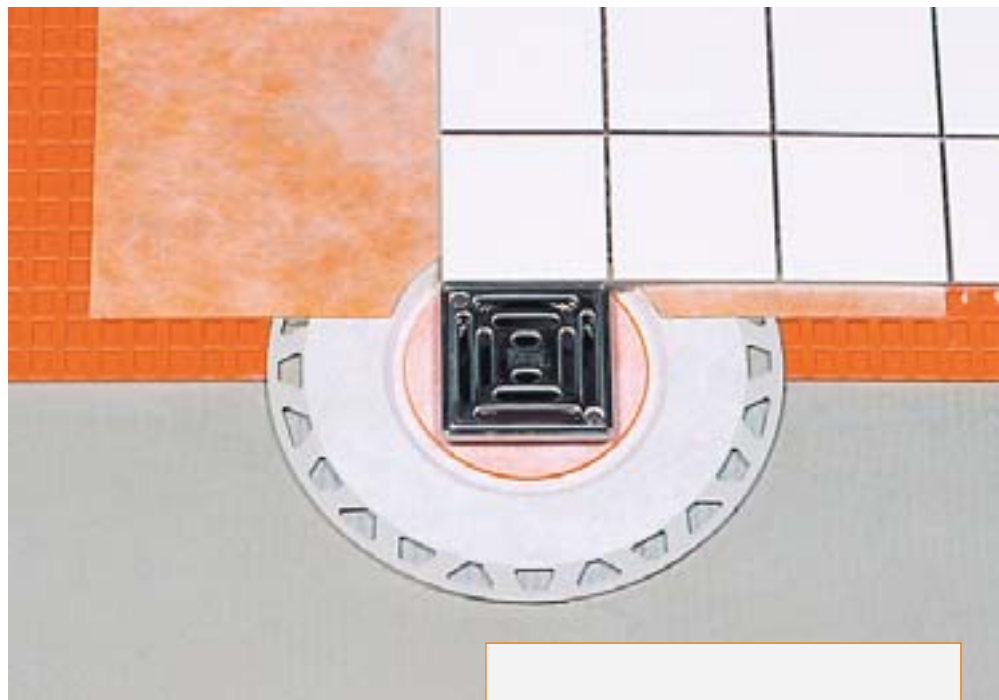
Material

The drain casing is made of highly impact-resistant polypropylene (PP).

The top assembly consists of acrylonitrile butadiene styrene (ABS) with a bonding flange that features a fleece-covered surface.

The Schlüter®-KERDI Collar is a crack-bridging waterproof membrane made of soft polyethylene and covered on both sides with a special fleece webbing to provide a solid bond to the tile adhesive.

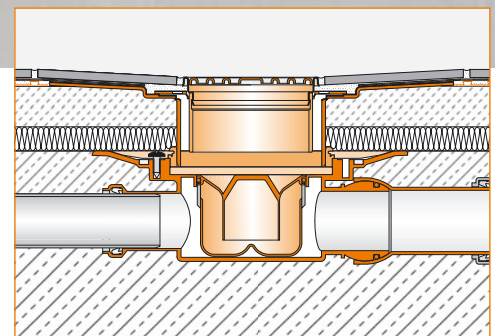
The stainless steel grate is made of V2A (material no. 1.4301).



Material properties

and areas of application:

The drain casing, the top assembly, and the covers are classified as K3 pursuant to DIN EN 1253, "Drains for buildings". This classification refers to surfaces without vehicular traffic, such as wet areas in apartments, senior residences, hotels, schools, washing and shower installations, as well as terraces, patios, and balconies.





Drains installed in areas that may be exposed to freezing temperatures must not have an odour trap. If an odour trap is required, it must be installed at a different location where it is protected from freezing, for example within a building.

All horizontal types of drain casings have an inlet and an outlet. The inlet is covered with a factory-installed cap, which can be removed and connected, e.g., to a sink, in order to ensure regular refilling of the odour trap.

In special cases, the suitability of the floor drainage system must be verified based on the anticipated chemical, mechanical, and other stresses.

Installation

1. The Schlüter®-KERDI-DRAIN drain casing (f) is integrated into the floor assembly and connected to the drainage system (page 3, Fig. 1).
2. If required, sound and heat insulation layers may be installed (Fig. 2).
3. The construction cover of the drain housing (Fig. 3) is removed and the cylindrical section of the Schlüter®-KERDI-DRAIN bonding flange unit (b) is cut to the height of the floor assembly (Fig. 4). The unit is set on top of the floor drain (Fig. 5) and the back-pressure seal is pushed into place (using a lubricant if required).
For floor drains with horizontal exits, the neck of Schlüter®-KERDI-DRAIN is set onto the yellow spacing ring (a), which ensures free space for height adjustments required in installations over insulating materials. Therefore, it is absolutely necessary to remove the ring after the work has been completed (Fig. 6). For vertical exits, cut the neck to such a length that it does not sit on the bottom of the drain housing.
4. The screed is then placed and aligned flush with the trapezoid-perforated bonding flange of the Schlüter®-KERDI-DRAIN.

5. By adhering the Schlüter®-KERDI Collar (c), a waterproof connection to the screed surface is achieved (Fig. 7). The connecting waterproof layer, consisting of Schlüter®-KERDI or a trowel-applied system, is connected to the collar with a sufficient overlap. If Schlüter®-DITRA is used as the waterproof layer, it is carried to the edge of the perforated bonding flange. Then, ensuring solid coverage, the Schlüter®-KERDI Collar is set, overlapping the DITRA membrane. Suitable adhesives for setting the Schlüter®-KERDI Collar are dry-set adhesives, epoxy adhesives, or trowel-applied waterproof membranes. The instructions of the corresponding product data sheets, 6.1 Schlüter®-DITRA and 8.1 Schlüter®-KERDI, must be observed.

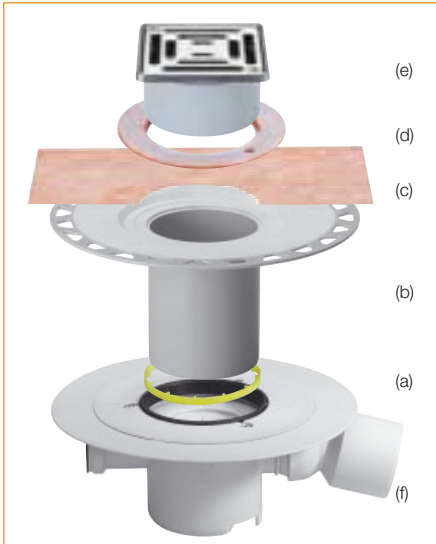
6. Coatings or tiles can be applied as surface coverings. The height of the grate (e) is adjusted via the adjustment collar (d). The grate is set with adhesive and aligned flush with the covering. (Fig. 8). Since the neck of the grate has a smaller diameter than the opening of the bonding flange, the grate can be positioned to match the joint pattern of the tile covering. For alternative substrate installations please contact Schlüter-Systems.

Note: Schlüter®-KERDI-DRAIN can also be installed in wood construction. Appropriate details are available upon request.

Maintenance

Schlüter®-KERDI-DRAIN requires no special maintenance or care. Stainless steel surfaces exposed to the environment or aggressive substances should be cleaned periodically using a mild household cleaner. Regular cleaning maintains the neat appearance of stainless steel and reduces the risk of corrosion. All cleaning agents must be free of hydrochloric and hydrofluoric acid. The stainless steel grate and the odour trap may be removed to clean the drain housing and the drainpipes.

Schlüter®-KERDI-DRAIN KD 10 AS



a	Spacing ring (for horizontal outlet only)
b	Bonding flange
c	Schlüter®-KERDI Collar
d	Height-adjustment collar
e	Stainless steel grate with support housing
f	Drain housing, for integration with substrate (to be ordered separately)

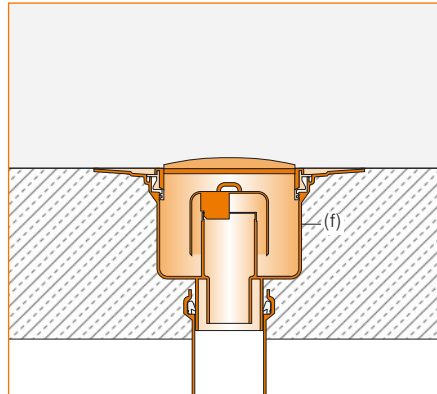


Illustration 1

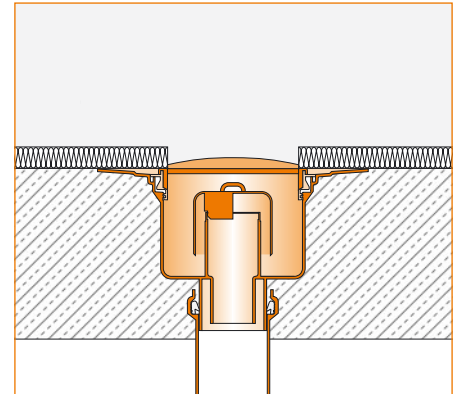


Illustration 2

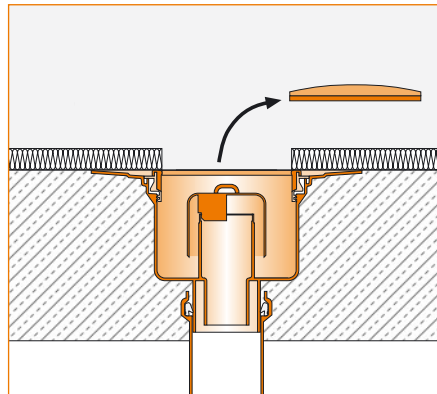


Illustration 3

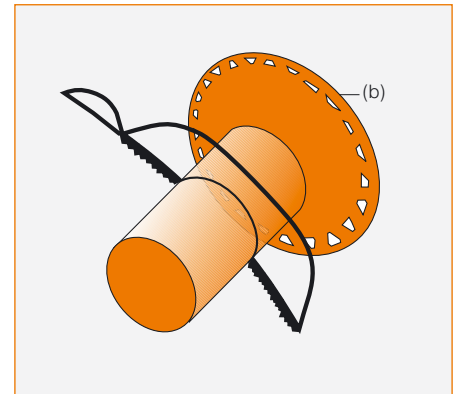


Illustration 4

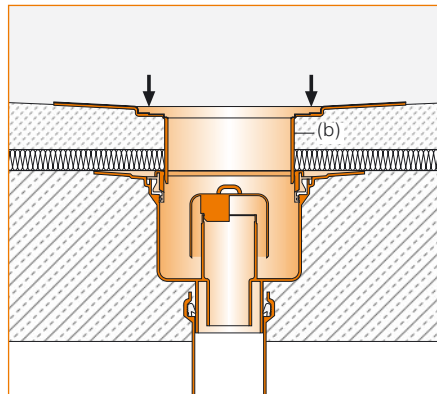


Illustration 5

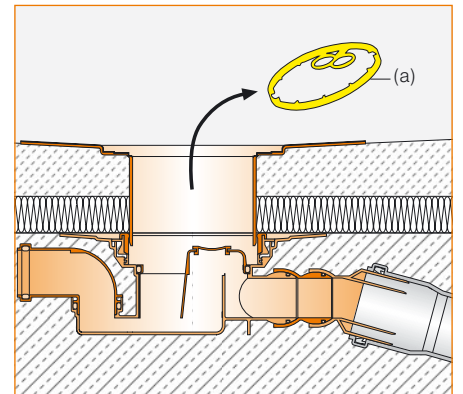


Illustration 6

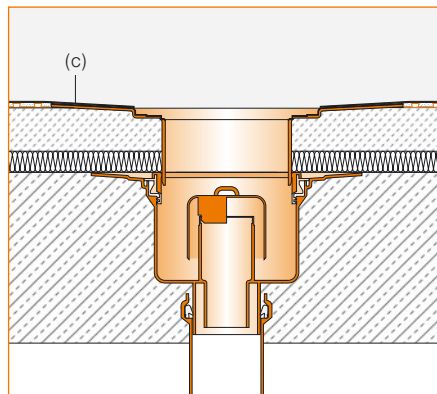


Illustration 7

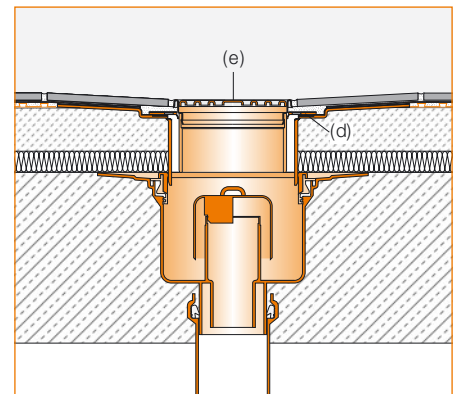


Illustration 8



Drainage at two levels KD 15 MSB

To install the collar, the Schlüter®-KERDI-DRAIN-MSB back-up gasket must first be removed from the installed floor drain, Schlüter®-KERDI-DRAIN. Open the cover by levering it with a screwdriver. The pressure seal ring (1) is then pressed into the groove.

There are two methods for connecting the waterproof membrane:

1. The enclosed collar made of EPDM (2) is laid over the flange of the floor drain.

Note:

Direct bonding (fusion) of the collar with a hot bituminous layer is not possible. Bonding to a bituminous fusion layer should be carried out with a cold adhesive, such as Resistit Adhesive G 2000.

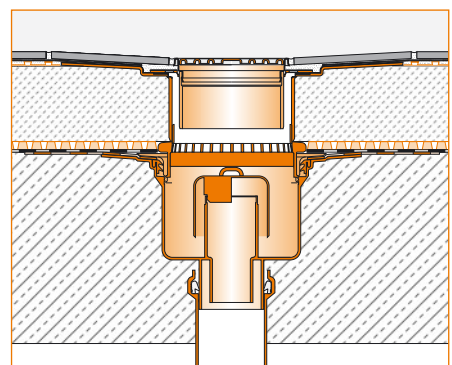
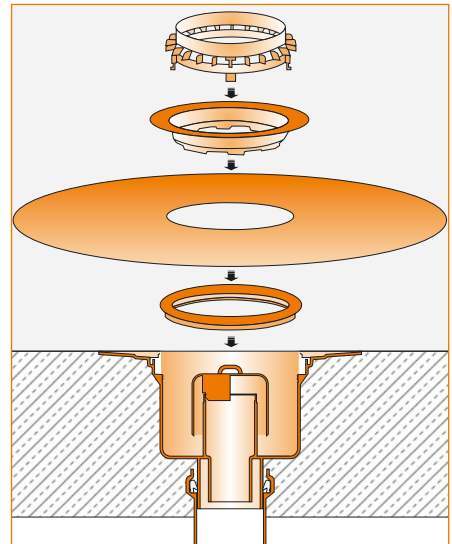
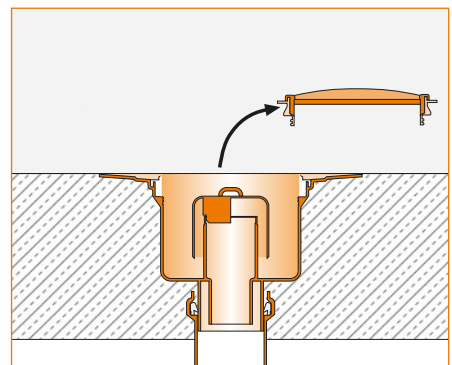
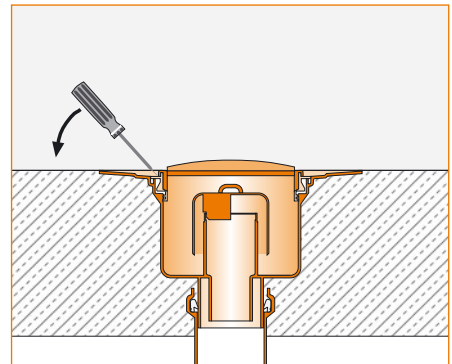
Or

2. Install the waterproof membrane and cut out a section the size of the inlet seal.

Schlüter®-KERDI-DRAIN-MSB KD 15 MSB



Now set the stainless steel flange ring (3) onto the collar and press it into the sub-structure. The perforated inlet component (4) is now clamped into the flange ring. The upper bonding flange is cut to match the remaining construction height and slide over the perforated inlet component.





Drainage at two levels KD 10 MSB

To install the collar, Schlüter®-KERDI-DRAIN MSB, the back-up gasket must first be removed from the installed floor drain, Schlüter®-KERDI-DRAIN. This is done by removing the 3 screws. The pressure seal ring (1) is then pressed into the groove. There are two methods for connecting the waterproof membrane:

1. The enclosed collar made of EPDM (2) is laid over the flange of the floor drain.

Note:

Direct bonding (fusion) of the collar with a hot bituminous layer is not possible. Bonding to a bituminous fusion layer should be carried out with a cold adhesive, such as Resistit Adhesive G 2000.

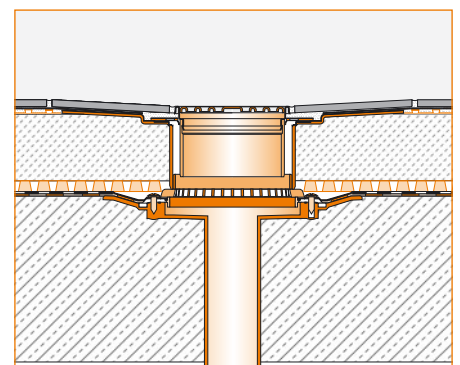
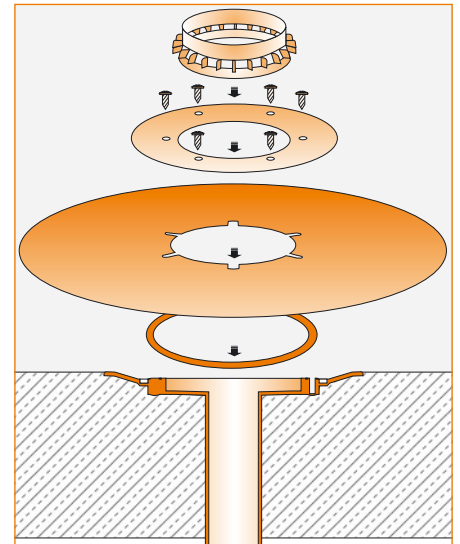
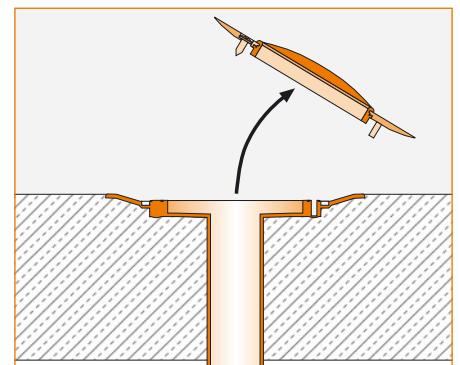
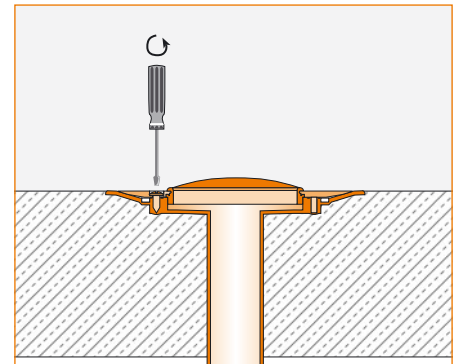
Or

2. Install the waterproof membrane and cut out a section of the size of the inlet seal.

Schlüter®-KERDI-DRAIN-MSB KD 10 MSB



Now set the stainless steel flange ring (3) (top side is marked) onto the collar, ensuring that the grooves sit over the plastic pins of the flange. The stainless steel flange ring is secured with the enclosed 3 screws through the collar onto the substructure. The perforated inlet component (4) is now clamped into the flange ring. The upper bonding flange is cut to match the remaining construction height and slide over the perforated inlet component.



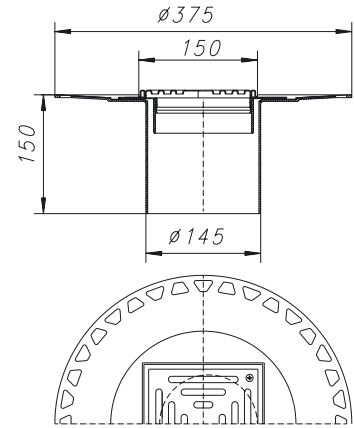
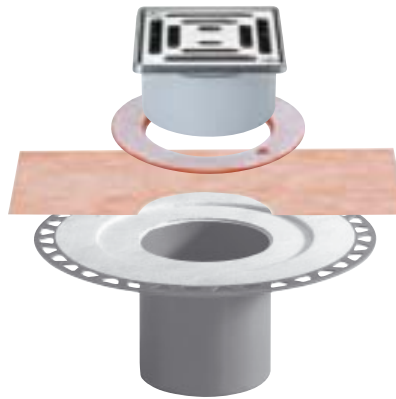


Drain housings for interior applications and bonding flange assembly for bonded waterproof membranes, grate 15 x 15 cm

Bonding flange assembly with Schlüter®-KERDI Collar for waterproof connections to a bonded waterproof membrane.

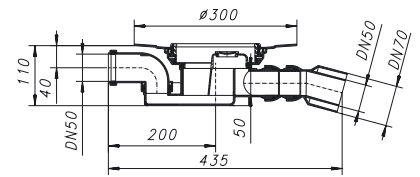
The stainless steel frame with screwed-on grate (15 x 15 cm) can be moved laterally in all directions.

Set includes: Bonding flange assembly, KERDI Collar, Height adjustment ring, stainless steel grate with frame 15 x 15 cm
Art.-No.: KD 15 AS



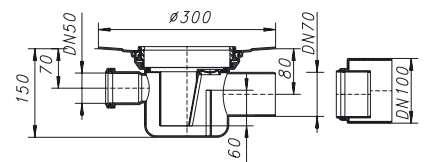
Floor drain with odour trap
Inlet DN 50 (50 mm), outlet DN 50/70 (50/75 mm), horizontal inlet and outlet with jointed connector

Use: interior
Drainage capacity: 0.9 l/s
Art.-No.: KD 15 H 50/70 GV



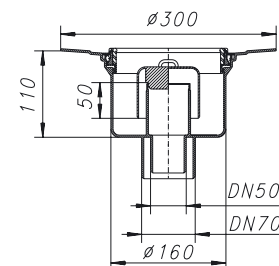
Floor drain with odour trap
Inlet DN 50 (50 mm), outlet DN 70/100 (75/110 mm), horizontal inlet and outlet rigid connection

Use: interior
Drainage capacity: 1.6 l/s
Art.-No.: KD 15 H 70/100 GV



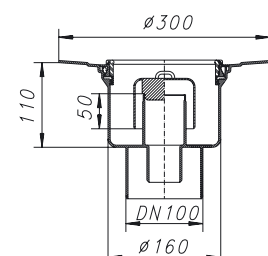
Floor drain with odour trap
vertical outlet DN 50/70 (50/75 mm)

Use: interior
Drainage capacity: 1.8 l/s
Art.-No.: KD 15 V 50/70 GV



Floor drain with odour trap
vertical outlet DN 100 (110 mm)

Use: interior
Drainage capacity: 1.8 l/s
Art.-No.: KD 15 V 100 GV





Drain housings for interior applications and bonding flange assembly for bonded waterproof membranes, grate 10 x 10 cm

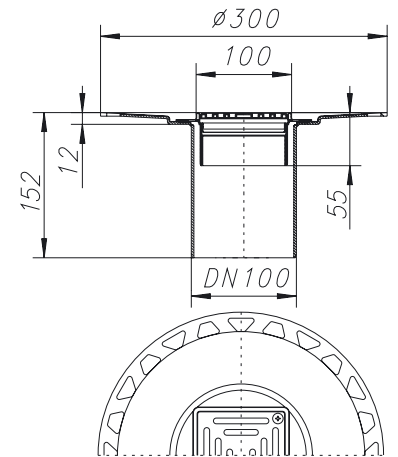
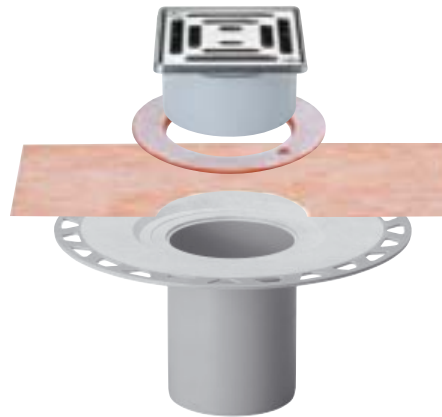
Bonding flange assembly with Schlüter®-KERDI Collar for waterproof connections to a bonded waterproof membrane.

The stainless steel frame with screwed-on grate (10 x 10 cm) can be moved laterally in all directions.

Set includes:

Bonding flange assembly, KERDI Collar, Height adjustment ring, stainless steel grate with frame 10 x 10 cm

Art.-No.: KD 10 AS



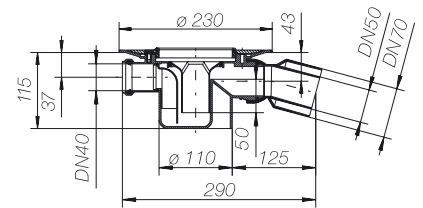
Floor drain with odour trap

Inlet DN 40 (40 mm), outlet DN 50/70 (50/75 mm), horizontal outlet with jointed connector and inlet with rigid connector

Use: interior

Drainage capacity: 0.8 l/s

Art.-No.: KD 10 H 50/70 GV



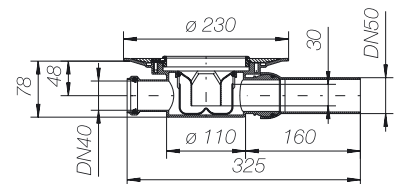
Floor drain with odour trap

Special flat version (does not meet the specifications of DIN EN 1253), inlet DN 40 (40 mm), outlet BS 2" connector, horizontal outlet and inlet with rigid connector

Use: interior

Drainage capacity: 0.6 l/s

Art.-No.: KD 10 H 50 GV

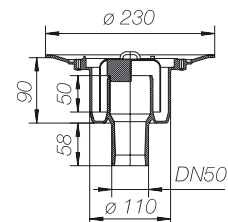


Floor drain with odour trap, drain connector DN 50 (50 mm), vertical outlet

Use: interior

Drainage capacity: 1.4 l/s

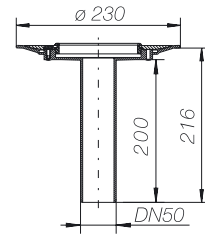
Art.-No.: KD 10 V 50 GV



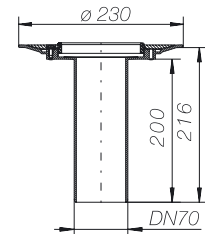


Drain housings for exterior applications without odour traps, for bonded waterproof membranes, grate 10 x 10 cm

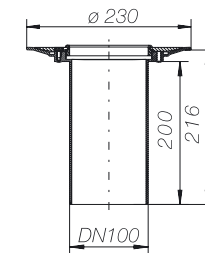
Balcony drain without odour trap
Vertical outlet DN 50 (50 mm)
Use: balconies and terraces
Drainage capacity: 5.79 l/s
Art.-No.: KD 10 V 50



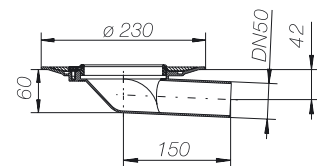
Balcony drain without odour trap
Vertical outlet DN 70 (75 mm)
Use: balconies and terraces
Drainage capacity: 6.14 l/s
Art.-No.: KD 10 V 70



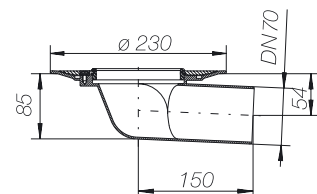
Balcony drain without odour trap
Vertical outlet DN 100 (110 mm)
Use: balconies and terraces
Drainage capacity: 5.62 l/s
Art.-No.: KD 10 V 100



Balcony drain without odour trap
Horizontal outlet DN 50 (50 mm)
Use: balconies and terraces
Drainage capacity: 5.79 l/s
Art.-No.: KD 10 H 50



Balcony drain without odour trap
Horizontal outlet DN 70 (75 mm)
Use: balconies and terraces
Drainage capacity: 6.14 l/s
Art.-No.: KD 10 H 70





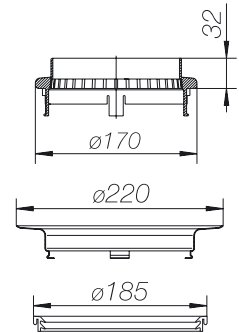
Collar set for waterproof bond with bituminous and synthetic sheet membranes

Collar set to create 2-level drainage, for use with Series 15 type drain casings, for draining surface and seepage water

Set includes:

Bonding collar, diameter 500 mm, stainless steel clamping ring, perforated inlet component

Art.-No.: KD 15 MSB

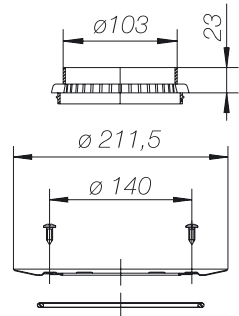


Collar set to create 2-level drainage, for use with Series 10 type drain casings, for draining surface and seepage water

Set includes:

Bonding collar, diameter 420 mm, stainless steel clamping ring, perforated inlet component

Art.-No.: KD 10 MSB

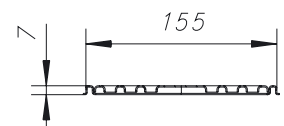


Grate assembly for retrofits

Retrofit frame and 15 x 15 cm grate made of stainless steel

Set includes: Frame with grate

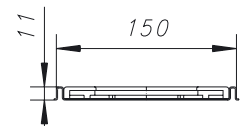
Art.-No.: KD 15 R



Two-piece retrofit frame, 15 x 15 cm, made of stainless steel, and two-piece synthetic grate for subsequent installation around an existing waste pipe, diameter 70 mm.

Set includes: Frame with grate

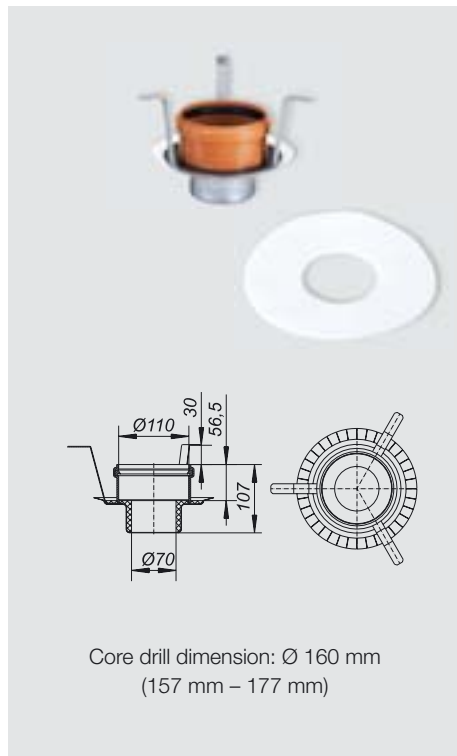
Art.-No.: KD 15 RL





Fire protection solution with Schlüter®-KERDI-DRAIN-BSR

These system components prevent fires from spreading to another floor level. The bulk material contained in the metal container (intumescent agent) will start to produce foam at approx. 150° C, providing a secure fire barrier, which will help prevent heat, fire, and smoke from penetrating the ceiling.



Schlüter®-KERDI-DRAIN

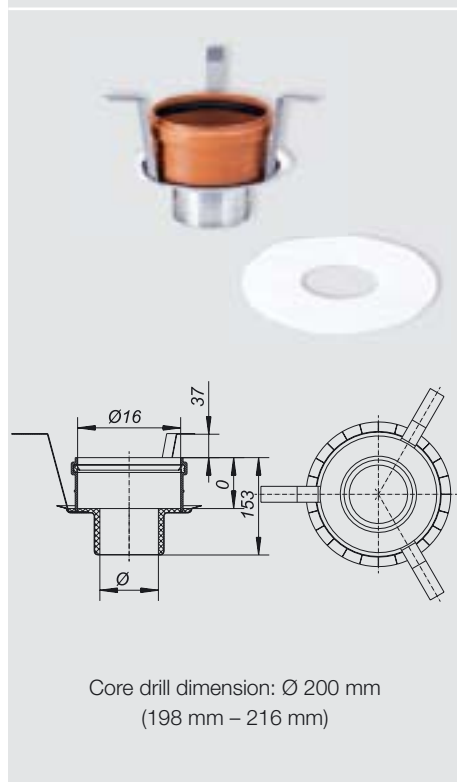
Fire protection element for installation during building construction **KD 10 BSR**, matching the floor drain **KD 10 V 50 GV**, for installation in F 90 or F 120 ceilings.

Metal construction with:

- Insertion element
- Intumescent agent insert
- Attachment bracket
- Flexible collar
- Sound insulation cuff
- Construction cover

For connecting

- Plastic pipes (DN 50)
using a **conduit coupling**



Schlüter®-KERDI-DRAIN

Fire protection element for installation during building construction **KD 15 BSR**, matching the floor drain **KD 15 V 50/70 GV**, for installation in F 90 or F 120 ceilings.

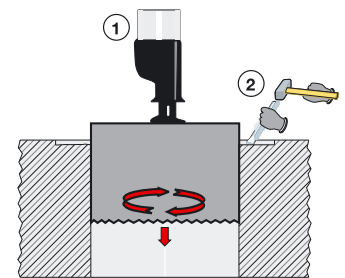
Metal construction with:

- Insertion element
- Intumescent agent insert
- Attachment bracket
- Flexible collar
- Sound insulation cuff
- Construction cover

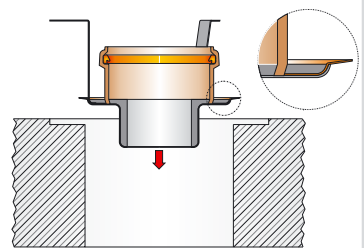
For connecting

- Plastic pipes (DN 50 or DN 70)
using a **conduit coupling**

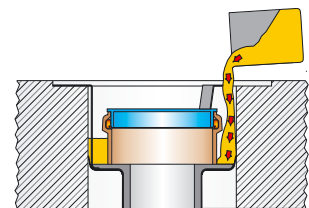
Installation:



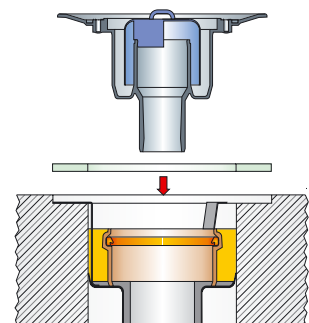
1 Drill the core



2 Insert the fire protection element



3 Pour MG II or III mortar in the open spaces



4 Install and complete the floor drain



Text templates for Series KD 15:

_____ units of Schlüter®-KERDI DRAIN KD 15 AS as a thin-bed floor drain with adhesive fleece webbing attached to the flange for connection with the included waterproof bonding collar, are to be supplied and professionally installed, cutting the drain to the height of the floor construction with consideration for the sealant ring, and installing the unit flush with the screed. The included stainless steel grate (15 x 15 cm) is to be set during the installation of the surface covering and aligned flush with the surface covering.

Art.-No.: _____
 Material: _____/unit
 Labour: _____/unit
 Total: _____/unit

_____ units of

Schlüter®-KERDI DRAIN KD 15 H 50/70 GV as a floor drain with odour trap, inlet DN 50 (50 mm), outlet DN 50/70 (50/75 mm), horizontal inlet and outlet with jointed connector, to be supplied and professionally installed.

Use: interior
 Drainage capacity: 0.9 l/s
 Art.-No.: _____
 Material: _____/unit
 Labour: _____/unit
 Total: _____/unit

_____ units of

Schlüter®-KERDI DRAIN KD 15 H 70/100 GV as a floor drain with odour trap, inlet DN 50 (50 mm), outlet DN 70/100 (75/110 mm), horizontal outlet and inlet with rigid connector, to be supplied and professionally installed.

Use: interior
 Drainage capacity: 1.6 l/s
 Art.-No.: _____
 Material: _____/unit
 Labour: _____/unit
 Total: _____/unit

_____ units of

Schlüter®-KERDI DRAIN KD 15 V 50/70 GV as a floor drain with odour trap, outlet connector DN 50/70 (50/75 mm), vertical outlet, to be supplied and professionally installed.

Use: interior
 Drainage capacity: 1.8 l/s
 Art.-No.: _____
 Material: _____/unit
 Labour: _____/unit
 Total: _____/unit

_____ units of

Schlüter®-KERDI DRAIN KD 15 V 100 GV as a floor drain with odour trap, outlet connector DN 100 (110 mm), vertical outlet, to be supplied and professionally installed.

Use: interior
 Drainage capacity: 1.8 l/s
 Art.-No.: _____
 Material: _____/unit
 Labour: _____/unit
 Total: _____/unit

_____ units of

Schlüter®-KERDI-DRAIN KD 15 MSB as a two-level drain assembly to be connected to the lower waterproof level as well as the surface, including a connecting collar, a stainless steel clamping ring, and a perforated inlet component, to be supplied and installed professionally.

Art.-No.: _____
 Material: _____/unit
 Labour: _____/unit
 Total: _____/unit

_____ units of

Schlüter®-KERDI-DRAIN KD 15 BSR as a fire protection solution for installation in F90 or F120 ceilings, with an insertion element and an integrated intumescent agent insert, matching the floor drain Schlüter®-KERDI-DRAIN KD15V50/70GV, to be supplied and professionally installed.

Art.-No.: _____
 Material: _____/unit
 Labour: _____/unit
 Total: _____/unit

Text templates for Series KD 10:

_____ units of

Schlüter®-KERDI DRAIN KD 10 AS as a thin-bed floor drain with adhesive fleece webbing attached to the flange for connection with the included waterproof bonding collar, are to be supplied and professionally installed, cutting the drain to the height of the floor construction with consideration for the sealant ring, and installing the unit flush with the screed. The included stainless steel grate (10 x 10 cm) must be integrated flush with the surface covering.

Art.-No.: _____
 Material: _____/unit
 Labour: _____/unit
 Total: _____/unit

_____ units of

Schlüter®-KERDI DRAIN KD 10 H 50/70 GV as a floor drain with odour trap, inlet DN 40 (40 mm), outlet connector DN 50/70 (50/75 mm), horizontal outlet with jointed connector, and inlet with rigid connector, to be supplied and professionally installed.

Use: interior
 Drainage capacity: 0.8 l/s
 Art.-No.: _____
 Material: _____/unit
 Labour: _____/unit
 Total: _____/unit

_____ units of

Schlüter®-KERDI DRAIN KD 10 H 50 GV as a floor drain with odour trap, inlet DN 40 (40 mm) and DN 50 (50 mm) outlet with a 2" BS connector, horizontal outlet with jointed connector and inlet with rigid connector, to be supplied and professionally installed.

Use: interior
 Drainage capacity: 0.6 l/s
 Art.-No.: _____
 Material: _____/unit
 Labour: _____/unit
 Total: _____/unit

_____ units of

Schlüter®-KERDI DRAIN KD 10 V 50 GV as a floor drain with odour trap, outlet connector DN 50 (50 mm), vertical outlet, to be supplied and professionally installed.

Use: interior
 Drainage capacity: 1.4 l/s
 Art.-No.: _____
 Material: _____/unit
 Labour: _____/unit
 Total: _____/unit

_____ units of

Schlüter®-KERDI DRAIN KD 10 V 50 as a floor drain without odour trap, outlet connector DN 50 (50 mm), vertical outlet, to be supplied and professionally installed.

Use: balconies and terraces
 Drainage capacity: 5.79 l/s
 Art.-No.: _____
 Material: _____/unit
 Labour: _____/unit
 Total: _____/unit



_____ units of
Schlüter®-KERDI DRAIN KD 10 V 70 as a floor drain without odour trap, outlet connector DN 70 (75 mm), vertical outlet, to be supplied and professionally installed.
Use: balconies and terraces
Drainage capacity: 6.14 l/s
Art.-No.: _____
Material: _____/unit
Labour: _____/unit
Total: _____/unit

_____ units of
Schlüter®-KERDI DRAIN KD 10 V 100 as a floor drain without odour trap, outlet connector DN 100 (110 mm), vertical outlet, to be supplied and professionally installed.
Use: balconies and terraces
Drainage capacity: 5.62 l/s
Art.-No.: _____
Material: _____/unit
Labour: _____/unit
Total: _____/unit

_____ units of
Schlüter®-KERDI DRAIN KD 10 H 50 as a floor drain without odour trap, outlet connector DN 50 (50 mm), horizontal outlet, to be supplied and professionally installed.
Use: balconies and terraces
Drainage capacity: 5.79 l/s
Art.-No.: _____
Material: _____/unit
Labour: _____/unit
Total: _____/unit

_____ units of
Schlüter®-KERDI DRAIN KD 10 H 70 as a floor drain without odour trap, outlet connector DN 70 (75 mm), horizontal outlet, to be supplied and professionally installed.
Use: balconies and terraces
Drainage capacity: 6.14 l/s
Art.-No.: _____
Material: _____/unit
Labour: _____/unit
Total: _____/unit

_____ units of
Schlüter®-KERDI-DRAIN KD 10 MSB as a two-level drainage system to be bonded with the lower level of the waterproof bonding membrane and the surface, including a bonding collar, a stainless steel clamping ring, and a perforated inlet component, to be supplied and installed professionally.
Art.-No.: _____
Material: _____/unit
Labour: _____/unit
Total: _____/unit

_____ units of
Schlüter®-KERDI-DRAIN KD 10 BSR as a fire protection solution for installation in F90 or F120 ceilings, with an insertion element and an integrated intumescent agent insert, matching the floor drain Schlüter®-KERDI-DRAIN KD10V50GV, to be supplied and professionally installed.
Art.-No.: _____
Material: _____/unit
Labour: _____/unit
Total: _____/unit

Text templates for accessories:

_____ units of
Schlüter®-KERDI-DRAIN KD 15 R as a retrofit grate assembly made of stainless steel for installation into new tile coverings over old drain systems, to be supplied and installed professionally.
Art.-No.: _____
Material: _____/unit
Labour: _____/unit
Total: _____/unit

_____ units of
Schlüter®-KERDI DRAIN KD 15 RL as a 2-piece retrofit frame of stainless steel and a two-piece synthetic grate for subsequent installation around an existing waste pipe.
Art.-No.: _____
Material: _____/unit
Labour: _____/unit
Total: _____/unit