

Instructions for Use

Advantix balcony/terrace drain base unit



Model
4944.21

Year built (from)
01/1996

viega

Table of contents

1	About these instructions for use	3
	1.1 Target groups	3
	1.2 Labelling of notes	3
	1.3 About this translated version	4
2	Product information	5
	2.1 Standards and regulations	5
	2.2 Certification	6
	2.3 Intended use	6
	2.3.1 Areas of application	6
	2.3.2 Media	6
	2.3.3 Drainage capacity	7
	2.4 Product description	8
	2.4.1 Overview	8
	2.4.2 Technical data	8
	2.5 Information for use	9
	2.5.1 Installation variations	9
	2.5.2 Sealing	10
	2.6 Required accessories	13
3	Handling	16
	3.1 Assembly information	16
	3.1.1 Important note	16
	3.1.2 Installation dimensions	17
	3.1.3 Tools and materials	17
	3.2 Assembly	17
	3.2.1 Connecting the drain	17
	3.2.2 Preparing for subsequent work	18
	3.2.3 Sealing the drain	19
	3.2.4 Installing the top in the tile surface	20
	3.3 Care	21
	3.3.1 Care tips	21
	3.3.2 Cleaning the drain	21
	3.4 Disposal	22

1 About these instructions for use

Trade mark rights exist for this document; for further information, go to viega.com/legal.

1.1 Target groups

The information in this instruction manual is directed at the following groups of people:

- Heating and plumbing experts and trained personnel
- Consumers

Individuals without the abovementioned training or qualification are not permitted to mount, install and, if required, maintain this product. This restriction does not extend to possible operating instructions.

The installation of Viega products must take place in accordance with the general rules of engineering and the Viega instructions for use.

1.2 Labelling of notes

Warning and advisory texts are set aside from the remainder of the text and are labelled with the relevant pictographs.



DANGER!

This symbol warns of possible life-threatening injury.



WARNING!

This symbol warns of possible serious injury.



CAUTION!

This symbol warns of possible injury.



NOTICE!

This symbol warns of possible damage to property.



This symbol gives additional information and hints.

1.3 About this translated version

This instruction for use contains important information about the choice of product or system, assembly and commissioning as well as intended use and, if required, maintenance measures. The information about the products, their properties and application technology are based on the current standards in Europe (e.g. EN) and/or in Germany (e.g. DIN/DVGW).

Some passages in the text may refer to technical codes in Europe/Germany. These should serve as recommendations in the absence of corresponding national regulations. The relevant national laws, standards, regulations, directives and other technical provisions take priority over the German/European directives specified in this manual: The information herein is not binding for other countries and regions; as said above, they should be understood as a recommendation.

2 Product information

2.1 Standards and regulations

The following standards and regulations apply to Germany / Europe and are provided as a support feature.

Regulations from section: Sealing

Scope / Notice	Regulations applicable in Germany
Stress class of the underground, as well as suitable bonded sealing	Leitfaden zur Abdichtung im Verbund (AIV)
Approved bonded sealings with proof of practicability in keeping with building law for stress classes A and AO	ETAG 022 T1
Approved bonded sealings with proof of practicability in keeping with building law for stress classes A, B and C	DIBt-Bauregelliste A, Teil 2 des DIBt und Prüfgrundsätze für Abdichtungen im Verbund (PG AIV-F)
Permitted bonded sealings	EN 14891

Regulations from section: Media

Scope / Notice	Regulations applicable in Germany
Typical domestic wastewater	DIN 1986-3

2.2 Certification

Data acc. to DIN EN 1253, Table 7

Manufacturer	Viega GmbH & Co.KG
Manufacturer identification mark	
Certificate of conformity	
Address	Viega GmbH & Co.KG Viega Platz 1 57439 Attendorn Germany
Relevant standard	DIN EN 1253-2
DN	50/70/100
Product class with respect to temperature behaviour	A

2.3 Intended use

2.3.1 Areas of application

The balcony/patio drain is suitable for the flow of large volumes of water.

Technical information, see [↪ Chapter 2.4.2 'Technical data' on page 8.](#)

2.3.2 Media

The drain is intended for draining wastewater commonly encountered in households in constant operation, see [↪ Chapter 2.1 'Standards and regulations' on page 5.](#)

- The short-term temperature of the wastewater may reach up to 95° C. The temperature must be considerably lower in constant operation.
- The pH value must be higher than four but lower than ten.

It is not permitted to introduce wastewater, which could damage the product material.

2.3.3 Drainage capacity

	Article 295 936	Article 557 270	Article 626 976
Nominal width [DN] (drain socket)	50	70	100
Drainage capacity at an accumulation height of 35 mm above the grate	2.5 l/s	3 l/s	4.5 l/s

The values are dependent on the total height of the drain unit.

2.4 Product description

2.4.1 Overview

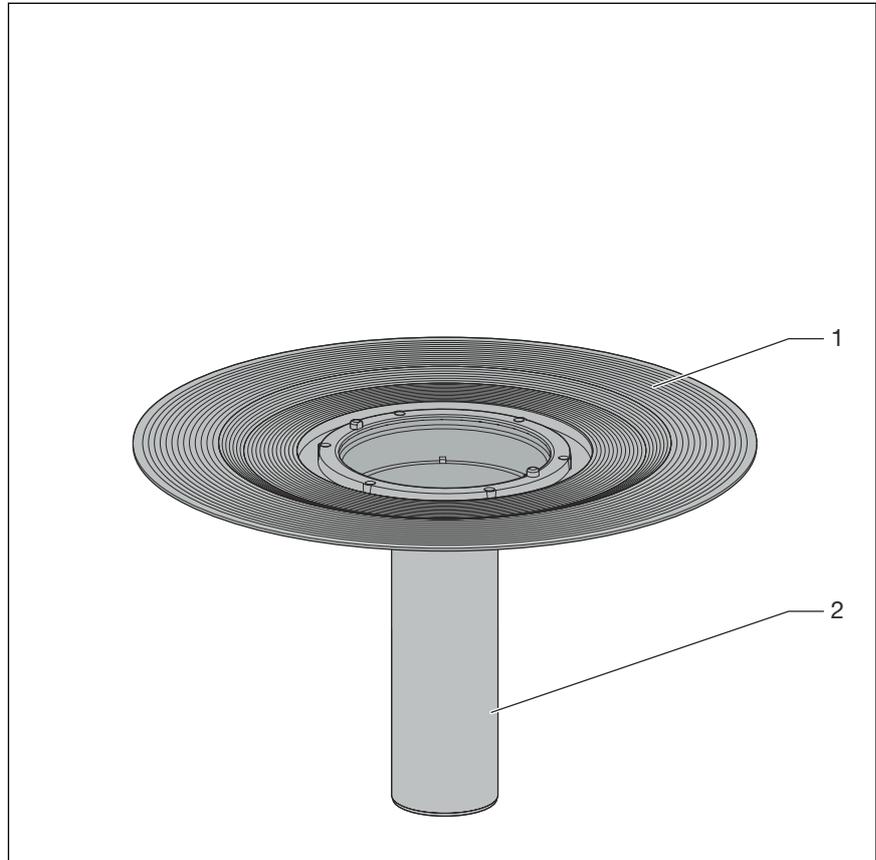


Fig. 1: Components balcony / terrace drain model 4944.21

- 1 flange for the application of the conventional sealing
- 2 Base unit

2.4.2 Technical data

	Article 295 936	Article 557 270	Article 626 976
Nominal width [DN] (drain socket)	50	70	100
Drainage capacity	☞ Chapter 2.3.3 'Drainage capacity' on page 7	☞ Chapter 2.3.3 'Drainage capacity' on page 7	☞ Chapter 2.3.3 'Drainage capacity' on page 7

	Article 295 936	Article 557 270	Article 626 976
Dimensions and installation height	↳ Chapter 3.1.2 'Installation dimensions' on page 17	↳ Chapter 3.1.2 'Installation dimensions' on page 17	↳ Chapter 3.1.2 'Installation dimensions' on page 17
Load class	corresponds with the load class of the top used	corresponds with the load class of the top used	corresponds with the load class of the top used

2.5 Information for use

2.5.1 Installation variations

Mounting in bare concrete

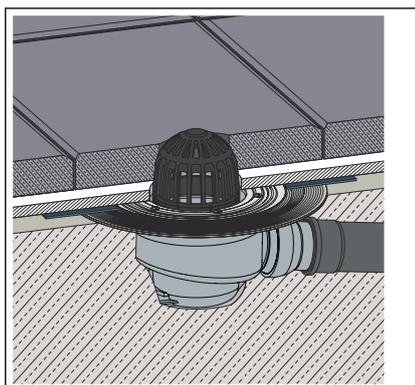


Fig. 2: General installation example – Floor recess

The mounting of the drain in bare concrete is as follows:

- The drain is placed in a floor recess and then cast-in.

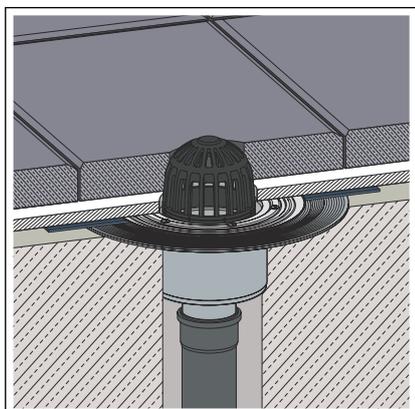
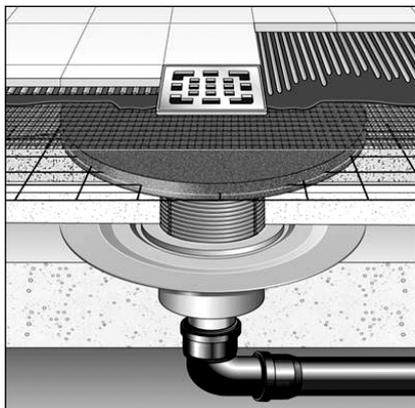


Fig. 3: General mounting example – Drill hole

- The drain is placed over a floor lead-in (e.g. of a drill hole), through which the drainpipe is led.

Mounting with a second sealing level



- The drain is given a stacking element and sealed via a sealing flange made of polymer concrete.

Fig. 4: General mounting example – second sealing level with polymer concrete flange

2.5.2 Sealing

The drain can be sealed both conventionally as well as with bonded sealing.

Depending on the type of sealing, you will require the relevant equipment set ↪ *Chapter 2.6 'Required accessories' on page 13.*

Conventional sealing

The flange of the drain is intended for conventional sealing. To be able to seal the drain conventionally, you require a suitable sealing collar and a clamping ring with which the cuff is secured ↪ *Chapter 2.6 'Required accessories' on page 13.*

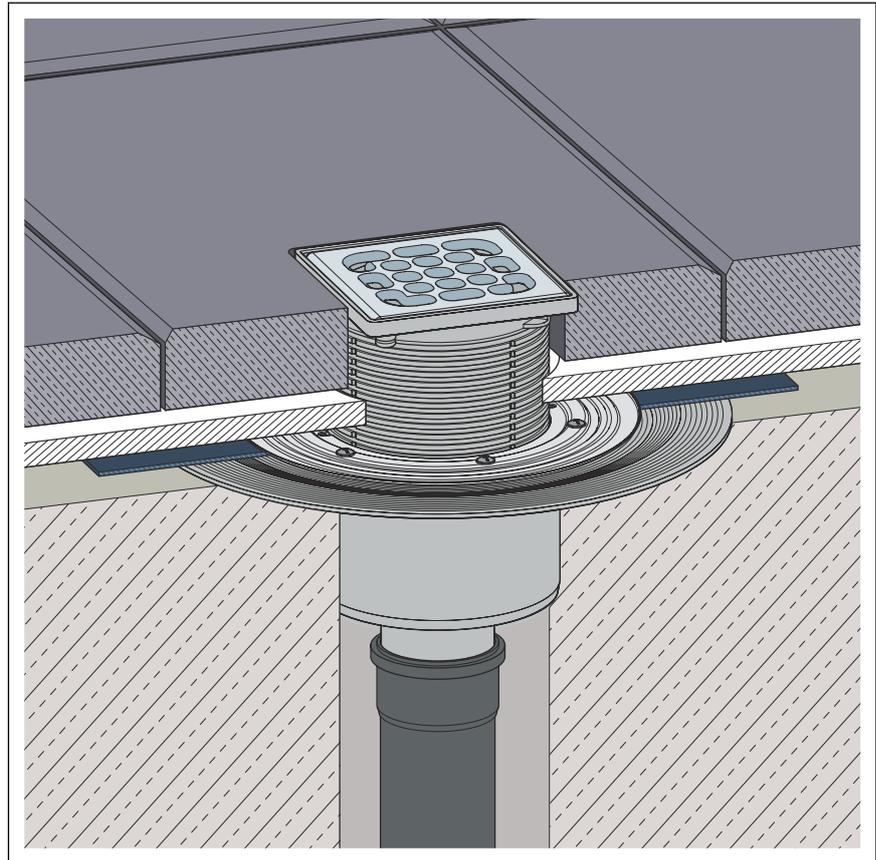


Fig. 5: Construction diagram of a conventional sealing

Principle

Traditionally, sealing is made using bitumen or EPDM sealing collars. The sealing collars are laid directly onto the raw concrete or heat insulation. This process has proved itself to be particularly effective for sealing balconies, patios, floor installation panels and cellar floors. In addition, sealing collars are often used as an additional second sealing layer below the bonded seal.

The following components are required for the installation of a drain with conventional sealing:

- Drain
- Clamping ring with sealing collar for EPDM and bitumen sealing lanes

Information for processing

The sealing collar is coated with EPDM on the one side and with bitumen on the other side

Place the sealing collar on the drain and fasten it with the flange. It depends on the sealing collar used which material layer of the sealing collar is placed facing up. You can find more information in the mounting instructions of the sealing flange.

Bonded sealing

To protect against moisture penetration, apply sealing foils, which are to be processed in liquid state, directly below the tiles on screed and walls. The determination of the stress class and the underground as well as the selection of the suitable bonded sealing must be carried out in compliance with the valid standards and regulations, see: ↗ *Chapter 2.1 'Standards and regulations' on page 5.*

Bonded sealing can be carried out with the help of a suitable stacking element. You have the possibility to double seal, using conventional and bonded sealing or only using bonded sealing.

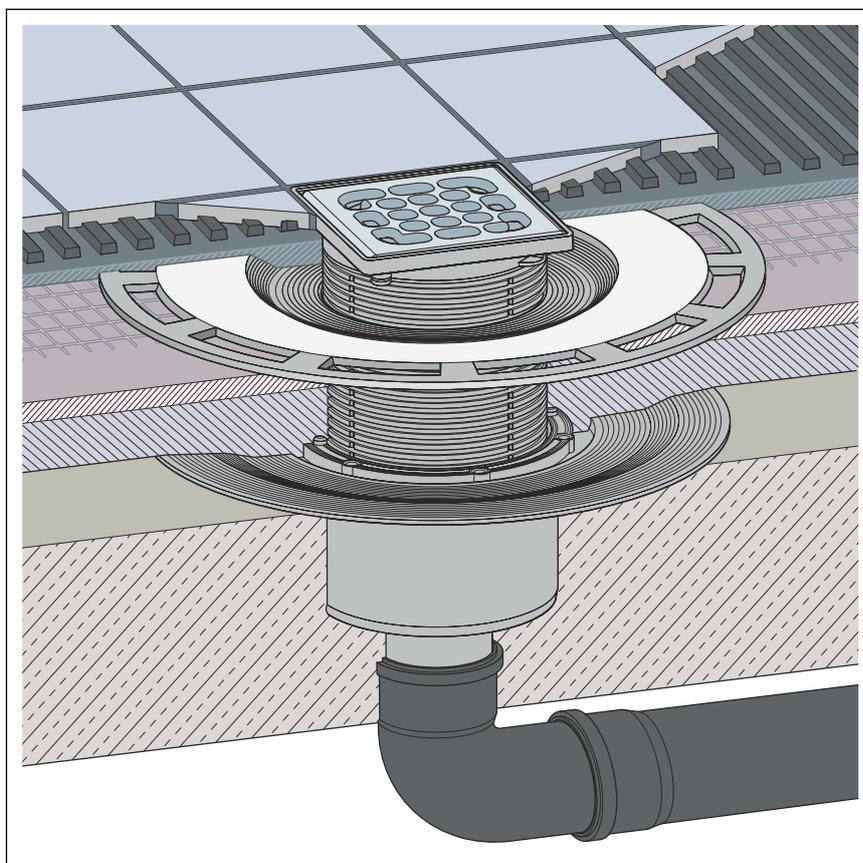


Fig. 6: Diagram of a bonded seal with stacking element

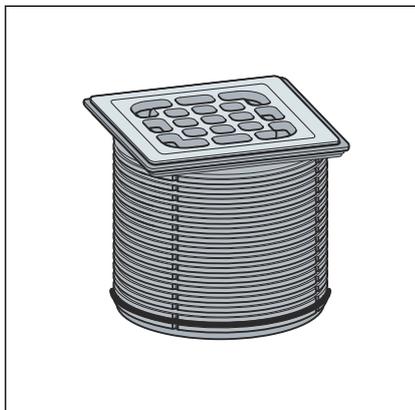
Permitted bonded seals

In connection with suitable drains, only approved bonded sealings with proof of practicability in keeping with building law may be used. See ↗ *Chapter 2.1 'Standards and regulations' on page 5.*

Information regarding the procedure can be found in the instructions for use of the corresponding product.

2.6 Required accessories

Top

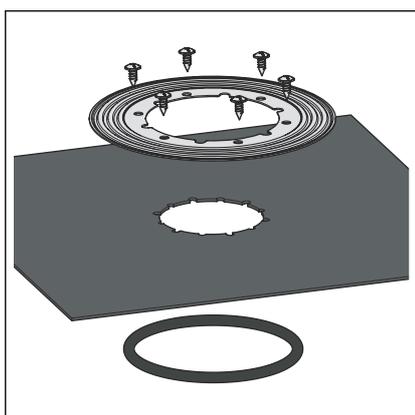


A top or a pebble trap must be purchased separately to complete the mounting of the drain.

A top or a pebble trap must be purchased separately to complete the mounting of the drain.

Advantix tops are available in a number of sizes and variations. You can also only buy an Advantix top frame and then purchase a suitable designer grate separately (see catalogue).

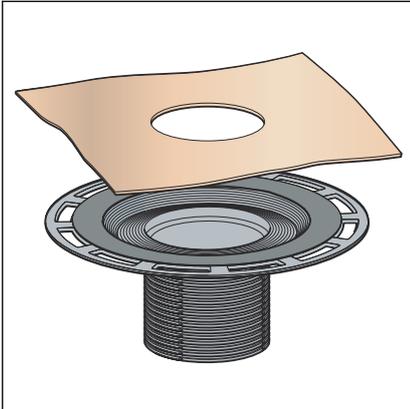
Accessories for conventional sealing



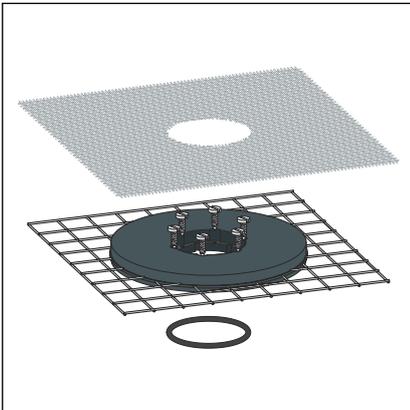
If a conventional sealing is to be made, a suitable sealing collar and a clamping ring will be required.

You will find a corresponding set in the catalogue (model 4948.31).

Accessories for bonded sealing

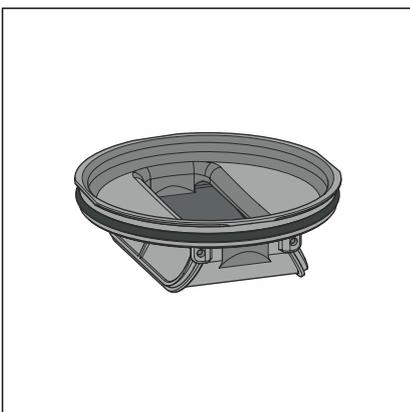


If a bonded sealing is to be applied, a suitable stacking element with sealing collar is required.



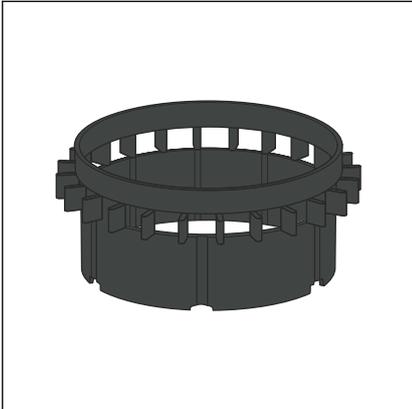
The Advantix sealing flange (model 4924) made of polymer concrete can be integrated into the floor construction to increase stability.

Odour barrier



Advantix balcony and terrace drains can be equipped with the frost-proof odour barrier (model 4944.8), which closes the drain in an odour proof manner.

Pebble trap inlet element



The drain can be equipped with the pebble trap inlet element (model 4946.3), to divert water next to the grate through the layer of pebbles.

3 Handling

3.1 Assembly information

3.1.1 Important note

Before assembly:

- Check if the drainage capacity of the drain is sufficient for the arising water volume ↪ *Chapter 2.3.3 'Drainage capacity' on page 7.*
- Check if the installation height of the drain corresponds with the planned floor construction.
- Ensure that the required connection line is installed with the necessary incline to the planned installation location.
- If necessary, supply the required accessories ↪ *Chapter 2.6 'Required accessories' on page 13.*

During assembly:

- Observe installation dimensions.

After assembly:

- The drain flange must be fully lined with mortar.

3.1.2 Installation dimensions

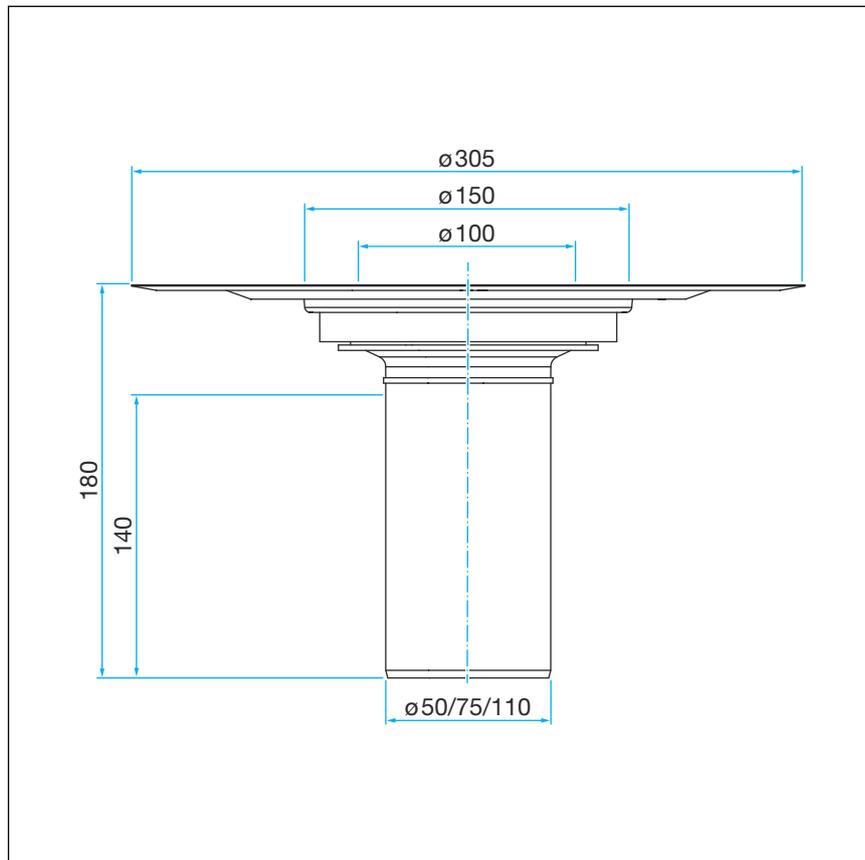


Fig. 7: Dimensional drawing for model 4944.21

3.1.3 Tools and materials

Required material

- Pebble trap or top with grate, if not included in scope of delivery
- Material for securing the drain

3.2 Assembly

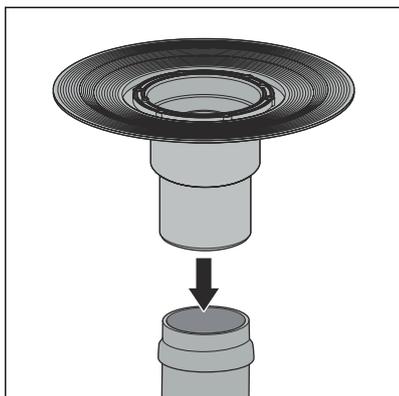
3.2.1 Connecting the drain

Connecting to the wastewater system

The connection to the wastewater system must be completed before the drain can be installed in the floor construction. Proceed as follows:

Requirements:

- A pipe to the planned drainage position is already in place for the connection to the wastewater system.
- The drain pipe has an internal sealing lip.

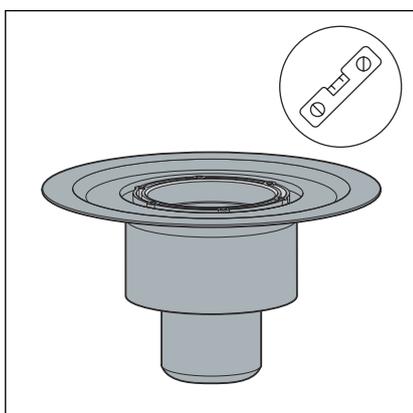


- Insert the drain socket into the drainpipe as far as it will go.

3.2.2 Preparing for subsequent work

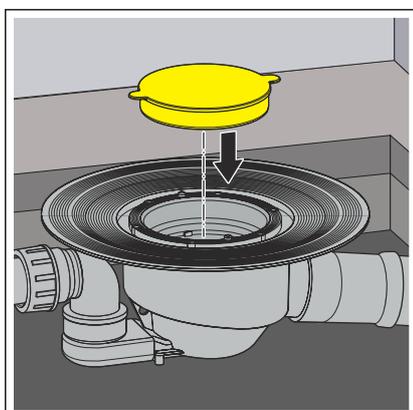
Requirements:

- The drain is connected.
- Position the drain at the desired height at the place of use. Depending on the planning, the drain can be integrated into concrete or into a heat insulation layer, for example. The upper edge of the drain flange must be flush with the upper edge of the sealing layer. If necessary, raise or lower the drain in the existing floor using suitable material.



- Align the drain horizontally using a spirit level.
- Secure the drain in such a way that it cannot shift when the subsequent works are applied.

Most importantly, it must be ensured that the drain does not float when the concrete or screed is poured in.



- Insert the yellow protective plug.


NOTICE!
Product damage due to improper installation

If hollow spaces occur during the lining of the drain, leaks may occur when pressure is applied.

Inform the subsequent workers that the drain must be fully lined and that there must be no hollow spaces.

3.2.3 Sealing the drain


NOTICE!
Product damage due to improper installation

If hollow spaces occur during the lining of the drain, leaks may occur when pressure is applied.

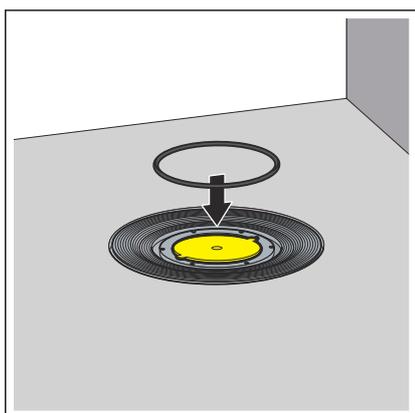
Check the completion of the subsequent work.

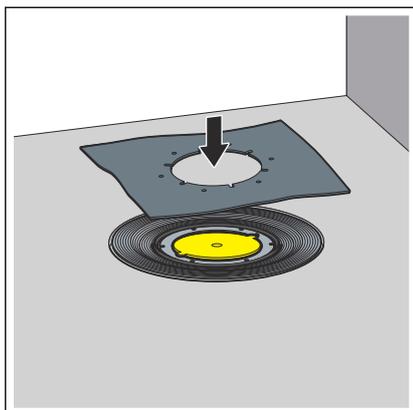
Conventional sealing

Requirements:

- A suitable sealing collar and a clamping ring are available.
- The flange is free of heavy soil.
- The complete surface of the flange is lined with material and undamaged.
- If required, clean the flange of heavy soil (e.g. from screed).
- Insert the seal ring.

The seal ring must lie in the groove between the flange and the screw holes.

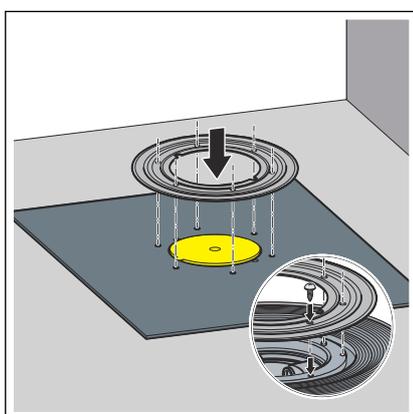




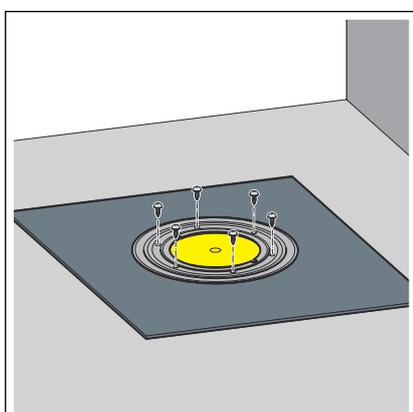
INFO! The Viega sealing collar has two differently coated sides. One side is coated with bitumen and the other side with EPDM. If the additional sealing takes place with bitumen sealing lanes, the sealing collar must be used with the bitumen side facing upwards. If EPDM sealing lanes are used, the EPDM side must face upwards.

- Position the sealing collar on the drain.

The screw holes must be visible through the recesses.



- Position the sealing flange on the sealing collar in such a way that the screw holes are visible.



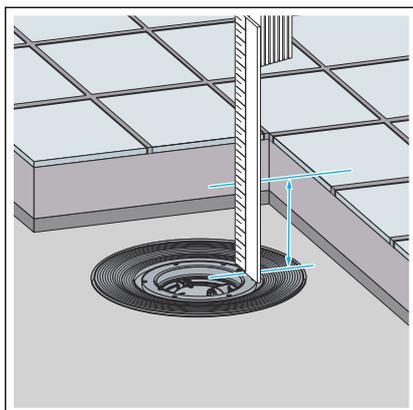
- Screw the sealing flange tightly to the drain.

The fixing screws of the clamping ring may only be screwed into the screw holes of the drain.

- ◻ The drain is sealed and the remaining sealing can be laid.

3.2.4 Installing the top in the tile surface

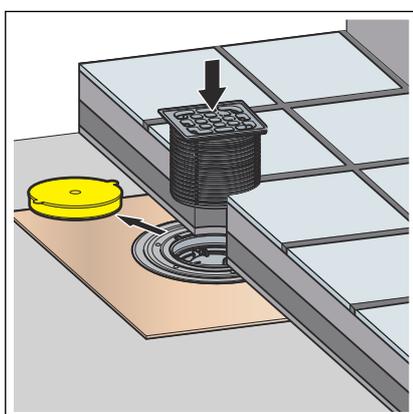
The top with the grate may also have to be mounted to finish off the mounting of the drain. Proceed as follows:



- Calculate the height of the floor construction from the edge in the inside of the drain up to the upper edge of the floor.

INFO! If you use a pebble trap inlet element, position it on the drain and calculate the height from the edge in the inside of the pebble trap inlet element.

- Starting with the upper edge, transfer the measured height onto the top.
- Cut the top to the marked height.



- Remove the yellow protective plug.
- Place the top into the drain and align according to the tiles.
- Work the top into the floor covering.

3.3 Care

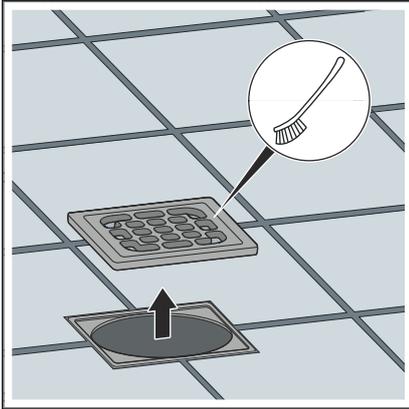
3.3.1 Care tips

Normal soap or a mild cleaning agent can be used for regular maintenance and prevention of lime scale on the grate and frame. Use no scouring agent or abrasive objects.

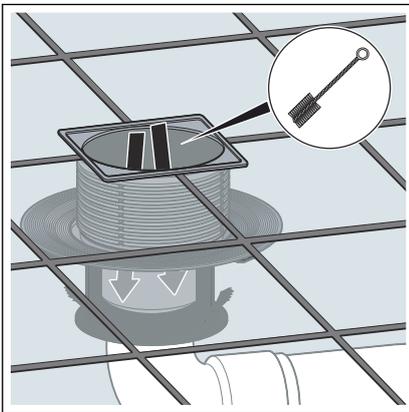
Strong stains, even around the drain unit and the odour trap, can be removed using typical household cleaner. Rinse the detergent very thoroughly with clear water after the prescribed dwell time. There should be no residue on the components.

3.3.2 Cleaning the drain

Use a mild cleaning agent and a washing-up brush for cleaning.



- Remove and clean the grate or pebble trap.



- Clean the drain.
- Re-insert the grate or pebble trap.

3.4 Disposal

Separate the product and packaging materials (e. g. paper, metal, plastic or non-ferrous metals) and dispose of in accordance with valid national legal requirements.



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