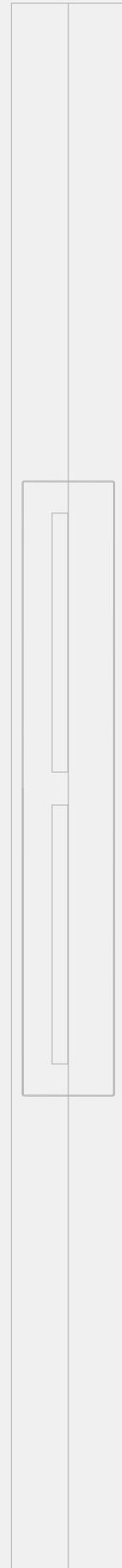




Drainage systems

TECEdrainprofile

TECHNICAL GUIDELINES



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TECEdrainprofile – Introduction

Introduction

The TECEdrainprofile shower profile enables recessed drainage to be easily implemented across the entire width of the shower area, making installation and sealing easier for technicians, and cleaning easier for users.

In typical cases, a piece of tile is precisely cut down to size and fitted in place to cover the gaps between the standard dimension shower channel and the sides of the shower zone. This spoils the visual appearance of the tile back splash, particularly in the case of modern, large-format tiles. With the TECEdrainprofile shower profile, simple adaptation right into the edges of the shower area is now possible. This speeds up the building process, saves money and gives the shower area an aesthetically pleasing overall look.

The TECEdrainprofile consists of a clear, easy-to-understand module which contains just a few components: a shower profile, a drain and accessories. The drain is installed in such way that it fits flush with the surface of the screed, so that no obstructive elements get in the way during trowelling. This makes the creation of an even screed surface with an incline really easy.

The flexible Seal System sealing collar ensures additional sealing reliability. The collar clicks right into the drain and is then integrated into the surface sealing. A water-tight connection is therefore guaranteed, and there is no need to glue the seal to the flange as has been customary up to now.

Finally, the profile is inserted, and can be easily laid on the screed like a tile. Simple height-adjustment allows adaptation to different tile thicknesses. The profile is available as brushed or polished stainless steel, in the lengths of 800, 900, 1,000 and 1,200 millimetres. For recessed adjustment to the width of the shower area, the installation technician or floor tiler can fit the profile simply and precisely on site. The assembly solution also allows subsequent fine positioning of the shower profile in all horizontal directions and via rotation once the drain has been integrated into the screed.



Planning

Sealing

Components and structural elements are constantly subjected to moisture. In the interior area, many “wet and humid rooms” are affected by this: Bathrooms, washrooms and kitchens in the private sector, commercial kitchens, washing facilities and production rooms in the commercial and industrial sector, and swimming pools, sports facilities and showers in the public sector. Moisture can penetrate into the components, causing structural alterations and changes in building chemicals, for example deterioration of thermal insulation or formation of mould. This can destroy the components and cause residents to develop health problems.

For this reason, the state of the Federal Republic of Germany has prescribed building regulations – the State Building Code – to protect components and structural elements against moisture and damp.

Adequate safeguard measures were originally regulated by DIN 18195, 1-10 “Waterproofing of buildings”. However, this did not contain any detailed specifications about composite seals currently in use today. So ZDB also published the “Composite sealing” bulletin.

A new series of standards has been in force since July 2017. Only part 1 remains from the previous DIN 18195 standard, and this only regulates the terms used for the new series of standards DIN 18531 - 18535. The waterproofing of indoor areas is regulated in this series of standards by standard DIN 18534.

DIN 18534 “Waterproofing for indoor applications” consists of the following parts:

- Part 1: Requirements and principles for design and execution
- Part 2: Waterproofing with waterproofing materials in sheet form
- Part 3: Waterproofing with liquid-applied waterproofing materials in conjunction with tiles and paving (AIV-F)
- Part 4: Waterproofing with mastic asphalt or asphalt mastic
- Part 5: Waterproofing with waterproofing materials in sheet form in conjunction with tiles and paving
- Part 6: Waterproofing with waterproofing materials in panel-shaped form in conjunction with tiles or paving

Parts 5 and 6 of DIN 18534 are currently still being drafted, the white print for these parts will follow at a later stage.

Parts 1, 3 and 5 are relevant to the area of TECE drainage products.

In addition to the regulations mentioned, the product-specific TECE installation instructions should also be observed.

The main contents of the standards DIN 18534-1:2017-07 and DIN 18534-3:2017-07 are described and explained below.

TECEdrainprofile – Planning

Water action classes according to DIN 18534-1

In DIN 18534, the “moisture stress classes” known from the ZDB “Composite seals” bulletin have been replaced by “water action classes”. Water action classes can be broken down as follows:

Water action classes	Water action	Stress	Application examples ^{***}	Waterproofing materials (DIN 18534-3, E DIN 18534-5)
W0-I	low	Areas exposed to infrequent splashing	<ul style="list-style-type: none"> • Wall areas above washstands in bathrooms and sinks in domestic kitchens • Floor areas without drainage in domestic spaces, e.g. in kitchens, utility rooms, guest toilets 	<ul style="list-style-type: none"> • Polymer dispersions (wall and floor) • Mineral sealing slurries (crack-bridging) • Reaction resin • Sheet-form waterproofing materials in conjunction with tiles and paving (E DIN 18534-5)
W1-I	moderate	Areas exposed to frequent splashing or to infrequent action of domestic water, without higher loads due to water accumulation	<ul style="list-style-type: none"> • Walls above bathtubs and in showers in bathrooms • Floor areas with drainage in domestic spaces • Floor areas in bathrooms <p>with/without drainage without high exposure to water from the shower area</p>	<ul style="list-style-type: none"> • Polymer dispersions (wall and floor) • Mineral sealing slurries (crack-bridging) • Reaction resin • Sheet-form waterproofing materials in conjunction with tiles and paving (E DIN 18534-5)
W2-I	high	Areas exposed to frequent splashing and/or to the action of domestic water, above all on the floor, occasionally through water accumulation	<ul style="list-style-type: none"> • Wall areas of showers in sports/commercial facilities^{***} • Floor areas with drains and/or channels • Floor areas in spaces with walk-in showers • Wall and floor areas in sports/commercial facilities^{***} 	<ul style="list-style-type: none"> • Polymer dispersions (wall) • Mineral sealing slurries (crack-bridging) • Reaction resin • Sheet-form waterproofing materials in conjunction with tiles and paving (E DIN 18534-5)
W3-I	extremely high	Areas exposed to regular or prolonged splashing and/or to the action of domestic water and/or water from intensive cleaning processes, intensified due to water accumulation	<ul style="list-style-type: none"> • Areas around swimming pools • Areas in showers and shower facilities in sports/commercial facilities^{***} • Areas in commercial facilities (commercial kitchens, launderettes, breweries, etc.) 	<ul style="list-style-type: none"> • Mineral sealing slurries (crack-bridging) • Reaction resin

W = water action class

0-3 = grade (low, moderate, high, very high)

I = indoors

* It may be appropriate to also assign the respectively higher water action class to adjoining areas which are not protected as they are located at a sufficient distance away or are not protected by structural measures (e.g. shower enclosures).

** Application scenarios can be assigned different water action classes depending on the anticipated water action.

*** Sealing surfaces, if applicable, with additional chemical action pursuant to 5.4 (DIN 18534-1)

Sealing materials

Different compound sealing materials comply with the standard, depending on the water action class. Compound sealing materials can be divided into two areas: liquid-applied sealing materials and waterproofing materials in sheet form.

Liquid-applied sealing materials include polymer dispersions, crack-bridging mineral sealing slurries and reaction resins. Polymer dispersions are in the lowest classification level. They may be used in classes W0-I and W1-I for wall and floor areas, and in class W2-I for wall areas only. Products in the next class up, are crack-bridging mineral

sealing slurries. These can be used in all classes, however in class W3-I only if no additional chemical, mechanical or technical effects can arise. Reaction resins which may be used without restriction in all water action classes are the highest graded products.

Waterproofing materials in sheet form are generally comprised of a waterproof plastic coating, mostly PP, PE or TPE materials, laminated on both sides with a non-woven fabric to guarantee bonding with the adhesive. According to E DIN 18534-5:2016-06, these sheet-form waterproofing materials can be used in conjunction with tiles and

paving in classes W0-I to W2-I for wall and floor areas not exposed to high mechanical action.

Composite sealing products require either a European Technical Assessment (ETA) on the basis of ETAG 022, or a general test certificate (abP) on the basis of PG-AIV-F or PG-AIV-B.

Floors and wall areas

In addition to sealing materials, DIN 18534-1 also regulates suitable substrates for floors and wall areas, according to the water action class. In water action classes W0-I and W1-I, moisture-sensitive substrates are permitted under the composite seal. These are, for example, calcium sulphate-bound screeds or gypsum wall panels. In classes W2-I and W3-I, only substrates which are insensitive to moisture are permitted. These are mostly substrates on a cement-based compound such as concrete, cement screed or fibre cement boards.

Connecting composite seals to floor drains and to shower channels and profiles

Floor drains, shower channels and profiles represent penetrations in the surface sealing (composite seal). Special attention is required to ensure that these constructional details remain permanently waterproof. Planners must coordinate the work carried out by the different trades (fitters, screed and tile layers). This includes realistically specifying the water action classes, and deciding on the right materials and products to use for substrates, the composite seal, drains and channels. Then there is the constructive design which must be flawlessly implemented.

Drains

The technical requirements for drains for buildings are regulated in DIN EN 1253. Among other things, the standard defines specifications for minimum drainage capacities, water seal depths for odour traps, and loading capacities for gratings.

Drainage capacities and odour traps

Discharge values for drains with one or more inlets are specified as follows in section 4.8.1 of DIN EN 1253-1:

Nominal value of outflow nozzles		Floor drains	
DN / OD	DN / ID	Flow values	Water level a
32	30	0.4 l/s	20 mm
40	40	0.6 l/s	20 mm
50	50	0.8 l/s	20 mm
75	70	0.8 l/s	20 mm
110	100	1.4 l/s	20 mm

Drainage capacity (inflow over grating) – minimum discharge value for drains

Odour traps should prevent channel gases from entering the building. To this end, DIN EN 1253 calls for odour traps with a water seal depth of at least 50 mm. An odour trap may only be omitted in certain cases in outdoor areas.

TECEdrainprofile – Planning

Loading capacity of gratings

Drains, drain tops and gratings must be designed so that they can withstand the expected loads (including traffic for instance). These classifications for installation inside buildings are described in DIN EN 1253-1.

Load class	Max. permitted load	Application area/site
H 1.5	< 150 kg (1.5 kN)	Areas which are not expected to be loaded.
K 3	< 300 kg (3 kN)	Areas without vehicle traffic such as flats, commercial buildings and certain public buildings. For example, bathrooms in dwellings, hotels, retirement homes, schools, swimming pools, public washing and showering facilities, balconies, recessed balconies, patios and green roofs.
L 15	< 1.5 t (15 kN)	Areas exposed to light vehicle traffic, commercially used areas and public areas.

Loading of gratings according to DIN EN 1253-1

The responsibility for selecting the suitable class lies with the designer. In case of doubt, the higher load class should always be chosen.

Barrier-free bathroom design

Demographic changes have led to an increased demand for barrier-free homes. A disability, an accident or growing older – there are many reasons why people can be limited in their mobility or become dependent on a wheelchair.

It is important for them that public buildings, and especially their own four walls, are equipped so that they can move around inside them without any problems. The technical term for this is “barrier-free”. This requires sufficiently wide doors, no thresholds or bumps, no steps and a walk-in shower. TECEdrainprofile makes a life without bumps and steps possible in the shower zone. The floor-level shower profile facilitates access into the shower area.

When planning a barrier-free bathroom, the specifications of DIN 18040-2 must be complied with.

DIN 18040-2:

DIN 18040-2 distinguishes between two types of requirements made upon buildings. On the one hand, barrier-free dwellings, and on the other, barrier-free dwellings which can be used by wheel-chairs users without any restrictions. The second category is identified by a large **R** in bold type.

General:

- In dwellings with several bathrooms, at least one bathroom must be barrier-free.
- Fittings should be designed as a single-lever, or touch-free. In the case of touch-free fittings, a temperature limiter must be provided. The water discharge temperature should be limited in this case to 45 °C.

Movement areas:

A movement area must be designed in front of each of the items of sanitary equipment such as toilet bowls, washstands, baths and in the shower zone. A minimum area of 1.20 m x 1.20 m is sufficient for this (**R**: 1.50 m x 1.50 m). Movement areas may overlay one another.

Shower zones:

Shower zones must be configured in such a way that they can be used barrier-free, e.g. also with a walking frame or wheelchair.

This is achieved by

- The layout of the bathroom on the same level as the adjoining floor area and a maximum lowering of 2 cm; where applicable, any transition elements should preferably be formed as inclined surfaces;
- Slip-proof floor coverings in the shower zone (in accordance with GUV-I 8527 at least rating group B);
- (**R**) the facility to retrofit a folding shower seat, with a seat height from 46 cm to 48 cm;
- (**R**) the facility to retrofit fold-up safety support arms both sides of the folding shower seat, the top edge of which is 28 cm above the height of the seat.)

The surface of the shower zone can be included in the movement areas of the bathroom if

- the transition to the shower area is designed level with the floor;
- the gradient required for drainage is maximum 2 %.

Shower profile position and design of incline

The shower profile can be installed flush-to-wall or away from the wall. A position in the transition between the wet and dry area is not recommended.

There must be an incline to the drain of at least 1 % for the shower water to flow away. Usually, an incline of 1-2 % is recommended.

Further details can be found in the following installation examples.

Installation examples

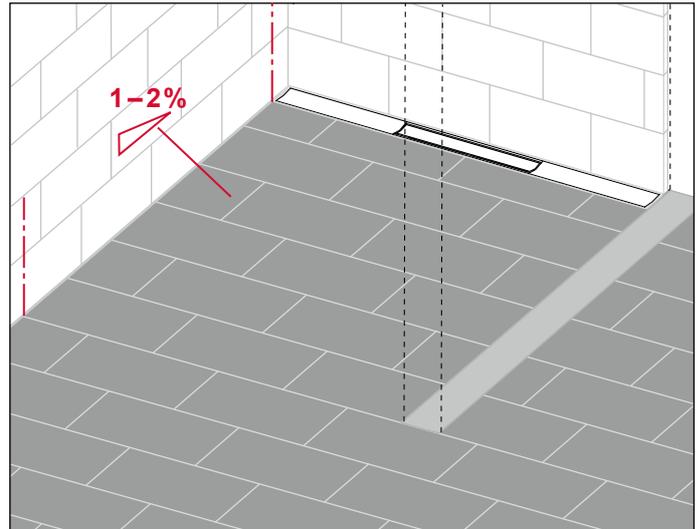
The Drainprofile shower profile has been specially developed for easy and reliable recessed installation. This means that it is installed across the entire width of the shower area. This reduces tile cutting, which, on the one hand, enhances the visual appearance, especially in the case of popular large-format tiles, and on the other, saves time and money in terms of preparation. The flush-to-wall installation is the most inconspicuous design.

The shower profile module is available in lengths of 800 mm, 900 mm, 1,000 mm and 1,200 mm. Each profile can be adapted, at the building site, to the individual width of the shower area, if necessary, simply by cutting it to the appropriate length. Each profile can be shortened to a minimum of 780 mm.

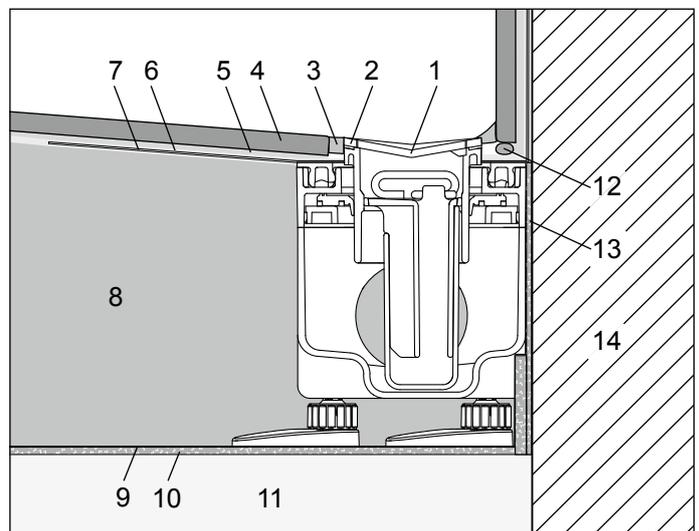
Flush-to-wall installation



“Flush-to-wall” installation



“Flush-to-wall” installation, incline



“Flush-to-wall” installation, layer structure:

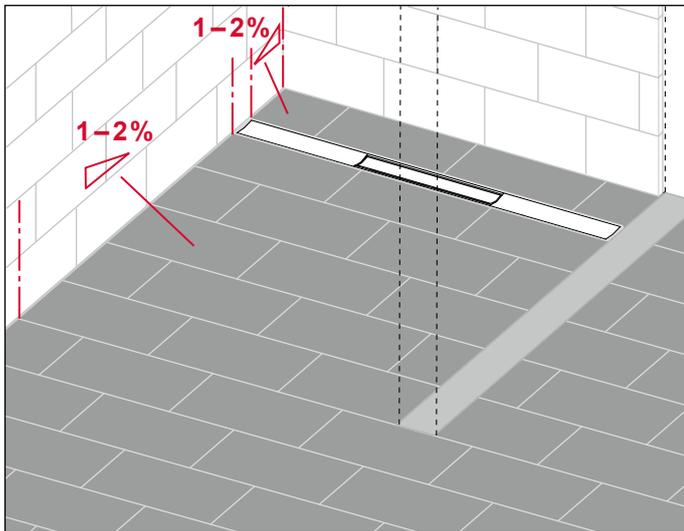
- | | |
|----------------------|------------------------------------|
| 1. Profile cover | 8. Screed |
| 2. Profile | 9. PE sheet |
| 3. flexible grouting | 10. Drainbase sound insulation mat |
| 4. Tile cover | 11. Bare floors |
| 5. Tile adhesive | 12. Backfill material |
| 6. Composite seal | 13. Edge insulation strip |
| 7. Sealing sleeve | 14. Masonry |

TECEdrainprofile – Planning

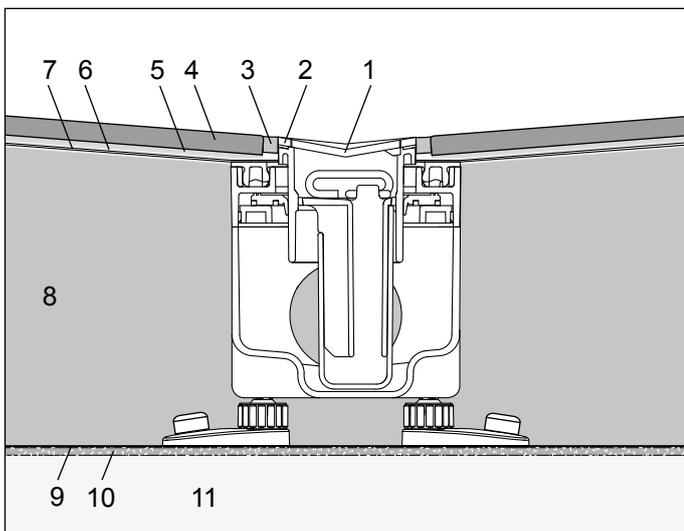
Installation close to the wall



Installation "close to the wall"



Installation "close to the wall", incline



Installation "close to the wall", layer structure:

- | | |
|----------------------|------------------------------------|
| 1. Profile cover | 7. Sealing sleeve |
| 2. Profile | 8. Screed |
| 3. flexible grouting | 9. PE sheet |
| 4. Tile cover | 10. Drainbase sound insulation mat |
| 5. Tile adhesive | 11. Bare floors |
| 6. Composite seal | |

Sound insulation

For sound insulation, the TECE range offers the pressure-resistant "Drainbase" sound insulation mat. Just 6 mm thick, the mat is laid throughout the whole shower area between the bare floor and the screed. In the case of flush-to-wall installations, sound insulation is enhanced by the supplied sound-proofing strips which are adapted to the contours of the Drainprofile drain. The shower profile, drain with assembly feet and wastewater pipe rest directly on the sound insulation mat which is covered by a PE sheet, and are therefore completely uncoupled from the structure.

The Drainbase sound insulation mat meets the more stringent requirements of DIN 4109 and VDI 4100 (sound protection level III). In accordance with DIN 4109, the requirements for sound pressure levels in living and sleeping spaces caused by water installations are ≤ 30 dB(A). The more stringent requirements of DIN 4109 and VDI 4100 (SST III) are actually as low as ≤ 25 dB(A) or ≤ 24 dB(A). When used in combination with TECEdrainprofile, the environmentally-friendly sound insulation mat made of recycled rubber achieves a sound pressure level of 25 dB(A) (rear lower floor) in accordance with DIN 4109 and 21 dB(A) (rear lower floor) in accordance with VDI 4100. This value has been confirmed by an official test report carried out by the Fraunhofer Institute for Building Physics. The Drainbase sound insulation mat achieves a rated impact sound reduction of $\Delta L_w = 19$ dB(A) (front lower floor).

Unlike conventional sound insulation of several centimetres thick, TECE's Drainbase sound insulation mat is only 6 mm "thin" and barely gives way at all under loading. Even under a pressure of 15 t/m^2 , compression is only 0.6 mm. Therefore, with the Drainbase, high sound insulation requirements can be fulfilled even with low floor projection heights.



Drainbase sound insulation mat

Drainbase technical data:

Material	recycled rubber granules bonded with PU elastomer
Colour	black/coloured
Surface	smooth with granular structure
Width x length	1,250 mm x 1,250 mm or 1,250 mm x 8 m (roll)
Strength	6 mm
Tensile strength	approx. 0.4 N/mm ²
Elongation at break	approx. 50%
Temperature stability	- 30 °C to + 80 °C
Fire behaviour	B2
Compression	0.6 mm at 15 t/m ²
Rated impact sound reduction ΔL_w	= 19 dB(A) (with 95 mm screed)

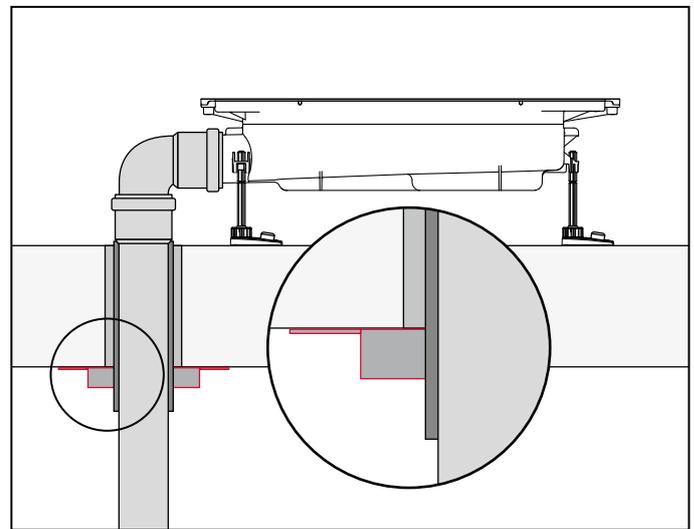
If you wish to achieve higher sound insulation values, the Drainbase sound insulation mat can also be combined with thin mineral-fibre impact sound insulation. To this end, the drain with assembly feet is installed on the Drainbase sound insulation mat (according to the installation instructions). The mineral fibre impact sound insulation is then laid over this and covered with a PE sheet before applying the screed.

In this way, installation sound-proofing L_{in} of 14 dB(A) (rear lower floor in accordance with DIN 4109), or 11 dB(A) (rear lower floor in accordance with VDI 4100) can be achieved for flush-to-wall installations. In the process, a rated impact sound reduction ΔL_w of 39 dB(A) (front lower floor) can be achieved. These values have been confirmed by sound insulation tests at the Fraunhofer Institute for Building Physics.

Certificates for the sound insulation tests can be found at www.tece.de.

Fire protection

When feeding the wastewater pipe through solid ceilings, fire protection solutions authorised to ensure protection against fire – such as the ROKU System AWM II fire protection sleeve – must be provided. This ROKU pipe penetration seal is authorised for many common pipes on the market, both for insulated and non-insulated plastic pipes, and also for sound-insulated wastewater pipes. The pipe is fed through the pipe penetration seal which is screwed under the ceiling. The gap between the pipe and the solid ceiling is first completely filled with a non-flammable, rigidly-retaining material (building material class DIN 4102-A) such as concrete, cement mortar or gypsum mortar.



In the event of fire, the foaming material inside the fire protection sleeve expands with strong foaming pressure, permanently closing the opening in the component and preventing the spread of fire and smoke.

The fire protection sleeve is classified in fire resistance class R90 (in accordance with DIN 4102) or EI 90/120/240 in accordance with EN 13501. The class depends on the design or installation of the fire protection sleeve and the pipes fed through.

TECEdrainprofile – Advantages

TECEdrainprofile – Advantages

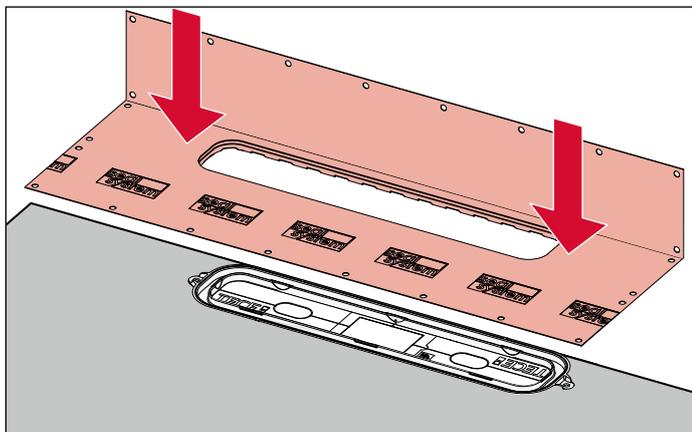
TECEdrainprofile facilitates simple recessed mounting of the drainage system across the entire width of the shower area. The product's technical details make it easier for the fitter, screed layer and tile layer to install the product correctly and ensure reliable sealing. The fact that the product is easy to clean facilitates the work of the end customer, enabling them to maintain perfect hygiene in the shower zone.

Recessed installation solution

Thanks to TECEdrainprofile's technical product design, the shower profile can be easily and reliably recess-mounted across the entire width of the shower area. Especially with the latest large-format tiles, this results in a more attractive and elegant overall impression, without the previously standard tile fragments on the sides as with shower channels. Simple, recessed installation is possible due to the fact that the shower profile is mounted over the composite sealing. This makes it far easier to reliably install the composite seal right in the corners of the shower. For the seal connection, flanges now no longer extend into the shower zone corners as is the case for shower channels. In addition, the shower profile can also be shortened by hand (stainless steel saw) at the building site. This means that, if necessary, it can be adapted to the existing width of the shower zone.

Safe sealing with click-in Seal System sealing sleeve

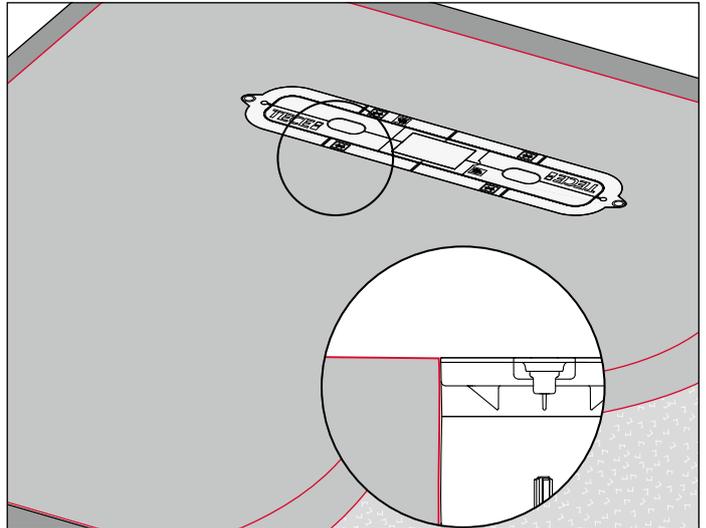
The factory mounted and clickable Seal System sealing sleeve forms part of the Drainprofile product. It is simply clicked into the drain by hand. This ensures a water-tight connection.



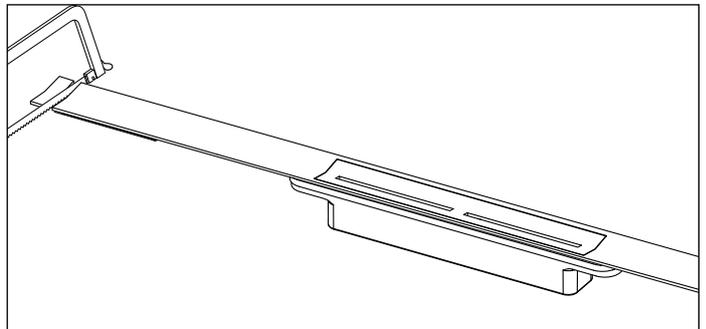
The flexible sealing sleeve must then simply be integrated into the composite seal.

Straightforward assembly thanks to clever product details

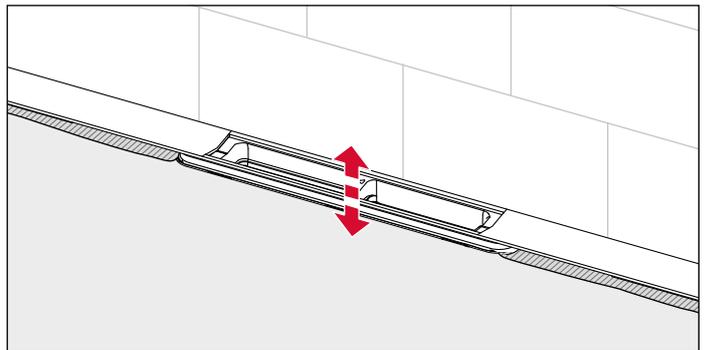
The drain, which is bound in the screed, simplifies the creation of a level screed surface with an incline. No elements get in the way when finishing the screed.



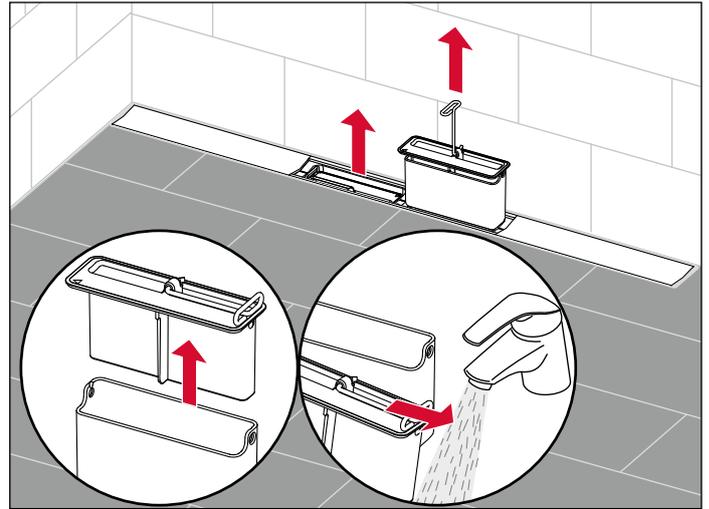
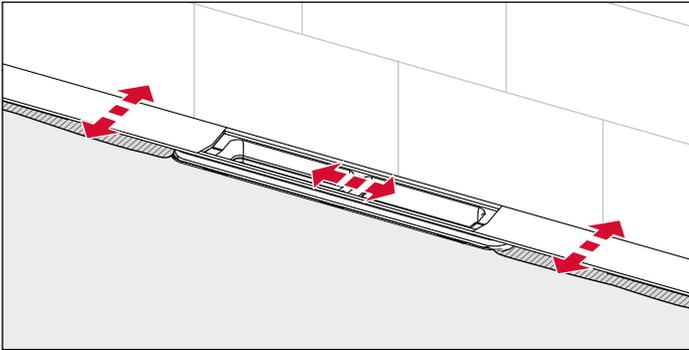
The shower profile can be cut to size and easily and precisely adjusted to fit the width of the shower area. This is carried out by means of a hand saw with a stainless steel hacksaw blade.



A simple height setting allows you to adjust the profile to various thicknesses of wall and floor tiles.



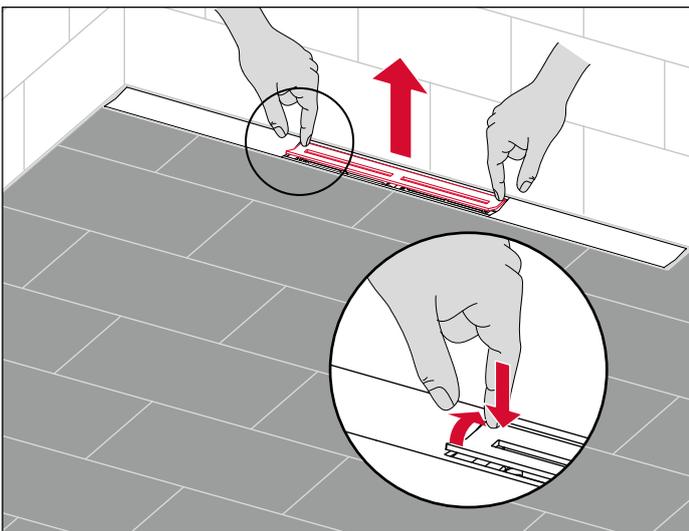
The shower profile is finely positioned by installing the drain in screed. The assembly solution allows subsequent fine positioning of the shower profile in all horizontal directions.



Easiest cleaning for perfect hygiene

Rinse, wipe, done! Removing the grate to clean the shower channel is now a thing of the past. The shower profile is made of hygienic stainless steel and has an internal incline. This optimises drainage of water and the self-cleaning effect, thus reducing the amount of cleaning required. The drain located beneath the shower profile is easily accessible and can be cleaned if required. The drain line can be accessed with a pipe cleaning cable.

Thanks to its special “push function”, the profile cover can simply be removed by hand without requiring any other accessories.



The odour trap which then becomes accessible can also be removed for easy cleaning by pulling out the stainless steel brackets.

TECEdrainprofile – Range and technical data

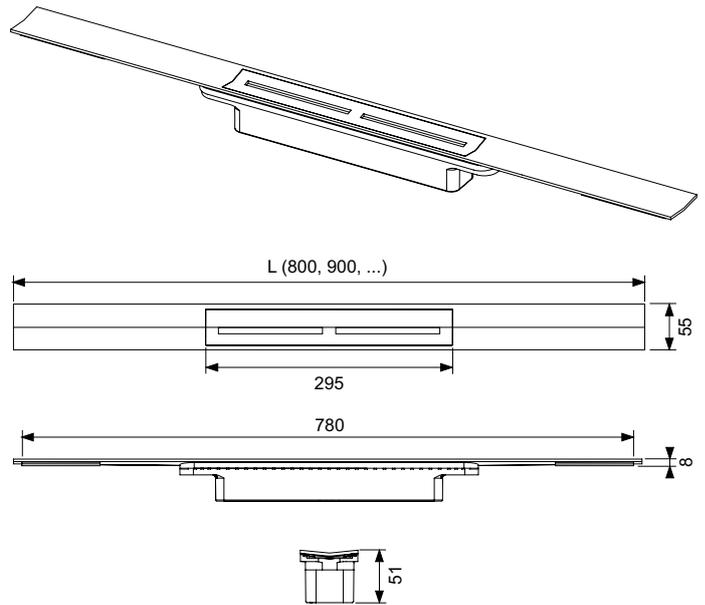
Range and technical data

The clearly structured, easily understandable range reduces storage space requirements. The few components include the shower profile, drain and accessories.



Various installation options can be implemented using just one shower profile – flush-to-wall, close to the wall or in the middle of the room.

Shower profiles



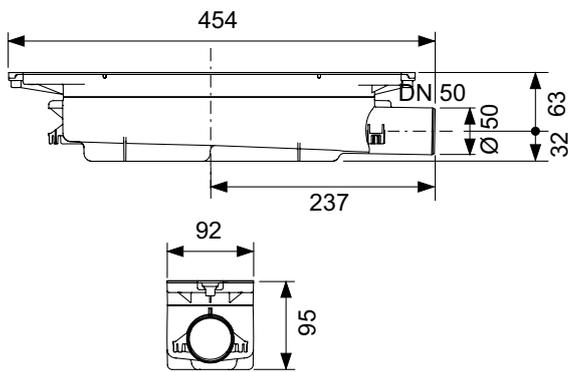
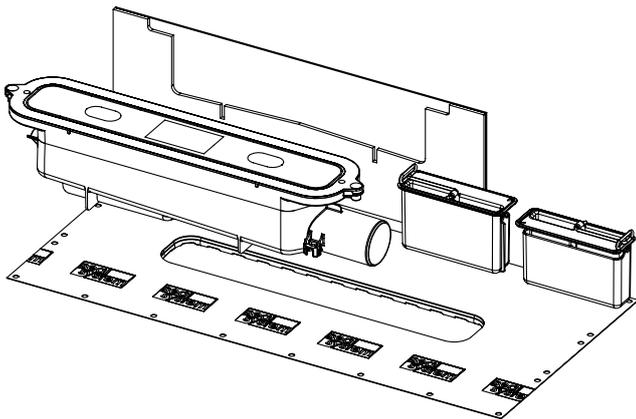
Shower profile for shower drainage, for installation in the tile adhesive above the screed and seal.

Properties:

- Stainless steel shower profile that can be cut to length with an internal incline for improving water drainage and a self-cleaning effect, material 1.4301 (304)
- Profile cover made of stainless steel, with “push function” for removal by hand, material 1.4301 (304)
- Connection trims for connection with the TECEdrainprofile drain
- Grip elements for easy installation and solid connection with the tile adhesive
- for floors from 8-25 mm (incl. adhesive bed)
- for flush-to-wall installation for coverings from 10 mm (incl. adhesive bed)
- for installation against the wall (flush-to-wall) or at any distance from the wall

Length	Width	Surface	Order no.
800 mm	55 mm	brushed	670800
800 mm	55 mm	polished	670810
900 mm	55 mm	brushed	670900
900 mm	55 mm	polished	670910
1,000 mm	55 mm	brushed	671000
1,000 mm	55 mm	polished	671010
1,200 mm	55 mm	brushed	671200
1,200 mm	55 mm	polished	671210

Drain



Drain for TECEdrainprofile shower profile, for installing in screed.

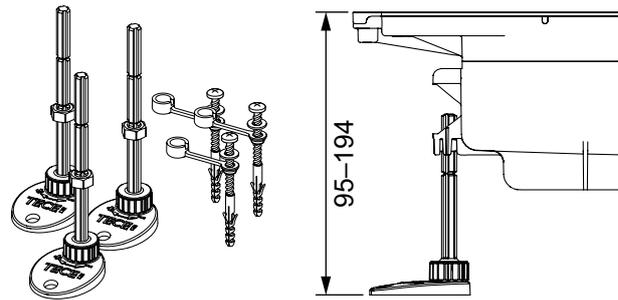
For connection to the side of a DN 50 drain pipe, factory-assembled and clickable sealing sleeve with Seal System, removable odour trap.

Properties:

- Min. installation height 95 mm (bottom edge of drain to upper edge of screed)
- Drainage capacity >0.6/>0.8 l/s (in compliance with DIN EN 1253 with 10/20 mm build-up above the profile cover)
- Water seal height 50 mm
- Removable odour trap
- Integrated screed anchor
- Factory-assembled, clickable and flexible sealing sleeve with Seal System
- Adapted prefabricated sound insulation strips
- Site protection cover
- Sliding/mobile seal for connection with TECEdrainprofile shower profile and to compensate dimensional tolerances

Order no. 673002

Assembly feet



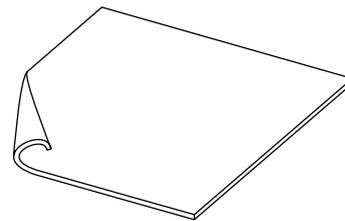
Assembly feet for TECEdrainprofile "standard" drain with universal flange to make it easy to adjust the height and attach in position during the bare-wall installation stage.

Properties:

- 3 assembly feet incl. sound insulation cap and attachment equipment
- Adjustment range 95-194 mm (lower edge of feet to upper edge of drain or screed).

Order no. 674000

Sound insulation mat



Sound insulation mat for fitting under floating screed in the area of floor-level showers or throughout the bathroom. To reduce plumbing noises and impact sounds and for impact sound insulation for renovations and new buildings. Installation sound level with TECEdrainprofile: 25 dB(A) (rear lower floor, in accordance with DIN 4109) and 21 dB(A) (rear lower floor, in accordance with VDI 4100). Made from recycled, sturdy rubber granules bound with PUR elastomer. Meets the more stringent sound insulation requirements to DIN 4109, issued 2001-01 and the highest sound protection level SSt III to VDI 4100, issued 2012-10 (sound test verification available from Fraunhofer IBP on request).

Properties:

- Form of delivery: 1.25 m x 1.25 m x 6 mm
- Fire class: B2 (DIN 4102)
- Thermal resistance: 0.05 (m²K)/W
- Compression at 15 t/sqm: 0.6 mm
- Impact sound reduction: $\Delta L_w = 20$ dB(A) (with 50 mm screed, in accordance with ISO 140-8/ISO 717-2)

Order no.	Form of delivery
660001	1.25 m x 1.25 m x 6 mm
660002	8.00 m x 1.25 m x 6 mm

TECEdrainprofile – Assembly instructions

Assembly instructions

This section describes the installation instruction and covers the main points for installing the Drainprofile. The instructions clarify sections from the overall installation process. The entire assembly process is described in the Drainprofile assembly instructions.

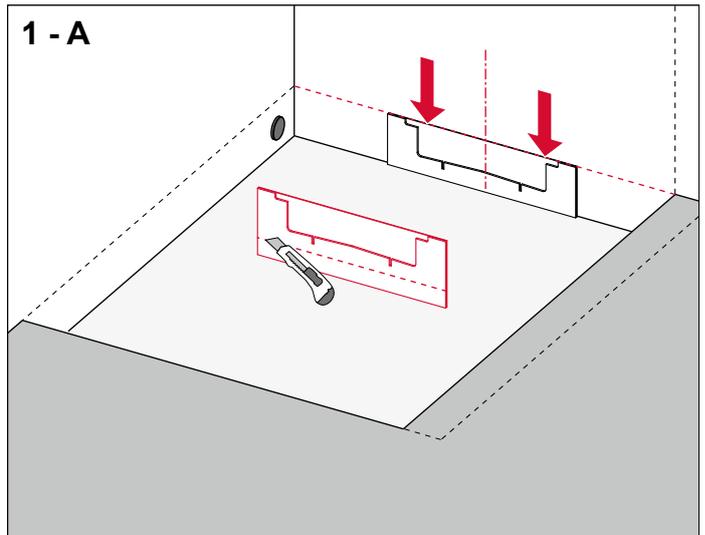
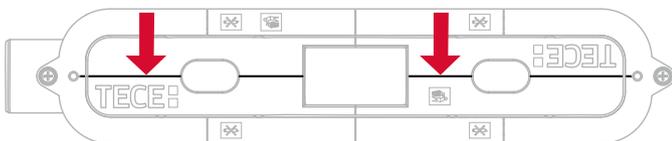
Flush-to-wall installation – Drain position

When performing the flush-to-wall installation of the shower profile, at the start of the installation process, the distance of the drain to the wall must be determined, and the drain is then built into the screed in this position. The distance of the drain to the wall depends on the required wall construction.

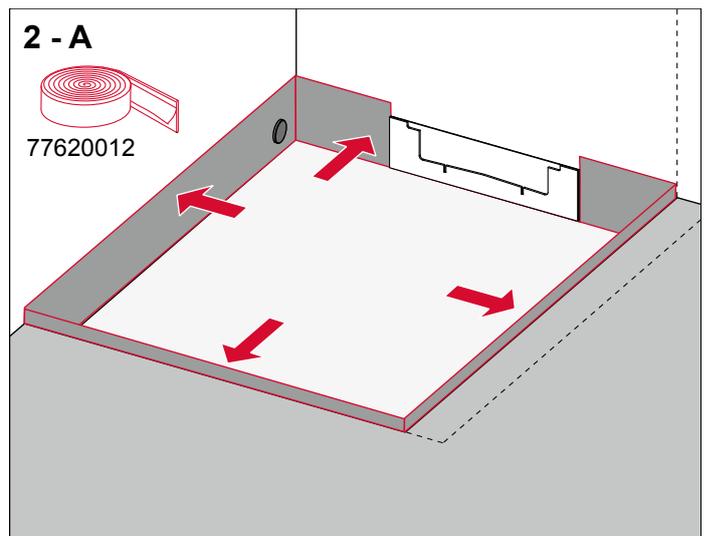
The thinnest possible wall construction (seal, adhesive, wall covering) is 13 mm. On wall constructions between 13 mm and 18 mm, the drain is positioned directly against the wall using the sound-proofing strips supplied. In this case, the distance from the centre of the drain to the wall is 48 mm. On a wall construction of > 18 mm, the distance of the drain to the wall is calculated as follows:

Distance from the centre of the drain to the bare wall (in mm) = wall construction (in mm) + 30 mm.

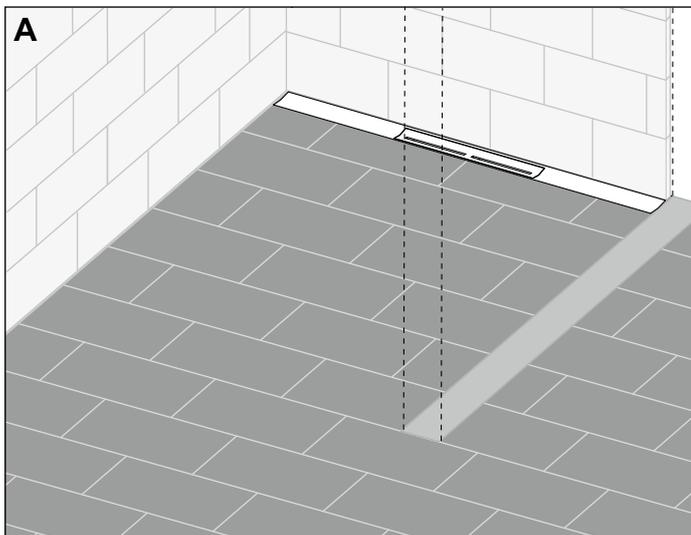
In order to measure the distance from the centre of the drain to the wall, a centre line is applied to the drain's bare-wall protection:



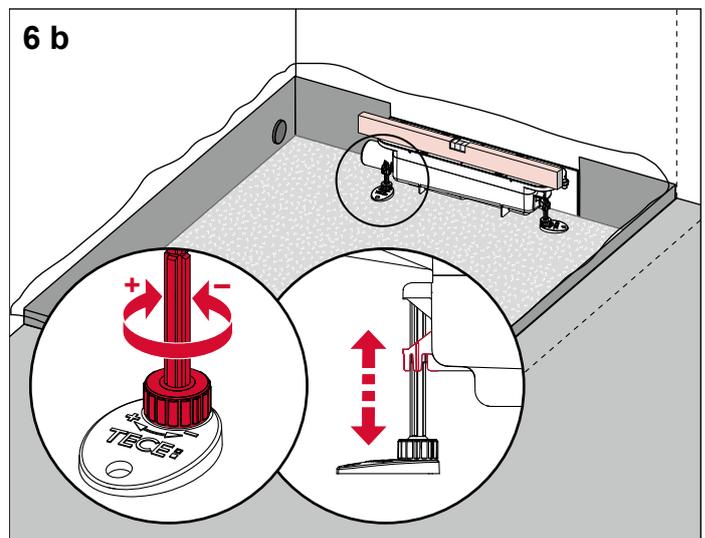
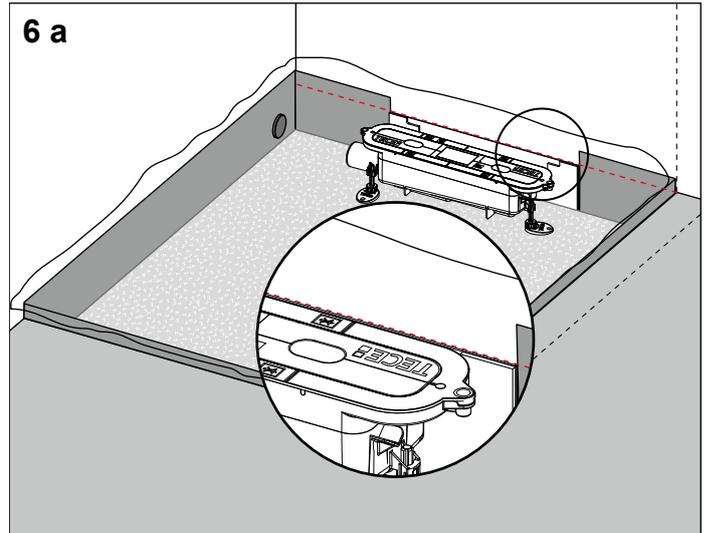
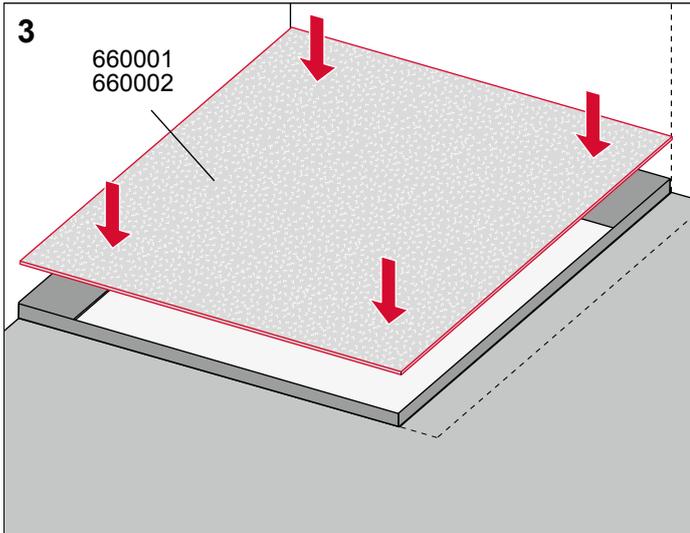
Before applying the screed, the special sound insulation strips supplied must be shortened to the required height. This should be shortened in such way that the top surface of the sound insulation strip fits flush with the surface of the screed.



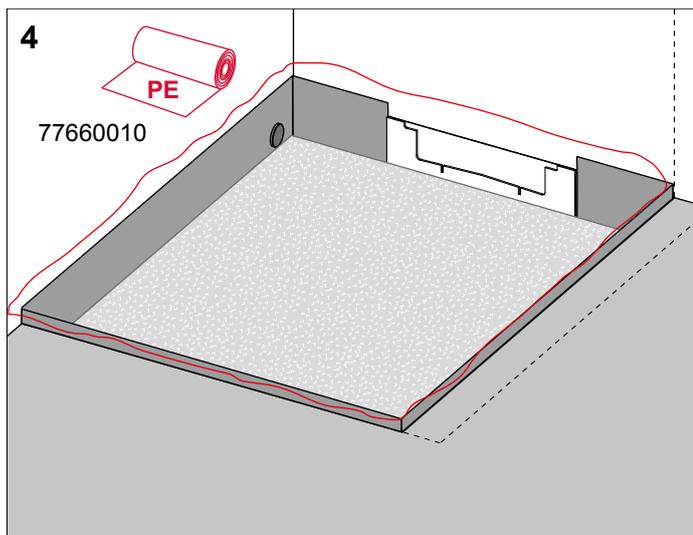
The Drainprofile sound insulation strip is positioned in the centre of the completed shower zone – observe the wall construction on both sides. In the illustrated example, the wall construction is identical on both sides of the shower zone, therefore it is positioned in the centre of the building structure opening. Finally, mount the remaining edge insulation strips. In the process, make sure that there are no gaps in the surrounding edge insulation strips (between the screed and the wall) in order to prevent the formation of sound bridges.



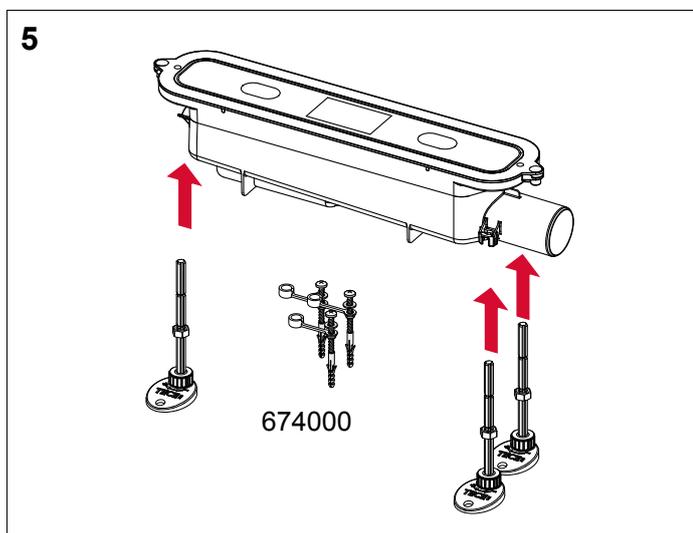
Flush-to-wall position of the drain profile after final installation.



Introduce the Drainbase sound insulation mat, cutting it down to size beforehand if necessary. Here too, you must make sure that there are no gaps or holes in the screed to prevent sound bridges from forming between the screed and the uncovered floor.



Finally, cover the entire area with a sheet. Make sure that there are no holes or gaps here too.



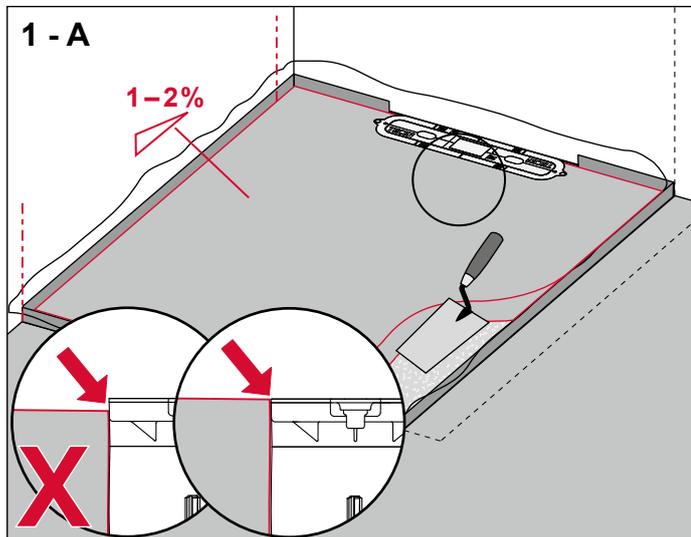
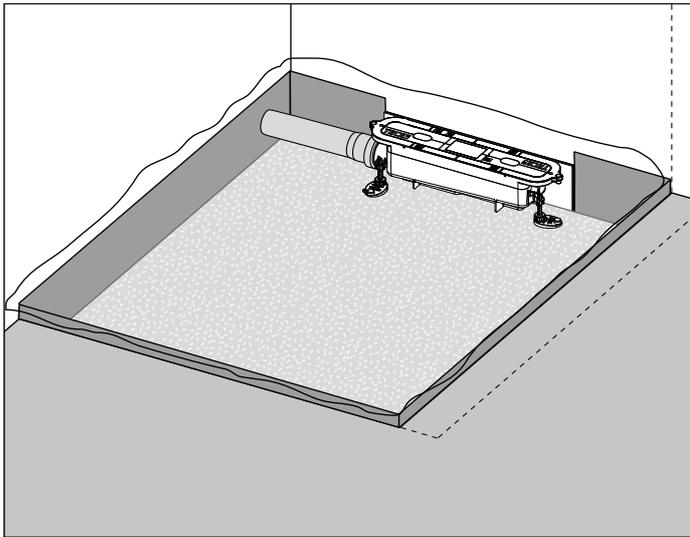
Manually screw in the assembly feet at the drain.

Adjust the height of the assembly feet, align horizontally and place in the indentations in the sound insulation strip. The height of the top edge of the drain must correspond with the later top edge of the screen.

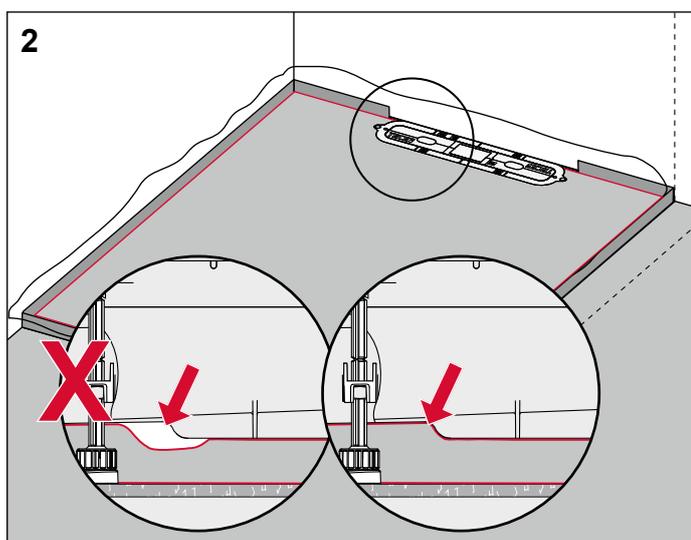
Finally, check that the drain is in the correct position in both horizontal directions, i.e. the distance to the rear wall (observe the wall construction) and the centre position in relation to the centre of the shower zone after completing the wall covering (observe the wall construction). Centre lines (lengthwise and crosswise) on the drain protection system can be used to easily and accurately ensure horizontal positioning.

TECEdrainprofile – Assembly instructions

Inserting the drain in the screed

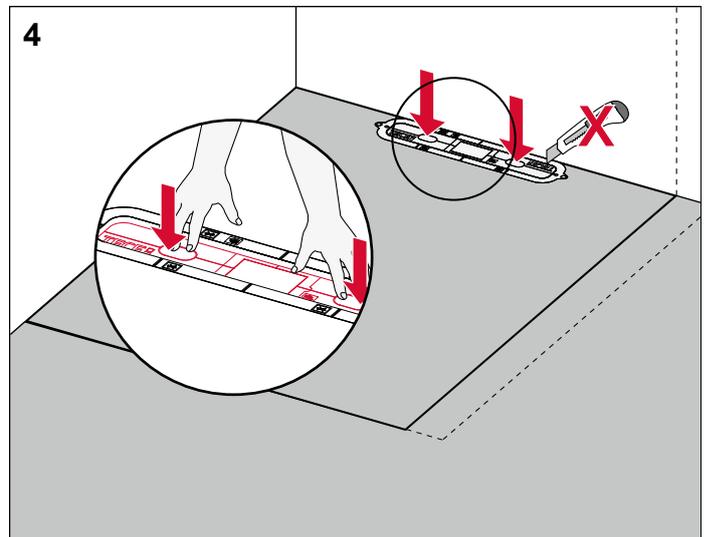
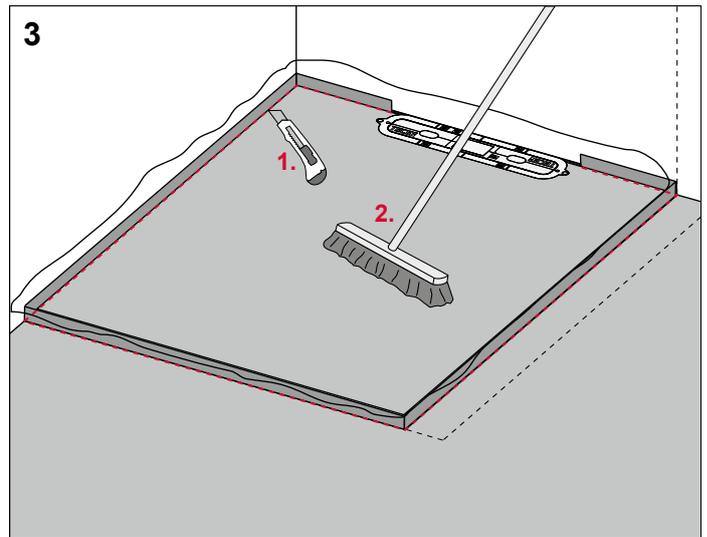


The drain must be inserted into the screed in such a way that it fits flush with the top surface of the screed.

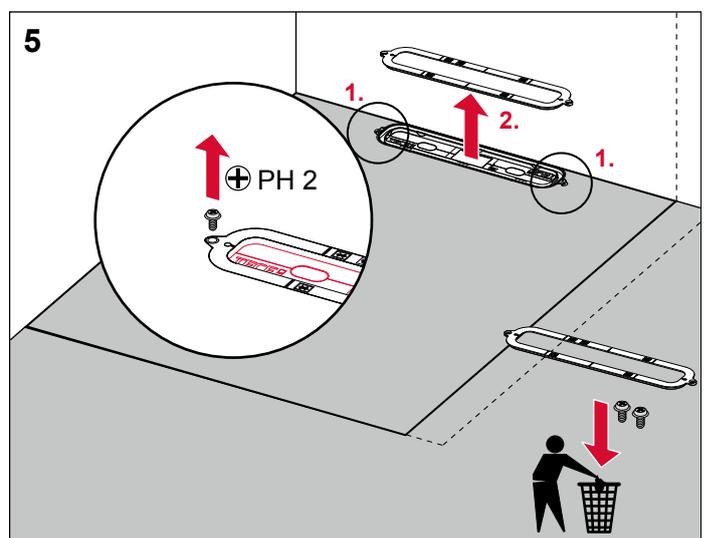


Make sure that the drain fits flush with the screed without any cavities.

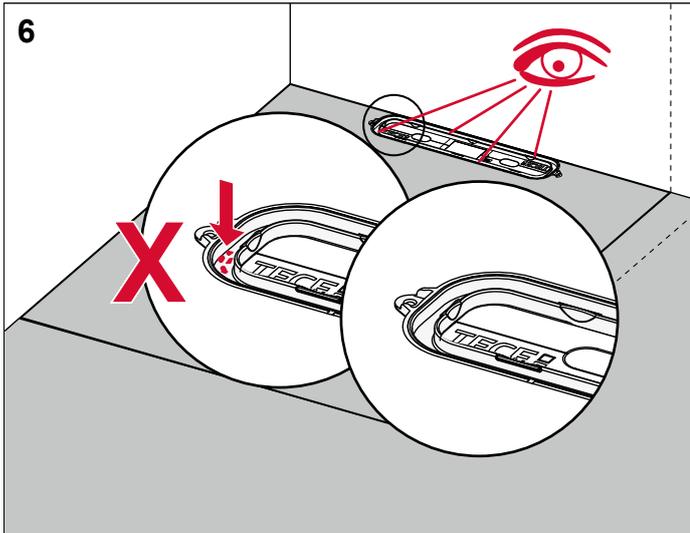
Installing the Seal System sealing sleeve



After cleaning the screed (vacuuming, brushing), push down with your fingers on the areas marked with “push” on the inner part of the protective cap. This will separate the inner area from the external area of the protective cap.

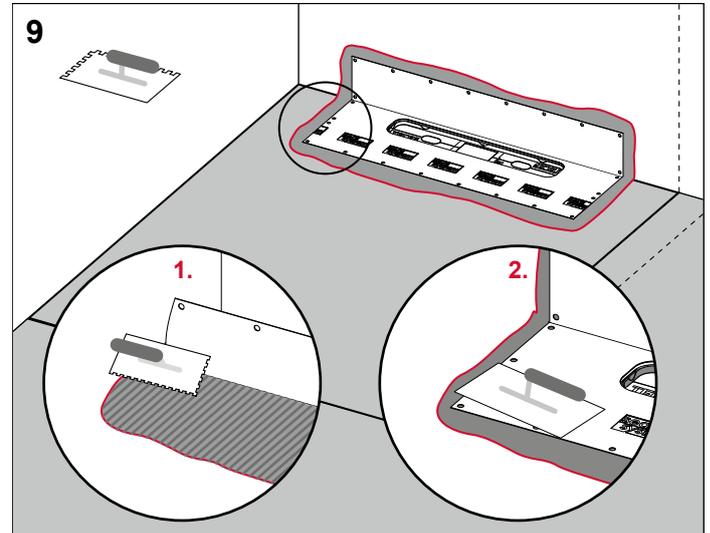


Loosen both screws and remove the external part of the protective cap.

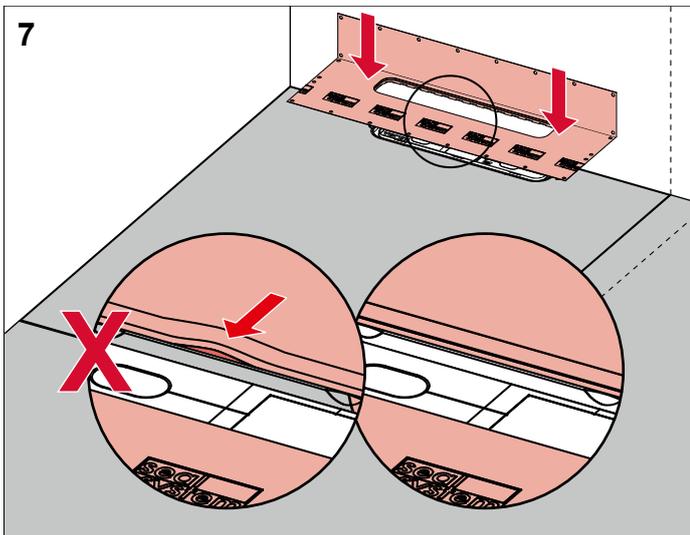


6 Check the groove area for dirt. Carefully remove any dirt from the groove area.

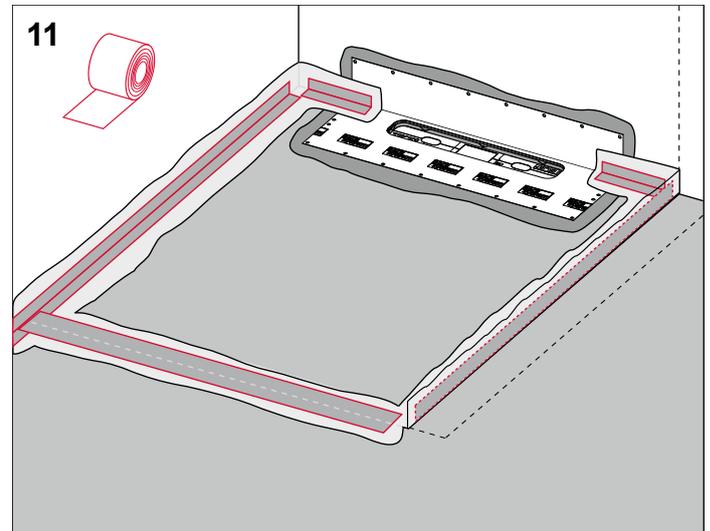
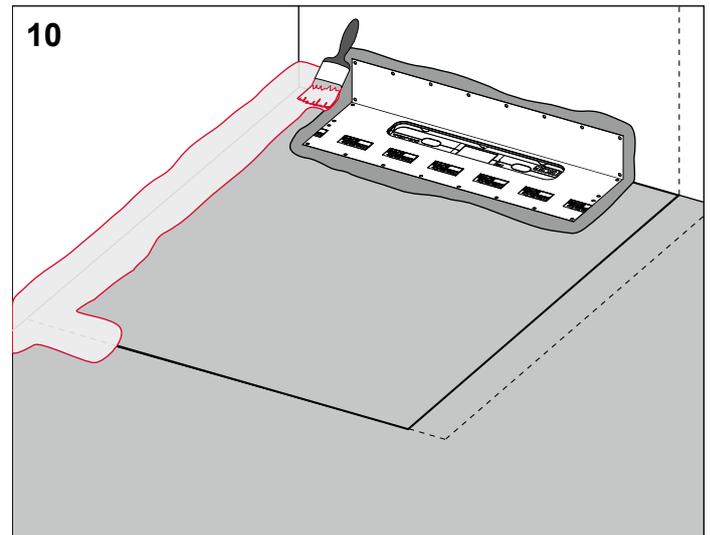
After the sealing sleeve has clicked into place, it may no longer be removed or pulled out again. Otherwise there is a risk that the sealing sleeve could become damaged and that leaks could develop.



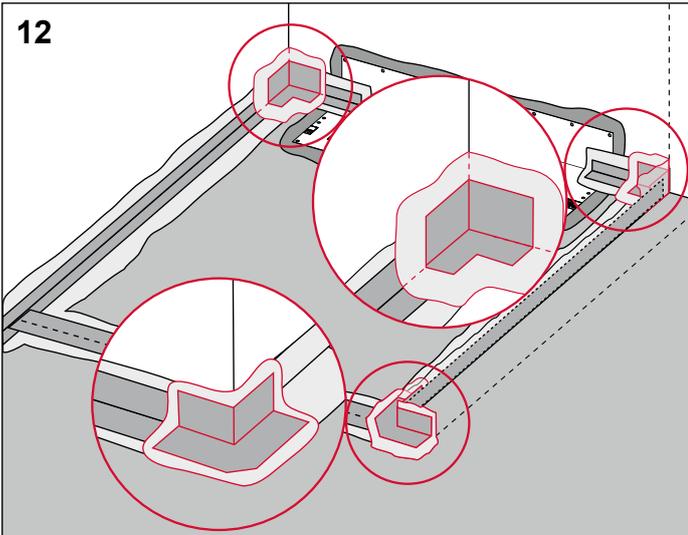
9 Install the sealing sleeve evenly across the whole area of the liquid-applied sealing material and press it down.



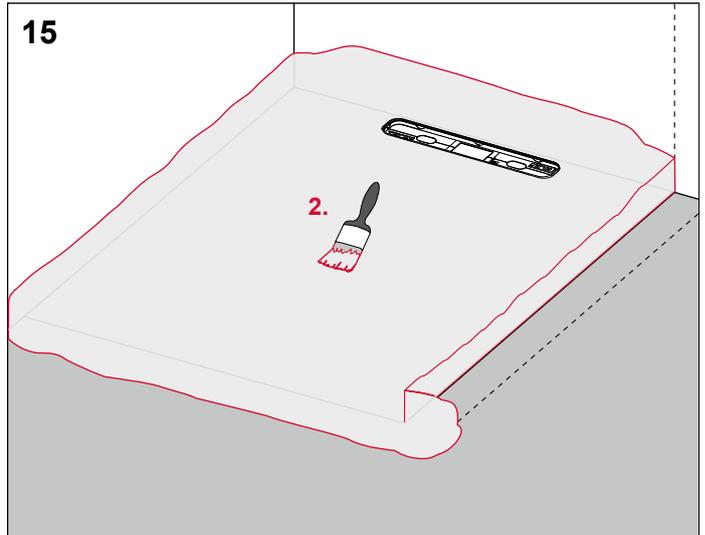
7 Remove the Seal System sealing sleeve from its packaging and press the frame manually into the slot. The sleeve is correctly installed when it is lying completely flat.



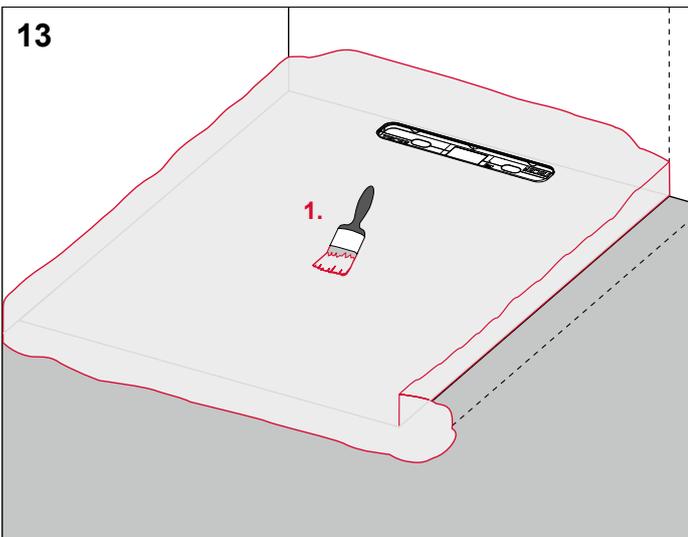
TECEdrainprofile – Assembly instructions



Finally, work the sealing tape and corner seals completely into the sealing material. The sealing tape should overlap the Drainprofile sealing sleeve by at least 50 mm.

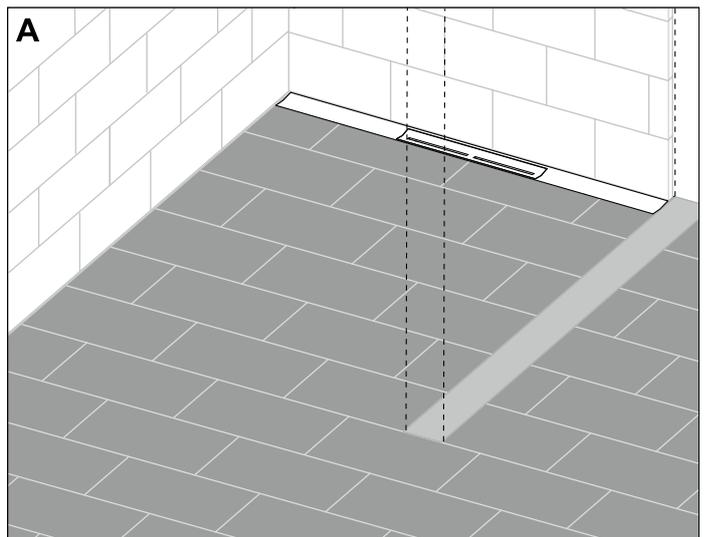


After the first coat has dried, apply the second coat over the entire surface.

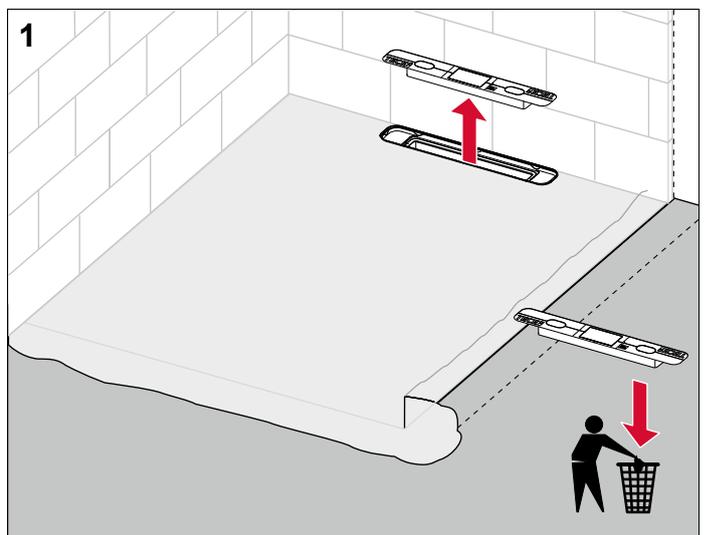
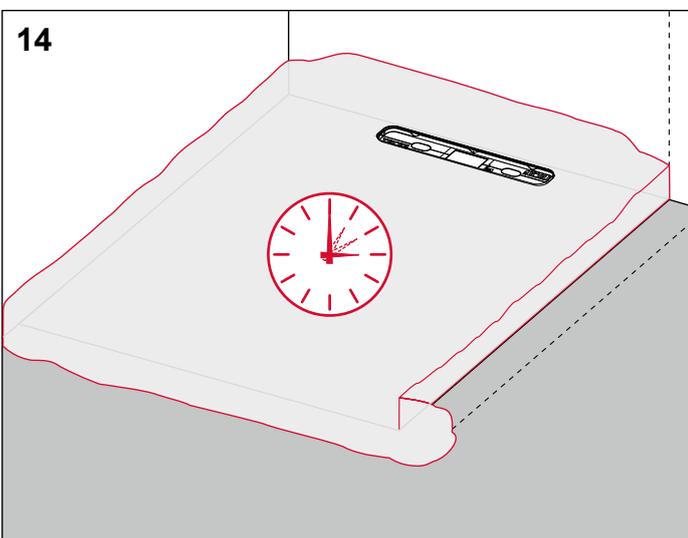


Finally, directly apply the first coat of sealing material wet-on-wet over the entire surface.

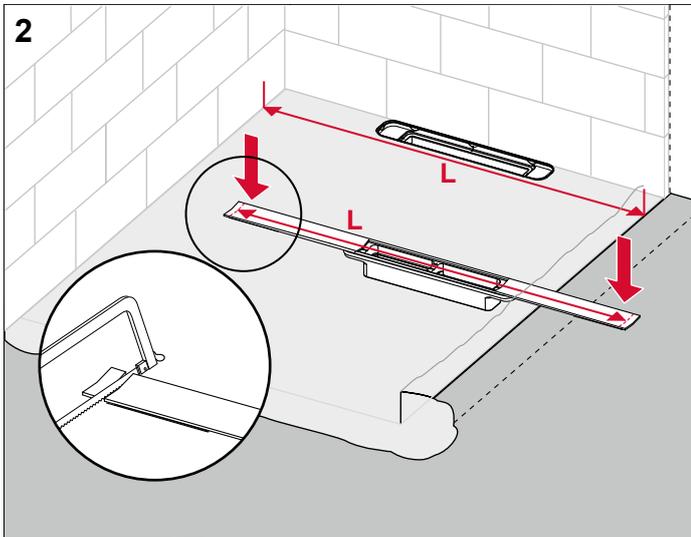
Installing the Drainprofile shower profile



An explanation of the recessed installation of the shower profile against the wall is provided here by way of example.

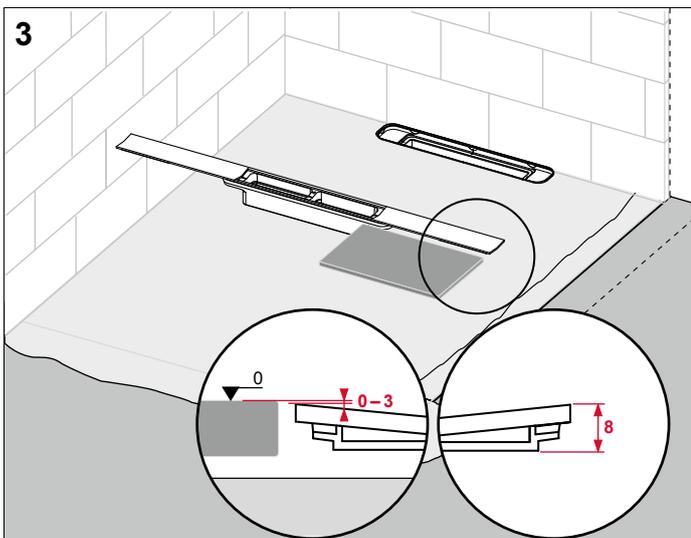


After the wall covering has been applied, the shower profile can be installed. To do so, remove the protective cap from the drain.

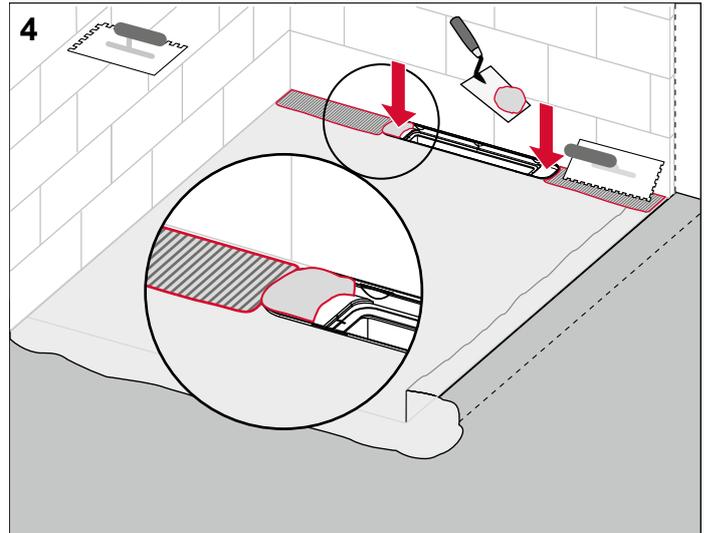


If the existing width of the shower zone does not correspond exactly with the as-delivered lengths of the Drain-profile shower profile, the profiles can be shortened with a saw. This should only be done with a stainless steel saw blade. The saw blade should be unused or it should at least be ensured that it has never been used to cut ferrous productions (steel, etc.). Otherwise, ferrous ions could be introduced causing external rust on the stainless steel profile.

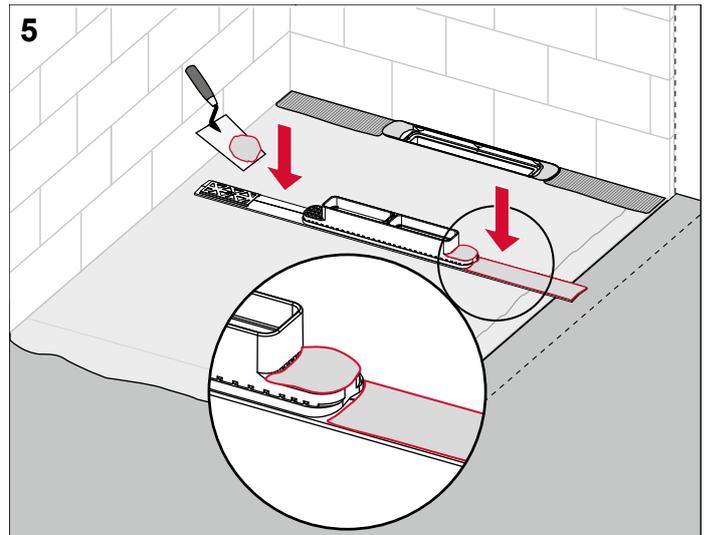
The shower profiles can be shortened up to the grip elements. This results in the following minimum producible shower profile length of 780 mm. This applies to all profile lengths (800 mm, 900 mm, 1,000 mm, 1,200 mm).



As is the case for every floor drainage element, the shower profile is the deepest element installed in the shower zone. Therefore it should be installed at the same height, or slightly deeper, than the subsequent tiles.

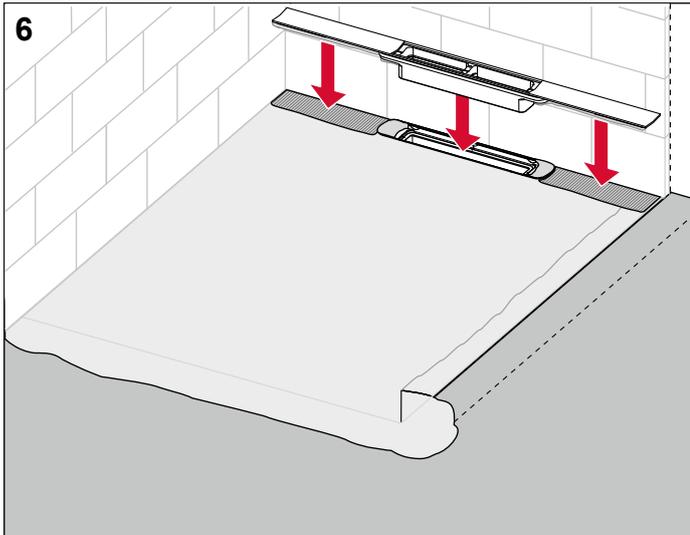


The shower profile is installed with tile adhesive following the “buttering-floating” method. To this end, the tile adhesive is applied to the floor and the deepened elements of the drain. Make sure that no tile adhesive gets into the drain or on the seal.

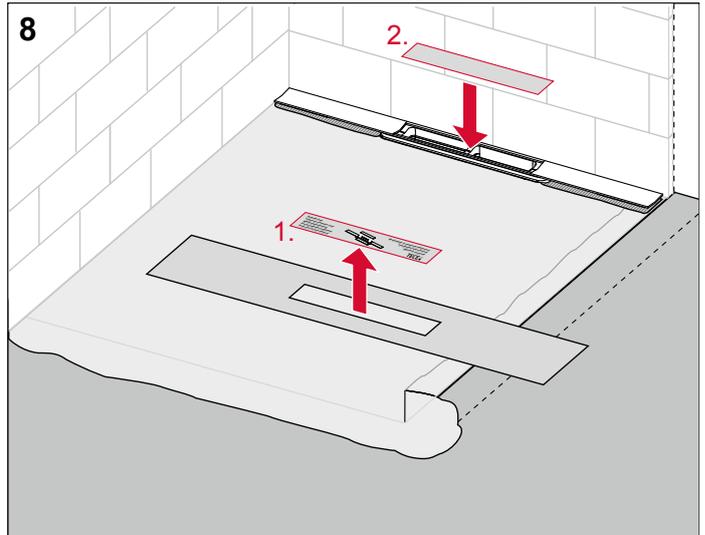


Apply tile adhesive to the underside of the entire shower profile.

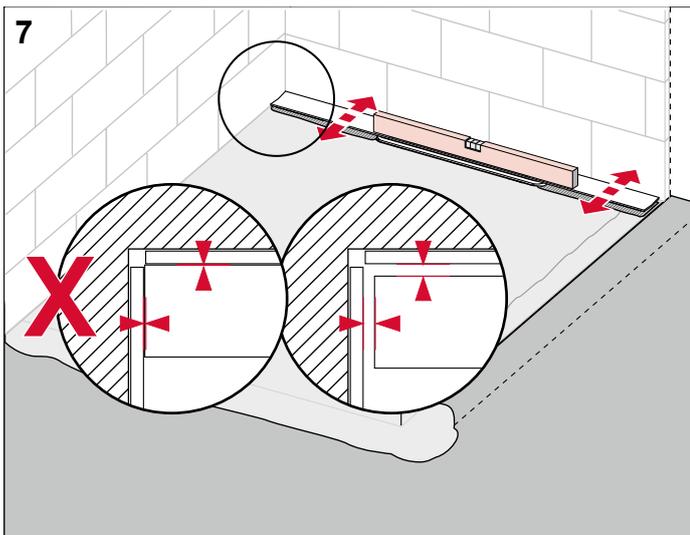
TECEdrainprofile – Assembly instructions



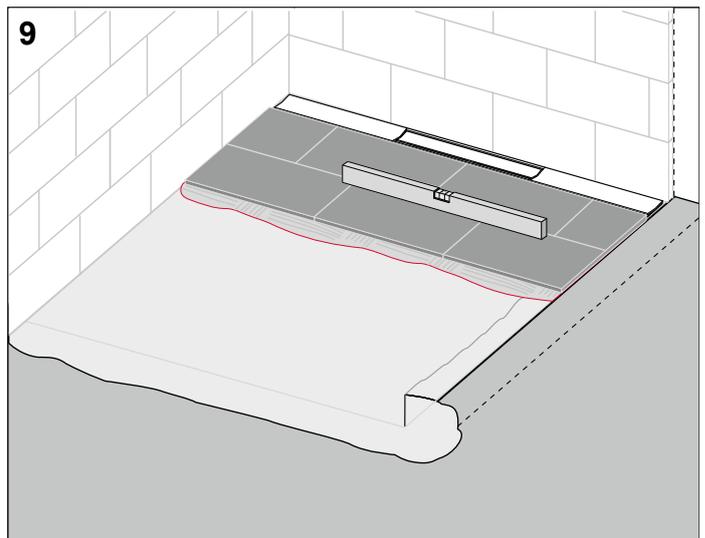
Then insert the shower profile with the supports into the drain. Also make sure, when doing so, that no tile adhesive gets into the drain (if necessary, remove any tile adhesive afterwards).



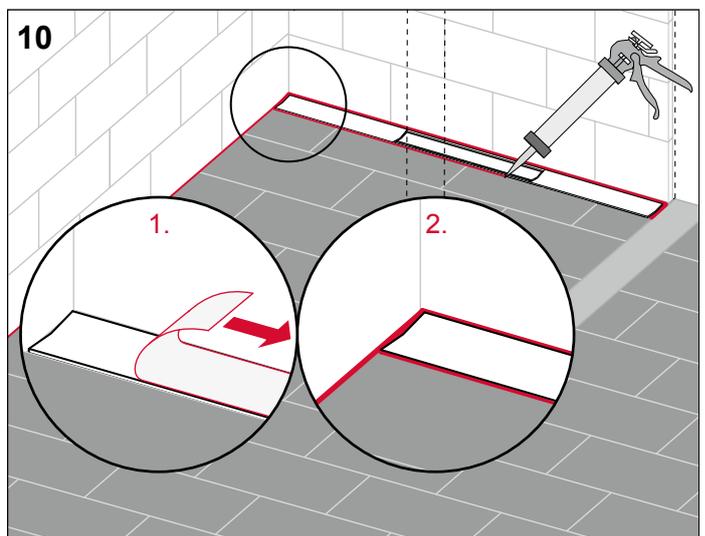
Place the protective cover over the shower profile opening so that nothing can get into the drain during the further course of the construction work.



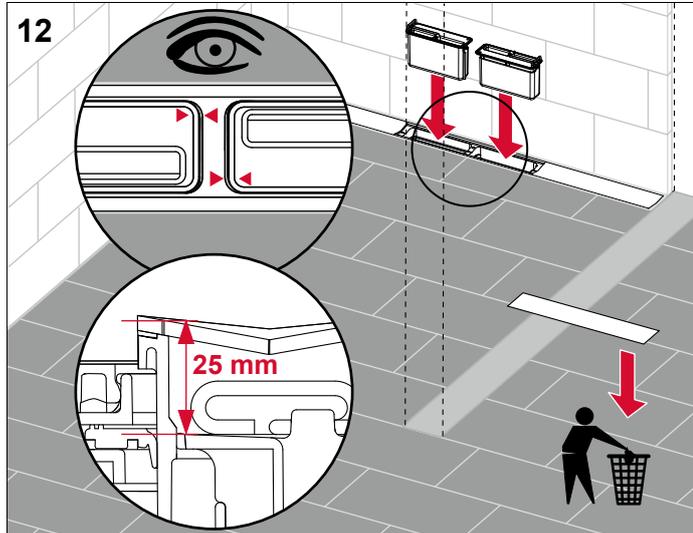
Adjust the height of the profile (also see illustration 3) and align horizontally. When aligning, make sure that the shower profile and wall tiles do not come into contact. The surrounding joint will later be filled in a permanently flexible way with sanitary silicone.



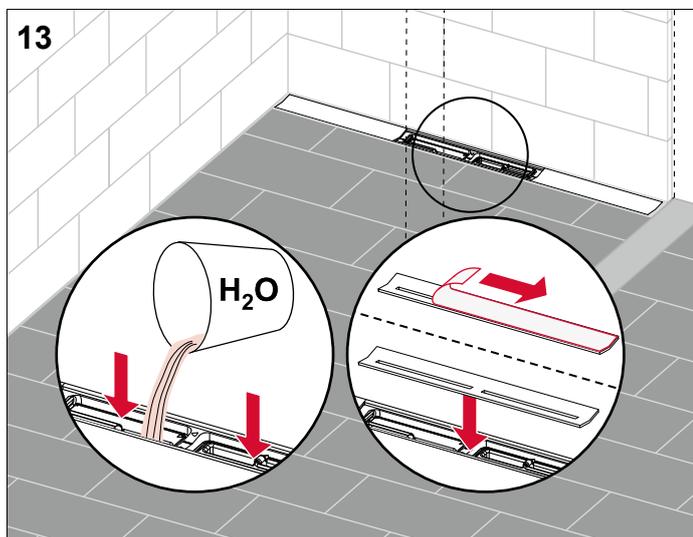
Lay the floor covering (8-25 mm including adhesive bed) with the required incline (1–2 %) towards the shower profile.



Fill the surrounding joint between the profile, wall and floor tiles with sanitary silicone. To do this, prepare the joint beforehand and remove the protective sheet from the shower profile.



Remove the protective cover and insert both odour traps. When doing so, the arrows on the odour trap and supports should lie directly opposite each other. Then push in the odour trap up to the stop. If necessary, the push-in depth can be checked by measuring (25 mm from the top edge of the odour trap to the top edge of the profile opening).



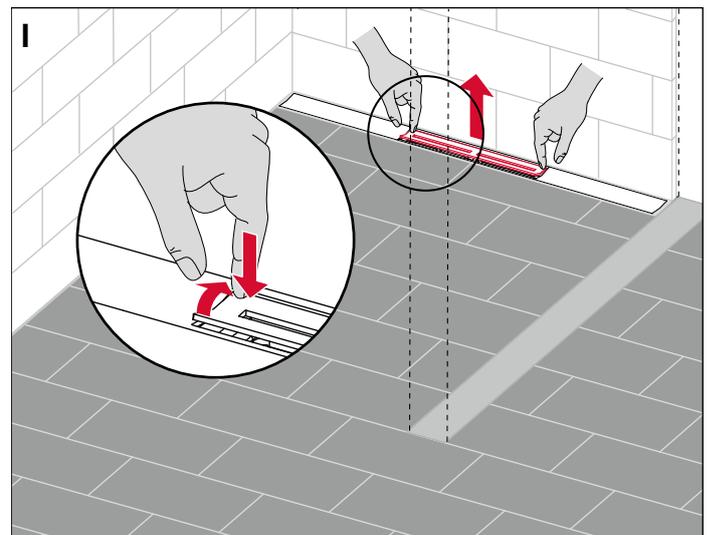
Fill up both odour traps with water. Remove the profile cover, pull off the protective sheet and position the cover.

Maintenance and cleaning

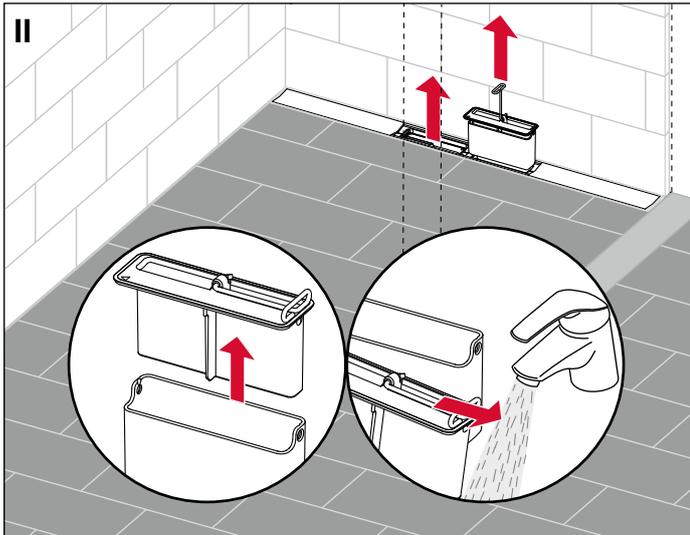
Thanks to its technical design and the materials used to make it, the shower profile can be hygienically cleaned quickly and easily. The inner incline optimises the flow of water and the self-cleaning effect. The stainless shower profile and profile cover have extremely good hygienic properties.

Generally speaking, it is sufficient to rinse the shower profile with water before cleaning and drying it with a soft (e.g. cotton) cloth. Make sure that the towel cannot cause scratches. For example, only microfibre cloths should be used which are suitable for stainless steel surfaces. Only use a mild household cleaner as the cleaning agent. Do not use any cleaning agents with strong acids, chlorine or bleaching agents. Only briefly apply cleaning agents, wipe and thoroughly rinse with water.

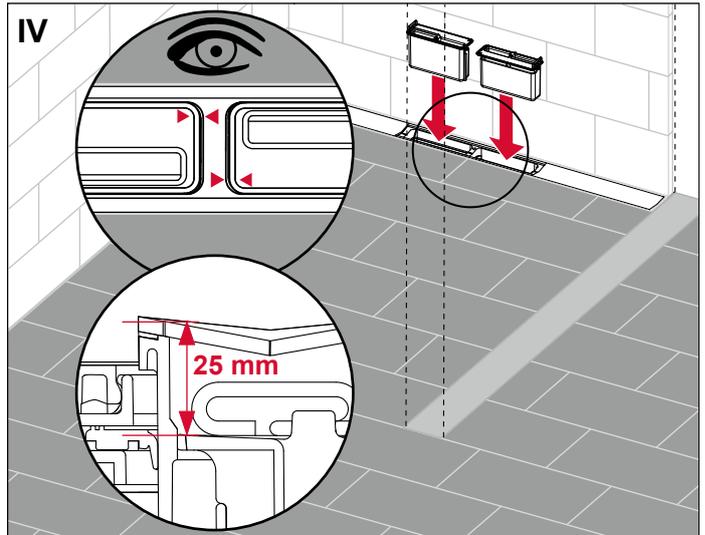
If the drain needs to be cleaned, the profile cover can be easily removed by hand thanks to its special “push” function.



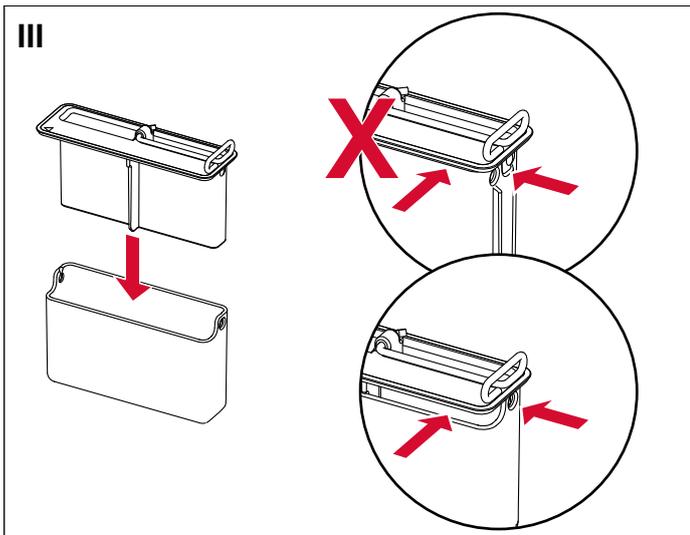
To do so, press the rear edge of the profile cover downwards. Doing this will slightly tilt the cover upwards; then it can be lifted up by hand.



The odour traps can be pulled out using the stainless steel brackets. To clean them as quickly as possible, the traps can simply be pulled apart and cleaned with water and a cloth.



Push in the odour traps up to the stop in the profile supports. When doing so, the arrows on the odour trap and supports should lie directly opposite each other. If necessary, the push-in depth can be checked by measuring (25 mm from the top edge of the odour trap to the top edge of the profile opening). Finally, insert the profile cover again.



After cleaning, put the odour traps back together.

If the drain line becomes blocked, it is fully accessible after removing the odour trap, and can be cleaned with a commercially available pipe cleaning cable. Avoid the use of pipe cleaning products where possible. However, if you do need to use a pipe cleaning product in isolated cases, do not allow it to come into contact with the profile or the profile cover. Also make sure that the product does not contain any sodium hypochlorite. After observing the application time, rinse thoroughly with water.

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