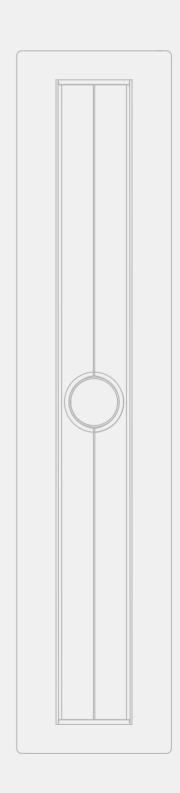


Drainage Systems

TECEdrainline

TECHNICAL INFORMATION



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Introduction

Floor level showers are a must in the modern bathroom. In order to achieve this new freedom in the bathroom in the most optimal way for the customer, TECE offers high-quality solutions in a wide range of current designs. At TECE, maximum design freedom and maximum reliability go hand in hand.

TECEdrainline has been on the market since 2005 and over this time the applications have become increasingly varied and creative.

For us, good design is not just a question of aesthetics, it's also one of functionality. This includes the most reliable and simple assembly possible as well as products that satisfy the highest demands in terms of design freedom, hygiene and safety. Drainage systems without compromise that designers, fitters and end customers can depend on.

Modern drainage works reliably – without putting itself at the forefront. TECEdrainline therefore offers a wide range of different covers in a modular system that integrate into any shower area almost seamlessly. And a wide range of channel bodies that make installation fast, secure and reliable at any point in the shower area.

Whether as the classic TECEdrainline with stainless steel flange and Seal System sealing tape or the new TECEdrainline-Evo with factory-fitted sealing sleeve in the construction time protection and combined secondary drainage option - what they all have in common is the perfect processing of easy-to-clean materials that make TECEdrainline not only durable, but also so practical. And that's not just during assembly, but during use as well.



Planning

Sealing

Building components and structures are constantly exposed to moisture. Indoors, it is mainly "wet and damp rooms" that are affected: bathrooms, washrooms and kitchens in the private sector, large kitchens, washing facilities and production rooms in the commercial and industrial sectors as well as swimming pools, sports facilities and shower facilities in the public sector. Moisture can penetrate the building components and cause changes in the building's physics or chemistry, for example deterioration of the thermal insulation or mould growth. This can lead to the destruction of building components and to adverse health effects for the occupants.

To protect building components and structures from moisture and damp, the local requirements, guidelines, standards and laws must be observed.

Connection of composite seals to floor drains, shower channels and profiles

Floor drains, shower channels and profiles are penetrations of the surface sealing (composite waterproofing). Special attention is required here to ensure that these detail points remain permanently watertight. Planners must coordinate the plumber, screed layer and tiler trades. This includes realistically determining the water impact classes, selecting the appropriate materials and products for substrates, the composite seal and drains or channels. The construction work must then be carried out professionally.

Seal System – Tested composite seal



The Seal System project was launched to change the confusing and uncertain situation of connecting composite seals to floor drains and shower channels.

First the Seal System sealing tape was developed, followed by the Seal System sealing sleeve. They are the connecting elements between composite seal and drainage solution (channel/floor drain).

Very extensive combination tests were then carried out on composite sealing products with the TECEdrainline shower channels, the TECEdrainprofile shower profile and TECEdrainpoint S floor drains. The functional reliability (tightness) of the connection of the composite seal to the TECE drainage products was tested. The tests were carried out by the independent testing institute KIWA TBU in accordance with the testing principles (PG-AIV-F/-B) for composite seals applicable in Germany.

Numerous composite sealing products from renowned manufacturers have been successfully tested.

The tested safety can be recognised by the Seal System quality seal. "Seal System - Tested Composite Seal" thus stands for tightness of the connection between drainage solution and composite seal and for a test certificate that provides planners, applicators and end users with security and an overview.

The currently tested composite seal products are listed in the table on the following page.

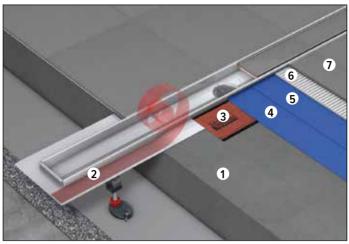
Seal System is available for the TECEdrainline shower channels, the TECEdrainprofile shower profile and the TECEdrainpoint S plastic drain range. You can find information on the components and structure of the other TECE products in the corresponding sections.

In the TECEdrainline shower channel, Seal System consists of the following components:

- TECEdrainline shower channel
- The factory-fitted Seal System sealing sleeve or the Seal System sealing tape
- One of the tested sealing products

Planning

Example of a Seal System seal of a TECEdrainline channel with a tested sealing product.



- 1 Screed
- 2 Channel flange protective film
- 3 Seal System sealing tape
- 4 First layer of composite seal
- 5 Second layer of composite seal
- 6 Tile adhesive
- 7 Tile cover

A test certificate is available for each composite sealing product that has passed the test (www.tece.com/en/drainage/seal-system).



Seal System test certificate (example)

The shower profiles, shower channels and floor drains are identified with the Seal System imprint on the sealing sleeves and the product packaging. Each of the products is accompanied by a brief explanation of Seal System and a list of all tested composite sealing products. This makes it easy for the installer on the construction site to select a safe and tested composite sealing product.

At www.tece.com/en/drainage/seal-system you can find all test certificates of the successfully tested composite sealing products and information on Seal System.

Drains

The technical requirements for drains for buildings are regulated in DIN EN 1253. The standard specifies, among other things, the minimum drain capacities, the sealing water heights of odour traps and the load-bearing capacity of grates.

Drain capacities and odour traps

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

Nominal value of the drain nozzle		Floor	drains
DN / OD	DN / ID	Drainage values	Water storage 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 the grate) - Minimum drainage values for drains

Odour traps are designed to prevent sewer gases from entering the building. DIN EN 1253 therefore requires odour traps to have a minimum sealing water height of 50 mm. In certain cases, an odour trap is not absolutely necessary in outdoor areas.

Compliance with the required drainage capacity and sealing water height entails certain design installation heights for the floor drains.

Often, the necessary floor installation heights are not available, as is the case with most renovations of old buildings. For these cases, TECE has flatter drains in its range. The project participants should make written agreements for its use beforehand.

Load-bearing capacity of grates

Drains, attachments and grates must be designed to withstand the expected loads (for example, including vehicular traffic). These classifications for installation inside buildings are described in DIN EN 1253-1.

Load class	Test load	Area/location of use
H 1.5	150 kg (1.5 kN)	Surfaces on which no load is expected.
К 3	300 kg (3 kN)	Surfaces without vehicle traffic, such as flats, commercial and some public buildings. Such as bathrooms in flats, hotels, retirement homes, schools, swimming pools, public washing and shower facilities, balconies, loggias, terraces and green roofs.
L 15	1.5 t (15 kN)	Surfaces with light vehicle traffic, such as in commercially used premises and public areas.

Load classes of gratings according to DIN EN 1253-1

It is the responsibility of the planner to select the appropriate class. If in doubt, always select the higher load class.

Barrier-free bathroom design

Demographic changes have led to an increased demand for barrier-free homes. A disability, an accident or increasing age - there are numerous reasons why people are restricted in their ability to move or are dependent on a wheelchair.

It is important for them that public buildings but especially their own four walls are equipped in such a way that they can move around in them without difficulty. "Barrier-free" is the technical term. This requires sufficiently wide doors, no thresholds, no steps, and a shower at ground level. The TECEdrainprofile makes life without bumps and steps possible in the shower area. The floor-level shower profile makes it easier to "enter" the shower area.

When planning a barrier-free sanitary room, the local requirements, guidelines, standards and laws must be observed.

Planning

Installation examples

TECEdrainline shower channels open up new design options in bathroom architecture – and bathroom planners can take advantage of this new freedom: The shower channels are usually installed directly on the wall or close to the wall, but the Drainline is also used as a transition from the wet to the dry area.

Installation "directly on the wall"



Installing the channel "directly on the wall" has the advantages that the channel blends in with the tiling in a more visually reserved way and requires less elaborate tiling. There is no need to insert narrow tile sections and hence joints between the wall and the shower channel, as is the case with "installation close to the wall". Compared to installation "in the room", you only require a one-sided gradient to the wall - the counter-gradient is not necessary.

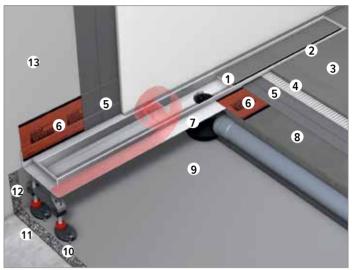
In order to enable an installation "directly on the wall", the TECEdrainline with wall upstand and the "Evo" with wall tile rail have been specially developed:



TECEdrainline-Evo with wall tile rail



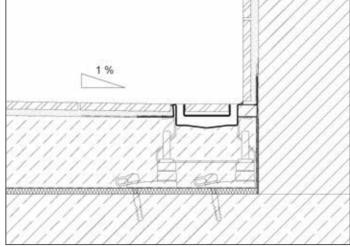
Straight TECEdrainline straight with wall upstand



Drainline installation with wall upstand "directly on the wall", layer structure

- 1. Shower channel/cover
- 2. Elastic grouting
- Tile covering
 Tile adhesive
- 5. Composite seal
- 6. Seal System sealing tape
- 7. Channel flange
- 8. Screed
- 9. PE film
- 10. Drainbase sound insulation mat
- 11. Unfinished floor
- 12. Edge insulation strip
- 13. Masonry

The 20 mm wide tile edge offers scope for a range of wall structures/wall tile thicknesses while at the same time offering a visually attractive tile finish. It also simplifies the installation of the Seal System sealing tape and the composite seal. Make sure that the wall tiles do not protrude beyond the edge of the channel to allow the grate to be taken in and out.



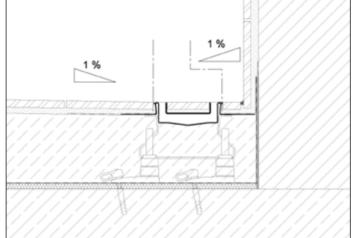
Installation "directly on the wall", gradient

Installation "close to wall"



Installation "close to wall"

When installing the TECEdrainline "close to the wall", a gap is created between the channel and the wall, which can be covered with narrow tile sections or mosaic tiles, for example.



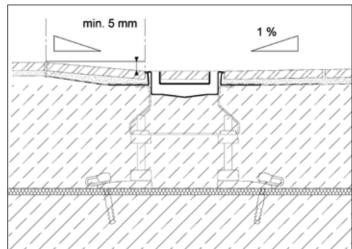
Installation "close to wall", gradient

Installation "in the room"



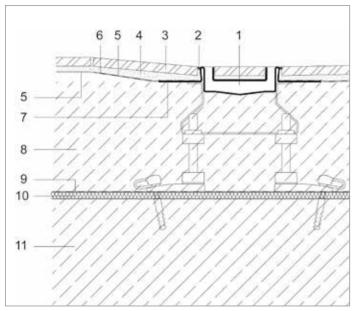
Installation "in the room"

When installing the TECEdrainline "in the room", in addition to the gradient of 1% in the wet area, a counter-gradient with a height difference of 5 mm on the other side of the channel must also be taken into account.



Installation "in the room", gradient

Planning



Installation "in the room", layer structure:

- 1. Shower channel/cover
- 2. Elastic grouting
- 3. Tile covering
- 4. Tile adhesive
- 5. Composite seal
- 6. Seal System sealing tape
- 7. Channel flange
- 8. Screed
- 9. PE film
- 10. Drainbase sound insulation mat
- 11. Unfinished floor



Installation "parallel"

Even when using two shower channels installed in parallel, in addition to the 1% gradient from the centre of the wet area to the channels, a counter-gradient with a minimum height difference of 5 mm "behind" each channel must also be taken into account.



Angled channel installation "in the room"

The Drainline angled channel can also be used as an alternative to the straight version. Achieving the required gradient is slightly more difficult than with the straight version: for example, the water in the wet area must be able to drain off equally to both sides of the channel. This means that a diagonal cut from the corner of the wall to the apex of the channel is required for larger tile formats - see illustration above. This is not necessary for small formats (mosaic). The highest point in the wet area is therefore in the corner of the wall. In addition, a counter-gradient with a minimum height of 5 mm must be provided in the dry area to prevent the water from overflowing.

For more information on installing shower channels, see the "Assembly Instructions" section or the assembly instructions in the product database at www. tece.com/en.

Sound insulation

The TECE range offers the pressure-resistant "Drainbase" sound insulation mat for sound insulation. Just 6 mm thick, the mat is installed throughout the shower area between the unfinished floor of the building shell and the screed. The shower channel, assembly feet, drain and sewer line therefore stand directly on the sound insulation mat covered with a PE film and are completely decoupled from the structural shell. It can be used for TECEdrainline, TECEdrainprofile as well as TECEdrainpoint S.

The Drainbase sound insulation mat meets the advanced requirements of DIN 4109 and VDI 4100 (sound insulation level III). According to DIN 4109, the requirements for the sound pressure level for living rooms and bedrooms caused by water installation are \leq 30 dB(A), the advanced requirements of DIN 4109 and VDI 4100 (SST III) even demand \leq 25 dB(A) and (\leq) 24 dB(A) respectively.

The sound insulation mat, which is manufactured from recycled rubber in a resource-friendly manner, achieves a sound pressure level of 22 dB(A) in combination with TECEdrainline and therefore lies even below the advanced sound insulation requirements. This value is confirmed by an official test report by Fraunhofer IBP.

The Drainbase sound insulation mat achieves a rated impact noise reduction of $\Delta Lw=20$ dB(A) (with 50 mm screed).

Unlike conventional sound-proofing methods that are several centimetres thick, the TECE Drainbase sound insulation mat is just 6 mm "thin" and practically does not give way under load. Even with a pressure of 15 t/m², the compression is just 0.6 mm. This means that the high sound insulation requirements can be met with Drainbase even with low floor construction heights.



Drainbase sound insulation mat

Drainbase technical data:

Material Recycled rubber granulate bound with

PU elastomer

Colour Black/coloured

Surface Smooth with granulate structure

Width x length 1,250 mm x 1,250 mm or

1,250 mm x 8 m (roll)

Thickness 6 mm

Tensile strength Approx. 0.4 N/mm² Elongation at break Approx. 50% Temperature resistance - 30°C to + 80°C

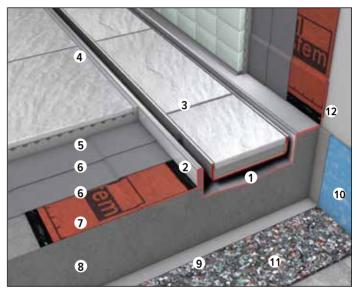
Fire behaviour B2

Compression 0.6 mm at 15 t/m^2

Assessed Impact noise reduction: $\Delta Lw=20$ dB(A) (with 50

mm screed)

Installation example with sound insulation mat



1. "Plate" tileable channel

Channel body
 Tile cover

4. Elastic grouting

5. Tile adhesive6. Composite seal

7. Seal System sealing tape

8. Screed 9. PE film

10. Edge insulation strip

11. Drainbase sound insulation mat

12. Flange insulation strip (factory-made)

If you wish to achieve even higher sound insulation values, you can additionally combine the Drainbase sound insulation mat with a thin mineral fibre impact sound insulation. To do this, the TECEdrainline shower channel is installed with the assembly feet on the Drainbase sound insulation mat (according to the assembly instructions). The mineral fibre impact sound insulation is then additionally laid over this and covered with a PE film and then the screed is applied.

This enables installation sound levels $L_{\rm ln}$ of 12 dB(A) to be achieved when the channel is installed in the room and 16 dB(A) when the channel is installed on the wall. A weighted impact noise reduction ΔLw of 34 or 33 dB(A) is achieved. These values have been confirmed by sound insulation tests carried out by Fraunhofer IBP. The test certificates of the sound insulation tests can be found at www.tece.com/en in the Service section.

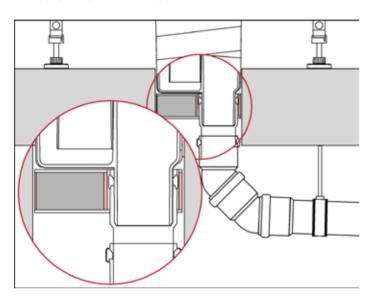
Planning

Fire protection

FireStop fire protection set for vertical drainage.

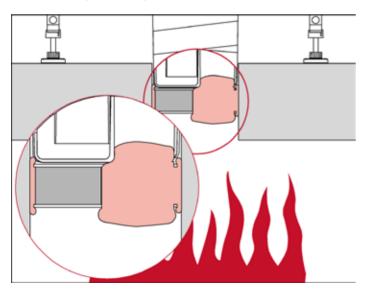
With the TECEdrainline FireStop fire protection set EI 120 DN 50 TECE offers a safe and innovative fire protection solution up to fire resistance class EI 120 in accordance with DIN EN 13501-2:2007 and A1:2009.

Inside the fire protection sleeve are special plasterboard panels enriched with additives. Adhesive strips of intumescent material based on expanded graphite are applied in the outer and nozzle areas.



When temperatures rise in the event of a fire, this material foams up many times its original shape.

In the outer area of the fire protection sleeve, this closes the remaining annular gap to the core drill hole.



In the nozzle area, the drain nozzle including the attached HT pipe socket is crushed.

The sealing water (siphon) in the drain ensures that no

flue gas escapes in the room that is to be protected. This creates a tested, highly fire-resistant pipe closure system (or firewall).

The usual mortaring/filling of the residual hole is not necessary with the TECE fire protection set.

Proof of suitability of the TECE FireStop fire protection set comes with a European Technical Approval (ETA-11/0437).

TECEdrainline - the advantages

The TECEdrainline range offers various advantages such as the free combinability of the products due to the modular system, channels and drains for a wide range of requirements, the Seal System tested sealing system, solutions for sound and fire protection and particularly good hygiene and cleaning properties.

The TECEdrainline Modular System

The TECEdrainline range is a modular system consisting of numerous covers, channel bodies and drains. These can be freely combined as desired. There are five different drains for different requirements and construction situations: e.g. drains with a particularly low installation height for the renovation of old buildings, or drains with a very high drainage capacity for power showers. Solutions for fire and sound protection are also part of the programme. Accessories such as assembly feet, membrane odour traps or hair traps are optionally available. TECEdrainline grates are available in nominal lengths of 700, 800, 900, 1000, 1200 and 1500 mm and also as angled channels (900 to 1200 mm).



Channels

The TECEdrainline range includes a wide range of channel body types. The straight version with and without wall upstand (especially for installation on the wall), the 90° angled channel, the version with factory-fitted sealing sleeve, a straight version especially for natural stone coverings and the Evo shower channel with factory-fitted sealing sleeve.



TECEdrainline, with and without wall upstand



TECEdrainline with factory fitted sealing sleeve



TECEdrainline for natural stone



TECEdrainline-Evo, with and without wall tile rail

TECEdrainline - the advantages

Covers

Eight design covers with different surfaces (stainless steel and glass) and two tileable trays are available. The TECEdrainline design grates are available in stainless steel with a polished or brushed surface. In addition, visually appealing glass covers are also available in three colours. The glass covers are attached to stainless steel supports.

The stainless steel covers are available in straight and angled versions (only basic, steel II and plate) to match the channel lengths and can withstand loads of up to 300 kg according to load class K3.

The photos show some examples of the channel covers:



"quadratum" design grate



"Steel II" design cover





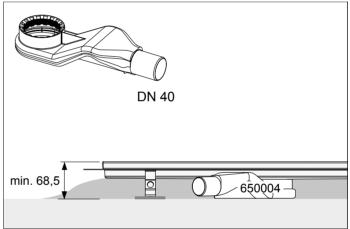
"Plate" tileable channel

Drains

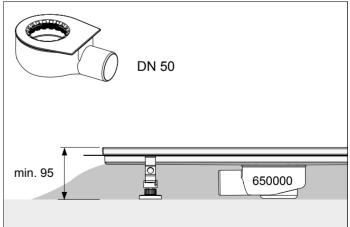
Horizontal

The TECE modular system comprises several horizontal plastic drains for a wide range of requirements. It offers drains for particularly low floor constructions (renovation of old buildings), as well as drains with particularly high performance for modern power showers.

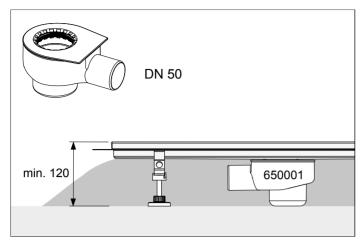
The lowest installation height of the drains is 68.5 mm (to upper edge of finished floor). This super flat drain has a drainage capacity of 0.6 l/s. This makes it sufficient for average shower heads (flow rate 10-15 l/min). For power showers that require a particularly high drainage capacity, TECE offers the "Max" drain with a drainage capacity of 1.4 l/s. The minimum installation height is 148 mm. The "flat" drain has a minimum installation height of 95 mm and has a drainage capacity of 0.8 l/s, the installation height of the "standard" drain is min. 120 mm and the drainage capacity is 0.8 l/s.



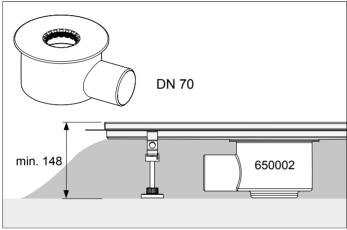
"Super flat" drain



"Flat" drain



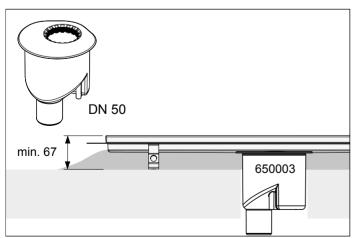
"Standard" drain



"Max" drain

Vertical

In addition to the horizontal drains, there is also a vertical drain. This is integrated into the unfinished floor with a 130 mm core drill hole. Here, the minimum installation height is just 67 mm (up to upper edge of finished floor). It has a drainage capacity of 1.3 l/s and can be supplemented with a fire protection element (class El 120).



"Vertical" drain

Seal System – Tested composite seal

The special sealing concept employed with the TECEdrainline shower channel ensures reliable and easy installation. The use of the supplied Seal System sealing tape or the factory-fitted sealing sleeve enables a permanently tight and secure connection of the shower channel to the composite seal.

This has been successfully tested by an independent testing institute. More information on Seal System can be found in the "Planning: Seal System - Tested composite seal" section or at www.tece.com/en/drainage/seal-system

Sound insulation and fire protection

Using the Drainbase sound insulation mat allows you to meet the increased sound insulation requirements of DIN 4109 and also sound insulation levels I-III of VDI 4100. The sound insulation mat is just 6 mm thick and extremely low in compression. Independent tests have been carried out by the Fraunhofer Institute. More information on sound insulation can be found in the "Planning: sound insulation" section.

The TECEdrainline FireStop El 120 fire protection set allows for highly fire-resistant partitioning of ceiling bushings for up to 120 minutes. This means that with the TECEdrainline shower channel, the vertical drain with wastewater discharge directly through the storey ceiling can be implemented easily and safely even with fire protection requirements. The fire protection sleeve is classified and approved according to DIN EN 13501 (European Technical Approval ETA-11/0437). More information can be found under "Planning: fire protection".

TECEdrainline - the advantages

Hygiene

The channel body of the TECEdrainline is made of stainless steel, without gaps, screws and inaccessible edges. This means that no hair, soap residues or other dirt can settle inside the channel. It is therefore particularly hygienic and easy to clean. The inside of the channel is simply cleaned with a cleaning cloth. The dip rod can simply be removed for cleaning purposes. The "self-cleaning" drain can be rinsed out with the shower head. As the Drainline is made of stainless steel - material 1.4301 (304) - do not use any cleaning agents that may attack this material.



Remove the cover with the extraction tool



Clean the channel body - do not use aggressive cleaning agents

In an emergency, if the drain pipe is blocked, access is possible with a small hand spiral. A marking on the inside of the drain shows the location of the drain nozzle for this purpose.



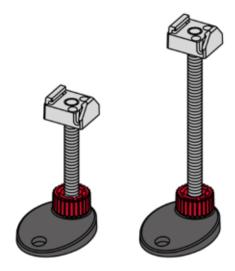
Remove the dip tube for cleaning purposes



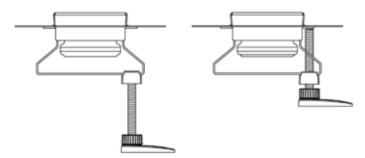
Clean the drain pipe with a small hand spiral

Simple height adjustment

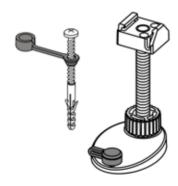
The assembly feet simplify the installation of the TECEd-rainline. With just one screw per foot, the Drainline adjusts easily and quickly to the required floor level. Another advantage is the clip mechanism. The feet are simply clipped onto the two brackets of the channel and the channel can be aligned! A sound-proofing element is also included in the scope of delivery of the foot. This is inserted between the foot and the mounting screw and, in conjunction with the Drainbase sound insulation mat, prevents a sound bridge between the floor and the assembly foot.



Assembly foot - normal and long version



Height-adjustable assembly feet



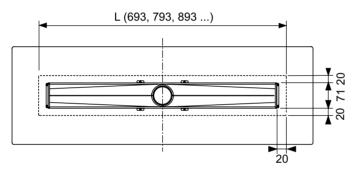
Sound-proofing element on the assembly foot

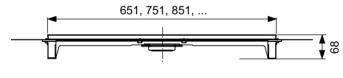
Range and technical data

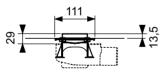
Evo shower channel

TECEdrainline-Evo channel, straight with Seal System* sealing sleeve









Straight stainless steel channel body, including factory-fitted Seal System sealing sleeve with construction time protection for installation in the screed, for a DIN 18534-compliant connection of the TECEdrainline shower channel to the composite seal.

Consisting of:

- Fully enclosed channel body made of polished stainless steel, material 1.4301 (304)
- Capillary protection edge to prevent capillary shower water entering under the tiles
- Anti-backflow secondary drainage via glass fibre reinforced plastic hard shell
- Factory fitted Seal System sealing sleeve for on-site installation in the liquid or strip composite seal
- · Construction time protection with seal of originality for

- stainless steel channel and Seal System sealing sleeve
- Mounting for optional assembly feet and for anchoring in the screed
- · Central channel nozzle to connect the drain
- Internal gradient for improved water drainage and self-cleaning effect
- · Dip pipe sealing
- · Optional secondary drainage

Installation height to upper edge of finished floor (depending on drain):

- 68 mm "vertical" drain
- 70 mm "super flat" drain
- 96 mm "flat" drain
- 121 mm "standard" drain
- 149 mm "max" drain

Please order separately: Design grate or tileable channel, drain, assembly feet (optional) and Drainbase sound insulation mat (optional), to comply with installation noise level according to DIN 4109 and VDI 4100 sound insulation levels (SSt) I to III.

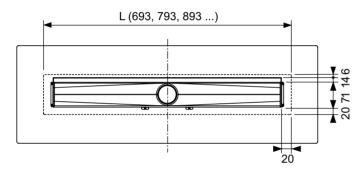
Item number	Nominal length	Total length L	Visible dimension after installation
600702	700 mm	693 mm	651 mm
600802	800 mm	793 mm	751 mm
600902	900 mm	893 mm	851 mm
601002	1000 mm	993 mm	951 mm
601202	1200 mm	1193 mm	1151 mm

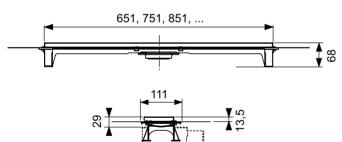
TECEdrainline-Evo channel range

Evo shower channel with wall tile rail

TECEdrainline-Evo channel with wall tile rail, straight with Seal System* sealing sleeve







Straight stainless steel channel body, including factory-fitted Seal System sealing sleeve with construction time protection for installation on the wall in the screed, for implementing a DIN 18534-compliant connection of the TECEdrainline shower channel to the composite seal.

Consisting of:

- Fully enclosed channel body made of polished stainless steel, material 1.4301 (304) with wall tile rail surface
- Capillary protection edge to prevent capillary shower water entering under the tiles
- Anti-backflow secondary drainage via glass fibre reinforced plastic hard shell
- Factory fitted Seal System sealing sleeve for on-site installation in the liquid or strip composite seal
- Construction time protection with seal of originality for stainless steel channel and Seal System sealing sleeve
- · Mounting for optional assembly feet and for anchoring in

the screed

- Central channel nozzle to connect the drain
- Internal gradient for improved water drainage and self-cleaning effect
- · Dip pipe sealing
- · Optional secondary drainage

Installation height to upper edge of finished floor (depending on drain):

- 68 mm "vertical" drain
- 70 mm "super flat" drain
- 96 mm "flat" drain
- 121 mm "standard" drain

Caution: Cannot be combined with the "max" drain.

Please order separately: Design grate or tileable channel, drain, assembly feet (optional) and Drainbase sound insulation mat (optional), to comply with installation noise level according to DIN 4109 and VDI 4100 sound insulation levels (SSt) I to III.

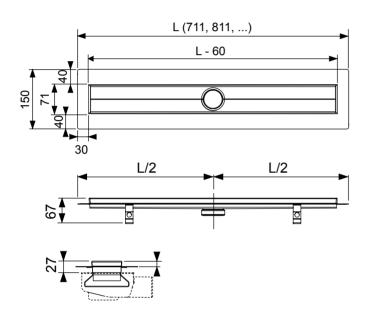
Item number	Nominal length	Total length L	Visible dimension after installation
600703	700 mm	693 mm	651 mm
600803	800 mm	793 mm	751 mm
600903	900 mm	893 mm	851 mm
601003	1000 mm	993 mm	951 mm
601203	1200 mm	1193 mm	1151 mm

TECEdrainline-Evo channel range with wall tile rail

Shower channel with sealing tape

TECEdrainline channel, straight with Seal System* sealing tape





Straight channel body for installation in screed, with flange and Seal System* sealing tape, for creating an independently tested connection of the TECEdrainline channel to the composite seal.

Consisting of:

- Channel body with flange made of polished stainless steel, material 1.4301 (304)
- Seal System* sealing tape with fleece lamination for on-site installation in the liquid or strip composite seal
- Connecting clip for anchoring in screed and fitting of optional assembly feet
- With central connection nozzle for drain
- With internal 3D gradient for improved water drainage and self-cleaning effect
- Seal

Installation height to upper edge of finished floor (depending on drain):

- 67 mm "vertical" drain
- 68.5 mm "super flat" drain
- 95 mm "flat" drain
- 120 mm "standard" drain
- 148 mm "max" drain

Please order separately: Design grate or tileable channel, drain, assembly feet (optional) and Drainbase sound insulation mat (optional), to comply with installation noise level according to DIN 4109 and VDI 4100 sound insulation levels (SSt) I to III.

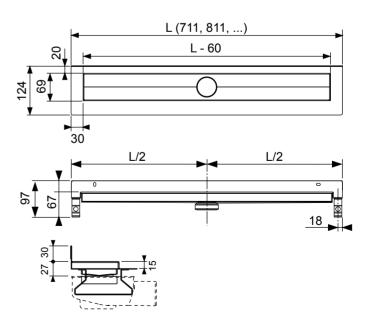
Item number	Nominal length	Total length L	Visible dimension after installation L - 60
600700	700 mm	711 mm	651 mm
600800	800 mm	811 mm	751 mm
600900	900 mm	911 mm	851 mm
601000	1000 mm	1011 mm	951 mm
601200	1200 mm	1211 mm	1151 mm
601500	1500 mm	1511 mm	1451 mm

TECEdrainline channel range, straight

Shower channel with wall upstand and sealing tape

TECEdrainline channel, straight with wall upstand and Seal System* sealing tape





Straight channel body with wall upstand for installation in the screed against the wall, with flange and Seal System* sealing tape, to create an independently tested connection of the TECEdrainline channel to the composite seal.

Consisting of:

- Channel body with flange made of polished stainless steel, material 1.4301 (304)
- Seal System* sealing tape with fleece lamination for on-site installation in the liquid or strip composite seal
- Connecting clip for anchoring in screed and fitting of optional assembly feet
- With central connection nozzle for drain
- With internal 3D gradient for improved water drainage and self-cleaning effect
- Seal

.

Installation height to upper edge of finished floor (depending on drain):

- 67 mm "vertical" drain
- 68.5 mm "super flat" drain
- 95 mm "flat" drain
- 120 mm "standard" drain
- 148 mm "max" drain

Caution: Not compatible with the "max" drain.

Please order separately: Design grate or tileable channel, drain, assembly feet (optional) and Drainbase sound insulation mat (optional), to comply with installation noise level according to DIN 4109 and VDI 4100 sound insulation levels (SSt) I to III.

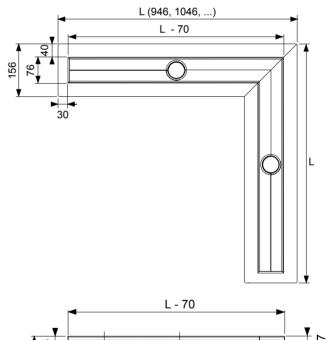
Item number	Nominal length Total length L		Visible dimension after installation L - 60
600701	700 mm	711 mm	651 mm
600801	800 mm	811 mm	751 mm
600901	900 mm	911 mm	851 mm
601001	1000 mm	1011 mm	951 mm
601201	1200 mm	1211 mm	1151 mm
601501	1500 mm	1511 mm	1451 mm

TECEdrainline channel range, straight with wall upstand

Angled channel with sealing tape

TECEdrainline angled channel with Seal System* sealing tape







Channel body with 90° angled version for installation in the screed, with flange and Seal System* sealing tape to create an independently tested connection of the TECEdrainline channel to the composite seal.

Consisting of:

- Channel body with flange made of polished stainless steel, material 1.4301 (304)
- Seal System* sealing tape with fleece lamination for on-site installation in the liquid or strip composite seal
- Connecting clip for anchoring in screed and fitting of optional assembly feet

Range and technical data

- · With two connection nozzles for drain
- With internal 3D gradient for improved water drainage and self-cleaning effect
- Seals

Installation height to upper edge of finished floor (depending on drain):

- 67 mm "vertical" drain
- 68.5 mm "super flat" drain
- 95 mm "flat" drain
- 120 mm "standard" drain
- 148 mm "max" drain

Please order separately: Design grate or tileable channel, 2 drains, 2 sets of assembly feet (optional), Drainbase sound insulation mat (optional), to comply with installation noise level according to DIN 4109 and VDI 4100 sound insulation levels (SSt) I to III.

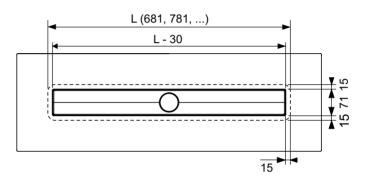
Item number	Nominal length	Total length L	Visible dimension after installation L - 70 mm
610900	900 x 900 mm	944 x 944 mm	874 x 874 mm
611000	1000 x 1000 mm	1044 x 1044 mm	974 x 974 mm
611200	1200 x 1200 mm	1244 x 1244 mm	1174 x 1174 mm

TECEdrainline angled channel range

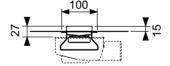
Shower channel with fitted sealing sleeve

TECEdrainline channel, straight with factory fitted Seal System* sealing sleeve









Straight channel body for installation in screed, with flange and factory fitted Seal System sealing sleeve, to create a DIN 18534 compliant connection of the TECEdrainline shower channel to the composite seal.

Consisting of:

- Channel body with flange made of polished stainless steel, material 1.4301 (304)
- Factory fitted Seal System sealing sleeve for on-site installation in the liquid or strip composite seal
- Connecting clip for anchoring in screed and fitting of optional assembly feet
- With central connection nozzle for drain
- With internal 3D gradient for improved water drainage and self-cleaning effect
- Seal

Installation height to upper edge of finished floor (depending on drain):

• 67 mm "vertical" drain

- 68.5 mm "super flat" drain
- 95 mm "flat" drain
- 120 mm "standard" drain
- 148 mm "max" drain

Please order separately: Design grate or tileable channel, drain, assembly feet (optional) and Drainbase sound insulation mat (optional), to comply with installation noise level according to DIN 4109 and VDI 4100 sound insulation levels (SSt) I to III.

Item number	Nominal length	Total length L	Visible dimension after installation L - 60
600704	700 mm	711 mm	651 mm
600804	800 mm	811 mm	751 mm
600904	900 mm	911 mm	851 mm
601004	1000 mm	1011 mm	951 mm
601204	1200 mm	1211 mm	1151 mm
601504	1500 mm	1511 mm	1451 mm

TECEdrainline channel range with attached sealing sleeve

Shower channel for natural stone

TECEdrainline channel for natural stone, straight, with Seal System* sealing tape and stainless steel support as a set

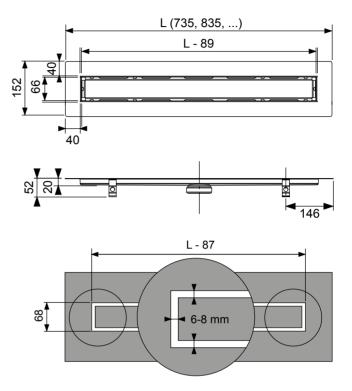


Straight channel body and support sheet for TECEdrainline shower channel, for installation in the screed and onsite laying of large tiles/natural stone slabs, with flange and Seal System* sealing tape, to create a tested connection of the TECEdrainline channel to the composite seal.

Consisting of:

- Channel body with flange made of polished stainless steel, material 1.4301 (304)
- Seal System* sealing tape with fleece lamination for on-site installation in the liquid or strip composite seal
- Connecting clip for anchoring in screed and fitting of optional assembly feet
- With central connection nozzle for drain
- With internal 3D gradient for improved water drainage and self-cleaning effect
- Support sheet made of stainless steel material 1.4301
 (304) for insertion in the channel body
- Seal

Covering cut-out length x width: (L - 87 mm) x 68 mm Width of the surrounding drain opening: 6 to 8 mm (see illustration below).



Please order separately:

Drain, assembly feet (optional) and Drainbase sound insulation mat (optional), to comply with installation noise level according to DIN 4109 and VDI 4100 sound insulation levels (SSt) I to III.

Caution: "Design grate" "steel II" possible as custom-made grate (see dimension sheet for natural stone custom channel); all other design covers (tileable channel, glass covers, design grates) are unsuitable!

Item number	Nominal length	Total length L	Support sheet length* L - 89
650700	700 mm	735 mm	646 mm
650800	800 mm	835 mm	746 mm
650900	900 mm	935 mm	846 mm
651000	1000 mm	1035 mm	946 mm
651200	1200 mm	1235 mm	1146 mm
651500	1500 mm	1535 mm	1446 mm

 $^{^*}$ Covering cut-out length = L - 87

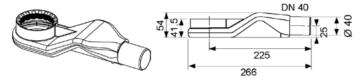
TECEdrainline channel range for natural stone

Range and technical data

Drains

"Super flat" drain

"Super flat" TECEdrainline drain, DN 40 side drain, 0.6 l/s*



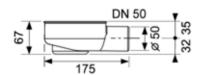
Very flat drain for TECEdrainline shower channel for rotatable installation on the channel body, for lateral connection to DN 40 wastewater pipe, with removable siphon dip pipe.

- Installation height from bottom edge of drain to upper edge of shower channel = 68.5 mm
- Drainage capacity of the shower channel with "basic" design grate
 - = 0.6 l/s)
- Reduced sealing water height = 30 mm Item no. 650004

"Flat" drain

"Flat" TECEdrainline drain, DN 50 side drain, 0.8 l/s*





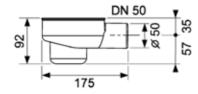
Very flat drain for TECEdrainline shower channel for rotatable installation on the channel body, for lateral connection to DN 50 wastewater pipe, with removable siphon dip pipe.

- Installation height from bottom edge of drain to upper edge of shower channel = 95 mm
- Drainage capacity of the shower channel with design grate "basic"
 - = 0.8 I/s
- Reduced sealing water height = 25 mm ltem no. 650000

"Standard" drain

"Standard" TECEdrainline drain, DN 50 side drain, 0.8 l/s*





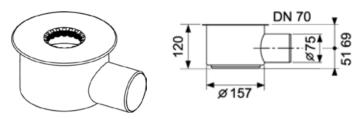
"Standard" drain for TECEdrainline shower channel for rotatable installation on the channel body, for lateral connection to DN 50 wastewater pipe, with removable siphon dip pipe.

- Installation height from bottom edge of drain to upper edge of shower channel = 120 mm
- Drainage capacity of the shower channel with design grate "basic"
 - = 0.9 l/s
- Sealing water height = 50 mm in accordance with DIN FN 1253

Item no. 650001

"Max" drain

"Max" TECEdrainline drain, DN 70 side drain, 1.2 l/s*



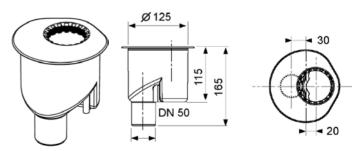
Large drain for TECEdrainline shower channel for rotatable installation on the channel body, for lateral connection to DN 70 wastewater pipe, with removable siphon dip pipe.

- Installation height from bottom edge of drain to upper edge of shower channel = 148 mm
- Drainage capacity of the shower channel with design grate "basic"
 - = 1.4 l/s
- Sealing water height = 60 mm in accordance with DIN EN 1253 > 50 mm

Item no. 650002

"Vertical" drain

"Vertical" TECEdrainline drain, DN 50, 1.2 l/s*



Standard drain for TECEdrainline shower channel for rotatable installation on the channel body, for lateral connection to DN 50 wastewater pipe, with removable siphon dip pipe.

^{*} Drainage capacity with "plate II" tileable channel

- Minimum installation height from upper edge of channel to lower edge of stirrup = 65 mm.
- Drainage capacity of the shower channel with design grate "basic"
 - = 1.3 l/s
- Sealing water height = 50 mm in accordance with DIN EN 1253
- Core drilling required = 130 mm Item no. 650003

Drainage capacity

The TECEdrainline drain range includes five drains for different requirements and structural features. The models match all the shower channels in the TECEdrainline range.

Drainage capacity of TECEdrainline floor drains in combination with various covers according to DIN EN 1253-1:

Design grate	Super flat drain 650004 (PP)	Flat drain 650000 (PP)	Standard drain 650001 (PP)	Max drain 650002 (PP)	Vert. drain 650003 (PP)
"basic"	0.5	0.8	0.8	1.2	1.3
600710/1	0.6	0.8	0.9	1.4	1.3
"lines"	0.4	0.7	0.7	1.3	1.2
600720/1	0.6	0.8	0.8	1.4	1.3
"drops"	0.5	0.8	0.8	1.3	1.2
600730/1	0.6	0.8	0.8	1.4	1.3
"royal"	0.6	0.8	0.8	1.3	1.1
600740/1	0.6	0.8	0.8	1.4	1.3
"quadratum"	0.6	0.7	0.8	1.3	1.1
600750/1	0.6	0.8	0.8	1.4	1.3
"organic"	0.5	0.6	0.8	1.3	1.0
600760/1	0.6	0.8	0.8	1.4	1.3
"Steel II"	0.5	0.7	0.7	1.2	1.3
600782/3	0.6	0.8	0.8	1.3	1.3
"plate", tiled	0.5	0.7	0.7	1.1	1.2
600770	0.6	0.8	0.8	1.2	1.2

Drainage capacity of TECEdrainline floor drains according to DIN EN 1253-1 in I/s at 10 mm (upper value) and 20 mm (lower value) installation height above the grate.

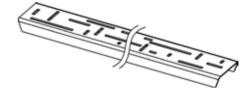
Design covers, straight

Design grate for TECEdrainline shower channel made of polished or brushed stainless steel for insertion into the channel body, load class K3 – test load 300 kg. Various designs available.

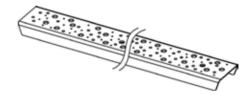
The "quadratum" version in the brushed variant has also been proven to be suitable for public barefoot areas. The grate has achieved the highest slip resistance class C according to DIN 51097.



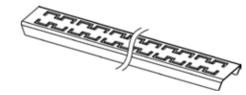
Design grate - "basic" version



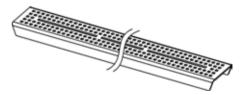
Design grate - "lines" version



Design grate - "drops" version



Design grate - "royal" version

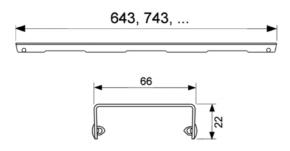


Design grate - "quadratum" version



Design grate - "organic" version

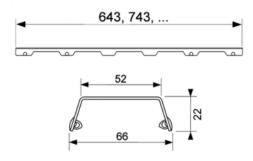
Range and technical data



Design grate dimensions



Design grate - "steel II" version



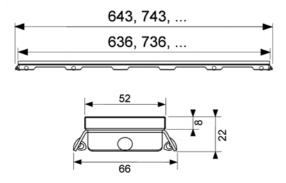
"Steel II" design grate dimensions

Glass cover, straight

Design grate for TECEdrainline shower channel, made of stainless steel with a glass surface, for insertion into the straight channel body. Maximum test load 300 kg based on load class K3, three different colour designs (white, green, black).



Glass cover



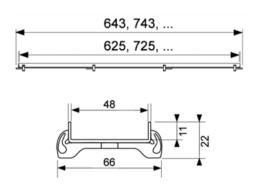
Glass cover dimensions

Tileable channel, straight

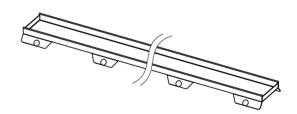
Tileable channel for TECEdrainline shower channel, for insertion into the channel body, made of stainless steel with polished visible edges. Maximum test load 300 kg based on load class K3. For gluing in tiles on site with elastic adhesive, e.g. silicone or epoxy resin adhesive; Caution: Check the adhesive to ensure tile compatibility! Design version = "plate" and "plate II".



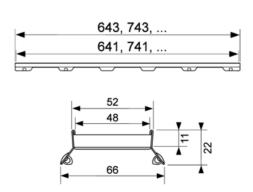
"Plate" tileable channel



"Plate" tileable channel dimensions



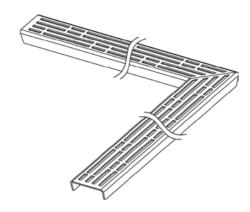
"Plate II" tileable channel



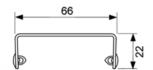
"Plate II" tileable channel dimensions

Design covers for angled channel

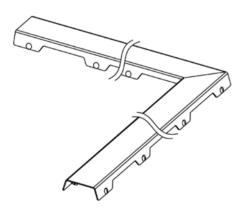
Design grate for TECEdrainline angled channel made of polished stainless steel for insertion into the channel body, load class K3 – test load 300 kg, two-part. "Basic" and "steel II" design versions:



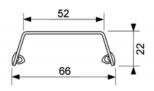
Design grate - "basic" version



"Basic" design grate dimensions



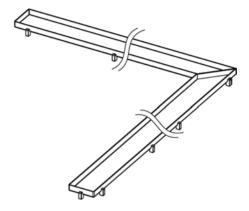
Design grate - "steel II" version



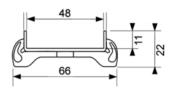
"Steel II" design grate dimensions

Tileable channel for angled channel

Tileable channel -two-part- for TECEdrainline shower channel, for insertion into the channel body, made of stainless steel with polished visible edges. Maximum test load 300 kg based on load class K3. For gluing in tiles on site with elastic adhesive, e.g. silicone or epoxy resin adhesive; Caution: Check the adhesive to ensure tile compatibility! Design version = "plate":



"Plate" tileable channel



Tileable channel dimensions

Range and technical data

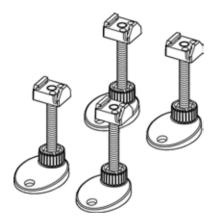
Assembly feet

Assembly feet, for attachment to the TECEdrainline shower TECEdrainline fire protection set FireStop El 120 DN 50 channel body, to make it easy to adjust the height of the channel body and fix the position during shell installation. Adjustment range, lower edge of the foot to the upper edge of the finished floor:

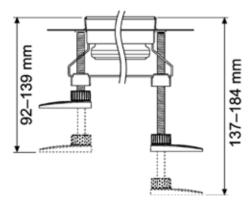
- 92-139 mm (for "super flat", "flat" and "standard" drains)
- 137- 184 mm (for "max" drain)

Consisting of:

- · Four assembly feet incl. sound-proofing elements
- · Mounting materials Item number 660003 (92-139 mm) Item number 660003 (137-184 mm)



Assembly feet

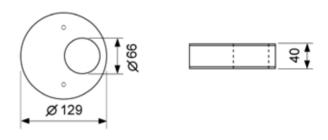


Adjustment range of assembly feet: 6 600 03 (left) and 6 600 04 (right)

Fire protection set



Fire protection set



Fire protection set dimensions

Fire protection set for direct installation on the TECEdrainline DN 50 drain vertically for highly fire resistant partitioning of ceiling bushings in solid ceilings up to 120 min. Classification in accordance with DIN EN 13501 for fire protection class El 120.

- · Set consists of: Fire protection sleeve, 2 Phillips screws, identification plate, 150 mm DN 50 PP-HT - pipe according to DIN EN 1451
- Required core drill hole: Ø 130 mm (Ø min = 129 mm, Ø max = 133 mm)
- Application area: Solid ceilings from 150 mm to 325 mm ceiling thickness
- · No grouting or filling of the gap necessary
- Compatible with all TECEdrainline channels and covers
- European technical approval (ETA-11/0437) Item no. 660006

Hair trap

TECEdrainline hair trap



Hair trap

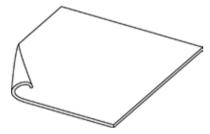
For insertion on the immersion pipe in the TECEdrainline channel body, stainless steel material.

Take out the hair trap at regular intervals and remove the hair.

Item no. 660005

Sound insulation mat

Drainbase sound insulation mat for TECEdrainline, TECEdrainprofile and TECEdrainpoint S



Drainbase sound insulation mat

Sound insulation mat for assembly under floating screed in the area of floor-level showers or throughout the bath-room. To reduce installation noise and impact sound improvement for renovation and new construction.

Installation noise level with normal shower setting: 22 dB(A) with TECEdrainline. Made from recycled high-tensile rubber granules bound with PUR elastomer.

Meets the sound insulation requirements in accordance with DIN 4109 and the higher sound insulation requirements in accordance with VDI 4100 (Fraunhofer IBP assessment on request)

- Delivery form: 1.25 m x 1.25 m x 6 mm and 8.0 m x 1.25 m x 6 mm (roll, approx. 50 kg)
- Assessed Impact noise reduction: $\Delta L_{\rm w}$ = 20 dB(A) (with 50 mm screed)
- Fire class: B2 (DIN 4102)
- Thermal resistance: 0,05 (m²·K)/W
 Compression at 15 t/m²: 0.6 mm

Item number 660001 or 660002

Membrane odour trap

Plastic immersion pipe with inner sealing lip membrane as



protection against evaporation, barrier against odour and vermin (two-stage trap effect through sealing water and sealing lip membrane)

Item number 660015 (for "super flat" drain)
Item number 660016 (for "flat" drain)
Item number 660017 (for "max" and "vertical" drains)
Item number 660018 (for "standard" drain)

Seal System sealing tape



Self-adhesive butyl sealing tape with fleece lamination for sealing TECEdrainline shower channels. For direct adhesion on site on the stainless steel flange of the shower channel. With fleece lamination for installation in the liquid or strip composite seal.

Not necessary with factory-fitted sealing sleeves!

Width: 100 mm, roll length: 3.9m

Item no. 660019

Information on Seal System can be found at the start of this section under "Planning" and online at www.tece.com/en/drainage/seal-system

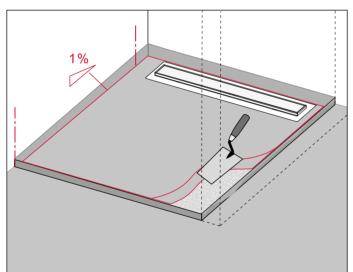
Assembly instructions

Note: This section provides assembly instructions for the essential points of shower channel installation. The notes are thus explained sections from the overall assembly procedure. The entire installation procedure is shown in the assembly instructions for the Drainline items.

The installation of the various TECE shower channels is shown here with a horizontal drain. The special features when using the vertical or super flat drain can be found in the assembly instructions for these drains.

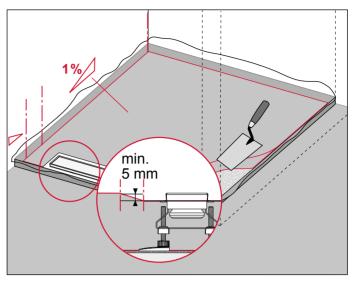
Channel position and gradient design

The correct gradient design in relation to the position of the shower channel is decisive for the smooth drainage of water in shower areas. The gradient in the shower area should be at least 1% towards the shower channel.



Gradient design for "near-wall installation" of the channel

If the channel separates the shower area from the dry area of the room, it must also be ensured that a steep counter-gradient with a height difference of at least 5 mm to the channel is implemented on the room side. This prevents the water from overflowing into the dry area.

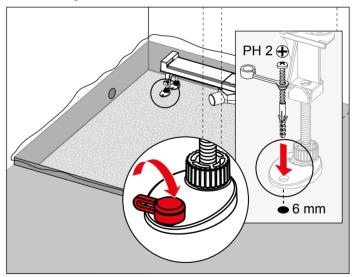


Gradient design when installing the channel in the room

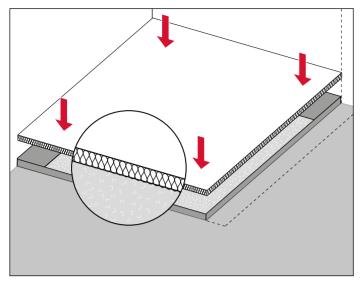
Further details on the gradient design can be found in the assembly instructions for the TECEdrainline shower channels. The recommended gradient design is shown there.

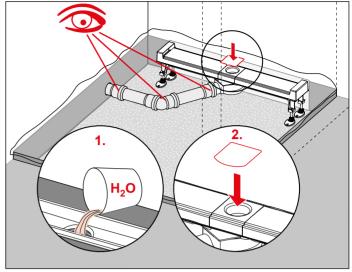
Installation of the shower channels in the screed

The shower channel is positioned on the Drainbase sound insulation mat. The assembly feet are screwed to the substrate through the Drainbase.

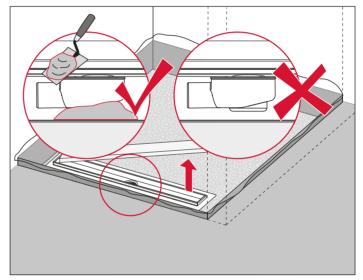


If, however, the channel is to be laid floating, the drain is positioned on a conventional sound insulation. In this case, the assembly feet must not be screwed onto the substrate.

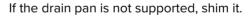


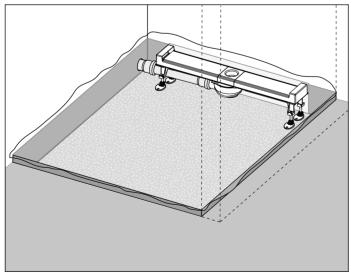


During the subsequent leak test, a visual inspection of the drain and drain pipe is carried out.



The drain pipe is installed. With the Evo shower channel, it can also be laid below the shower channel, as shown in the illustration below.





After connecting the drain pipe, the dip pipe is pushed in as far as it will go (remove the building protection or sticker beforehand).

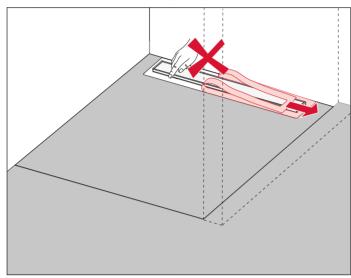
There must not be any cavities between the screed and the channel or drain!

Sealing

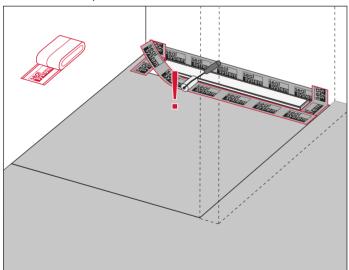
Sealing is carried out – depending on the channel type – either via a sealing tape or using the factory-fitted sealing sleeve.

Assembly with Seal System sealing tape

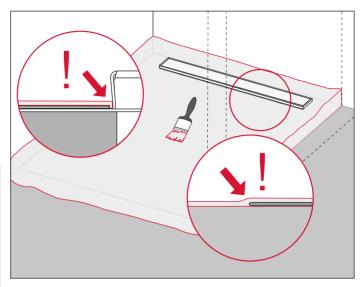
Remove the protective film from the channel flange completely, do not touch the flange any more.



Cut the Seal System sealing tape to length, remove the protective film and stick it onto the channel flange and (clean) screed with the overlap shown – free of folds and bubbles – and press it on with a roller.

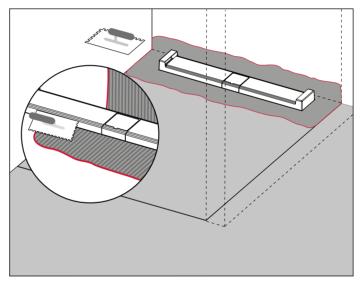


Apply the composite seal according to the assembly instructions and the manufacturer's instructions. The Seal System sealing tape must be fully integrated into the sealing.

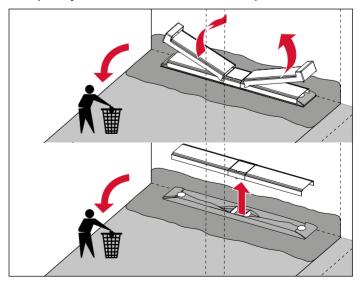


Sealing with factory-fitted Seal System sealing sleeve

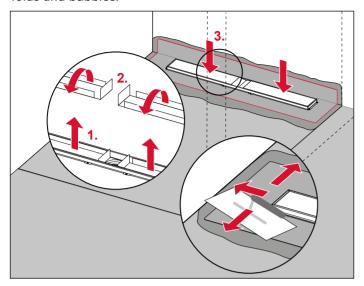
XXX



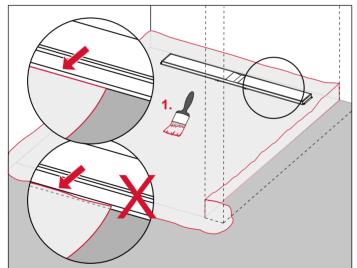
Completely remove the construction time protection.



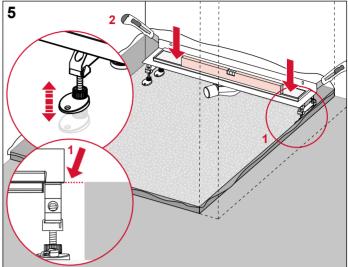
Work the sealing sleeve into the adhesive bed – free of folds and bubbles.



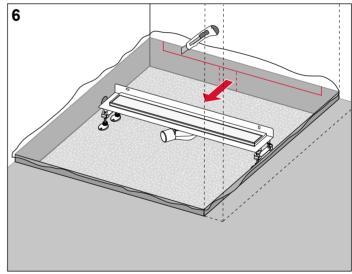
Apply the composite seal according to the assembly instructions and the manufacturer's instructions. It should only be applied up to the end of the sealing sleeve, ensure you leave out the black plastic area.



Shower channel with wall upstand

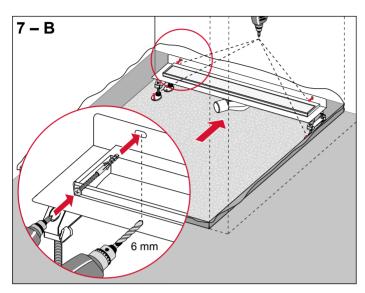


Adjust the channel to the required height using adjustable assembly feet and align horizontally, shim the drain pan if necessary.

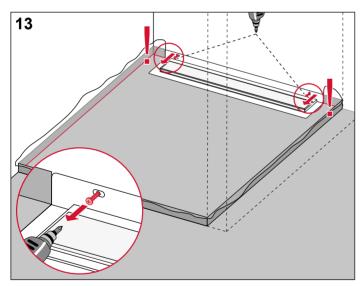


Remove the edge insulation strip above the horizontal channel flange.

Place the channel against the wall. Either fix the assembly feet as shown here and press the sound insulation caps onto the screw heads, or ...

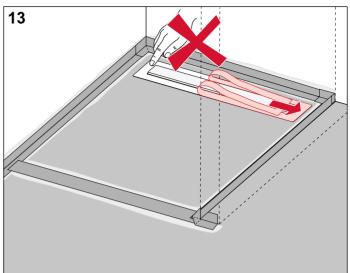


... Fix the channel to the wall. The screws of the wall fastening must be removed again after the screed has hardened.



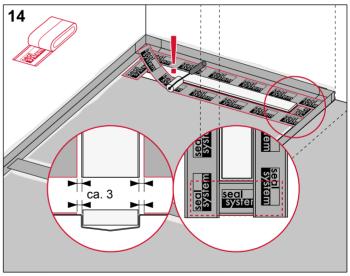
After the screed has hardened, the screws in the wall must be removed again (if used).

Shower channel for natural stone

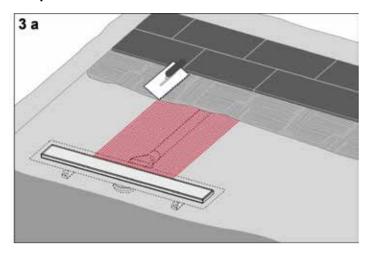


Remove the protective film from the channel flange completely. Do not touch or contaminate the flange again.

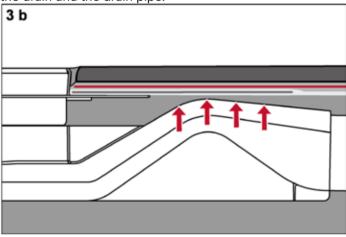
Cut the Seal System sealing tape to length, remove the protective film and stick it onto the channel flange and screed with the overlap shown, without folds or bubbles, and press it on with a roller.



"Super flat" drain



Due to the partially low screed cover, a sufficiently wide reinforcement fabric must be incorporated in the area of the drain and the drain pipe.



There should be no joint in the marked area above the drain body.

Special channels

The TECEdrainline range is so well developed that longitudinal and angled channels between 700 mm and 1500 mm (angled channels 900 to 1200 mm) are part of the standard range. And if the standard channels do not fit, there is the option of a custom-made product - for the shower channels. Whether it's custom-fit lengths or two drains for an extremely high drainage capacity - the special channels help to achieve unusual bathroom designs.

You can find measuring and ordering aids on our website www.tece.com/en