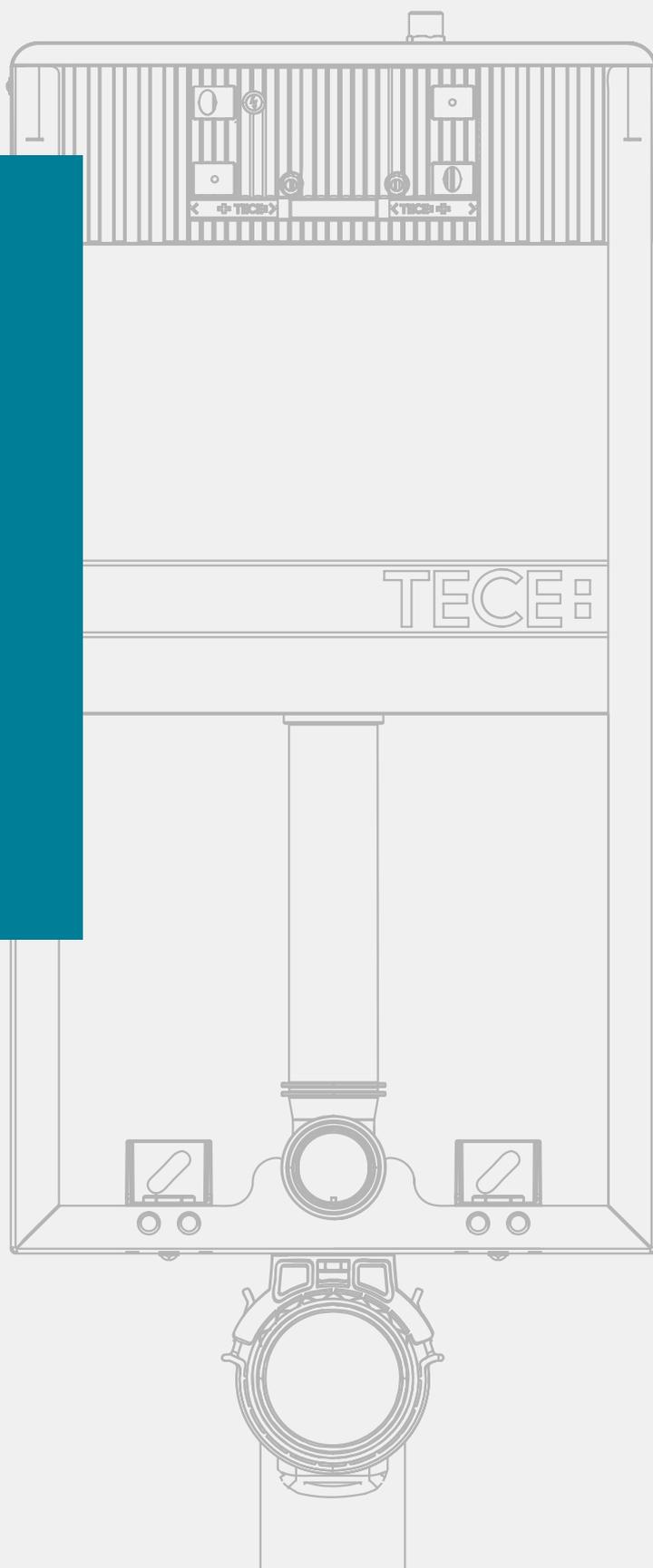




Sanitary systems

# TECEbox 8 cm

TECHNICAL GUIDELINES



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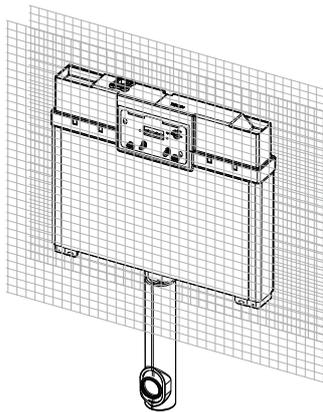
## System description

TECE offers modules for the TECEbox range with an installation depth of 8 cm that are particularly suitable for a market dominated by thin partition walls. The system comprises toilet modules with cisterns for floor-standing or wall-hanging toilets as well as modules for bidets, wash-stands and urinals. The TECEbox 8 cm toilet modules with cisterns can be combined both with the installation systems for brick-wall construction (TECEbox basic, TECEbox and TECEbox plus) as well for dry-wall construction (TECEbox module).

The TECE cisterns can be used with all manual TECE flush plates as well as single and dual-flush systems.

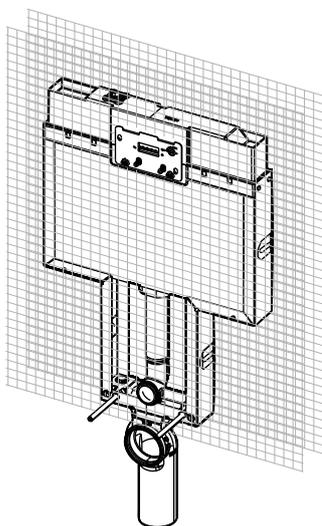
## Toilet module product range

The TECEbox basic brick-wall-mounted cistern for floor-standing toilets is the starting point for solutions utilising wall-hanging toilets.



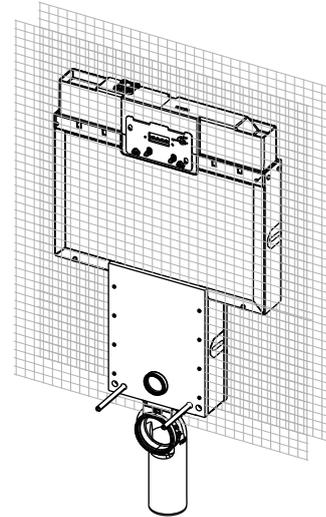
TECEbox basic brick-wall-mounted cistern, depth 8 cm (order no. 9370007)

The TECEbox brick-wall-mounted cistern for wall-hanging toilets comes with an external aluminium frame that guarantees secure wall attachment and ensures that the toilet is anchored securely.



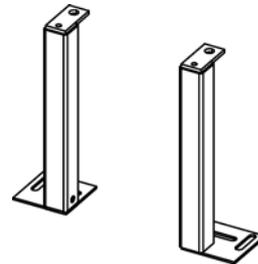
TECEbox brick-wall-mounted cistern, depth 8 cm (order no. 9370008)

The TECEbox plus brick-wall-mounted cistern has the same properties as the TECEbox cistern, however the first section of the drain is insulated against noise with rock wool and fibre-cement plates on both sides.



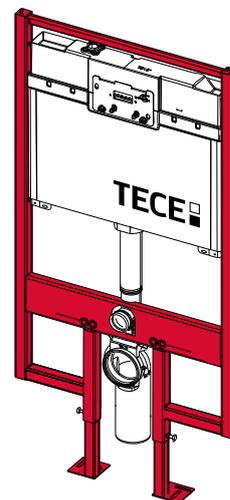
TECEbox plus brick-wall-mounted cistern, depth 8 cm (order no. 9370009)

The set with assembly feet (optional) makes installation easy and allows the TECEbox and TECEbox plus modules for wall-hanging toilets to be adjusted in height.



TECEbox assembly feet set (order no. 9030026)

The TECEbox module can be installed in lightweight partition walls with a metal or wooden frame or as an independent module in front of a brick wall.



TECEbox toilet module with 8 cm cistern (order number 9300040)

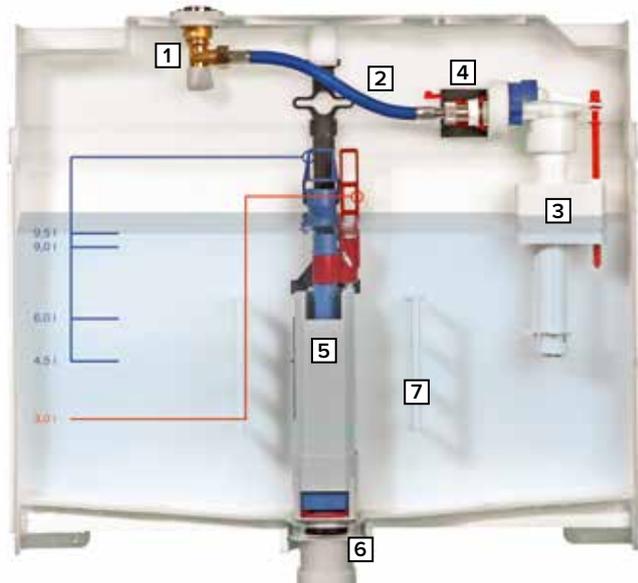
# TECEbox 8 cm – Cistern

## Cistern 8 cm

The concealed cistern from TECE is a universally adaptable 8 cm cistern. By using different frames, the cistern can be installed in dry or brick-wall constructions. The TECE cistern is always equipped with the same internal technology inside and is therefore compatible with toilet fittings and all manual TECE flush plates. Due to the cistern's universal nature, there is a clearly organised range and storage and the supply of spare parts is straightforward.

Properties of the cistern:

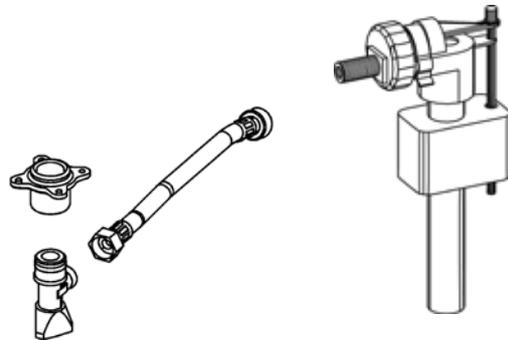
- Pre-assembled and sealed
- Can be combined with all manual TECE flush plates
- Single or dual-flush technology available
- Robust lever mechanism
- 9.5-litre safety tank: enough water when needed
- Compatible with standard market spare parts
- Cistern connection with 1/2" internal thread
- 6-litre pre-set standard flush volume
- 4.5 / 6 and 9-litre flush volume can be set as an option at any time,
- 3-litre part-flush with dual-flush system,
- Cistern tank made of impact-resistant plastic and insulated against condensation water
- Easy to install
- Self-explanatory technology



- TECE cistern with:
1. Corner valve
  2. Reinforced hose
  3. Filling valve F 1 with standard connection 3/8"
  4. Filling valve holder
  5. Drain valve A 3
  6. Valve seat of drain valve
  7. Reinforcements

## Filling valve F 1

Thanks to the high technical quality standard of the filling system (valve, hose and F1 valve) the TECE cistern is characterised by the lowest sound level on the market - Lap  $\leq 17$  dB(A).

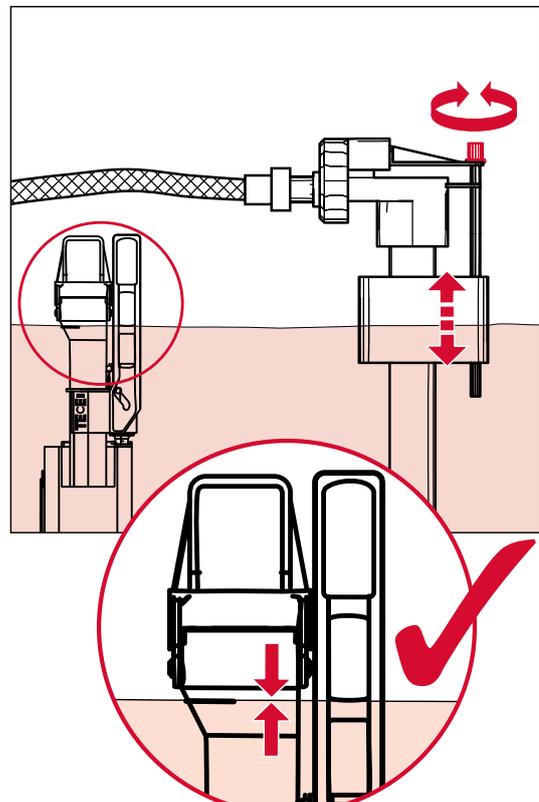


Intake and filling valve F 1

### Setting the fill level

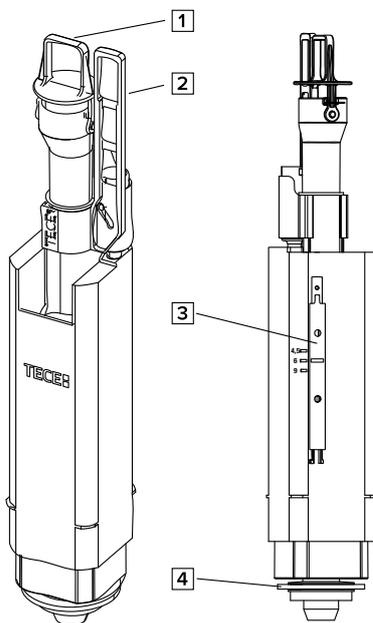
The fill level in the cistern can be set by turning the adjustment spindle on the filling valve.

The height should be set so that the water reaches the upper mark on the overflow and the mark on the actuation block (see figure).



## Drain valve A 3

The drain valve A 3 is installed exclusively in the 8 cm cistern.



Drain valve A 3 (order number 9820224) with

1. Connecting rod large
2. Connecting rod small
3. Sliding lever for flush volume
4. Gasket

### Dual-flush technology

During everyday use, a considerable amount of drinking water is used to flush toilets. The intelligent solution from TECE goes a long way towards saving water. With dual-flush technology the small flush volume is set to 3 litres and the large flush volume can be set to 4.5 / 6 or 9 litres. The default setting for the dual-volume flush is 6 litres for the large flush volume and 3 litres for the small flush volume

### Single-flush technology

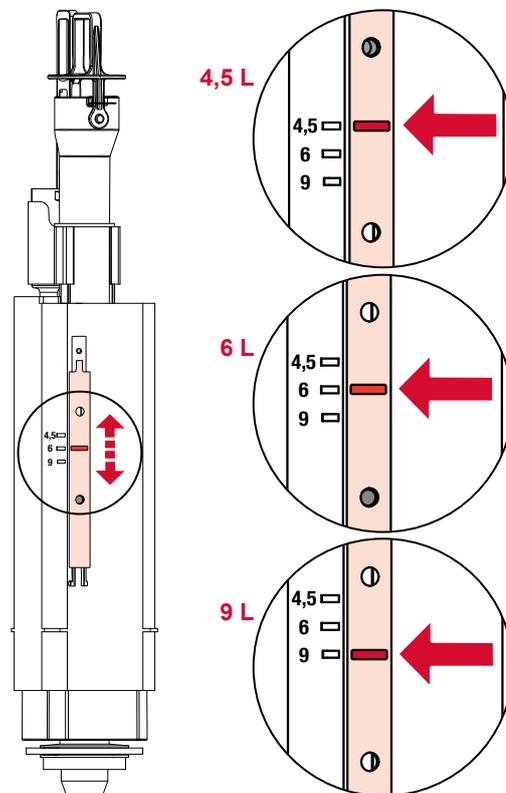
Single-flush technology is also possible with the cistern and TECE drain valve. However, with this flush option, only the large flush volumes of 4.5 / 6 or 9 litres are available.

### General

Due to the easily adjustable drainage valve settings, the flush volumes can be adapted to each specific situation. In the new builds with custom pipes, gradients and using a 4.5 litre ceramic, it is possible to have a 4.5 litre saving flush in combination with a 3 litre flush. However, pipework systems are often installed which need a larger flush volume to ensure that they work correctly. In this case, flush volumes of up to 9 litres can be chosen to ensure this.

## Setting the flush volumes

Adjusting the flush volume is performed centrally using a sliding lever, which is located on the side of the main part of the drainage valve. The flush volumes which can be set are clearly marked on the valve.



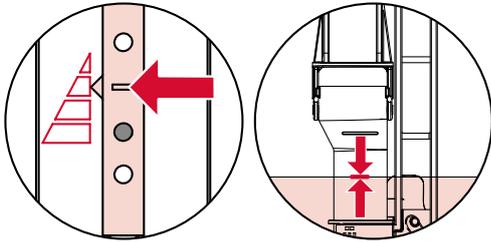
The large flush volume can be set to 4.5 / 6.0 or 9.0 litres.

The default setting is 6 litres. To change the large flush volume the drainage valve must be removed from the cistern. To do this, the splash guard and the actuation block must be removed. Then the drainage valve can be taken out of the cistern. The sliding lever is located on the side of the main part of the drainage valve. Move the sliding lever to the desired flush volume. This increases or decreases the flush volume.

This does not change the small flush volume and it remains set to 3 litres.

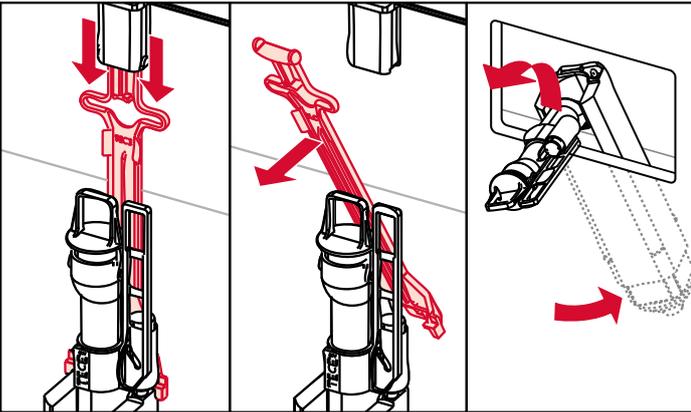
## TECEbox 8 cm – Brick-wall toilet module

To reduce the default large volume to 4.0 and the small volume to 2.5 litres, the tank water level lever above the filling valve must also be moved to the lowest mark on the overflow.



### Removing the drainage valve

To take out the filling valve open the splash guard with the actuation block. Press the hold-down device downwards as shown in the diagram and remove it from the tank. Now pull the filling valve upwards out of the valve seat, snap off the top part and take it out.



After removing the drainage valve, the valve seat can be removed by pulling it upwards.



### Throttle set

Problems with toilets not flushing correctly can be solved by using a throttle set.

The throttle set includes four different throttles:

- Blue: Diameter 32 mm (100%)
- Grey: Diameter 30 mm (90%)
- Black: Diameter 29 mm (80%)
- White: Diameter 28 mm (70%)

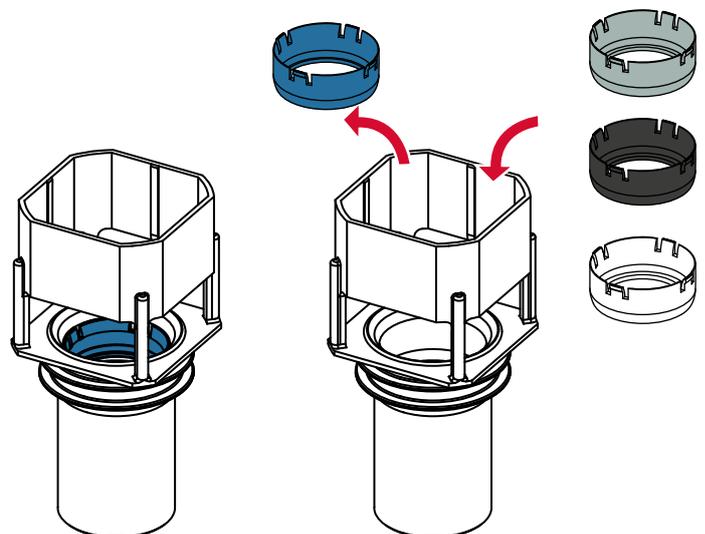


### Reducing the flushing pressure

To prevent overspray by the toilet ceramics, the flush flow can be reduced using a throttle set. To control the flushing pressure, a throttle with a smaller internal diameter can be used.

### Increasing the flushing pressure

If a toilet ceramic is not being correctly cleaned then the flushing pressure for 8 cm cistern can be subsequently increased. To increase the flushing pressure, install a throttle with a larger internal diameter or remove the inserted throttle.

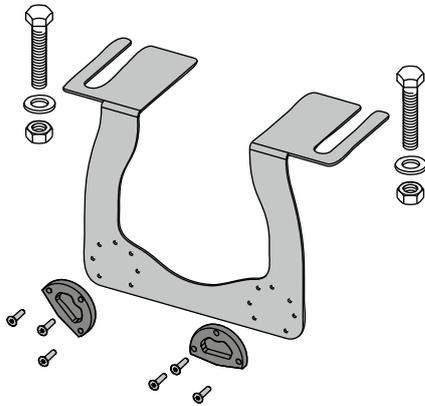


The flush flow throttle can be easily installed in the valve seat of the drainage valve.

## Upgrade sets for TECEone

Upgrade sets are available to combine wall-mounted TECEone shower toilets with a brick-wall module or toilet module.

### Upgrade set for TECEbox 8 cm brick-wall-mounted cistern

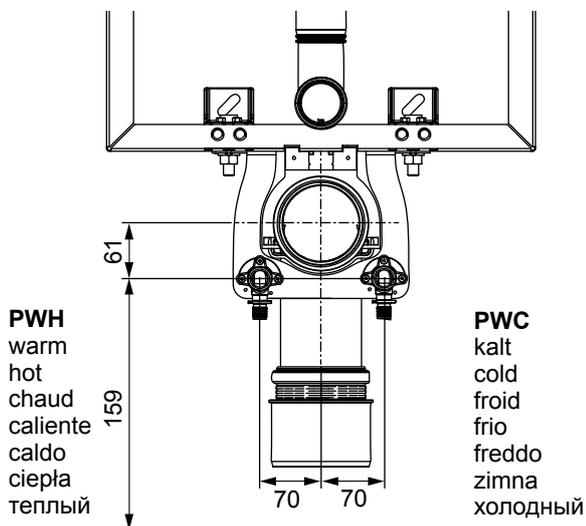


TECEone upgrade set for brick-wall construction - order number 9880048

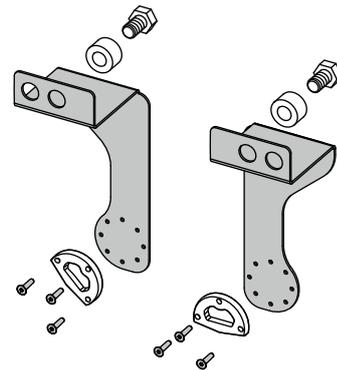
The shell installation set consists of:

- Holding plate for hot and cold water connections
- Sound-proofing elements for two wall disks
- Mounting materials

The holding plate is attached to both elbow brackets using the screws supplied.



### Upgrade set for TECEbox 8 cm dry-wall module

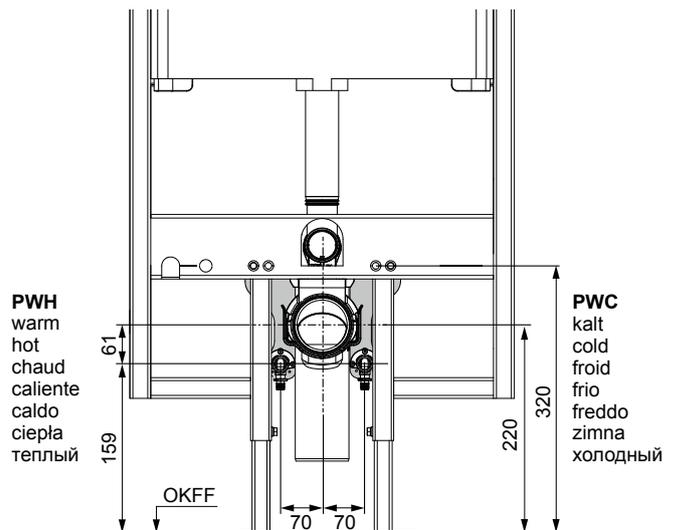


TECEone upgrade set for dry-wall construction - order number 9880056

The shell installation set consists of:

- Holding plate for hot and cold water connections
- Sound-proofing elements for two wall disks
- Mounting materials

The holding plate is mounted to the bottom of the module frame using the existing drain bend holder.



# TECEbox 8 cm – Toilet module

## Initial operation of the cistern

### Shell construction stage

The corner valve of the TECE 8 cm cistern is closed and pre-installed as a complete unit. The pressure can be tested without the cistern needing to be opened. The cistern only needs to be opened during the fine installation phase. During the shell construction stage, the cistern remains sealed. An unbroken seal during fine installation work guarantees that the cistern is clean and functional. A damaged seal shows that the cistern has already been opened.



Splash guard with seal.

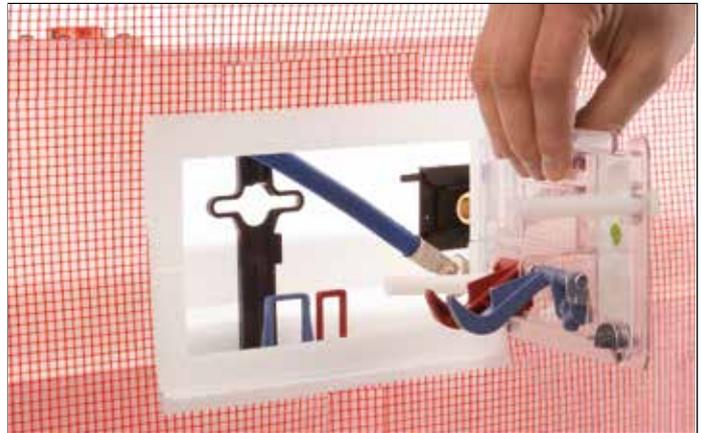
### Fine installation

The TECE 8 cm cistern can only be opened by destroying the seal on the splash guard. If the seal is intact at the fine installation stage, the inner workings of the cistern are intact and free of contamination. The connection lead must be well flushed out during commissioning of the concealed cistern. To do this, the hose in the cistern can be pressed downwards. After being flushed out, the reinforced hose can be screwed to the filling valve without the need for any tools.



Connect the hose to the cistern filling valve.

A special feature of the TECE concealed cistern is the actuation block mounted on the splash guard. When the concealed cistern is opened, it is completely removed. This also works with the support frame for the actuation.



Splash guard with actuation block

### Service

Despite the small inspection opening there is ample space to work within the cistern. After removing the flush-plate cover, the flush-plate installation frame including the splash guard can be removed as one unit using a flat-head screwdriver.



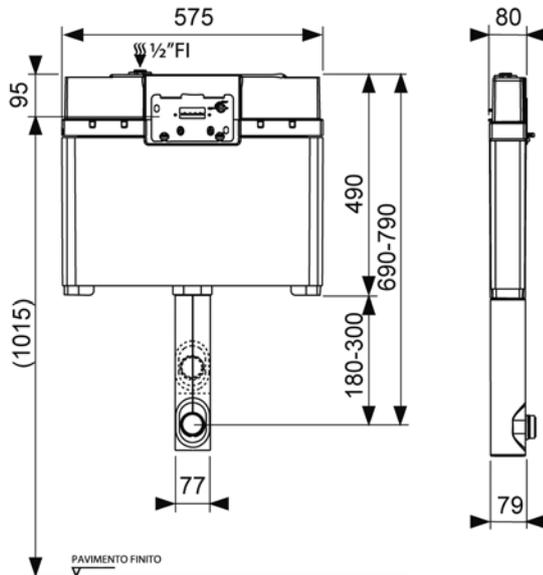
Removing the compact unit.

This approach is easy and saves time because it avoids laborious disassembly of individual components.

## TECEbox basic

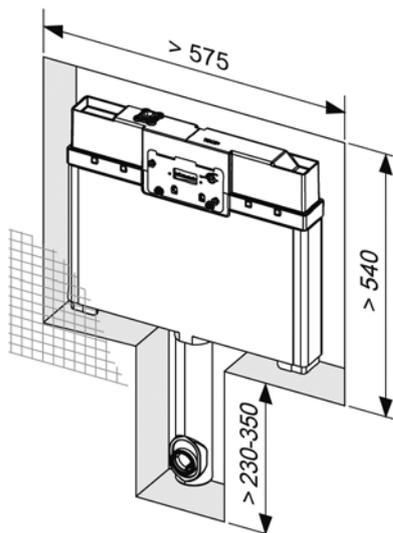
Toilet module with cistern, ideal for floor-standing toilets and compatible with all manual TECE flush plates (excluding the flush plates with IR sensor).

Only for installation in a bricked-in wall.



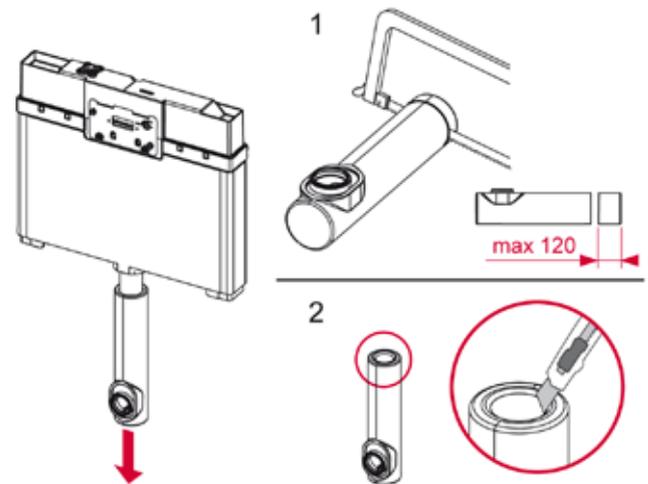
## Assembly in the wall

Create a niche in the wall according to the dimensions specified.

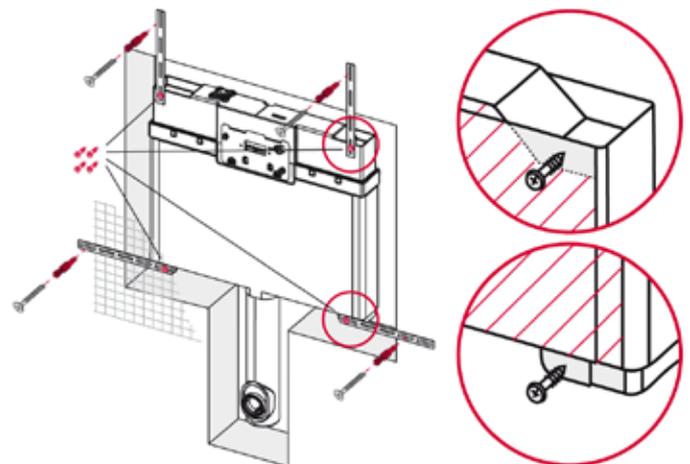


If the flush pipe (made of PE) is too long for the arrangement, it must be removed from the cistern and cut to length (maximum 120 mm).

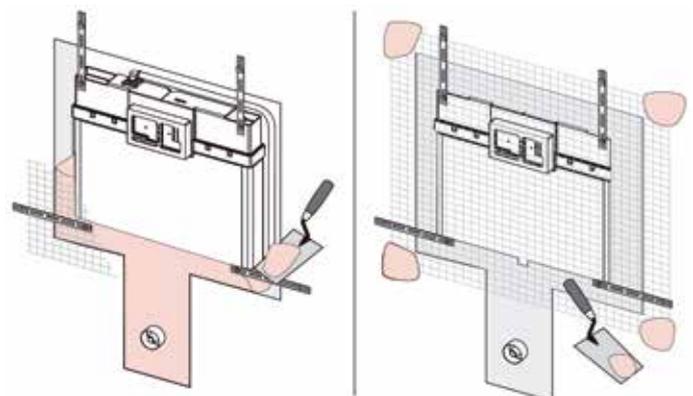
By contrast, if a flush pipe must be extended for a cistern exceeding the standard dimensions, this can be extended using via hot welding on an additional pipe.



Place the module in the niche, make sure it is level and attach it using perforated rails as shown in the following diagram.

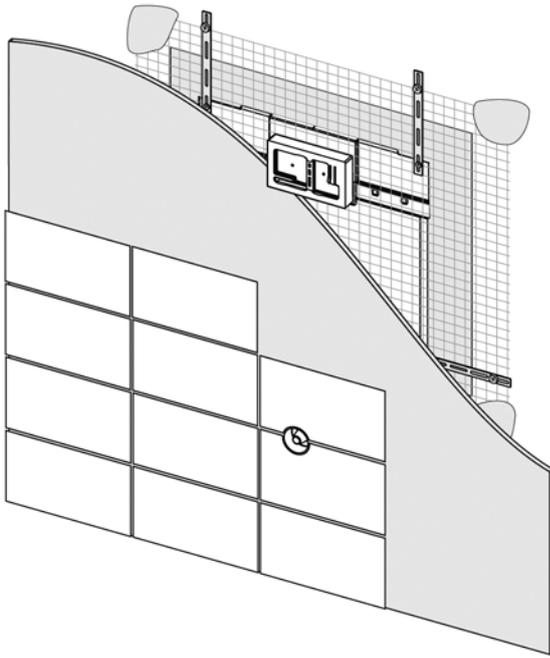


Attach the water connection (connection R 1/2" on the cistern) and then assemble both the polystyrene bare-wall protection and the drainage cover. Brick the module in completely. Fill all cavities and attach the metal mesh.



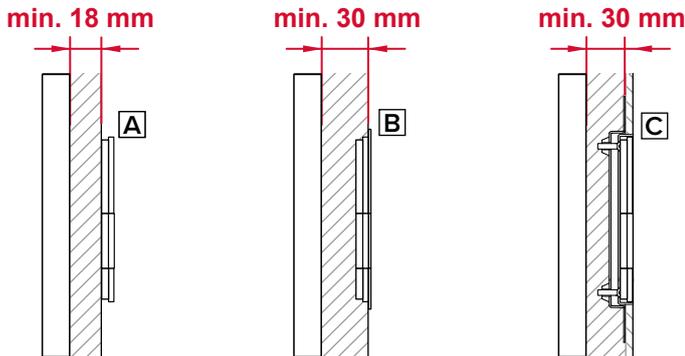
Plaster and tile the wall.

# TECEbox 8 cm – Upgrade sets



TECEbox 8 cm

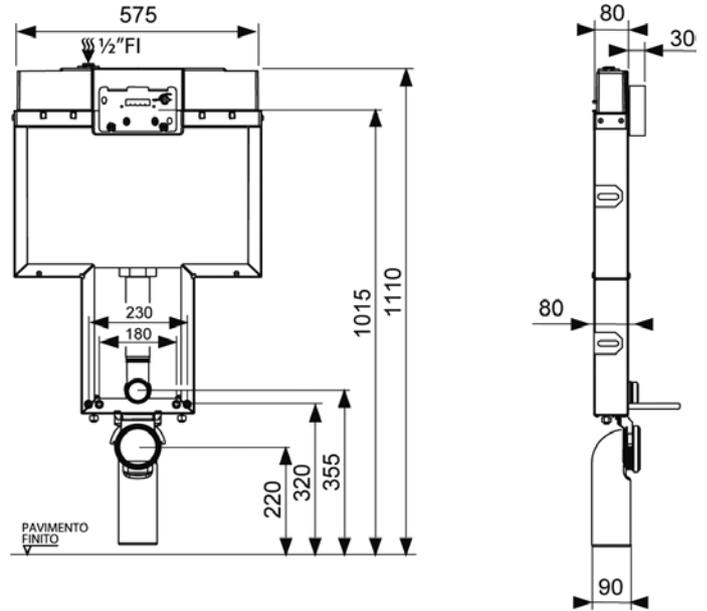
The wall construction must be at least 18 mm if the actuation is located on the wall (A). A minimum of 30 mm is required to install the TECESquare II (B) and when using the flush-mounted installation frame (C).



## TECEbox toilet module

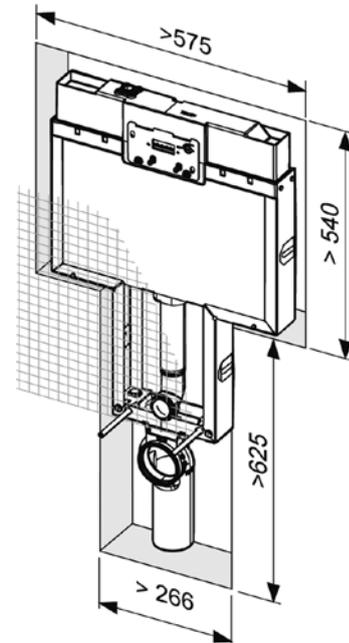
Toilet module with cistern, ideal for wall-hanging toilets and compatible with all TECE flush plates (excluding the TECE-planus flush plates with IR sensor).

For installation in a brick wall or in front of a solid wall.



## Assembly in the wall

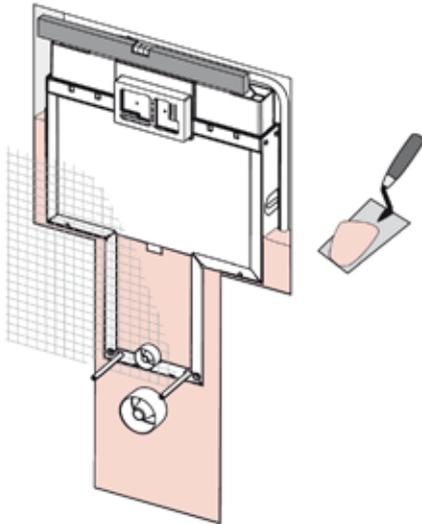
Create a niche in the wall according to the dimensions specified.



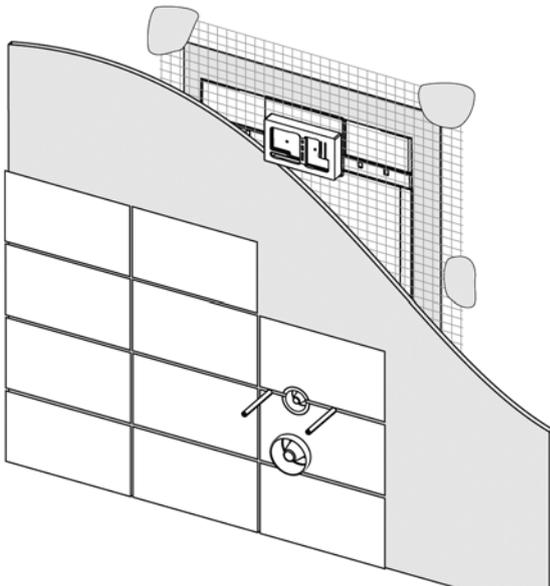
Place the module in the niche and attach the water connection (connection R 1/2" on cistern). Install the polystyrene bare-wall protection, the threaded rods and the odour traps. Make sure the module is level and brick it in completely. Fill all cavities as you do this.

## Assembly in front of a solid wall

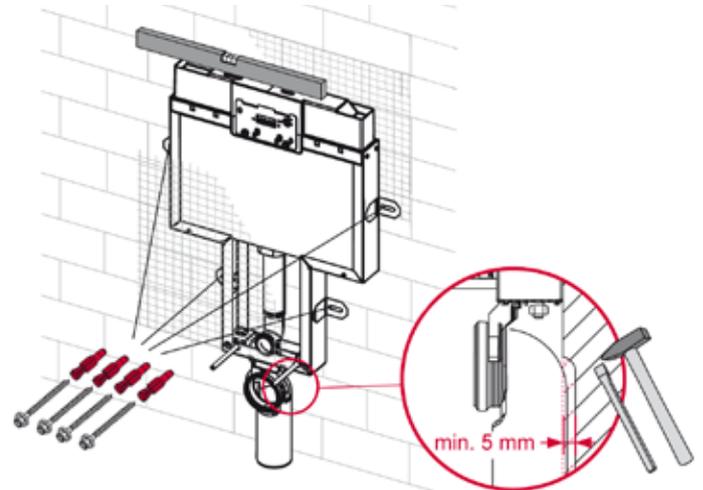
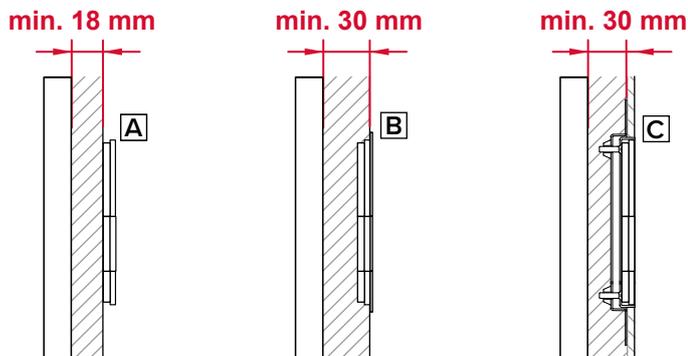
Create a small cavity at least 5 mm deep behind the flush pipe so that the cistern lies full against the wall. Make sure the TECEbox module is level, open the wings on the side of the aluminium frame and attach the module to the wall.



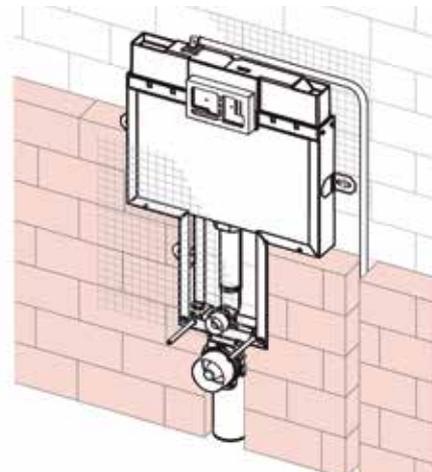
Attach the metal mesh, then plaster and tile the wall.



The wall construction must be at least 18 mm if the actuation is located on the wall (A). A minimum of 30 mm is required to install the TECESquare II (B) and when using the flush-mounted installation frame (C).

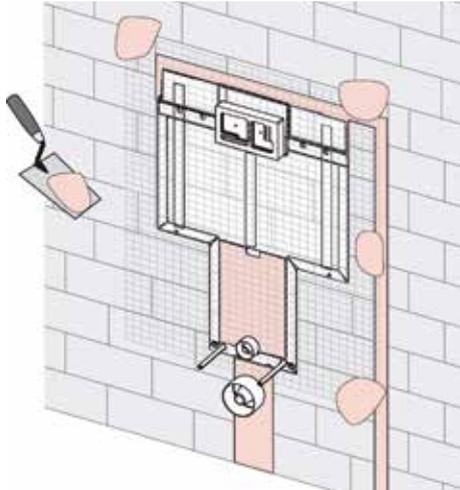


Attach the water connection (connection R 1/2" on cistern). Brick the module in completely and follow the outline. Install the polystyrene bare-wall protection, the threaded rods and the odour traps.

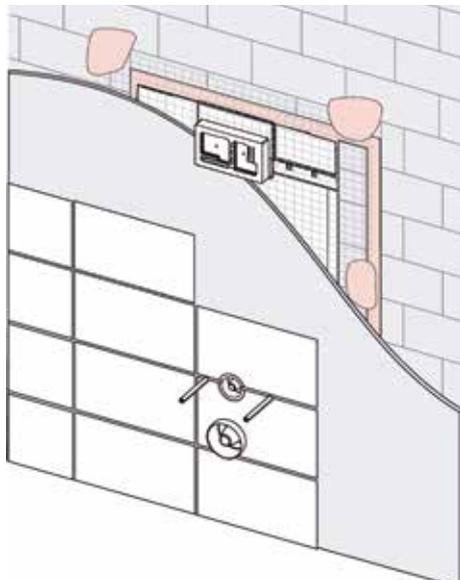


Fill all cavities and attach the metal mesh (see diagram).

## TECEbox 8 cm – Filling valve

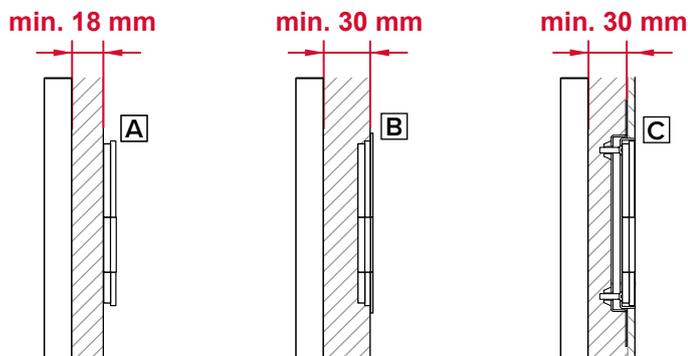


Plaster and tile the wall.



TECEbox 8 cm

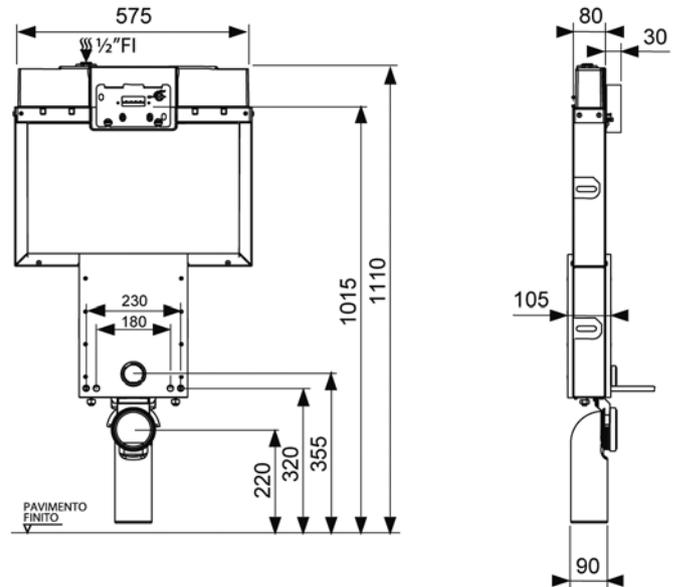
The wall construction must be at least 18 mm if the actuation is located on the wall (A). A minimum of 30 mm is required to install the TECEsquare II (B) and when using the flush-mounted installation frame (C).



## TECEbox plus toilet module

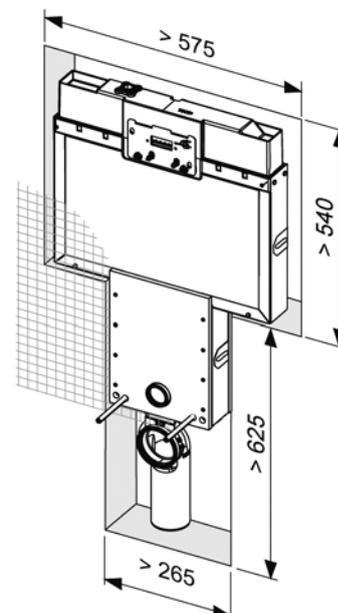
Toilet module with sound-insulated cistern, ideal for wall-hanging toilets and compatible with all TECE flush plates (excluding the TECEplanus flush plates with IR sensor). To insulate the cistern against noise, the flush pipe housing is filled with rock wool and enclosed by 12.5 mm thick fibre-cement plates on both sides.

The TECEbox plus module can be installed in a brick wall or in front of a solid wall.



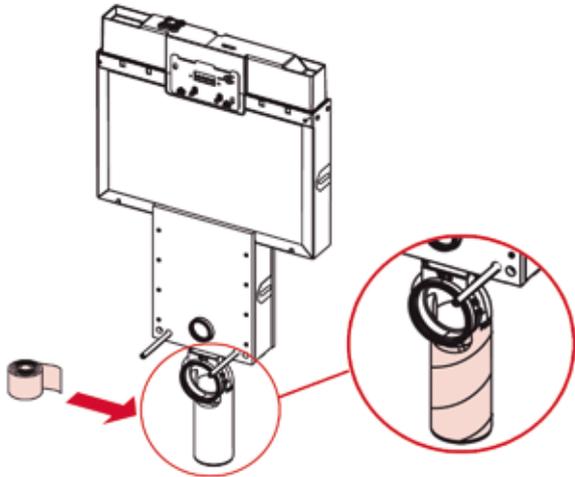
## Assembly in the wall

Create a niche in the wall according to the dimensions specified.



Clad the flush pipe with the adhesive insulation tape supplied in the packaging.

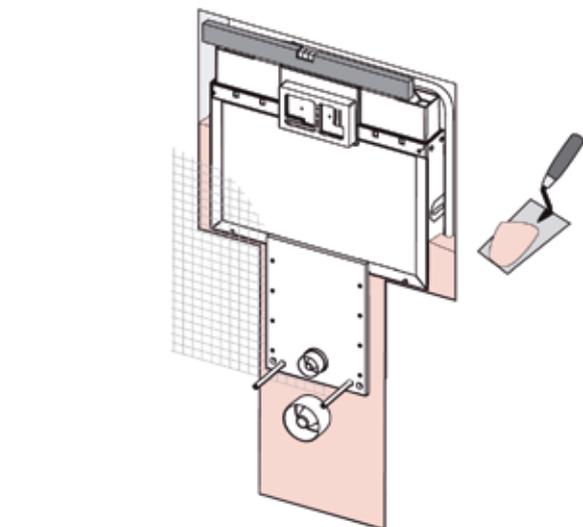
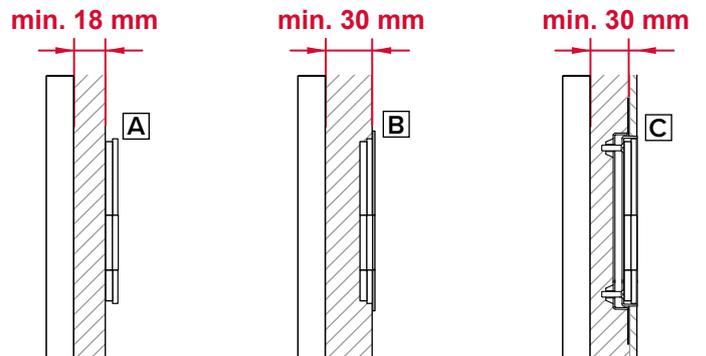
## TECEbox 8 cm – Drain valve



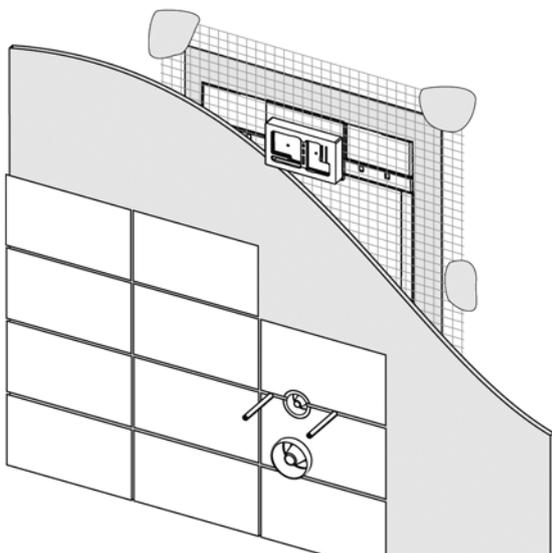
Place the module in the niche and attach the water connection (connection R 1/2" on the cistern).

Install the polystyrene bare-wall protection, the threaded rods and the odour traps. Make sure the module is level and brick it in completely. Fill all cavities as you do this.

The wall construction must be at least 18 mm if the actuation is located on the wall (A). A minimum of 30 mm is required to install the TECESquare II (B) and when using the flush-mounted installation frame (C).

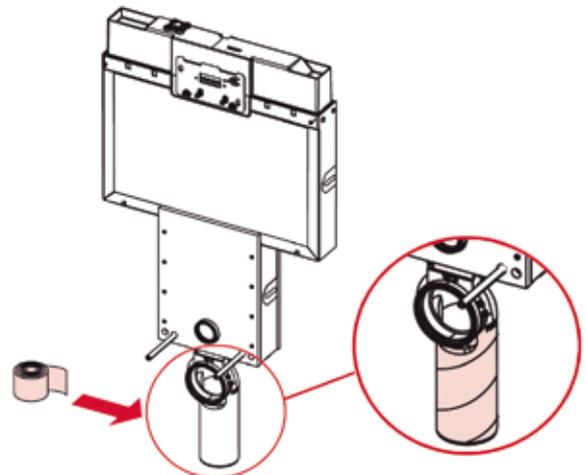


Attach the metal mesh, then plaster and tile the wall.

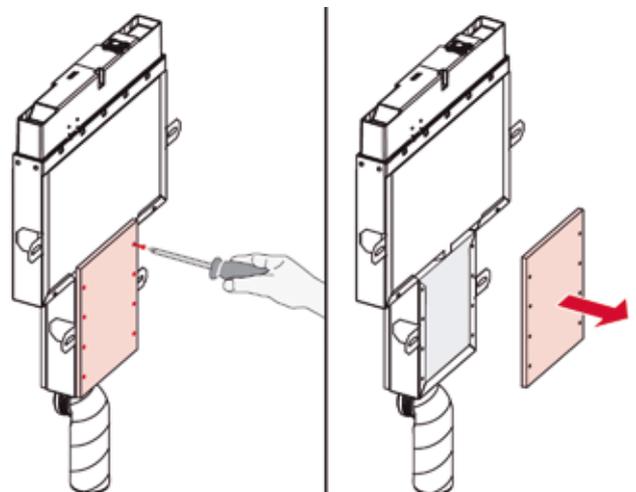


### Assembly in front of a solid wall

Clad the flush pipe with the adhesive insulation tape supplied in the packaging.

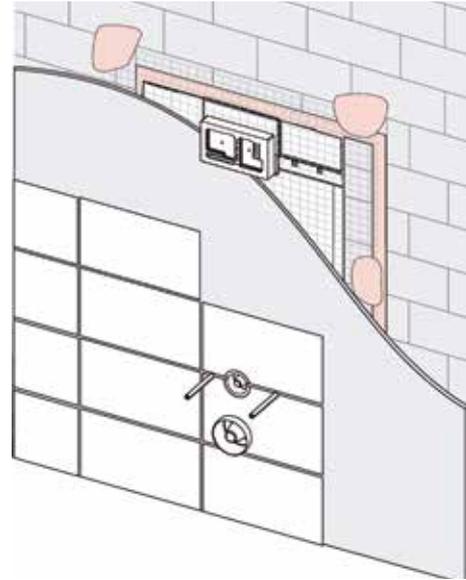
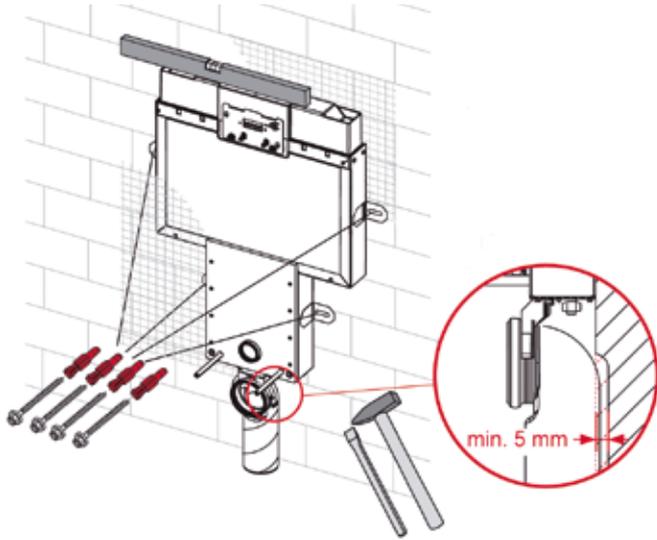


Remove the rear sound insulation plate.



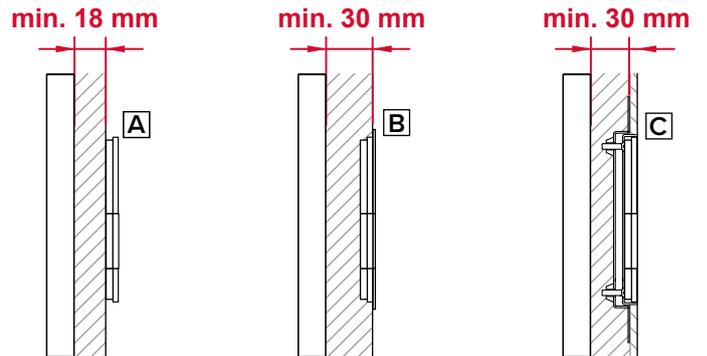
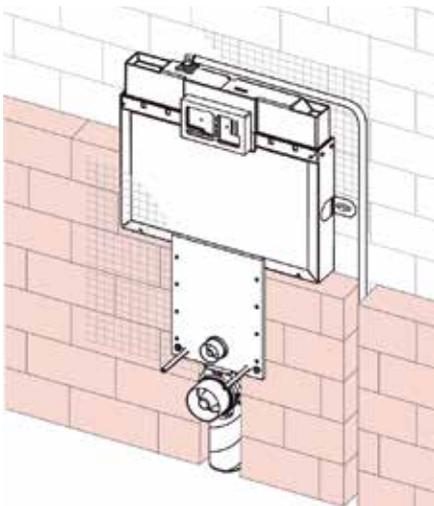
Create a small cavity at least 5 mm deep behind the flush pipe so that the cistern lies full against the wall. Make sure the TECEbox module is level, open the wings on the side of the aluminium frame and attach the module to the wall.

## TECEbox 8 cm – Drain valve

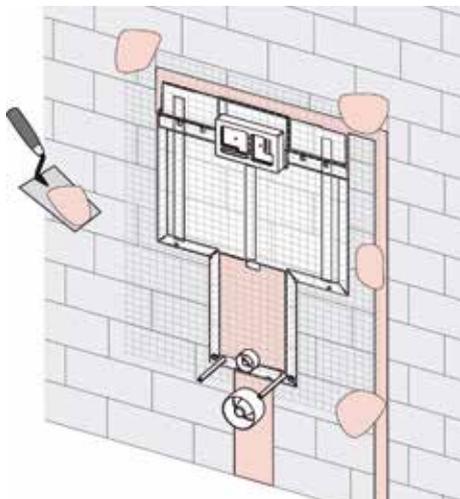


Attach the water connection (connection R 1/2" on cistern).  
Brick the module in completely and follow the outline.  
Install the polystyrene bare-wall protection, the threaded rods and the odour traps.

The wall construction must be at least 18 mm if the actuation is located on the wall (A). A minimum of 30 mm is required to install the TECESquare II (B) and when using the flush-mounted installation frame (C).



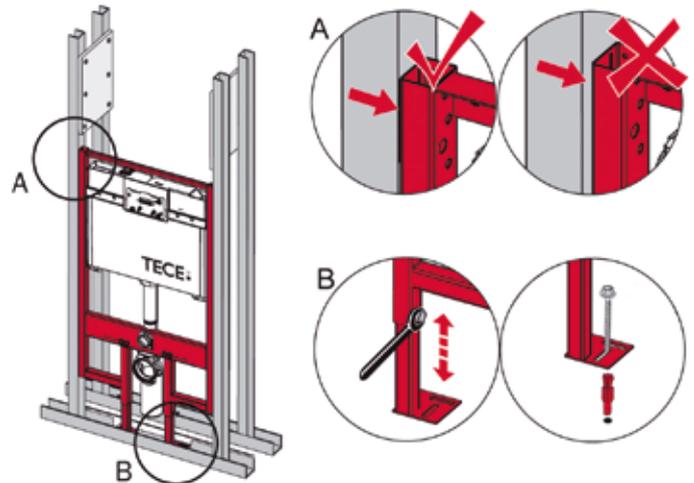
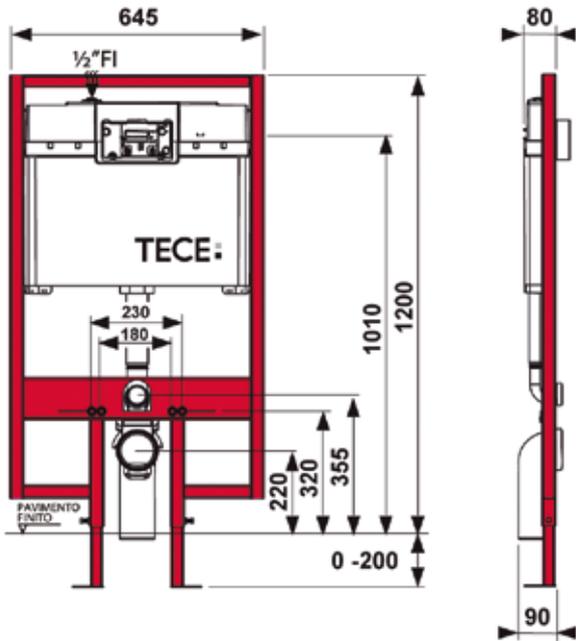
Fill all cavities and attach the metal mesh (see diagram).



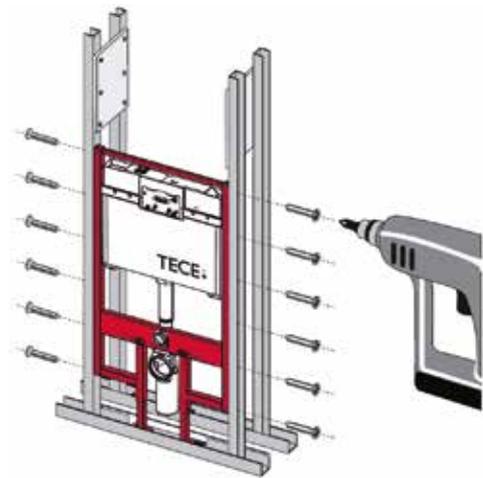
Plaster and tile the wall.

## TECEbox toilet module

Toilet module with cistern (8 cm deep), compatible with all TECE flush plates (excluding the TECEplanus flush plates with IR sensor). The module can be installed in front of a brick wall or in lightweight partition walls with a metal or wooden frame.

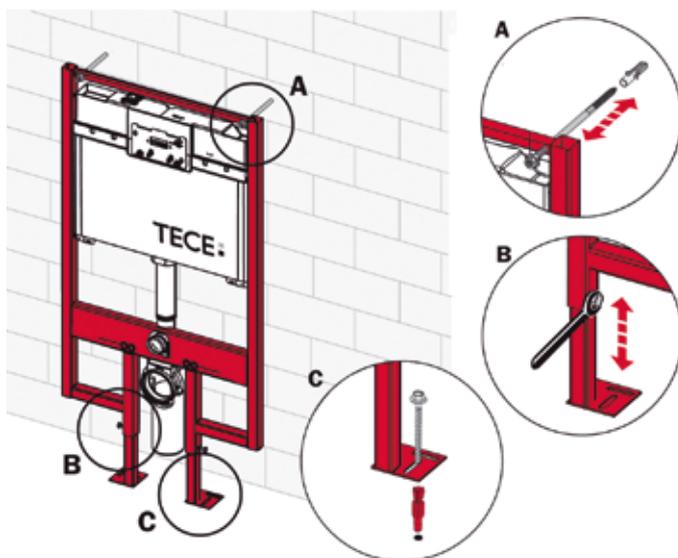


Attach the sides of the module to the supports on the frame.

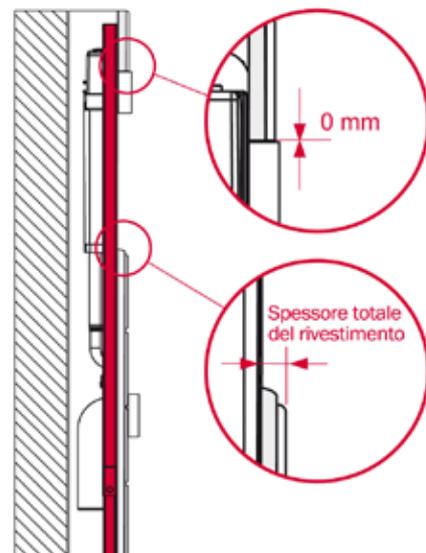


## Assembly in front of a wall

The height of the telescopic feet must be checked first before installing the TECEbox module in front of a wall. The feet are then attached to the floor and the top part to the wall.



Attach the water connection (connection 1/2" FI on the cistern) and clad the wall with plasterboards. Ensure that openings are left for the flush plate, drainage and threaded rods. The total thickness of the coating (board, adhesive and tiles) must be at least 18 mm.



## Assembly with a frame

Position the module on the frame flush against the supports. Adjust the height of the telescopic feet and attach them to the floor.

# TECEbox 8 cm – Assembly

## Repairing the cistern

The TECE cistern tank is made of polypropylene. If a leakage point is found (up to a diameter of approx. 12 mm), this can be mended using a repair set. This consists of:

- 5 plastic disks
- Sandpaper
- Solvent (125 ml)
- 2 cloths
- Hot glue gun
- 2 glue sticks



Repair set for TECE cistern (order number 9221013)

### Repair instructions

Clear and clean the area around the opening.



Round off the edges around the opening with a cutter knife.



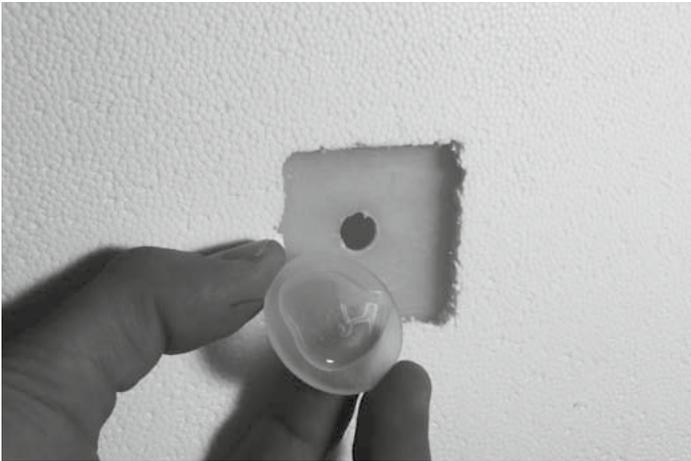
Sand the area around the opening as well as the plastic disks with sandpaper.



Clean the area to be repaired thoroughly using a solvent or acetone.



Insert a glue stick into the hot glue gun and apply the glue to the plastic disk (the covered area must be twice as large as the diameter of the opening). Only use the original adhesive and do not mix this with other adhesives!



Immediately place the disk on the opening and press lightly. The drying time is approx. 15 minutes. Fill the cistern and check the seal.

## TECEbox washstand and bidet

The TECEbox modules for washstand and bidet let you implement all connections with brick walls easily. Both modules comes with an all-around steel frame with a depth of 8 cm.

With the washstand module the distance between the threaded rods and the height of the attachment bracket must be adjusted, whereas with the bidet module both the height of the attaching rods as well as the height of the drainage must be checked. It is important that all adjustments are performed before bricking in the modules. It is not possible to change the dimensions in retrospect.



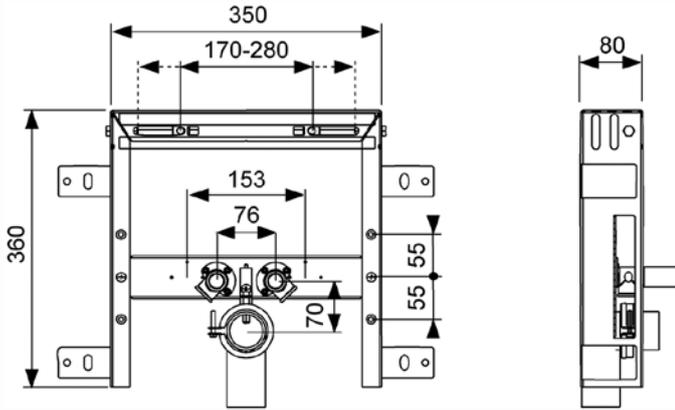
TECEbox washstand module (order no. 9 370 032)



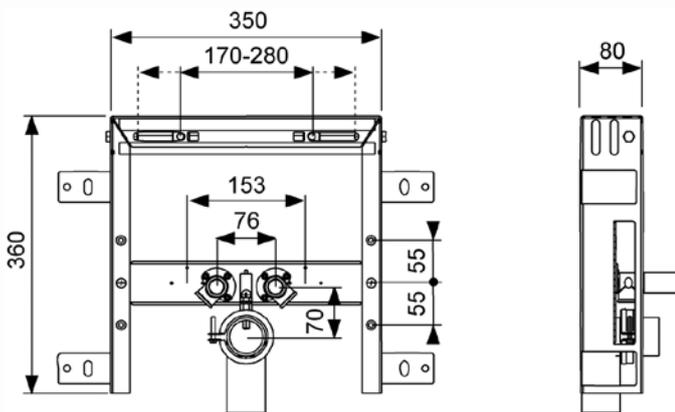
TECEbox bidet module (order no. 9 370 031)

## Assembly for washstand and bidet modules

The assembly phases are the same for both modules (washstand and bidet). They can be installed in front of a solid wall or installed in the wall with the help of a small niche.



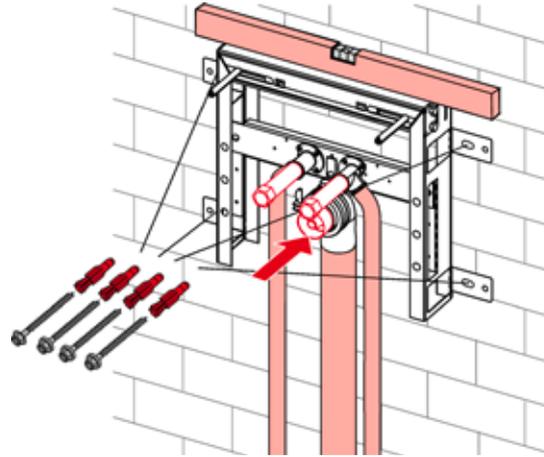
Dimensions of the TECEbox washstand module (order no. 9 370 32)



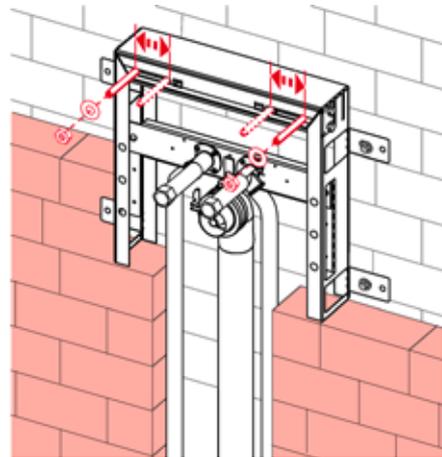
Dimensions of the TECEbox bidet module (order no. 9 370 031)

**Assembly in front of the wall:** Make sure the module is level, open the four wings on the sides and attach to the brick wall.

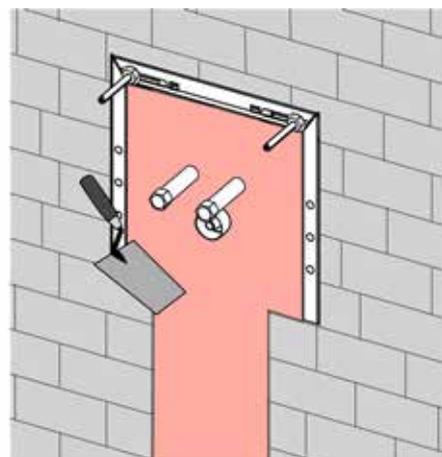
Adjust the height of the attachment bracket and drain bend. Connect the water connections and fit the caps for both ends as well as for the drainpipe.



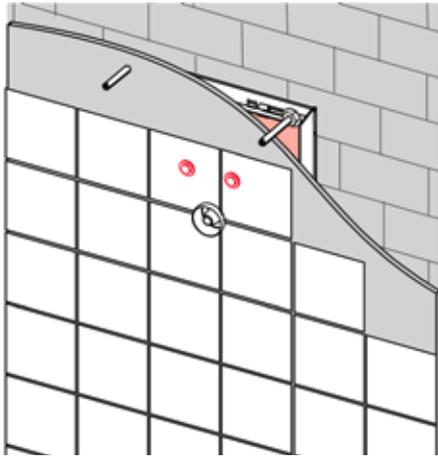
With the washstand module, you must set the distance between the threaded rods (minimum value 170 mm, maximum value 280 mm).



Brick the module in completely and fill all cavities.

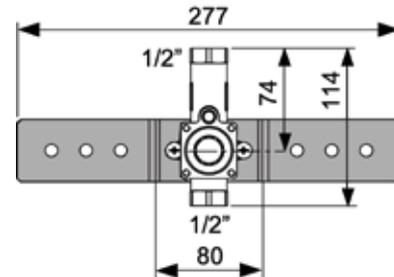


Plaster and tile the wall.

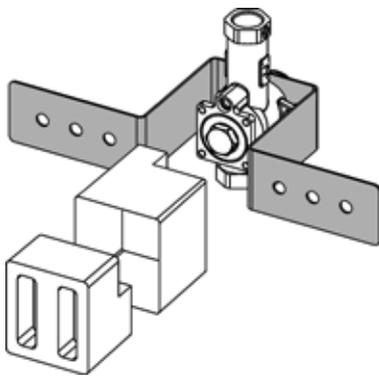


## Assembly of TECEbox urinal flush valve housing

The depth and assembly height of the attachment bracket must be taken into account when installing the urinal flush valve housing. The position of the valve and the bare-wall protection must also be considered.



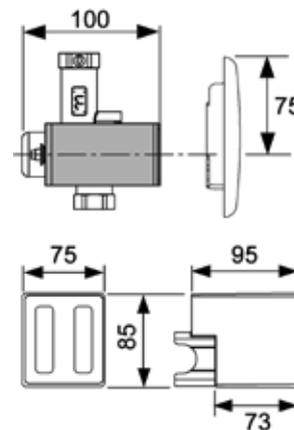
## TECEbox urinal flush valve housing



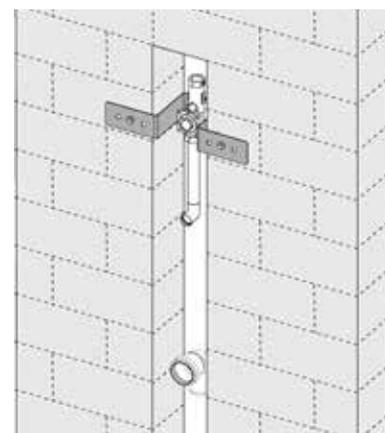
The urinal flush valve housing with TECE valve is already pre-mounted on an attachment plate and can easily be inserted into the slot in the wall. The big advantage of this urinal flush valve housing is its total compatibility with manual or electronic actuation variants. This means the flush plate can be swapped out at any time, even after assembly.

### Note:

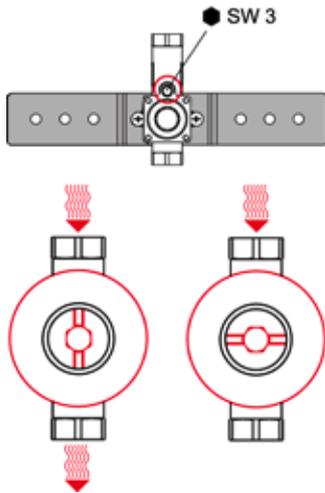
The urinal ceramics to be used must be known in advance prior to installation. You should use the current connection dimensions from the ceramic manufacturer for this purpose.



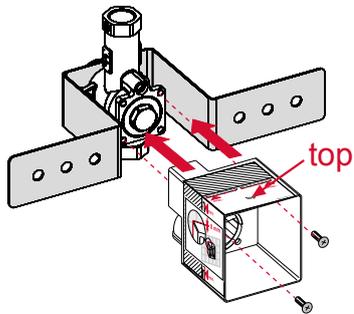
The flush valve housing is inserted into a slot in the wall and attached using a holding plate. The water connection and the intake for the urinal ceramics can be installed using any approved piping system.



The urinal flush valve is locked in its as-delivered state so the required pressure test can be performed. The inlet flow control is located above the stopper. This must only be removed during the fine installation.



Install the protective shell and ensure it is aligned correctly.



The bare-wall protection housing is cut flush to the wall after tiling.

Please remember to follow the required wall mounting dimensions when using the corresponding urinal actuation.

## Toilet flush plates

All manual TECE flush plates are compatible with the 8 cm cistern!



TECEsquare



TECEloop



TECEplanus



TECEnow



TECEbase



TECEambia

The toilet flush plates shown here only give an overview of the available product range. See the whole range online at [www.tece.com](http://www.tece.com)

There, you can also find a flush plate configurator, which allows you to select the material and colour for the buttons and covers.

Please note the necessary installation dimensions and wall structure for the flush-mounted frames.



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