

Sanitary systems

FLUSH PLATES

TECHNICAL INFORMATION

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Overview

TECE flush plates offer a wide variety of shapes, materials and colours. The different materials ensure that they meet the requirements of various application areas. With a robust actuating mechanism, these flush plates can be installed from the front or from above. TECE flush plates are among the smallest on the market. Thanks to the special design of the cistern, the installation space inside can be easily accessed despite the small flush plate.

Overview manual TECE toilet flush plates







TECEsquare II metal



TECEsquare glass



TECEsquare metal



TECEloop plastic



TECEloop glass



TECEsolid













TECEplanus

TECEnow

TECEnow

TECEambia

TECEambia

Toilet flush handle

Single and dual-flush systems

Depending on the flush plate, the TECE concealed cistern offers the option of single-flush or the economical dual-flush. In a single-flush system installation, only one actuation rod is installed; with dual-flush systems, two are installed.

Care of TECE flush plates

In order to ensure that the surface of the flush plate retains its original appearance, please observe the following information:

- Always clean the surfaces using a soft cloth.
- First remove residues with a soft cloth.
- Only use warm water to clean visible surfaces.
- For glass surfaces, you can also use a colourless mild glass cleaner.
- Do not spray cleaner directly on the glass.
- Moisten the cloth and remove dirt using only slight pressure.
- Do not use any abrasive or aggressive cleaning agents or cleaning sponges.
- Do not use stainless steel polish for stainless steel surfaces either.

TECEantibac

The "TECEantibac" version of the TECEambia and TECEloop flush plates (toilet and urinal) has antibacterial properties. They are only available in white. Both TECEantibac flush plates are available for single and dual-flush systems.

What is TECEantibac?

The TECEantibac flush plate consists of a new high-tech plastic in which microscopically small silver ions are distributed. The silver ions effectively inhibit bacterial growth on the surface of the plate.

Since the silver particles are distributed in the plate material, the effect is maintained over its entire useful life. It is therefore more than a coating. As a result, surface abrasion through usage or cleaning has no negative impact on the long-term effect.



The germ-inhibiting effect of the TECEantibac flush plates has been proven in an expert report by the Hohenstein Research Institute: "This study has demonstrated under practical conditions that the TECEantibac product has significant or strong antimicrobial activity".

The germ reduction rate measured through TECEantibac was over 99.7% on average. The only currently standardised method according to the Japanese industry standard JIS 2801:2000 was used as the test method. This method is internationally recognised and is used in Japan, America and Europe. The expert report can be obtained from TECE.

Flush-mounted installation

The flush-mounted installation is an outstanding feature of the TECElux Mini, the TECEloop glass (toilet and urinal), the TECEsquare glass (toilet) and the TECEnow (installation including spacing frame). Using the installation frame, these flush plates can be installed flush with the surface if required, both in dry-wall construction (toilet and urinal) and in wet-wall construction (toilet).



Flush-mounted installation frame for toilet flush plates



Flush-mounted installation frame for urinal flush plates

Dry-wall construction - toilet flush plates

Dry-wall construction requires the TECEprofil dry-wall module and the toilet installation frame. Dry-wall modules of all installation heights can be combined with the flushmounted installation frame.

Required components:



TECEprofil module



Toilet installation frame

Toilet flush plate installation - dry-wall construction

To insert the flush-mounted installation frame into the plasterboard, the plasterboard must be recessed for the inspection opening of the cistern.



To do this, push the installation frame over the polystyrene bare-wall protection.





Draw the dimensions of the inner installation frame - width 230 mm, height 160 mm - on the centre of the plasterboard.



Saw the required opening for the installation frame into the board.



Screw the plasterboard onto the centre of the module.



Remove the protective films from the gluing points of the installation frame and glue it together with the support frame onto the plasterboard. Make sure that the "TOP" marking is in the correct position and check the horizontal alignment.







After adjusting the depth, you can tile the installation frame.

Tip:

To obtain a perfect tile edge to the installation frame, TECE recommends processing the tiles with a water jet cutter.



Installation from above

The flush-mounted installation frame can also be used for actuation from above. The installation is carried out in the same way as the installation of a flush plate for front actuation. The frame must be installed in the "reading direction" (= "TOP" lettering facing the wall).



Installation "flush-mounted from above" - dimensions

However, due to the dimensions of the mounting frame, a thicker minimum planking is required:

A **minimum planking of 35 mm** corresponds to a planking with

- 2 x 18 mm or
- 3 x 12.5mm thick plasterboard panels.



Installation "flush-mounted from above" - minimum wall construction

With minimum wall construction, however, there is no longer any space between the installed flush plate and the wall (top picture). For aesthetic reasons, however, an even distance in front of and behind the flush plate is preferable (bottom picture). This also applies to installing TECEsquare metal with slightly larger dimensions.



Installation "flush-mounted from above" - wall construction (suggestion)

Brick-wall construction - toilet flush plates

Unlike dry-wall construction, brick-wall construction requires not only the TECEbox brick-wall-mounted cistern but also an enlarged bare-wall protection. In brick-wall construction, however, TECE cisterns of all installation heights can be used.

Required components:

TECEbox module

Brick-wall bare-wall protection system 9030029









Toilet flush plate installation - brick-wall construction



Remove the standard bare-wall protection and mount the larger brick-wall bare-wall protection system for flush mounting (order no. 9030029).



Remove the protective films from the gluing points of the installation frame and glue it together with the support frame onto the plaster surface. Make sure that the "TOP" marking is in the correct position and check the horizontal alignment.

Dismantle the brick-wall bare-wall protection system.



Adjust the depth of the installation frame according to the tile thickness (5-18 mm). If the wall construction is thicker (up to 33 mm), for example as with natural stone, you can use a suitable extension set (order no. 9820181).



After adjusting the depth, you can tile the installation frame.

Tip:

To obtain a perfect tile edge to the installation frame, TECE recommends processing the tiles with a water jet cutter.



Remove the support frame and the polystyrene bare-wall protection. Now install the suitable mounting frame as described in the respective assembly instructions (TECEloop or TECEsquare). After that, insert the flush plate into the flush-mounted installation frame using the handles. The handles are included with the installation frame.

Installation from above

The flush-mounted installation frame can also be used for actuation from above in brick-wall construction. The installation is carried out in the same way as the installation of a flush plate for front actuation. The frame must be installed in the "reading direction" (= "TOP" lettering facing the wall).



Installation "flush-mounted from above" - dimensions

Due to the dimensions of the installation frame, however, a thicker wall construction is required: Minimum wall construction = 30 mm



Installation "flush-mounted from above" - minimum wall construction

With minimum wall construction, however, there is no more space between the installed flush plate and the wall (top picture). For aesthetic reasons, however, an even distance in front of and behind the flush plate is preferable (bottom picture). This also applies to installing TECEsquare metal with slightly larger dimensions.



Installation "flush-mounted from above" - wall construction (suggestion)

Dry-wall construction - urinal flush plates

A flush-mounted installation frame is also available for the urinal. The TECEloop urinal flush plate can be installed flush-mounted in dry walls using this frame.

Installation of urinal flush plate - dry-wall construction

To insert the flush-mounted installation frame into the plasterboard, the plasterboard must be recessed for the inspection opening of the cistern.



To do this, push the installation frame over the urinal barewall protection.





Draw the dimensions of the inner installation frame - width 114 mm, height 134 mm - on the centre of the plasterboard.



Saw the required opening for the installation frame into the board.



Screw the plasterboard onto the centre of the module.



Remove the protective films from the gluing points of the installation frame and glue it together with the support frame onto the plasterboard. Make sure that the "TOP" marking is in the correct position and check the horizontal alignment.



Adjust the depth of the installation frame according to the tile thickness (5-18 mm). If the wall construction is thicker (up to 33 mm), for example as with natural stone, you can use a suitable extension set (order no. 9820181).



After adjusting the depth, you can tile the installation frame.

Tip:

To obtain a perfect tile edge to the installation frame, TECE recommends processing the tiles with a water jet cutter.

Remove the support frame and then proceed as described in the assembly instructions (installation of the urinal cartridge, installation of the mounting frame, etc.). After that, insert the flush plate into the flush-mounted installation frame using the handles. The handles are included with the installation frame.

TECElux Mini

TECElux Mini is an genuine glass flush plate with electronic flush actuation. A sensor recognises when a person approaches the toilet – only at this point the contours of the sensor surfaces light up through the seamless glass facing.

The flush is triggered touch-free or also by lightly tapping. The safety glass plate only stands out slightly from the wall. It can also be flush-mounted on the wall with the installation frame.



TECElux Mini toilet flush plate, dual-flush system

Note: The TECElux Mini is not compatible with the TOTO Washlet RX and SX, as the lid can activate the flush actuation when folded up - even with an actuation height of 1 m (centre actuation).

Transformer assembly including connection cable

The transformer is required to connect the power connection to the TECElux Mini flush plate. A flush-mounted socket with a diameter of at least 60 mm and a depth of 61 mm is suitable for installation in dry or wet walls.



Transformer positioning: In the 0-475 cm range around the cistern



Inserting the cable into the cistern



Transformer connection



Programming the electronics

A remote control (order no. 9240971) is required to programme the TECElux Mini electronics. The electronics can be programmed (at any time) after the power supply has been connected. In the event of a power failure, the last settings saved are retained. Each configurable setting is assigned a position on the remote control.

	Software version 1.0
Position	Function
1	Hygiene flush off
2	Hygiene flush 24 h
3	Hygiene flush 56 h
4	Hygiene flush 72 h
5	Hygiene flush 168 h
6	Hygiene flush 336 h
7	Illumination level 1 very bright
8	Illumination level 2 standard
9	Illumination level 3 dimmed
10	Illumination level 4 darker
11	Activate illumination 20 sec*
12	Activate illumination 2 mins
13	Activate illumination 3 mins
14	Activate illumination 4 mins
15	Activate illumination 5 mins
16	Activate illumination permanently*
17	Cleaning function off
18	Cleaning function on
19	Automatic flush off
20	Automatic flush 2 mins
21	Automatic flush 5 mins
22	Touchless operation
23	Touch operation
24	Identification long-distance
25	Identification standard
26	Identification short-distance
•••	
Reset	Factory setting

Programming the TECElux Mini electronics:

- Move closer to the electronics until the button illumination is activated.
- Point the remote control towards the middle of the button area at a distance of 5-10 cm, and then press the desired button on the remote control.



• An optical signal indicates the desired function has been successfully configured: The button illumination is switched off and flashes twice.

Automatic flush:

- If the toilet is not flushed when the automatic flush function is activated, an automatic flush is carried out 2 or 5 minutes after the button illumination is switched off.
- When the automatic flush is activated, person recognition is automatically set to "Identification short-distance".

Manual flush:

 It is possible to flush the toilet without power – e.g. following a power failure: To do so, remove the flush plate cover from the wall and press the red actuation rod.

Cleaning function:

- When the cleaning function is activated, both the touch panel and touchless operation are deactivated for 30 seconds.
- Once this time has elapsed, the previously set functions are automatically available again.

= Factory setting

* Function only for exhibitions

TECEsquare

The TECEsquare flush plate is available for both toilet and urinal with glass or metal covers:

Similar to TECEloop, the glass version can be installed in front of the tile (wall-mounted) or flush with the toilet installation frame.





TECEsquare II Metall



Wandaufbau 3 mm

3





150



- 2

TECEsquare Glas



Installation of TECEsquare flush plates (applies to toilet and urinal flush plates)

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TECEsquare II toilet flush plate, metal

TECEsquare toilet flush plate, glass

TECEsquare urinal flush plate, glass TECEsquare urinal flush plate, metal

TECEloop

The TECEloop flush plates are available in plastic and glass surfaces. The outstanding feature of the TECEloop glass flush plate is the option for flush-mounted installation. The TECEloop flush plate is also available for the urinal.



TECEloop toilet flush plate, plastic TECEloop toilet flush plate, glass TECEloop urinal flush plate, plastic TECEloop urinal flush plate, glass

TECEloop modular system

The modular system is available for the TECEloop toilet flush plate with glass cover. Glass cover and actuation unit must be ordered separately. This ensures a large number of colour combinations (104 possibilities in total).

Buttons + cover = toilet flush plate



The basic idea of the TECEloop modular system is to adapt the flush plate to existing colours in the bathroom as best as possible. For this reason some of the glass covers are coordinated with the colours from Alape, EMCO or Burgbad.

TECEplanus

Stainless steel TECEplanus flush plates are robust and can be used in single or dual-flush systems. Thanks to a concealed screw, these flush plates can be installed in a vandal-proof manner. Consequently, they are particularly suitable for public sanitary areas, restaurants and hotels. TECEplanus flush plates are also available in a matching design for the urinal.



TECEplanus toilet flush plate, single-flush system TECEplanus toilet flush plate, dual-flush system TECEplanus urinal flush plate **TECEplanus infrared electronics**



TECEplanus toilet infrared electronics TECEplanus urinal infrared electronics

TECEplanus infrared electronics are available for toilet and urinal.

They detect usage thanks to the reliable autofocus infrared sensor and flush independently. The power for these electronics can be supplied either with a 6 V battery or as a 12 V mains version.

Observe the following:

A transformer must be used to supply power to the 12 V mains versions. A suitable location (flush-mounted socket or similar) must be provided for this during the shell construction phase, as it must never be placed directly on the flush plate.

The connection cable between the transformer and the electronics must be no more than 10 m in length.

The TECEplanus infrared electronics are equipped with vandal protection and are therefore protected against theft. With the toilet electronics, an additional single-quantity flush can still be activated manually.

Toilet infrared electronics

The toilet infrared electronics activate the flushing when a person has entered the detection area and - after a specified minimum stay - has left it again. The following parameters must be observed:

- The detection range is between 50 80 cm.
- The detection of persons is only completed after a period of at least 16 seconds, during which the user must remain within the detection zone.
- Activation only starts when the user has vacated the detection zone: after 5 seconds, a short tone sounds, after another 2 seconds, the flush is activated.

If the user enters the detection zone within the period of the last 7 seconds (5 + 2), the flush activation stops and

only restarts after the user has left the zone again and a further 7 seconds have elapsed.

Cleaning function

Activating the cleaning function stops the toilet flush for ten minutes. After this time, a cleaning flush is automatically triggered and the standard operating mode is restored.

 Activating the cleaning function: Hold the programming key briefly i window until an acknowledgement



 Deactivating the cleaning function: Hold the programming key briefly it

window. Three consecutive acknowledgement beeps sound - the toilet electronics are restored to standard operation.

The cleaning function can only be activated in standard mode, not during the programming phase.

Programming toilet infrared electronics

The toilet infrared electronics can be programmed in the first 30 minutes after the power has been connected. Each configurable function is assigned a position.

Position	Function
1	Hygiene flush off
2	Hygiene flush 56 h
3	Hygiene flush 84 h
4	Hygiene flush 168 h
5	Hygiene flush 336 h
6	Hygiene flush 672 h

= Factory setting

How to program the toilet infrared electronics:

- Hold the programming key in front of the sensor window (see figure). The programming mode starts with a quick series of short beeps.
- After the start-up phase, a sequence of the same beeps can be heard. Count the beeps until you reach your desired function.
- Now remove the programming key. A long beep indicates that the programming key has been removed.

Example: Setting the hygiene flush to 56 hours:



Hold the programming key Count in front of the sensor until t

Count the individual beeps until the desired position is reached

Adjusting the cistern

When installing toilet electronics, the drain valve of the cistern must be adapted:



For cisterns installed from mid/end 2009 and containing the drain valve (A2) shown above, the red pull rod of the valve must be replaced with a black one. This is included with the motor of the toilet electronics or is available as a spare part (order no. 9820229).

Toilet infrared electronics energy options

• Mains version:

230 V alternating current is transformed to 12 V direct current via a TECE transformer (order no. 9810003, please order separately).

- Battery operation:
 - 1 x lithium 2CR5 6 V

Based on a service life of two years, the battery lasts for

- 15,000 flushes or
- approx. 20 flushes/day.

Alternatively, battery operation is also possible using 4 mono cells (LR20). This increases the battery life to 110,000 flushes or 150 flushes/day. As well as the batteries, you also need a different battery housing (order no. 9820202).

Urinal infrared electronics U 1

The autofocus sensor of the urinal infrared electronics measures not only the distance travelled but also the angle of entry of the light that a person reflects. The sensor also detects whether the person is approaching or moving away.

Activation of the flush is therefore largely independent of the colour of the user's clothing. It is possible to precisely determine the recognition range completely separate from the background. The probability of false activation is therefore greatly reduced.

The TECE autofocus sensor has many advantages:

- Intelligent PSD technology (Unique Position Sensitive Detection)
- Exact triggering behaviour
- Good black detection
- Insensitivity to changing light conditions
- Minimal energy consumption with maximum battery life



Function of the IR sensor with PSD technology

The toilet electronics activate the flush when a person has entered the detection area and - after a specified minimum stay - has left it again. The following parameters must be observed:

- The detection range is between 5 and 45 cm.
- The detection of persons is only completed after a period of at least 6 seconds, during which the user must remain within the detection zone.
- Activation only starts when the user has left the detection zone.

Pause function

When the pause function is activated, the flushing time is automatically reduced to one second following repeated flushes in short succession (distance less than two minutes). 45 minutes after the last economy flush, a standard flush volume is activated.





Cleaning function

Activating the cleaning function stops the urinal flush for ten minutes. After this time, a cleaning flush is automatically triggered and the standard operating mode is restored.

- Activating the cleaning function: Hold the programming key briefly in front of the sensor window until an acknowledgement beep sounds.
- Deactivating the cleaning function: Hold the programming key briefly in front of the sensor window. Three consecutive acknowledgement beeps sound - the urinal is restored to standard operation.

The cleaning function can only be activated in standard mode, not during the programming phase.

Programming the urinal infrared electronics

After installing the electrical supply, the electronics can be programmed within one hour using the magnetic key supplied. If you wish to change the program, you must disconnect the power supply. Thanks to a memory chip, the last program set always remains active even after a power cut.

Position	Function
1	Pause function "off"
2	Pause function "on"
3	Flush time 2 s
4	Flush time 2.5 s
5	Flush time 3 s
6	Flush time 3.5 s
7	Flush time 4 s
8	Flush time 5 s
9	Flush time 6 s
10	Flush time 8 s
11	Flush time 10 s
12	Pre-rinsing "off"
13	Pre-rinsing 0.5 s
14	Pre-rinsing 1 s
15	Pre-rinsing 2 s
16	Hygiene flush "off"
17	Hygiene flush 24 h
18	Hygiene flush 255 h
19	Sensor sensitivity "low"
23	Distance "standard"
24	Distance "short"
25	Distance "long"
28	Factory setting
29	Urinal covers "off"
30	Urinal covers "on"

= Factory setting

Approximately five seconds after being connected to the power supply, TECE electronics can be programmed in the first 30 minutes. Each configurable function is assigned a position.

In programming mode, the electronics can be set with the magnetic key. In standard mode, only the cleaning function can be activated with this key.

• Cleaning function:

When cleaning the urinal, automatic flushing is generally not required as the cleaning agent needs time to take effect. For this reason, flushing can be delayed by 10 minutes.

• Pre-flush (optional):

(Duration 0-2 seconds) Briefly humidifies the ceramic before use, preventing adhesion of urine. Desired side effect: The pre-flush stimulates the urge to urinate.

• Pause function (optional):

The volume of water is automatically reduced if the urinal is flushed at intervals of less than two minutes. A cleaning flush takes place 45 minutes after the last water-saving flush.

• Variable flush time:

(Duration 2–10 seconds) The flush volume can be adapted to requirements throughout the flush time.

• Distance:

The modern autofocus sensor optical system operates reliably in varying construction situations. Nevertheless, the optical system's detection range can be changed on extremely small or large urinal systems.

• Hygiene flush (optional):

If this function is activated, a regular clean flush prevents the siphon from drying out and emitting unpleasant smells, and also prevents residues from being deposited (choice of 24 or 255 hours after the last flush).

 Siphon refill (optional): Modern urinals generally suck the siphon contents completely away and then refill enough water to fill the siphon back up again. If this does not work, the refill function of the TECE electronics can be activated and a short flush pulse fills the siphon.

How to program the TECE electronics:

 Hold the programming key in front of the sensor window.
 The programming mode starts with a quick series of short beeps.



- After the start-up phase, a sequence of the same beeps can be heard. Count the beeps until you reach your desired function.
- Now remove the programming key. A long beep indicates that the programming key has been removed.

Example: Setting the flush time to three seconds



Energy options - urinal electronics for radio activation

• Mains version:

230 V alternating current is transformed to 12 V direct current via a TECE transformer (order no. 9810003, please order separately).

 Battery operation: 1 x 2 CR 5 lithium – 6 V

Based on a service life of two years, the battery lasts for

- 220,000 flushes or
- approx. 300 flushes/day.

Technical data

Using the following flow diagram, you can calculate the flush volume for the urinal flushing valve depending on mains pressure and flush time.





Example:

Mains pressure 3 bar: Flushing flow = 0.58 l/s Flush time e.g. 3.5 s: Flush volume approx: 2 litres

TECEplanus infrared electronics

Urinal infrared electronics, 6 V battery

	-
Minimum flow pressure	0.5 bar
Max. operating pressure	12 bar
Flow rate at 3 bar	0.58 l/s
Operating voltage	6 V DC
Power input	1 W
Max. power input	5 W
Battery type	Lithium 6 V, 2 CR 5
Battery service life	approx. 3 years
Protection class	III
	Safety extra-low volt-

(SELV)Flush time, factory setting3 sFlush time, setting range2-10 sPre-flush, factory settingoffPre-flush, setting range0.5-2 sPause function, factory settingoffHygiene flush, factory settingoff

Hygiene flush, setting range

age

		Nominal power	6 W
Urinal infrared electronics, 12 V n	nains	Minimum load	0
Minimum flow pressure	0.5 bar	Energy efficiency	75%
Max. operating pressure	12 bar	Electronic overload protection	
Flow rate at 3 bar	0.58 l/s	Electronic short circuit protection	
Mains voltage	230 V	Type of protection	IP 2
Operating voltage	12 V (± 20%)	Protection class	II
Power input	1 W		CE low voltage power
Max. power input	5 W	supply	
Protection class	III		
	Safety extra-low volt-	Operating temperature	- 20°C to + 40°C
age		Safety standard	EN 61 558 / EN 60
	(SELV)	950	
Flush time, factory setting	3 s	EMV standard	EN 55 022/B
Flush time, setting range	2-10 s		
Pre-flush, factory setting	off	Technology	Switching
Pre-flush, setting range	0.5-2 s	Switching frequency	100 KHz
Pause function, factory setting	off	Dielectric resistance	3,750 V/1 min
Hygiene flush, factory setting	off	MTBF (MIL HDBK217)	120,000 h
	((o ()		

off, 24 hours, 255

Frequency

Residual ripple

Output rated voltage

Output rated current

Output voltage tolerance \pm 3%

Transformer 230 V/12 V mains



48–63 Hz

< 50 mVpp

1.0 A

12 V DC (± 20%)

hours

Toilet electronics, radio actuation

Electrically triggered flushing systems are also available when using foldable safety support arms. You have the option of installing a radio button for electrical activation on the foldable safety support arm. It is also possible to use several radio buttons with a single receiver.



Energy options - toilet electronics for radio actuation

• Mains version:

230 V alternating current is transformed to 12 V direct current via a TECE transformer (order no. 9810003, please order separately).

 Battery operation: 4 x LR20 mono cell – 6 V

Based on a service life of two years, a battery lasts for

- 190,000 flushes or
- approx. 260 flushes/day.

Observe the following:

A transformer must be used to supply power to the 12 V mains versions. A suitable location (flush-mounted socket or similar) must be provided for this during the shell construction phase, as it must never be placed directly on the flush plate.

No flush plate is included in the scope of delivery. You can use any single-flush plate with the remote release, but all dual-flush plates are also possible (e.g. TECEloop, TECEsquare). However, only the large volume is flushed, even if both actuation rods are installed during assembly.

TECEplanus radio button

The TECEplanus radio button (order no. 9240360) can be retrofitted for most foldable safety support arms and matches the TECEplanus toilet radio solution.



TECEplanus radio button

Initial operation

Before mounting the radio transmitter on the foldable safety support arm, the enclosed batteries must be inserted:

- Remove the screw from the back of the housing and open the cover. Insert both batteries as marked in the housing.
- You can only adjust the volume of the "beep" for the acoustic flush acknowledgement when the housing is open. We recommend the factory setting: full volume.
- To decrease the volume, turn the controller to the left. To increase the volume, turn it to the right.

Lautstärkeregler



Volume controller

You can now close the housing tightly.

- Make sure that you position the housing cover exactly: A sealing ring is inserted in the cover to prevent water from penetrating inside.
- When screwing on the housing cover, you should also make sure that the sealing ring inserted fits tight around the screw plug.

Installation

The radio transmitter is already supplied with two premounted fastening clamps for screw fastening to the safety support arms with a tube diameter of up to 33 mm.

- Loosen the screw connections from the universal clamps. You can now attach the radio transmitter to the upper or lower pipe (depending on the safety support arm) using these two clamps.
- Tighten the screws firmly after you have finally positioned the radio transmitter.

Depending on the desired position of the transmitter, the radio transmitter can be mounted anywhere on a safety support arm (to the left or right of the toilet).

Programming the radio transmitter

Before using the radio transmitter for the first time, it must first be programmed to the respective receiver (part of the corresponding flushing system). There is a corresponding button and an LED on each receiver for this purpose.



Programming the radio button

• To program the radio transmitter, press the teach-in button on the receiver. This is visually acknowledged on the receiver by a single flash of the LED.



 Now press the flush release button of the radio transmitter within 30 seconds (illustration on the right). The LED flashes three times to indicate that the radio transmitter has been successfully programmed.

Flush function

After successful programming, you can now flush the toilet by approaching the trigger surface of the radio transmitter (approx. 3-5 mm in front of the surface) or by touching this surface. A successful flush signal is acknowledged acoustically by a "beep".

Technical data

Frequency	868.4 MHz		
Addressing	Individual 32-bit address, can be pro- grammed on the receiver		
Range	max. 10 m		
Functions	Flushing for compatible toilet controls		
Actuating	Capacitive button, acoustic acknowl- edgement by button beep		
Power supply	3 V DC (2 x alkaline battery LR-1)		
Battery life	approx. 3 years or 100,000 flushes		
Housing	ABS housing approx. 85 x 46 x 16 mm		
Installation	via clamps on the foldable safety support arm		
Colour	Black (RAL 9005)		
Degree of protection	IP 54		
Compatible toilet controls	TECEplanus 9240354 TECEplanus 9240355 Geberit 115.867 Sanit 03.082.00.0000 Viega 462.376		

Compatible radio electronics for the TECE radio solution (868.4 MHz) - (Foldable) safety support arms and arm-independent radio transmitters

Manufac-	Item	Item no.
turer		
AMS	Radio actuation, can be mounted on AMS safety support arms	533390
DEUBAD	Radio remote release	DEU FK100
Erlau	FMI/E radio transmitter FMI/O radio transmitter	8102213 8102214
Frelu	Transmitter for wireless toilet flush actuation	OP10 radio
FSB	Radio-controlled button	8248 0002
GEBERIT	Hytronic button	241.568.00.1
GROHE	Radio transmitter	100620
HEWI	Toilet flush actuation (radio) upgrade set	802.50.060
	I, left I, right	802.50.060L 802.50.060R

Actuating the radio transmitter

Manufac-	Item	Item no.
turer		
KEUCO	Foldable safety support arms with integrated radio actuation	
	700 mm right	34903011737 34903011738 34903171737 34903171738
	700 mm left	34903012737 34903012738 34903172737 34903172738
	850 mm right	34903011837 34903011838 34903171837 34903171838
	850 mm left	34903012837 34903012838 34903172837 34903172838
Lehnen	Radio transmitter (with universal clamp)	FA10-001
Normbau	Radio transmitter (white housing) Radio transmitter NY.WCR 435, retrofittable	FA30-001 0449010
PBA	Universal radio transmitter	Unknown
Pressalit Care	Radio transmitter 868.4 MHz	R9341
Wagner	Universal radio transmitter	600063

Toilet electronics, radio actuation, 6 V battery



The radio impulse sent by the radio button when actuated is received by a radio receiver. This receiver unit switches the electric circuit for triggering the actuation motor. The power is supplied by four batteries which are housed in a waterproof casing in the cistern.

Toilet electronics, radio actuation, 12 V mains supply



The radio impulse sent by the radio button when actuated is received by a radio receiver. This receiver unit then switches the electric circuit for triggering the actuation motor.

To connect the 12 V mains version, the mains current must be transformed to 12 V direct current via a TECE transformer (transformer: order no. 9810003, please order separately).

Toilet electronics, wired remote release

Another solution when using foldable safety support arms is the installation of a wired version, in which a button connected with a cable is mounted on the foldable safety support arm.



Energy options - Toilet electronics for wired remote release

• Mains version:

230 V alternating current is transformed to 12 V direct current via a TECE transformer (order no. 9810003, please order separately).

Battery operation:
1 x lithium 2CR5 – 6 V (delivery scope)

Based on a service life of two years, the battery lasts for

- 20,000 flushes or
- approx. 27 flushes/day.

Alternatively, battery operation is also possible using 4 mono cells (LR20). This increases the battery life to 220,000 flushes or 300 flushes/day. As well as the batteries, you also need a different battery housing (order no. 9820202).

Observe the following:

A transformer must be used to supply power to the 12 V mains versions. A suitable location (flush-mounted socket or similar) must be provided for this during the shell construction phase, as it must never be placed directly on the flush plate.

No flush plate is included in the scope of delivery. You can use any single-flush plate with the remote release, but all dual-flush plates are also possible (e.g. TECEloop, TECEsquare). However, only the large volume is flushed, even if both actuation rods are installed during assembly.

Toilet electronics, wired remote release, 6 V battery



The flush is activated when the circuit is closed on the button of the foldable safety support arm. In addition to the electrical supply, the button on the foldable safety support arm and the actuation motor, an electronic component must be installed as an additional component between the different components. Power is supplied by a 6 V battery.

Toilet electronics, wired remote release, 12 V mains supply



The flush is activated when the circuit on the button of the foldable safety support arm is closed. In addition to the electrical supply, the button on the foldable safety support arm and the actuation motor, an electronic component must be installed as an additional component between the different components.

To connect the 12 V mains version, the mains current must be transformed to 12 V direct current via a TECE transformer (transformer: order no. 9810003, please order separately).

TECEnow

The TECEnow toilet flush plates are very flat plastic flush plates with rubber-buffered flush buttons. The TECEnow flush plate is also available for the urinal. They are suitable for flush-mounted installation in combination with toilet installation frame and the TECEnow spacing frame.



TECEnow toilet flush plate, dual flush system TECEnow urinal flush plate

TECEambia

The TECEambia toilet flush plates are available in single or dual flush systems. The TECEambia flush plate is also available for the urinal. The double-sided rubber buffers prevent rattling noises. The flush plate is made of plastic.





TECEbase

TECEbase is a simple plastic toilet flush plate for dual flush systems. It is operated via two buttons using a rocker system.



TECEbase toilet flush plate, dual-flush system

TECEfilo urinal electronics U 2

The new TECEfilo urinal electronics are available with a metal, glass or plastic surface. Their appearance therefore harmonises perfectly with various TECE flush plates such as with the TECEsquare metal, TECEsquare glass or with the TECEnow toilet flush plate. The TECEfilo urinal electronics with a glass or plastic surface can also be mounted flush to the surface with the TECEfilo installation frame.



Based on a service life of two years, the battery lasts for • 220,000 flushes or

- 220,000 Ilusties of
 approx 200 flushes /dr
- approx. 300 flushes/day.

The TECE urinal flush U2 is suitable for installation in dry and brick-wall constructions. For dry-wall structures, installation is performed together with the TECE urinal module.

TECEfilo urinal electronics U 2

The transformer is already integrated into the two shell elements which means that it is suitable for direct 230 V connection.

U 2 TECEbox urinal flush valve housing for brick-wall construction (9370040)





Compatible with the 230 V mains and the 7.2 V battery versions. The transformer for 230 V mains operation is already integrated.

TECEprofil urinal module with U 2 flush valve housing (9320013)





It is also possible to loop the connection through.

Compatible with the 230 V mains and the 7.2 V battery versions. The transformer for 230 V mains operation is already integrated.

TECEfilo installation frame for flush-mounted installation, for dry-wall constructions only (9242040/41/42)



The TECEfilo plastic electronics, like the glass ones, can be mounted with the TECEfilo installation frame for flush-mounted installation in dry-wall structures.



Bare wall – mounting and installation

The U2 flush valve housing can be installed in dry-walls and brick-walls. The transformer is already integrated into the flush valve housing to facilitate coordination of the different trades. Therefore, the transformer can be directly connected with a 230 V cable.

Programming the urinal electronics

To program the TECEfilo urinal electronics, the programming key provided in the scope of delivery is required. The TECE electronics can be programmed during the first 30 minutes after connection to the power supply. In the event of a power failure, the last settings saved are retained. Each configurable setting is assigned a position on the remote control.

Position	Function	
1	Pause function "off"	
2	Pause function "on"	
3	Flush time 1 s	
4	Flush time 2 s	
5	Flush time 3 s	
6	Flush time 4 s	
7	Flush time 5 s	
8	Flush time 6 s	
9	Flush time 7 s	
10	Flush time 8 s	
11	Flush time 9 s	
12	Flush time 10 s	
13	Pre-rinsing "off"	
14	Pre-rinsing 0.5 s	
15	Pre-rinsing 1 s	
16	Pre-rinsing 2 s	
17	Hygiene/interval flush "off"	
18	Hygiene/interval flush 24 hrs	
19	Hygiene/interval flush 72 hrs	
20	Hygiene/interval flush 168 hrs	
21	Refill "off"	
22	Refill "on" (refill for 2 s after flushing for 2 s)	
23	Sensor sensitivity "sensitive"	
24	Sensor sensitivity "standard"	
25	Hygiene flush volume small (5 s)	
26	Hygiene flush volume medium (15 s)	
27	Hygiene flush volume big (30 s)	
28	Reset to factory settings	
29	Urinal covers "off"	
30	Urinal covers "on"	
	= Factory setting	

During the programming phase, a red diode flashes in the centre of the sensor field as soon as a person enters the area. This diode acknowledges that the programming mode is activated. In addition, it indicates the exact position of the programming key.



How to program the TECE electronics:

• Hold the programming key in front of the red diode (see diagram). The programming mode starts with a quick series of short beeps.



- After the start-up phase you will hear a sequence of the same distinct beep.
 Count the beeps until you reach your desired function.
- Now remove the programming key. A long beep indicates that the programming key has been removed.

Example: Setting the flush time to three seconds



Flow characteristic curve:

Using the flow characteristic curve, the TECEfilo flush volume flow rate can be read and set depending on the flow pressure as well as the flushing time:



Example:

Mains pressure 4 bar \rightarrow Flow rate 0.44 l/s \rightarrow with 5 s flushing time \triangleq 2.2 l

Adjustable functions:

Pause function/stadium function

When the pause function is activated, the flushing time is automatically reduced to one second following repeated flushes in short succession (= less than two minutes). 45 minutes after the last economy flush, a standard flush volume is activated.

Cleaning function

Activating the cleaning function stops the urinal from flushing for ten minutes. After this time, a cleaning flush is automatically triggered and it returns to the standard operating mode.

Activating the cleaning function:

Hold the programming key briefly in front of the sensor window until an acknowledgement beep sounds.

The cleaning function can only be activated in standard mode, not during the programming phase.

Hygiene/interval flush

Automatic flush actuation, choose between 24, 72 or 168 hours after the last flush. The hygiene flush volume can be set to small (5 s), medium (15 s) or large (30 s).

Toilet flush handle

The toilet flush handle is a completely different type of toilet flush plate, which can only be mounted on the TECE concealed cistern. It sets standards in terms of operation and design. The technology of the toilet flush handle enables a large or small flush volume to be activated via a rotary movement.

Toilet fittings are offered by various manufacturers of bathroom fittings. They are normally part of a fitting or accessory series or "cross-series". The design coordinated with the fittings ensures a consistent bathroom design without disturbing influences. The toilet flush handles are high-quality products made of metal.

A toilet flush handle can be replaced with a TECE flush plate at any time without any effort. The customer can therefore still decide on a toilet flush handle at a later stage.

Your contact for the toilet flush handle is not TECE, but the manufacturer who also sells the toilet flush handle:

DORNBRACHT

Dornbracht GmbH & Co. KG Köbbingser Mühle 6 D-58640 Iserlohn www.dornbracht.de info@dornbracht.de

JADO

Jado AG Deutschland Euskirchener Straße 80 D-53121 Bonn Tel. +49 (0) 2 28 521-0 Fax +49 (0) 2 28 521-241 www.jado.de jado.info@idealstandard.de

oras

Oras GmbH & Co. KG Armaturen Grünlandweg 10 D-58640 Iserlohn Tel. +49 (0) 23 71 94 80-0 Fax +49 (0) 23 71 94 80-23 www.oras.com info.germany@oras.com

Installation of the rotary mechanism

The installation of the cover of a WC flush handle varies depending on the manufacturer and series and is described in detail in the respective assembly instructions. The basis of every toilet flush handle, the rotary mechanism, is installed as follows:





Now screw the rotary mechanism to the fastening rods and align horizontally.

The covers are installed according to the instructions of the fitting manufacturer.

Insert chute

The TECE insert chute for cleaning cubes offers a high degree of universality, can be combined with all flush plates and also allows flush-mounted installations. In brick-wall construction, a wall thickness of more than 16 mm is required. The maximum wall thickness is 60 mm in dry walls and 75 mm in wet walls.

To ensure this feature, different installation steps must be carried out for the combination with TECE flush plates. For this reason, various assembly instructions are enclosed with the insert chute. The application to which the instructions refer can be seen in the top right-hand corner of the first page of the respective instructions.

9 240 950	+ 9 240 64x	
	TECEnow	

TECEnow instructions, flush-mounted

Insert chute operation

The metal intermediate frame with guide rods is required when installing the following flush plates:



TECEsquare II metal and TECEnow instructions



The insert chute is easy to use in just a few simple steps:

The flush plate is pulled out behind the surface with a

The flush plate is pulled out behind the surface with a simple handle and swivelled away downwards. For flush-mounted plates and for TECEsquare metal II, please use the bow handles.



The insert chute can now be filled through the red flap. The tablet falls into the collector basket, from where it releases its hygienic cleaning agents into the water.

Note:

Caution: The cleaning tablets used must not contain chlorine or any other oxidising substances The metal intermediate frame and the guide rods are **not** required for the following flush plates:





TECEsquare II metal

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TECEnow



TECE flush plate installation dimensions

TECElux Mini



Dimensions of toilet flush plate and bare-wall protection for vertical joint alignment



Toilet flush plate with module 1120 mm
TECEsquare II metal



Dimensions of toilet flush plate and bare-wall protection for vertical joint alignment



Dimensions of urinal flush plate and bare-wall protection for vertical joint alignment



- Toilet flush plate (left) and urinal flush plate (right):
- Installation flush at top (top illustration)Installation centred (middle illustration)

- Installation flush at bottom (lower illustration)



Toilet flush plate (left) and urinal flush plate (right) with module 1120 mm



Toilet flush plate with module 980 mm (left) and 820 mm (right)

TECEsquare glass



Dimensions of toilet flush plate and bare-wall protection for vertical joint alignment



Dimensions of urinal flush plate and bare-wall protection for vertical joint alignment



Toilet flush plate (left) and urinal flush plate (right):

- Installation flush at top (top illustration) - Installation centred (middle illustration)
- Installation flush at bottom (lower illustration)





Toilet flush plate with module 980 mm (left) and 820 mm (right)

TECEloop glass



Dimensions of toilet flush plate and bare-wall protection for vertical joint alignment



Dimensions of urinal flush plate and bare-wall protection for vertical joint alignment



Toilet flush plate (left) and urinal flush plate (right):

- Installation flush at top (top illustration)
- Installation centred (middle illustration)
- Installation flush at bottom (lower illustration)





Toilet flush plate with module 980 mm (left) and 820 mm (right)

TECEloop plastic



Dimensions of toilet flush plate and bare-wall protection for vertical joint alignment



Dimensions of urinal flush plate and bare-wall protection for vertical joint alignment



Toilet flush plate (left) and urinal flush plate (right):

- Installation flush at top (top illustration)
- Installation centred (middle illustration)
- Installation flush at bottom (lower illustration)





Toilet flush plate with module 980 mm (left) and 820 mm (right)

TECEsolid



Dimensions of toilet flush plate and bare-wall protection for vertical joint alignment



Dimensions of urinal flush plate and bare-wall protection for vertical joint alignment



Toilet flush plate (left) and urinal flush plate (right): - Installation flush at top (top illustration)

- Installation centred (middle illustration)

- Installation flush at bottom (lower illustration)





Toilet flush plate with module 980 mm (left) and 820 mm (right)

TECEplanus



Dimensions of toilet flush plate and bare-wall protection for vertical joint alignment



Dimensions of urinal flush plate and bare-wall protection for vertical joint alignment





Toilet flush plate (left) and urinal flush plate (right): - Installation flush at top (top illustration) - Installation centred (middle illustration)

- Installation flush at bottom (lower illustration)





Toilet flush plate with module 980 mm (left) and 820 mm (right)

TECEnow



Dimensions of toilet flush plate and bare-wall protection for vertical joint alignment



Dimensions of urinal flush plate and bare-wall protection for vertical joint alignment



- Toilet flush plate (left) and urinal flush plate (right):
- Installation flush at top (top illustration)
- Installation centred (middle illustration)
- Installation flush at bottom (lower illustration)





Toilet flush plate with module 980 mm (left) and 820 mm (right)

TECEambia



Dimensions of toilet flush plate and bare-wall protection for vertical joint alignment

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Dimensions of urinal flush plate and bare-wall protection for vertical joint alignment





Toilet flush plate (left) and urinal flush plate (right):

- Installation flush at top (top illustration)

Installation centred (middle illustration)
Installation flush at bottom (lower illustration)





Toilet flush plate with module 980 mm (left) and 820 mm (right)

TECEbase



Dimensions of toilet flush plate and bare-wall protection for vertical joint alignment



Toilet flush plate with module 1120 mm



Toilet flush plate with module 980 mm (left) and 820 mm (right)

TECEfilo



Dimensions of metal urinal electronics and bare-wall protection for vertical joint alignment



Dimensions of plastic urinal electronics and bare-wall protection for vertical joint alignment



Dimensions of glass urinal electronics and bare-wall protection for vertical joint alignment



Urinal electronics with module (flush housing U2) 1120 mm

TECEfilo-Solid



Dimensions of urinal flush plate and bare-wall protection for vertical joint alignment



Urinal flush plate with module (flush housing U2) 1120 mm

Assembly instructions

The following shows an example of the installation of a manual toilet flush plate. The work steps are similar for all manual TECE flush plates.



Remove the splash guard and open the corner valve. Flush out the pipe adequately.



Close the corner valve again and connect the reinforced hose to the filling valve. If you wish to fill the cistern with water (for commissioning, for example), the corner valve must then be opened again.



Replace the splash guard. The actuating hooks must be correctly seated in the towing eyes of the drain valve. Tighten the clamping screws of the splash guard.



Turn in both fastening rods - the distance of the fastening rod to the wall surface is contained in the respective assembly instructions (here 15 mm).





Bend the actuation rods according to the wall construction.



Screw in both actuation rods - the distance between the fastening rod and the wall surface is 2 mm in this example.



Lever the cover off the actuation unit using a screwdriver. Insert the screwdriver into the recesses on the underside of the flush plate and carefully loosen it. With some plates, the cover can also be loosened by hand or is already enclosed loose.



The installed cover can be levered off from the actuation unit using the disassembly tool. To do this, insert the tool into the recesses on the underside of the flush plate and carefully loosen the cover. For some plates (e.g. made of glass), the bow handles with suction cups should be used.



Screw the fastening frame onto the fastening rods.



Snap the cover of the flush plate into the fastening frame.