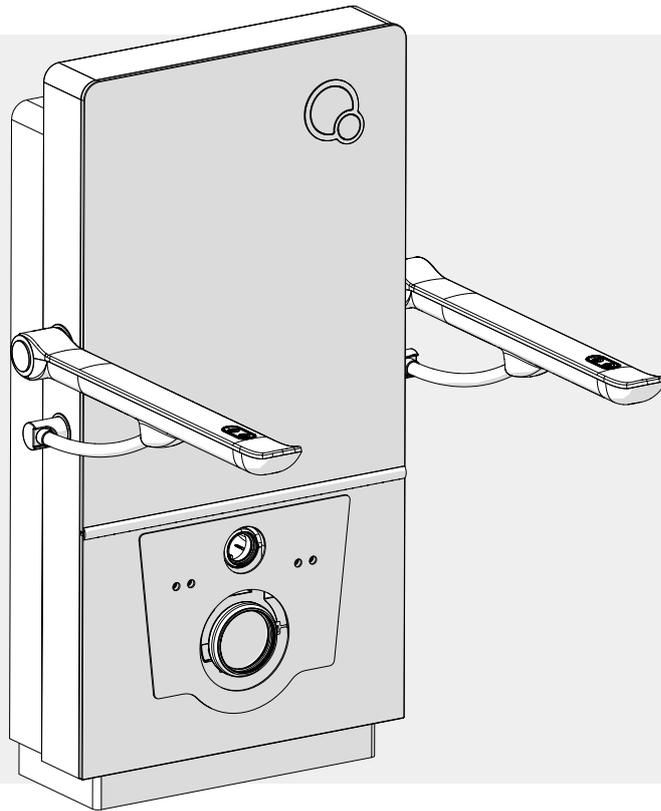


# Rise and Fall Cistern Unit

## INSTALLATION & USER GUIDE



Stock Code  
**28403**

Please read all instructions before installation and leave this document with the end user for future reference as it contains important warranty information

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### Flush Operation

Press the full flush button to start the full flush cycle of about 6L.

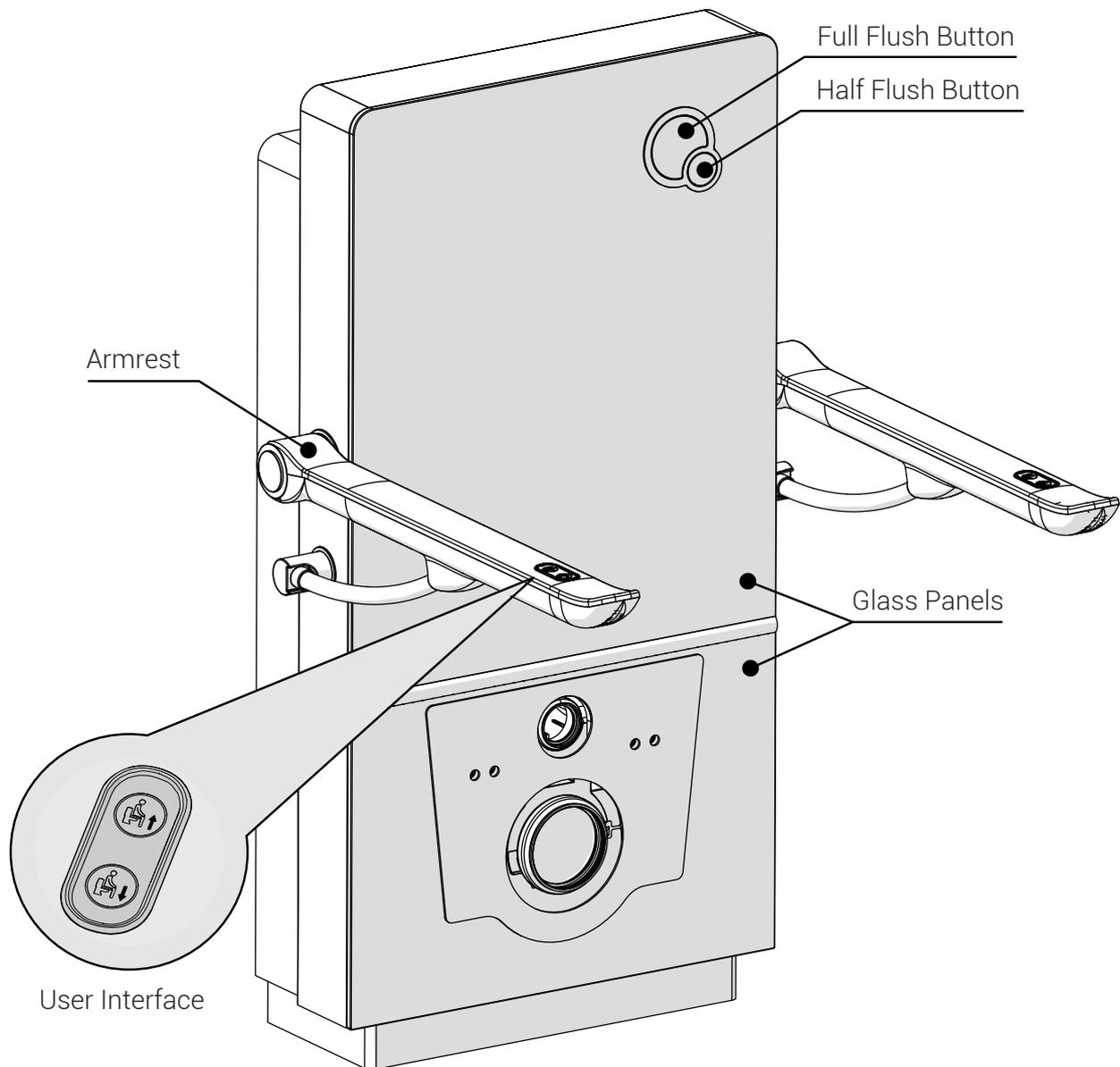
Press the half flush button to start a reduced flush cycle of about 4L.

Armrests can be rotated up 90 degrees.

### Rise and Fall Operation

Press and hold the up or down button to raise or lower the unit. Release the button to stop.

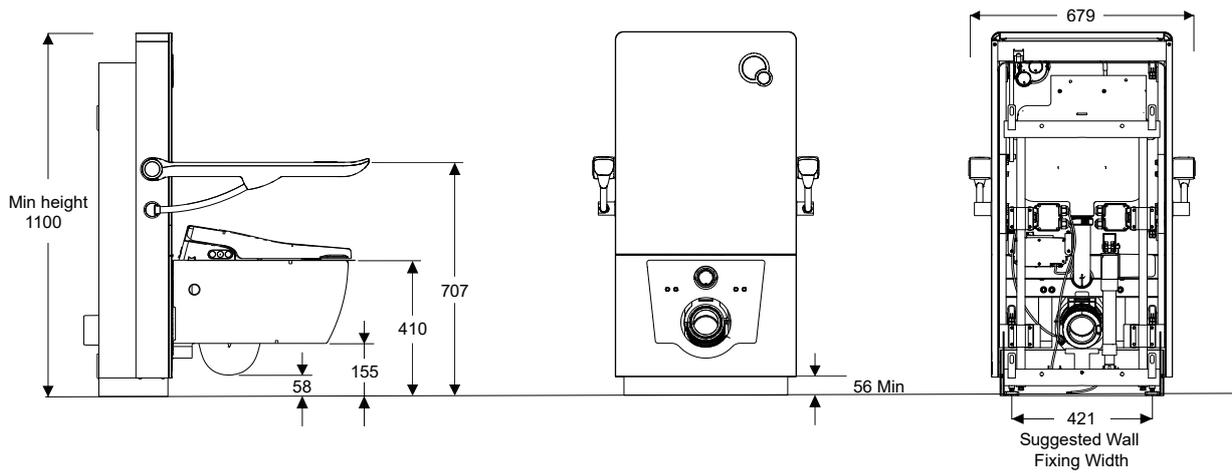
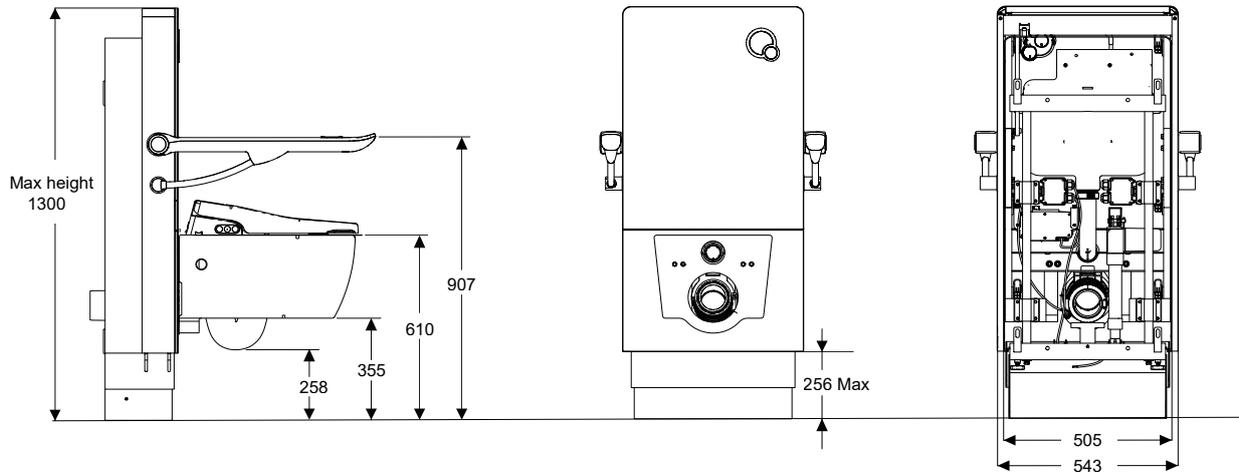
The unit has 200 mm of vertical travel.



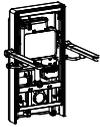
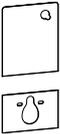
**Note:** The toilet and the AKW bidet are not part of the appliance, they should be purchased separately. Also suitable with the AKW Bidet.

Specification	Description
Model	28403
Product name	Rise and Fall Cistern Unit
Flush volume	6L (full flush) and 4L (half flush)
Lift direction	Vertical
Rated voltage	AC 220-240V,50/60Hz
Max. power	200 W
Drive mode	DC motor lead screw
Duty cycle	10%, Max.2 min operate/Min.18min stop
Operation switch	Push-button
Adjustable lifting range	200 mm
Length of power cord	2.0 m
Max. weight load	200 kg
Max. load weight each arm rest	120 Kg
Waterproof rating	IPX4
Ambient temperature	4~400C
Waste direction	Wall or floor
Dimension	(H) 1099 x (W) 543 x (D) 212mm
Net weight	55.9 kg
Colour of glass panel	White





\*Dimensions in mm

Item	Description	Size	Quantity	Item	Description	Size	Quantity
	Rise and Fall Cistern Unit		1		Straight Waste Pipe		1
	Interior Cover Panel		1		Flush Pipe		1
	Exterior Cover Panel		1		Flush Pipe Seal		1
	Glass Panels		1		Flush Pipe Gasket	Ø60	1
			1				
	Panel Strip		1		Threaded Stud	M12 x 180	2
	Protective Cover		1				
	Flush Buttons		1		Fixing Nut	M4	2
	Full Flush Air Hose - Clear		1		Countersunk Screw	M4 x 8	2
	Half Flush Air Hose - Blue		1		Extension Screw	M4	4
	Soil Pipe Gasket	Ø110	1		G 1/2 Flexible Hose	1.2 m	1
	Flexible Waste Pipe					1.5 m	1

### Important - Wall fixings are not supplied

Before fixing anything to the walls, ensure that the construction of that wall type is capable of supporting the maximum weight of the loaded unit and that the appropriate fixings and fixtures are used for that wall type. Use all fixing holes. Do not use countersunk screw fixings.



TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK, OR INJURY:

Installation of this appliance must be carried out in accordance with these instructions by a competent and experienced installer. The supplier is not liable for any loss arising from the failure to comply with the following instructions.

## Before you start

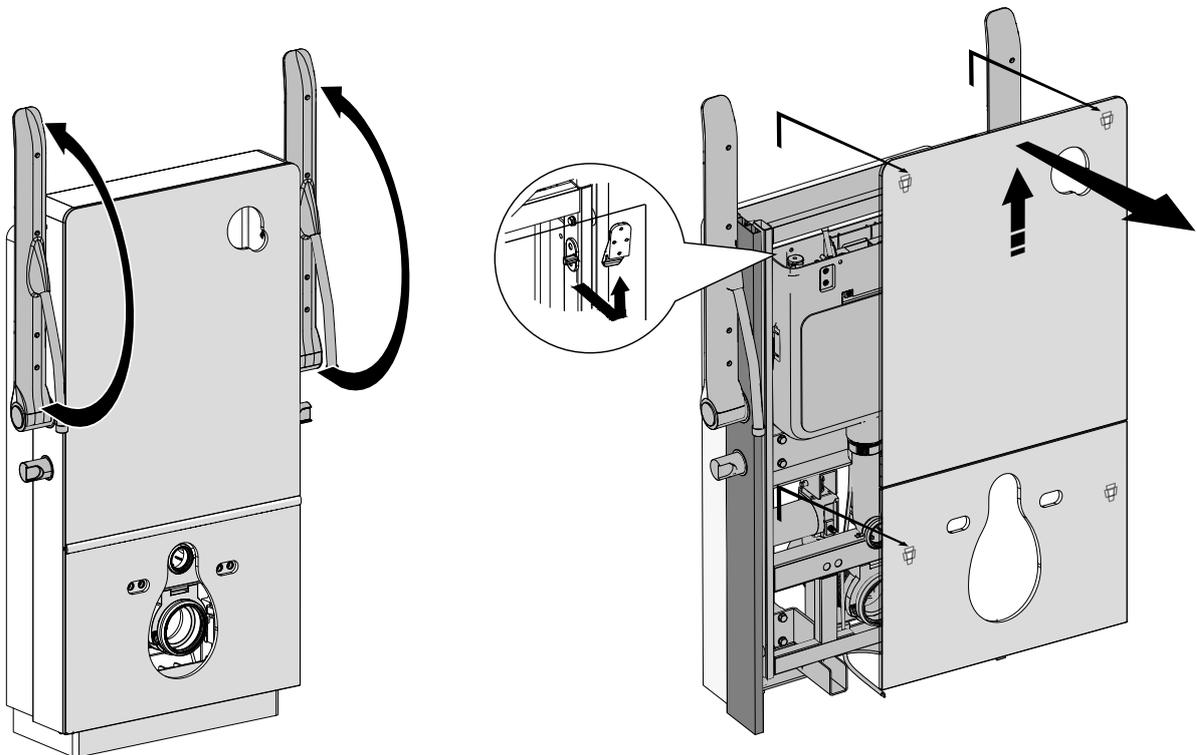
Remove all protective packaging and carefully remove the product. Notify the retailer immediately of any damage or faults. The manufacturer cannot be held responsible for any installation costs that may arise from damaged or faulty products being installed in accordance with these instructions. Dispose of all packaging in accordance with the local recycling authorities.

## Safety

- Handle this product with care. This product is heavy and will require two people to carry.
- Have the correct tools available.
- When drilling into walls or floors, check first for hidden pipes and cables.
- Use safety eye wear when drilling.
- Keep small parts and packaging away from children.
- Isolate the electrical and water supplies before commencing installation. The electricity must be isolated at the consumer unit.
- This equipment is "Class 1" type electrical appliance, and must be Earthed. If the power supply cord is damaged, it must be replaced by the installer or similarly qualified persons in order to avoid a hazard.
- Do not install this appliance in areas of high humidity, high temperatures, or where it can be easily splashed, e.g. a steam room.
- Ensure that an extractor fan is installed to aid good ventilation when using the bathroom.
- The appliance must be permanently connected to a wired mains power supply and not plugged into a electrical socket or connected to a lighting circuit.
- The appliance must be permanently connected to the cold water supply with an isolating valve.
- Do not switch on the appliance if water is leaking from the casing. Isolate the electricity supply immediately and then isolate the water supply.
- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction by a person responsible for their safety and shown how to use the appliance in a safe way and understand the hazards involved.
- Children must not play with the appliance. Cleaning and user maintenance must not be undertaken by children.
- For safety, people heavier than 200 kg must not use this appliance.

**Caution**

- This product is heavy, get someone to help move and install this product.
- Carefully remove the glass panel from the packaging and place it to one side.
- This product has sharp edges. Protect your hands, the cistern frame, and floor with the packaging during installation.
- Connect the cistern only to the cold water supply.
- Do not operate if the power cable is damaged.
- After the installation, check all water supply connections for leaks.
- Rubber washers should be in place for the water connection hoses and Tee Junction.
- Ensure that the user is familiar with the operation of the rise and fall mechanism and leave this manual with the owner.
- Do not stand with feet under the unit when in operation. Ensure that no objects are placed under the unit that could get trapped when lowered.
- When this appliance has reached the end of its serviceable life, it should be disposed of in a safe manner in accordance with current local authority recycling or waste disposal policy.



Note: support arms move independently.

Carefully remove both glass panels and panel seal strip, put to one side until final installation steps.

## Important

Before installation, isolate the water and electrical supplies. Ensure that the installation complies with the latest wiring regulations, and is situated away from any wet areas such as a shower tray. Ensure that the floor and wall are clean, smooth, level, and free of anything that could cause damage during installation.

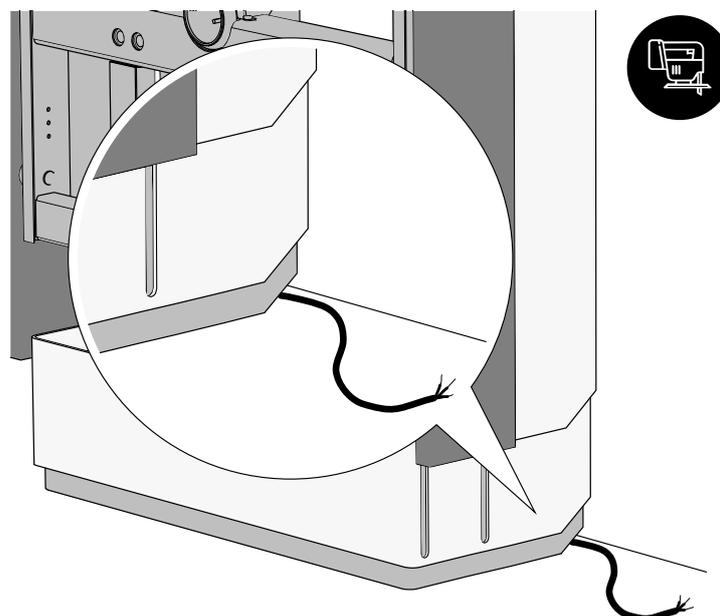
Determine the 'roughing in position', the soil pipe must be within 180 mm of the wall or floor depending on whether it is a through wall or through floor installation. Routing the waste outlet pipe through the side of the cistern unit is not suitable. The flexible waste outlet pipe is attached to the soil outlet pipe with the supplied gaskets and clamps. This allows the flexible pipe to move with the cistern unit when in operation - see page 15.

Measure and install all the necessary pipework and electrical services prior to installing the rise and fall cistern unit on the wall.

For new build installations, the power socket, isolation valve and outlet waste pipe should all be installed within the rise and fall covers but they must not interfere with the rise and fall operation. Ensure that the services are installed within 180 mm either side of the waste outlet pipe and 150 mm off the floor, as shown in grey areas - see page 13.

## Modify electrical entry points

Alternatively, for existing toilet installations, side entry may be the only access to the rise and fall unit. There may be no electrical supply on the intended wall surface and the isolated water supply cannot be moved so therefore modifications may be required to cut the external covers. This will allow for the long power cable to reach an alternative connection in accordance to the latest wiring regulations.



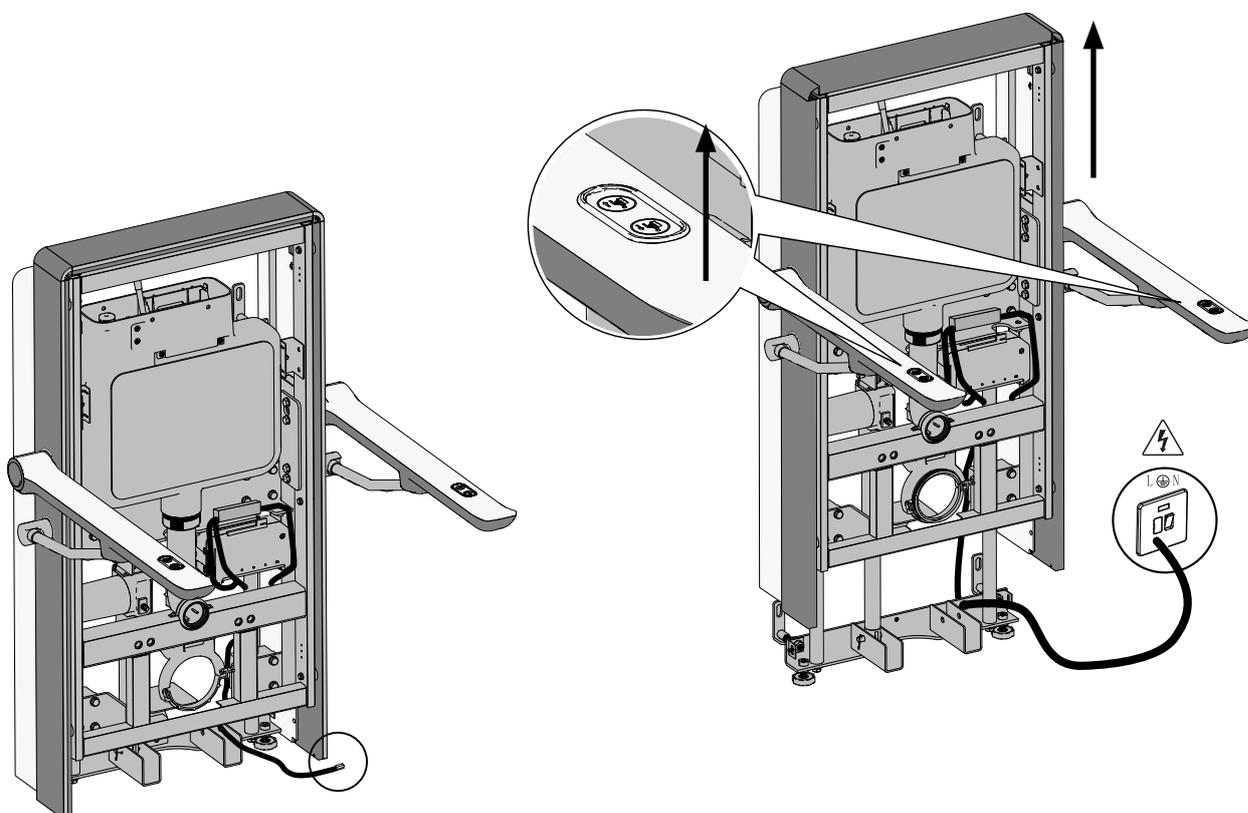
- 1 The rise and fall cistern frame will need to be in set at the highest position in order to access the waste outlet pipe, electrical and plumbing installation points. This can be done whilst on the floor in the packaging if there are no obstructions and it is safe to do so.



**Caution:** This product is heavy and will require two people for installation.



Temporarily connect the power cable to an isolated mains connection and turn on the isolated switch. Note: power cable connection may not be possible in the same area, especially for new build installations.

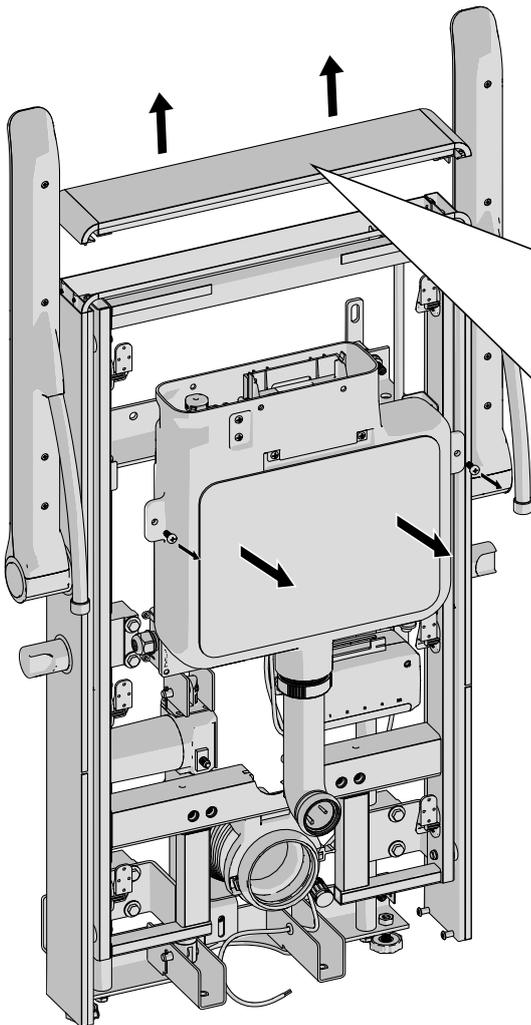


Press the button on the armrest to raise the frame to the maximum height.

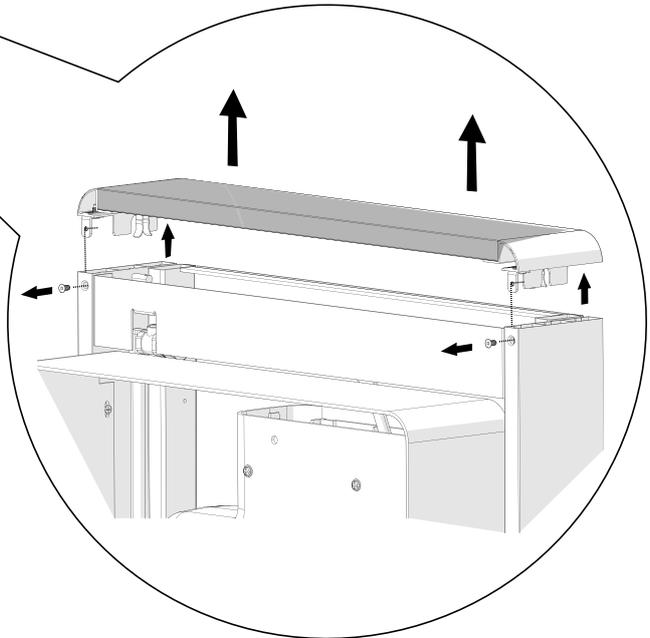


Disconnect the power cable and isolate the mains connection.

- 2 Remove the top panel in order to access the cistern and plumbing connections.

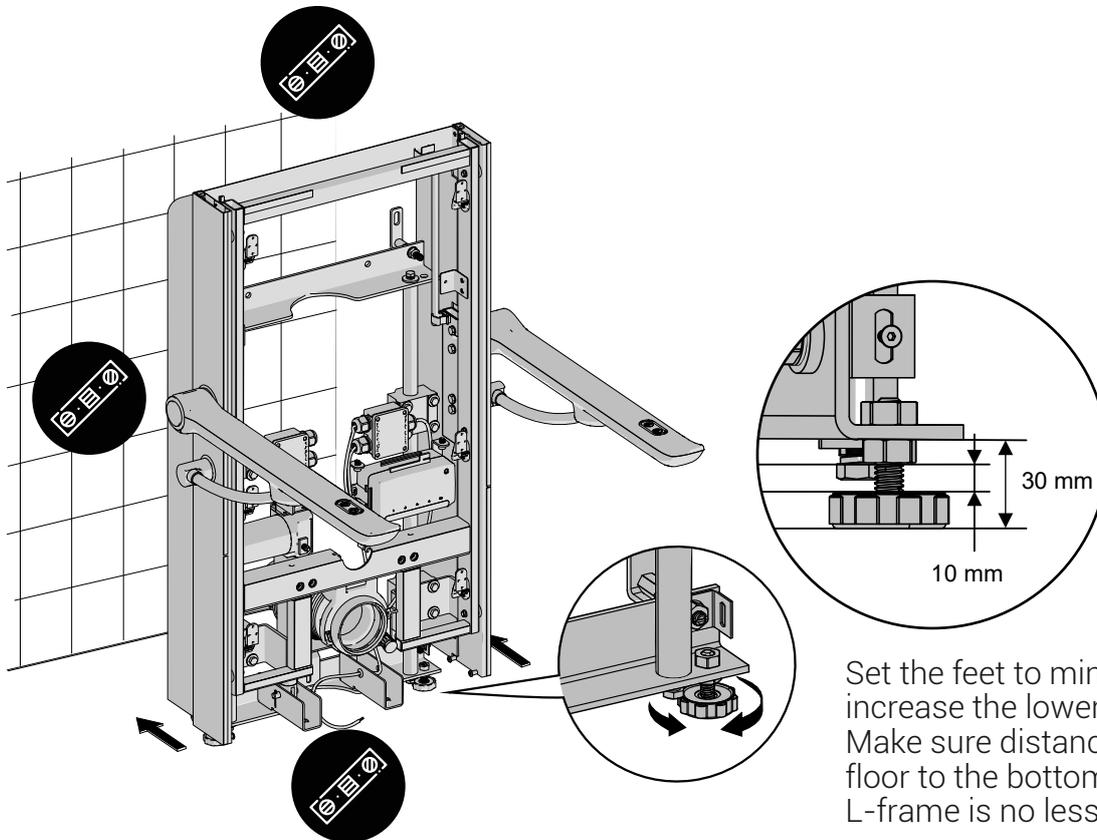


Remove the top panel by undoing the screws on the back of the unit, carefully lift and put to one side.



Unscrew and remove tank assembly.

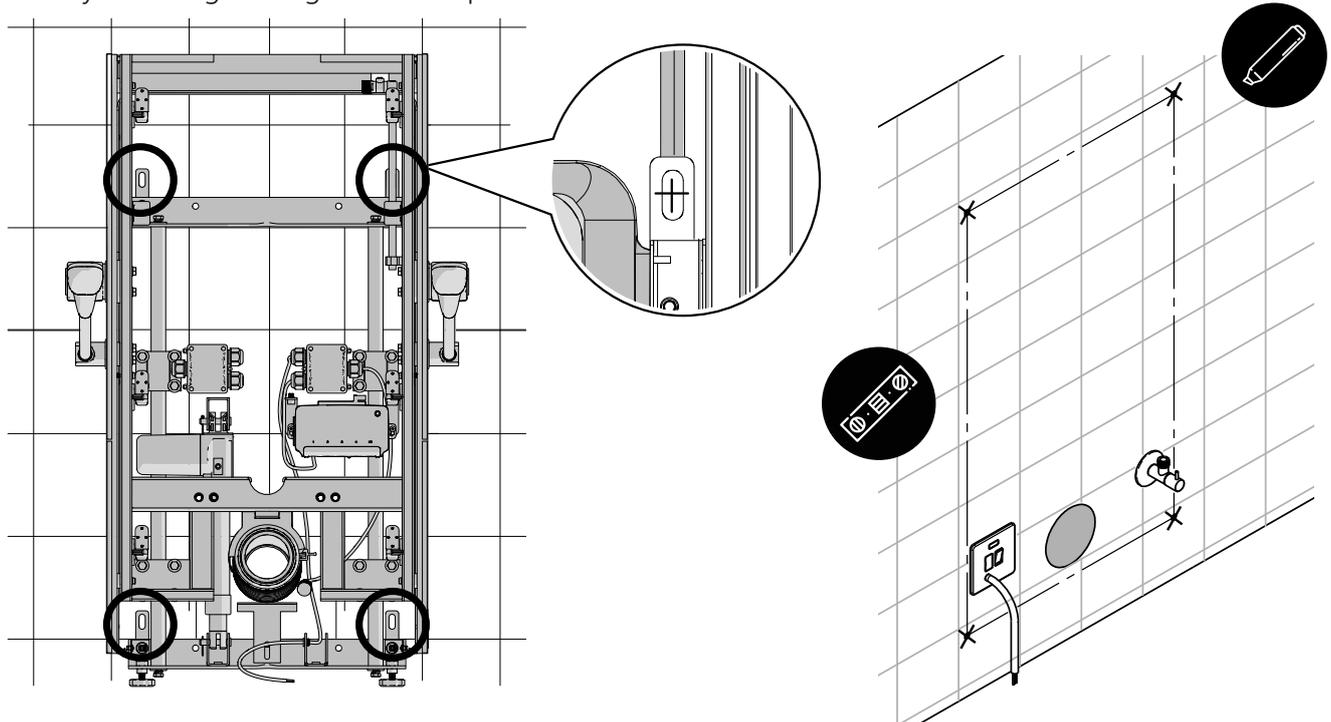
- 3 Manoeuvre the cistern unit into the desired position against the wall.



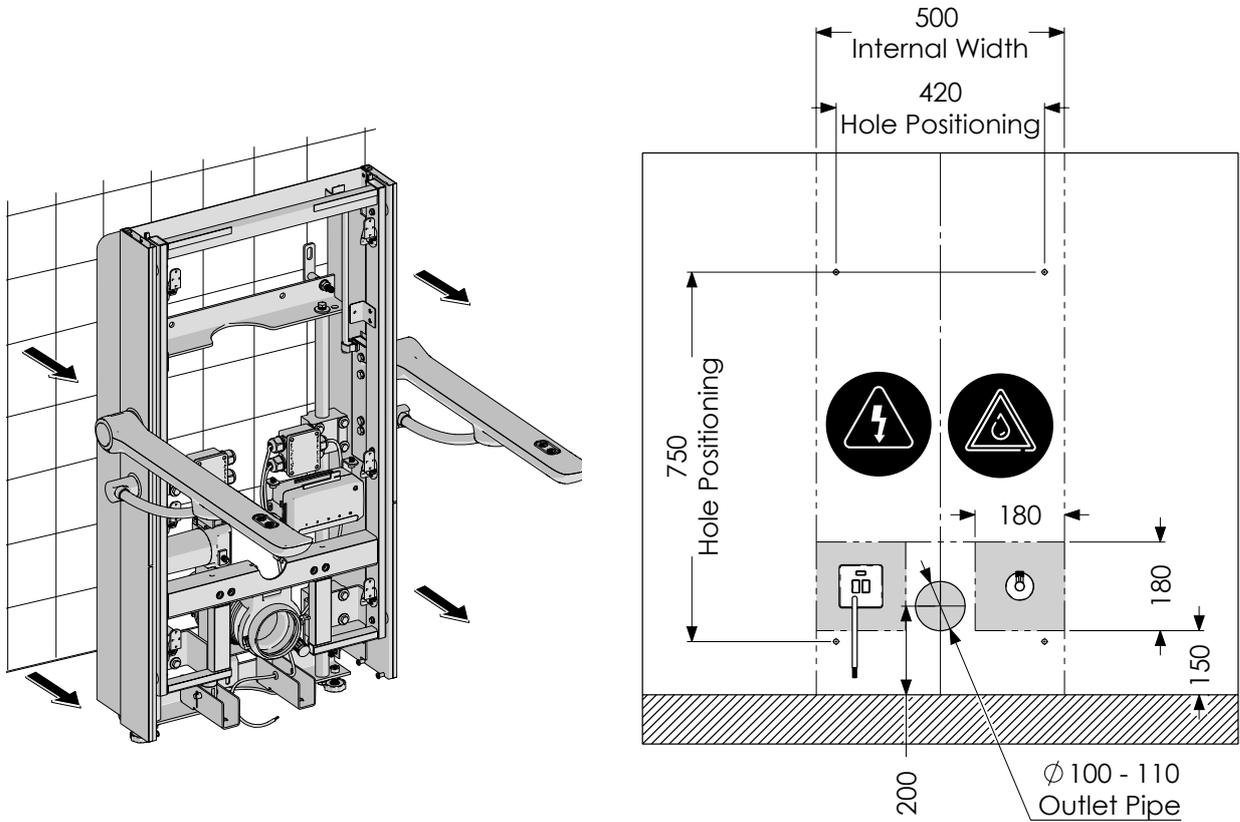
Set the feet to minimum to increase the lowering height. Make sure distance from finished floor to the bottom of the L-frame is no less than 30mm.

Ensure that the frame is level. Rotate the feet for finer adjustment.

Unscrew 2 screws to remove the tank assembly and mark the four mounting positions on the wall by marking through the hole positions.

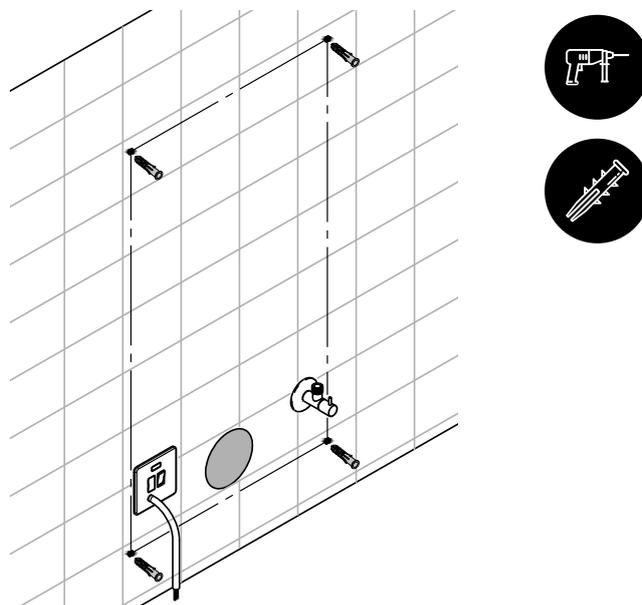


- 4 Remove the frame from the wall and carefully put to one side. Install the services either side of the waste outlet and within the areas on the wall as specified below.

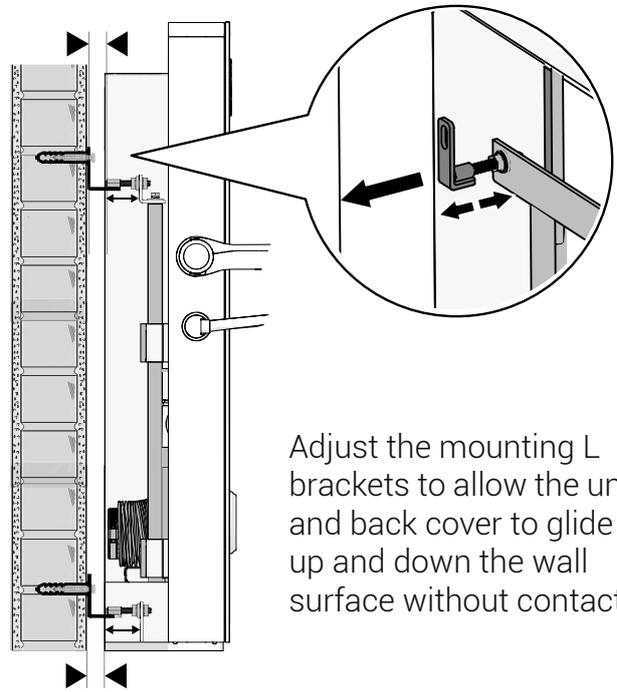
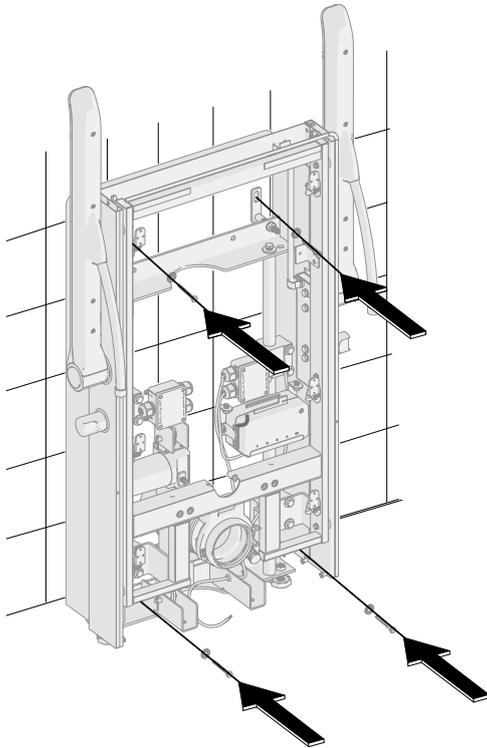


Double check for hidden cables and pipework in the wall before drilling. Drill the fixing points with a 10 mm drill bit and insert wall plugs. Ensure that the fixings are solid into the supporting wall.

**Note:** wall fixings not included.

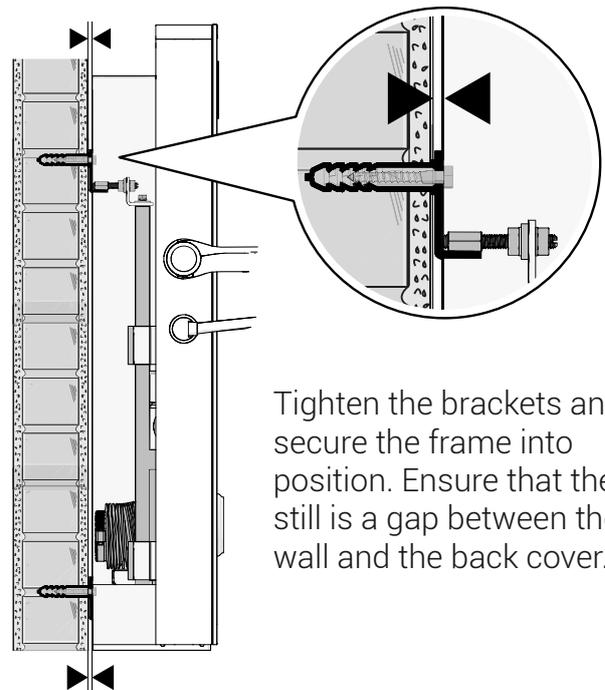
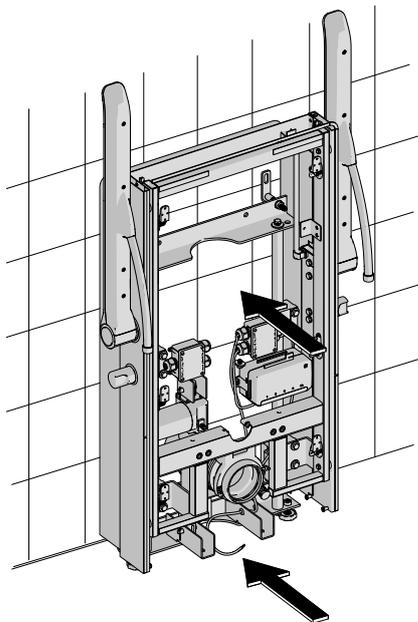


5



Adjust the mounting L brackets to allow the unit and back cover to glide up and down the wall surface without contact.

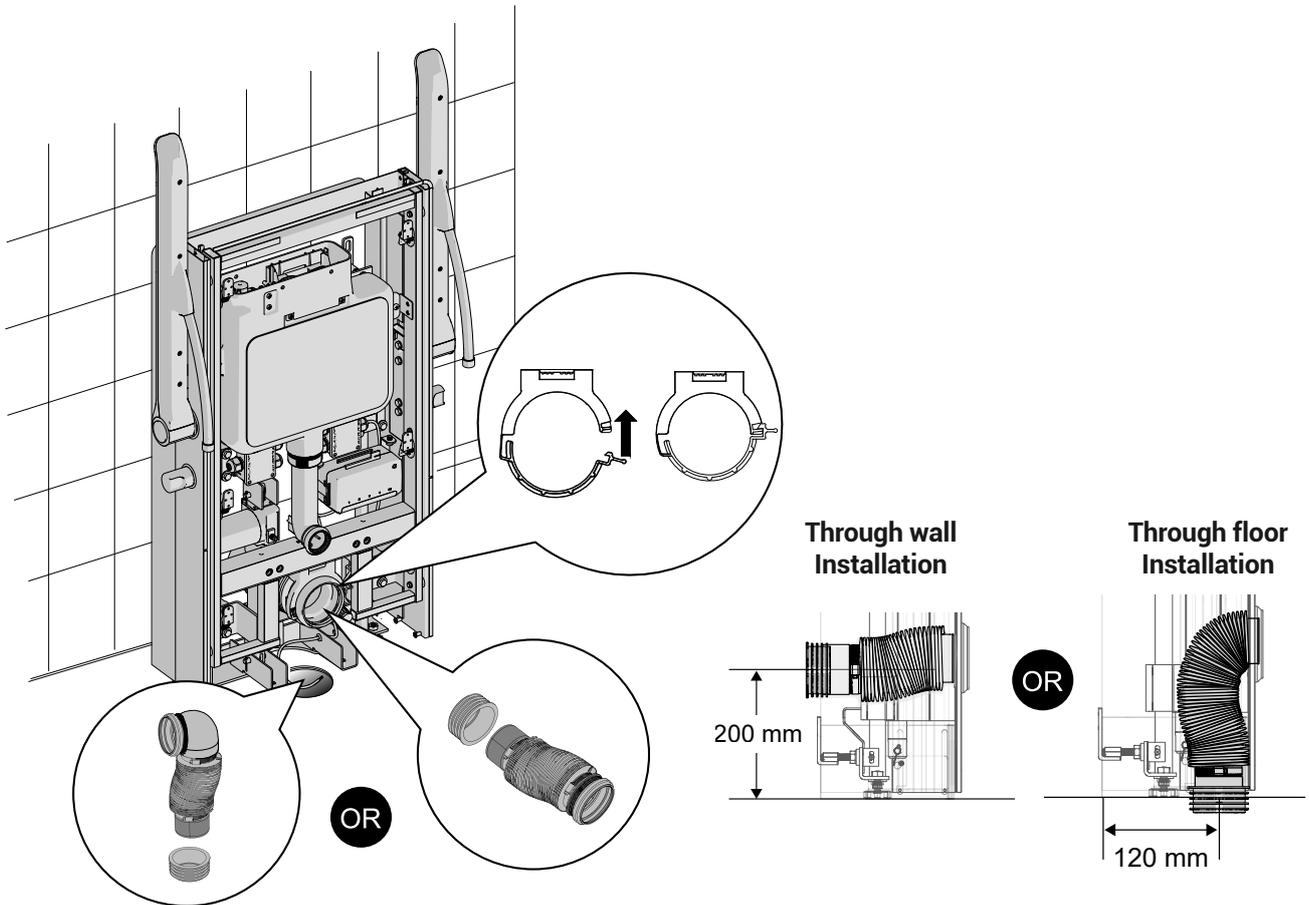
ALLOW  
GAP



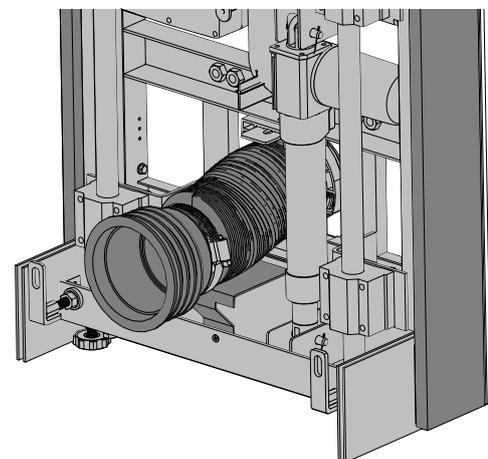
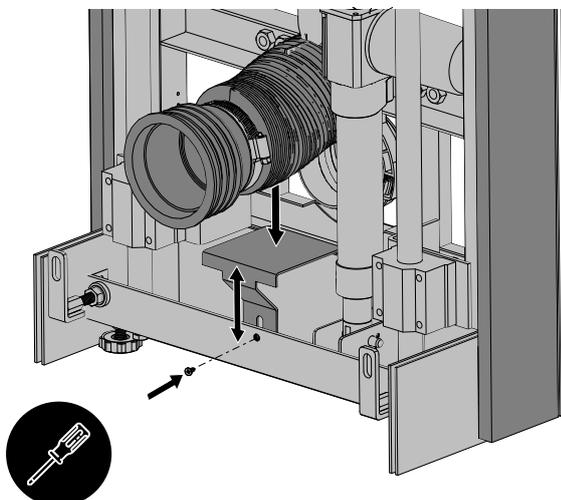
Tighten the brackets and secure the frame into position. Ensure that there still is a gap between the wall and the back cover.

MIN  
GAP

- 6 Put the tank assembly back and Attach the waste and tank outlet pipe to the soil outlet.



Carefully secure the waste outlet pipe into the bracket housing on the cistern frame and then into the soil outlet pipe with the gasket and clamps. Ensure that the connections are secure and test for leaks. Note: remove the support bracket for vertical installations but for the horizontal installations attach the support bracket as shown below.

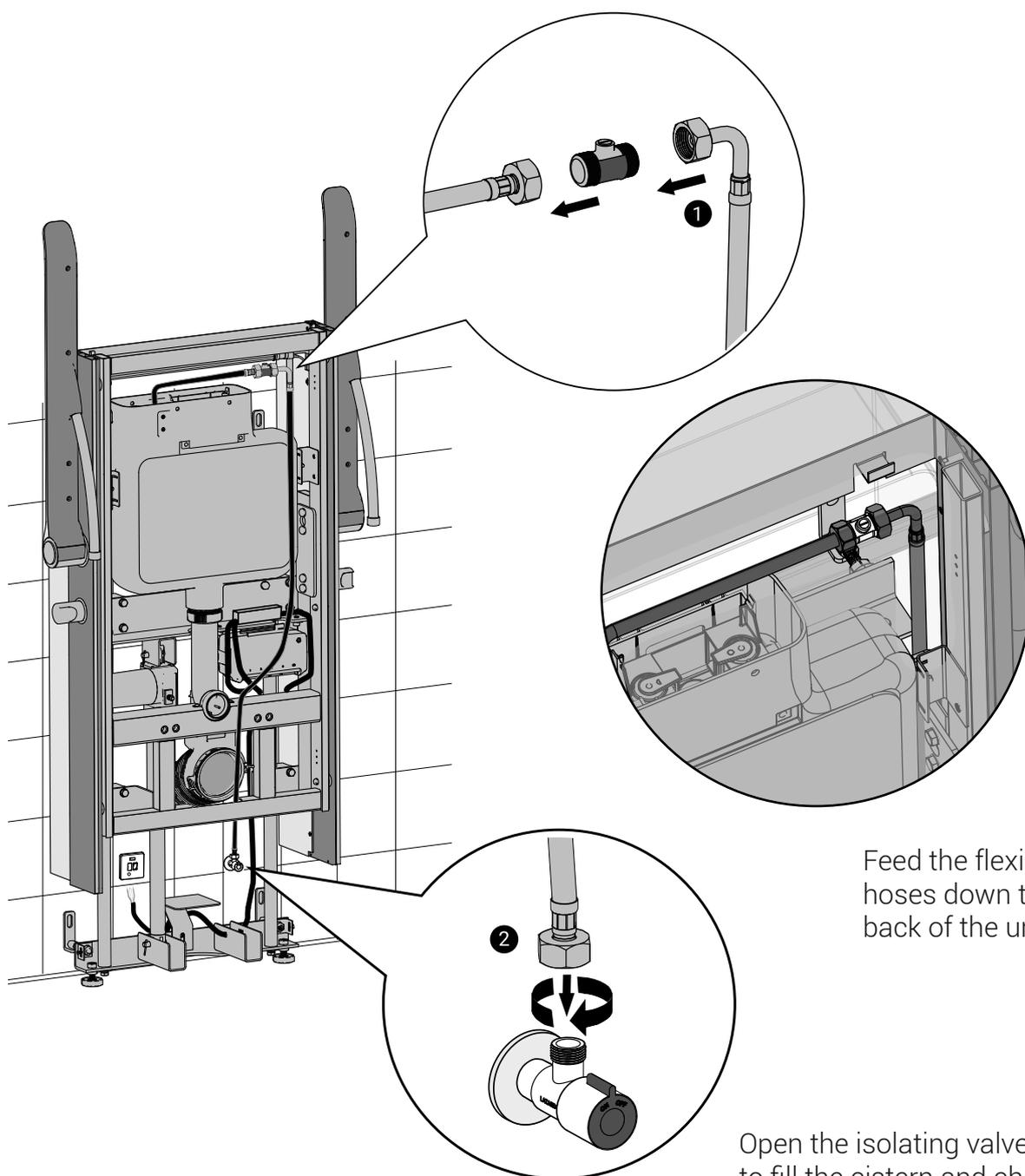


Use the adjustable support bracket for through wall waste outlets installations.

# Option 1: Standard Wall Hung Toilet Plumbing Installation

## 7 Plumbing

For standard toilet installations, attach the long flexible hose to the cistern isolating valve at the top of the unit. Feed the hose down the back of the unit and connect the other end of the hose to the isolating valve on the wall. Ensure that the water and power services are within the positions given on page 13, and that they do not interfere with the rise and fall operation.



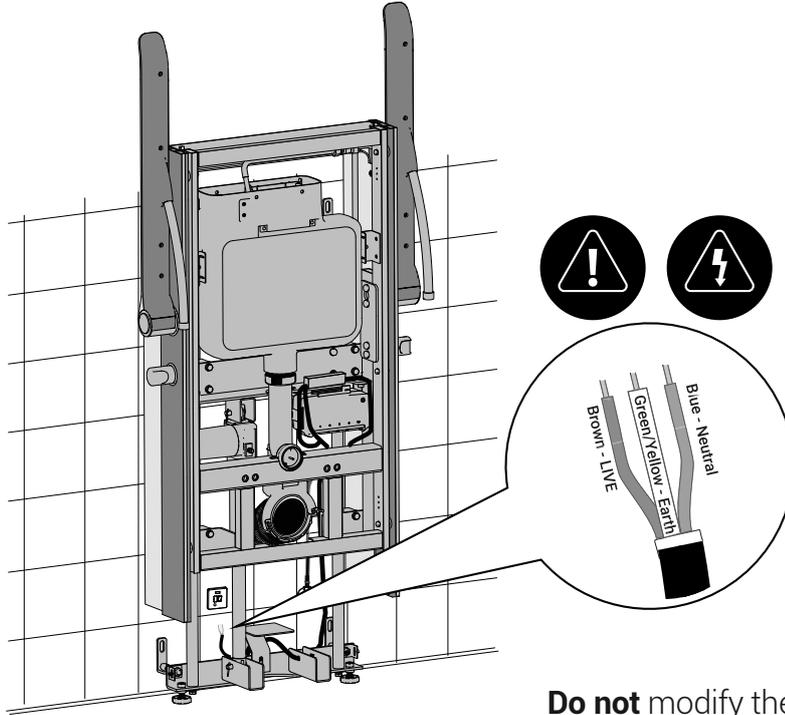
Feed the flexible hoses down the back of the unit.

Open the isolating valves to fill the cistern and check for leaks.

# Option 1: Standard Wall Hung Toilet Electrical Installation

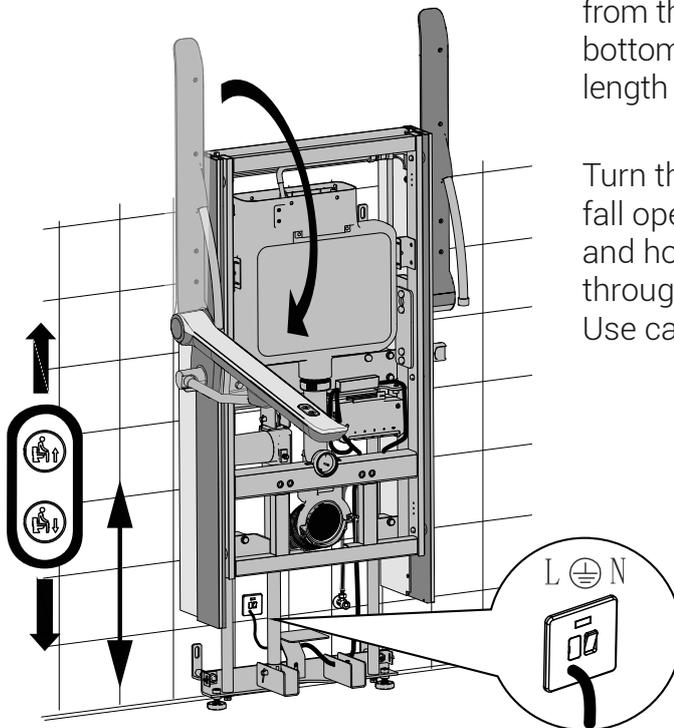
## 8 Electrical

Connect the power cable to the mains power supply. Feed the cable around the back of the frame and ensure that the cable can not be trapped when in operation.



**Do not** modify the fixed cable length from the power control unit to the bottom frame. Remove any excess cable length from the end of the mains cable.

Turn the power on and test the rise and fall operation. Ensure that the cables and hoses cannot become trapped throughout the unit's range of travel. Use cable ties as required.

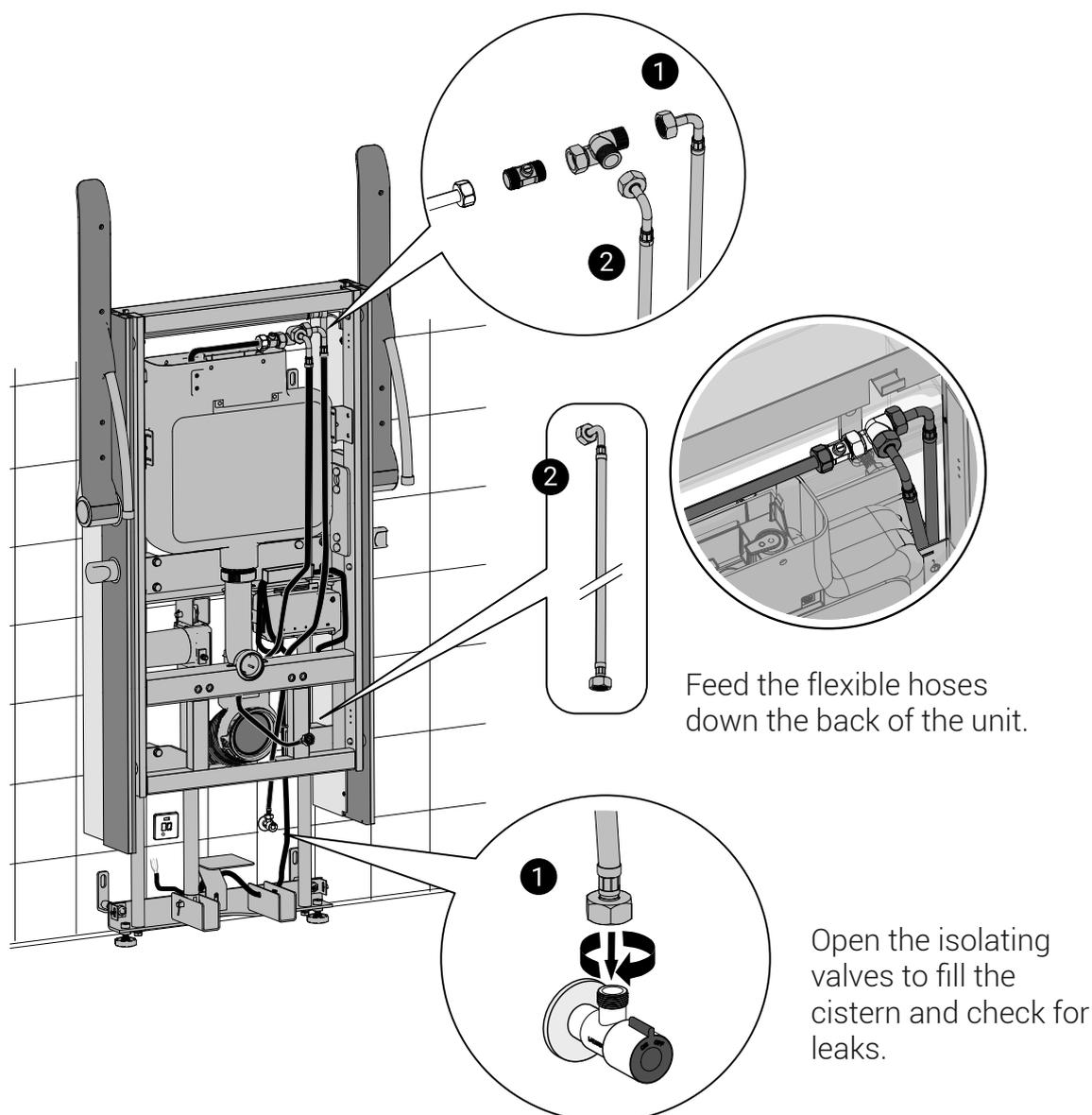


Continue to install the Exterior and Interior cover panels, page 20.

## 9 Plumbing

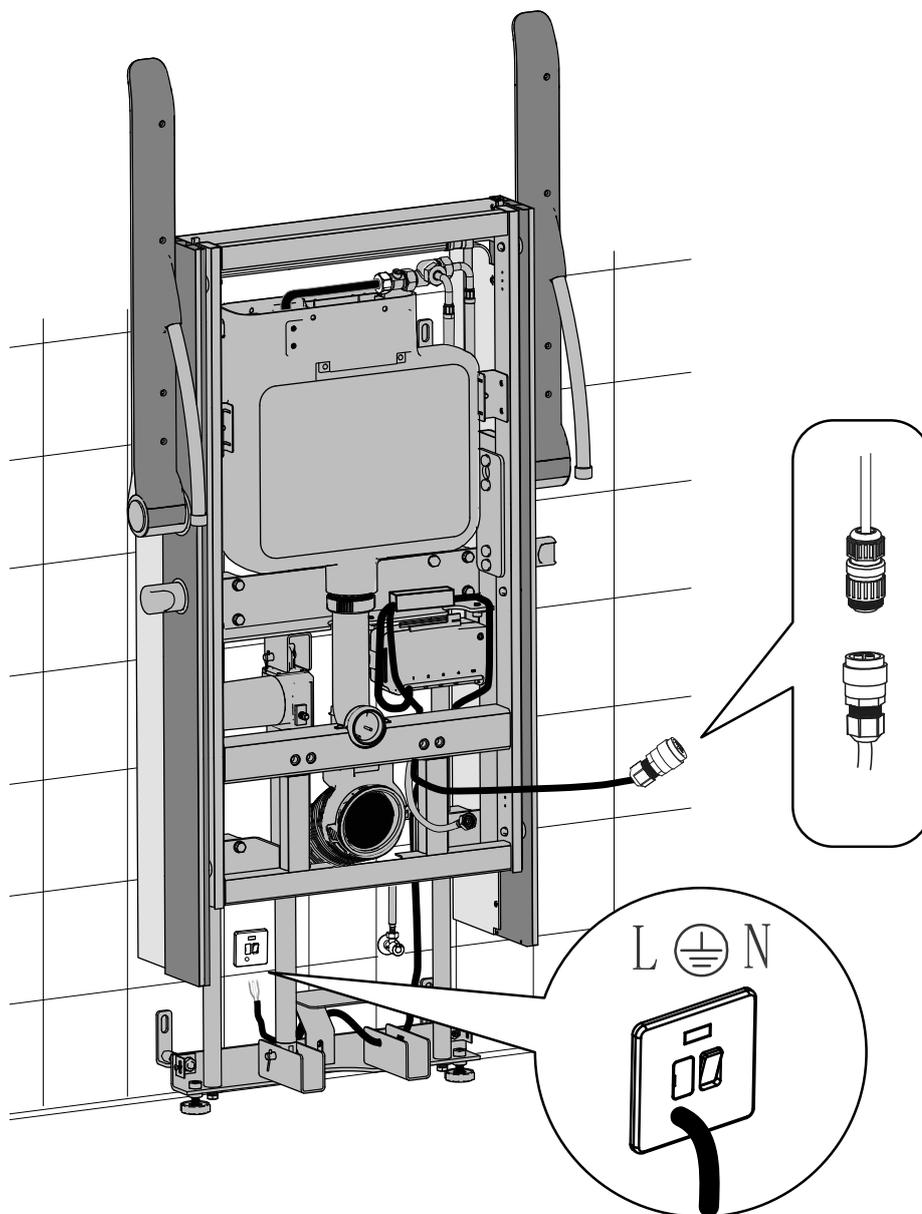
**1.** Attach the Tee Junction supplied with the AKW Bidet unit directly onto the isolation valve at the top of the cistern unit. Attach the cistern hose to the other end of the isolating valve. Attach the long 1.2 m flexible hose onto the other end of the Tee Junction. Feed the long hose down the back of the unit and connect the other end onto the isolating valve on the wall. Ensure that the water and power services are within the positions given on page 13, and that they do not interfere with the rise and fall operation.

**2.** Attach the other 1.2 m flexible hose onto the Tee Junction and feed the hose down the back of the unit out through the front and out next to the waste outlet opening. Check that the cables and hoses cannot become trapped throughout the unit's range of travel. Use cable ties as required. Open the isolating valves to check for leaks and close the valve.



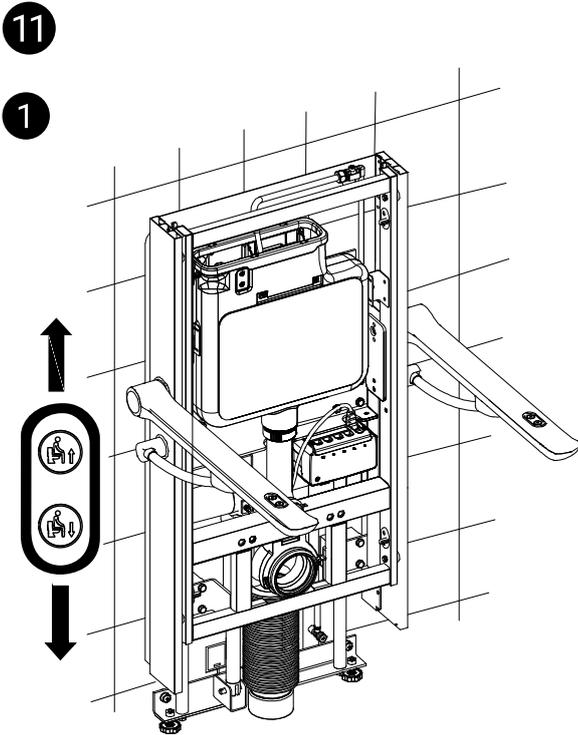
## 10 Electrical

1. For bidet users only: feed the cable around the back of the frame and out through the front next to the waste outlet. Ensure the cable will not be trapped when in operation.
2. Connect the rise and fall power cable to the mains power supply. Turn the power on and test the rise and fall operation. Ensure that all cables and hoses cannot be trapped in operation. Isolate the power.

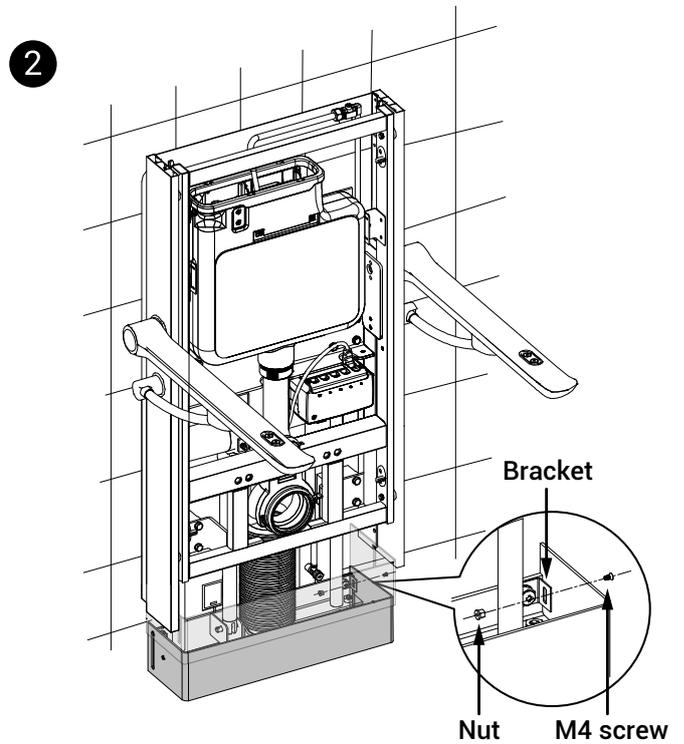


**Do not** modify the fixed cable length from the power control unit to the bottom frame. Remove any excess cable length from the other end of the mains cable depending where the fixed power supply is.

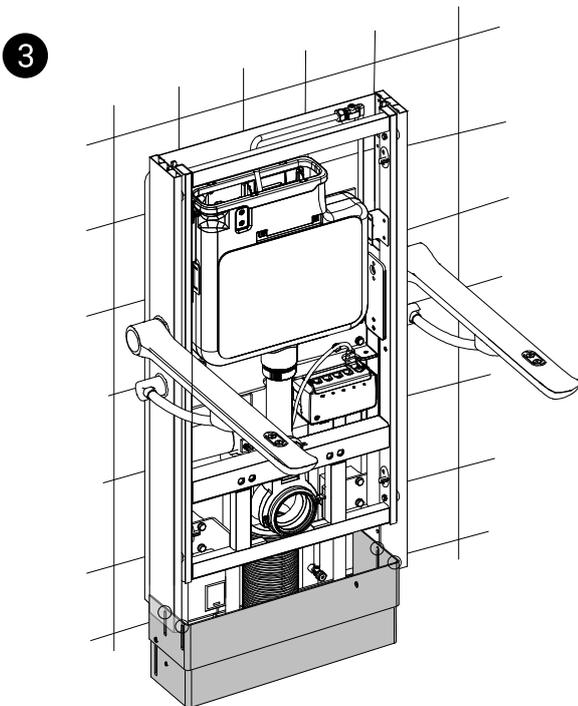
## Installation - Exterior &amp; Interior Cover Panels



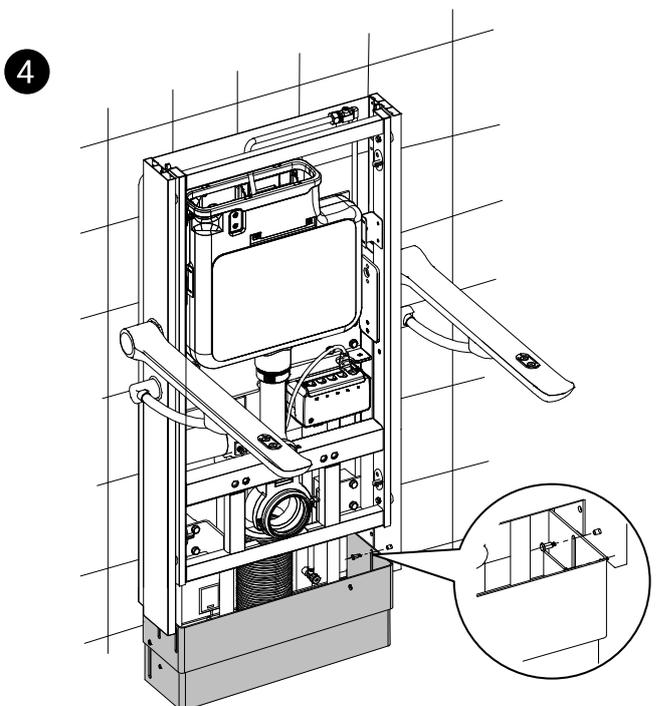
Raise the frame to access the mounting positions for the bottom covers.



Attach the inner cover panel to bottom frame brackets with the M4 screws and nuts.

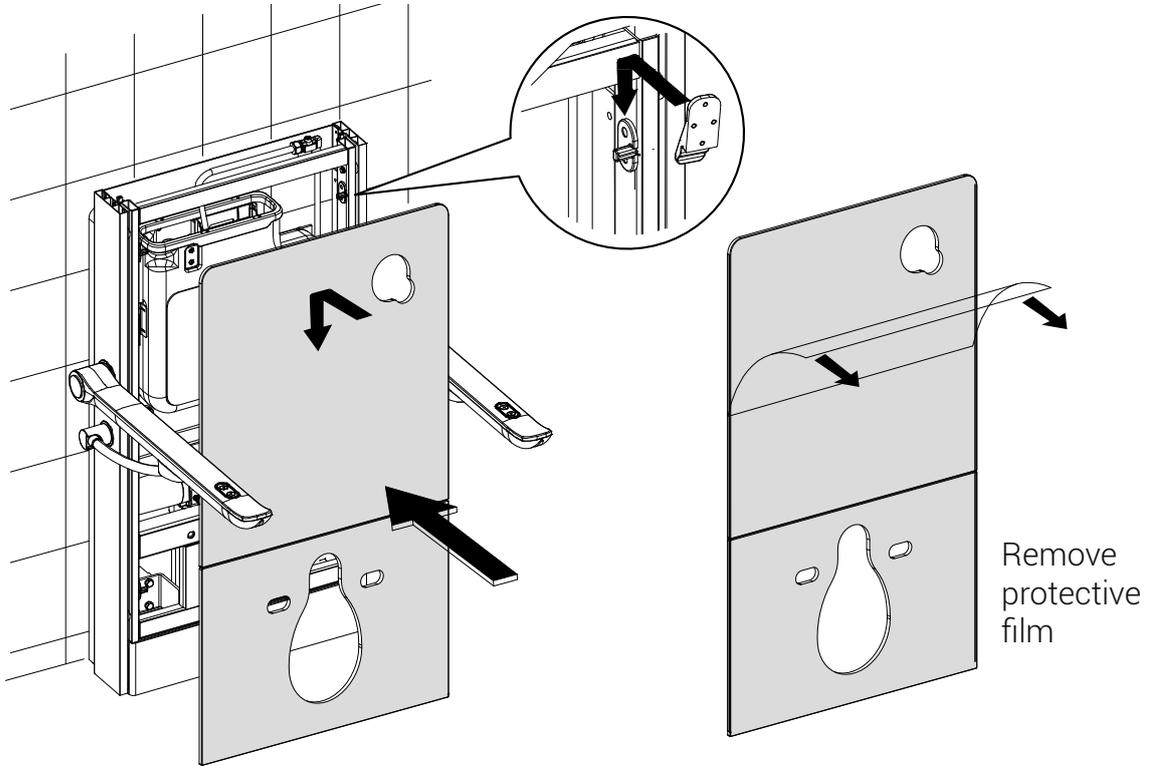


Position the outer cover up over to align the slot holes with the screw holes.



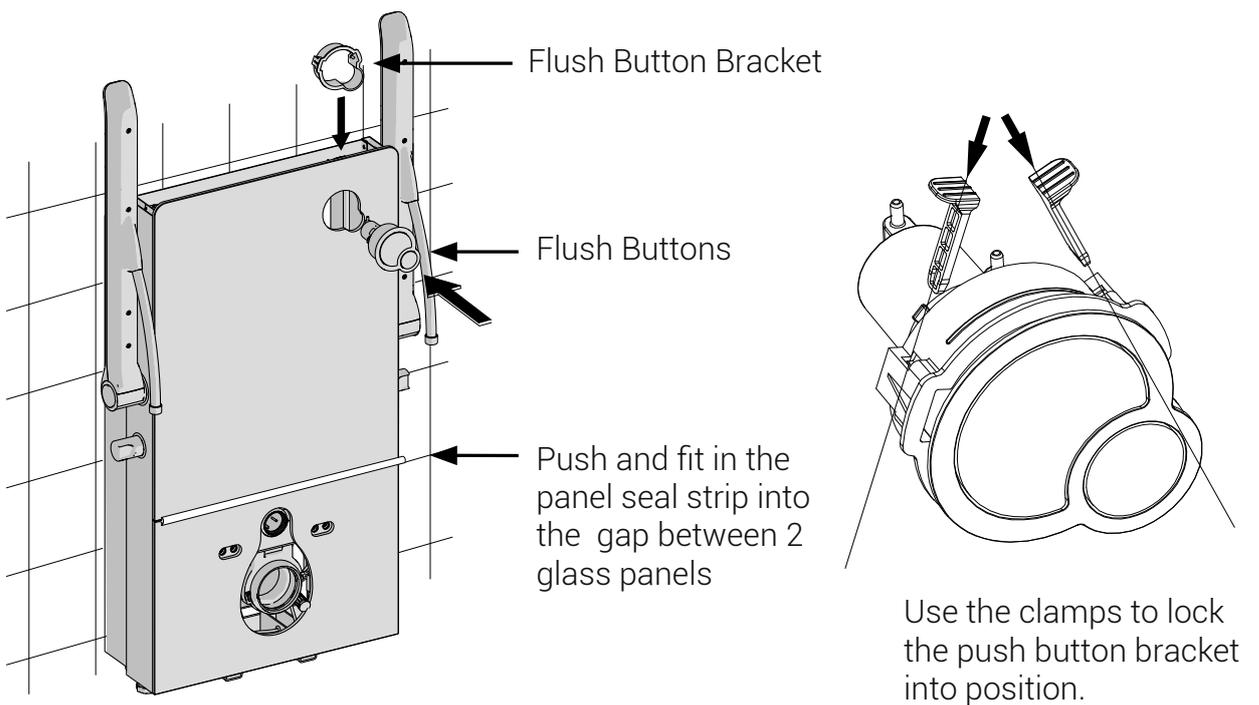
Attach the outer cover panel to top frame with the M4 screws.

**12** Attach the glass panel

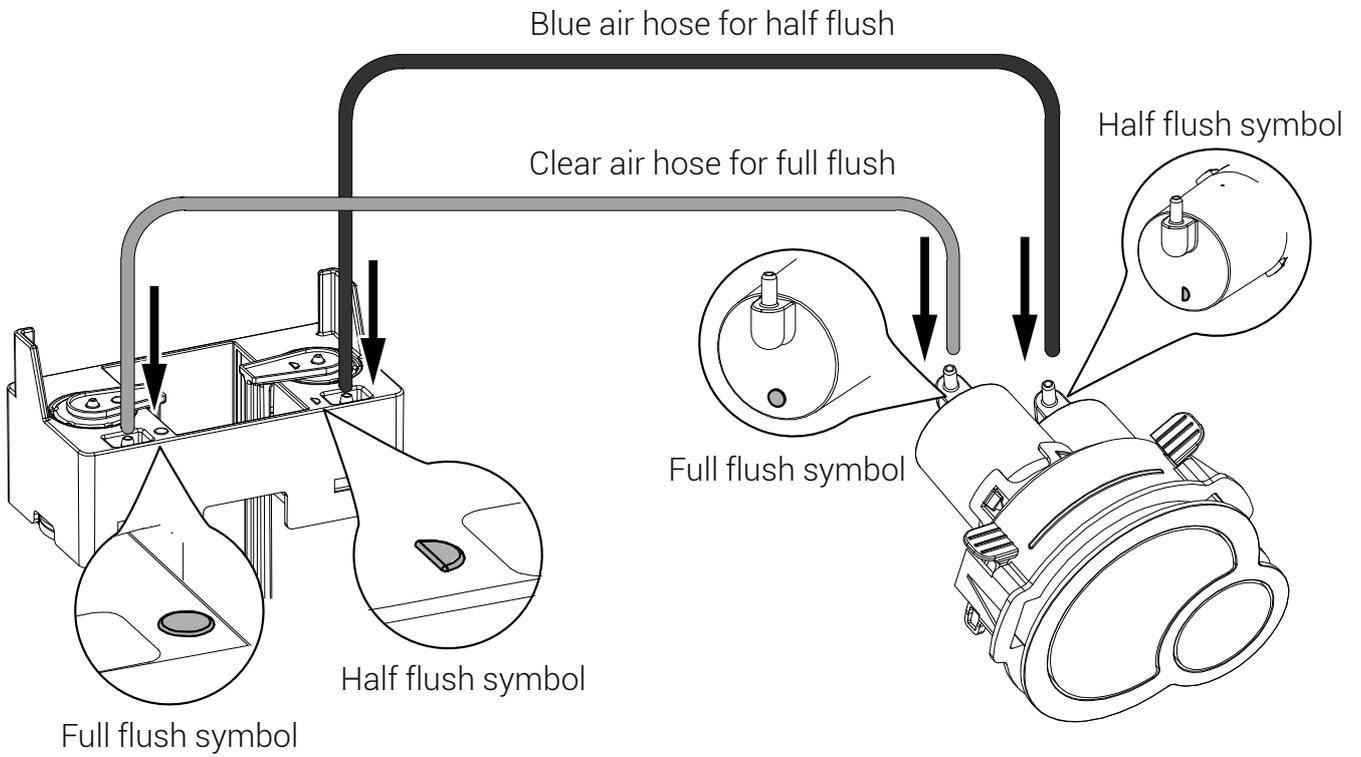


For bidet user, fish the electrical cable & water feed through the lower glass panel via the waste void. Locate and use 4 hooks on upper glass, 2 hooks on lower glass.

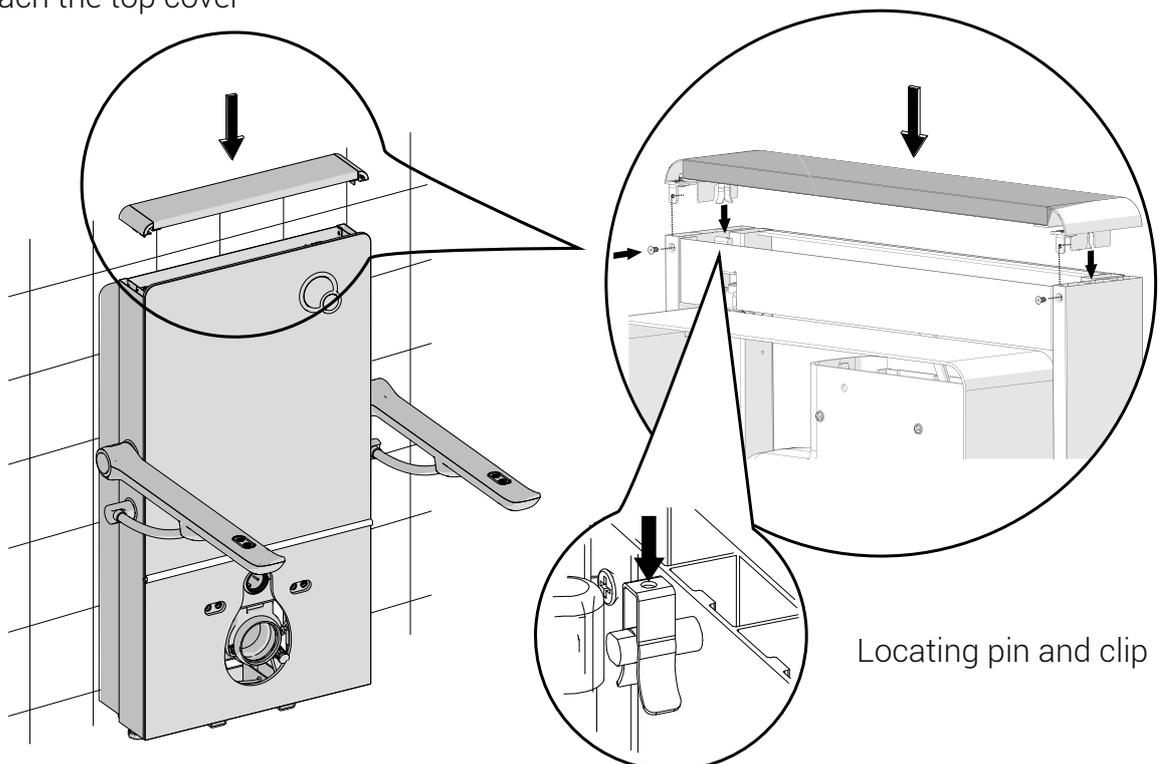
**13** Attach the push button assembly



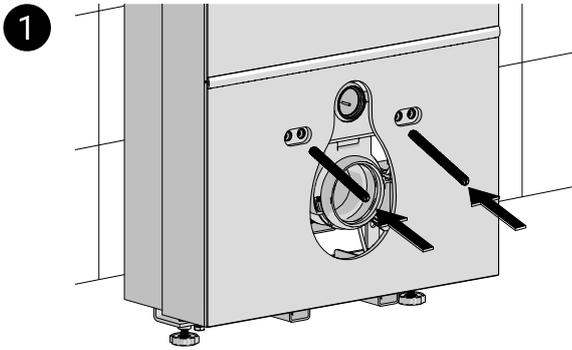
## 14 Attach the air hoses



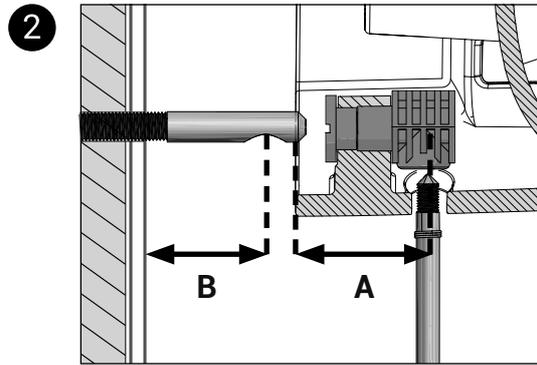
## 15 Attach the top cover



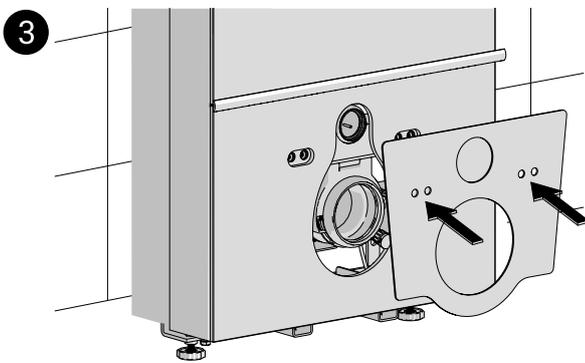
**16** Attach toilet pan fixings and protective cover



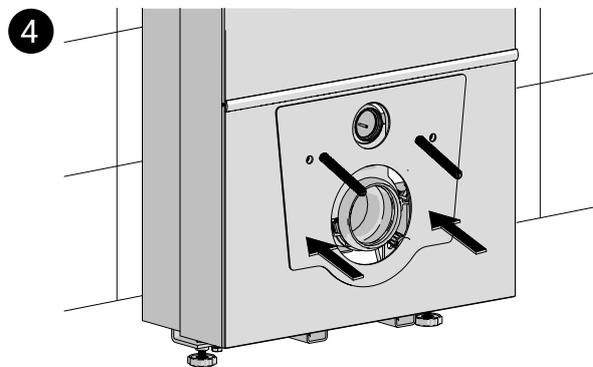
Install the threaded stud onto the cistern frame.



Work out the dimension of **B** by measuring **A** and subtracting 3 mm.



Install the protective cover.

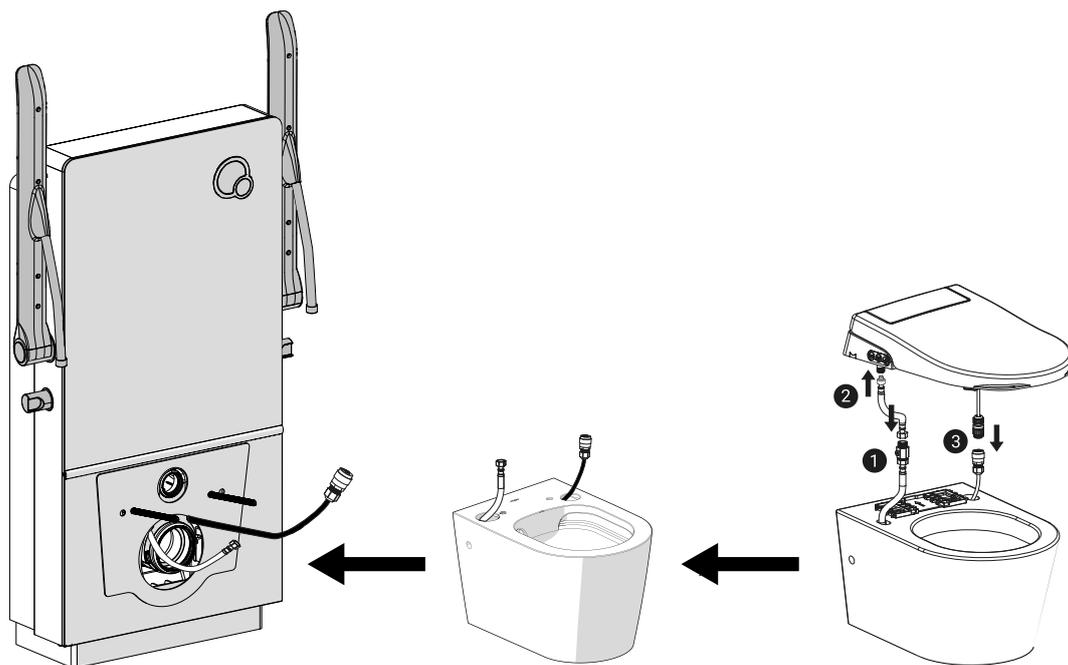


Install the waste pipe into the waste outlet hole and the cistern flush pipe on the pan. See separate wall hung toilet instructions for more detail.

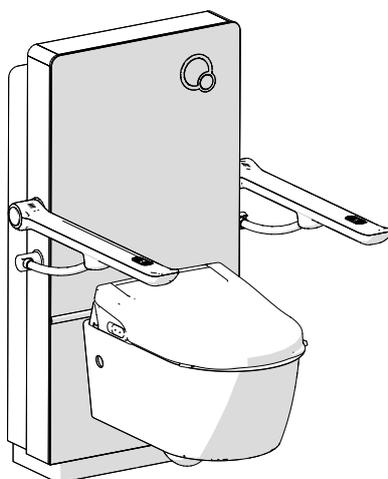
## AKW Bidet & Wall Hung Pan Installation

- 17** For installing a toilet pan and AKW Bidet, refer to the **Wall Hung Toilet Pan for AKW Bidet Instructions (20-020-030)** first for connecting the toilet pan to the cistern frame.

**Note:** Ensure pan is supported underneath during installation and is pushed back to the protective cover when tightening. Once one side is tight, you will need to go back to the other side and re-tighten. Repeat until both sides are secure.



Then refer to the **AKW Bidet Instructions (18-009-018)** for connections and installation on how to feed the connections through the back of the pan up into the bottom entry AKW Bidet.



When the installation is complete test the rise and fall operation, and test the flush mechanism for leaks and volume checks.

Problem	Potential Cause	Suggestive Action
Appliance is not working Isolate the power supply - Potential risk of shock	The power supply may not be turned on	Check that the power is on
	Power cord and controller are not well connected	Connect the Power cord and the controller
	Electric motor and the controller are not well connected	Check the connections on the control box
	The Rise and Fall buttons are not connected	Check the connections on the control box
Obvious abnormal sound occurs during lifting	The cabinet frame touches the isolating valve or the power socket on the wall	Please move the position of the cabinet or adjust the wall brackets to ensure that it does not interfere with the isolating valve and power socket
	The back cover of the cabinet interferes with the wall when in operation	Adjust the wall brackets to move the unit away from the wall
	The decorative cover at the bottom of the cabinet catches the other inner panel.	Clean or remove items causing them to catch together
	Glass panel touches item under the unit	Always ensure that there are no items present under the unit before operating

If any maintenance is required, it must be carried out by a competent installer.

Regularly cleaning is advised for long term cleanliness.

Rinse the unit and ceramic by lightly spraying water on the surfaces and then wipe down with a soft cloth. For routine cleaning, use hot soapy water or a mild detergent and a soft cloth to wash and rinse the toilet area. Never use abrasive cloths or any aggressive cleaning materials to clean surfaces. Do not use industrial cleaners that have abrasive or harsh chemical properties as this could affect the surface finish.

The unit should never directly come into contact with strong industrial acids or alkalies, organic solvents, caustic soda, lacquers or nail polishes, bleaches, or any dry powder cleaning agents. Do not use paint strippers or stain removers to remove any stubborn staining. If more thorough cleaning is needed, always test the cleaning products on a small area first.

These instructions are provided to advise the minimum standards of installation and recommends what the best practice for the installation is. Due to the very wide variability of possible installation conditions, AKW cannot provide all circumstances for the installation. AKW cannot accept any liability in connection with this information or its use. This information is provided on the condition that the person receiving it shall make their own tests to determine the suitability for the particular purpose. Failure to install this AKW product in accordance with supplied instructions or the making of unauthorised modifications will invalidate any warranty and may affect product safety. None of the foregoing affects your statutory rights.



# Contact Us

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## Orders & Quotes

01905 823 299  
orders@akw-ltd.co.uk

## General Enquiries

01905 823 298  
sales@akw-ltd.co.uk

## Technical Enquiries

01905 560 219  
tech@akw-ltd.co.uk

## Kitchen Enquiries

01905 823 262  
kitchens@akw-ltd.co.uk

## Fax

01905 823 297

## AKW

Pointon Way, Hampton Lovett  
Droitwich Spa, WR9 0LR

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## Warranty

Warranty applies only to manufacturing or material defects, conditional on the one-time correct installation of the product. It does not apply to:

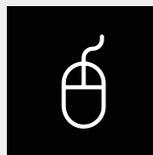
- Inappropriate use or accidental damage.
- Damage or defects that result from incorrect installation.
- Lack of maintenance including the build up of grime or damage resulting from inappropriate cleaning.
- Damage or defects that result from repairs or modifications undertaken by unauthorised persons.
- General wear and tear through usage and does not apply to surface finishes.

Warranty period starts from the date of installation. To activate your warranty, you must register your product within 30 days of installation. See the T&Cs on our website for further information.

### Select 1 of 2 ways to activate your warranty



#### 1. Scan using your Smart Device



#### 2. Visit Online

[akw-ltd.co.uk/warranty-information](http://akw-ltd.co.uk/warranty-information)

### What to do if something goes wrong?

In the event that you encounter a problem with this product, follow the trouble shooting guide if applicable, then contact your local installer. If the issue is still unresolved, contact AKW Technical Enquiries who will provide further advice and arrange for a maintenance engineer to visit if necessary. None of the foregoing affects your statutory rights.