



Installation Manual

Orbital Tank (OT8911-E)

5-06-0037

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Table of Contents

Thank you for your purchase	4
Service	4
System overview	5
Technical specification	6
Installation requirements	7
Wall installation	8
Seal mountings in wet zone	8
Component overview	9
Product measurements	10
Recommended installation measurements	11
Installation	13
Prepare bathroom	13
Install the bottom valve outlet	15
Install Tank	17
Install Pump	19
Connect to water and drain	21
Connect all components	23
Prerequisites and Approvals	26
EU Declaration of Conformity	27

Thank you for your purchase

This manual applies to model OT8911-E

 Read the Safety Guide before starting the installation or before operating the product.

Thank you for purchasing the Orbital Tank from Orbital Systems. To enjoy the product's full potential, please read and follow the procedures in this manual. Make sure that you fully understand how to operate Orbital Tank and make sure that it is properly maintained in accordance with the instructions given in this manual and the User Guide. Do not discard this manual, keep it handy for future reference.

Service

Orbital Systems and our team of expert staff are available to assist you if you require product advice, experience any problems, need to purchase spare parts or to set up a service appointment.

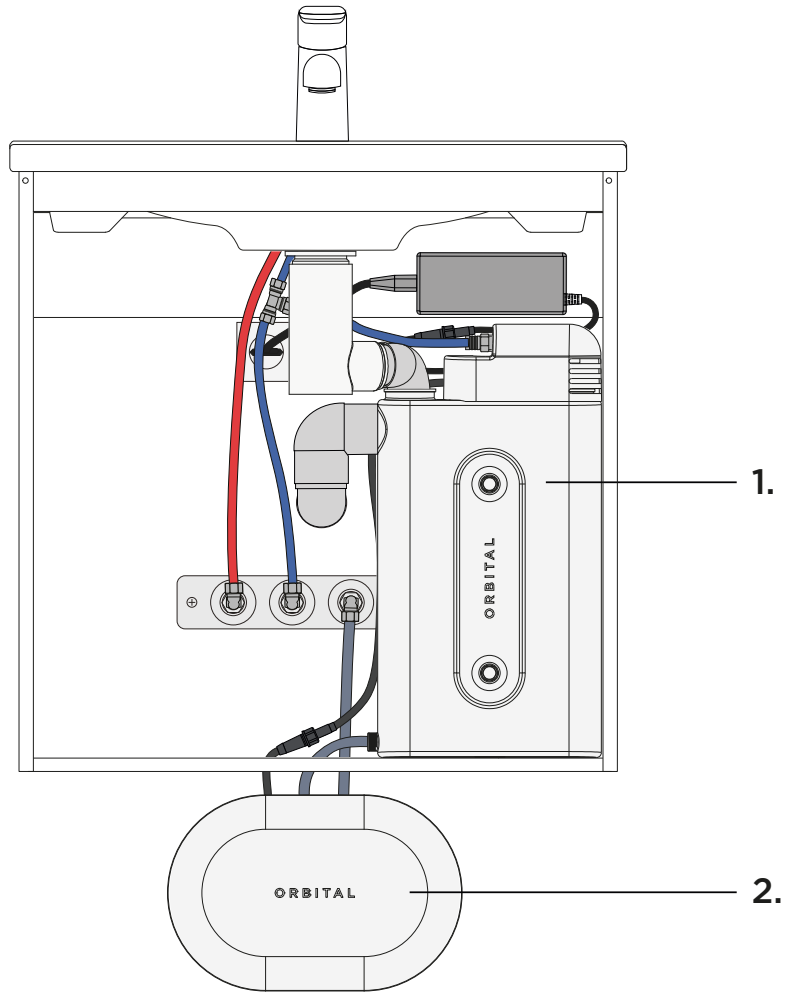
Repairs should only be carried out by Orbital Systems.

If the supply cord is damaged, it must be replaced by Orbital Systems to avoid a hazard.

Contact us

- support@orbital-systems.com
- www.orbital-systems.com

System overview



- 1. Tank
- 2. Pump

Technical specification

General performance

Savings rate: Up to 100% water savings of water used in sink

Size and weight

Tank: 440 x 270 x 65 mm, 1.2 kg

Pump: 197 x 296 x 140 mm, 3.5 kg

AC/DC power supply: 152 x 63 x 30 mm, 420 g

Water supply

Incoming Cold water: Recommended flow: 5-8 l/min

Recommended incoming water pressure: 2-5 bar

Maximum working pressure: PN10

Water connections (Tank and Pump): G 1/2 threads (ISO 228/1-G 1/2" external threads) and G 3/8 threads (ISO 228/1-G 3/8" external threads)

Water hardness: 3°dH-14°dH.

If the local water hardness on the installation site is more than 14dH it is recommended to install a water softener.

Recommended power supply

100-240V, 50/60Hz, 2.5A, 120W Power consumption:

Tank and Pump unit; active mode: nominal 25W, max. 70W; standby mode: 0.21W

Installation area

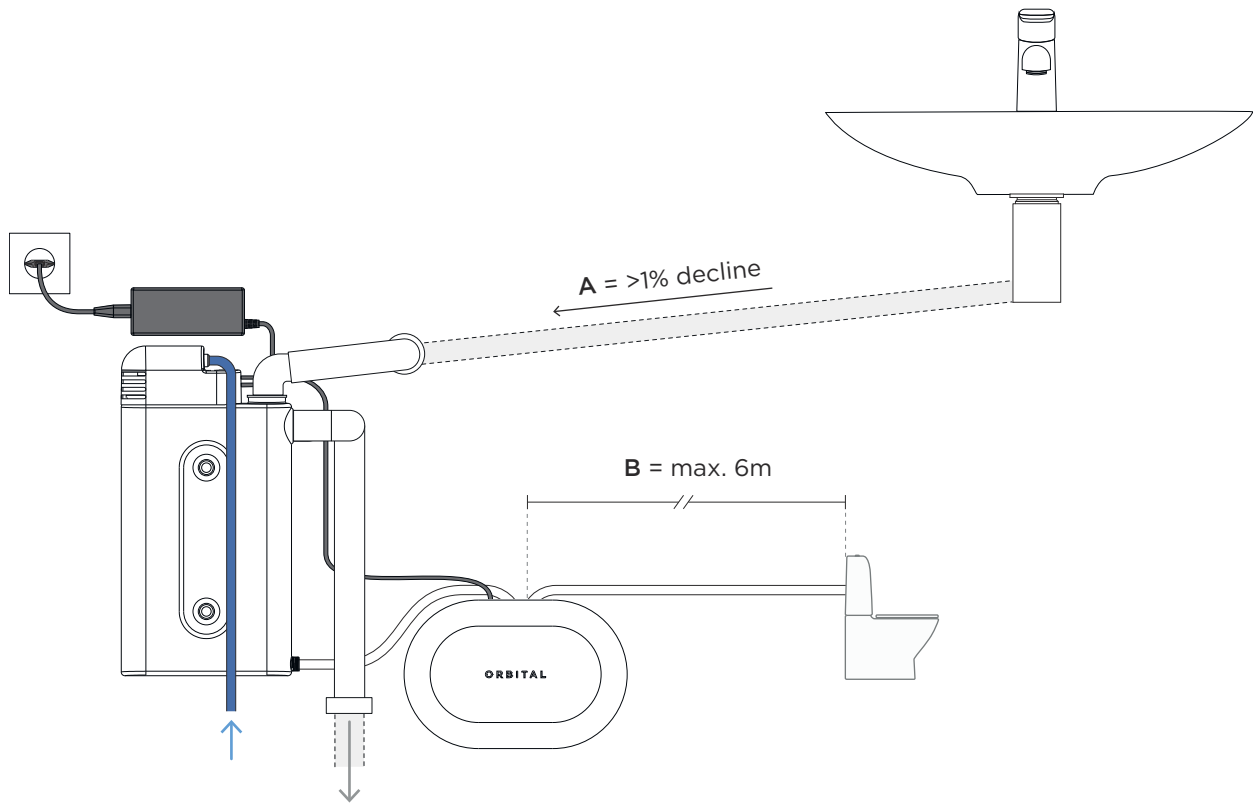
Full system: All components are wall mounted: behind commode, below wash basin or up to 3 m from the wash basin. The top inlet in the Tank needs to be placed at a lower point than the outlet from the wash basin. The Pump needs to be placed within 6 m from the toilet cistern.

Maintenance

Cleaning tablet: Add in the sink at regular intervals to both clean the product and get a fresher bathroom experience. The frequency depends on usage and preference.

Fresh Mesh: Cleaned by hand, in a dishwasher, or replaced when needed. The frequency depends on usage; typically once per month. It's important that the Fresh Mesh is not emptied and cleaned in the wash basin.

Installation requirements



A. The bottom valve outlet must be placed higher than the inlet on the Tank (minimum 1% inclination).

B. The Pump and toilet can be placed at a maximum distance of 6 meters. The Pump should not be placed at a higher position than the Tank.

Wall installation

The total weight of all components is approximately 10 kg when the Tank is filled with water. The surrounding structure must be able to support the forces that will stress the attachment points.

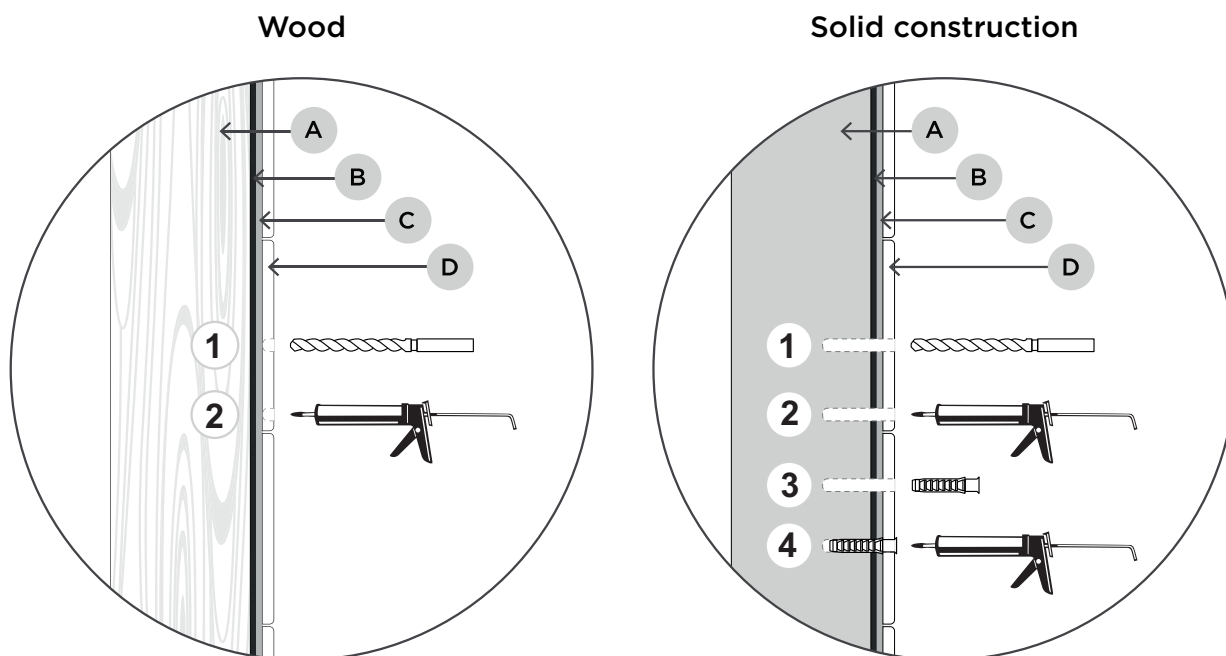
Seal mountings in wet zone

Seal the drill holes in accordance with applicable industry standards.



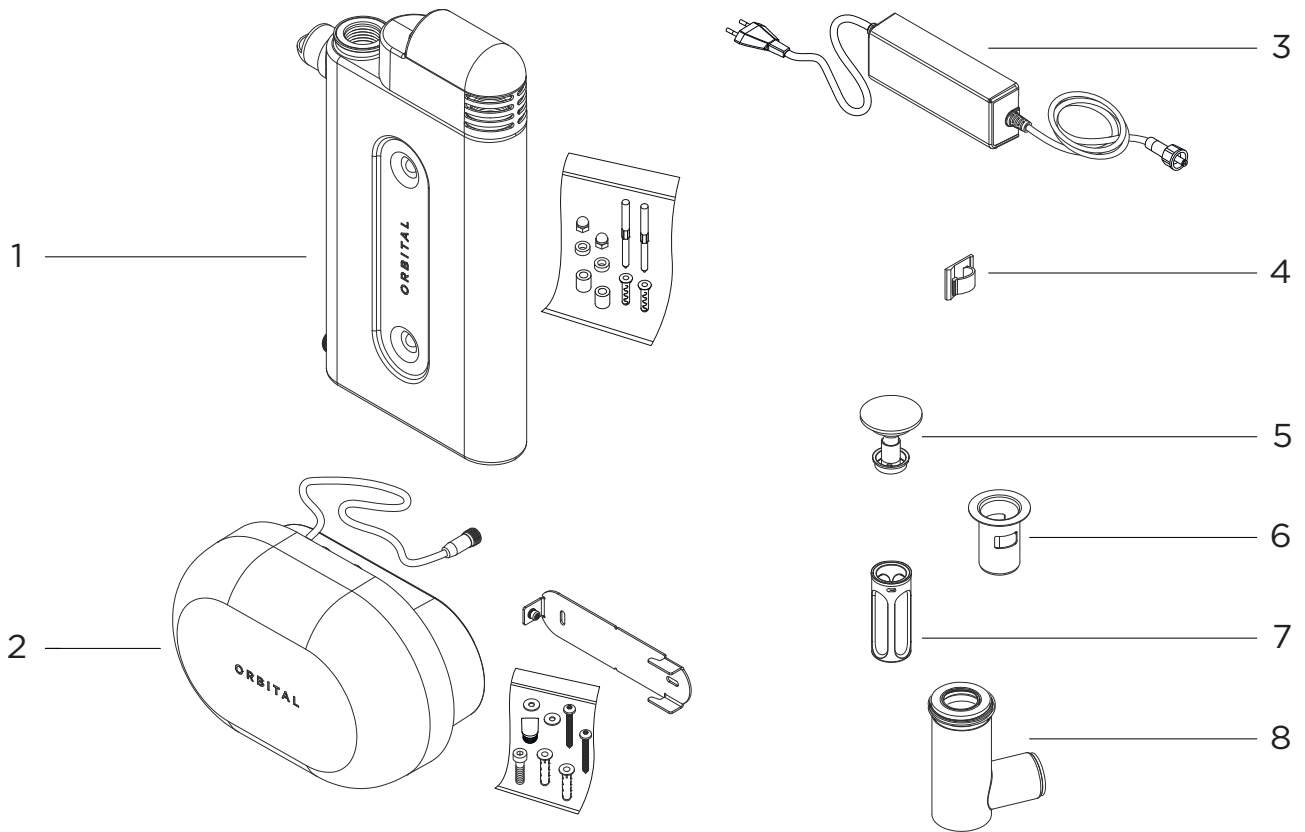
CAUTION

Installations in Sweden must be carried out in accordance with the current Industry Rules Safe Water Installation. All mountings in the wet zone must be sealed against the waterproofing layer of the wall or floor. Material for sealing must adhere to the substrate and be water-resistant, mold-resistant and aging-resistant.



- **A:** Wood / Concrete
- **B:** Waterproofing membrane
- **C:** Tile adhesive
- **D:** Tile

Component overview

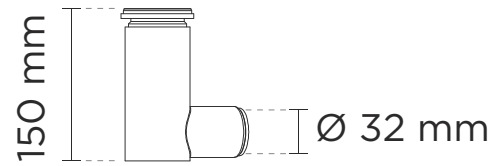
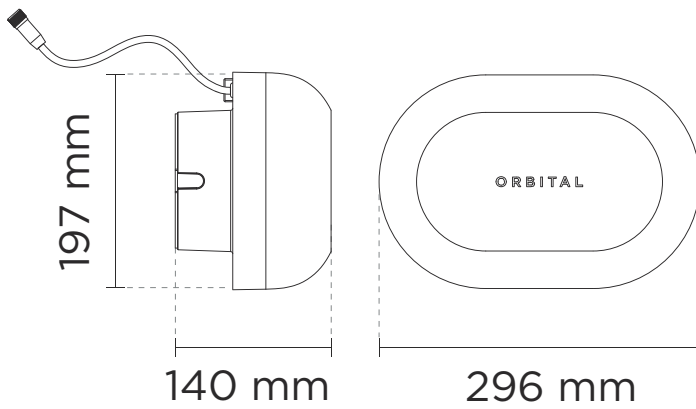
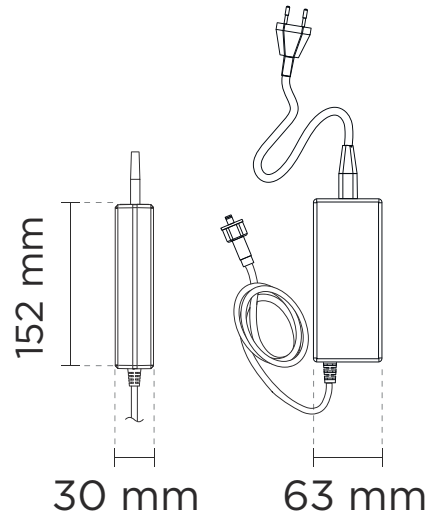
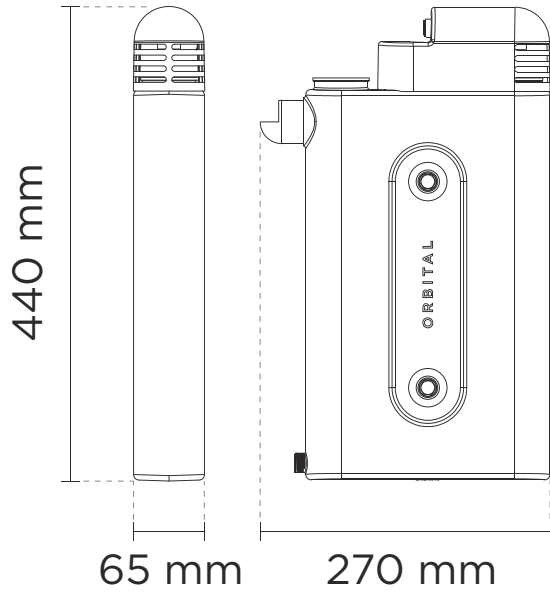


1. Tank with fastening kit
2. Pump with wall bracket and fastening kit
3. AC/DC power adapter
4. Cable organizer
5. Bottom valve
6. Bottom valve flange
7. Fresh Mesh
8. Bottom valve outlet

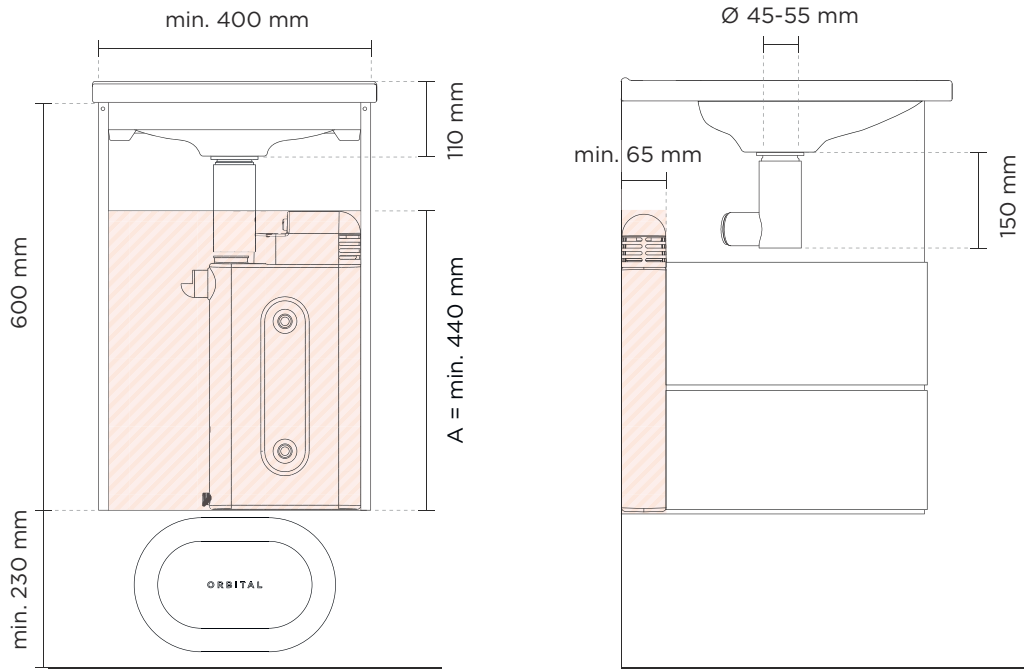
Additional components needed:

- Wall socket 220 V, x1
- Flex hose G 1/2" to 3/8", x1
- T-coupling G 1/2" male, x1
- Exposed flex hose G 1/2" female/nut, x2
- Connectors G 1/2" male to female, RSK 850 50 08
- Pipes D40
- Pipes D32
- Screws for mounting of the power adapter, x2

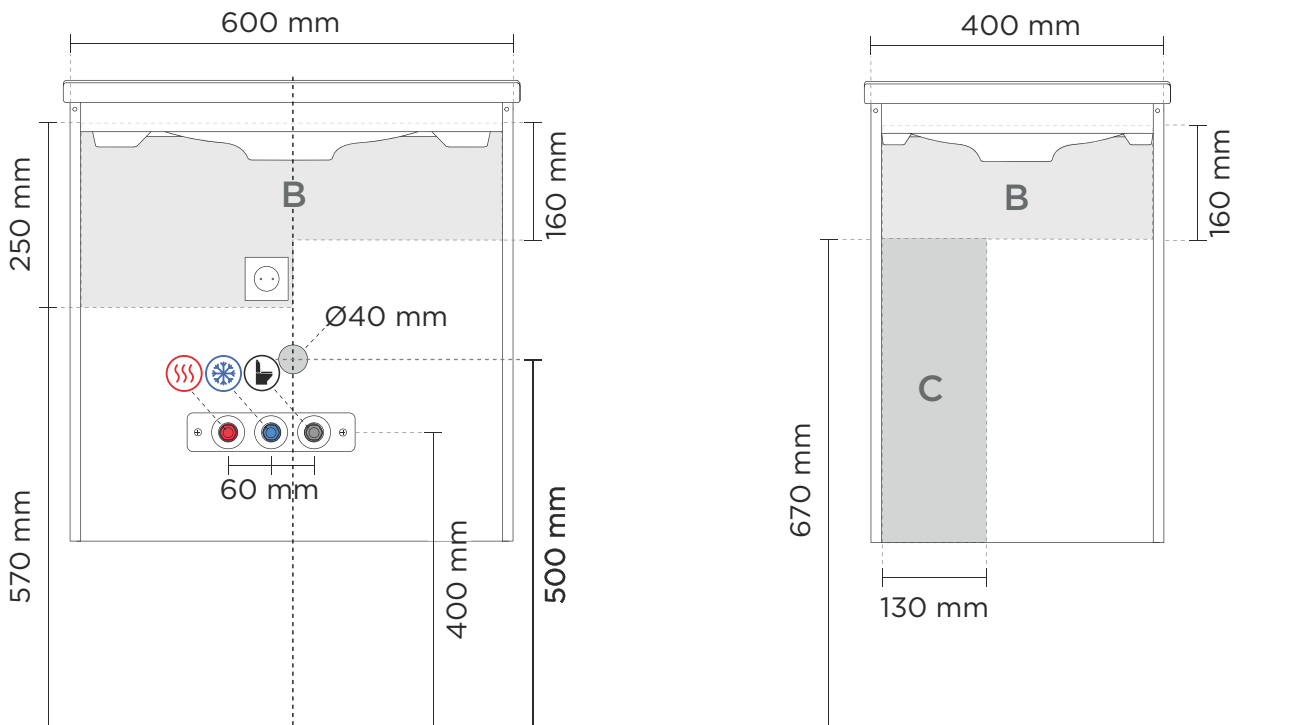
Product measurements



Recommended installation measurements



A = Area with open surface for mounting the wall mounted components.



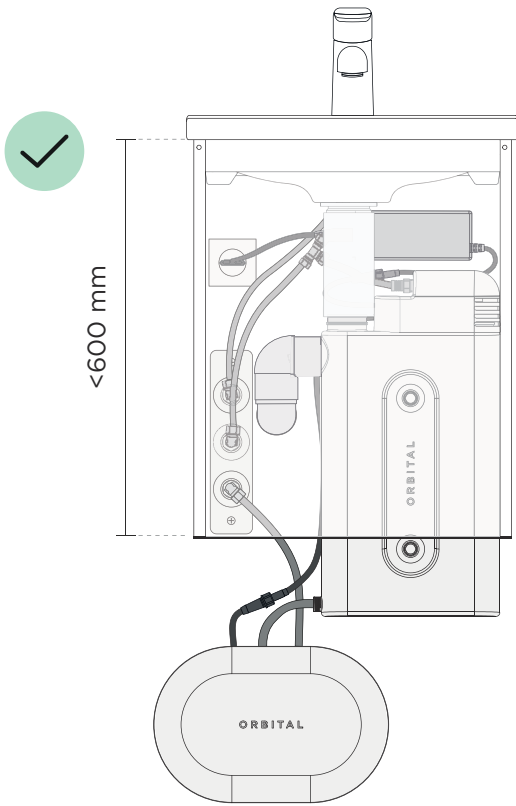
B = Area where the electrical outlet can be placed.

C = Area where the drain, hot and cold incoming water and toilet connection can be placed. Note that this area can be mirrored if the Tank is placed to the left.



NOTE

The recommended commode height of 600 mm is only applicable for complete coverage of the components. You can use a commode with a lower height without affecting the product's functionality.

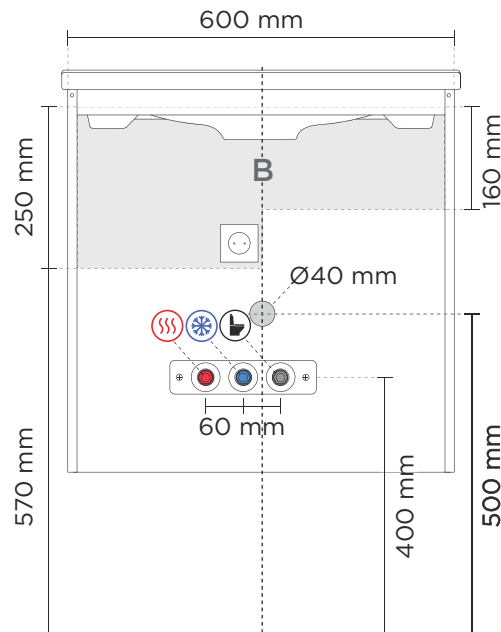


Installation

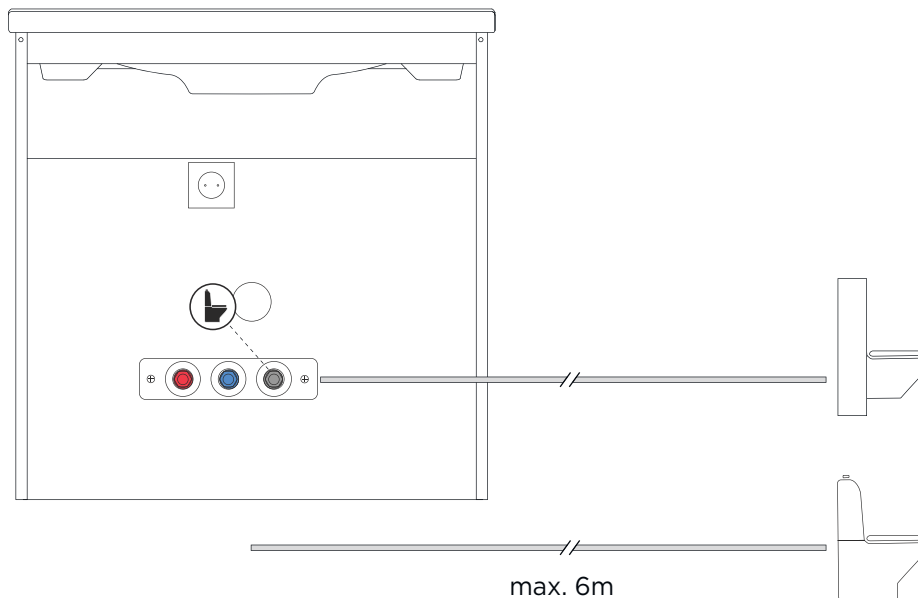
In the scenario displayed in this manual, the commode is 600 mm wide.

Prepare bathroom

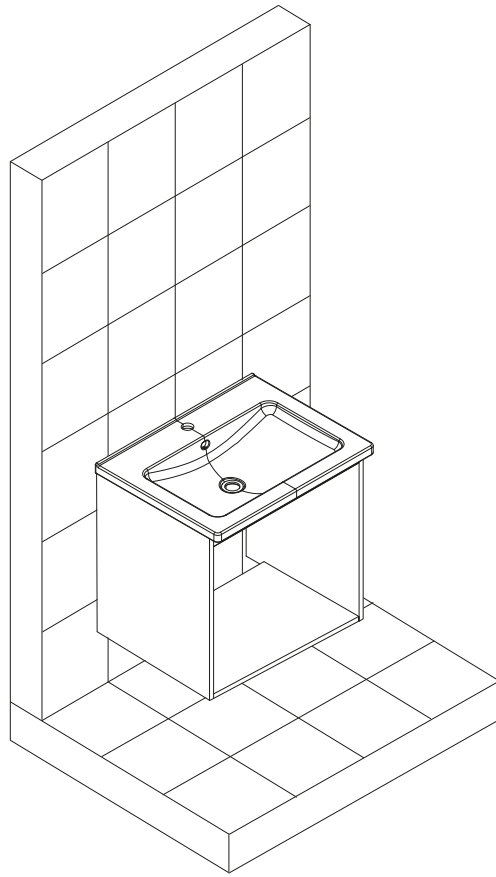
1. Prepare the installation area for incoming hot and cold water, drain, and electricity.
B = Area where the electrical outlet can be placed.



2. Install the connection to the toilet cistern. Adapt the piping according to the installation scenario. The distance between the Pump and the toilet cistern can be a maximum of 6 meters.

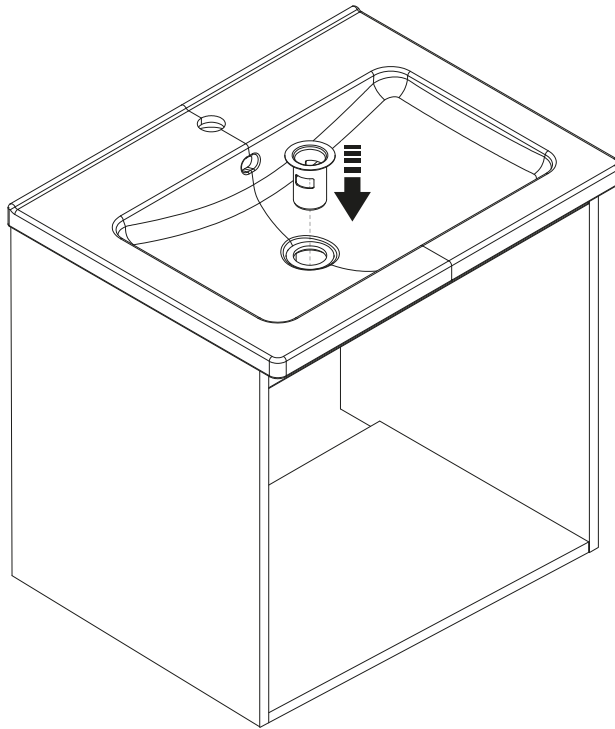


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3. Apply wall covering, tiling, and commode according to industry rules and the supplier's instructions.

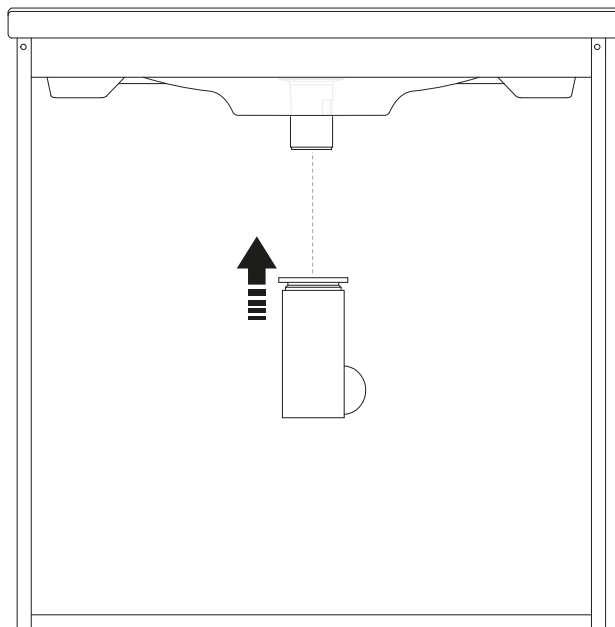


Install the bottom valve outlet

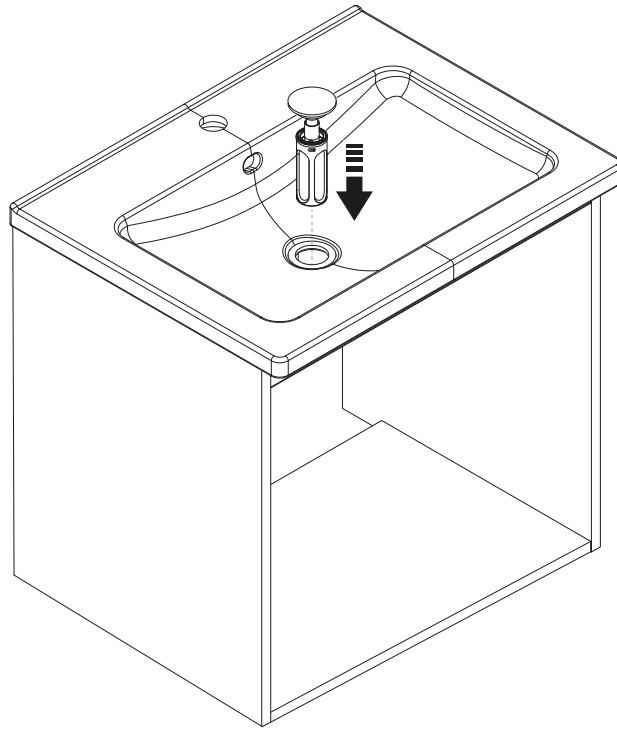
1. Place the bottom valve flange in the sink.



2. Mount the bottom valve outlet.

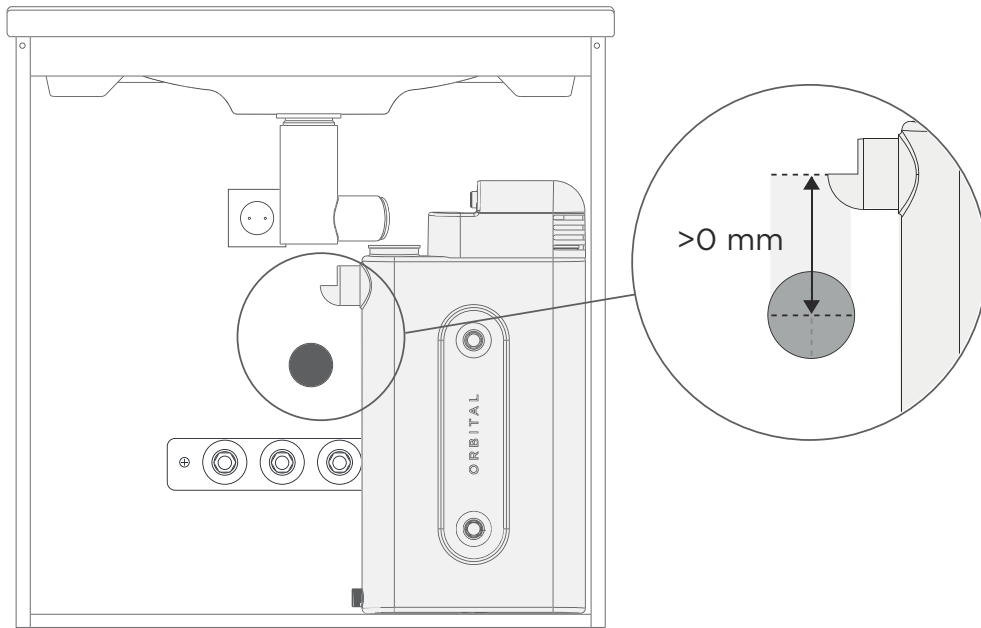


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3. Place the bottom valve with the Fresh Mesh in the bottom valve flange.



Install Tank

1. Before drilling, make sure the components fit and that the overflow outlet on the Tank is located at a higher point than the drain.

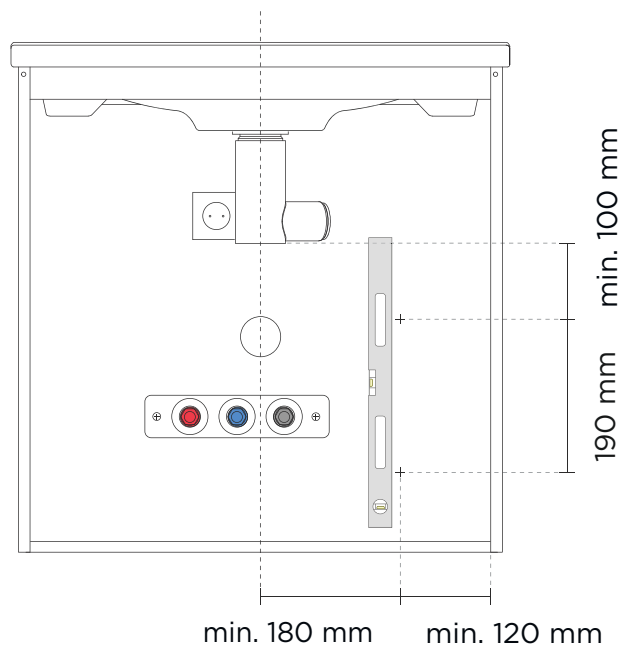


2. Pre-drill holes for the Tank fastening kit.

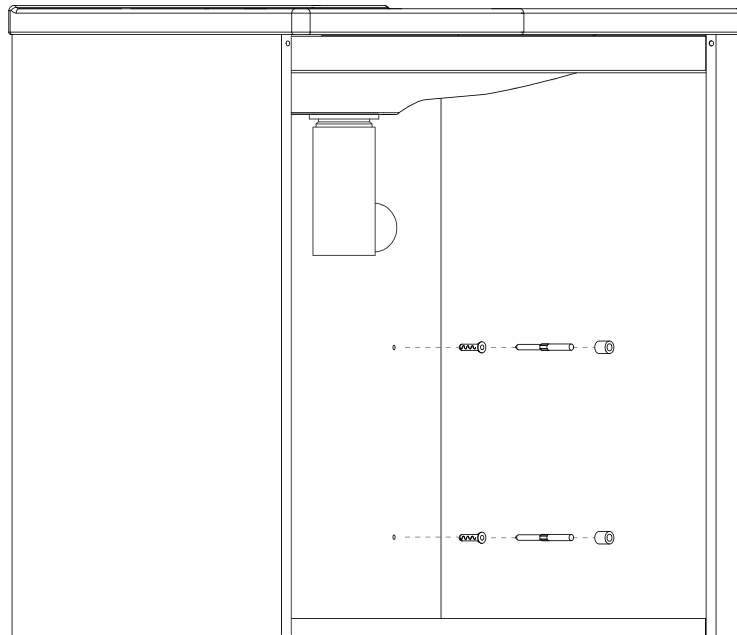


CAUTION

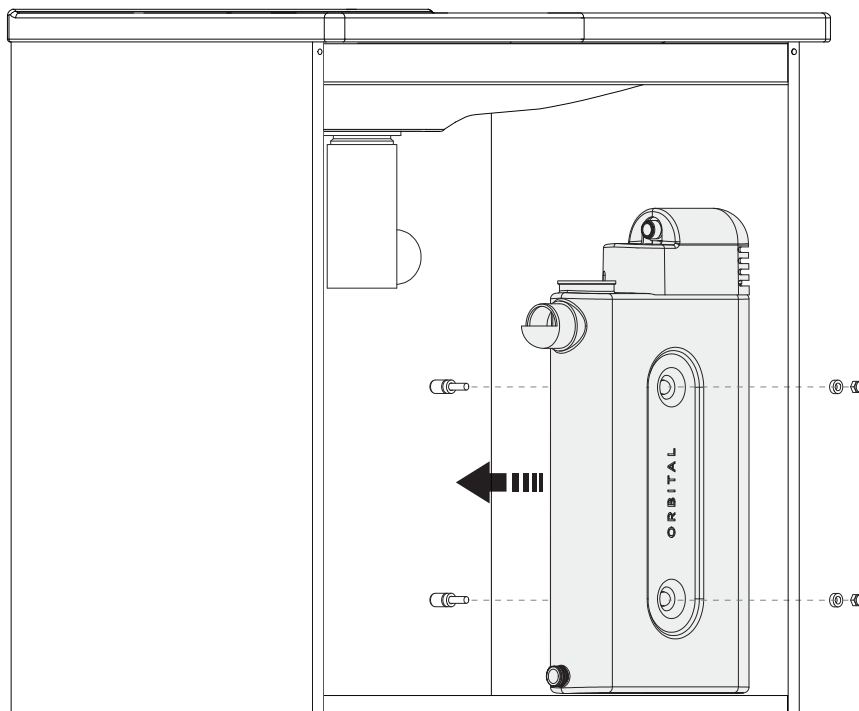
- The length of the plugs is 40 mm. Adapt placement according to the piping.
- Make sure the two holes are vertically aligned to ensure the Tank is not tilting.



3. Insert the plugs, screws, and the long spacers.

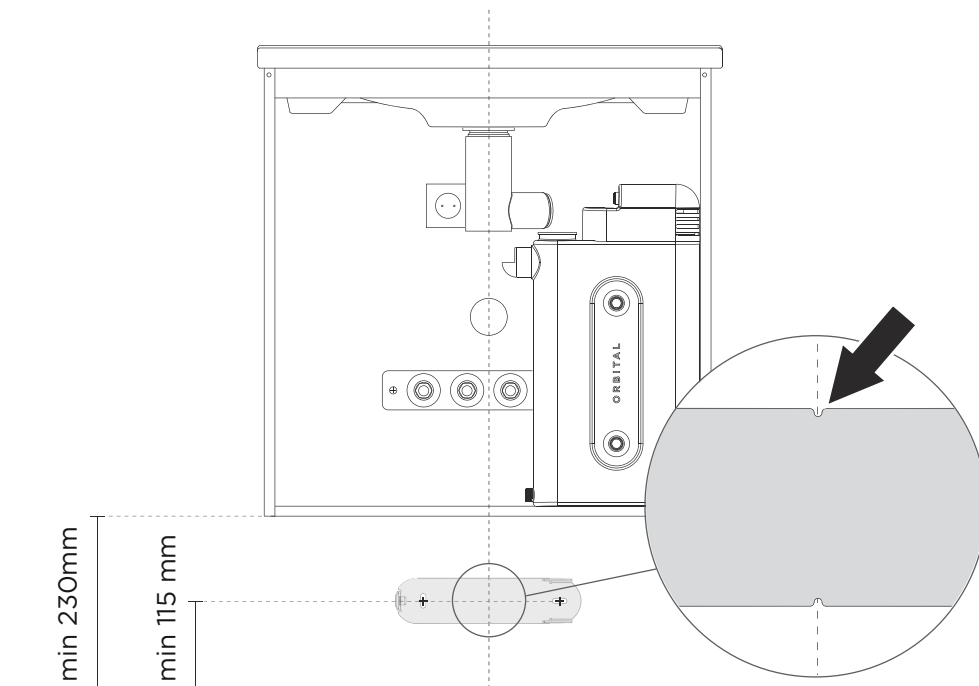


4. Attach the Tank. Add the thin washers, and secure with the nuts.

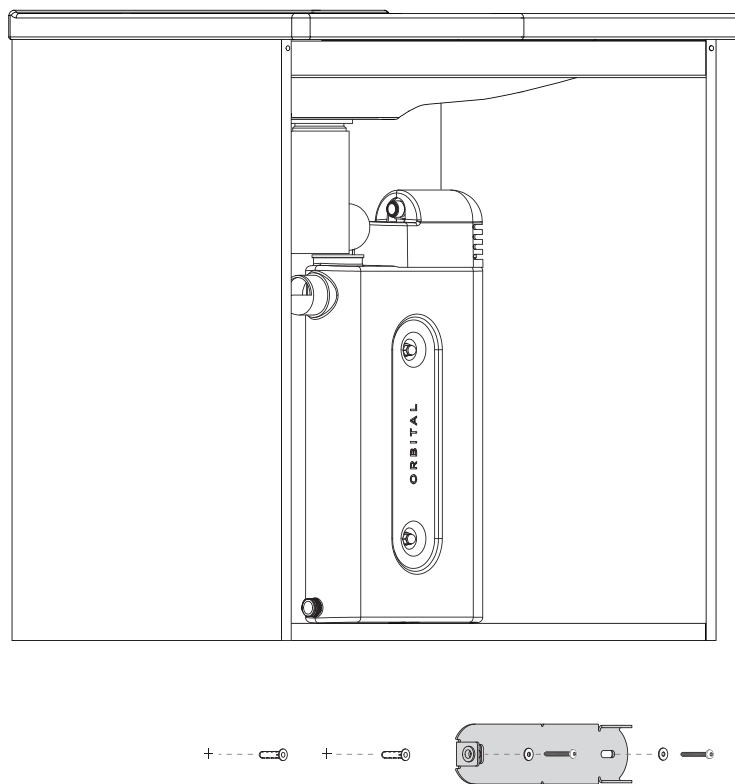


Install Pump

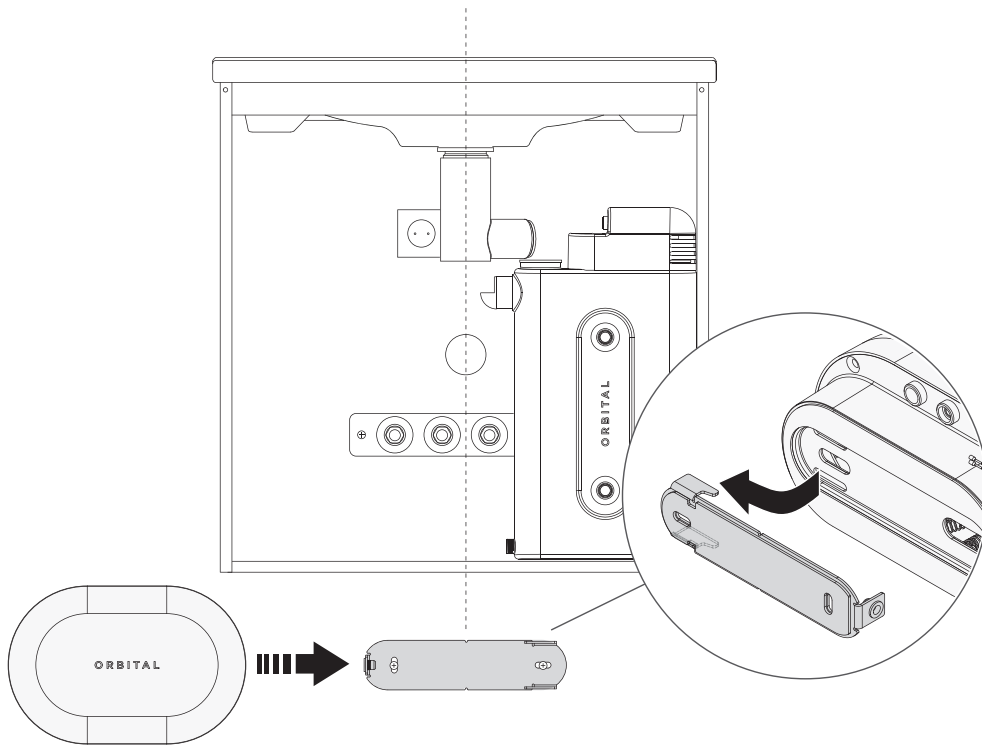
1. Measure and pre-drill holes for the wall bracket.



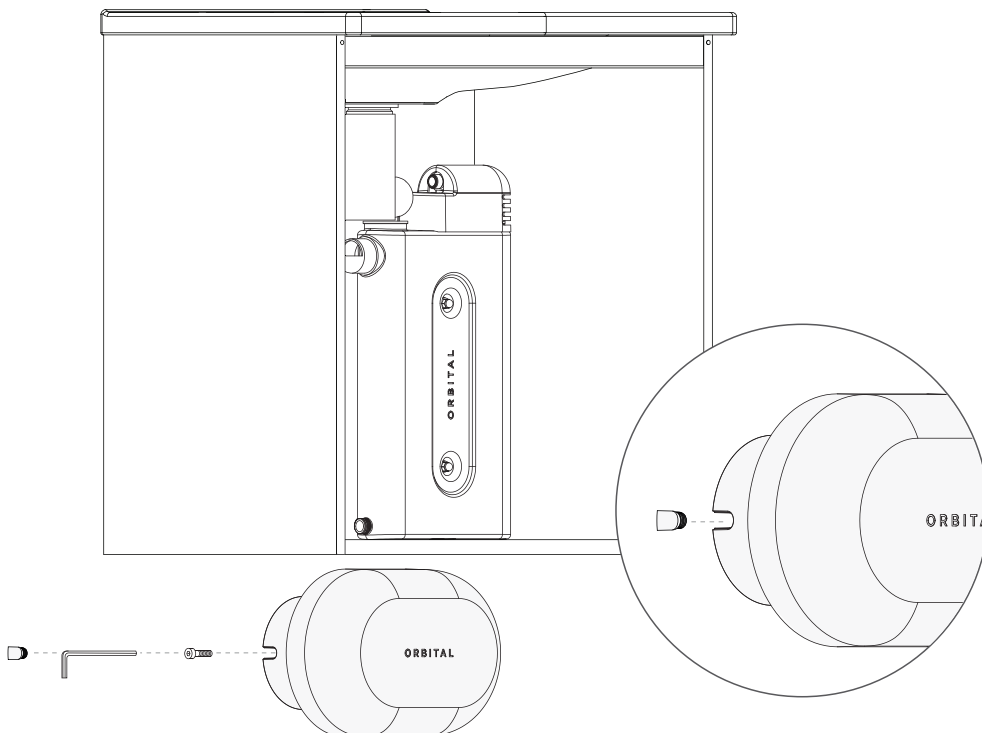
2. Insert the plugs and screw the wall bracket in place.



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3. Attach the Pump by threading the back piece onto the bracket from the left and sliding the Pump in place.

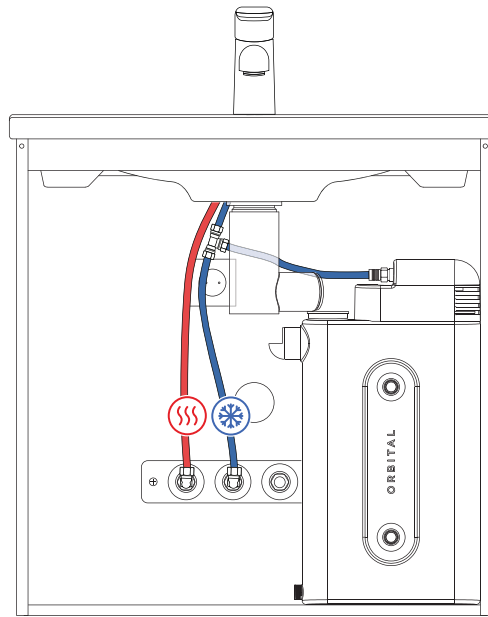


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4. Lock the Pump in place by tightening the screw on the left side with a straight 4 mm Allen key. Add the rubber plug to cover the hole.

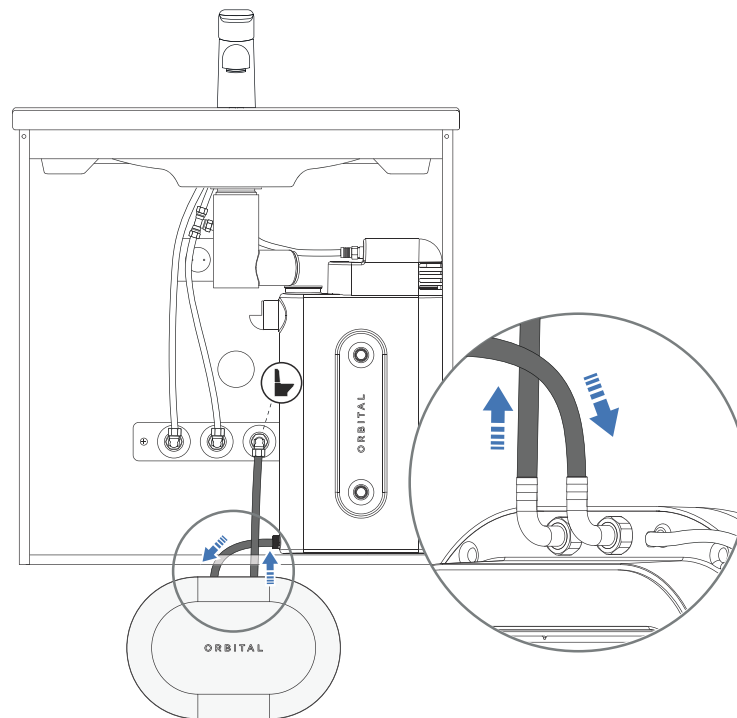


Connect to water and drain

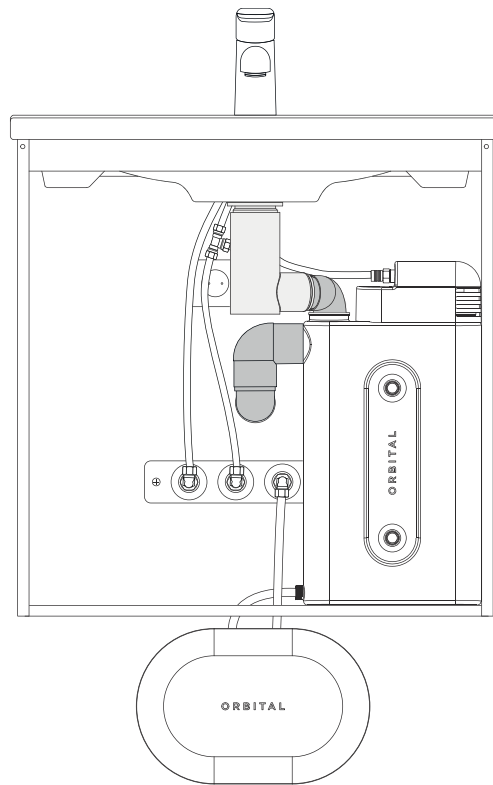
1. Install the mixer (not included with Orbital Tank) according to the supplier's instructions. Connect incoming hot and cold water to the mixer, and incoming cold water to the tank (3/8").



2. Connect the Tank to the Pump, and the Pump to the toilet.

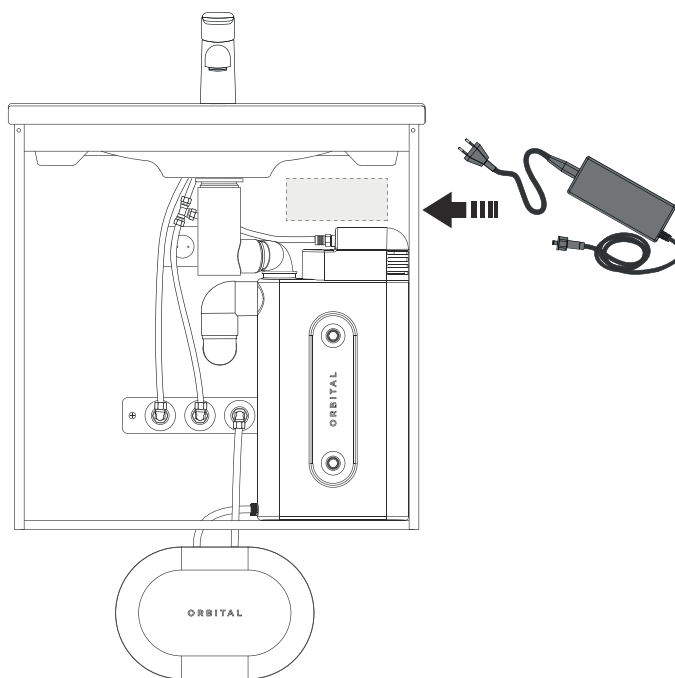


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3. Connect the sink's bottom valve outlet to the Tank. Proceed by connecting the outlet of the Tank to the drain.

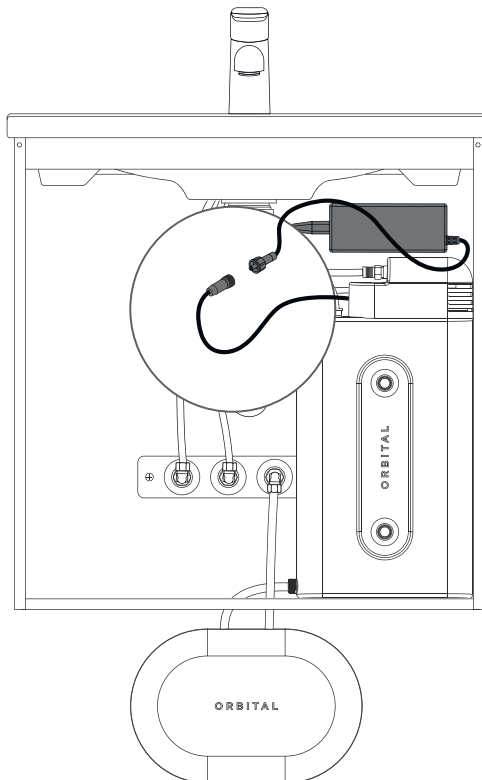


Connect all components

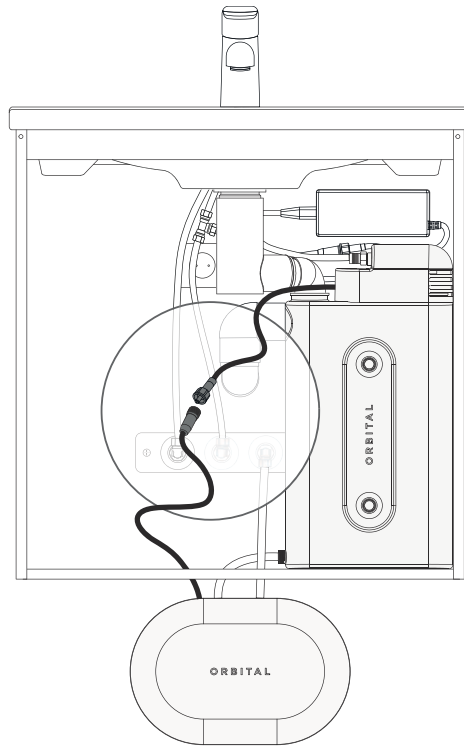
1. Attach the AC/DC power adapter in an available space using two screws.



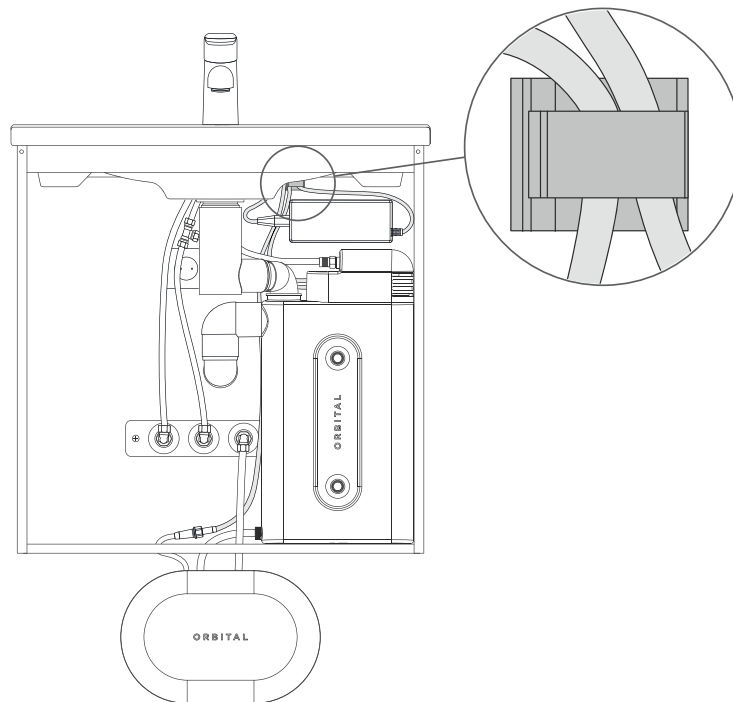
2. Connect the power adapter to the Tank.



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3. Connect the Tank to the Pump.

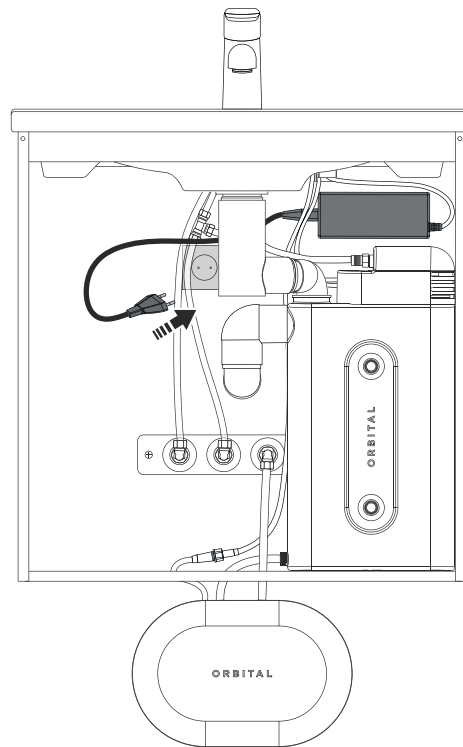


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4. Mount the cable organizer in a suitable place in the commode and attach the cables.



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- 5.** Connect the power adapter to the socket.

When the system is connected to power, the Tank will fill up about 4 dl of water, to make sure there is water to flush with even if the faucet has not been used.



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- 6.** Flush the toilet twice to ensure the Pump starts and the toilet cistern is refilled. To prevent any leakage, it is recommended to verify the water tightness.

Prerequisites and Approvals

Orbital Tank is designed according to the Swedish requirements in Swedish National Board of Housing and Building & Planning regulations (BBR).



Orbital Tank is CE-marked based on certificate and test reports from third party labs.

If industry regulations and instructions in this manual are followed, Orbital Systems guarantees a functional system.

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