

INSTALLATION GUIDE

quatreau®
SmartTap



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INSTALLATION GUIDE

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#1 PRE-INSTALLATION CHECK LIST

1.1 Mains Cold Water

An isolated 1/2" lever ball valve (ideally fixed to top front right hand side wall of cupboard, set back 6" from door, 20" up from base).

Min recommended operating pressure
3Bar / 45psi

Max recommended operating
pressure 4Bar / 60psi

1.2 Drainage

Trapped upstand (washing machine type) (Ideally located back left hand side of cupboard so that it doesn't sterilise the floor space of the cupboard)

1.3 Power

The system requires 2 x 15amp sockets or one double socket (ideally fixed front left hand side of cupboard, set back 6" from door, 20" up from base).

1.4 Tools required

Jigsaw to cut ventilation into the cupboard base.

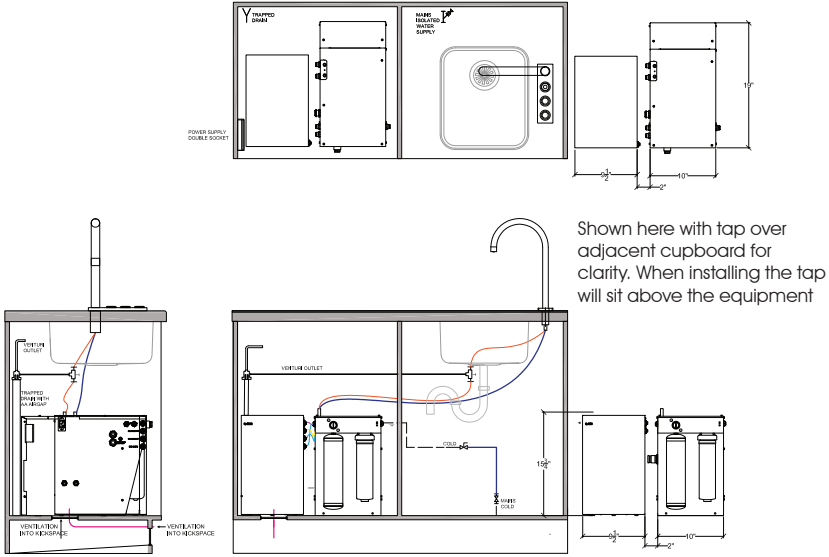
Drill and bits suited to the worksurface

- a. SmartTap™ 1 x 30mm core bit (or closest match)
- b. SmartTap™ with Drainer 1 x 150mm core bit (or closest match)

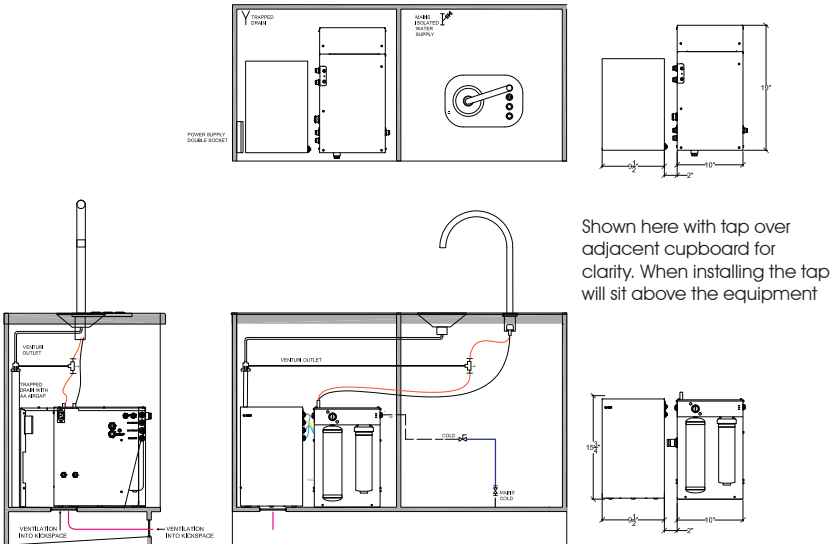
1.5 John Guest Fittings

Refer to <https://www.johnguest.com/speedfit/product/cts-jg-twist-lock-fittings/end-cap/>

TYPICAL INSTALL - QUATREAU SMARTTAP™ STANDALONE



TYPICAL INSTALL - QUATREAU SMARTTAP™ WITH DRIP TRAY



PRE INSTALLATION CHECK LIST

#2 UNPACKING YOUR EQUIPMENT

- 2.1 If your system's protective packing is damaged upon delivery you should photograph the damage and remove the contents for inspection before signing the delivery note. There will be 2 or 3 boxes depending on the model you have purchased.
 - 2.1.1 Quatreau SmartTap™ (faucet)
 - 2.1.2 Quatreau Boiler
 - 2.1.3 Quatreau Chiller / Chiller Carbonator
- 2.2 Open and inspect the Quatreau SmartTap™ to inspect the components and installation kit. Use the packaging to prevent damaged until ready to fit to work surface.
- 2.3 Open the top of the Quatreau Boiler (QST553-B) box and remove the top protective layer. You will see two protruding opaque stems, be careful not to damage these outlets.
- 2.4 Cut down each side of the box to reveal the system so that you don't have to lift it out of the box. The boiler will be installed on the right-hand side of the cupboard after you've installed the SmartTap™. This item weighs 44lbs. Please take care when moving or lifting, the sides and corners are hard and will damage furniture if knocked.
- 2.5 Leave the system on the protective packaging until ready to install.
- 2.6 Open and inspect the chiller carbonator, leave in its base until ready to install.

#3 INSTALLING THE QUATREAU SMARTTAP™

3.1 NOTE THAT THE TAP MUST BE SITED ABOVE OR ADJACENT TO THE QST553-B (BOILER CONTROL UNIT), CLOSE ENOUGH SO THAT THE COMMUNICATION CABLE FROM THE SMARTTAP™ IS NOT STRETCHED WHEN IT PLUGS INTO THE BACK LEFT SIDE OF THE BOILER.

- 3.2 THE QUATREAU SMARTTAP™ will come as a stand-alone tap or integrated into a drip-tray. With the relevant cutting template enclosed with your product choose the most suitable position for the tap.
- 3.3 Depending upon the surface you will need special cutting equipment. For granite or marble a diamond tipped core bit will be required. For wood or MDF or polymer type surface a wood bit will normally be adequate. Always check with the worksurface manufacturer and ask what type of bit can be used.
- 3.4 Decide where the tap is going to sit. Note that the control panel on the drip tray is on the right-hand side of the tap. Ensure that the location you choose is suitable and that you can reach the controls without needing to stretch whilst ensuring that the user will not have to reach through the stream of water to operate the tap. Your kitchen design will of course dictate where you can install it safely.

- 3.5 We typically site the standalone tap on the right hand side of the sink with the spout farthest away (at the back) from the user or to the back of the sink in a front to back orientation. Before you start cutting ensure that you have set up a jig or a template device to prevent the drill bit moving when you cut.
- 3.6 If installing the integrated drip tray (QST-D) locate it centre of worktop, with controls to the right-hand side.
- 3.7 Once the hole(s) is prepared, remove any rough edges or bits of wood and place the tap carefully into the hole ensuring that the comms cable is dropped into the hole first to prevent damage.
- 3.8 Run a bead of silicone around the edge of the holes or around the edge of the tap base unit and carefully place the SmartTap into the worksurface ensuring that the comms cable is hanging free underneath the worksurface.
- 3.9 Using the fixing nut (and washer if required) provided gently tighten to underside of the worksurface to prevent the tap base (or drip tray) from moving. Once secure remove any excess silicon using a wet finger to run around the edges pushing into the corners to create a smooth finish.

THE COMMS CABLE CONNECTS INTO THE BACK-LEFT SIDE OF THE QST553-B. IT'S ESSENTIAL THAT THE QST553 IS LOCATED CLOSE TO THIS CABLE WITHOUT CAUSING IT TO STRETCH.

#4 INSTALLING THE TYPE AA (AIRGAP) DRAIN

This device prevents reverse contamination into the boiling water from the drain.

- 4.1 Open the drain off kit and type AA connection found in the installation kit. Be careful not to lose any parts. Locate a suitable position on a trapped upstand (above the water trap)
- 4.2 Place the O-ring in the recess around where the blade and place saddle clamp in a position where you can access the cutting device.
- 4.3 Fix in place and connect the elbow, check-valve and finally the AA airgap fitting and check it fits. The top of the AA airgap should be at least 6" below the worksurface to ensure a fall when it is connected to the Venturi™ onto the SmartTap™ boiling pipe approx. 4-6" below the worksurface (this comes later).
- 4.4 When you are happy that the parts all fit and the airgap fitting is fixed pointing directly upwards, remove components and use the piercing blade or a drill to cut through the waste pipe. This part connects to the internal thread on the saddle clamp. Once cut, remove this cutting device completely and discard.
- 4.5 Now assemble the drain off kit with the elbow, check valve and AA fitting tightening all the collars to create a firm fix. The check valve and the airgap create 2 different forms of back flow prevention.

#5 INSTALLING THE VENTILATION FOR THE CHILLER UNIT

Ventilation will ensure your chiller performs to its specification. Failure to install this will void the warranty on this module.

- 5.1 Inside the packing you will find cutting templates. Chose the CS20 base and front grill.
 - 5.2 Drop the kick board and check underneath the left side of the cupboard for any pipes or electrical wires that may be in the way. Ensure they are moved before starting to cut the ventilation.
 - 5.3 locate base cutting template inside the left side of the cupboard, mark the 4 corners and cut the ventilation hole into the base.
 - 5.4 install the vent kit steel angle piece provided and insert the vent duct so that it runs to the front of the cupboard. Mark off the point where it crosses the kickboard and cut to length using a suitable hand saw.
 - 5.5 Using the template for the kick board vent grill mark the location for the screws and cut out area and cut out.
 - 5.6 Fix grill to front and replace the kick board so that it marries up with the vent duct.
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#6 CONNECTING WATER SUPPLY

- 6.1 Connect the John Guest 1/2" - 1/4" reducer from the installation kit to the cold isolation valve
- 6.2 Connect the blue 1/4" tube found in the installation kit to this 1/4" connection on the mains supply (push in firmly) then cut it at a length that extends to the front of the cupboard where the Boiler inlet will sit.
- 6.3 Attach the 1/4" isolator valve from the fitting kit and add a 6" piece of blue pipe onto its outlet.
- 6.4 Now slide the QST553-B (the boiler) into place on the right side of the cupboard. Connect the 1/4" pipe from the isolator into the front right-hand side port.
- 6.5 Now turn on the mains water supply and open the isolator, check the connections are Water-tight.
- 6.6 In your installation kit you will find a length of silicon hose with a Venturit™ connector. Connect the shortest length (above the T) to either of the 2 pipes protruding from the base of the spout ensuing you have located the spring clip first. NOTE Only push the silicon upwards onto the pipe – do not pull the pipe down to join it or you'll risk disconnecting it from the spout tip.
- 6.7 Connect the other end to the rear spigot sticking up at the back of the boiler unit. Do this by cutting the length back so that you don't have too much pipe in use. The run should be as long as necessary to make a

smooth connection without stretching the pipe. Use the spring clips to secure in place.

- 6.8 The other pipe that comes out of the venturiT™ should now be connected to the top of the Type AA airgap drain. Cut it back if to a sensible length but not so short that it is stretched. The pipe should run down hill so that water can escape by gravity.
- 6.9 Using the final piece of silicon in the fitting kit connect the front spigot (this feeds chilled and sparkling water) to the remaining pipe coming from the spout – remember to push up onto the pipe - don't pull it down.

DO NOT TURN ON THE POWER

This step is handled in the commissioning guide.

NOTE

The venturiT™ is a unique device that enables the boiler to vent itself to drain.

During the heating cycles, water expansion would otherwise push boiling water out of the spout without activating the boiling function. It's essential to install it running the pipe down-hill.

NOTE

If using an RO system you must ensure it delivers water at 45-60psi at all times. You may need to add a pump to ensure the optimum psi is supplied to the Quatreau system.

During commissioning use only mains water then convert to RO once the system has been set up and commissioned.

#7 INSTALLING THE QUATREAU CHILLER CARBONATOR

- 7.1 Site the chiller unit to the left of the Boiler over the ventilation duct
 - 7.2 Use the 1/4" PE pipe provided to interconnect the QST553-B and CS20 units as follows.
 - 7.2.1 H2O OUT on the 553-B into WATER IN on the chiller
 - 7.2.2 CO2 OUT on the 553-B into CO2 GAS IN on the chiller
 - 7.2.3 SODA WATER OUT on the chiller to CARB IN on the 553-B
 - 7.2.4 STILL WATER OUT on the chiller to CHILLED IN on the 553-B
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NOTE

Inside the fitting kit are 4 1/4" stem elbows that can be inserted into the chiller to make it easier to install the interconnections without kinking the pipe

NOTE

Ensure that you leave a 1" gap around the sides of the chiller unit - this enables ventilation and air movement without which the system will not chill correctly.

DO NOT TURN ON THE POWER TO THE CHILLER OR DAMAGE WILL OCCUR.

This step is covered in the commissioning guide.

End of installation guide. Now refer to commissioning guide.

IMPORTANT INFORMATION

TECHNICAL DETAIL	QUATREAU 553-B	QUATREAU CS20 CHILLER CARBONATOR
POWER REQUIREMENTS (RCD Protected)	1 x 15Amp socket	1 x 15Amp socket
VOLTAGE	110V	110V
WATTAGE Max consumption Standby consumption	1.5KW 80W	200W 0W
START UP TIME	10 minutes	10 minutes
MAX WORKING PRESSURE	4Bar / 60psi	4Bar / 60psi
CO2 CAPACITY		CS20 = 20ltrs/h at 4C

NAME OF INSTALLING ENGINEER
INSTALLATION DATE
INSTALLATION NOTES Mains cold water pressure? psi
Flow rate from mains supply ? ltr/min
Hardness of mains cold water? gpg
If hardness is above 10gpg has a OneStop Plus™ scale reduction filter been installed? For further details visit https://www.globalwatersolutions.com/ products/water-treatment/onestop-plus/ y/n
Has the type AA airgap drain off device been installed in accordance with the instructions? y/n