

Push Button Control Shower Valve

Installation & Aftercare Instructions

This guide covers the installation of:

- 1 Function Push Button Shower Valve
- 2 Function Push Button Shower Valve
- 3 Function Push Button Shower Valve

(2 Function system shown for illustrative purposes - shower system may vary from one shown)

INTRODUCTION

Thank you for choosing this product. This guide covers the installation and commissioning of the shower valve - for the installation of the associated shower accessories, please see separate instructions supplied.

This shower valve must be installed in accordance with the Water Supply (Water Fittings) Regulations 1999. We recommend this product should only be fitted by a qualified plumber.

OPERATING CONDITIONS OF USE AND COMPLIANCE

Before installation the operating conditions of use must be checked. The table below contains details of the necessary conditions of operation. This valve is suitable for high pressure (BS1111) operating conditions. Valves cannot operate effectively where a hot or cold pressure system crosses the boundaries of the two ranges. In addition the maximum ratio of unbalanced hot and cold water pressures for the valves to operate effectively is 2:1. Hot or cold pressure must be reduced or boosted so as to work within the required range.

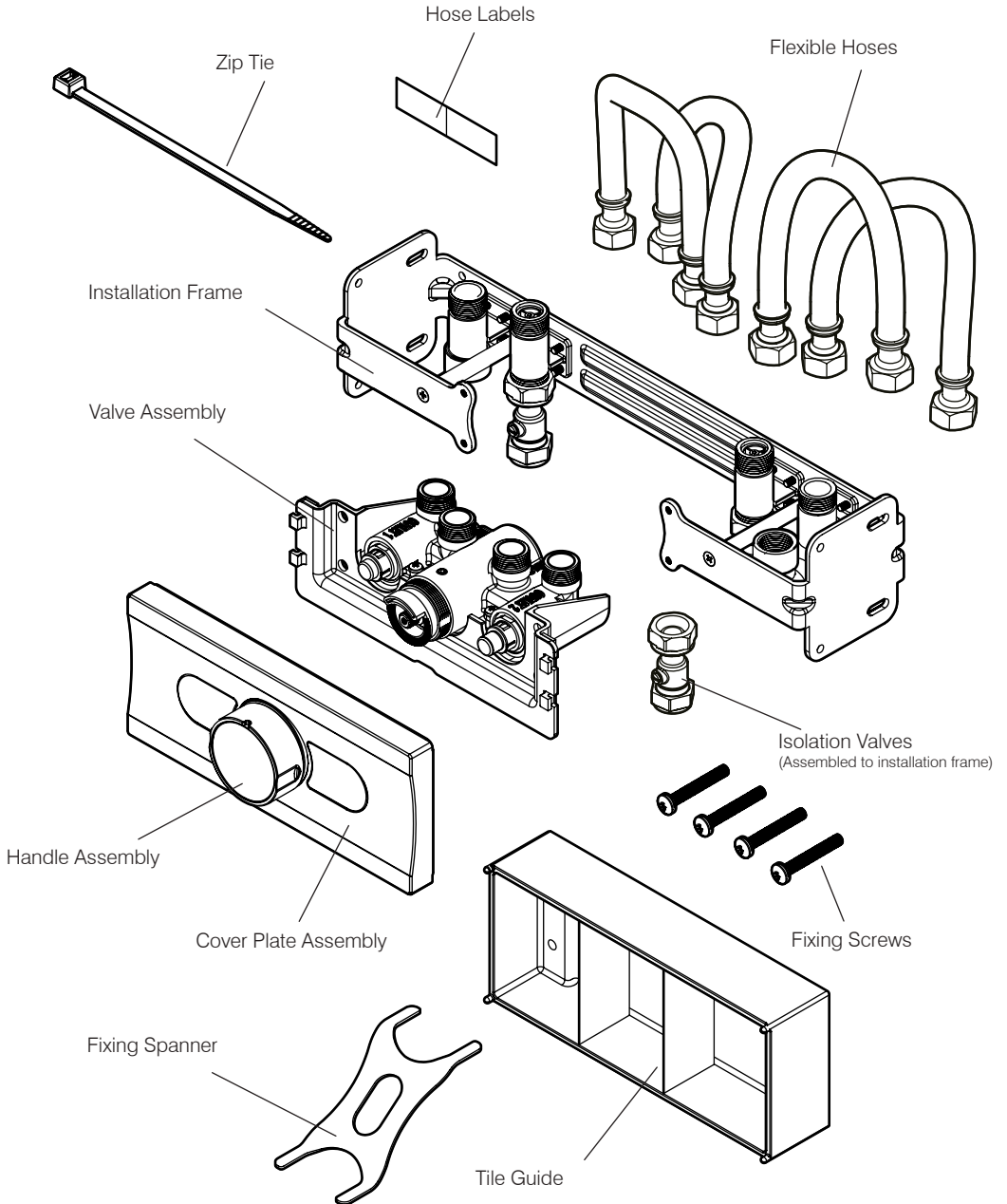
These shower valves are suitable for use with all water supply systems up to a maximum of 5.0 Bar. Operating pressures above 5.0 Bar will require the installation of pressure reducing valves.

	HIGH PRESSURE BS1111
MAX STATIC BAR	10 BAR
FLOW PRESSURE (BAR) HOT & COLD	1.0 - 5.0
HOT SUPPLY (°C)	55 - 65
COLD SUPPLY (°C)	MAX 25
MIXED WATER (°C)	MAX 44

The valve must be installed so that it is readily accessible for commissioning and maintenance. The valve is supplied with isolation valves on both the hot and cold inlets so as to allow the valve to be commissioned and tested correctly. The valve is fitted with integral check valve cartridges which command the water supply, therefore the thermostatic valve is protected against cross-flow due to unbalanced line pressures as required by the Water Supply (Water Fittings) Regulations 1999.

WHATS IN THE BOX

Before installation please ensure all components are present. The following illustrations can be used as a guide and used for reference during installation - illustrations are intended as a guide only, style and sizes vary depending on system chosen.



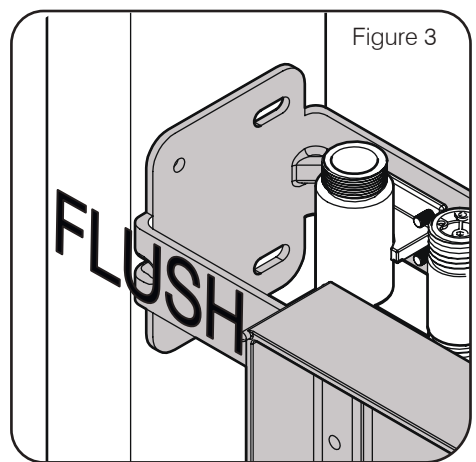
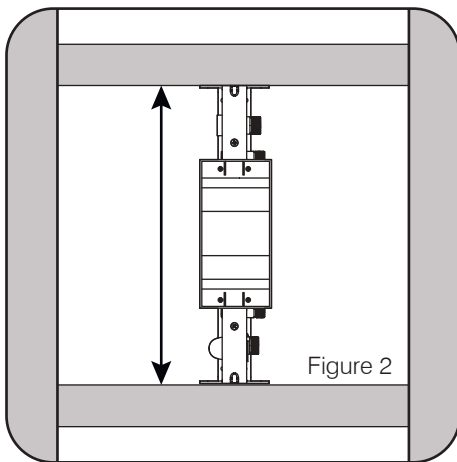
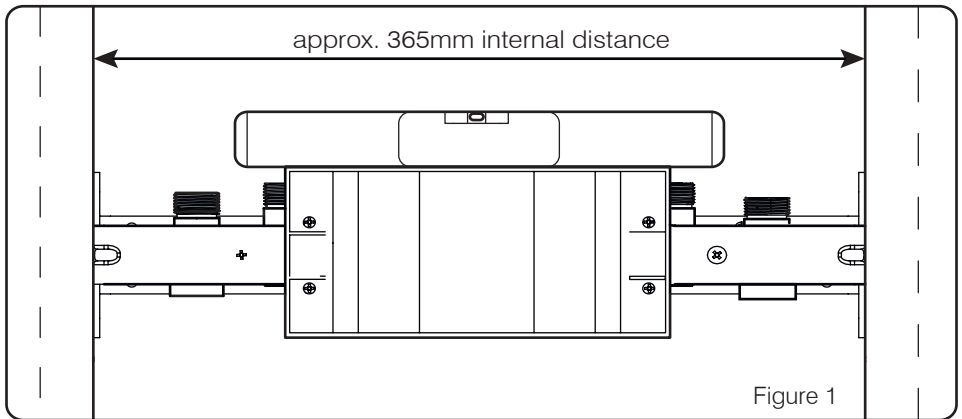
VALVE INSTALLATION

Most problems associated with the operation of thermostatic shower valves are caused by debris in the new pipe work getting into the thermostat. These problems are easily avoided by thoroughly flushing the pipe work BEFORE the valve is fitted. Failure to do so may invalidate your guarantee.

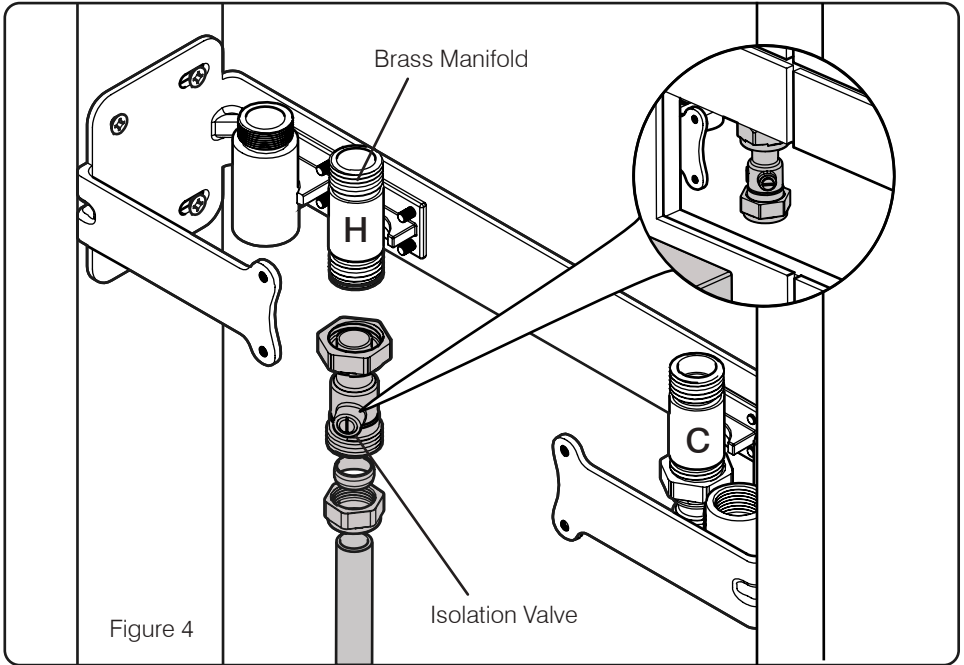
1. This valve is designed to be installed in stud constructions using timber of a suitable depth as to allow the full installation frame to fit onto the stud. The centre point between the two studs will be the final position of the valve. To ensure successful installation, the frame needs to fit correctly between the two studs without deforming the frame. If necessary use spacers to create the correct fit.

When fitting the installation frame, keep the tile guide assembled as this will ensure that the frame does not warp or bend during installation.

NOTE: Some systems allow for the valve to be mounted vertically using noggins between studwork. Check product information to see if your system is suitable. (Figure 2)

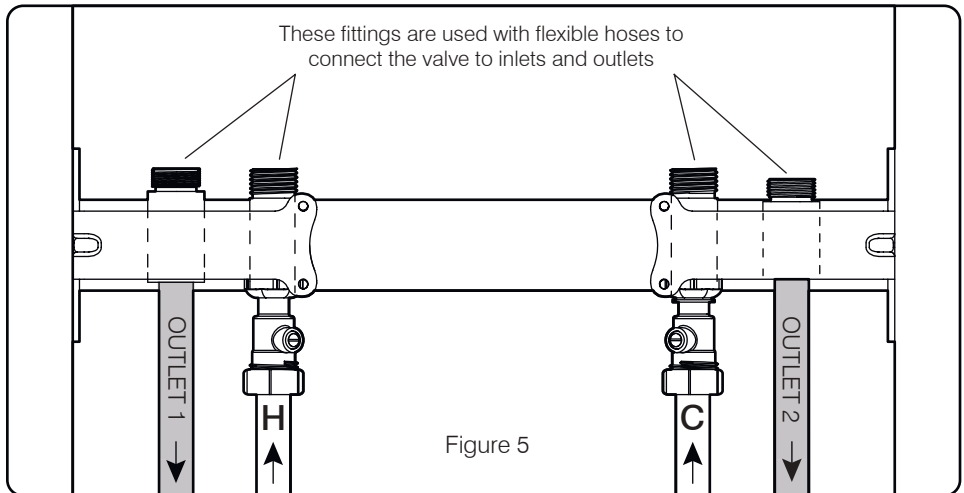


2. Position the installation frame between the two stud timbers at a suitable height for its final installation position. The front of the frame and the front of the timber stud should be flush (Figure 3). Use a spirit level placed on the tiling guide to make sure the installation frame is level both front to back and left to right. Once level remove the tile guide and keep the fixing screws safe for later steps.



NOTE: Inlet and outlet manifold locations vary depending on which system has been purchased.

3. Install the supply pipework to the isolation valve and the brass manifolds. The hot water feed should be installed into the left hand manifold and the cold water feed to the right hand manifold. Ensure the isolation valves are mounted so that they will be visible and accessible for later stages (Figure 4).



4. With the water inlet supplies installed, install outlet pipework using suitable plumbing fittings. Ensure that there is enough room to route pipework to the chosen outlet location.

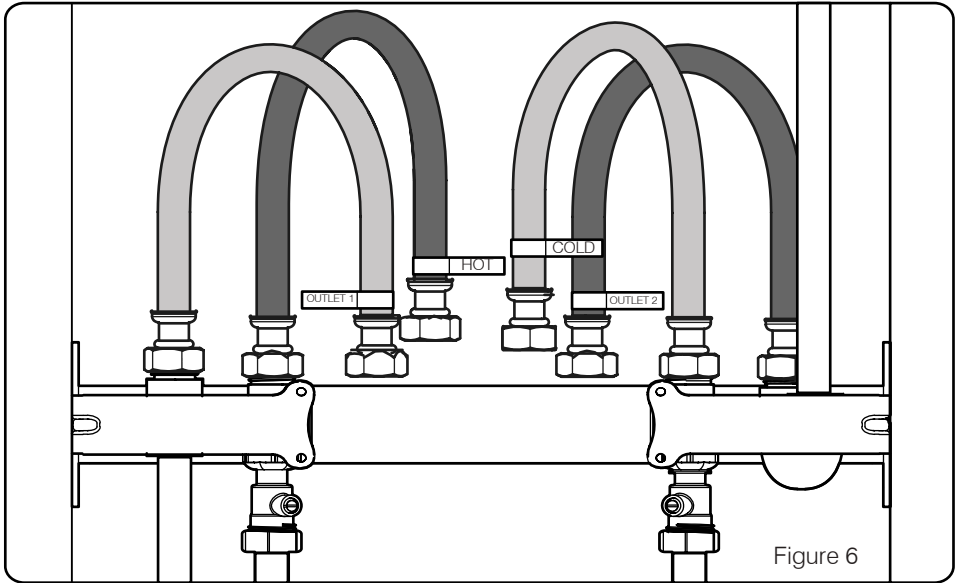


Figure 6

5. Connect the flexible hoses to the manifolds - ensure that each hose has a rubber washer inserted at each end to create a watertight seal. Once connected, label each hose with the corresponding inlet / outlet - this will help easily identify which hose is which during later installation stages.

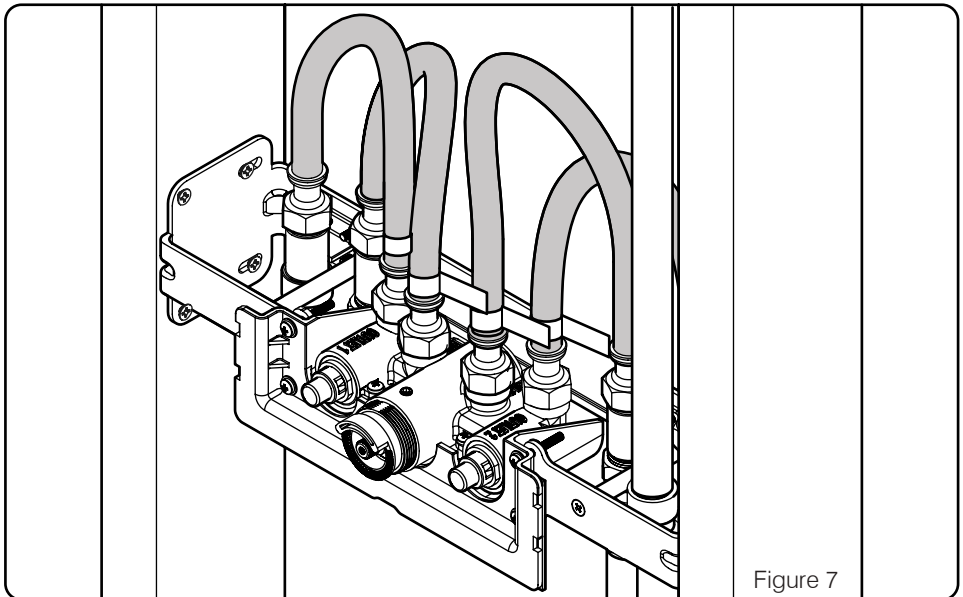


Figure 7

6. **At this point it is critical that leak tests are performed.** Connect the valve body to the flexible hoses - the hot and cold inlets are marked with red and blue paint on the valve. Turn on the water supply and test the system for leaks. Push the buttons for each outlet and check all connections are fully sealed.

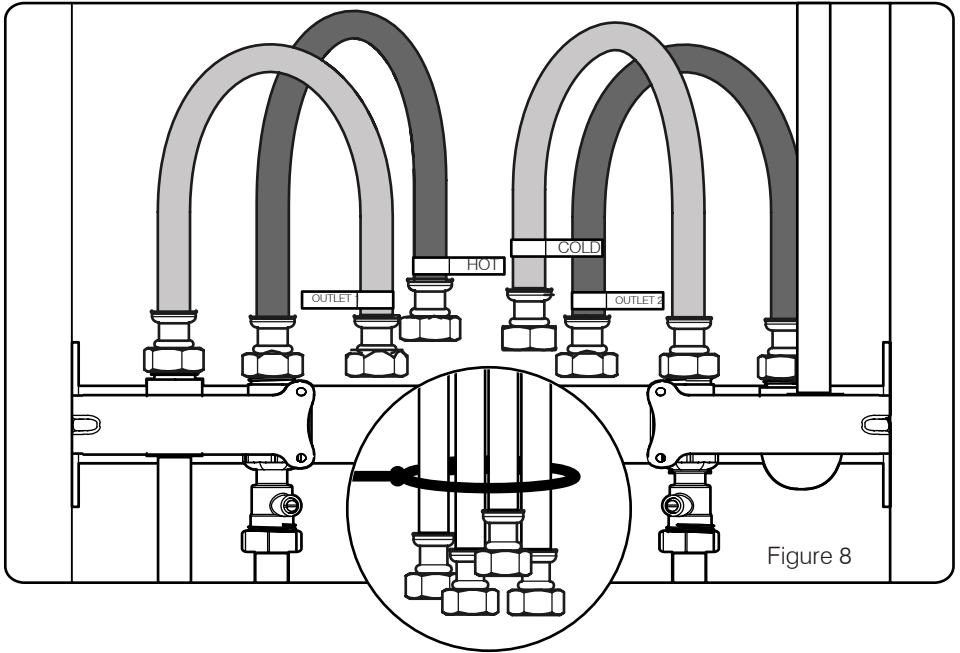


Figure 8

7. Once satisfied that there are no leaks, turn the water supply off and disconnect the valve from the flexible hoses. Before installing plasterboard and tiles, use the zip tie provided to tie the ends of the hoses together to make them easier to access later.

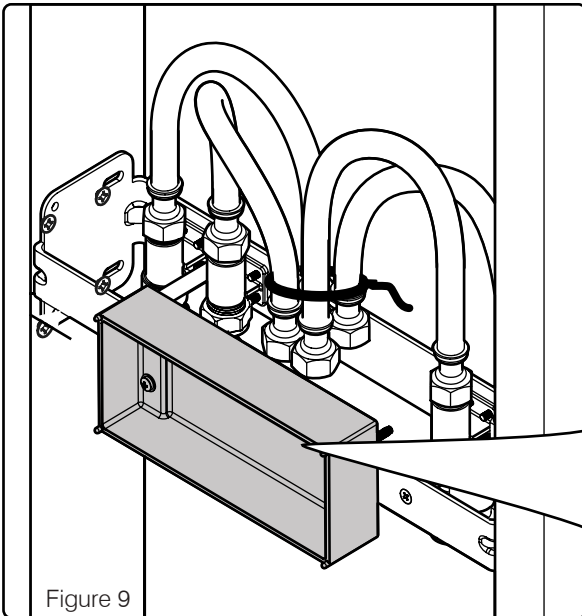


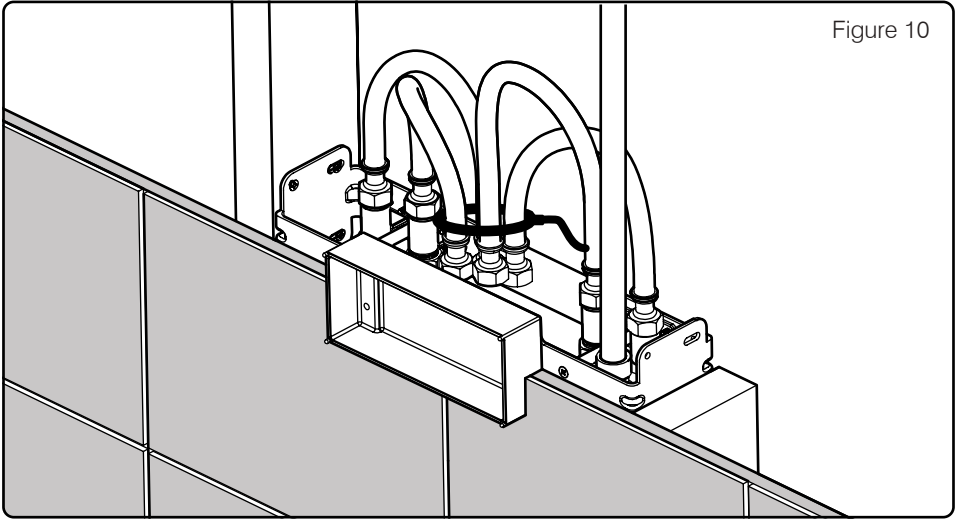
Figure 9

You are now ready to apply the final finished surface.

8. Reattach the tile guide using the fixing screws. Cut a hole in the plasterboard using the tile guide to determine position and sizing.

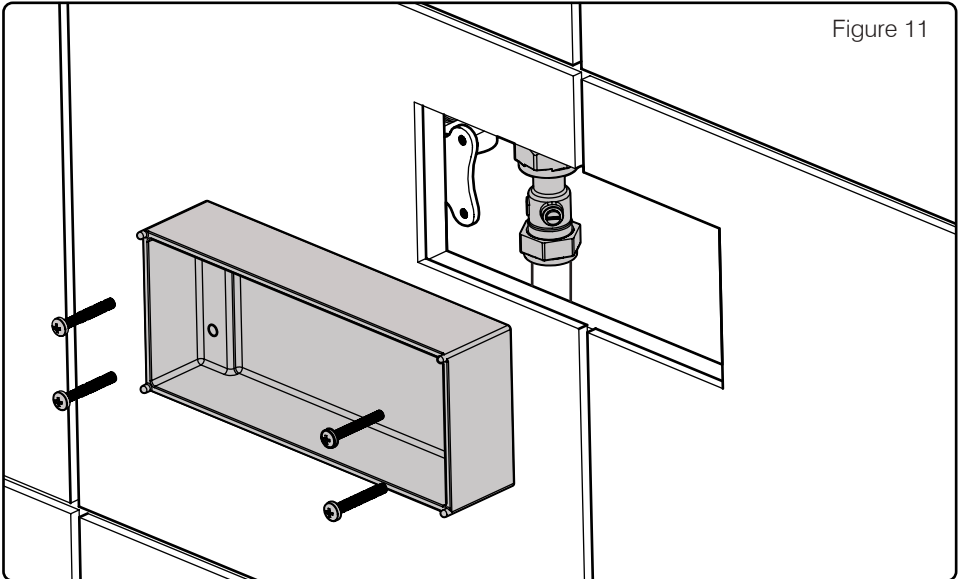
Tip: There are pins in the corners of the tile guide to help mark its position on the plasterboard to use as a cutting template.

Figure 10



9. Once a hole has been cut in the plasterboard, secure it to the stud. The tile guide should pass through the hole in the plasterboard. Tile up to the edges of the tile guide to ensure the correct size access hole. Failure to do so may mean the cover plate does not form a water-tight seal in later installation stages.

Figure 11



10. Remove the tiling guide, allowing access to the pipework behind the tiled wall. Keep these screws safe as they will be used to mount the valve. From this position the isolation valves should be visible and accessible through the access hole.

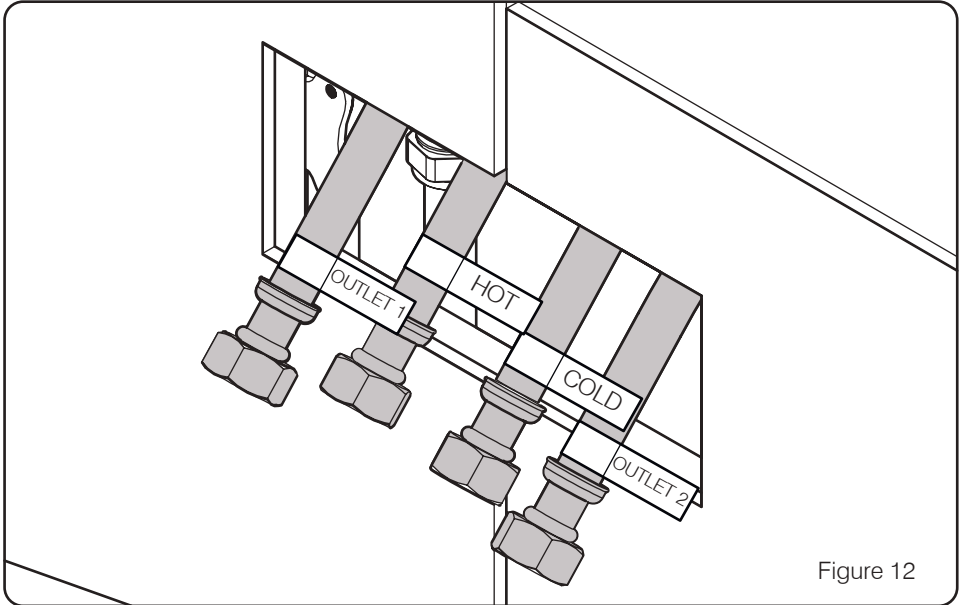


Figure 12

11. Pull the flexible hoses through the access hole in the wall and remove the zip tie.

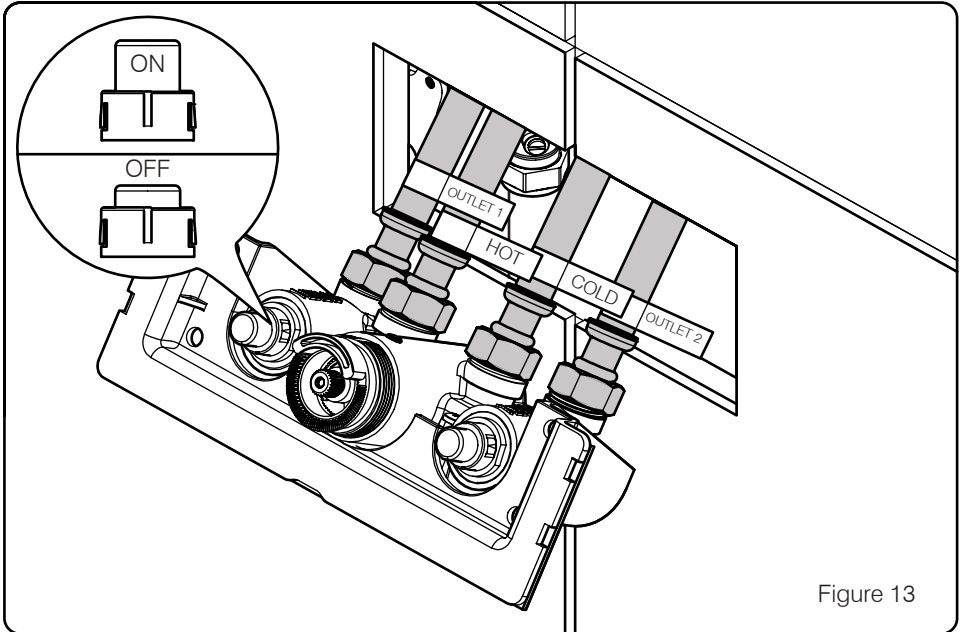
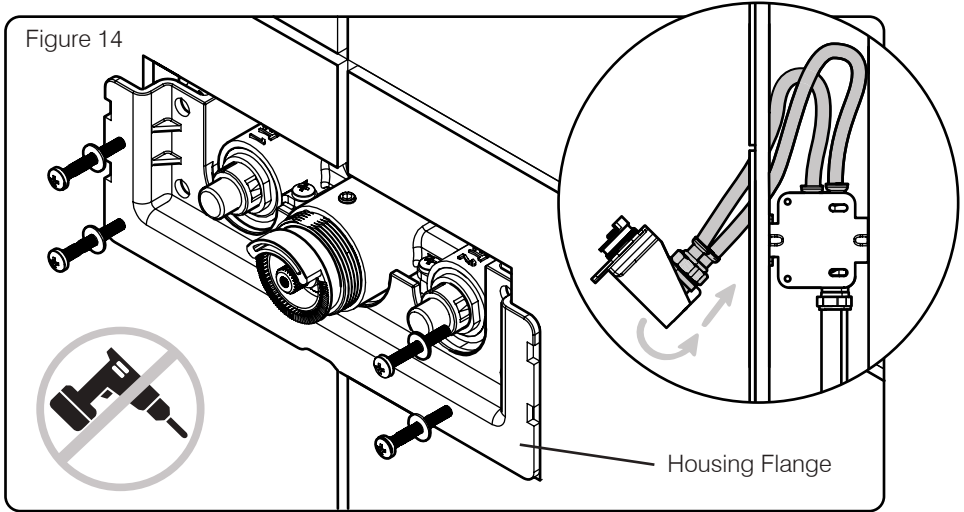


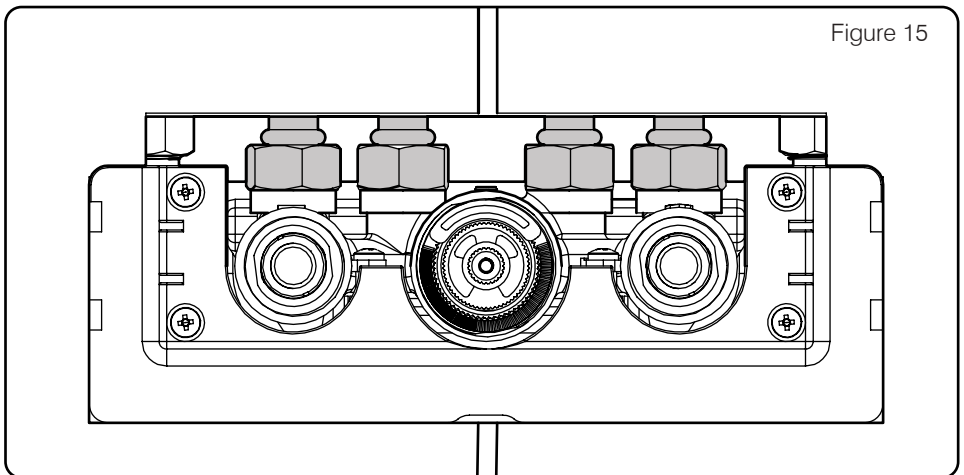
Figure 13

12. Working from left to right, using the labels as a guide, connect the hoses to the valve. Ensure the hose from the hot supply is connected to the inlet marked hot on the valve. Do the same for the cold supply. Ensuring all outlet buttons are in the 'OFF' position (Figure 13), turn the water supply back on at the isolation valve. Do not overtighten the hoses as this may damage the rubber washers.



13. Lift the valve and push the hoses back through the access hole, making sure the hoses do not kink (Figure 14). Position the valve flat against the tiles and line up the fixing holes with those on the metal installation frame. Secure the valve to the fixing frame.

Note: Tighten fixing screws with a screwdriver to prevent over-tightening. Do not use an electric driver as this may damage the valve housing or cause it to warp, preventing correct installation. If the housing flange is not flat against the wall surface, the fixing screws are too tight.

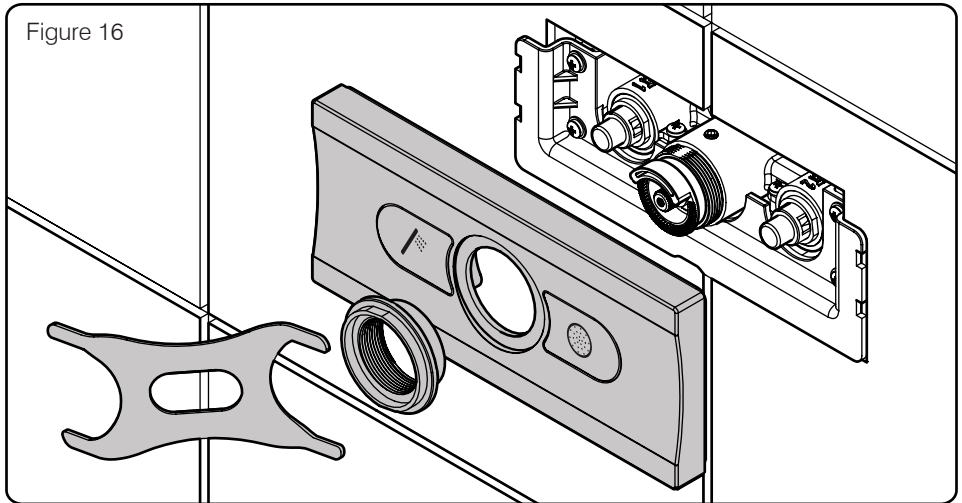


14. When secured in place, the fixing nuts of the flexible hoses will be visible above the valve housing. This will allow the connections to be checked for leaks and for the hoses to be tightened slightly, if necessary, without removing the entire valve.

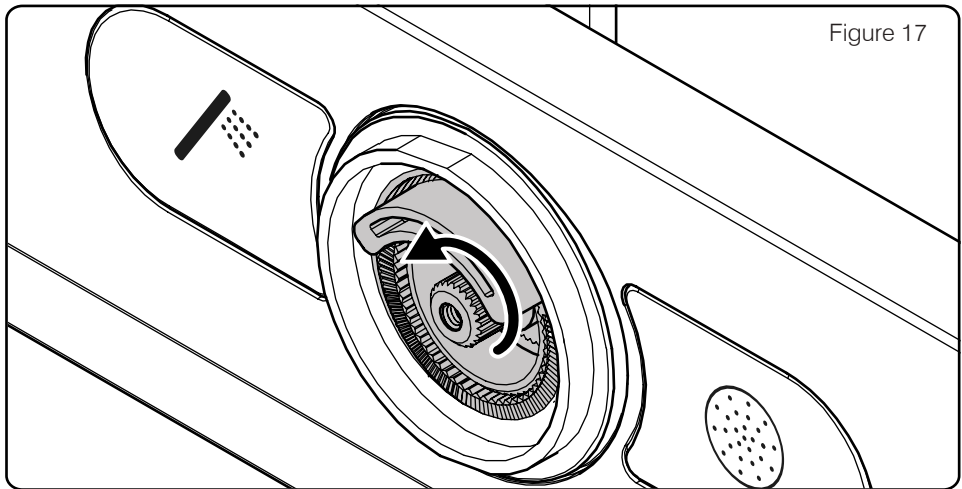
You are now ready to install the cover plate and valve controls.

Note: The cover plate is supplied with etched control buttons for a shower handset, fixed shower head

and bath filler options. For 1 and 2 function shower systems, extra buttons are supplied with your cover plate. For button swapping instructions please see the supplementary instructions supplied with the cover plate.



15. Position the cover plate over the valve housing and fix in place with the cover plate fixing nut. Tighten the plate to the wall with the tool provided making sure not to scratch the cover plate. Make sure the cover plate is level and that the buttons are in line with those on the valve. The cover plate is fitted with an integrated foam seal - it is not necessary to use silicone sealant. Some cover plates have an additional fixing screw on the side of the cover plate to secure the plate in place. Test that the cover plate and valve buttons are correctly aligned by testing the button operation.



You are now ready to set the maximum temperature of the valve.

16. With all outlet buttons checked for smooth operation, using a thermometer, test the temperature of the water from the outlets. Rotate the cartridge spindle anti-clockwise to increase the temperature and clockwise to reduce the temperature until the water from the outlet reaches the maximum recommended temperature of 44°C. Leave the cartridge in this position.

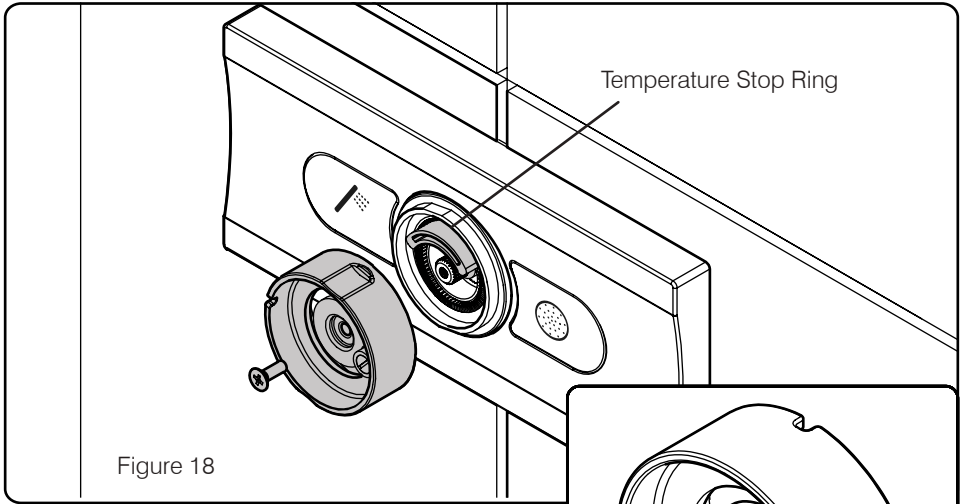
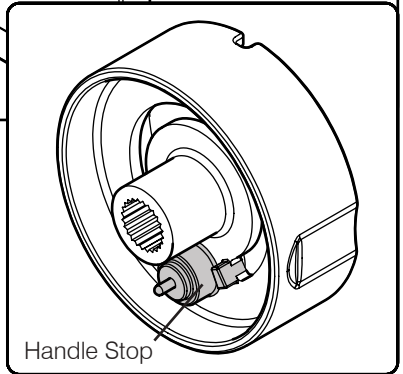


Figure 18

17. On the rear of the handle is a handle stop that sits against the right hand side of the valve temperature stop ring to prevent the handle being rotated past the pre-determined maximum temperature position. Without moving the temperature spindle, position the handle onto the cartridge so that it cannot rotate anti-clockwise.

Note: Do NOT remove the temperature stop ring to make adjustments as this will prevent correct assembly later.



Handle Stop

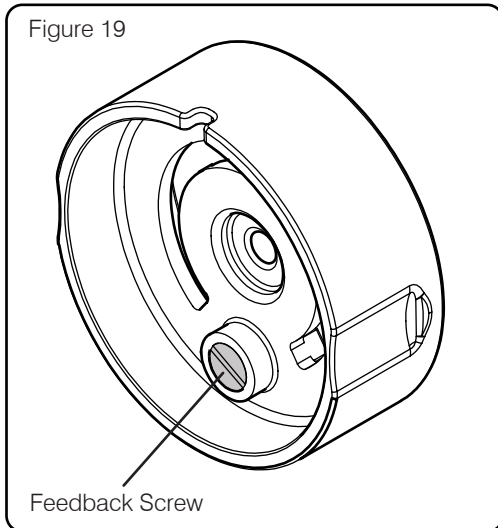


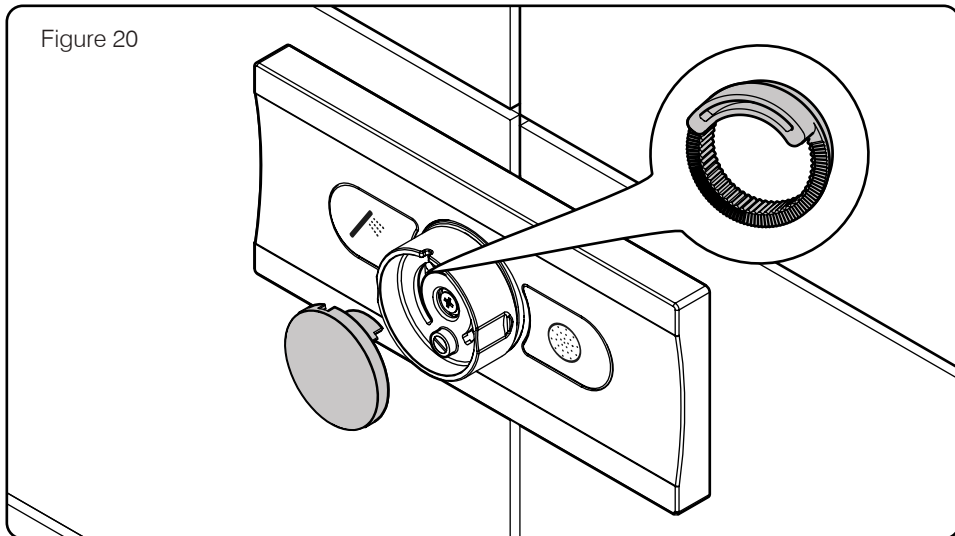
Figure 19

Feedback Screw

18. Once installed, the handle should click as it rotates. This click can be adjusted to give more feedback when in use.

Rotating the feedback screw clockwise will make the pin stiffer and the click will be more noticeable - rotating the screw anti-clockwise will loosen the pin and soften the click.

Figure 20



19. With the handle installed, the centre dial can be pushed into place. The dial has a tab that fits into the temperature stop ring via a gap in the handle. To remove the dial for maintenance, line up the notch in the centre dial with the notch on the handle and use a small screwdriver to separate the two parts.

Installation is now complete.

TESTING AND ANNUAL SERVICING

It is recommended that showers do not exceed 44°C. The valve temperature should never exceed 46°C. After commissioning, carry out the cold failure test to ensure the valve operates at the correct outlet temperature.

The valve should be tested to ensure correct operation during installation and thereafter at stated intervals decided by the user but never at greater than 12 monthly intervals. The testing will only require a normal thermometer with a scale greater than 65°C. The temperature sensitive element of the thermometer should always be fully inserted into the water flow.

Follow the procedure below:

1. Measure the mixed water temperature.
2. Carry out a cold fail/safe shut-off test by using the mains isolation valve to shut off the water to the cold supply. Wait 5 seconds, if water is still flowing check that the water temperature is below 44°C. The flow should stop or reduce to a trickle.
3. Open the cold water isolation valve and measure mixed water temperature. If there is no significant change from the original settings and fail/safe shut off is functioning the valve is working correctly and no further service is required. If the outlet temperature has drifted by more than 2°C, or if the fail/safe function does not work, a full service or re-commissioning is required. We recommend that in these circumstances you contact a plumber.

TROUBLE SHOOTING

If you require further assistance beyond the guide below, including replacement parts, please contact customer services using the contact details on the back of this guide.

PROBLEM	SOLUTION
After installation, shower only runs Hot or Cold - there is no mixed water.	Hot & Cold supplies are plumbed the wrong way around. Remove the valve from the wall and check the plumbing connections to the valve.
Shower will not run hot enough when first installed.	The maximum temperature needs to be adjusted - see the temperature setting guide in this manual.
Cold water is running back through the valve and into the hot water system.	Check and clean the check valves located on the hot and cold inlets on the valve. These may need to be replaced.
The valve does not turn on even when the button is pressed.	In some cases this may be caused by over-tightening the cover plate during installation which can cause the buttons to become partially pressed. Loosening the cover plate fixing nut slightly should fix this.
The button operation is not smooth and sometimes scrapes.	Remove the cover plate and reassemble ensuring that the valve buttons and cover plate are correctly aligned to avoid interference.
There is no water running to the valve	Check you have correctly turned the isolation valves to the 'on' position for both the hot and cold supplies.