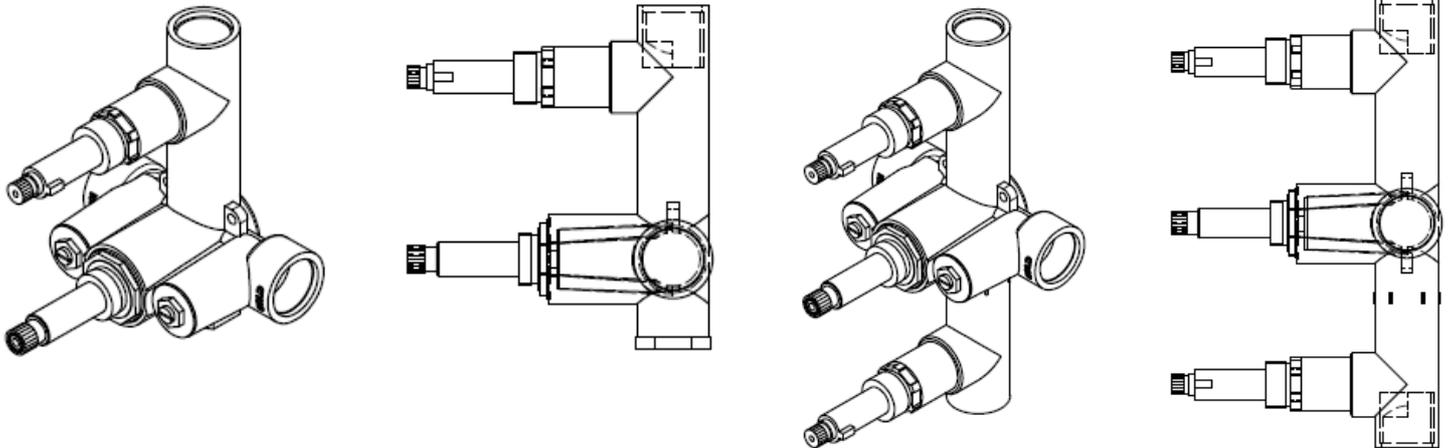


# **TWIN & TRIPLE CONCEALED VALVE INSTRUCTION**



## **PRESSURE BALANCING**

Your thermostatic control mixer valve is designed to work best when the feed for both the hot and cold water are balanced. Differences between the pressures of each feed can cause the flow of water to pulse, in this event, pressure reducing valves should be used to balance the pressures (NOT SUPPLIED).

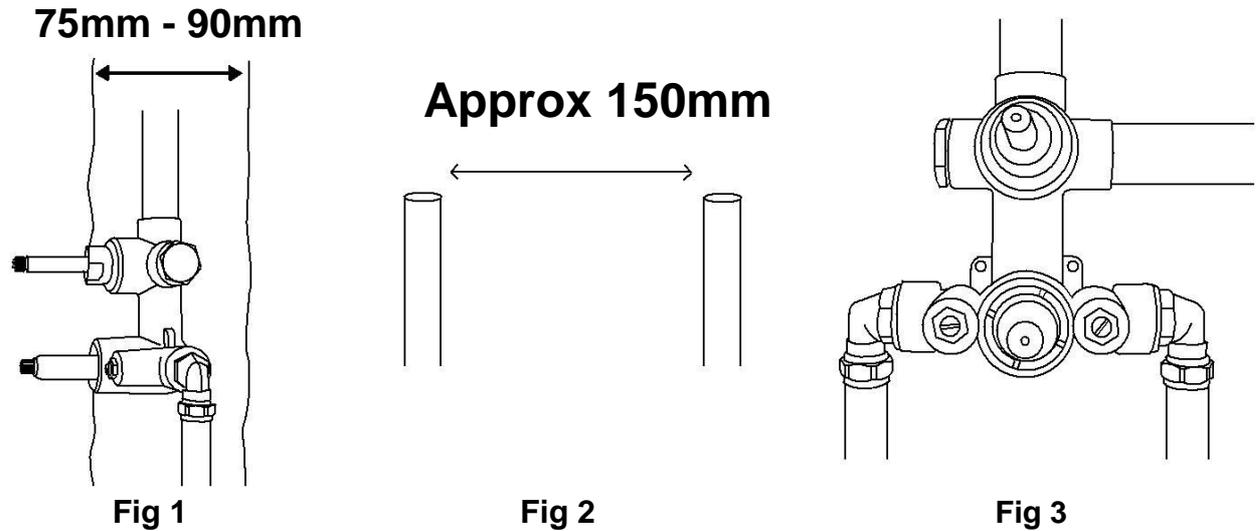
## **FITTING OF THE CONCEALED MIXER VALVE**

1. Create a rectangular cavity in the wall where the valve is to be installed, 200mm x 160mm for twins and 250mm x 160mm for triples and between 75mm and 90mm deep. (Fig 1)
2. The supply pipe work can be plumbed either from above or below but must finish at the suitable connections which will be approximately 150mm centres (Fig 2). Allowance should be made for some adjustment when fitting the valve.
3. Fit a male 3/4 BSP elbow to 15mm/22mm compression fitting to suite the pipe work (not supplied) to both hot and cold inlets, apply PTFE tape to seal the threads.

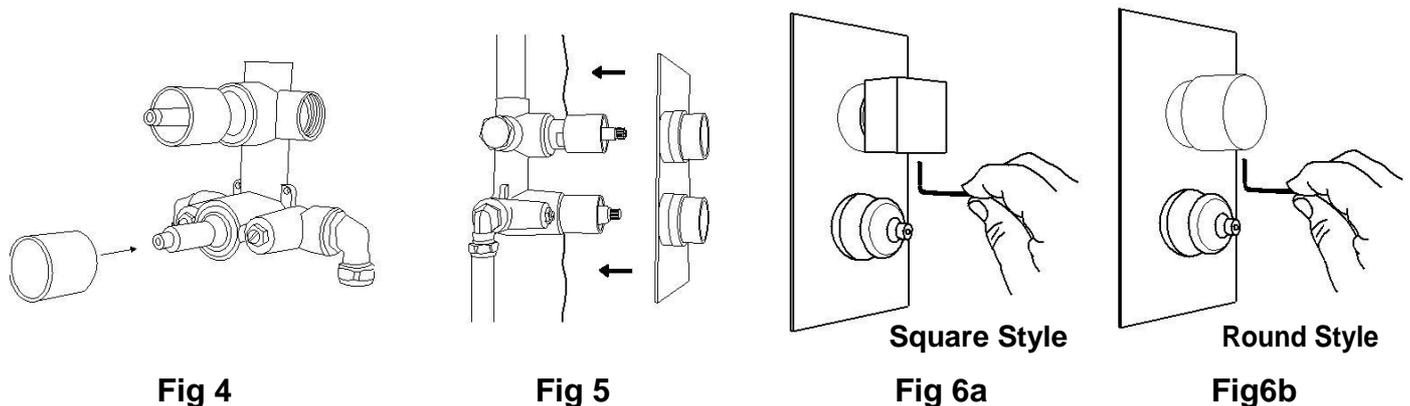
**NB It is recommended to apply PTFE tape to all threaded connections (Boss white or other sealing compounds are not suitable)**

4. It may be useful to fit all other pipe work and connections at this time, prior to tiling.
5. The valve should be attached firmly between 75mm & 90mm below the finished wall surface to allow the cover plate to fit correctly. Using the two fixing holes on the sides of the valve, position the valve centrally between the feed pipes and mark the screw hole positions, drill & plug the wall and fix accordingly.

**NB: Make sure the mixer valve inlets and outlets are covered to prevent rubbish etc getting into the openings while tiling, and fitting the pipe work. Tiling behind the trim plate must leave sufficient access to service the valve.**

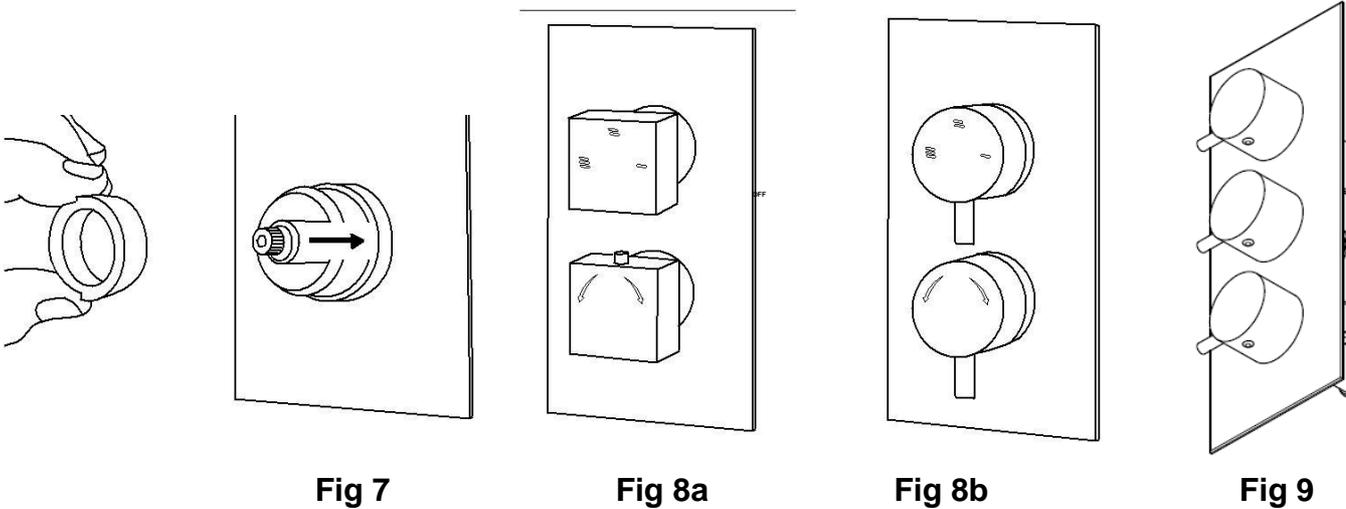


6. Position the mixer valve onto the hot and cold water feed pipes and tighten the compression nuts (See Fig 3). Hold mixer valve in place and secure to the wall with screws.  
Make sure the mixer valve hot feed is connected to the inlet marked hot and the cold inlet marked cold (clearly marked). The valve will not work correctly if connected the wrong way.
7. Screw the two chrome cover sleeves onto the control shafts (See Fig 4).
8. Pipes must be fitted from the 3/4 BSP female outlets of the mixer valve to the location at which you wish to position the wall outlet, overhead arm or other fittings, using the correct connections (not supplied)
9. Once the mixer valve and wall outlets are fitted, and prior to fitting the cover plate, ensure all connections are watertight. This can be done by re-connecting the water supplies and checking all connections. To do this you must fit the diverter handle in the correct position so that 'off' is at the bottom. After pressurising the system and checking no leaks are present turn the handle to all other positions, checking each time there is no leak. Return the handle to its original position and remove.
10. The cover plate is fitted by pushing it onto the mixer until it is flush with the tiles (Fig 5).



**NB: Before assembling the valve controls identify all the parts and check that both the red markings on the control shaft of the thermostatic control are inline.**

11. Fit the on/off control knob onto the diverter (the top shaft with the 'off' at the bottom), push fully onto the shaft. Hold firmly in position and tighten the grub screw with Allen key supplied (Fig 6a/b).
12. Fit the stop ring into the lower shaft assembly with the notch at the bottom (See Fig 7).



13. Fit the temperature control knob onto the lower shaft with the override button at the top. Hold the control knob firmly in position and tighten the grub screw with Allen key supplied.

**N.B: Test water temperature by turning the flow control knob clockwise. Allow the water to stabilise, this should be at approximately 38 °C. Use a thermometer to accurately measure this temperature. If the temperature is not 38 °C you need to adjust the stop ring so it is in the correct position, temperature can be altered by moving the stop ring clockwise/anticlockwise.**

14. Fit chrome caps to the grub screw hole for square style and fit control levers to circular style to complete valve installation (See Fig 8a/b).
15. For triple valves the temperature control is in the centre, with the on/off controls top and bottom (Fig9)

Fault	Possible cause
Shower only runs hot or cold after installation	<ol style="list-style-type: none"> <li>1. Hot and cold supplies have been plumbed the wrong way around.</li> <li>2. Faulty thermostat.</li> </ol>
Shower does not run hot enough	<ol style="list-style-type: none"> <li>1. Check hot water supply temperature.</li> <li>2. Maximum temperature needs adjusting, see temperature adjustment.</li> <li>3. Blockage in the hot supply.</li> </ol>
Hot water in cold supply or vice versa	Check and clean non-return valves.
Low or no flow	<ol style="list-style-type: none"> <li>1. Possible blockage in the system.</li> <li>2. Operating conditions are incorrect.</li> <li>3. Valve shut off as been activated due to a pressure drop in either the cold or hot supplies.</li> </ol>
Leaking when in the off position	<ol style="list-style-type: none"> <li>1. Debris in the CD valve.</li> <li>2. Faulty CD valve.</li> </ol>
Fluctuating flow	<ol style="list-style-type: none"> <li>1. Dynamic inlet pressures are not balanced.</li> <li>2. Faulty thermostatic cartridge</li> </ol>