



Rigid Riser Thermostatic Mixer  
Shower Installation &  
Maintenance Guide

# BEFORE YOU START

## GUIDANCE

This installation guide offers instruction to ensure correct installation and maintenance of thermostatic shower valve. Failure to comply with this installation will result in the loss of warranty.

## SPECIFICATION CHECK

In all cases before installation it is imperative to ensure that the system is within the stated specification limits.

### Suitable for installation on the following:

Solid wall, GRP panels, Stud partition or dry lined wall

SPECIFICATION	
Maximum Static Pressure	10 Bar
Working Pressure	0.5 - 5 Bar
Hot Supply Temperature	55 - 65 °C
Cold Supply Temperature	≤ 25 °C
Pressure Balance Hot & Cold	within 0.2 Bar
Connection Size	¾ BSP
Standard	EN 1111 HP-S
Destination	HP-S
Approval	WRAS

Valves operating outside of these conditions of use cannot be guaranteed to operate as type 2 valves. If the supply is fed by gravity, then the supply pressure should be verified to ensure conditions of use are appropriate for the valve.

The valve must be installed in accordance with current regulations, and Water Supply (Water Fittings) regulations 1999. Failure to do so cannot be guaranteed to operate as a type 2 valve.

## MAX OUTLET TEMPERATURES

Showers 41 °C

Wash Basins 41 °C

### It is not a safe bathing temperature for adults or children.

The British Burns Association recommends 37 to 37.5°C as a comfortable bathing temperature for children. In premises covered by the Care Standards Act 2000, the maximum mixed water outlet temperature is 43°C.

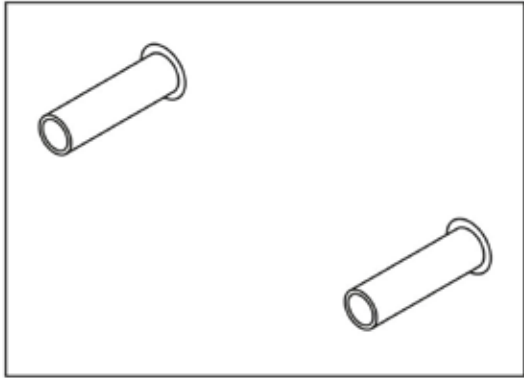
The thermostatic mixing valve will be installed in such a position that maintenance of the TMV and its valves and the commissioning and testing of the TMV can be undertaken.

### Safe Isolation

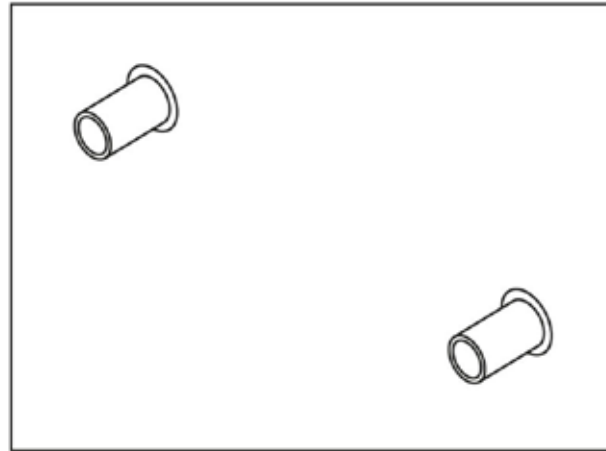
The fitting of isolation valves is required as close as is practicable to the water supply inlets of the thermostatic mixing valve. Access to the isolation is required.

### Back Flow

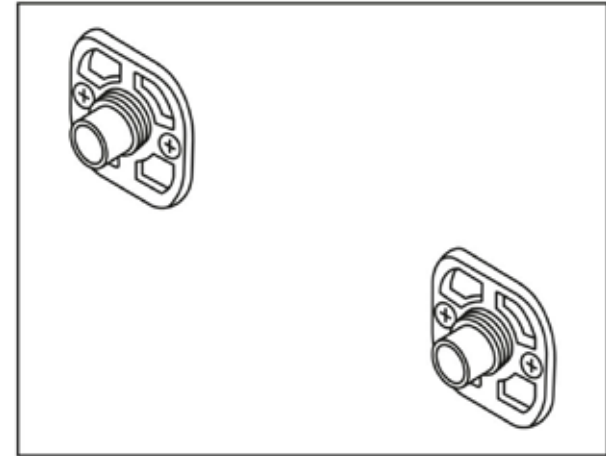
Valve is supplied with non-return valves. However, it is recommended to use the retaining rings where possible.



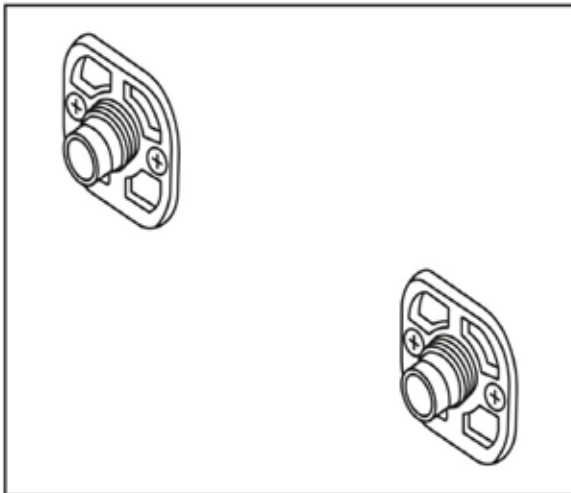
Ensure that your pipe centers are correct for your bar valve (usually 150mm) and ensure that your tiles/ wall coverings are fully sealed and cured.



Cut the pipes down leaving protruding from the face of the wall. Do not leave any sharp edges or burrs on the pipes.

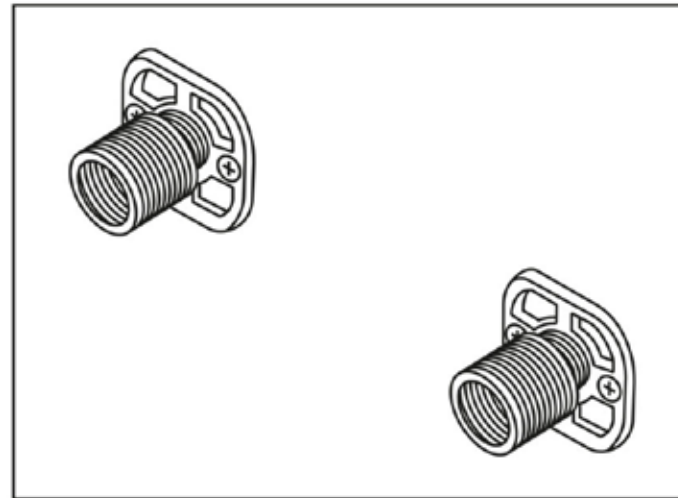


Place the backing plate over the pipe. Drill and screw the backing plate to the wall using a suitable method for your wall. Check for pipes and cables before drilling.

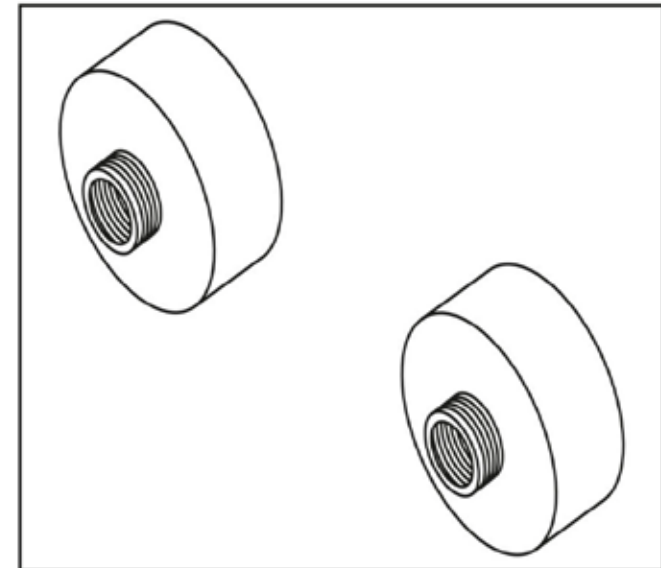


Place the olives onto the pipes, ensuring the olives are straight, as they will bend when the main body is tightened to the backplate if improperly placed.

Screw the main body onto the backing plate, using an adjustable spanner to tighten. This will compress the olive and create a seal. You can now water test.



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Screw your shrouds onto the main body, back to the wall. (Shroud not included)

## Tools and Materials Needed:

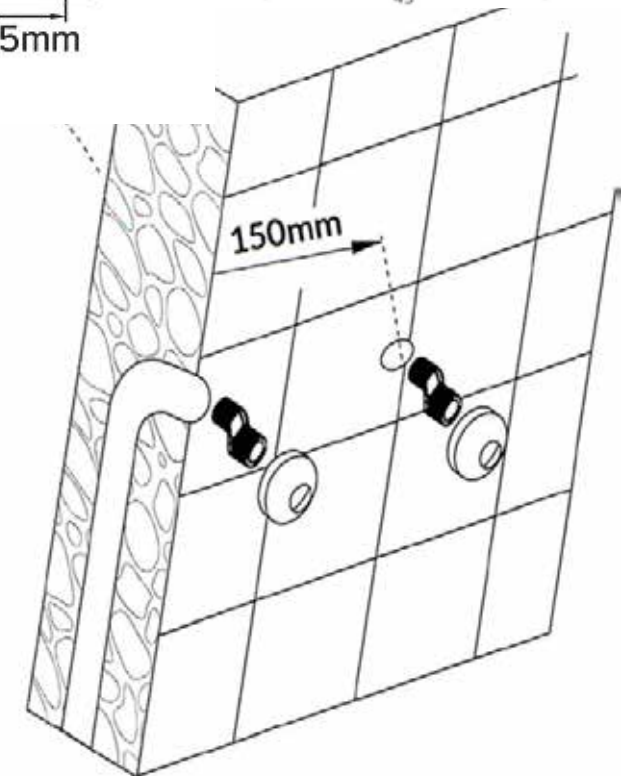
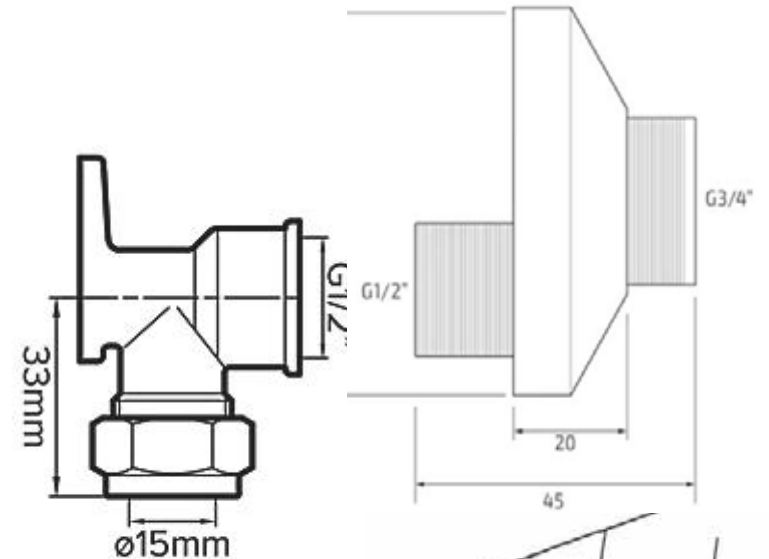
- Eccentric crank shower fitting
- Back plate elbows (already installed 150mm apart in the wall)
- Adjustable wrench or spanner
- Pipe thread sealant tape (PTFE tape)
- Screwdriver (if needed)
- Level (optional, for ensuring evenness)

## Step 1

Install back plate elbows ensure they are set 150mm centres, the correct height. Ensure the depth is suitable to allow the eccentric crank to be installed leaving suitable thread to install both the cover and shower valve.

## Step 2

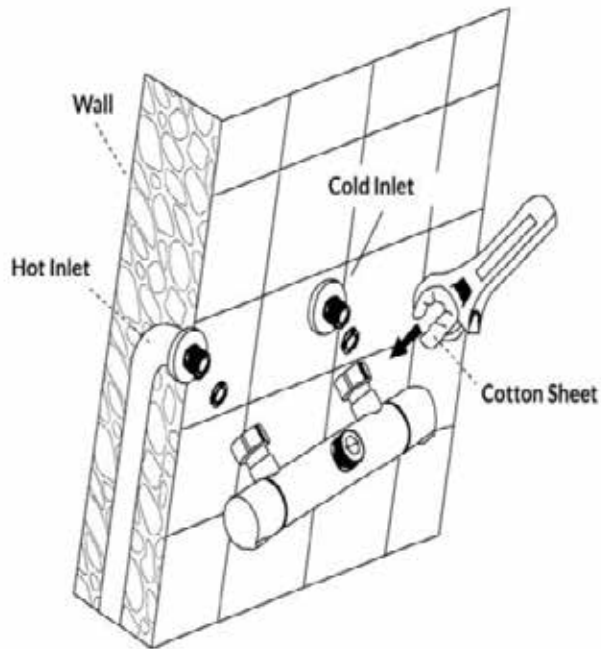
Apply PTFE to eccentric crank G1/2 tighten in to back plate elbow ensure the crank is aligned at 150mm centres.



# Installation Instructions

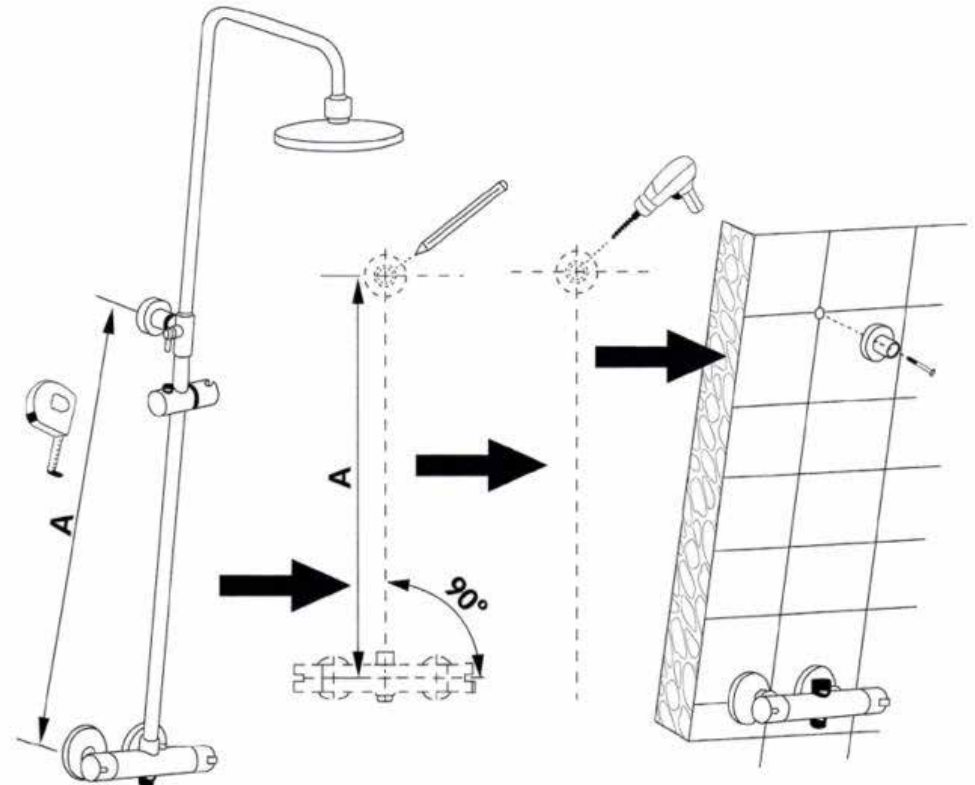
## Step 3

Fix the connector of shower valve to the off-set connector with spanner. Please use a cotton sheet inside of spanner in case of any scratches. Make sure hot inlet on the left and cold inlet on the right, otherwise it will affect the performance



## Step 4

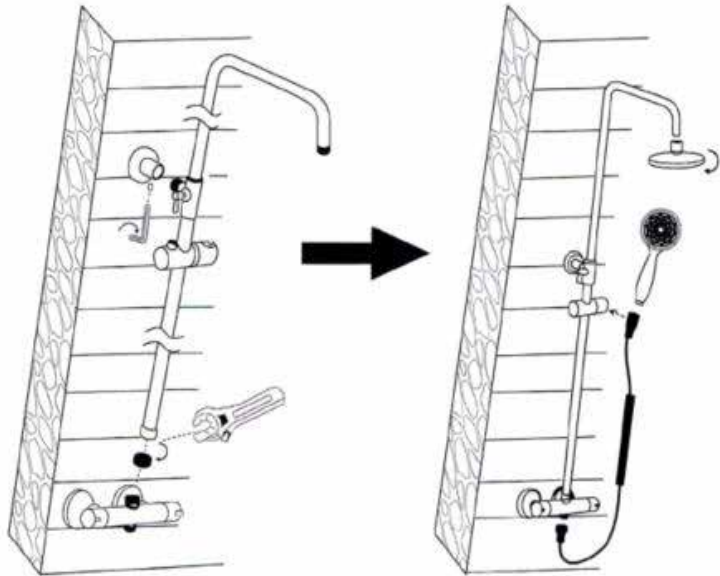
Measure the installation height of the shower kit with tape. Mark two holes in required positions with pen. Drill holes properly with electric drill and place the wall plugs into the holes. Fit the connector to the fixing plate and cover.



## Step 5

Align the shower valve, connector, and tighten the nuts using an adjustable spanner. Fit the screw to the fixing plate with an Allen key, then secure the rail to the wall. Finally, connect the head shower to the flexible hose, the flexible hose to the mixed water outlet, and the showerhead to the top of the sliding rail.

FIG. 3

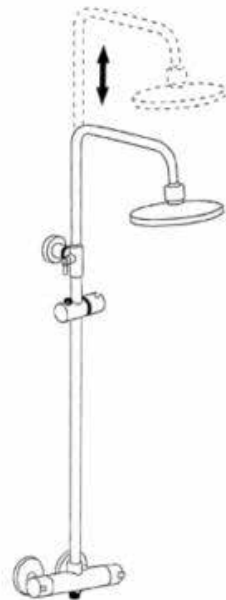


**Step 6**

Adjust the height of sliding rail suitably.

**Step 7**

Turn on the water supplies and check for correct operation.



# TMV2 TYPE 2 COMMISSIONING PROCESS

Once installation is completed to manufacturer's instructions. Follow the following commissioning steps to complete the installation.

## Tools Required:

- Thermometer (digital recommended)
- Measuring Jug
- Stopwatch

## Pre Checks:

- Run a non-thermostatic hot tap basin or bath until hot.
- Collect water in a jug and test temperature. All hot water systems must be 55 °C minimum to kill bacteria.

## Cold Water Isolation Test

The cold water isolation test ensures that in the result of the loss of cold water to the product scalding is prevented.

1. Adjust the temperature to 38°C ± 1°C. Allow product to run until temperature stabilises.
2. Collect a sample from the shower head 250 - 500ml in a measuring jug
3. Test the temperature using thermometer result 38°C ± 1°C
4. Isolate the cold water
5. Collect the water from from the outlet for 5 seconds. Must not exceed 200ml.
6. Continue to collect the water from the outlet for a further 30 seconds. Must not exceed a further 300ml.
7. The mixed water temperature at terminal fitting should never exceed 46°C.
8. Re-open (restore) the cold water supply and after 30 seconds measure the mixed water temperature. The water shall not differ by more than 2°C from the initial set mixed water temperature.

**Note: If there is a residual flow during the commissioning or the annual verification (cold water supply isolation test), then this is acceptable providing the temperature of the water seeping from the valve is no more than 2°C above the designated maximum mixed water outlet temperature setting of the valve.**

**Temperature readings should be taken at the normal flow rate after allowing for the system to stabilise. The sensing part of the thermometer probe must be fully submerged in the water that is to be tested. Any TMV that has been adjusted or serviced must be re-commissioned and re-tested in accordance with the manufacturers' instructions.**

## Testing Calibration

1. Set the shower to the coldest setting allow to run for 2 minutes to ensure air removal from the system.
2. Switch to the hottest setting and allow to run for 2 minutes to remove air in the hot system.
3. Set temperature at 38°C, allow the shower thermostat time to calibrate.
4. Collect a sample from the shower head 250 -500ml in a measuring jug
5. Test the temperature using thermometer, result should be 38°C ± 1°C

## Recalibrating Thermostat

In the result of incorrect calibration of thermostat, rule out any underlying issues with plumbing system and complete maintenance. Then follow the below steps to correct the issue:

1. Set temperature at 38°C, allow the shower thermostat time to calibrate.
2. Collect a sample from the shower head 250-500ml in a measuring jug
3. Test the temperature using thermometer, make a note of findings
4. Remove control handle and safety control ring (make a note of ring position).
5. Replace control handle turn either towards hot or cold depending on results step 3.
6. Retest the temperature regularly until the desired 38°C ± 1°C is reached.
7. Remove control handle, refit the safety control ring.
8. Reconnect the control handle.
9. Perform one final test to ensure calibration has not changed during refitting.
10. The mixed water temperature at terminal fitting should never exceed 46°C.

**Note: It is a requirement to perform the above cold water isolation/ calibration tests once a year to ensure continued performance**