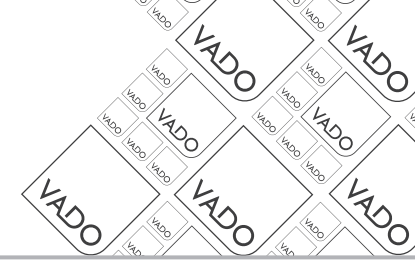




where inspiration flows

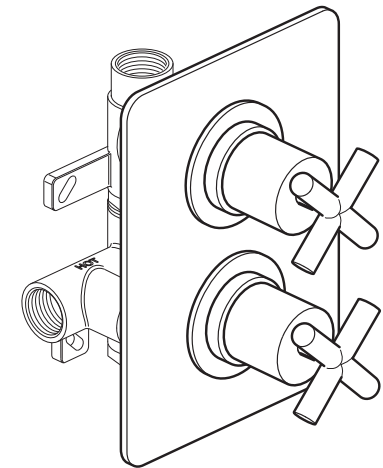
ELEMENTS



1 Outlet, 2 Handle Concealed Thermostatic Valve
Installation Guide

This instruction booklet covers models:
ELE-148D/SQ-CP

ELE-148D/SQ-CP



Vado
Wedmore Road, Cheddar, Somerset, England BS27 3EB
tel 01934 744466. fax 01934 744345
aftersales@vado.com
www.vado.com



Important - please read

Please read these instructions carefully before starting installation and keep for future reference.

Remove all packaging and check the product for missing parts or damage before starting installation.

Any alterations made to this product and fittings may infringe water regulations and will invalidate the guarantee.

The installation must comply with all Local/National Water Supply Authority Regulations/Byelaws and Building and Plumbing Regulations.
To be installed in accordance with BS EN806.

We strongly recommend that you use a qualified and registered plumber.

General installation

This fitting is a mixing device and therefore operating pressures (hot and cold supply) should be kept as balanced as possible in order to assure optimum efficiency.

When installed, the fitting must comply with the requirements of the Water Supply (Water Fittings) Regulations 1999 and Scottish Byelaws 2004.

For further information, contact the Water Regulations department of your local water supplier (see the WRAS website www.wras.co.uk for details) or the Water Regulations Advisory Scheme by email (info@wras.co.uk) or telephone: 01495848454.

Before making any inlet pipe connections, all supply pipes MUST be thoroughly flushed to remove debris. Failure to do so could result in damage or low flow from the mixer unit.

The fitting of strainers is recommended as close as practicable to the water supply inlets of the thermostatic mixing valve.

If the concealed valve is connected to pipework that is fixed by soldering, it is essential the concealed valve is protected to prevent the check valves, thermostatic cartridge and headworks being exposed to elevated temperatures which can cause internal damage.

Please note: if installing in an enclosed environment, access should be left for servicing and maintenance. No costs relating to inadequate access can be accepted.

Operating Specifications

Operating Pressure

Minimum operating pressure for shower **0.2 bar**

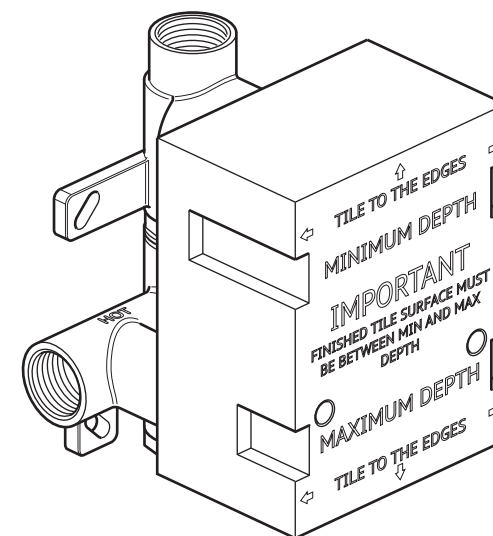
Minimum operating pressure for bath **1 bar**

Maximum operating pressure **5 bar**

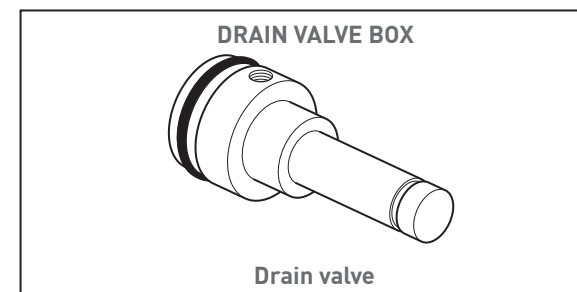
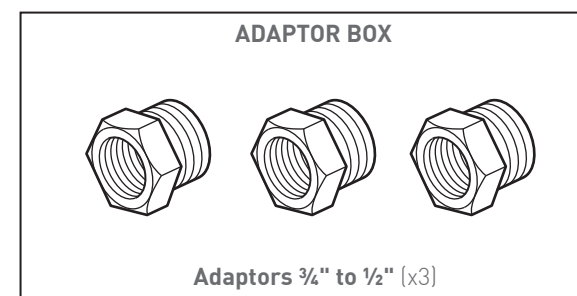
Contents of Packaging



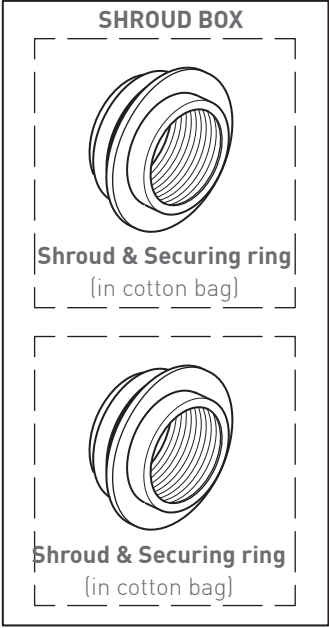
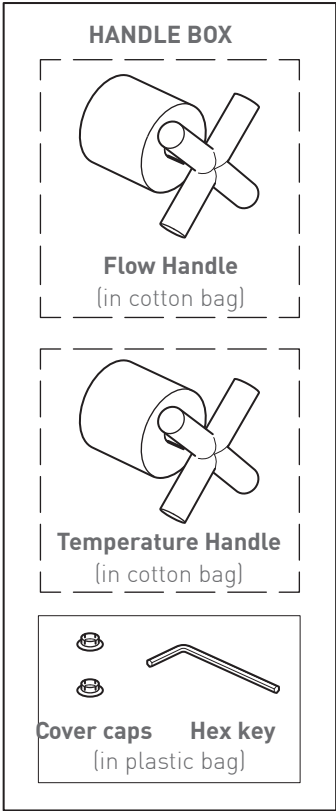
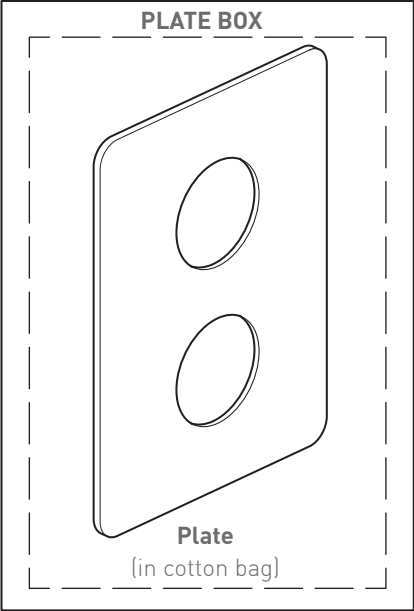
Installation guide & user guide



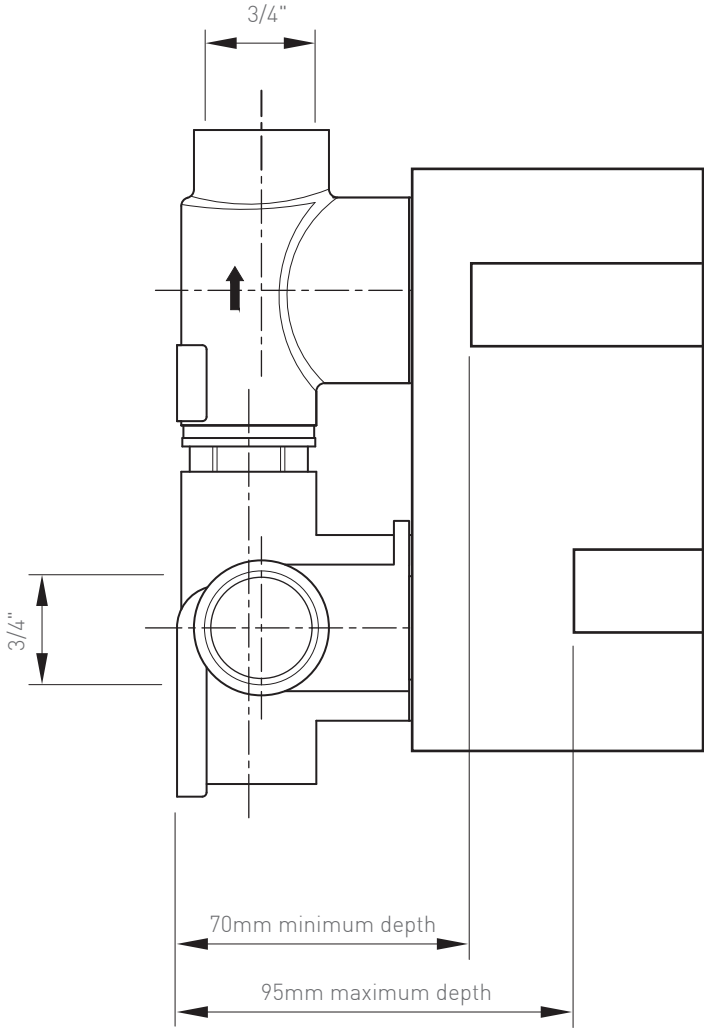
Valve body
(with mortar guard)



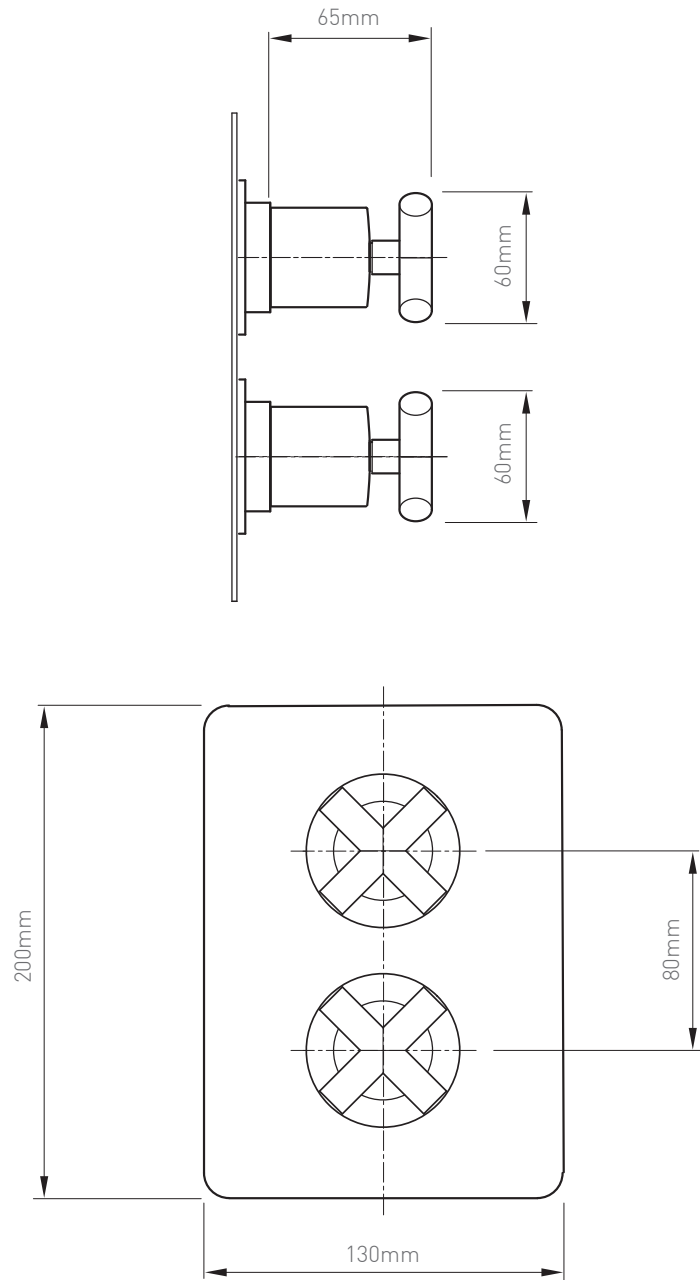
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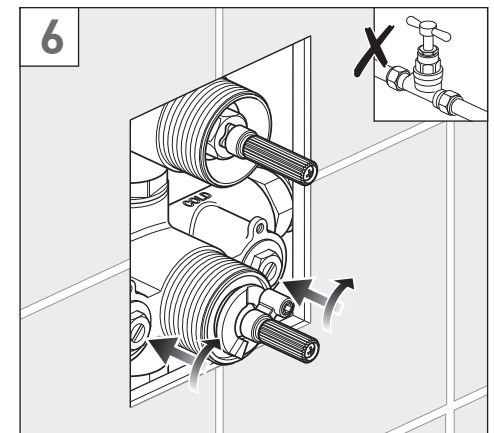
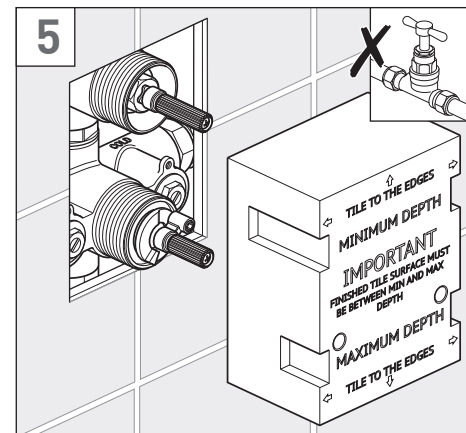
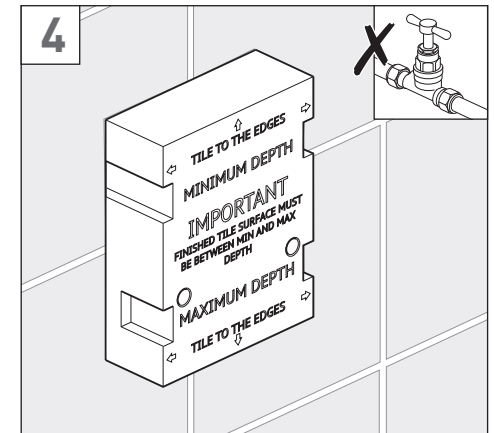
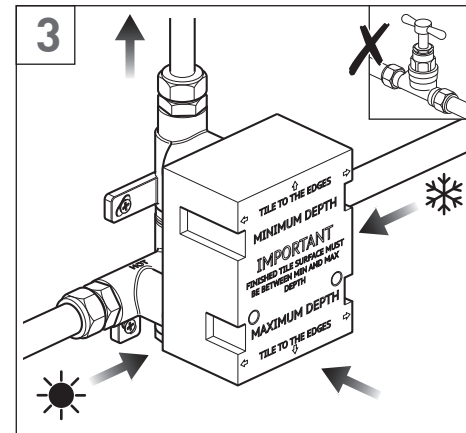
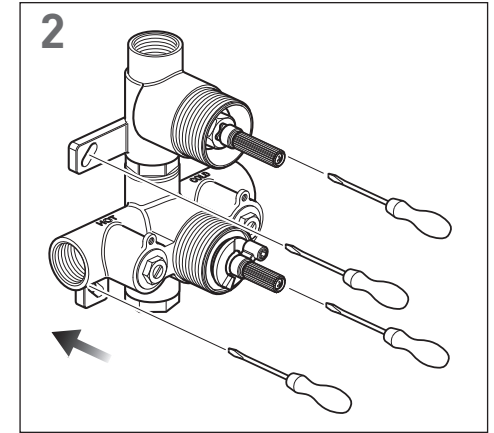
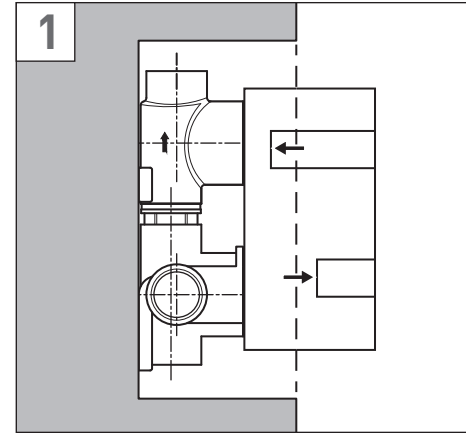
Valve dimensions



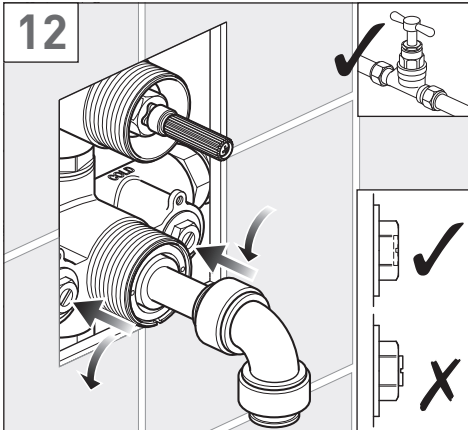
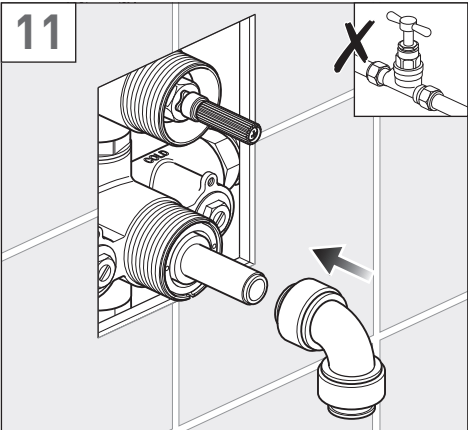
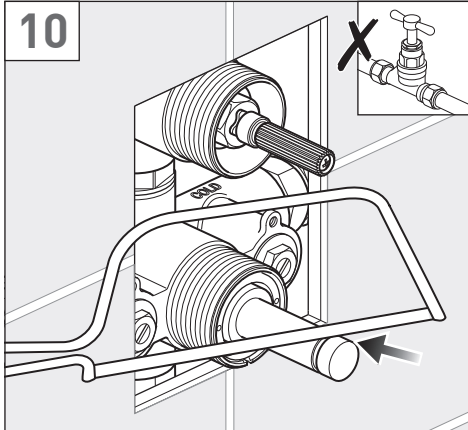
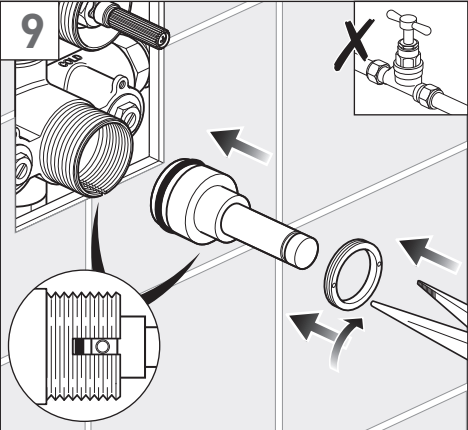
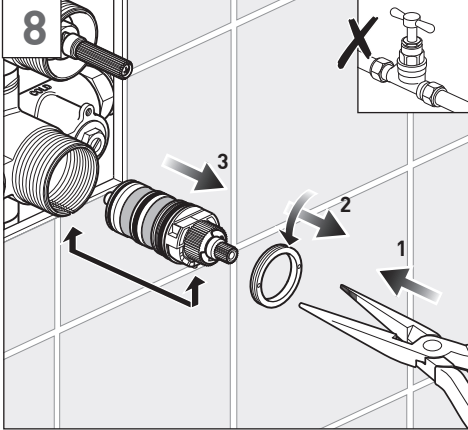
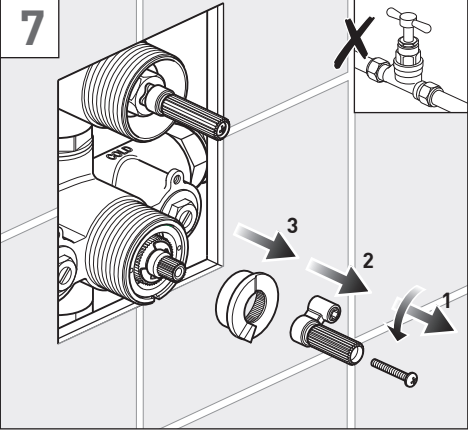
Trim dimensions



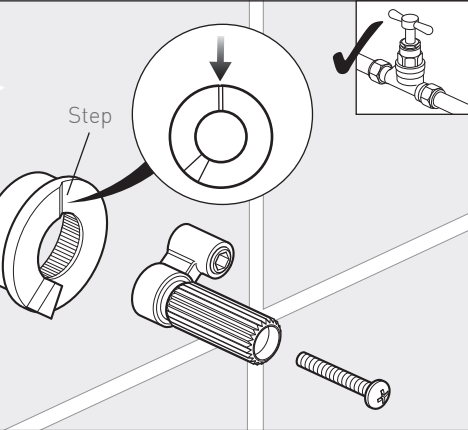
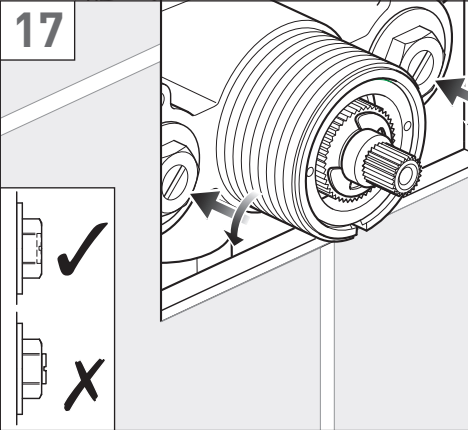
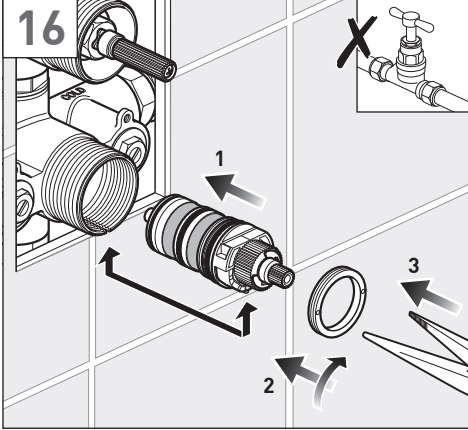
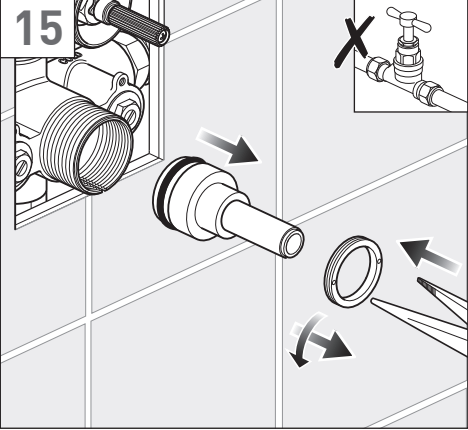
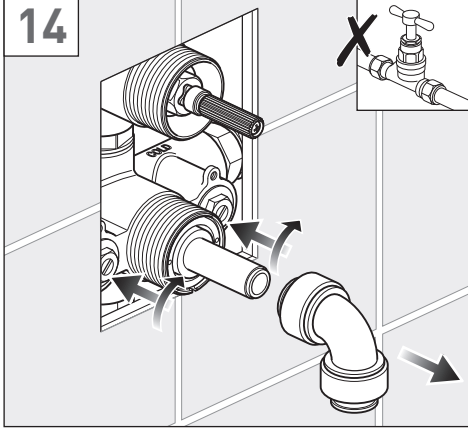
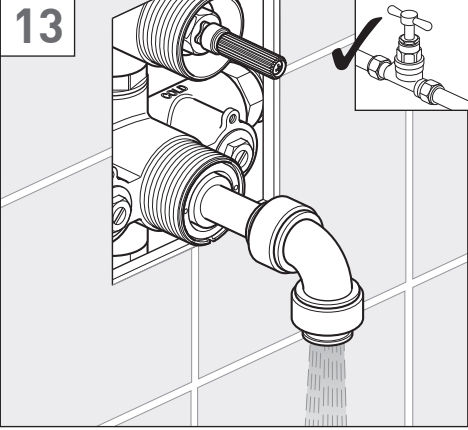
Installation - Quick guide



Installation - Quick guide



Installation - Quick guide

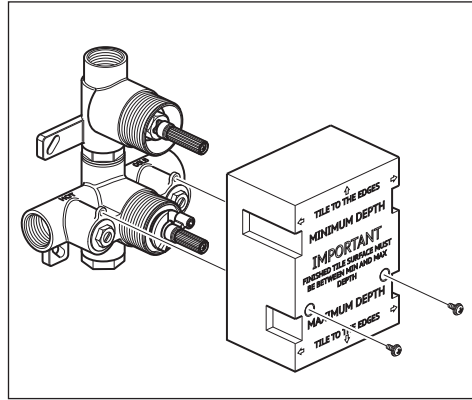
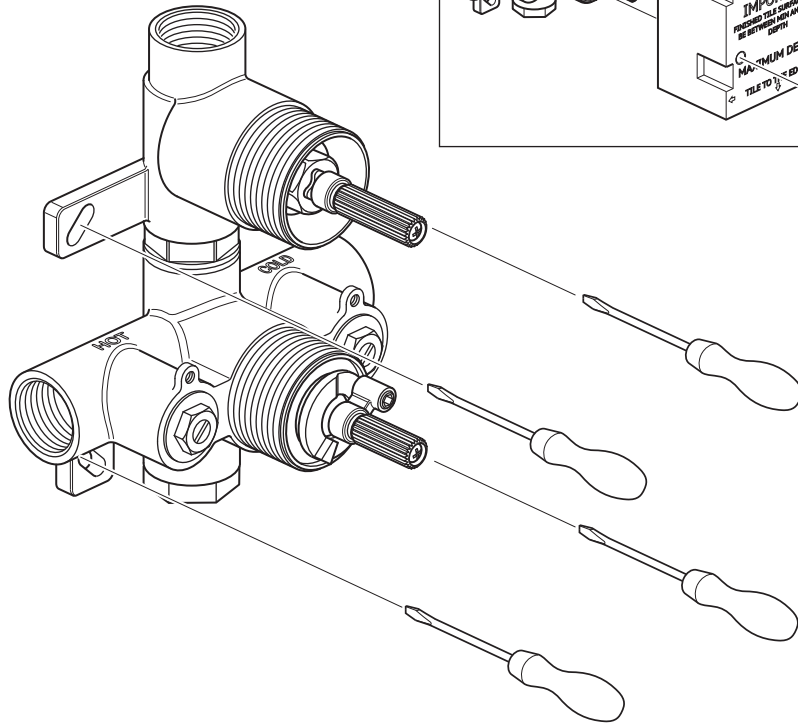


Installation

Mortar guard

During installation protect the parts by leaving the mortar guard on the valve to avoid damage to internal parts.

Remove the mortar guard by releasing the two screws and pulling off.



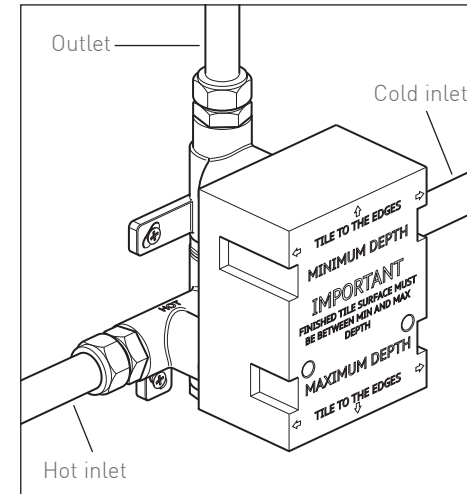
Warning! Please check for any hidden cables and pipes before drilling holes in the wall.

The back of the valve must be set into the wall between (70mm minimum - 95mm maximum) from the face of the finished wall.

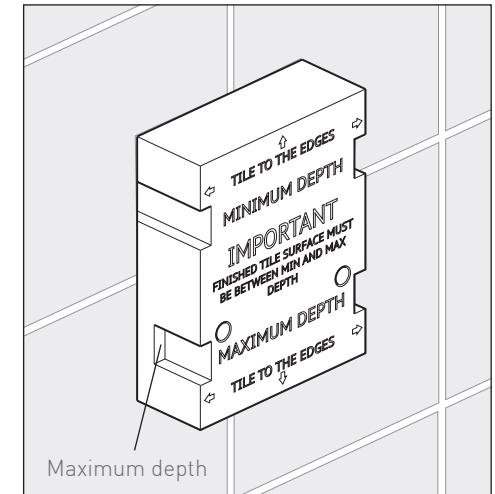
Select the position for the shower valve and offer the shower valve to the wall, make sure the valve is vertical with a level and fixed to a flat surface, mark the 4 fixing points. Secure using suitable fixings.

Replace the mortar guard and secure in position with the two screws.

Installation

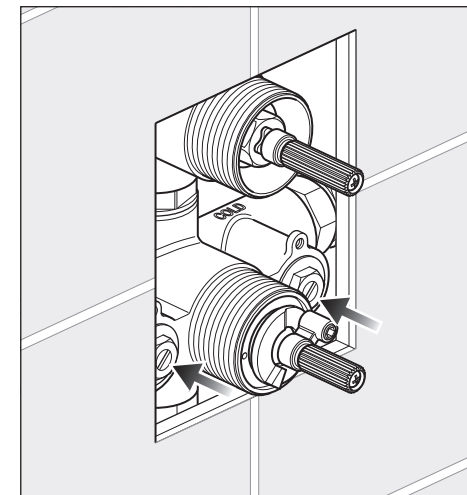


Use the supplied adapters if required. Connect hot supply to the lower left inlet of the valve and cold supply to the lower right inlet. Connect the top outlet to the desired channel.

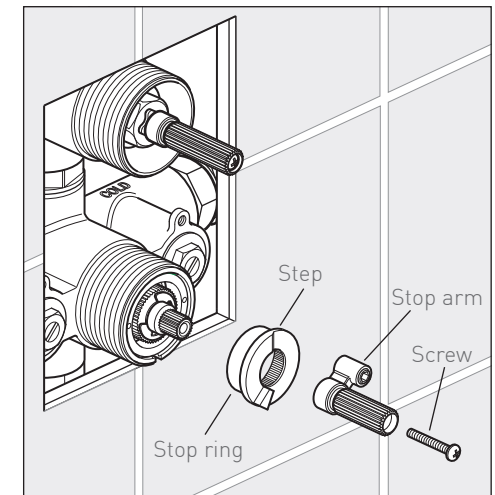


Finish the wall by tiling up to the mortar guard, keep the final finished wall surface between the min and max marks.

Unscrew the 2 mortar guard screws and remove from the wall.



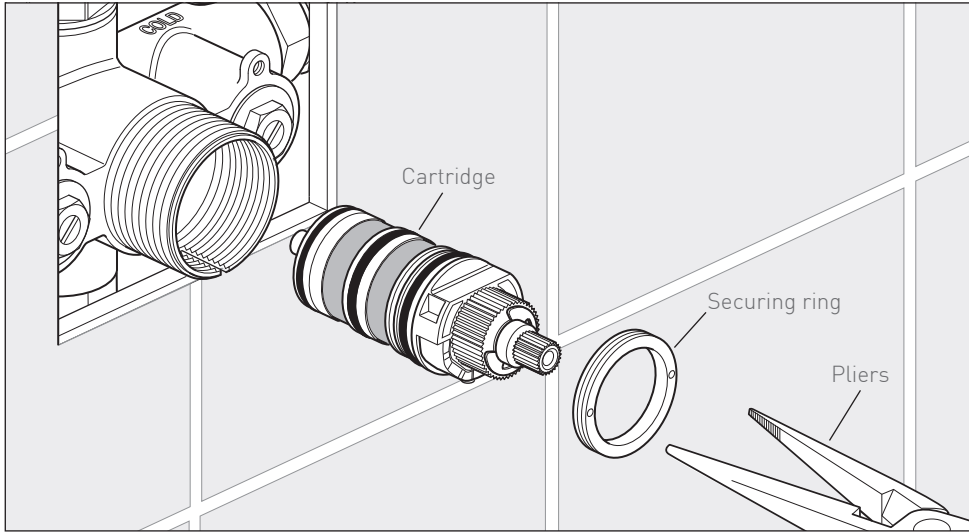
Turn off both non return valves by turning clockwise, do not overtighten.



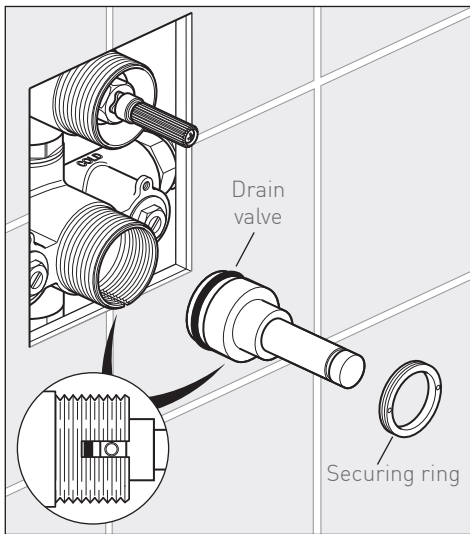
Remove the screw from the temperature stop arm and pull off.

Pull off the stop ring (note the position of the step).

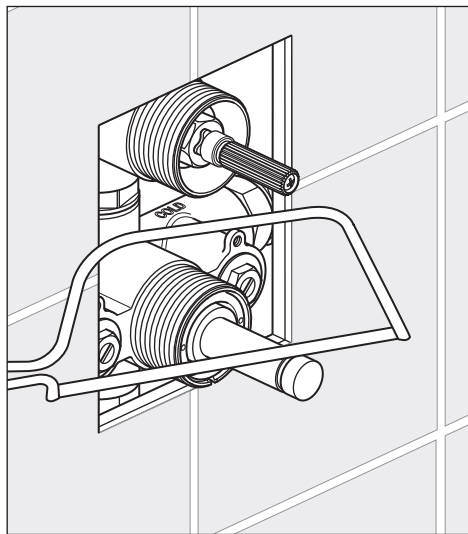
Installation



Important: ensure the hot and cold water supplies have been isolated. Using a pair of long-nosed pliers unscrew the securing ring and remove. Pull the cartridge out from the body

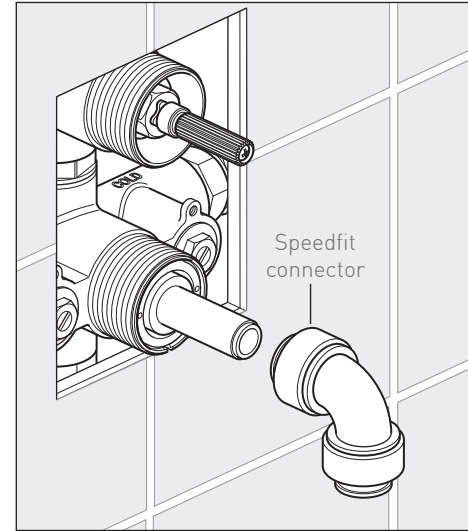


Push drain valve into the body, replace the securing ring and tighten.

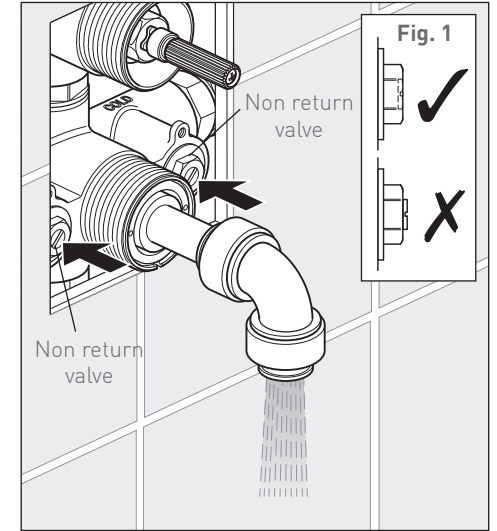


Using a suitable tool, cut the end off the drain through the easy cut section.

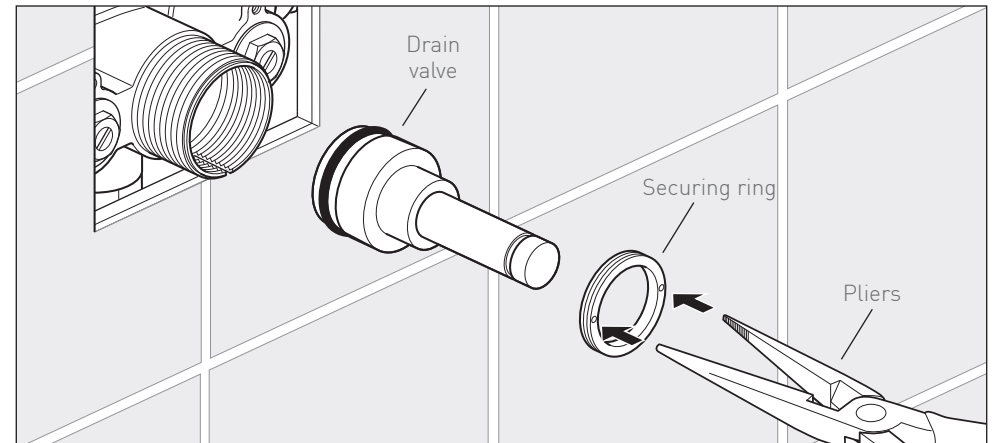
Installation



We recommend to push a speedfit connector (not supplied) over the drain, and place a bucket underneath. If a speedfit connector is not being used, carefully hold a bucket underneath the drain valve.

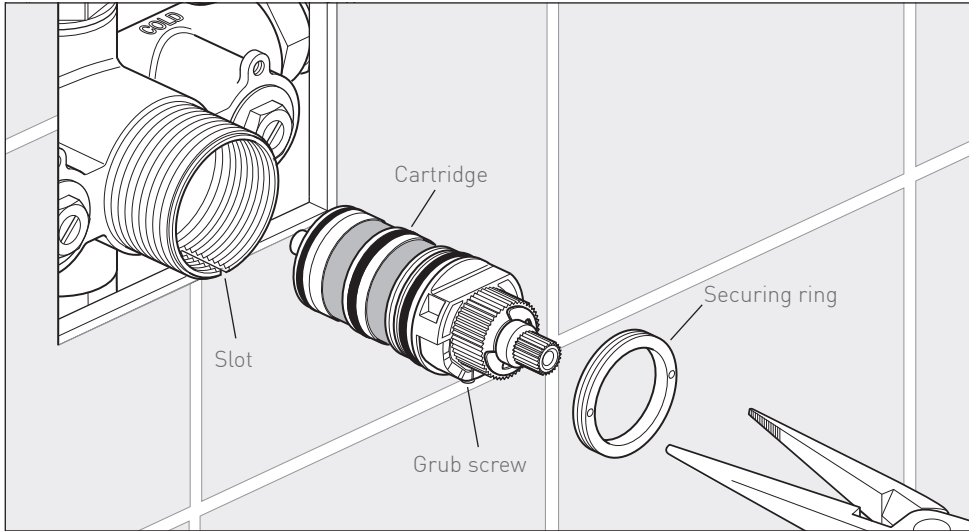


Turn on at the mains, open both non return valves and allow the debris and water to drain. When loosening the non return valve do not unscrew further than the face of the nut (**see Fig. 1**). After approximately two minutes of flushing the pipe work and product close both non return valves. Do not overtighten.



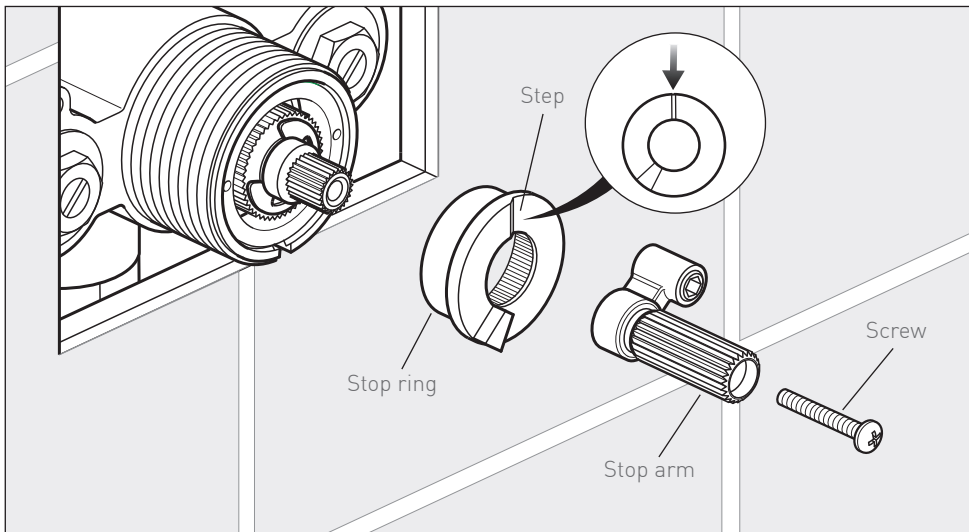
Remove the speedfit connector. Using a pair of long-nosed pliers unscrew the securing ring and remove. Pull the drain valve out from the body

Installation



Push the cartridge into the body, align the grub screw with the slot and continue to push the cartridge all the way in.

Fit the securing ring and tighten using a pair of long-nosed pliers



Push the stop ring onto the splines of the cartridge, making sure that the step on the stop ring is at 12 o'clock.

Slide the stop arm on and secure in position with the screw.

Commissioning

Note: mix water temperature at terminal fitting should never exceed 46° C.

The valve has been factory set under balance pressures and hot water supply at 65°C. When your specific operating conditions are significantly different from the above, the temperature of the water may vary from the setting.

When the difference is too great, you can adjust the calibration of the valve to suit individual requirements of the installation:

1. Check the temperature of the water being delivered from the outlet with a thermometer, when the stop arm is located at 12 o'clock.

Note: temperature readings should be taken at normal flow rate after allowing for the system to stabilise.

2. If the temperature is not 38°C proceed to reset the calibration as follows:

Remove the stop arm (**see Fig. 1**).

Ensure the step on the stop ring is located at 12 o'clock (**see Fig. 2**)

Do not remove the plastic stop ring. Turn the spline of the thermostatic valve clockwise to decrease the temperature and anti-clockwise to increase the temperature until 38°C is achieved at outlet.

Note: the sensing part of the thermometer probe must be fully submerged in the water that is to be tested.

Replace the stop arm making sure that the arm is against the step (**see Fig. 3**)

When the handle is attached (see page 17) ensure the temperature does not exceed 46°C when turned entirely anti-clockwise.

Your valve setting is now commissioned.

Fig. 1

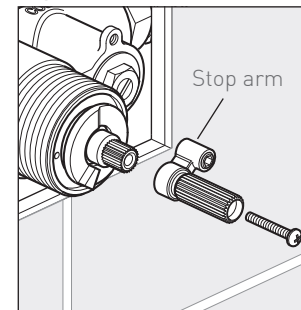


Fig. 2

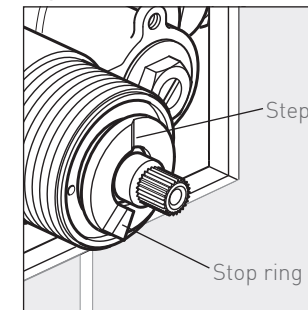
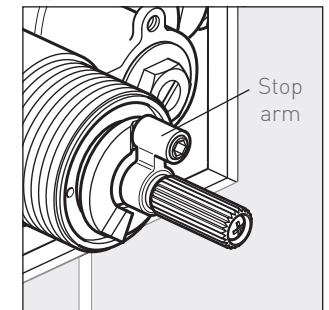
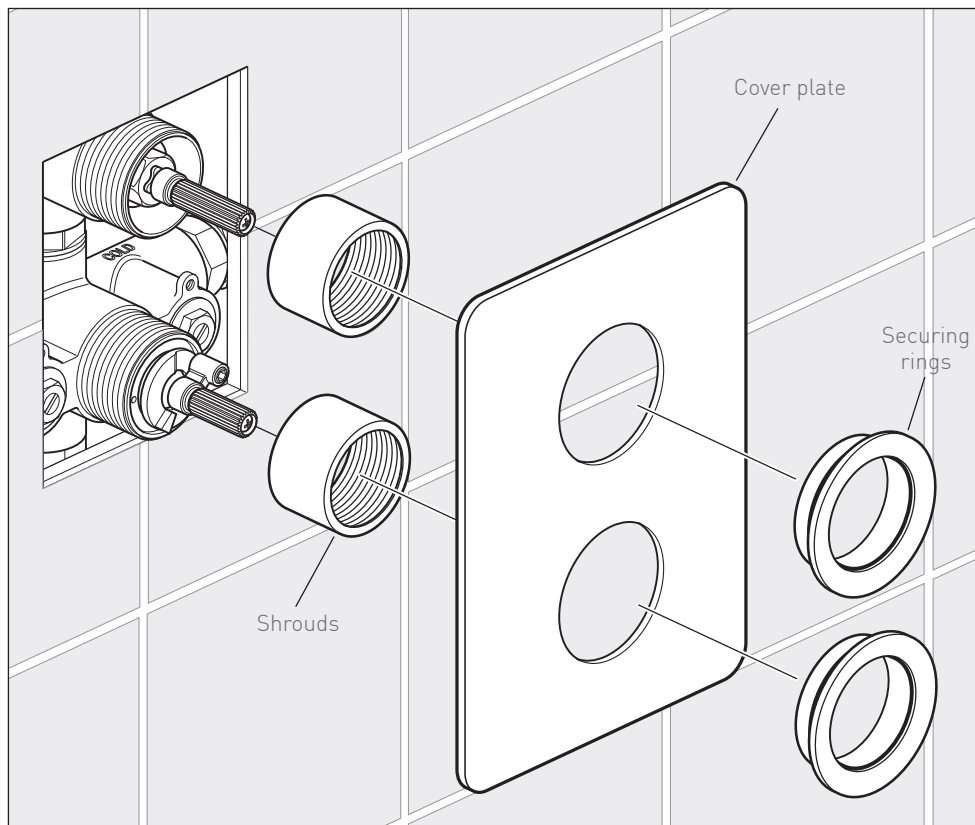


Fig. 3



Trim installation



Screw shrouds on ensuring they sit proud of the finished wall. The shrouds can be turned/adjusted to achieve this.

Carefully place the cover plate over the shrouds, once the plate is flush with the wall, secure with securing rings.

If the valve is sited within in a wet environment, it is recommended that the plate is sealed with a thin bead of sealant around three sides to provide a water-tight seal between the plate and the wall material, leaving the bottom edge free to allow for maintenance purposes.

Handle installation

Flow control handle (top).

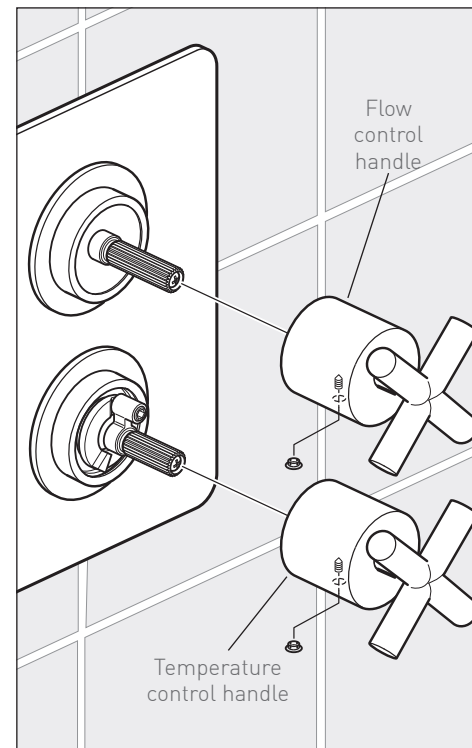
Carefully slide the flow control handle onto the splines of the top valve. Secure the handle with the grub screw on the underside using the supplied hex key.

Push on the screw cover cap.

Temperature control handle (bottom).

Carefully slide the temperature control handle onto the splines of the bottom valve. Be careful not to turn the spline of the valve. Secure the handle with the grub screw on the underside using the supplied hex key.

Push on the screw cover cap.



Maintenance

We advise that the below is carried out annually as failure to do so may result in invalidation of warranty.

Shut off the water supply to both hot and cold inlets, before commencing any maintenance work below.

See isolation procedure on page 19.

Thermostatic cartridge

This thermostatic valve is fitted with a single filtering facility. Filters are fitted on the thermostatic cartridge.

Depending on the water quality, filters may become dirty, causing reduced flow and inefficient working of the valve.

To clean the filters, you must first remove the cartridge from the housing.

Removing the Cartridge

1. Shut off the water supply to both inlets at the isolating valves.

Ensure the thermostatic valve has been successfully isolated.

See page 19 for correct procedure.

2. Remove the temperature control handle. Remove the screw from the temperature stop arm and pull off. Pull off the stop ring.

Pull off the plate securing ring and unscrew the shroud.

Using a pair of long-nosed pliers unscrew the securing ring and remove.

For more information see the installation section.

3. Pull out the thermostatic cartridge.

4. Clean filters by rinsing them under running water to remove any debris.

5. If there is limescale deposits then it is recommended to immerse the cartridge for a few minutes in 50% white vinegar + 50% hot water, brush the filters gently and then rinse under running water to clean all particles. If this is not effective, a replacement cartridge should be fitted.

6. Before reassembling the cartridge, clean its housing with a wet cloth and grease the 'O' rings using a suitable silicone grease, insert the thermostatic cartridge.

7. Screw the securing nut on and tighten using long-nose pliers, careful not to overtighten.

8. Place the temperature stop ring on the cartridge so the stop is located at 12 o'clock.

9. Turn the water supply on via the isolating valves.

10. Check the water temperature to ensure correct commissioning (see page 15)

11. Replace shrouds, plate, securing ring, stop arm and handle.

12. Secure the handle (see page 17).

Isolation procedure

IMPORTANT:

Please see the below procedure for isolating concealed thermostatic valves.

1. Remove handles/faceplate and trim parts allowing access to the isolation points on the valve.

2. Screw down the isolation screws clockwise until you feel a resistance (taking care not to over tighten).

3. Turn shower on to check isolation, please ensure that your body/hands are not under the flow of water as there is a potential for delivery of hot water.

4. Remove temperature stop ring (essential).

5. With shower in the on position, replace temperature handle on thermostatic valve (ensure temperature stop ring has been removed).

6. Turn temp handle fully anti-clockwise until stop point is reached and can be turned no further, please ensure that your body/hands are not under the flow of water as there is potential for delivery of hot water if isolation has been unsuccessful.

7. Turn temperature handle fully clockwise until you feel a resistance.

8. If there is no flow of water coming from the outlet during both points 6 and 7 isolation has been successful, you may now remove and maintain the thermostatic cartridge.

9. If at any of the above points water continues to flow please isolate at an alternative point within the system for both hot and cold and repeat points 3-9.