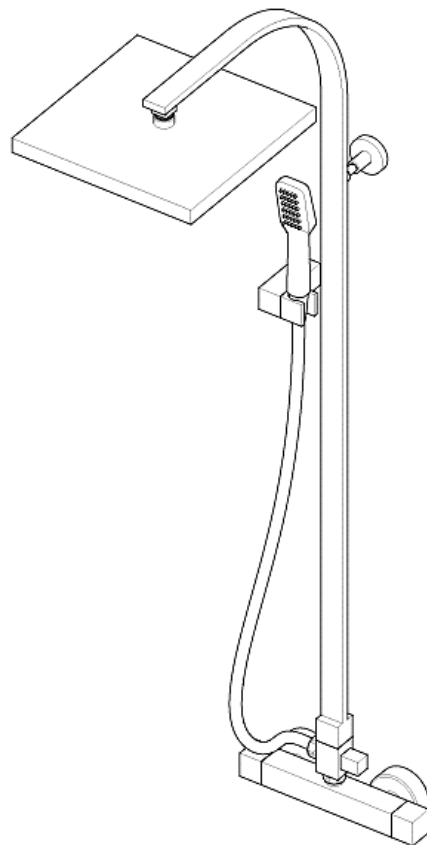


# BRISTAN

## Craze Rigid Riser Bar Mixer

### Installation Instructions & User Guide






Please keep these instructions for future reference and request of replacement parts

# BRISTAN

Thank you for choosing Bristan, the UK's leading taps and showers expert. We have designed this product with your enjoyment in mind. To ensure that it works to its full potential, it needs to be fitted correctly. These fitting instructions have been created to give you all of the information you need and, if you need any further help, please do not hesitate to give us a call on 0844 701 6273.

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## Important Safety Information

- Please read these instructions thoroughly and retain for future use.
- All products manufactured and supplied by Bristan are safe provided they are installed correctly, used correctly and receive regular maintenance in accordance with these instructions.
- **If you are in any doubt about your ability to install this shower valve safely you must employ the services of an experienced qualified plumber.**
- This shower valve needs to be installed in accordance with, and meet the requirements of the Water Supply (Water Fittings) Regulations 1999 and Scottish Byelaws 2004.
-  **Warning:** Do not operate the shower valve if you suspect it is frozen. Do not site the shower valve where it might be subjected to freezing conditions.
- Do not crush or kink the shower hose as this could damage the hose and cause leaks.
- Remove all packaging and check the contents for damage before starting installation.
-  **Warning:** Before starting any installation please consider the following: before drilling into walls, check that there are no hidden electrical wires, cables or water supply pipes. This can be checked with the aid of an electronic detector.
- If power tools are used do not forget to;
  - Wear eye protection
  - Unplug equipment after use
- Fitting isolating valves to the inlet feeds is required for ease of maintenance.
-  **Warning:** Before installing the new shower valve it is essential that you thoroughly flush through the pipework in order to remove any remaining swarf, solder, etc. Failure to carry out this procedure could cause problems or damage to the workings of the shower valve.
- **It is recommended that when installing the shower valve, full access is provided for servicing purposes.**
- This shower valve **must not** be modified in any way as this will invalidate the guarantee.

## General Information

This product satisfies the requirements of the Water Supply (Water Fittings) Regulations 1999 and current bylaws and is designed to be used within systems designed to BS 6700.

BS 6700 recommends the temperature of stored water should never exceed 65°C. A stored water temperature of 60°C is considered sufficient to meet all normal requirements and will minimise the build up of lime scale in hard water areas

If the shower valve is installed at low pressure (tank fed), then the minimum distance from the highest installed position of the shower valve to the underside of the cold tank should be at least 5 metres to ensure adequate performance.

This shower valve should be installed in compliance with the Water Regulations. For further details contact your Local Water Authority.

## Specifications

**Inlet Connections:** 15mm Compression with 150mm between centres.

**Minimum working pressure:** 0.5 bar,

**Maximum working pressure:** 5.0 bar.

**Maximum Static Pressure:** 10.0 bar.

**Note:** Nominally equal (balanced) inlet supply pressures are required for optimum performance. If pressures are unequal, then a pressure reducing valve should be used.

Maximum recommended imbalance between hot and cold supply should not exceed a ratio of 5:1

**Maximum Outlet Temperature:** Factory pre-set to 38°C with push button override to 46°C (can be re-set to suit site conditions or personal preference).

### Supply Requirements:

Minimum cold water supply temperature: 5°C

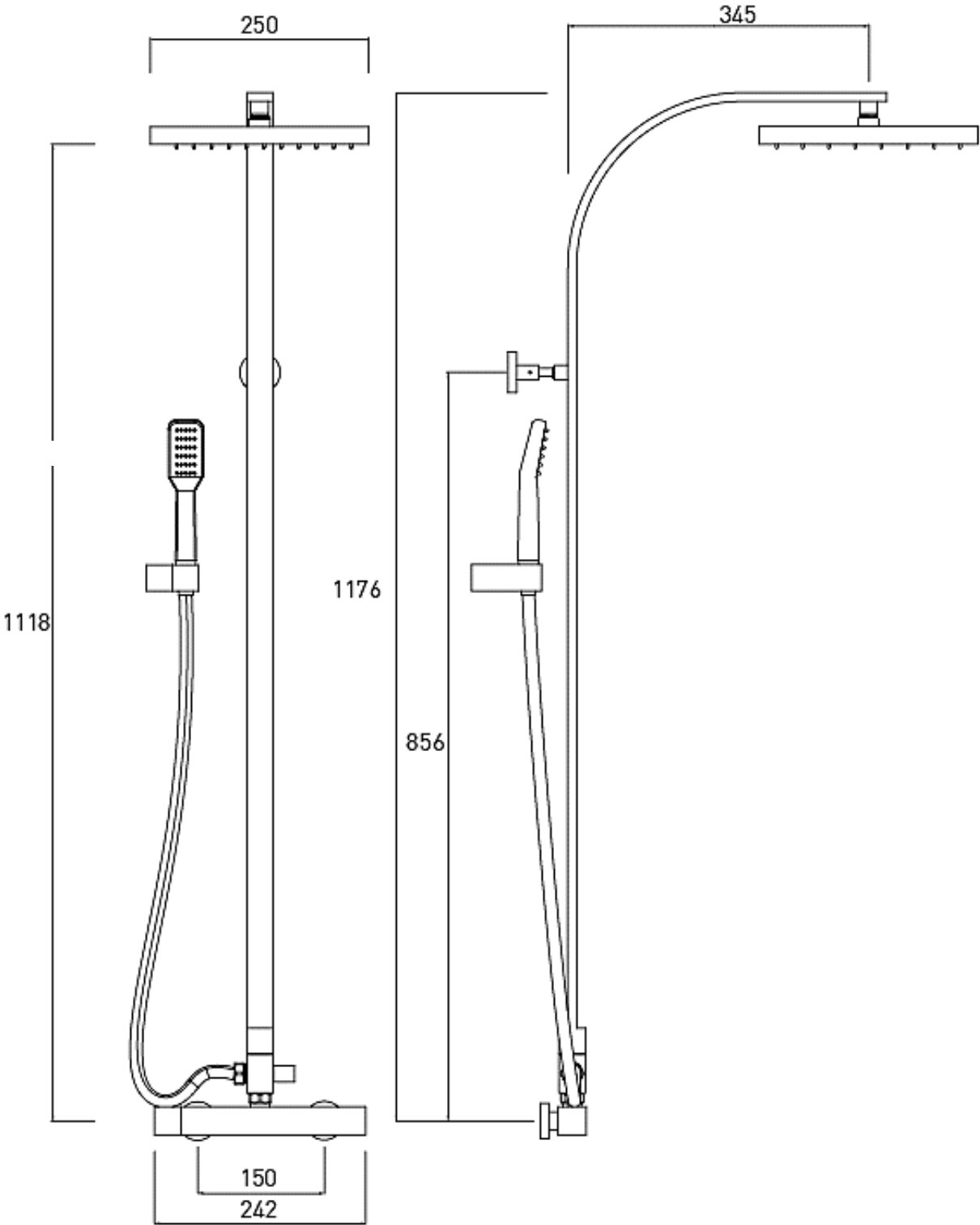
Maximum cold water supply temperature: 25°C

Maximum hot water supply temperature: 80°C

(a maximum hot water supply of 60-65°C is recommended for ablutionary purposes).

**Note:** The inlet hot water temperature must be at least 10°C above the required blend temperature (e.g. outlet temperature 43°C: Minimum hot supply 53°C).

## Dimensions

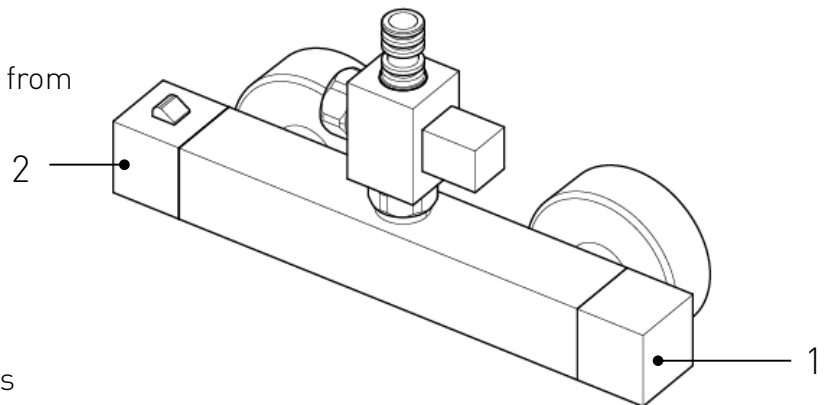


All dimensions are in mm's and are approximate.

## Product Features

### 1. Water Flow Control

Controls the amount of flow of water from the showerhead.



### 2. Temperature Control

Adjustable temperature control.

The temperature control incorporates a safety stop facility limiting the water temperature to 38°C.

To obtain a higher water temperature, Slide the button to the side and continue to turn the control to the desired temperature.

### Cool Touch Feature

This shower valve incorporate a cool touch feature. When the shower valve is in use the body of the shower will not get hot and will remain cool.

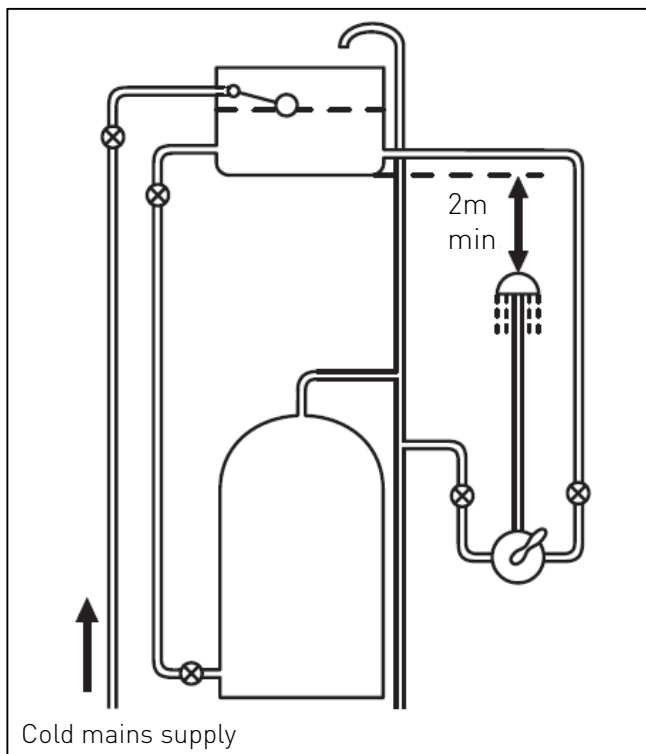
## Installation Requirements

This shower valve must be installed in compliance with current water regulations. If you have any doubts about the water regulation requirements contact your local water services provider or use the services of a professional plumber.

This shower valve is suitable for use with the following water supply systems.

- Gravity Fed Hot and Cold (pressure Balanced)
- Gravity Fed Hot and Mains Cold (differential pressure – see Specification section on page 5.
- Instantaneous Water Heater (combination boiler)
- Unvented System
- Pumped System

### Gravity Fed Hot and Cold



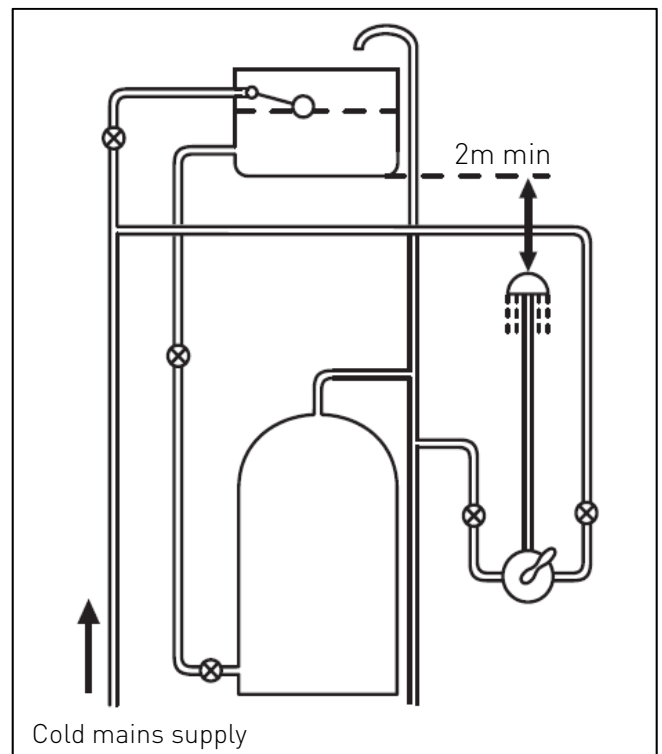
**⚠ Important:** If you install this shower valve with a gravity fed system, there must be a minimum head (vertical distance) from the underside of the cold water storage tank to the shower valve position of at least 5 metres.

**Note: Pumped system (with Essex flange)** If you install this shower valve to a pumped gravity fed system where the minimum head (vertical distance) from the underside of the cold water storage tank to the top of the hot water cylinder is less than 1 metre we recommend an Essex flange is used as shown on page 09.

### Flushing Pipework

**⚠ Important:** Before connecting the shower valve (see Installation on pages 11-15), supply pipework **must** be flushed to clear debris before connecting the shower valve. Debris will reduce the performance and life of the shower.

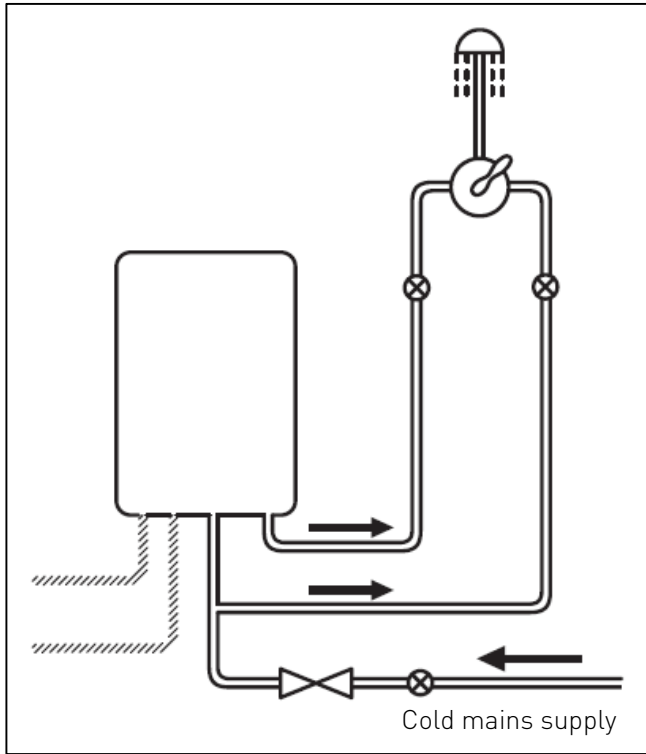
### Gravity Fed Hot and Mains Cold



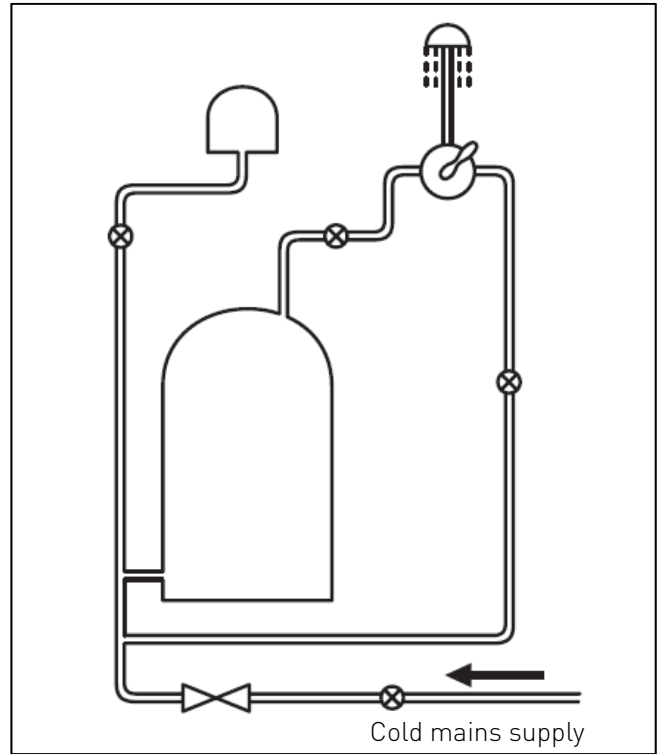


## Installation Requirements

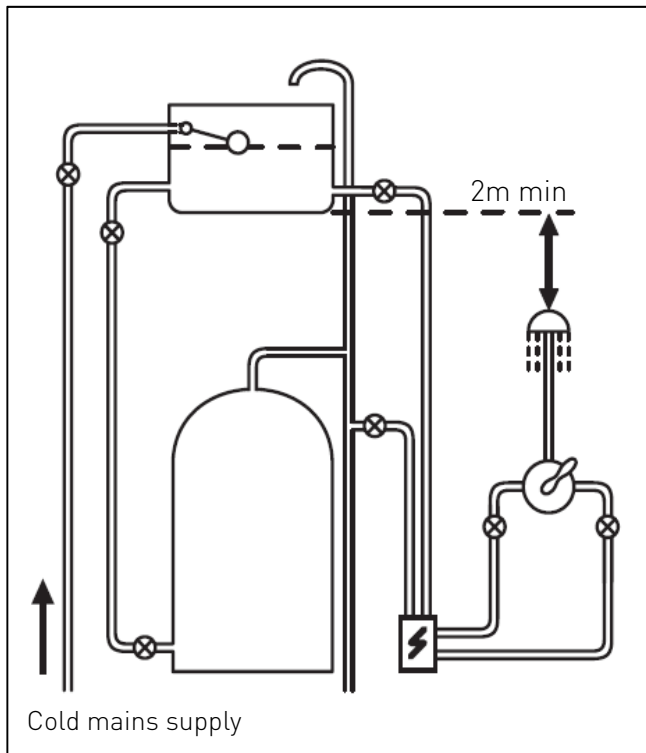
### Instantaneous Water Heater



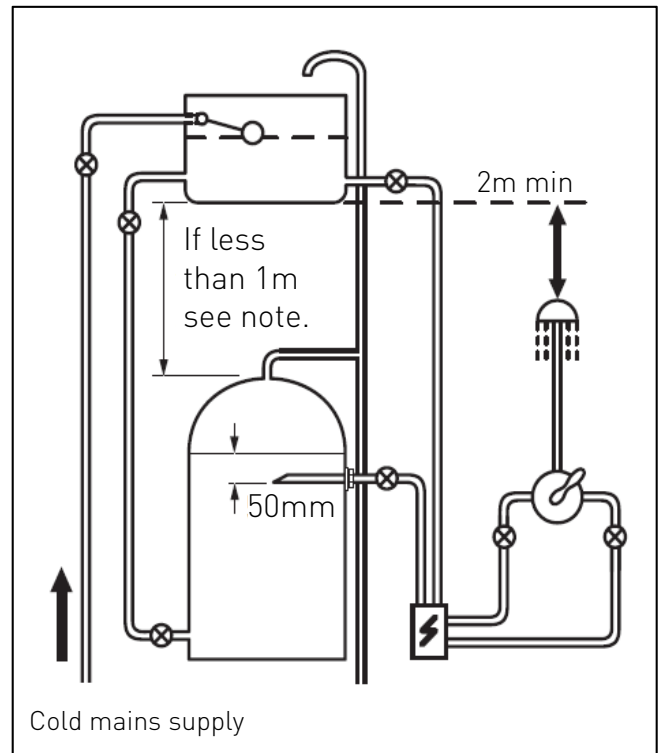
### Unvented System



### Pumped System



### Pumped System (with Essex flange)



Key:  Isolating Valve  Reducing Valve  Shower Valve  Pump  Essex Flange

## Installation Requirements

These fittings need to be installed in accordance with the following Installation Requirements and Notes (IRN) to ensure they meet the requirements of the Water Supply (Water Fittings) Regulations 1999 and the Scottish Byelaws 2004.

IRN R001: See text of entry for Installation Requirements or Notes.

IRN R040 - Schedule 2-15 (1): The fitting shall be installed so that its outlet discharges above the spill-over level of any fixed appliance as indicated below:-

**For backflow protection in domestic or installations up to, and including, Fluid Category 3.**

If the fitting cannot be installed as indicated in the table opposite it shall be installed as either **a** or **b** below:

**a:** with an approved double check valve assembly or some other no less effective backflow prevention device immediately upstream of the inlet.

**b:** so that it draws water by gravity only from a cistern, or cylinder having a permanently open vent pipe, and the distributing pipe supplies no other fitting (other than draining tap) at a lower level.

**For backflow protection in premises or installations up to, and including Fluid Category 5.**

The vertical distance of the outlet above the spill-over level shall be not less than 20mm or twice the diameter of the inlet pipe to the fitting, which ever is the greater. If the fitting cannot be installed as indicated it shall be installed with a backflow prevention arrangement suitable for the Fluid Category.

Size of tap or combination fitting.	Vertical distance of outlet above spill-over level.
1. Not exceeding 1/2 in	20mm
2. Exceeding 1/2 in but not exceeding 3/4 in	25mm
3. Exceeding 3/4 in	70mm

## Installation

This Thermostatic Mixer Valve (TMV) should be installed in compliance with Water Regulations (refer to General Information section). For further details contact your Local Water Authority.

This TMV is suitable for use with the following systems:

- Gravity Fed Hot & Cold (Nominally Equal Pressure)
- Gravity Fed Hot & Mains Cold (Differential Pressure, Max ration 5:1)
- Unvented Systems
- Instantaneous Water Heater (Combination Boiler)
- Pumped System

**Note:** On Gravity systems the minimum distance from the underside of the cold water storage tank to the shower valve must be at least 5 metres.



**Warning:** Before installing the thermostatic mixer valve it is essential that you thoroughly flush through the pipework in order to remove any remaining swarf, solder, etc. Failure to carry out this procedure could cause problems or damage to the workings of the mixer valve.

## Installing the Fast Fit Kit

1. Identify all components are present prior to starting installation.
2. Using the template supplied with the fast fit kit mark out the position for the pipework and the fixings supplied.

**Note:** The Pipe centres required for this Thermostatic Mixing Valve are 150mm.



Before drilling into walls, check that there are no hidden electrical wires, cables or water supply pipes. This can be checked with the aid of an electronic detector.

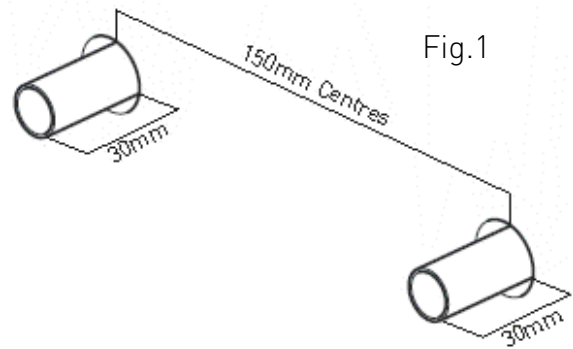


If power tools are used do not forget to;

- Wear eye protection
- Unplug equipment after use

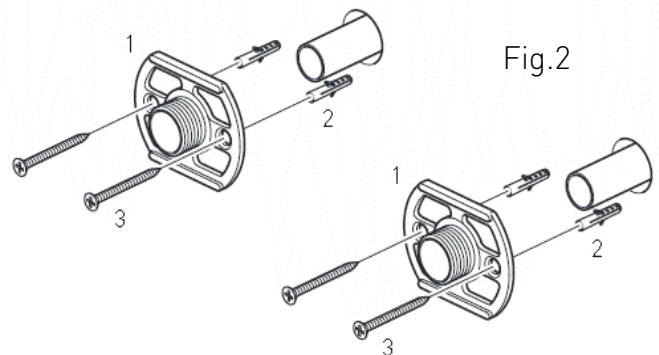
3. Drill suitable holes in the wall surface at the marked positions to accommodate the supply pipework and fixings.

4. Terminate the pipework in the wall ensuring that there is at least 30mm of 15mm diameter pipework protruding from the finished wall surface (See Fig.1).



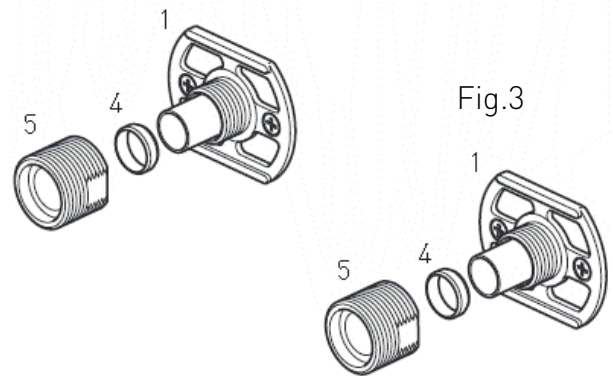
**IMPORTANT:** The water supply pipes to the thermostatic Mixer Valve must be with the Hot on the left and the Cold on the right when viewed from the front.

5. Place the wall plates (1) over the supply pipes. Using the wall plugs (2) and screws (3) provided fix the wall plates to the wall (See Fig.2).



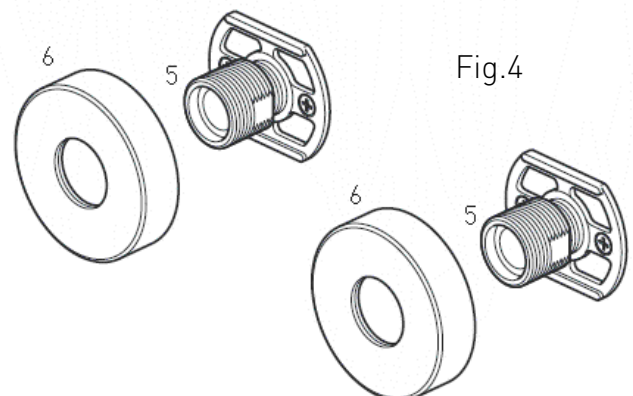
6. Place the olives (4) onto the protruding pipework (See Fig.3).

**IMPORTANT:** The pipework **must not** protrude past the olive (4) by more than 5mm.



7. Holding the flat edges of the wall plate (1) with a 47mm spanner screw the fixing bridge (5) onto the wall plate (1) using a 22mm spanner. Repeat this step on both sides (See Fig.3).

8. Screw the covers (6) over the wall plates / fixing bridges (5), so they are flush against the finished wall surface (See Fig.4).

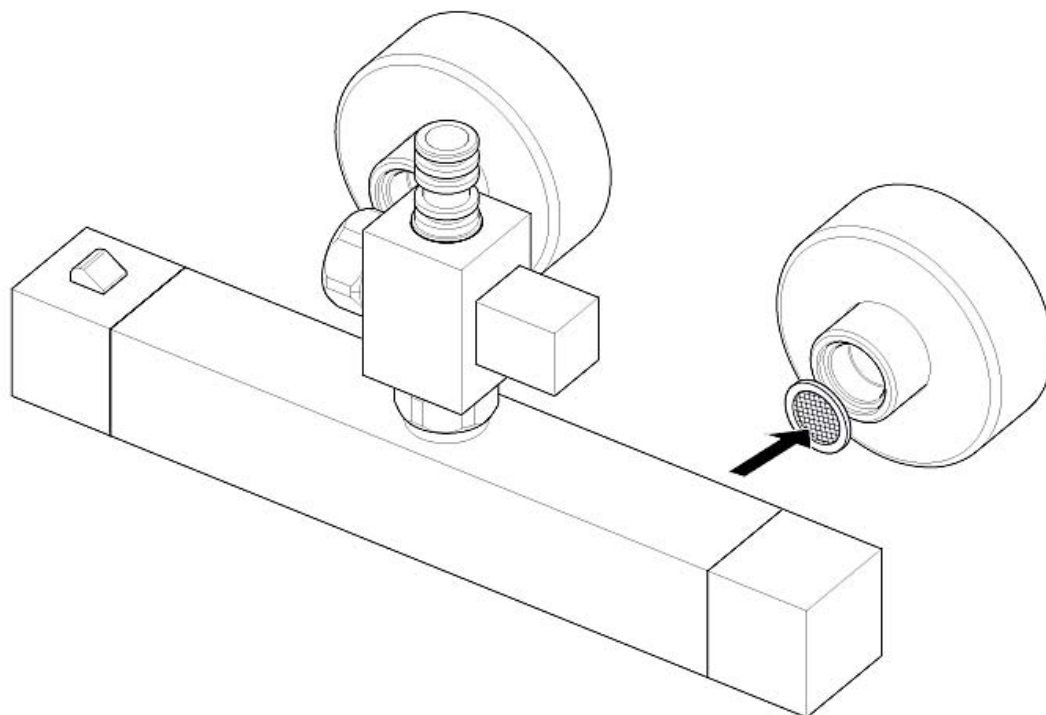


## Installing the Thermostatic Mixer Valve

1. Place the filter washers into the connectors.
2. Position the shower valve against the connectors and carefully tighten the shower valve fixing nuts onto the connectors. **Do not overtighten.**

**Note:** Take care not to damage the finish of the shower valve fixing nuts. Protect the chromium plated surfaces with a cloth.

3. Fit the diverter to the top outlet of the shower valve.

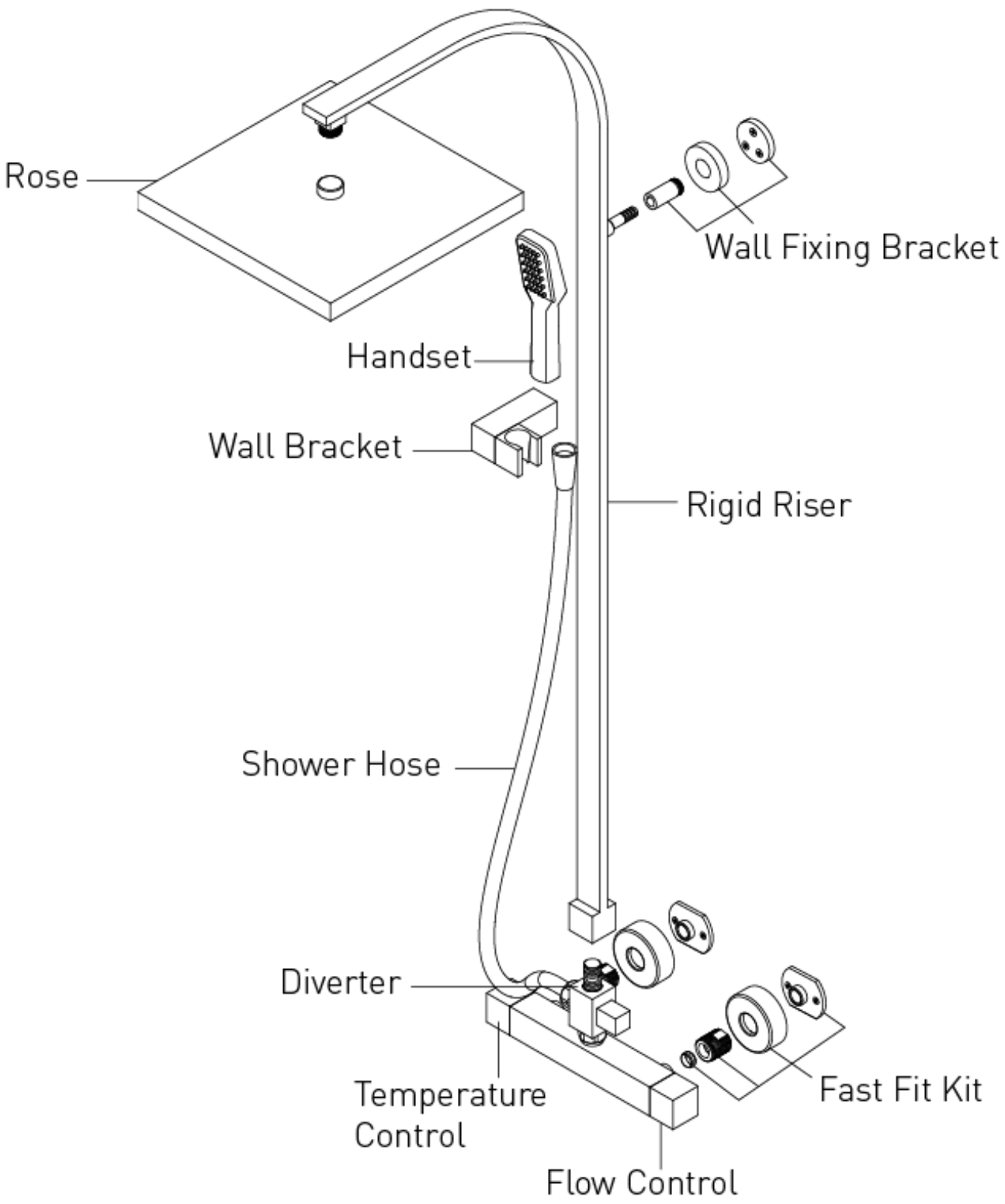


## **Installing the Rigid Riser**

1. Loosen the grub screw on the wall fixing bracket.
2. Assemble the rigid riser and attach to the diverter.
3. Ensure the rigid riser is level and mark the position of the fixing bracket on the wall surface.
4. Remove the rigid riser from the shower valve
5. Remove the wall fixing bracket from the riser and place on the wall surface at the marked position.
6. Mark fixing holes onto wall surface and drill suitable holes for the fixings supplied.
7. Attached the wall bracket to the wall using fixings supplied.
8. Attach the rigid riser onto the diverter and position riser rail into the wall bracket ensuring the riser rail is vertical using a spirit level and tighten the grub screw.
9. Attach the rose onto the rigid riser ensuring the sealing and washer is fitted.
10. Attach the shower hose to the diverter ensuring the sealing washer is fitted.
11. Attach the handset to the shower hose, ensuring the sealing washer is fitted.

## **Installing the wall bracket**

1. Mark the position of the wall bracket on the wall surface.
2. Remove the wall bracket fixing using a flat headed screwdriver by pressing the lug.
3. Mark the fixing holes onto the wall surface and drill suitable holes for the fixings supplied.
4. Attach the wall bracket fixing onto the wall and push the wall bracket onto the wall bracket fixing.



## Operation

### Flow Control

The flow control handle (on the right) increases and decreases the flow rate through the thermostatic mixer valve. The more the handle is turned the greater the flow rate.

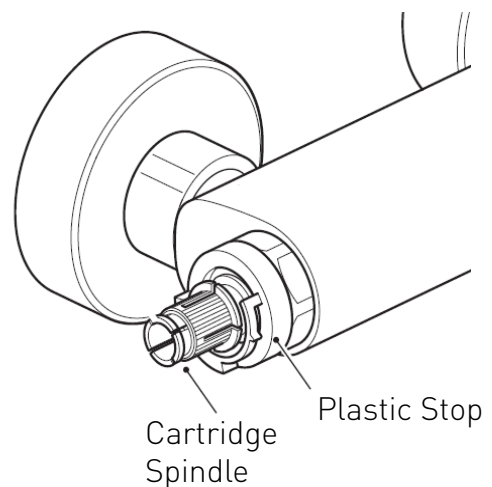
### Temperature Control

The temperature control handle (on the left) allows the user to adjust the temperature up to 38° C, however this can be overridden by simply pressing the button on the temperature handle in and continuing to turn the control handle until the desired temperature is achieved. The user can then override the temperature to a maximum of 46°C.

### Temperature Setting

The temperature can be adjusted to suit different site conditions or personal preference by following the steps below.

- Using a flat bladed tool remove the Handle end cap and loosen the retaining screw.
- Remove the handle by pulling it from the valve spindle.
- Turn the flow of water on to the maximum temperature and wait a few minutes to allow the temperature to stabilize.
- Turn the cartridge spindle in the required direction to increase or decrease the set temperature. Anti-clockwise to increase the temperature, clockwise to decrease.
- Turn the flow of water off.
- Replace the handle, retaining screw and handle cover cap.





## Maintenance

### General Cleaning

Your fitting has a high quality finish and should be treated with care to preserve the visible surfaces. All surfaces will wear if not cleaned correctly, the only safe way to clean your mixer valve is to wipe with a soft damp cloth. Stains can be removed using washing up liquid. All bath cleaning powders and liquids will damage the surface of your fitting, even the non – scratch cleaners.

**Note:** Never use abrasive detergents or disinfectants or those containing alcohol, hydrochloric acid or phosphoric acid.

### Flow Valve Maintenance

If your shower valve begins to drip it may be due to the flow valve letting water pass through the valve.

Isolate both hot and cold water supplies to the mixer valve by either:

- Turning the water supply off at the mains stopcock or
  - Turning off the isolation valves to the mixer valve.
1. Remove the flow control cover cap, loosen the screw and pull the handle off the valve spindle.
  2. Using a suitable spanner unscrew the valve out from the body and check its condition.
  3. Clean the valve and replace if necessary.

4. Push the handle back onto the valve spindle and replace the handle, screw and handle cover cap.

### Cartridge Maintenance

We advise that the shower valve is regularly serviced in hard water areas to maintain optimum performance (see Map of Hard Water Regions in England and Wales overleaf).

Isolate both hot and cold water supplies to the mixer valve by either:

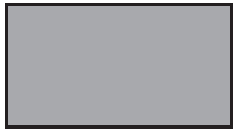
- Turning the water supply off at the mains stop cock or
  - Turning off the isolation valves to the mixer valve.
1. Remove the temperature control cover cap, loosen the screw and pull the handle off the cartridge spindle
  2. Remove the plastic stop. **Important:** Take note of the position of the plastic stop and handle – they must be refitted in the same positions.
  3. Unscrew the thermostatic cartridge from the body.
  4. Place the cartridge in a bowl and carefully add hot water (just off the boil) and vinegar to de-scale the cartridge. Leave in the solution until the water has cooled and rinse with clean water.
  5. Grease the seals with a silicon grease supplied by Bristan (part number: SP-495-0002) and carefully refit.
  6. Reset the maximum temperature and refit the handle, screw and handle cover cap.

# BRISTAN

## Hard Water Regions in England and Wales\*



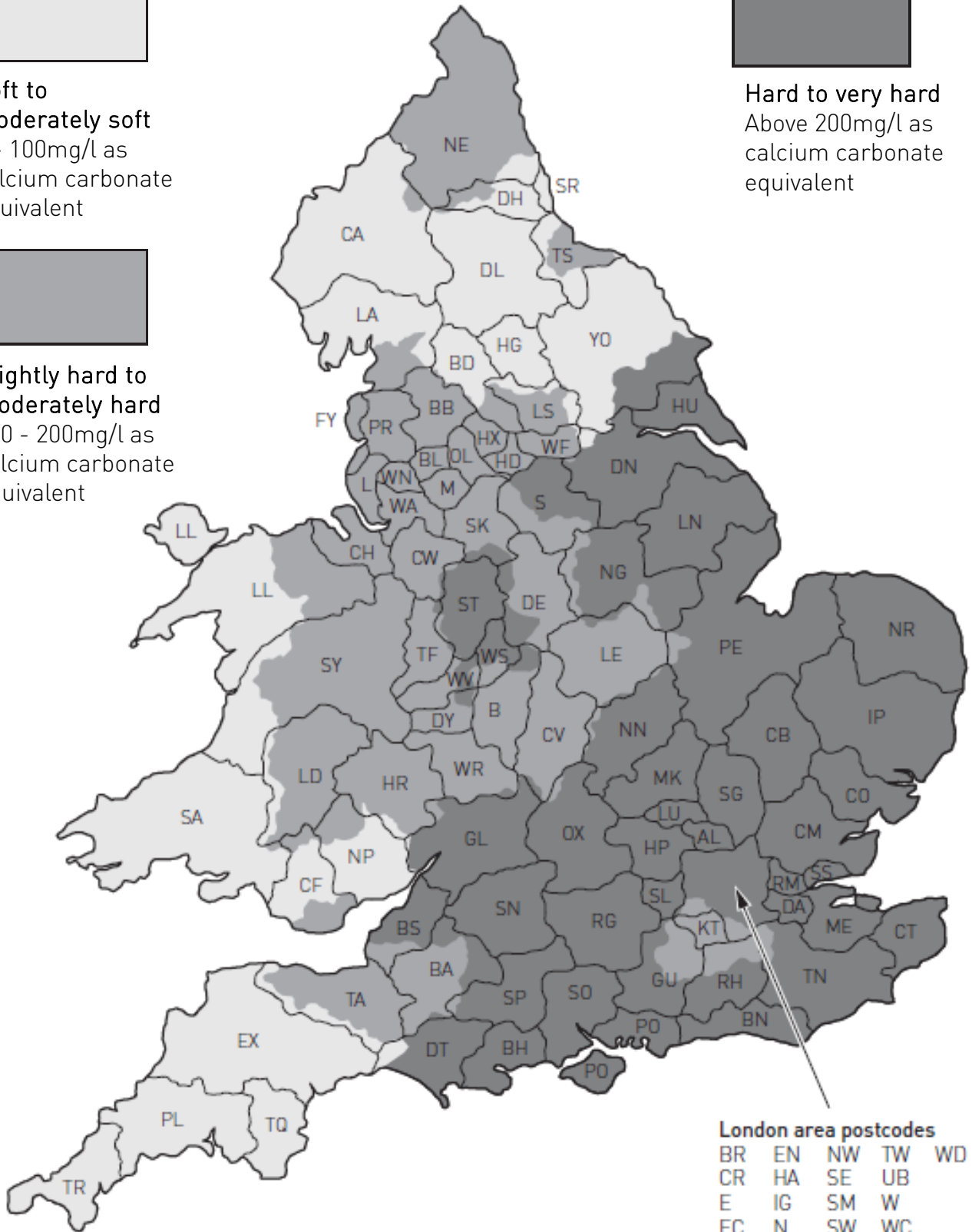
Soft to moderately soft  
0 - 100mg/l as calcium carbonate equivalent



Slightly hard to moderately hard  
100 - 200mg/l as calcium carbonate equivalent



Hard to very hard  
Above 200mg/l as calcium carbonate equivalent



\* The map above shows England and Wales only. Scotland has mainly soft water.

## Troubleshooting

Symptom	Cause	Remedy
No flow or low flow rate and / or varying temperatures.	Partially closed stop or service valve in water supply pipework to the mixer valve.	Open stop or service valve.
	Instantaneous water heater cycles on and off as the flow rate or pressure is too low.	Increase water flow rate or pressure through system  Contact the boiler manufacturer.
	Head of water is below the minimum distance required.	Refer to the specifications section.
	Inlet filter is partially blocked.	Clean or replace, flush through pipework before refitting.
	Hot or cold water being drawn off elsewhere causing pressure changes or instantaneous boiler changes.	Do not use other water outlets when using the shower valve.
	Make sure the maintained inlet pressures are nominally balanced and sufficient.	If pressures are unbalanced then a pressure reducing valve should be used.
	Airlock or partial blockage of the pipework.	Flush through pipework to ensure removal of debris and any airlocks.
	No hot or cold water reaching the shower valve.	Check hot and cold feeds (the valve will shut down if either the hot or cold supply fails).
Water leaking from showerhead.	This is normal for a short time after turning off.	Adjust the angle of the showerhead as necessary to vary draining time.
	Shower flow control valve failing to close fully, possibly due to water borne debris.	Remove flow control valve assembly and check. Refer to maintenance section (page 17) before dismantling shower valve.
	Flow control valve seals damaged.	Check condition of flow control valve and replace as necessary (refer to maintenance section (page 19)).

## Troubleshooting

Symptom	Cause	Remedy
Maximum water temperature too hot or cold.	Maximum water temperature set incorrectly.	Reset maximum water temperature. Refer to 'Setting/Commissioning' sections.
Outlet water temperature too hot / cold.	Inlet filter is partially blocked.	Check insert filters for any blockages and clean as necessary.
	Installation conditions outside operating parameters.	Refer to Installation Requirements (pages 08-10).  Service shower valve as recommended. Refer to maintenance section (page 17).
Water temperature too cold – maximum water temperature incorrectly set.	Hot water temperature is less than 10°C above the required blend temperature.	Adjust hot water temperature or wait for water to reheat if stored system is used.
	Instantaneous water heater not igniting because water flow rate is too low.	Increase water flow rate through the system.  Check cartridge inlet filters and clean or replace. Refer to maintenance section (page 17).  Contact the boiler manufacturer.
	Instantaneous water heater not igniting because water pressure is too low.	Refer to General Information for system requirements.  Increase water pressure through system.  Contact the boiler manufacturer.
Only hot or cold water from Thermostatic Mixing Valve outlet.	Inlet water supplies are reversed (hot to cold supply).	Check the connections are the correct way round. Hot on the left and cold on the right when viewed from the front. Rework pipework as necessary.
	Inlet filter is partially blocked.	Clean or replace, flush through pipework before refitting.

## Notes

Please use this space to add any notes you or your installer may have regarding the plumbing system / installation of this product.

## Bristan Guarantee

At Bristan, we want to make things as easy as possible for our customers. That's why we design products that are easy to fit and use, and that are quality tested to make sure they won't let you down. It's also why we offer solid guarantees on all products, effective from the date of purchase, to give you peace of mind.

All Bristan taps are covered by a **5 year guarantee**. This also includes **2 years labour cover** which means that, in the unlikely event that there is a problem in the first 2 years after purchase, we'll send one of our expert engineers to fix it.

\*Labour is provided by an approved Bristan Care engineer or appointed representative. The guarantee only applies to products with a manufacturing fault. There will be a call out charge for any incidents where no fault has been found with the product, or if the issue is due to poor installation or maintenance.

### Guarantee Terms and Conditions

This guarantee is in addition to your statutory and other legal rights and is subject to the following conditions:

- The product was purchased within the United Kingdom or Republic of Ireland.
- The guarantee applies solely to the original purchaser with proof of purchase.
- The installation must allow ready access to all products for the purpose of inspection, maintenance or replacement.

- Repair under this guarantee does not extend the original expiry date. The guarantee on any replacement parts or products ends at the original expiry date.
- Any part found to be defective during the guarantee period will be replaced without charge, providing that the product has been installed in accordance with the instructions given in this guide and used as the manufacturer intended.

The guarantee does not cover:

- Damage or defects caused by:
  - general wear and tear (including special non-chrome finishes; components such as filters, seals, 'O' rings and washers)
  - incorrect installation
  - repair using non-Bristan parts
  - accidental or wilful misuse
  - corrosion and the use of inappropriate cleaning products.
  - system debris including the build up of limescale (which can be controlled through regular servicing and maintenance).
- Compensation for loss of use of the product or consequential loss of any kind.

In the interests of continuous product improvement, Bristan reserves the right to alter product specifications without notice.

The Bristan Product Guarantee does not affect your statutory rights as a consumer.

### •Need help?

If this product does not function correctly when first used, contact **Bristan Care Customer Service on 0844 701 6273** where our expert team of advisors will be able to offer you help and advice.

### •Problems during the guarantee period

In the unlikely event that you encounter any problems with the product during the guarantee period, contact **Bristan Care Customer Service on 0844 701 6273** with your proof of purchase and we will work to resolve the problem quickly.

### **Bristan Care Customer Support**

Bristan customers also benefit from the support of Bristan Care, our comprehensive customer support package which offers:

### **Technical support hotline**

(Tel: **0844 701 6273**) with access to fully trained advisors who can offer installation advice, talk you through quick maintenance checks, or recommend the best course of action to fix any problems with a product

### **Expert advice**

Find easy to follow 'how to' video guides and technical FAQs online at [www.bristan.com](http://www.bristan.com). Our guides take you step-by-step through many product installations and you can find plenty of easy guides to quick product fixes and servicing.

### **Spare parts**

We hold thousands of spares and we keep them for discontinued products for over seven years. Spares can easily be ordered online at [www.bristan.com](http://www.bristan.com) and are dispatched the same day.

### **Expert plumbing engineers**

If we can't solve the problem over the 'phone or with a spare part, then we'll send out one of our Bristan Care engineers to take a look. Bristan Care engineers provide free support for products that are within guarantee, but are also available to service products that are out of guarantee for a small charge. For details, please call customer services on **0844 701 6273**.

# BRISTAN

This booklet covers product code  
CRZ SHXDIVCTFF C

**Helpline**

**0844 701 6273**

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