



# THERMOSTATIC SHOWER

Before you start anything, please make a cup of tea and read these instructions fully. If you are in any doubt, STOP and seek professional help. Do not proceed unless you are sure. These instructions assume a certain level of competency with basic building and plumbing techniques. Correct installation is essential to avoid the risk of scalding.

## Your thermostatic shower

Your thermostatic shower comprises various components to provide you with both a wall-mounted rain shower head and a handheld wand. The central mixer assembly has two controls: one to determine the temperature, the other to direct the water flow.

### Items needed

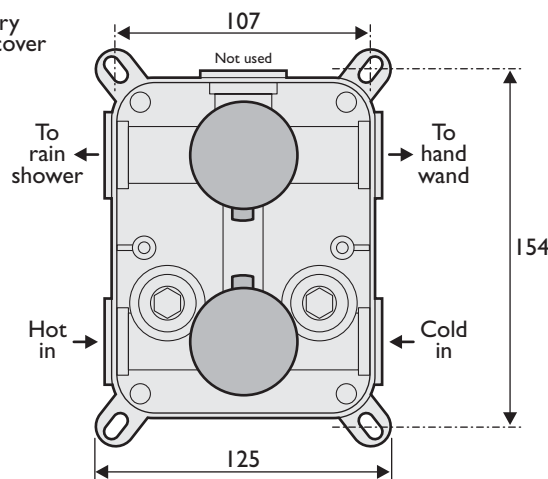
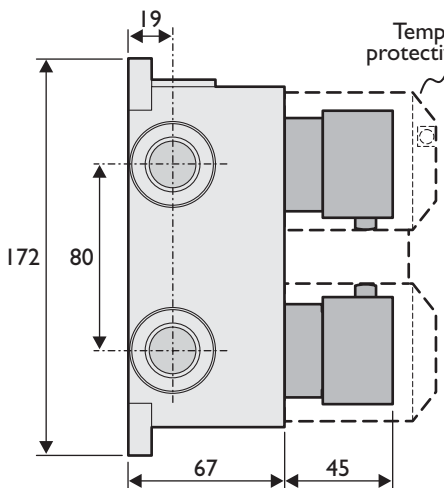
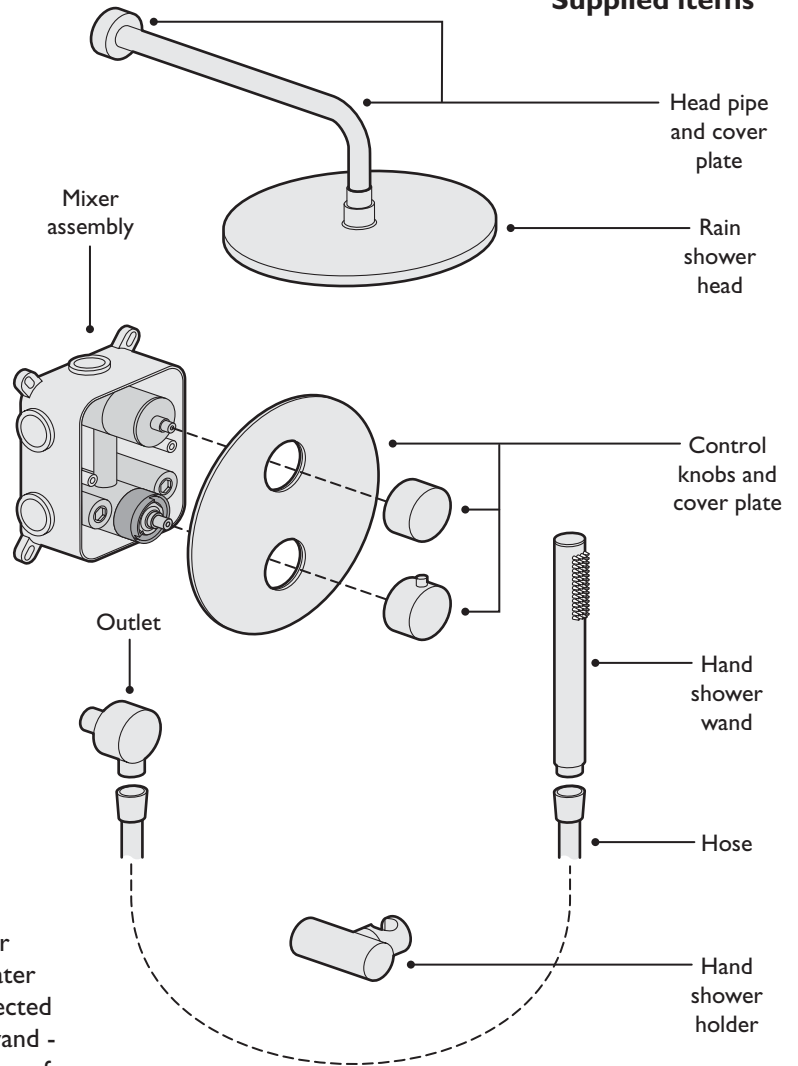
In addition to the supplied items shown here and necessary tools, you will also need to arrange the hot and cold water supply pipes (plus fittings) to the mixer assembly. Additionally, you will need to run pipes from the dual mixer assembly outputs to both the rain shower head pipe and the hand wand outlet.

All joints have 1/2" BSP (British Standard Pipe) threads and you should use 15mm diameter pipes throughout. You will also need to use suitable PTFE tape on all threads to achieve water-tight joints.

### The mixer assembly

At the heart of your thermostatic shower is the mixer assembly. It is here that the incoming hot and cold water feeds are mixed to the required temperature and directed to either the rain shower head or the hand shower wand - all controlled by the two knobs. The crucial dimensions of the mixer assembly are shown below:

## Supplied items



- The recommended operating pressure is 1 to 6 bar.
- The hot water feed should be in the range 55 to 80°C.

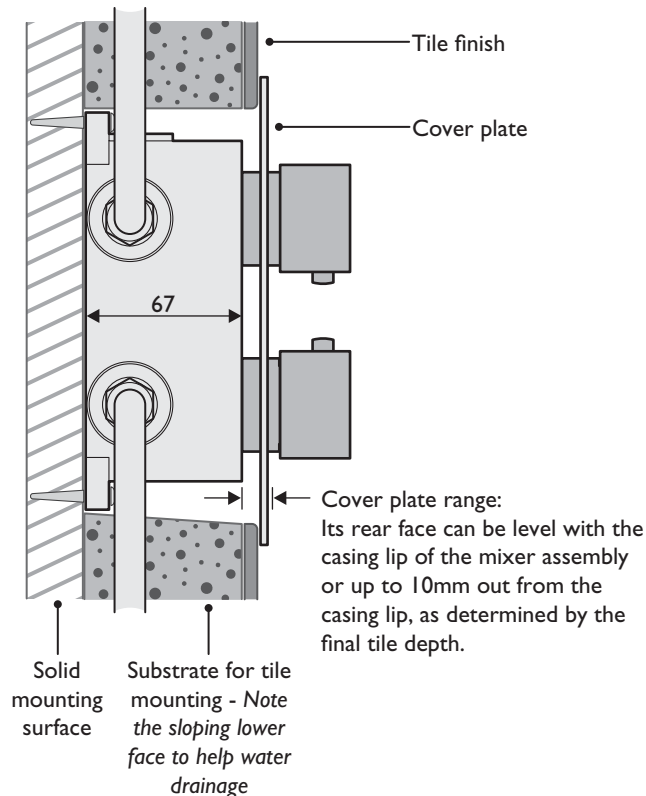
All dimensions in mm

## Locating the mixer assembly

The mixer assembly must be screwed onto a recessed solid surface, (eg brick, wood, Aquaboard®, etc.) within the shower area at a height that makes it easy for users to reach the controls.

*Note: It is possible for some moisture to get behind the cover plate and around the mixer assembly. The mounting surfaces should be sufficiently robust and water-resistant to cope without degrading. A sloping lower face of the substrate will help to drain out any water.*

Ideally, when the final tile finish is in place, the cover plate should sit just behind the control knobs, ie the rear face of the cover plate will be roughly 10mm from the mixer assembly casing lip:



## To fit your thermostatic shower

1 Isolate the hot and cold water feeds to the shower area.

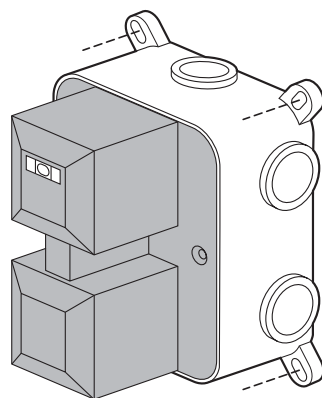
2 Create the recess for the mixer assembly and fix it into place using the supplied four screws and wall plugs (or other fixings more suitable to the mounting surface).

Use the spirit level built into the blue protective cover to ensure the mixer assembly is level.

3 Embed and install your hot and cold feed pipes and connect them using suitable fittings to the marked lower inlets on the mixer assembly.

**IMPORTANT:** Ensure that all pipes and the mixer assembly ports are completely free of debris.

*Tip: When making a joint connection, wrap two layers of PTFE tape around the male thread in a clockwise direction, ie with the thread - so that it is pulled tighter as it is screwed in.*



4 Embed and install pipes from the two upper outputs of the mixer assembly and feed them to the locations of the rain shower head and also the hose outlet of the hand shower wand.

5 An outlet for the hand shower wand pipe is supplied.

6 You will need a suitable fixing to hold/feed the horizontal pipe that leads to the rain shower head - such as a compression wall plate elbow.

7 Temporarily install the rain shower head and hand shower wand to allow testing prior to tiling.

8 Remove the two screws which secure the blue protective cover on the mixer assembly and lift it off to reveal the control knobs.

9 Open either the hot or cold feeds to the mixer assembly. Check that all joints are fully water-tight. Use the upper knob to direct water to the rain shower head and the hand shower wand and check those joints.

10 Repeat step 9 for the other input feed.

11 When you are sure that all joints are correct and fully water-tight:

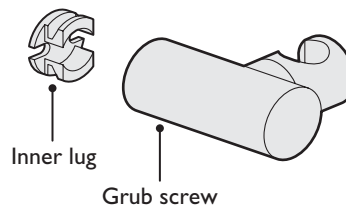
- Re-install the blue protective cover onto the mixer assembly,
- Isolate the hot and cold water feeds,
- Remove the rain shower head and pipe,
- Remove the hand shower wand outlet,
- Continue with the tiling (or other final surface treatment) within the shower area.

12 When the shower area has been tiled:

- Fit the rain shower horizontal pipe, cover plate and head, and
- Fit the hand shower wand outlet.

13 Determine the best location for the hand wand holder. Choose a position that is easy to reach and also presents minimum stress on the pipe.

- Use the supplied 2.5mm hex key to loosen the grub screw located on the underside of the wand holder:



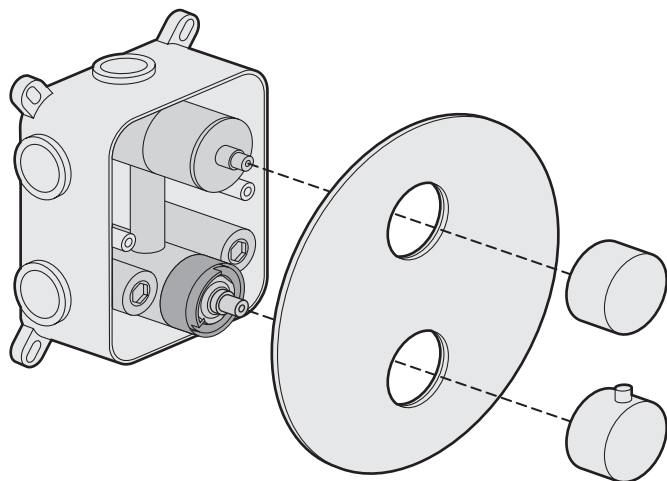
- Remove the inner lug from the holder and mark the positions of the two screw slots on the wall.
- Use a suitable drill (diamond-tipped tile drill where necessary and then masonry drill) to create two holes for the supplied wall plugs.
- Insert the wall plugs, mount the lug and tighten using the supplied screws. Then attach the holder and tighten the grub screw.

14 Fit the hand shower wand pipe between the outlet and the wand. Place the wand into the holder. A separate grub screw on the underside allows you to adjust the angle of the wand within the holder.

15 Remove the two screws which secure the blue protective cover on the mixer assembly and lift it off to reveal the control knobs.

16 Use the supplied 2.5mm hex key to remove the two control knobs:

- On the upper knob, carefully unscrew the prong and loosen the concealed grub screw.
- On the lower knob, before starting this step, place the knob into its vertical position so that it is straightforward to return it to that same position - this is important due to its temperature control function:
- Carefully remove the blanking plug that is on the opposite side of the prong and loosen the concealed grub screw.



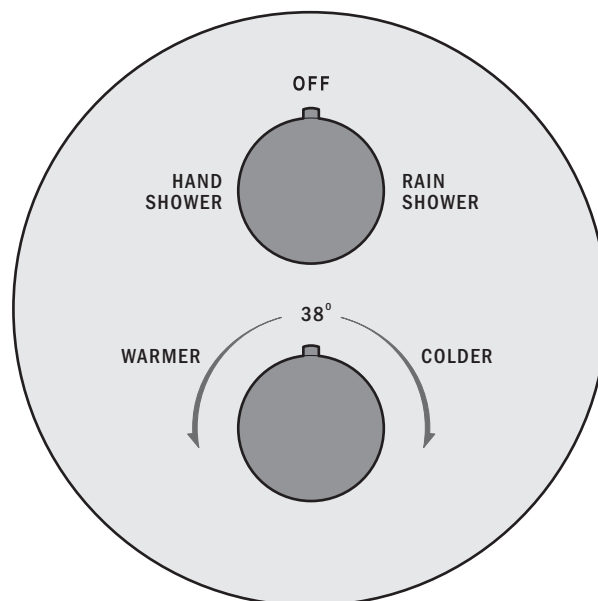
17 Place the cover plate onto the two control cylinders so that it is tight against the tiled surface.

18 Replace the knobs to their original positions and tighten their concealed grub screws.

19 Your shower is now complete. Open the hot and cold isolators and carefully test the shower.

## Using your thermostatic shower

Your shower has two controls:



- The upper knob controls the flow of water: Off, Rain shower and Hand shower.
- The lower knob controls temperature. Turn clockwise to make the output cooler, anti-clockwise to make the output hotter. At the mid-way setting, the shower should produce a flow at 38°C. The knob is prevented from turning beyond the 38°C setting unless you press the prong in as you turn the knob anti-clockwise. Take care if you do this as the water temperature can reach scalding levels.

## Shower maintenance

- Clean your shower as and when required – regular cleaning prevents calcification.
- If you live in a hard water area, consider fitting a water softener to your home to help to further prevent calcification (scaling).
- Never use cleaning materials containing hydrochloric, formic, phosphoric or acetic acid, all of which can cause considerable damage.
- Never use abrasive cleaning materials, sponge pads or micro-fibre cloths.
- After cleaning, rinse the shower thoroughly with clean water to remove any cleaner residue.
- Unscrew and clean the rain shower head regularly.

## Replacing the thermostatic cartridge

Your shower uses a replaceable thermostatic cartridge which should give you many years of reliable service. However, the internal mechanism will eventually degrade and require replacement - a key sign is if the shower temperature control becomes erratic. Your shower uses a **Type 8** thermostatic cartridge. These are built to a standard design by numerous manufacturers (available from professional plumbing outlets), however, some do differ in certain details. It is best if you can remove the cartridge from the shower first and take it to your supplier to ensure the replacement item is compatible.

To replace the thermostatic cartridge

1 Isolate the hot and cold water feeds to the shower area.

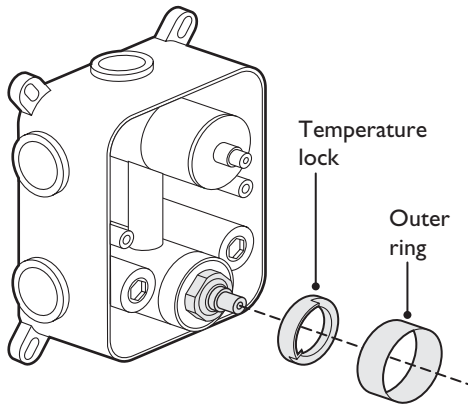
2 Use the supplied 2.5mm hex key to remove the two control knobs:

- On the upper knob, carefully unscrew the prong and loosen the concealed grub screw.
- Carefully remove the blanking plug that is on the opposite side of the prong and loosen the concealed grub screw.

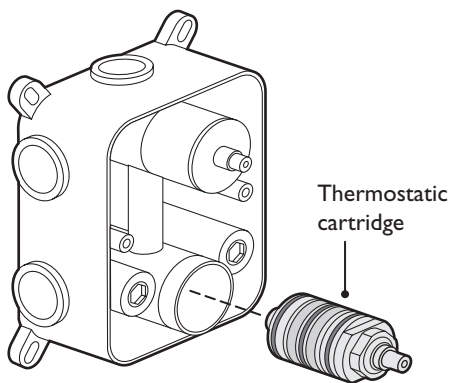
3 Slide off the cover plate.

4 On the lower control, unscrew the black Outer ring.

5 Note the orientation of the black plastic Temperature lock and pull it off the spline of the thermostatic cartridge.

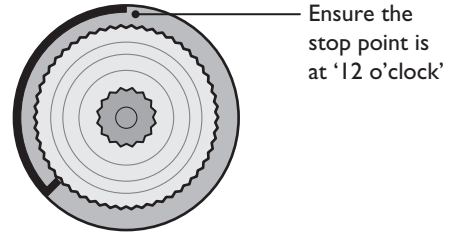


6 Use a 21mm spanner to unscrew and remove the thermostatic cartridge - be sure to support the mixer assembly to prevent any stress being placed upon the wall screws or pipework.



7 Introduce the new cartridge into the hole and push it in fully to ensure the three rubber o-rings have seated correctly within the control cylinder. Carefully screw the cartridge into place, using the 21mm spanner to fully tighten it - be sure to support the mixer assembly to prevent any stress being placed upon the wall screws or pipework.

8 Place the black plastic temperature lock onto the larger spline of the thermostatic cartridge in the same orientation as before:



9 Carefully screw the black outer ring back onto the barrel of the lower control.

10 The rotor of the thermostatic cartridge should have a travel of roughly 360 degrees. Wind the rotor all the way to one end of its travel and then wind it back a half turn (180 degrees) so that it's at the middle of its travel.

11 Place the knob onto the rotor and tighten the grub screw using the 2.5mm hex key. Replace the blanking plug into the knob to seal the hole.

12 Open the hot and cold isolators and carefully test the shower. Until the mid temperature is confirmed to be 38°C, beware of the danger of scalding.

13 Use a thermometer to test the water temperature when the control is at the 38°C mid setting.