

SAFETY : WARNINGS

WARNING - This product can deliver scalding temperatures if not operated, installed or maintained in accordance with the instructions, warnings and cautions contained in this guide.

The function of a thermostatic mixing valve is to deliver water consistently at a safe temperature. In keeping with every other mechanism, it cannot be considered as functionally infallible and as such, cannot totally replace a supervisor’s vigilance where that is necessary. Provided it is installed, commissioned, operated and maintained within manufacturers recommendations, the risk of failure, if not eliminated, is reduced to the minimum achievable. PLEASE OBSERVE THE FOLLOWING TO REDUCE THE RISK OF INJURY:

INSTALLING THE SHOWER

- 1. Installation of the shower must be carried out in accordance with these instructions by qualified, competent personnel. Read all instructions before installing the shower.
- 2. **DO NOT** install the shower where it may be exposed to freezing conditions. Ensure that any pipework that could become frozen is properly insulated.
- 3. **DO NOT** perform any unspecified modifications, drill or cut holes in the shower or fittings other than instructed by this guide. When servicing only use genuine Kohler Mira replacement parts.
- 4. If the shower is dismantled during installation or servicing then, upon completion, an inspection must be made to ensure all connections are tight and that there are no leaks.

USING THE SHOWER

- 5. The shower must be operated and maintained in accordance with the requirements of this guide. Make sure you fully understand how to operate the shower before use, read all instructions and retain this guide for future reference.
- 6. **DO NOT** switch the shower on if there is a possibility that the water in the shower unit or fittings is frozen.
- 7. The shower can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children must not be allowed to play with the shower.
- 8. Anyone who may have difficulty understanding or operating the controls of any shower should be attended whilst showering. Particular consideration should be given to the young, the elderly, the infirm or anyone inexperienced in the correct operation of the controls.
- 9. **DO NOT** allow children to clean or perform any user maintenance to the shower unit without supervision.
- 10. Always check the water temperature is safe before entering the shower.
- 11. **DO NOT** adjust the temperature control rapidly while using the shower.
- 12. Use caution when altering the water temperature while in use, always check the temperature before continuing to shower.
- 13. **DO NOT** switch the shower off and back on while standing in the water flow.
- 14. **DO NOT** connect the outlet of the shower to any tap, control valve, trigger handset or showerhead other than those specified for use with this shower. Only Kohler Mira recommended accessories must be used.
- 15. The showerhead must be descaled regularly. Any blockage of the showerhead or hose may affect showering performance.

SPECIFICATIONS

Pressures

- Max Static Pressure: **10 bar**.
- Max Maintained Pressure: **5 bar**.

- Min Maintained Pressure: (Gas Water Heater): **1.0 bar** (for optimum performance supplies should be nominally equal).
- Min Maintained Pressure (Gravity System): **0.1 bar** (0.1 bar = 1 Metre head from cold tank base to showerhead outlet).

Temperatures

- Close temperature control is provided between **20°C and 50°C**.
- Optimum Thermostatic Control Range: **35°C to 45°C** (achieved with supplies of 15°C cold, 65°C hot and nominally equal pressures).
- Recommended Hot Supply: **60°C to 65°C**.
For safety reasons we recommended that the maximum hot water temperature does not exceed 65°C).
- Minimum Recommended Differential between Hot Supply and Outlet Temperature: **12°C at desired flow rates**.
- Minimum hot water supply temperature: **55°C**.

Thermostatic Shut-down

- For safety and comfort the thermostat will shut off the shower **within 2 Seconds** if either supply fails (achieved only if the blend temperature has a minimum differential of 12°C from either supply temperature).

Connections

- **Hot: Left** - 1/2” BSP to pipework, 3/4” BSP to shower unit.
- **Cold: Right** - 1/2” BSP to pipework, 3/4” BSP to shower unit.
- **Outlet: Bottom**, 1/2” BSP Male to flexible hose.

Note! This product does not allow for reversed inlets and will deliver unstable temperatures if fitted incorrectly.

INSTALLATION

Suitable Plumbing Systems

Gravity Fed:

The thermostatic mixer must be fed from a cold water cistern (usually fitted in the loft space) and a hot water cylinder (usually fitted in the airing cupboard) providing nominally equal pressures.

Gas Heated System:

The thermostatic mixer can be installed with a combination boiler.

Unvented Mains Pressure System:

The thermostatic mixer can be installed with an unvented, stored hot water system.

Mains Pressurised Instantaneous Hot Water System:

The thermostatic mixer can be installed with systems of this type with balanced pressures.

Pumped System:

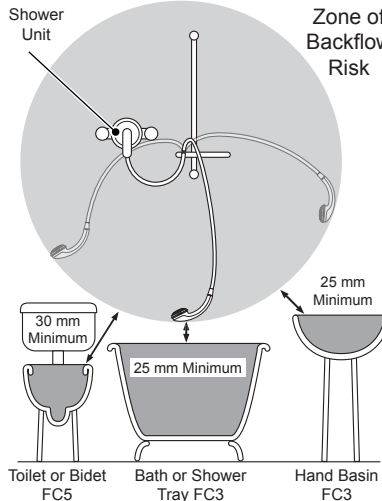
The thermostatic mixer can be installed with an inlet pump (twin impeller). The pump must be installed on the floor next to the hot water cylinder.

General

- 1. Installation of the shower must be carried out in accordance with these instructions by qualified, competent personnel.
- 2. The plumbing installation must comply with all national or local water regulations and all relevant building regulations, or any particular regulation or practice specified by the local water supply company.
- 3. Make sure all pressures and temperatures comply with the requirements of the shower. See **‘Specifications’**.
- 4. Full bore/non restrictive isolating valves must be fitted in a readily accessible position adjacent to the shower to facilitate maintenance of the shower.
DO NOT use a valve with a loose washer plate (jumper) as this can lead to a build up of static pressure.
- 5. Use copper pipe for all plumbing.
- 6. **DO NOT** apply excessive force to plumbing connections; always provide mechanical support when making plumbing connections. Any soldered joints should be made before connecting the shower. Pipework must be rigidly supported and avoid any strain on the

connections.

- 7. Pipework dead-legs should be kept to a minimum.
- 8. The position of the shower unit and hose retaining ring must provide a minimum air gap of 25mm between the showerhead and the spill over level of any bath, shower tray or basin. There must be a minimum distance of 30mm between the showerhead and the spill over lever of any toilet, bidet or other appliance with a Fluid Category 5 backflow risk.



Note! There will be occasions when the hose retaining ring will not provide a suitable solution for Fluid Category 3 installations, in these instances an outlet double checkvalve must be fitted, this will increase the required supply pressure typically by 10 kPa (0.1 bar). Double checkvalves fitted in the inlet supply to the appliance cause a pressure build up, which can affect the maximum static inlet pressure for the appliance and must not be fitted. For Fluid category 5 double checkvalves are not suitable.

- 9. Position the shower unit where the controls are at a convenient height for the user. Position the showerhead so that the water sprays in line with the bath or across the opening of a shower cubicle. The installation must not cause the shower hose to be kinked during normal use or obstruct the use of the control handles.
- 10. The showerhead should be positioned so that it discharges down the centre line of the bath or across the opening of a shower cubicle.
- 11. Only use the inlet connections supplied with the product. **DO NOT** use any other type of fittings.
- 12. **DO NOT** overtighten pipe connections or screws as product damage may occur.

Installation of the Bar Valve

The shower unit should be installed where it will be supported by fixed pipework.

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Fit the plastic pipe guide over the inlet pipes. Level the pipe guide and secure to the wall to hold in position. **Leave the guide in place and finish the wall.**

Drill the fixing holes.

Install the wall plugs.

Install the fixing screws.

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A flow regulator may be required for installation on high pressure systems (above 0.5bar). Two 6L/min flow regulators are provided, please refer to the flow regulator pack for more information.

Connecting the Shower Hose

- 9. The shower hose has slightly different sized conical connections at each end (the smaller diameter / longer length conical is identified with a **Red** protective cover or **White** label).
Fit the end with the red cover or white label to the showerhead, fit the clear end to the shower unit.