

### **BuildCert Certification Scheme**

# Information to be Included Within "The Information and Maintenance" Documentation

Issue: 25/6/09

The Secretary of the Scheme has prepared this list after consultation with the members of Technical Assessment Panel and with the approval of the members of the BuildCert TAP liaison Group and the Industry Forum.

- 1. Operating conditions of use, pressure & temperature (hot & cold) Table 1 in BS EN 1111 and or 1287.
- 2. Statement that valves operating outside these conditions of use cannot be guaranteed to operate as Type 2 valves.
- 3. Its designation of use L.P if tested against BS EN 1287, H.P if tested against BS EN 1111 and H.P and L.P if tested against both documents.
- 4. Valves approved for designation of use H.P only, must state: If a water supply is fed by gravity then the supply pressure should be verified to ensure the conditions of use are appropriate for the valve.
- 5. Recommended maximum set mixed water temperatures for applications of use, including the recommended safe water temperatures for children.
- 6. Information upon the installation of the valve, this will include:
  - Requirements for valve accessibility to commission and maintain the valve
  - Maintenance instructions
  - If isolation valves are not provided then a statement is required that states
    'The fitting of isolation valves is required' and identify preferred location.
  - If strainers are not provided then a statement is required that states 'The fitting of strainers is recommended' and identify preferred location
- 7. Information upon the commissioning and testing of the valve, this will include:
  - Method of adjusting the mixed water temperature
  - Method for commissioning the valve.
  - Statement that 'the mixed water temperature at the terminal fitting should never exceed 46°C'
  - Method and frequency (1 year maximum) for performing the In-service tests
  - Information on residual water flow during the cold water supply isolation test
- 8. Reference be made to the 'Water Supply (Water Fittings) Regulations 1999.

9. Valves approved for low pressure tub/bath applications that only achieve the minimum flowrate requirement at a supply pressure of 0.2 bar must indicate that the minimum supply pressure for tub/bath applications is 0.2 bar.

# **I&M Template**

The BuildCert TMV Scheme has produced this I&M template that can be used by license holders to fulfil there requirements of information that must be included within the Installation and Maintenance (I&M) documentation supplied with the TMV2 approved valve.

Information highlighted in blue must be included within the I&M document.

## **Conditions of use for Type 2 valves**

	High Pressure	Low Pressure
Maximum Static Pressure (Bar)	10	10
Flow Pressure, Hot & Cold (Bar)	0.5 to 5	0.1 to 1
Hot Supply Temperature (°C)	55 to 65	55 to 65
Cold Supply Temperature (°C)	Equal to or Less than 25	Equal to or less than 25

NOTE: Valves operating outside these conditions cannot be guaranteed by the Scheme to operate as Type 2 valves.

The valves designation of use, LP if tested against BS EN 1287, HP if tested against BS EN 1111 and HP & LP if tested against both standards.

Valves approved for designation of use H.P only, must state: - If a water supply is fed by gravity then the supply pressure should be verified to ensure the conditions of use are appropriate for the valve.

Valves approved for designation of use LP Tub applications that only achieve the minimum flowrate requirement at a supply pressure of 0.2 bar must indicate that the minimum supply pressure for LP Tub application is 0.2 bar.

#### Recommended outlet temperatures

The BuildCert TMV scheme recommends the following set maximum mixed water outlet temperatures for use in all premises:

44°C for bath fill but see notes below;

41°C for showers;

41°C for washbasins;

38°C for bidets.

The mixed water temperatures must never exceed 46°C.

The maximum mixed water temperature can be 2°C above the recommended maximum set outlet temperatures.

#### Note:

46°C is the maximum mixed water temperature from the bath tap. The maximum temperature takes account of the allowable temperature tolerances inherent in thermostatic mixing valves and temperature losses in metal baths.

# 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.

If isolation valves are not provided then a statement is required that states: - The fitting of isolation valves is required as close as is practicable to the water supply inlets of the thermostatic mixing valve.

If strainers are not provided then a statement is required that states: - The fitting of strainers is recommended as close as is practicable to the water supply inlets of the thermostatic mixing valve.

# **Commissioning notes for Thermostatic Mixing Valves.**

The first step in commissioning a thermostatic mixing valve is to check the following:

- 1. The designation of the thermostatic mixing valve matches the application.
- 2. The supply pressures are within the valves operating range.
- 3. The supply temperatures are within the valves operating range.
- 4. Isolating valves (and strainers preferred) are provided.

If all these conditions are met, proceed to set the temperature as stipulated in the manufacturer installation instructions.

Method for adjusting the mixed water temperature with a note that states: - The mixed water temperature at the terminal fitting must never exceed 46°C.

It is a requirement that all TMV2 approved valves shall be verified against the original set temperature results once a year. When commissioning/testing is due the following performance checks shall be carried out.

Measure the mixed water temperature at the outlet.

Carry out the cold water supply isolation test by isolating the cold water supply to the TMV, wait for five seconds if water is still flowing check that the temperature is below 46°C.

If there is no significant change to the set outlet temperature (±2°C or less change from the original settings) and the fail-safe shut off is functioning, then the valve is working correctly and no further service work is required.

#### **Notes**

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.

The installation of thermostatic mixing valves must comply with the requirements of the Water Supply (Water Fittings) Regulations 1999.