

## **THERMOSTATIC MIXING VALVES (TMVs) MAINTENANCE REQUIREMENTS**

**Thermostatic Mixing Valves (TMVs) are needed wherever scalding is a risk, but they cannot be fitted and forgotten**

TMVs are usually fitted following a risk assessment identifies outlets where skin burns are a risk to users due to vulnerabilities including age and infirmity. As well as carrying out checks to make sure that the TMV is working after installation, regular maintenance is required.

### **LEGIONELLA CONTROL – HSG274**

In order to reduce the risks posed by Legionella, the strainers or filters should be inspected, cleaned, descaled and disinfected annually, or at a frequency defined by the risk assessment. Manufacturers' guidance should be taken into account.

### **SERVICING AND MAINTENANCE**

TMVs should be annually temperature and failsafe checked to guard against valve failure. The annual failsafe check ensures that in the event of cold water failure the valve shuts off. Servicing will often be carried out at the same time as descaling and disinfection, or more often depending on manufacturer's advice and local water supply. Internal components will be inspected, cleaned and replaced as necessary and the unit re-calibrated.

### **REGULAR CHECKS BY MAINTENANCE STAFF**

It is not sufficient to rely on servicing, and every hot water temperature from taps in basins and baths should be manually checked by maintenance staff. This is often carried out weekly.

Checking temperatures for scalding is more frequent and extensive than the monitoring of temperatures for Legionella control. For Legionella control, hot and cold water temperatures should be checked monthly from sentinel outlets and, over the course of the year, from all outlets. This is in order to identify any

outlets that, due to plumbing design or mechanical faults such as clogged pipes, do not reach the required temperatures.

All temperature checks and servicing must be recorded, even when no faults are identified, and records retained for 5 years. Records should include the staff member or engineer who carried out the work, the date, faults identified and how they were rectified.

### **MAXIMUM OUTLET TEMPERATURES**

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

**46°C for bath fill** , but note this is the temperature of the running water, not a safe bathing temperature (37.0-37.5°C is recommended for most adults and children)

**41°C for showers**

**41°C for washbasins**

**38°C for bidets.**

Temperatures should never exceed 46°C.

### **FURTHER INFORMATION**

Preventing hot water scalding in bathrooms using TMVs, IP 14/03 Building Research Establishment

Guide to commissioning, in-service inspection, in-service test and frequency of testing Thermostatic Mixing Valves (TMV) for use in health and social care establishments as Type 3 valves (TMV3 approved).

Health Technical Memorandum 04-01: Supplement - Performance  
Specification D 08: thermostatic mixing valves (healthcare premises)