Hot & Cold Mains Water Feed Recommissioning Guide April 2020 Rev 1.0

This document is intended as a guide to assist with the recommissioning process for mains hot and cold water supplies following a period of hibernation.

We recommend that the following steps be performed at the earliest opportunity, to allow sufficient time to address any unexpected issues that may arise.

Estimated Duration: 30 minutes

Ensure that appropriate Personal Protective Equipment (PPE) is used

The following checks/tests should be carried out as described in the table below (Ref HTM 01-05). Additional checks/tests may be recommended by your local water authority or CQC. Please contact your local office for further details.

Table 1 Tests for temperature performance

Frequency	Check	Cold water	Hot water	Notes
Monthly	† Sentinel outlets	The water temperature should equilibrate below 20°C after draw-off for 2 minutes [1,2]	The water temperature should equilibrate to at least 50°C after draw-off for 1 minute [3]	These measurements are applicable to non-mixed outlets only
Monthly	Inlets to sentinel TMVs	Temperatures as above	Temperatures as above	Measurements can be made by means of surface temperature probes
Monthly	Water leaving and returning to calorifier			Also to be monitored continuously by BMS
6-monthly	In-coming cold water at inlet to building – in the winter and in the summer	The water should be below 20°C [2]		Also to be continuously monitored by BMS
Annually	‡ Representative outlets	The water temperature should equilibrate below 20°C after draw-off for 2 minutes [1,2]	The water temperature should equilibrate to at least 50°C after draw-off for 1 minute [3]	

Notes:

† Sentinel outlets are normally those that – on a hot water service – are the first and last outlets on a recirculating system. On cold water systems (or non-recirculating hot water systems), they are the closest and furthermost from the storage tank (or water heater). The choice of sentinel taps should also include other outlets that are considered to represent a particular risk, for example those installed in accommodation in which particularly susceptible patients are treated, or others identified in the risk assessment and temperature mapping exercise as having the least satisfactory temperature performance.

‡ Representative outlets include conventional and mixed-temperature taps; 20% of the total number installed throughout the premises would be tested annually on a rotational basis: that is, all taps checked every five years.

1. The Health & Safety Commission's (2000) Approved Code of Practice L8 permits a period of two minutes to achieve an equilibrium temperature below 20°C. Achieving this minimum requirement would be indicative of an exceptionally underutilised water system. (At a typical flow to a wash-hand basin of 4.5 L/m, 2 minutes to achieve temperature would indicate a 50 m dead-leg of 15 mm pipe.)

2. The Water Supply (Water Quality) Regulations 2000 permit water undertakers to supply water to premises at temperatures up to 25°C. In practice, the water temperature is likely to be below this maximum value, typically below 10°C in winter and 20°C in summer. If, during prolonged periods of high environmental temperature, the water temperature starts to exceed 20°C, the water undertaker should be asked to see whether remedial action could be undertaken. Within the curtilage of the premises, the aim should be to ensure that the temperature difference between the in-coming supply and most distal parts of the distribution system is below 2°C.

3. The Health & Safety Commission's (2000) Approved Code of Practice L8 permits a period of 1 minute to achieve an equilibrium temperature of 50°C. A minimum of 55°C may be required for the operation of suitable mixing devices required to provide "safe" hot water at the upper limit of the recommended range. Hot water at 55°C is required in many cases for reasons of food hygiene or decontamination requirements, for example in kitchens and sluice rooms etc. In a properly balanced hot water circulating system, with the circulation taken close to the draw-off point, achieving temperature should be virtually instantaneous. (At a typical flow to a wash-hand basin of 4.5 L/m, 1 minute to achieve temperature would indicate a 25 m dead-leg of 15 mm pipe.)