

Warm Water Ablution Systems

Last Issue Date: 07/12/2020		Type Of Service				
Activity		A	B	C	D	E
1	This TDS excludes activities for thermostatic mixing valves and tempering valves. For these components generic TDS PL39: Thermostatic Mixing Valves and Tempering Valves or PL73: Electronic Thermostatic Mixing Valve are to be scheduled.					
2	All warm water outlets that are not frequently used (1 week or more between use) should be flushed weekly at full flow for at least 15 seconds, and all outlets on individual branches should be flushed simultaneously.	Y	Y	Y	Y	Y
3	Ensure that no rooms have changed purpose e.g. to storage with unused outlets - If found ensure weekly testing continues to be undertaken. Note the change of use & room name/s & advise the Facility Manager.	Y	Y	Y	Y	Y
4	Measure and record the water temperature from outlets. (Refer to the site system plan to help in locating them). Inform the site of any outlet/s where the temperature of the water is inappropriate for its use. Note: Temperature range should be 40 to 45 degC.			Y	Y	Y
5	Measure and record in the log book / customer service report the water temperature in the storage tank/s and from the return loop for: a) Hot water loops a minimum of 63 degC. b) Dedicated warm water loops no higher than 45 degC. Do not increase water temperatures where this can result in scalding temperatures from any outlet. Report systems with non-compliances or concerns immediately to the Facility Manager. Refer to the Special Comments.		Y	Y	Y	Y
6	Check the cleanliness and mechanical condition of the system by inspecting the water flushed into the basin & checking the turbidity. Refer Special Comments.		Y	Y	Y	Y
7	Thoroughly clean the system if inspection reveals sludge, slime, scale, foam, rust, dirt or other impurities or foreign material present in the system.					Y
8	If fitted, check the safety tray & overflow for stagnant water & non-operating drains.		Y	Y	Y	Y
9	Water leak sensor shut-off valve, if installed: a) Check the condition of the valve, sensor and cabling. b) Test the valve in accordance with the manufacturer's instructions. c) Check the visual and/or audible alarms as applicable. d) Replace the batteries annually or when the battery alarm is activated.			Y	Y	Y
10	Check that the circulation pump is operational and flow is apparent.			Y	Y	Y
11	Check and purge air locks from the circulating pump, air release valves and general system. If applicable, check the pump strainer.			Y	Y	Y
12	Obtain 2 water samples from different parts of each warm water loop as follows: a) One being the furthest outlet from the water heater. b) The second sample from a random location. Test both samples in a NATA certified laboratory for Heterotrophic Colony Count and Legionella. If a sample returns positive, the local council is to be notified within 24			Y	Y	Y

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	hours and the Facility Manager immediately. Note: The testing frequency may need to be increased depending on site requirements and historic positive results.					
13	MAINS PRESSURE HOT WATER STORAGE TANK/S: a) Undertake a visual inspection. b) Check for water leaks at fittings. c) Ensure electrical cables are secure and undamaged. d) Check operation of the hot and cold-water expansion control valves. e) Ensure relief drains are not touching the tundish and an air gap is present.			Y	Y	Y
14	MAINS PRESSURE HOT WATER STORAGE TANK/S: Replace the sacrificial anode and note the date with a permanent marker on the external casing of the heater.					Y
15	HEAT EXCHANGE STORAGE TANK/S - if applicable undertake the following: Visual Inspection: a) Check shell for leaks. b) Check that all connections are tight and not corroded. c) Check the insulation and replace if deteriorated. Expansion Tank: a) Adjust the float valve to maintain a water level below overflow, with an allowance for expansion. b) Ensure the float valve shuts off completely. Water Treatment: a) Drain 250mL of treated water from the service valve on the main tank. b) Ensure the pH is within 8.5 - 9.0 range. Performance Check: a) Check the water temperature in the tank is within 3 degC for the warm water thermostat setting and 7 degC for the hot water thermostat setting.				Y	Y
16	HEAT EXCHANGE STORAGE TANK/S - if applicable undertake the following: Check the heat exchanger and flush out if fouled.					Y
17	GAS BURNER UNIT/S - INTERNAL - if applicable undertake the following: Visual inspection: a) Check and clear if necessary the air intake and flue. b) Check the heat exchanger for signs of corrosion, debris or obstructions and clear if required. c) Check the burner blades for any foreign matter or build-up & clear if required. d) Check that the pump is set for the required operation. e) Check for any gas leaks with soapy solution and rectify if necessary. f) Check the operation of the flow switch and clean if necessary. Performance: a) Check the performance of the safety relief valves. Check the burner rating by checking the burner gas operating pressure, adjust the gas pressure if required.				Y	Y
18	GAS BURNER UNIT/S - EXTERNAL - if applicable:				Y	Y

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	Visual inspection: a) Inspect the air inlet and flue for debris and clear if necessary. b) Check the heat exchanger for signs of corrosion, debris or obstructions & clear if necessary. c) Check the burner blades for foreign matter or build-ups and clear if required. d) Check for gas leaks and rectify if necessary. Performance: a) Check the operation of the safety relief valves. Check the burner rating by checking the burner gas operating pressure, adjust the gas pressure if required.					
19	HEAT PUMP/S - if applicable: Visual inspection: a) Check the cleanliness and mechanical condition of system. b) Check the water heater for damage or leaks. c) Check the condition and operation of strainer / filter. d) Check all electrical connections. Performance: a) Check the performance of the safety relief valves. b) Check the refrigeration system and clean the evaporator.				Y	Y
20	HEAT PUMP/S - if applicable: a) Replace the sacrificial anode and note the date with a permanent marker on the external casing of the heater. b) Thoroughly clean the system if there's sludge, slime, scale, foam or rust.					Y
21	DECONTAMINATION (Mandatory, frequency at least 6 monthly): If the water heater has sufficient storage use the Pasteurisation method by increasing the systems water temperature and flushing outlets with water from the storage tank for 10 minutes with water at 60 degC or for 5 minutes with water at 70 degC. Allow the water to flow from each outlet starting from the most distant outlet from the water heater and working back. If the water heater has insufficient capacity to achieve the above temperatures, use the Chlorination method: 1. Add chlorine to the system, sufficient to produce a minimum free chlorine residual of 1-2 mg/L at all outlets. 2. Each outlet is to operate for at least 5 minutes, starting at the most distant point from the heater and working back. 3. Flush each outlet in turn until chlorine is flushed throughout all system outlets. Chlorine concentration to be measured by a DPD test kit or similar at the most distant outlet and at a few chosen outlets throughout the system. For an occupied / operational site do not exceed 5.0ppm total chlorine. NOTE: - The number of outlets tested will depend on the size & configuration of the system. - All outlets of the system are to be flushed individually, however all outlets on individual branches should be flushed simultaneously whilst maintaining the set			Y	Y	Y

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	residual chlorine level.					
22	Record the maintenance results in the log book / customer service report. Refer to the Special Comments for notes on registration and annual inspection.	Y	Y	Y	Y	Y

Special Comments and Technical Data

A SERVICE WEEKLY (MAY BE UNDERTAKEN BY SITE)

B SERVICE MONTHLY

C SERVICE 6 MONTHLY

D SERVICE ANNUAL

E SERVICE:

- CLEANING TO BE UNDERTAKEN WHEN REQUIRED

- REPLACE THE SACRIFICIAL ANODE WHEN RECOMMENDED BY THE MANUFACTURER FOR THAT TYPE & MODEL OR REQUIRED.

THIS TDS EXCLUDES ACTIVITIES FOR THERMOSTATIC MIXING VALVES AND TEMPERING VALVES. FOR THE MAINTENANCE OF THEM REFER TO GENERIC TDS PL39: THERMOSTATIC MIXING VALVES AND TEMPERING VALVES OR PL73: ELECTRONIC THERMOSTATIC MIXING VALVE ONE OF WHICH MUST BE SCHEDULED IN CONJUNCTION WITH THIS TDS.

SERVICE ACTIVITIES AND FREQUENCIES MAY VARY DEPENDING ON MANUFACTURER'S REQUIREMENTS AND SITE CONDITIONS INCLUDING WATER QUALITY.

INFORM THE FMSP IF THE SYSTEM HAS A CIRCULATING PUMP.

- FOR THE ANNUAL INSPECTION (INDEPENDENT AUDIT) OF THE SYSTEM USE PL72.

- FOR THE REGISTRATION OF THE SYSTEM USE PL56.

APPLICABLE LEGISLATION, STANDARDS AND GUIDELINES:

PUBLIC HEALTH (LEGIONELLA) REGULATIONS, THE OTR AND SA HEALTH, THE GUIDELINES FOR THE CONTROL OF LEGIONELLA (SA HEALTH) and enHEALTH GUIDELINES FOR LEGIONELLA CONTROL. AS3666.2, AS3666.3, SAA/SNZ HB32, AS3896, AS4276.3.2, AS3500.1 & AS3500.4.

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