Heating Systems

- Diagnosing Heating Problems
- Under Mezzanine - Heat Control

Diagnosing Heating Problems

Overview

The heating systems for the buildings are 2 separate systems. Each unit consists of:

- Electric Boiler – Operated by a power switch on/off
- Pump – Triggered by the Boiler when heat is called from the thermostat
- Pressure Tank with taps – The pressure gauge should be a 1 bar.
- Thermostat – switches the boiler on and off as heat is required (main office at kitchen/operations office).
- Radiators – emit heat
- Pipes – used to create a loop of water to and from the boiler to the radiators.
- Electronic Wifi Valves (main office, upstairs offices only)
- Controller – This should be set to “ALL DAY” as on/off is controlled by the thermostat or wifi valves

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Battery Failures:

- Wifi Valves
- Thermostats

Heating Not Working (radiators not heating) Checks:

1. Thermostat has batteries - if they are dead then no heat will be called from the boiler
2. Days and time are correct on the thermostat.
3. Demand Heat icon is illuminated on the thermostat (little flame).
4. Controller is set to “ALL DAY”.
5. Boiler is switched on and illuminated with “call”
6. Pump is operational (test using a screw driver by placing this on the pump casing and placing the other end of the screw driver to your ear – a humming noise will indicate the pump is operational). The pump will only operate if the heating has be called from the thermostat.
7. Radiator valves are set to 2 ½

Still not working:

- Power down the boiler and leave for 20 minutes as the thermal overload switch may have been tripped.

Under Mezzanine - Heat Control

Set Up:

The Electric Boiler is on permanently (unless switched off in the summer) but not always producing hot water, this is controlled by the thermostat.

Timer/Controller is set to permanently "on" -

Thermostat - this controls the on/off of the boiler to produce hot water for the radiators under the following circumstances:

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1. Too hot - switches boiler off
2. Too cold - switches the boiler off
3. Time of day to switch off
4. Time of day to switch on
5. Days to switch on
6. Days to switch off.

PROGRAMMING THE THERMOSTAT

To control when the area is to be heated the Thermostat must be programmed.

Flomasta Programmable thermostat.pdf

Video:

Overview of programmable thermostats:

https://www.youtube.com/watch?v=O3ECpfj-ZWU