Operation of your radiator system

In the vast majority of installs the heat source (or boiler) requires very little interaction from you as the end user once commissioned by the installer, other than perhaps rarely topping up the system and adjusting the temperature dial.

Principal of operation

Basically your heating system contains hot water produced by the boiler, a pump is used to circulate this hot water around the radiator circuits, thus heating your rooms. This heat is controlled by three thermostats, a boiler thermostat, a room thermostat/programmer and individual radiator thermostats (TRV's). We will cover these briefly below but please view our PDF library at www.heatiq.co.nz for more in depth information.

In the next sections you may also have to refer to your individual boiler and thermostat instructions that were left by your installer, if you don't have them, ask for them or download them from our website.

Boiler Thermostat-:

This could either be a simple dial or a setting that has to be made in a menu on the boiler itself. This temperature sets the maximum output temperature to your radiator system. Our radiator systems are designed to run at 75degC, so your boiler temperature should be set at around 75-80degC to allow for system heat loss.

Room Thermostat-:

There are many different controls with an array of features (you will need to refer to the individual control instructions). Your familiarity and interaction with The Room Thermostat/Programmer is essential, it will vastly improve the efficiency of your heating system.

Radiators respond very rapidly so there is no need for them to be on constantly most people will set the room thermostat/programmer to provide heat at given times, Typically in the morning and again in the late afternoon and evening periods.

Eg -: 8 AM to 10 AM temperature (say 21deg) - 10.01 AM to 3.30 PM setback (say at 15 Deg – so seldom active or you can manually turn up with temporary override) - 3.30 to 10.30PM temperature (21deg) - 10.31PM to 4 AM Set back the temperature to around 10 degrees or lower.

The above are based on air temperature readings at the controller, sometimes the controller position may require temperature settings to be adjusted for the best overall house temperature.

Once you have established the time control settings that best suit your needs you will rarely need to re program the controller.

Most controllers provide various options like override temporarily, override permanently or to place them in off mode with the settings memorised. You should familiarise yourself with these features to get better efficiency.

Thermostatic Radiator Valves-:

Thermostatic radiator valves (or TRV's) are used to give some room by room tempering control to a system. They are typically marked with Off/Frost/1/2/3/4/5. The TRV heads are Wax or liquid filled and this fill expands as the radiator warms up shutting or restricting flow through the radiator. This may result in fluctuating temperature at the radiator or the radiator being off as the room warms up. The set points 1-5 do not equate to specific room temperatures as the room size etc. would alter this. We recommend you adjust each TRV until you find the actual set point you desire in any room but in general we Recommend 4-5 in living areas and usually around 3 in bedrooms or as low as 1 or 2 in a room you may not be using so this room is aired but not necessarily heated.

Just a few handy tips-:

- **If you are away for a day or two, put your system in override to say 10 Degrees to keep some heat if the temperature becomes exceptionally cold.**
- **Use temporary override to turn the system on at the weekend knowing it will return to the pre-set timing at the next switching point.**
- **A Wifi programmer is more efficient as it encourages your interaction through an App on your phone.**
- **Using the timer and override features of your controller will save you considerable amounts on your energy bill.**