Heat iQ
Home heating solutions

Operation of your HP under-floor system

Principal of operation

Your heating system circulates hot water produced by the HP around the underfloor heating loops buried in the floor slab, heating your rooms from the floor up. Your Zone control thermostats control the heat to the given areas with the integral appliance and manifold controlling the delivery temperature.

Heat Pump controller

An output temperature of between 40 & 45 degrees is typically required to an underfloor system. The floor manifold will have blending control to allow finer control to the design parameters of a given system. **This should have been set up by your installer when the system is commissioned**. You should not need to change any settings on the appliance or manifold, doing so may adversely affect the performance of the whole system.

Room or zone Thermostats

These ae the controls you use to manage your system, there are many different control types with an array of features (you will need to refer to your individual control instructions provided). **Familiarity and interaction with Room Thermostat/Programmers will vastly improve the efficiency of your heating system.**

Underfloor heating should maintain heat consistently through what are known as comfort and setback points. For periods when heat is most required the floor area should be at a (comfort) output. When heat is least required the control should take the temperature down to a (setback) temperature, Say" during the night or periods in the day when you are not typically at home. We recommend setback be between 2 and 3 degrees back from the comfort setting for the zone.

We recommend and specify only zone controls that work either on the air temperature of the room or the temperature of the floor slab.

This is because simple air sensing control in some instances can be too heavily influenced by the affects of passive heat from the sun during the daytime this can result in floors being off for prolonged period which may leave rooms struggling to heat when the sun descends.

If you have a house or specific areas orientated such that there is a lot of passive gain we recommend the use of floor sensing when setting your controls.

On the reverse of this sheet are some suggested setting defaults for both air and floor sensing
As every house differs this can only be a guide so treat it as a starting point from which you can make adjustments

See over before starting.

You will need to refer to the instructions for your specific control programmer for the specifics of set up, but the following will guide you.

These set temperatures may need to be different to those given to suit your specific requirements.

An example of settings for a primary living area using air sensing

Assuming you get up around 8 Am from 6am set to (comfort at 22) - if you go out or are active in the daytime you might (setback to 20) at say 10 AM then at 3 PM as the day cools go back to (comfort at 22) and at 10PM (setback at 20).

An example for a bedroom using air sensing

You might set (comfort at 20) at 5 AM ready for you rising at 7AM then at 8.30 AM (setback at 18) until 4 PM when you go back to (comfort at 20) and at 10pm drop to (setback at 17).

Using the Floor sensor as the control

(Strongly recommended for rooms with sunny aspects and bathrooms.)
Follow the same principal as above, but you will need to use higher control temperatures, to achieve the same feel. We suggest a starting point of 26 as the comfort setting and 24 as the setback point. If this is too low or too high for you drop the temperatures by just one degree and allow 24 hours before making any further adjustments. Do not apply a daytime set back

Tip : Don't set all your controllers with exactly the same times Stagger the times a little
just a 10 minute difference will reduces peak loads on the Heat pump making it more efficient.

Tip : Most controllers provide options to permanently lock them in comfort mode or setback mode, override them temporarily or permanently, or place them in off mode with the settings memorised. You should familiarise yourself with these features as their use will result in greater system efficiency.

- If you are away for extended periods of a week or longer, override to permanent setback.
- Leave rooms not in use or that you want to be aired at a lower setback.

Tip: when you shut the system down completely in the summer months turn one control on to call for heat once in a while for 5 minutes, this helps prevent pumps and motor valves seizing through lack of use.

We hope you enjoy many years of comfort from your system. Thank you for choosing our products. **Please remember to have your system serviced.**

Installers Use this as a guide for initial set up, but please leave with the end user.