



GET THE MOST
OUT OF YOUR



HEATING
SYSTEM

Comfort • Efficiency • Reliability • Safety

YOUR GUIDE TO GETTING THE MOST FROM YOUR HEATING AND HOT WATER SYSTEM.

This may surprise you a little. More than 75% of your household energy consumption is used to provide heating and hot water. In fact, in many cases it can easily account for much more.

So, you'll probably agree, getting the most from your heating system is essential if you want to keep your heating bill as low as possible - whilst maintaining a nice level of comfort in all areas of your home.

Following recent legislation and with the increasing importance of energy efficiency, Aire Serv want to help you make the best decisions to not only help the environment but just as importantly, save you cash.

Here's the thing - the most efficient way to run your heating system is through the proper use of heating controls.

So it's really important you consider the following and ask yourself:

- When you want to be warm
- Where you want to be warm
- How warm you want to be

If you have a hot water cylinder, you also need to choose when you want hot water and how hot it should be. Then let the controls do the rest for you.

WHEN DO YOU WANT TO BE WARM?

Normally, allow an hour at least to let the house warm up. If you get up at 7am and you want your home to be warm for when you step out of bed, time the heating to come on at 6am.

In the winter it could take a lot longer than an hour to warm your home to a nice level. Make sure to bear that in mind. You need to also decide when you want the heating period to finish (when you leave the house) and then when it comes on again later.

Here's a rule of thumb: your heating system is designed to raise the temperature of your home by 1 degree centigrade, every twenty minutes. So, if the temperature drops dramatically over night, the heating system has a lot of work to do to get to your desired temperature.

And if your home maintains an internal temperature of around 18 degrees between heating 'on' periods, then an hour should suffice.

The boiler won't be on for the whole of this 'on' period. It will go on at intervals in accordance to the boiler controls settings. That's normal.

There are a number of choices for timing your heating system. Some timer programs allow you two heating periods a day and others three.

Some use the same program every day and others use different times for different days. This can be particularly useful if you're at home some days and not others. Or you like to get up later at the weekends.

New building regulations state that if you're having a new heating system you need to have independent timing for heating and hot water.

HOW WARM DO YOU WANT IT TO BE?

Most homeowners set their heating thermostats to around 20/21 degrees centigrade. That's where most people find a comfortable level. You may differ.

Room thermostats are the temperature controllers for the heating system. If you have two thermostats then one thermostat will be responsible for one part of the house and then the second thermostat for another part.

To find a temperature which suits you best, do the following;

Set the thermostat low (around 18 degrees). After a whole day has passed, turn the thermostat setting up by just one degree if you're still finding your home chilly. But only adjust the setting by only one degree each day until you're warm enough.

People only have three temperatures they can sense; too hot, too cold and then the comfort band in between. No matter where you are in that comfort band, you don't notice any difference in temperature.

So don't start with the setting too high. If you do it this way round, then you run the risk of your heating costing you 10% extra to run.

Whenever the temperature in the room falls below the set point of the thermostat it will switch on.

If the timing is also on then the boiler will fire up. The boiler will only fire when the thermostat calls for heat during an on period at the programmer.

WHICH ROOMS WILL BE HEATED?

If all your heating system is in one large zone, with a single thermostat, all rooms will heat up together.

Only two things can change this.

Firstly, the thermostatic radiator valve. Its design prevents rooms from being too warm. As room air temperatures rise, individual radiators will close down the flow of water to the radiator. Adjusting the setting on a radiator valve changes the target air temperature - not necessarily the radiator temperature.

And it's quite possible to have two rooms at opposite ends of the home, each with a thermostatic radiator valve set to the same target temperature, but with the actual temperature of the radiator quite different.

Here's why this is absolutely normal:

If a room benefits from solar gain from the sun, the radiator has less work to do to reach its required target temperature. The radiator valve can sense this, and reduces the flow of hot water to the radiator so it doesn't overheat the room.

At the opposite end of the house, there may be no solar gain from the sun, so the full flow of water is required to the radiator. One radiator may be significantly hotter than the other - but it doesn't matter. After all, we are only interested in the air temperature of the room.

But do remember - the radiator thermostatic valve cannot control the firing of the boiler - there's no electrical connection to switch it off. Only the room thermostat or programmer can do that.

If your system has no thermostat - only thermostatic radiator valves - you'll be overpaying for your heating bills for sure.

Installing a thermostat will save you around 10%, maybe even more. Combining a room thermostat and thermostatic radiator valves will save you considerably more.

SYSTEM BALANCING

Another factor affecting heat distribution is system balancing.

If most of the house is warm but an area remains too cool, it's probably because the system isn't properly balanced.

Each radiator is like the end of a loop of pipework - out from the boiler, and back again. If one loop is longer, it has a greater resistance to the flow of hot water, so less water goes through it.

The pipework needs adjusting to even out the rate at which the water flows and rooms warm up.

This is a job for your Aire Serv technician.

MULTI - ZONES

If your heating is multi - zoned (has more than one room thermostat) then different parts of the home can be switched off independently.

Discuss with your technician to decide which areas are best to be linked together into zones.

HOT WATER: WHEN WILL IT COME ON?

Just like the heating, set the time you want the cylinder to be heated up. Once the cylinder is hot it will stay full of hot water as long as its lagged or insulated - or, of course, the water is used. It will only be reheated during hot water 'on' programmer setting periods.

Allow at least 45 minutes to reheat a cold cylinder completely.

HOW WARM WILL IT BE?

Usually, the cylinder thermostat is set somewhere between 55 to 65 degrees centigrade. This is a safe temperature in which all bacteria in the water are killed.

However, it's still very hot water and must be treated with care. To store the water at an even higher temperature is likely to waste energy and cost you more in the long run.

Your technician will normally adjust the cylinder thermostat before he leaves - its normally better to leave this control alone as it only stops the hot water from overheating. Please don't be tempted to lower the cylinder thermostat target temperature. It may seem wasteful that it is so hot. But it's absolutely necessary.

The cylinder will only reheat after a substantial amount of hot water has been drawn off. The cylinder will refill with cold water from the supply causing the cylinder thermostat to call for heat. When the programmer next allows an 'on' period the cylinder will be reheated from the boiler.

This is the most cost effective way of heating a cylinder. There is normally an immersion heater too. This works like a huge electric kettle and costs a lot to run. Use it only if your boiler develops a fault.

HOT WATER FROM COMBINATION BOILERS

When will it come on?

If you have a combi boiler, usually you'll have no stored hot water.

Whenever you turn on the hot tap the heating is disabled and the boiler heats water directly and instantly, so that it can go straight to your taps.

How hot will it be?

Normally, there's a hot water temperature adjustment on the front of the combi boiler - but in practice, the slower you run the tap the hotter the water will become. Slowing the flow of water down allows the incoming water to spend longer in the boiler being heated and comes out hotter.

This is why a bath tap sometimes runs cooler than a basin tap. The bath tap flows faster when opened fully than a basin tap does.

Running another tap will affect the temperature of the water already running as it increases overall flow.

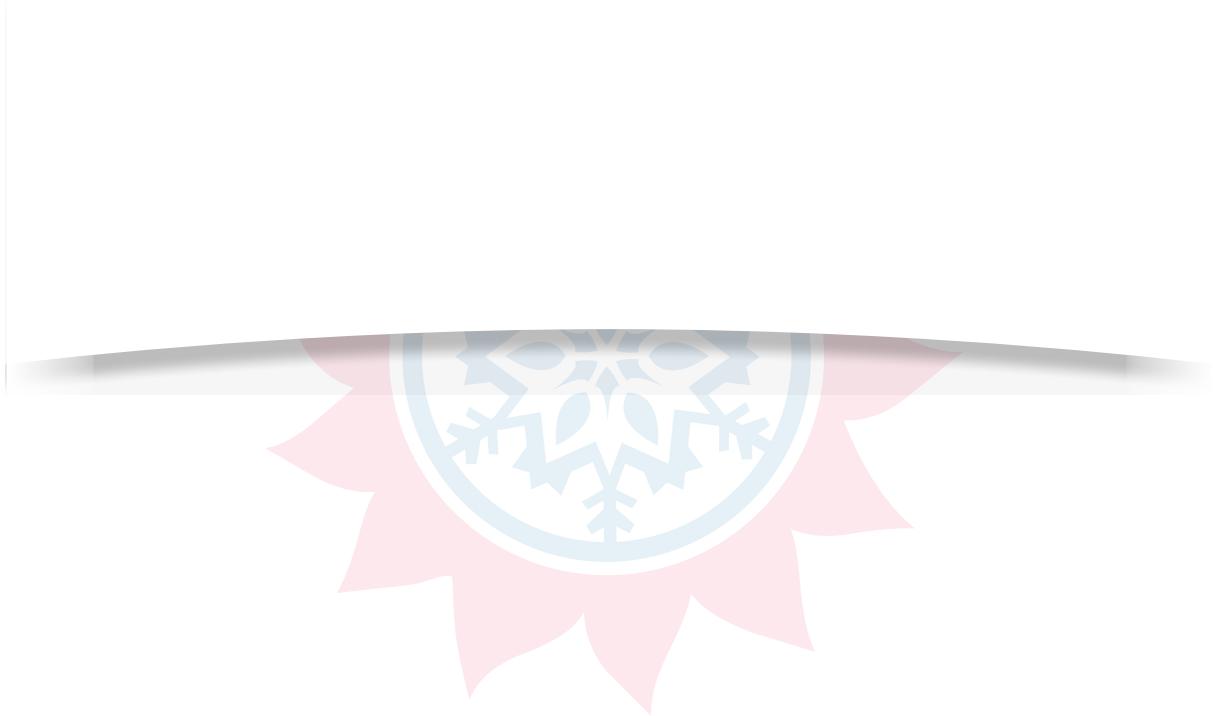
So in summary :

- Decide when you want hot water - and set these times at the programmer
- Decide how warm you want to be and set this temperature on the room thermostat (don't forget - set it low then turn it up one degree a day until you're just warm enough for the most economical operation).
- Adjust radiator thermostatic valves to mid setting then leave them to work. Only adjust them if the room is too warm
- There is no need to alter the cylinder thermostat

If you have any further questions, feel free to ask anytime.

And if you feel your present controls are inadequate or unsuitable, or feel your home is uncomfortable or your heating bill too high, why not ask your Aire Serv technician to provide you with a permanent cost effective solution?

You really have nothing to lose - but a lot to gain.



“Slash 10% off your heating bill
- guaranteed...

...or you don't pay”



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