

Flow temperature instructions

Heat pumps work most efficiently when the temperature of the water flowing around your radiators is not very high — usually around 35 °C to 45 °C. By comparison, most gas boilers circulate water at over 70 °C. This means that with a heat pump system, your radiators won't feel as hot, and also that your system will need to be on for longer to keep your home at the temperature you set on your thermostat. This might sound worrying, but don't be concerned:

- You will have a really nice, even temperature with less cold periods.
- This is still fine from the carbon point of view — heat pumps are around 300% efficient (compared to ~90% for condensing gas boilers), and you will be using electricity which is currently around one third from renewable sources.

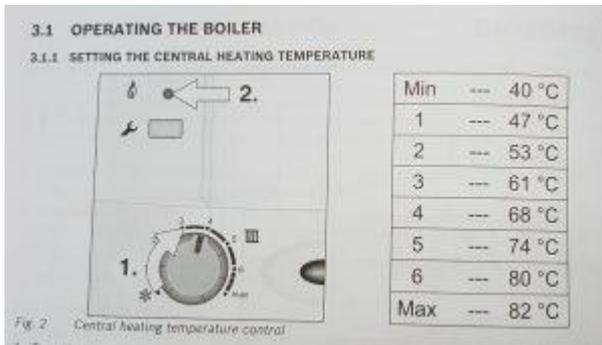
Luckily, it is possible for many people to get an idea of what this is like by adjusting their gas boiler. Read on to find out how.

IMPORTANT: These instructions only apply if you have a condensing gas combi boiler. You should check your manual to find out what kind of system you have. Combi systems do not have a hot water cylinder. You should not reduce your flow temperature if you have a cylinder because of the risk of Legionella (a bacteria which needs higher temperatures to kill it).



Your combi boiler will usually have one or two temperature dials on it. One will have an icon that looks like a radiator next to it — this is the dial for the "flow" temperature, which determines your radiator temperature. The other dial (if you have one) will probably have an icon of a tap next to it, and controls the temperature of your hot water (i.e. that comes out of your taps and shower). Here, you will be adjusting the flow temperature control.

Instructions continue over the page...



If you have access to the manual for your boiler, look up how to adjust the flow temperature. Hopefully there will be a guide showing what temperature each number relates to. Turn the dial to the number corresponding to 55 °C. If you don't have access to the manual, try turning the dial down to about one third of the way between the lowest and highest settings. You could try to take the temperature of your radiators using a thermometer to find out what flow temperature you have set (again, aim for about 55 °C).



Now that your flow temperature is lower, you may find that you need your heating to come on for longer. If you have a programmable thermostat you could set it to come on a bit earlier (if you have a learning thermostat like Nest it should pick up on this itself). You may need to use some trial and error to come up with something that works for you!

You might be worried that having your heating on for longer will end up costing you more — but fear not. By reducing your flow temperature, you are increasing the chances that your condensing boiler will condense properly, making it more efficient.

The low flow temperature and longer running time is also the reason why heat pumps work best in well insulated homes. So you can also use these settings as a way of finding out how well your home will hold its temperature with this kind of heating system. And if necessary, you can think about what kind of home energy efficiency improvements you might want to make.