**FACTSHEET**

# Getting the best from your Central Heating

*Simple, practical advice to help you keep your home warm, use less energy and feel more confident using your heating system.*

**Who is this leaflet for?** This leaflet is for householders, tenants, landlords and anyone supporting members of the public with home energy advice. It explains the main types of heating controls, how to use them day to day, and when to ask for professional help.

Small changes to how you set your heating can make a real difference. You do not need to be an expert — start with one or two simple actions, then build up from there.

| Three quick steps to try today |
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| 1. Check the clock on your programmer is correct. |
| 2. Set your room thermostat to the lowest temperature that feels comfortable, usually around 18°C to 21°C for most homes. |
| 3. Turn Thermostatic Radiator Valves (TRVs) down in rooms you use less often, while keeping enough background warmth to help protect your home. |

## Are you getting the best from your central heating?

Programmers or timers, room thermostats, thermostatic radiator valves or smart heating controls can all help you control your central heating system.

Make sure you service your boiler regularly as this will help to ensure it runs efficiently

**If you rent your home:** You can still use heating controls safely and effectively, but you should speak to your landlord, housing provider or managing agent before making changes to the boiler, programmer, radiators or hot water system.

## Why heating controls matter

### Keep your home warm

Heating controls help you keep your home comfortably warm without over-heating your rooms and wasting energy.

### Lower your heating bills

By installing and using your heating controls effectively, you could use less energy and save money on your heating bills.

### More convenient

Some heating controls let you control your heating via an app. This lets you adjust your heating while you're out, so you can get your home nice and cosy for when you get home.

### Better comfort room by room

Good controls help you heat the rooms you use most, while keeping less-used rooms at a lower background temperature. This can be especially helpful in larger homes, shared homes, or homes where people are in and out at different times.

## What controls should your heating system have?

Central heating systems such as combi boilers should include at least:

- a programmer (time control)
- at least one room thermostat
- thermostatic radiator valves (TRVs)

If your heating system has a hot water cylinder, it should also have a thermostat.

If you are unsure whether your system has the right controls, look for a timer or programmer, a wall thermostat, radiator valves with numbered dials, and a thermostat on any hot water cylinder. If any of these are missing or not working, ask a qualified heating professional or your landlord for advice.

### At-a-glance checklist

- Set the programmer so heating comes on only when you need it.
- Set the room thermostat to the lowest comfortable temperature.
- Use the controls on each radiator (TRVs) if you have them, to reduce heat in rooms you use less often.
- Keep radiators clear so heat can circulate properly.
- Book a regular boiler service with a qualified professional.

## Programmer or timer

A timer or programmer controls when your heating comes on and off.

Older programmers are simple timers that only run once or twice a day, but modern programmers offer options to have the heating come on and off at different times and even different temperatures.

This is useful because you can programme your heating to fit your routine. If you're not at home or don't need heating at night, you can programme the heating to switch off or run at a lower temperature during these times.

If you have a hot water cylinder, you should also have a timer to control when your water is heated, too.

Depending on how your central heating system was installed, programmers are either:

- Single channel: for combi boilers. This only controls central heating as hot water is provided on demand.
- Two channel: for system boilers controlling heating and hot water, or combi boilers controlling two heating zones (e.g. upstairs and downstairs).
- Three channel: for system or regular boilers controlling hot water and two separate heating zones (e.g. upstairs and downstairs).

## Room thermostat

A room thermostat keeps your home at a steady temperature. It turns the heating on until it reaches your chosen temperature, then switches it off until the room cools slightly.

You should set your thermostat to the lowest comfortable temperature, which for most people is between 18°C and 21°C. And if you turn the thermostat down by just one degree, from 22°C to 21°C, you could save money.

You don't need to turn your thermostat up when it is colder outside. The house will heat up to the set temperature regardless. It may take a little longer on colder days, so you might want to set your heating to come on earlier in the winter.

**Tip:** Turning the thermostat up high will not usually heat your home faster. It simply tells the heating to keep running until the higher temperature is reached, which can use more energy.

**Where to place a room thermostat:** Keep it away from radiators, direct sunlight, draughts, curtains and furniture. It needs a free flow of air so it can sense the room temperature properly.

## Thermostatic radiator valves (TRVs)

Thermostatic radiator valves (TRVs) control how much hot water flows through each radiator. Each TRV has a dial, often numbered 0-6, where 0 is off and 6 is fully open. Turn the dial clockwise to reduce the temperature and anticlockwise to increase it.

The TRV senses the room temperature and adjusts an internal valve automatically. When the room reaches the temperature you've set, the valve partially closes to reduce hot water flow. When the room cools, it opens again to allow more heat.

To save energy, set each TRV to the lowest number that keeps the room comfortable. For example, you might set a spare bedroom lower than your living room.

Radiator covers prevent the TRV from getting an accurate temperature reading, so are generally not recommended. Warm air can get trapped under the cover, and the TRV senses that the room is warmer than it actually is.

**TRV settings in everyday use:** Try lower settings in bedrooms, hallways and rooms you do not use much. Avoid turning TRVs fully off in very cold weather, as a low background setting can help reduce the risk of damp, mould or frozen pipes.

**Common TRV mistake:** Do not use a TRV like an on/off switch every day. Set it to a comfortable level and leave it to work automatically, then adjust gradually if the room feels too warm or too cool.

## How to use your heating controls

There are lots of different types of heating controls, so for specific advice, it's good to check with your installer or read the manufacturer's manual. If you don't have a copy of the manual, you can usually find them on the manufacturer's website.

**If your controls are not working:** If the display is blank, buttons are unresponsive, the heating comes on at unexpected times, or rooms are not warming properly, check the manual and the battery first. If you are unsure, ask a qualified heating engineer, landlord, housing provider or trusted advice service.

## Heating controls jargon-buster

- 'Auto' or 'Twice' means the heating goes on and off during the day at the times it has been programmed to do so.
- '24hrs' or 'On' means the heating stays on all the time.
- 'Off' means the heating will remain off all the time.
- 'All day' or 'Once', means the heating will switch on at the first 'on' setting you have programmed and then remain on until the last 'off' setting of the day.
- 'Boost' or '+1hr' switches the heating on for a one hour 'boost' of heat.
- 'Advance' moves the programmer to the next 'on' or 'off' setting in the daily cycle

## Hot water cylinder thermostats

Hot water tank/cylinder thermostats regulate the temperature of your domestic hot water by switching off the heat supply from your boiler once the set temperature has been reached. They can save you money and avoid wasting energy by over-heating your water. If your hot water tank has its own thermostat, set it to 60°C: that's hot enough to kill harmful bacteria like legionella, but not so hot that you're wasting energy. If you find 60°C too hot, mixer taps can help. To read more about hot water cylinders (including thermostats and cylinder insulation) see our factsheet 'Hot Water Cylinders'

## Bleed your radiators

Trapped air in your radiators may make them less effective at heating your home. If you compensate by turning the heating up or adjusting the boiler thermostat this could lead to wasted energy and increased heating bills.

You can pick up a radiator key for around £3 at your local DIY shop. The summer months are a good time to bleed your radiators: your heating is more likely to be off for several hours at a time. Make sure the radiators are cool before you bleed them.

To bleed your radiators:

1. Lay an old towel under the pipes and place a bowl or jug under the bleed valve.
2. Insert the radiator key into the valve and slowly give it a quarter or half turn. As air escapes, you'll hear a hissing sound.
3. Once the hissing sound stops or water begins to pour out, close the valve.
4. If you have a combi boiler (one with no hot water cylinder) you may need to top up the water pressure after bleeding the radiators. There's usually a short length of flexible pipe with a tap at each end, and a pressure gauge on the boiler itself. If the gauge is in the red, open the two taps to let more water in until you're back in the green, then turn off both taps.
5. You may want to check for air again next year. Check it sooner if the tops of any radiators get cold or you hear a lot of gurgling in the pipes.

## Before winter: simple preparation steps

- Check that the programmer shows the correct day and time.
- Test the heating before the first cold spell so you have time to fix problems.
- Make sure furniture, curtains and radiator covers are not blocking heat from radiators.
- Bleed radiators if the tops are cold while the bottoms are warm.
- Know who to contact if the boiler stops working, especially if you rent your home.

## Use this leaflet at home

Walk around your home with this leaflet and check each room. Look at the radiator valve, whether the radiator is blocked, and whether the room needs to be warm all day. Small adjustments can help you stay comfortable and avoid heating rooms more than you need to.

**Remember:** Everyone's home and health needs are different. If you are older, have a health condition, care for someone vulnerable, or are worried about damp and mould, seek tailored advice before making major changes to how you heat your home.

**Important safety note:** If you smell gas, suspect carbon monoxide, or your boiler shows a warning or fault code, do not ignore it. Follow the safety advice on your appliance, ventilate the area if safe to do so, and contact the relevant emergency or professional support service.

| **When to get help urgently** |
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| Get help straight away if you smell gas, suspect carbon monoxide, see repeated boiler fault warnings, have no heating or hot water during very cold weather, or are worried about someone vulnerable in the home. |

**Need more help?** If you would like more information or support with heating controls, keeping warm, energy bills or home energy improvements, visit us at one of our drop-in advice and information sessions or look out for details of events we will be running across the town in the next few months.

If you are attending an advice session, it can help to bring a note of your boiler type, photos of your programmer or thermostat, and any recent energy bills or letters you would like help understanding.

***Together, we can create warmer homes, stronger communities and a clean energy Calder Valley.***

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