



# A Homeowner's Guide To Heating Controls

## HOW YOU CAN BENEFIT FROM INSTALLING HEATING CONTROLS:

- Reduce your heating bills by improving your energy efficiency.
- Increase your home comfort levels.
- Support the climate by reducing your own greenhouse gas emissions.

### **Do you know that you are entitled to a grant through the SEAI Better Energy Homes programme to help improve your home heating system?**

Installing Heating Controls to your home heating system will typically reduce your energy usage by up to 20%.

Home heating systems without heating controls can be wasteful of energy and costly to run because there is little to no control of the amount of heat being used to heat your home and your hot water. Adding modern heating controls can help you to accurately match your space heating and hot water schedules to the working and living patterns in your home, so when heat and hot water are required, it is there; and when it is not required, it is turned off.

As a minimum, your heating systems should be split into two independently controlled zones. They are your 'Space Heating Zone' and your 'Domestic Hot Water Zone'. This allows you to heat your domestic hot water without being forced to turn on your space heating. It will also allow you to use your boiler to heat your hot water in the summer time, without using the immersion. Additional zones can also be put in place in large homes to split upstairs and downstairs or living areas and bedrooms.

There is a grant available through the SEAI Better Energy Homes programme to help you improve your home heating system through the installation of heating controls.

## DO I NEED HEATING CONTROLS?

You can do a quick check on your heating control requirements by answering the simple questions below. If you answer NO to some or all of the below questions, it would be beneficial for you to install some heating controls:

1. Can you heat your domestic hot water without switching on your radiators or an electric immersion heater?
2. Can you turn on your heating without heating your domestic hot water?
3. Can you easily adjust the heat output from radiators in the rooms you use most often?
4. Do you have temperature control on your boiler?
5. Have you time control on your boiler that you can set for different days of the week?
6. Have you a separate temperature control for your hot water cylinder?
7. Have you a separate time control on your hot water cylinder?

Choosing and installing heating controls should not prove to be a difficult process. However, there are important decisions to make and a few rules to apply to ensure that your heating controls will be to your satisfaction and meet your requirements. It is vital to look for high quality when choosing your heating controls. To achieve this, products should only be chosen that comply with the appropriate Irish Standards (IS), British Standards (BS) or European Standards (EN).

Please visit [www.seai.ie/grants/home-grants/better-energy-homes/how-to-apply](http://www.seai.ie/grants/home-grants/better-energy-homes/how-to-apply) for a list of registered contractors for this grant programme. We recommend that you shop around and view other installed systems before making your final decision in order to get the best product and the best value for money. It is a good idea to discuss the heating controls on offer with any friends, neighbours or workmates who may already have them installed, to give you a better insight of how they are operated, how often you might need to change settings and also the advantages, improvements and any problems people have experienced when they have had them installed.

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## HEATING CONTROLS FACTS AND TIPS

### THERMOSTATIC RADIATOR VALVES (TRV'S)

A TRV is a thermostat that regulates the amount of heat going into a radiator according to the temperature in the room. You can set a specific temperature level for a room that you are comfortable with, and then as the room heats up to that comfortable temperature, heat flow is reduced into the radiator, stopping when it reaches your comfortable set level. TRV's are particularly useful in rooms where the temperature requirement is different to that required in the main living area bedrooms, or rooms where there are other heat sources such as in kitchens.

### 7-DAY PROGRAMMABLE TIMER

A 7-Day programmable timer will allow you to set your heating system to match your occupancy patterns on a daily and weekly basis. The separation of space heating and domestic hot water controls into zones will also allow you to set each zone to operate for required periods only. For example: you can set your boiler to switch on automatically before you wake in the morning to heat water for showers without turning on the central heating.

### BOILER INTERLOCK

Boiler interlock is a method of interconnecting your heating system controls with your boiler to ensure that the boiler only operates when required.

### TIME AND TEMPERATURE CONTROL OF ELECTRIC IMMERSION HEATER (HOT WATER CYLINDER HEATER)

Time and temperature controls installed on immersion heaters allow householders to pre-set the time period required for water heating and the temperature to which water is heated. This means that water need not be heated for longer than required or to higher temperatures than required. Temperatures for hot water should be set to around 60°C. To heat water above this temperature, only to add cold water to it afterwards, is a waste of your energy. Please note that if you have a solar water heating system in place, this temperature may need to be set higher. SEAI also recommend that lagging jackets are fitted to old, uninsulated copper hot water cylinders to ensure that minimum energy is lost. This should not be necessary for factory-insulated cylinders, which should be the norm for new cylinders.

## QUESTIONS TO ASK YOUR SUPPLIER AND INSTALLER

SEAI have compiled a list of questions you should ask your suppliers and contractors prior to making a purchase. It is in your best interest to make sure you are satisfied that all your questions are answered. If an answer seems too complicated, then ask for a simpler explanation. If someone is selling you new controls, they will be happy to provide an explanation to your satisfaction.

### EQUIPMENT

1. Is the heating system in my dwelling currently zoned/divided according to Industry Best Practice? If not, will installation of these controls achieve this?
2. How should I divide my house into zones? What is Industry Best Practice?
3. Do I already have some of these products installed in my home? If so, do they need replacing?
4. Are all of the proposed heating controls suitable for my particular requirements?
5. What Irish Standard (IS), British Standard (BS) or European Standard (EN) do the controls comply with?
6. Will the product improve the Building Energy Rating (BER) of my home?
7. Will the system allow me to set different time and temperature schedules for different days of the week?
8. How often should I change settings on the controls to make my house more efficient? Will the products satisfy all rules and requirements for receipt of a grant under the Better Energy Homes programme?
9. Do the products have the required CE or Kitemark?
10. Will the programmer be user-friendly and easy to reprogramme, should my schedule change in the future?

### INSTALLATION AND COMMISSIONING

1. Is the contractor on SEAI's list of Registered Contractors? (Remember, if the contractor is not listed you will not receive a grant under the Better Energy Homes programme)
2. To what standards will the products be installed?
3. Does the contractor offer delivery, installation, commissioning and after sales service?
4. What training or accreditation has the contractor received?
5. To which trade associations does the contractor belong?
6. How many similar systems has the contractor installed? Are local references available?
7. Will any of the installation be sub-contracted? How much?

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8. Who is ultimately responsible for what segments of work?
9. Does the contractor have the plumbing and electrical skills required for the installation?
10. How long will the installation take?
11. What are the procedures and tests carried out when commissioning the system?
12. Who is responsible for repairing any disruption to walls/ceilings etc., necessary during the installation of the system?
13. What additional pieces of work need to be done to my home to prepare for the installation?
14. Will the contractor provide all of these services, and at what cost?
15. What work will need to be done to get my home back into its' original condition following installation?

## OPERATION AND MAINTENANCE

1. Is full documentation, including any operation manuals and warranties provided in English?
2. Will the supplier provide instruction and demonstration on how the installed controls work?
3. Will I need to carry out any housekeeping or maintenance tasks once the controls are installed? If so, how often do I need to carry out these tasks?
4. Does the supplier have spare parts available if required?
5. Will I be charged for subsequent call outs if required?

## COSTS AND PAYMENT

1. Does the detailed quotation cover all costs associated with the works?
2. What range of energy savings are these control measures likely to achieve? Approximately how much will this installation save me on my heating bill?
3. What are the financing options or payment terms?
4. At what stage will I get my SEAI grant payment?
5. Are there any additional costs that I should be aware of?

## AFTER-SALES SERVICE

1. What after sales service does the contractor provide?
2. What is the guarantee on labour and parts for each component of the system?
3. Is any ongoing professional maintenance required (by the Contractor or similar)?
4. For how long does the supplier provide emergency service work if required?

## I NEED HEATING CONTROLS. WHAT DO I DO NEXT?

1. You can get more information on the Better Energy Homes programme in one of three ways:
  - Request more information by ringing 1850 927 000.
  - Contact the programme team directly at: [info@betterenergyhomes.ie](mailto:info@betterenergyhomes.ie).
  - Visit: <https://www.seai.ie/grants/home-grants/better-energy-homes>.
2. Contact a registered contractor for heating controls from the SEAI Registered Contractor list at: <https://hes.seai.ie/GrantProcess/ContractorSearch.aspx>.
3. It is recommended you contact a number of registered contractors to ensure you receive the best quality available, at a competitive price.
4. Once you have selected a suitable contractor, follow the steps to complete the Better Energy Homes programme online application form: <https://www.seai.ie/grants/home-grants/better-energy-homes/how-to-apply/>
5. The next step is to have the works carried out. It is in your best interest to make sure you are satisfied that all your questions are answered. If an answer seems too complicated, then ask for a simpler explanation. If someone is selling you a new boiler they will be happy to provide an explanation to your satisfaction.

## NOTES:

- To qualify for a grant, all works must be undertaken by an SEAI registered Contractor in accordance with the technical requirements set out in the Contractor Code of Practice and Quality Assurance & Discipline Procedures (QADP). For more information visit: <https://www.seai.ie/energy-in-business/contractor-supports/>
- The applicant shall have a formal contract in place with each of their chosen registered Contractors before works commence.
- The contract of works agreed is between the Homeowner and the Contractor only. SEAI accepts no liability or responsibility for any breach of contract between the Homeowner and the Contractor.
- For the full list of Terms & Conditions please refer to the Better Energy Homes Programme Application Guide, available at: <https://www.seai.ie/grants/home-grants/better-energy-homes/how-to-apply/>