

Home Energy Grants: Technical Bulletin

Heating Controls Installation Guidance

Series 2024-02-001 HCU



Installation guidance for heating controls upgrade

This technical bulletin outlines common technical and administrative non-compliance issues noted by SEAI for heating controls upgrade (HCU) works. The information below is intended as guidance. All measures must be installed as per the [Domestic Technical Standards and Specification \(DTSS\)](#) and in accordance with the Contractors Code of Practice. Please see the Contractors Support page for further information: <https://www.seai.ie/grants/supports-for-contractors/>.

The [Quality Assurance and Disciplinary Procedures \(QADP\)](#) document contains a full list of checks, used by SEAI inspectors. This list should be used to check your work, prior to completing and signing the Declaration of Works (DOW) form. **Nominated Personnel must not sign the DOW stating that the works have been completed to standard if non-compliances are outstanding.**

Remember: you must confirm the eligibility of the home for a heating controls upgrade *prior* to works commencing, noting that homes are only eligible where they previously had no, or very basic, heating controls.

1. Declaration of works (DOW)

Incorrect completion of DOW forms is a common source of error which can result in payment delays, grant declines and reworks. We would like to draw your attention to the following important points regarding completion of the DOW:

Minimum number of newly installed items

It is vital that at least **6 out of 9** prescribed items on the DOW are *newly installed* as part of the grant works.

Item	Pre-existing	Installed as part of grant works	N/A
1 Separated pipework for Space Heating and Domestic Hot Water* (N/A for combi Boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Boiler interlock arrangement*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Thermostat controlling 1 Space Heating zone and wiring*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 24hr/7day programmer with minimum 2 channels*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5 Time clock for immersion heater* (N/A for combi Boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Cylinder thermostat and wiring* (N/A for combi Boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Additional space heating zone(s):			
7 Separated pipework for two Space Heating zones (e.g., downstairs/upstairs) *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Thermostat controlling an additional space heating zone and wiring*	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9 Thermostatic Radiator Valves (TRVs) *	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The items listed below do not contribute to the requirement to have 6 newly installed items.			
The following items must be in place with heating controls where applicable. Please indicate if they are pre-existing or newly installed as part of heating controls grant works.			
10 Hot water cylinder insulation (factory applied if new cylinder)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11 Auto by-pass	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12 Compliant earthing and equipotential Bonding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

At least 6 of these items must be newly installed as part of the grant works

These 3 items do not contribute towards the minimum requirement for newly installed items but must be present for safe and optimum operation of the heating system

Figure 1. Extract from Heating Controls Upgrade DOW

Important Reminder:

Items 7 and 8 (*Separated Pipework for Two Space Heating Zones* and *Thermostat Controlling an Additional Space Heating Zone & Wiring*) are interdependent. Where one has been installed as part of the grant works, the other must also be present (but can be pre-existing).

Failure to comply with the above requirements will mean that the works will be considered seriously non-compliant and may result in de-registration from the Better Energy Homes programme, in line with our Quality Assurance and Disciplinary Procedures (QADP).

Replacement of existing equipment

Replacement of existing heating control equipment **does not** constitute new installation, even where the existing equipment is old and/or no longer functioning.

Signing off on works

Please note that if Section 2 (c) of the DOW is not completed accurately, the documents will be returned to the homeowner and grant payment will be delayed until such time as a correctly completed DOW has been received.

(c) Contractor Declarations

Registered Contractor ID Number _____

Contractor (Company) Name (BLOCK CAPITALS) _____

- I declare that all works indicated overleaf are fully compliant with the Better Energy Homes Contractor Registration Terms and Conditions, the Domestic Technical Standards and Specifications (DTSS) and the Better Energy Homes Contractors Code of Practice.
- I confirm that I have been paid in full or an agreed payment schedule contract is in place by the homeowner for the works described and that I have personally completed section 2 of this form to reflect the works undertaken.
- I confirm I have completed Section 4 (Pre-Grant Evaluation Estimate data) on the BER DOW Form as required for all energy upgrades undertaken by me and have returned the form to the homeowner.

Signature of Nominated Person* _____ Date: / /

Nominated Person Name (BLOCK CAPITALS) * _____

DATE THE GRANT WORK WAS COMPLETED _____ Date: / /

*Must be a nominated person on Contractor Registration List

Figure 2. Extract from Heating Controls Upgrade DOW, Section 2 (c)

Total cost

Please note that if you are carrying out other works such as replacement or repair of a boiler in tandem with the heating controls upgrade, the total cost declared on the DOW must only include the cost of installing heating controls. Boiler costs are not relevant as they are not grant funded.

If you have any technical queries in relation to the completion of the DOW, please contact our technical helpdesk at: 01-2776977.

2. Combi boilers

For heating controls installation in homes with a combi boiler, the following items are *not applicable* and **must be ticked as N/A** on the DOW:

- 1) Separated pipework for Space Heating and Domestic Hot Water (N/A for combi Boilers)
- 2) Time clock for immersion heater (N/A for combi Boilers)
- 3) Cylinder thermostat and wiring (N/A for combi Boilers)

As such, the remaining six (6) of the nine (9) contributing items **must be newly installed**, as listed below:

Please see DTSS Section 6.7 for further information and QADP Appendix 2, Section 2.5 for a full list of heating controls checks.

Item	Pre-existing	Installed as part of grant works	N/A
1 Separated pipework for Space Heating and Domestic Hot Water* (N/A for combi Boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2 Boiler interlock arrangement*	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3 Thermostat controlling 1 Space Heating zone and wiring*	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4 24hr/7day programmer with minimum 2 channels*	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5 Time clock for immersion heater* (N/A for combi Boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6 Cylinder thermostat and wiring* (N/A for combi Boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Additional space heating zone(s):			
7 Separated pipework for two Space Heating zones (e.g., downstairs/upstairs) *	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8 Thermostat controlling an additional space heating zone and wiring*	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
9 Thermostatic Radiator Valves (TRVs) *	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The items listed below do not contribute to the requirement to have 6 newly installed items.			
The following items must be in place with heating controls where applicable. Please indicate if they are pre-existing or newly installed as part of heating controls grant works.			
	Pre-existing	Installed as part of grant works	N/A
10 Hot water cylinder insulation (factory applied if new cylinder)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11 Auto by-pass	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
12 Compliant earthing and equipotential Bonding	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

These 6 items *must* be newly installed where a combi boiler is present

Figure 3. Example of compliant DOW for homes with a combi boiler

This means that for homes with a combi boiler, contractors **MUST** install an additional space heating zone as part of the grant works. Please see *Figure 3* above for an example of a compliant DOW for homes with a combi boiler.

3. Common reworks

Take care to avoid these common errors noted by SEAI inspectors:

TRV installed in room with room stat

Thermostatic Radiator Valves (TRVs) must not be fitted in rooms with a room thermostat as this causes inaccuracies in the thermostatic control. TRVs must be installed in accordance with the manufacturer’s guidelines and DTSS Section 6.7.3.



Room stat in poor location

Take care with placement of room stats. Do not place directly over a heat source such as a radiator, in direct sunlight, in a kitchen or in a room with a secondary heat source such as an open fire/stove.

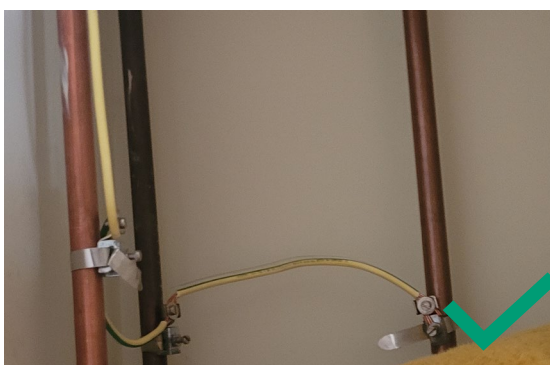
Immersion heater timer not fitted but required

Where required, electric immersion heaters must be fitted with a timer. Timer and temperature control equipment must conform to Section 6.7.4 of the DTSS.



Cross bonding not complete

Earthing/cross bonding **MUST** be completed on all exposed metallic pipework under the terms of SEAI grant programmes.



Incorrect fusing

Many spur switches will come with a 13-amp fuse as standard. However, depending on which type of boiler is present in the home, you will need to replace this for the correct fuse type.

Gas Boilers = 3 Amp Fuse

Oil Boilers = 5 Amp Fuse



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