

Home Energy Grants: Roof Insulation Technical Bulletin

Economic Feasibility of Roof Insulation Installation

Series 2025-04-001 RI



Introduction

This technical bulletin details advice for Contractors for roof insulation which have resulted in works being returned to the Homeowner for further information, or on rare occasions, grant works being declined for not meeting SEAI Better Energy Homes (BEH) Scheme standards. The advice detailed in this bulletin should be carefully read and passed onto roof insulation installers as a form of training. Correct application of this advice in practice will yield fewer non-compliant works and a smoother experience through the grants process for both Contractors and Homeowners.

This technical roof insulation bulletin covers the following topic:

- 1. The Economic Feasibility Rule when Insulating a Roof Space
 - a. Achieving a whole-house solution.
 - b. Areas where cost to retrofit doesn't yield significant benefit
 - c. Detailing uninsulated areas on DOW

Further details of this rule are outlined in the <u>BEH Contractors Code of Practice document</u>, Section 5.5.

1. Economic Feasibility of Insulating Roof Areas

a. Achieving a Whole-House Solution

For a Homeowner to claim grant funding for roof insulation work supported on the BEH Programme, works must be compliant with SEAI's Domestic Technical Standards and Specifications (DTSS) document. It is stated in the DTSS that 'The Contractor must ensure that, in the case of insulation, an optimal whole-surface solution is provided where physically and economically feasible'.

When dealing with roof insulation, this comprises insulation of the whole surface of roof elements which have a heat loss element to them and are connected to the outside or unhabitable/unheated spaces. This includes all heat loss roof elements of habitable rooms in the dwelling, including (but not limited to) extensions, flat roofs, room-in-roofs.

<u>Please note, economic feasibility of an installation of insulation does not refer to the Homeowners ability to fund their portion of the cost of works to achieve to a whole-surface solution.</u>

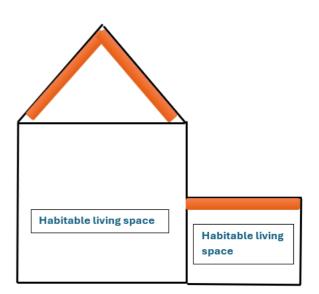
It is essential that prior to commencement or agreement of works, all roof elements must be surveyed by the Contractor to determine the extent of works required to achieve a whole-surface solution <u>and</u> the Homeowner must be made aware of this. Please see section b of this bulletin for information regarding areas which are not deemed economically feasible to insulate.

The three diagrams below provide an explainer of what areas are required to be insulated in different scenarios or makeup of homes. The areas which are required to be insulated to SEAI standard and to achieve a whole-surface solution, and therefore grant compliance, are highlighted in orange.

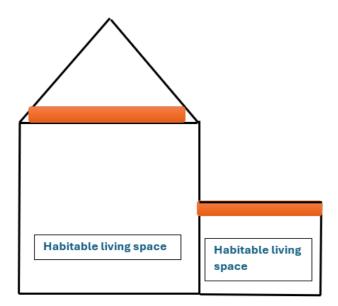
<u>Dwelling with insulated Room-in-Roof and Flat Roof Extension</u>



<u>Dwelling insulated at Rafter Level with Flat</u> <u>Roof Extension</u>



Dwelling insulated at Ceiling Level with Flat Roof Extension



b. Areas where Cost to Retrofit Doesn't Yield Significant Benefit

As noted in section a, <u>economic feasibility of an installation of insulation does not refer to the Homeowners ability to fund their portion of the cost of works to achieve to a whole-surface solution.</u> Prior to commencement or agreement of works, all roof elements must be surveyed by the Contractor to determine the extent of works required to achieve a whole-surface solution and this must be communicated to the Homeowner.

In certain circumstances, there may be small areas of a heat loss roof where access is restricted and will require extensive and expensive work to retrofit and insulate to DTSS standards. Where this area makes up 15% or less of the entire heat loss roof area envelope, it is not deemed economically feasible to insulate this area as the uplift and benefit achieved in energy efficiency is not seen as significant compared to the cost to carry out these works on this particular area of roof.

Determining this requires the Contractor to survey all heat loss roof areas and quantify the **Total Heat Loss Roof Area** and any heat loss roof areas with restricted access which require insulating (**Restricted Access Roof Area**).

NB: If the Restricted Access Roof Area makes up 15% or less of the Total Heat Loss Roof Area, the Contractor may deem the Restricted Access Roof Area as economically unfeasible to insulate and leave this area uninsulated.

If the Restricted Access Roof Area makes up greater than 15% of the Total Heat Loss Roof Area, this area of roof must be insulated to standards set out in the DTSS for the works to be compliant and the Homeowner to be eligible for grant payment. Please see the table below to use as a guide. These areas must be outlined clearly on the DOW in the comment box provided, guidance of which is provided in the next section.

Please Note: In all scenarios described above, the target post-works U-Value as set out in the DTSS must be achieved to meet grant compliance.

| Percentage of Total Heat Loss Roof Area Insulated by Contractor | Status |
|--|---|
| 100% | No action or comment required |
| 85%-100% | Detail areas, in m ² , left uninsulated and reasoning in DOW comment box |
| < 85% | Carry out further insulation works to bring to DTSS compliance |

Please note, for inspections purposes, information entered on the DOW should accurately reflect the installation on site.

c. Detailing Uninsulated Areas on DOW

Once the Contractor has carried out all the relevant surveys and identified that a roof can be insulated and avail of the economic feasibility rule, it is important to document this accurately on the DOW for reporting and compliance reasons. It is also important to note that the details listed in Section (b) of the DOW must accurately reflect the installation works carried out by the Contractor and any pre-existing insulation in situ, insofar is possible to document.

In the case where you could not achieve a whole-surface solution but comply with the economic feasibility rule described above, the percentage of After Works insulation coverage must be entered along with a comment detailing why 100% coverage was not achieved, including area quantities.

Below is an example of a Roof Insulation DOW where 92% of the heat loss roof area was completed as the remaining 8% heat loss area would require significant construction modifications to insulate. Given this inaccessible area is less than 15%, it qualifies to be compliant under the economic feasibility rule <u>and</u> the target u-value was met.

NB: Contractors should always be aiming to complete a whole-surface solution, in line with the DTSS. Only in certain circumstances, as described in this bulletin, are Contractors permitted to complete and sign a DOW where between 85% - 100% of the heat loss roof areas have been insulated.

Type of roof found in **Before Works After Works** Home (please tick) % Flat Roof Area of Home Insulated % %* % Sloping Rafters Area of Home Insulated % %* X % Ceiling Area of Home Insulated % %* 92 0 Is Spray Foam used for roof / ceiling insulation? Yes No % % NSAI Agrément Certificate Name of the product number or equivalent 300 Depth / Thickness of Insulation (average) mm mm 0 Calculated U-Value for Roof (average) 2.3 W/m^2K W/m^2K 0.16 m^2 Area of roof / ceiling insulated by you 100

Comment: 8% or 9m² of total heat loss roof area (109m²) is inaccessible and would require significant building works, therefore economically unfeasible to insulate.

Important Note: If a **Spray Foam** insulation product is used, the NSAI Agrément Certificate or equivalent must be provided to the homeowner and must be available in case of an SEAI inspection.

^{*}If less than 100% please provide explanation in comments box below, or attach on a separate sheet

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