

Home Energy Grants: Technical Bulletin

External Wall Insulation

Series 2023-07-002 EWI



Introduction

The Better Energy Homes programme team have noted an increase in the number of non-compliant external wall insulation upgrades being installed on the scheme. In particular, we note continued issues with ventilation and a rise in reworks associated with poor quality of finish.

A recent review has highlighted that in the first half of this year, the inspection pass rate for external wall insulation is falling below the standard required of contractors operating on the scheme. We have also identified companies with repeated non-compliances which raises concerns regarding the quality management procedures in operation by a number of SEAI-registered contractors.

Continued infringement will lead to an increase in reworks and penalty points, contractor de-registrations and homeowners may have their grants declined as a result.

We request that all contractors registered to install external wall insulation review the following information and ensure that works are installed in full compliance with programme requirements. Further information can be found on the [Contractors Support page](#) on our website.

Most common reworks

Below are the most common external wall insulation reworks noted by SEAI inspectors with some guidance on best practice.

Ventilation

Proper ventilation is essential for maintaining good indoor air quality and creates a healthy living environment for occupants by removing excess moisture from the air and reducing the risk of condensation and mould.

Ventilation is a fundamental part of all external wall insulation works however it remains the most common non-compliance and so far in 2023 has accounted for more than a third of all EWI reworks.

In August 2022 we issued a ventilation guidance note to all registered contractors. This provides useful 'rule of thumb' guidance for installers of External Wall Insulation and is available on our website. We recommend that you download and print a copy, and circulate to all nominated personnel: [Guidance Note on Ventilation](#).

Please ensure you are familiar with the ventilation requirements of the programme and that suitable ventilation has been installed as part of the grant works.

Below are the most common ventilation reworks noted by our inspectors:

1. Background vent not fitted but required

Background ventilation is required in all habitable rooms and kitchen/utility rooms. It usually consists of sleeved wall ventilators or window/door trickle vents.

When retrofitting a property, additional ventilation may be required due to increases in both internal temperatures and levels of airtightness. The minimum level of background ventilation required will depend on the air permeability of the home.

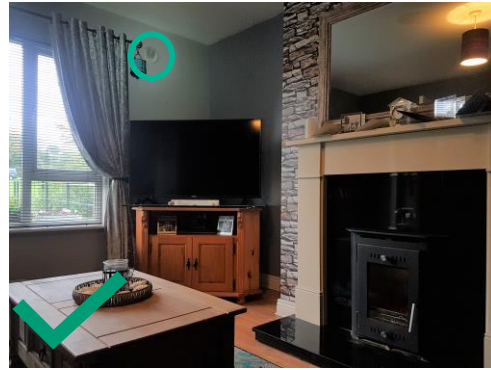
For exact specifications, please refer to *NSAI SR 54: Code of practice for the energy efficient retrofit of dwellings*, Section 10.



2. Permanent vent not fitted but required

Permanent ventilation must be installed in rooms with an open-flued (non-room sealed) appliance. Heat producing products require a permanent supply of fresh air to operate safely.

Permanent vents must have **fixed, open** covers to provide an adequate supply of external air.



3. Permanent vent not installed to standard

A common occurrence of this rework is the presence of closable covers on permanent vents (where non-adjustable covers are required).

Please note that Mechanical Ventilation with Heat Recovery (MVHR) systems are not designed to provide combustion air and on their own will not satisfy the requirement for permanent ventilation.

The image on the right shows a home with a MVHR system, an open flued appliance (open fire) and no permanent ventilation installed.



4. Mechanical Extract Ventilation Advisory Note

Where mechanical extract ventilation in wet rooms has NOT been installed before the installation of wall insulation, it is a requirement that contractors issue a safety notice to the homeowner.

The notice must be signed by both the homeowner and the contractor to confirm that the homeowner has been properly advised on their options.

The signed form must be retained by the homeowner and made available to an SEAI inspector upon request.

A copy of the waiver form is available to download here:

<https://www.seai.ie/publications/Mechanical-Extract-Ventilation-Safety-Notice.pdf>

Please note that forms other than the SEAI waiver form (e.g. a contractor’s own template) will **not** be accepted.

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IMPORTANT SAFETY NOTICE

Mechanical Extract Ventilation Safety Notice
Please read carefully and sign if satisfied

Mechanical Extract Ventilation allows for the rapid removal of water vapour and other pollutants at source to the outside, and helps to reduce the likelihood of these pollutants spreading throughout the remainder of the dwelling. Cooking, bathing, showers, hairdriers and other activities using water contribute to this condition. When improvements to the thermal envelope (wall insulation) are being made, as improvements will reduce heat loss and lead to higher internal temperatures within a building. All wet rooms (Kitchen, Bathroom, Utility rooms, etc.) should be fitted with mechanical extract ventilation.

To address this issue, there is a requirement with SEAI to ensure that ventilation is in accordance with Chapter 10 of IGH's SR 04 - Code of Practice for the energy efficient retrofit of dwellings, which can be accessed through the following link: <http://www.igh.ie/ghs/04-2018.pdf>

All wall insulation works under the Better Energy Homes programme must be in full compliance with the published Better Energy Homes Technical Specification

- SEAI requires that wall insulation contractors discuss the installation of mechanical extract ventilation (where it does not exist) with homeowners and that homeowners are properly advised on the option, which will best meet their household needs, as part of the specification process ahead of installation commencement.
- SEAI requires that contractors discuss this matter fully with homeowners and that homeowners are properly advised on the option, which will best meet their household needs, as part of the specification process ahead of installation commencement.
- SEAI requires that this notice is used in all instances where mechanical extract ventilation in wet rooms has NOT BEEN INSTALLED before the installation of wall insulation.
- This form must be signed by both the homeowner and the wall insulation installer. This form should be retained with any documents relating to your Mechanical Extract Ventilation installation for possible SEAI inspection, future maintenance and any future users of the system.

I have discussed the options with the householder and have agreed not to install mechanical extract ventilation in the wet rooms.

Installer Name: _____ Installer No.: _____
Signature: _____ Date: _____

Homeowner Name: _____ Application ID: _____
Signature: _____ Date: _____

Mechanical Extract Ventilation Safety Notice_2018
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Joists and seals

Not as per scheme standard/partially complete/open

To prevent cold bridging and water ingress, joints must be properly sealed. Particular care must be taken at:

- Window/door frames
- Sills
- Plumbing fixtures
- Services

A high-quality finish is essential to prevent water penetrating the insulation and to ensure the effectiveness of the installation.

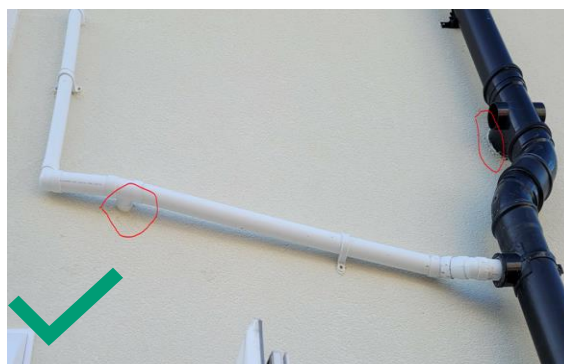


External plumbing fixing

Not as per scheme standard/not correctly reinstated

Please ensure all external plumbing is correctly reinstated taking particular care that:

- Wastewater pipes are glued where appropriate
- Pipework is clipped/bracketed with approved fixings
- Plumbing is extended/relocated to accommodate the external wall insulation



Irish agrément certificate

Certificate not provided

Please ensure you are providing the homeowner with a copy of the Irish Agrément certificate (or equivalent) for the EWI system installed. Homeowners must be made aware of the importance of retaining this document in the event their home is selected for inspection.

We recommend you leave a hard *and* soft copy with the homeowner as part of your handover pack.

Gas supply services

Gas pipe not sleeved through insulation and wall in accordance with Bord Gais Job Aid Note

Gas pipework must be sleeved where it passes through the external wall insulation.

Please review the Gas Networks Ireland (formerly Bord Gáis Networks) technical guidance [here](#) to ensure you are fully aware of the requirements.



Declaration of works

A significant number of Declaration of Works forms submitted by homeowners are incomplete or not signed by contractors. This leads to delays in processing grant payments as these forms must be returned to homeowners for correction.

Please remember to accurately complete and sign *all* relevant fields in **Section 2** of the Declaration of Works form before you return the document to the homeowner, bearing in mind that **only nominated personnel** are permitted to sign these forms.

Further guidance on proper completion of the Declaration of Works is provided below:

2. Sections to completed by your Contractor

(a) Energy Upgrade Cost AND Dwelling Type

Total Cost of External Wall Insulation including Labour and VAT		€
Please Confirm Dwelling Type	Detached House <input type="checkbox"/>	Semi-Detached <input type="checkbox"/>
	Mid Terrace <input type="checkbox"/>	Apartment (Top, Mid or Ground Floor) <input type="checkbox"/>
		End of Terrace <input type="checkbox"/>

1. Enter cost of works (grant-related costs only) & dwelling type.

(b) Energy Upgrade Specification

(Please **COMPLETE ALL** of the following)

	Before Works	After Works
% Total Wall Area of Home Insulated	%	%*
(Average) Depth / Thickness of Insulation	mm	mm
(Average) Calculated U-Value for Wall	W/m ² K	W/m ² K
Name of ETICS used by you for this property		
NSAI Agrément Certificate number		
Area of wall EXTERNALLY insulated by you		m ²

2. Enter accurate details of upgrade works, adding supplementary information as required.

*If less than 100% (e.g. mixed wall measure), please provide detailed explanation in comments box below, or attach on a separate sheet, noting that the grant requires a whole-house solution.

(c) Contractor Declarations

Page of

Registered Contractor ID Number _____	
Contractor (Company) Name (BLOCK CAPITALS) _____	
<ul style="list-style-type: none"> 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: / /

3. Enter ID Number & Company Name.

4. Nominated person must sign and date & enter date of works.

*Must be a nominated person on Contractor Registration List

Important Note: in signing a Declaration of Works form, the nominated person is declaring that the works have been completed in full compliance with the requirements of the Better Energy Homes programme. Nominated personnel must not sign off on incomplete or non-compliant works.

Agreement installer registration

We would like to remind all contractors that in order to comply with the competency requirements of the programme, you must be an NSAI Agrément registered External Insulation installer (or equivalent). You are obliged to inform SEAI immediately of any changes to a) your registration and/or b) the system/manufacturer whose product(s) you are approved to install.

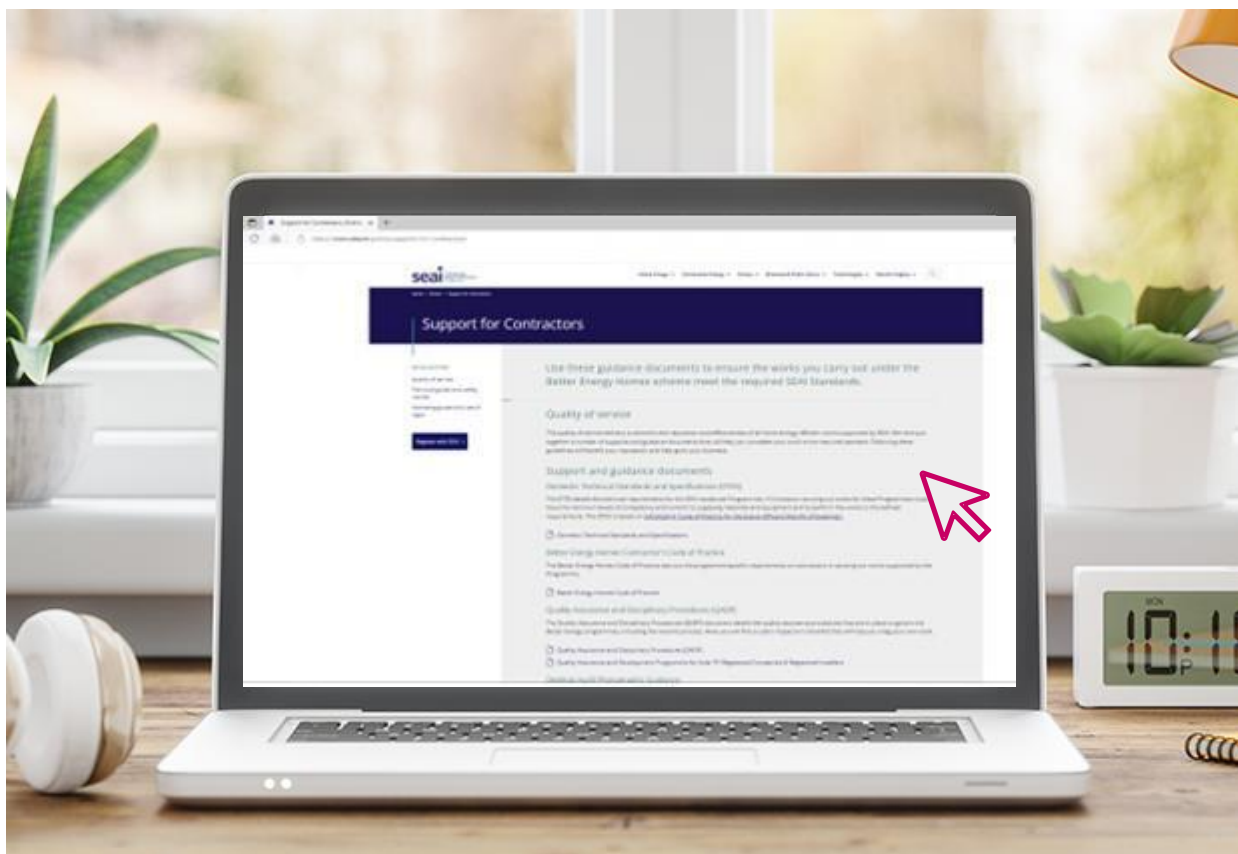
Grant administration and quality management

An effective Quality Management System (QMS) can address all of the above issues and ensure

- faster processing of payments
- reduced costs
- fewer reworks
- better quality of service for your customers

all of which will help you grow your business.

Please visit <https://www.seai.ie/grants/supports-for-contractors/> for more information on how to manage quality.



We now have a dedicated QMS section on our webpage where you will find a copy of our QMS webinar and slides, and a MS Excel template to help you manage your works.

For more tips on how to improve your administration of grant works, please review the following quality alert: [Grant Management Tips for Contractors](#).

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