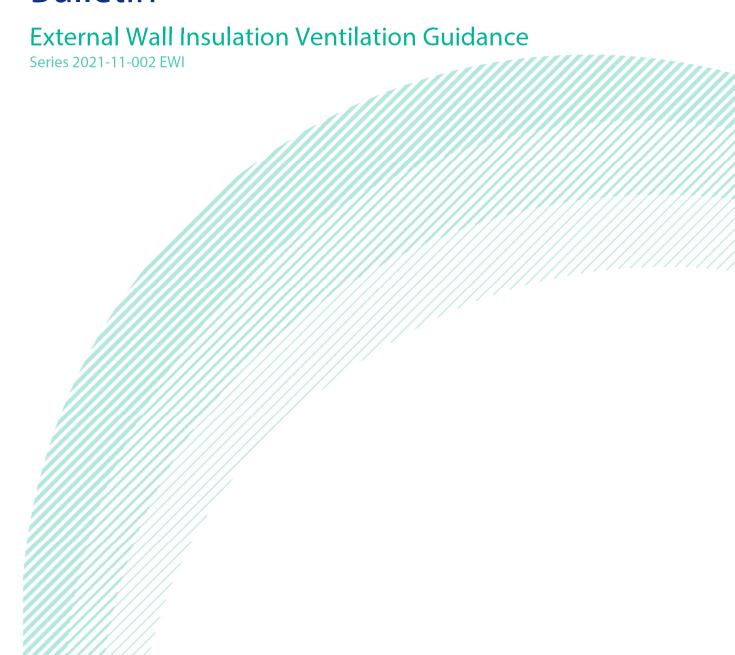


# Home Energy Grants: Technical Bulletin



# Ventilation guidance for external wall insulation

This technical bulletin outlines common reworks noted by SEAI regarding ventilation for external wall insulation 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: <a href="https://www.seai.ie/grants/supports-for-contractors/">https://www.seai.ie/grants/supports-for-contractors/</a>. 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 these items are outstanding.

### 1. General ventilation requirements

The installation of wall insulation may reduce unintended ventilation (such as draughts) and increase the overall air tightness of a home. It is essential therefore that contractors consider the effect the installation may have on the ventilation of the building and offer suitable solutions for the homeowner. Insulation works must not compromise the air quality or internal environment of the home. Where installed, homeowners must be informed of proper operation and maintenance of ventilation systems. Further information may be found in the DTSS and NSA/ S.R. 54:2014 Code of practice for the energy efficient retrofit of dwellings.

# 2. Mechanical Extract Ventilation (MEV) 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.



Figure 1: MEV Advisory Note

A copy of the safety notice is available on the 'Support for Contractors' page on the SEAI website at the following link: <a href="https://www.seai.ie/grants/supports-for-contractors/">www.seai.ie/grants/supports-for-contractors/</a>.

#### 3. Permanent ventilation

Permanent ventilation refers to any permanent non-adjustable vent, opening directly to the external air. For wall insulation works, permanent ventilation should be provided in any room with a fixed open flued appliance. Because these appliances draw fresh air from the room during combustion, insufficient ventilation may result in an accumulation of carbon monoxide.



Figure 2: Permanent ventilation – indoor view



Figure 3: Permanent ventilation – outdoor view

Please see *NSAI S.R. 54:2014 Table 35* for further information regarding permanent ventilation and retrofit works. All new permanent vents should be installed in accordance with the manufacturer's instructions and tested to *EN* 13141-1.

# 4. Background ventilation

Background ventilation provides a flow of natural air to maintain indoor air quality and reduce moisture levels. Background ventilation may take the form of sleeved wall ventilators or trickle window/door ventilators and should be located so as to avoid draughts. The requirements for background ventilation will depend on the air permeability of the home.



Figure 4: Background ventilation – window ventilator (adjustable)

Further guidance can be found in *NSAI S.R. 54:2014 :Clause 10.2.2.1.1*. All background vents should be installed in accordance with the manufacturer's instructions and tested to *EN 13141-1*.

#### 5. Mechanical ventilation

Mechanical extract ventilation allows for the active removal of moisture and other pollutants from the air. All wet rooms e.g. utility room, bathroom, kitchen areas, should be fitted with MEV in accordance with NSAI S.R. 54:2014

*Table 31.* Please see Section 2 above regarding the requirement for an MEV Advisory Note/Safety Notice. Further information regarding the requirements for mechanical ventilation can be found in the DTSS and *NSAI S.R. 54:2014*.



Figure 5: Mechanical extract ventilation

Mechanical extract ventilation must be installed by suitably qualified personnel and in accordance with manufacturer's guidelines.

# 6. Training material

Further guidance and information can be found on the 'Support for Contractors' page on the SEAI website. Our most recent online training webinar on wall insulation and ventilation is available to view at the following link: <a href="https://www.youtube.com/watch?v=taikpQ5bmgM">https://www.youtube.com/watch?v=taikpQ5bmgM</a>.

w: www.seai.ie e: info@seai.ie **t:** 01 8082100









