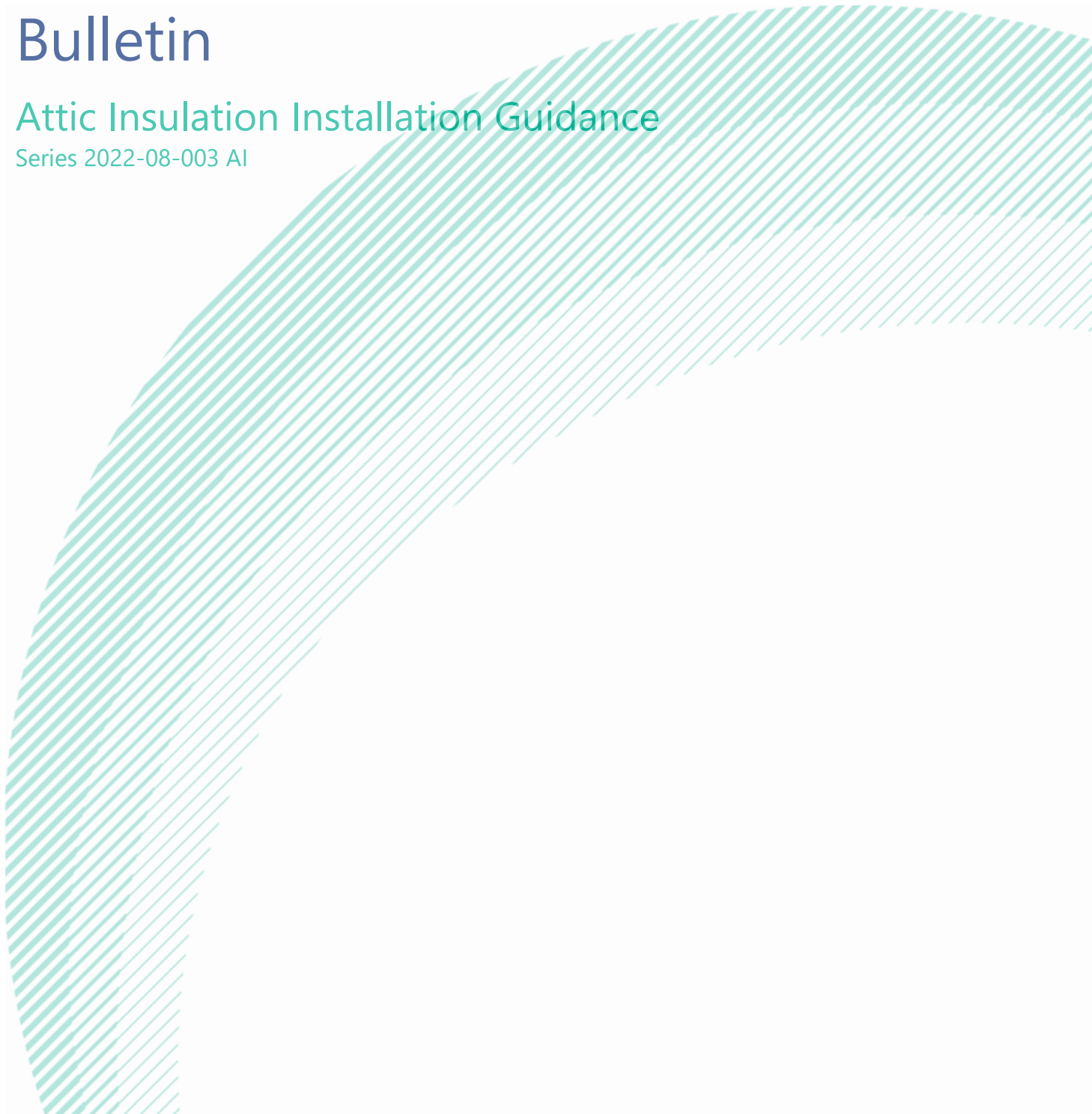


Home Energy Grants: Technical Bulletin

Attic Insulation Installation Guidance



Series 2022-08-003 AI



Installation guidance for attic insulation

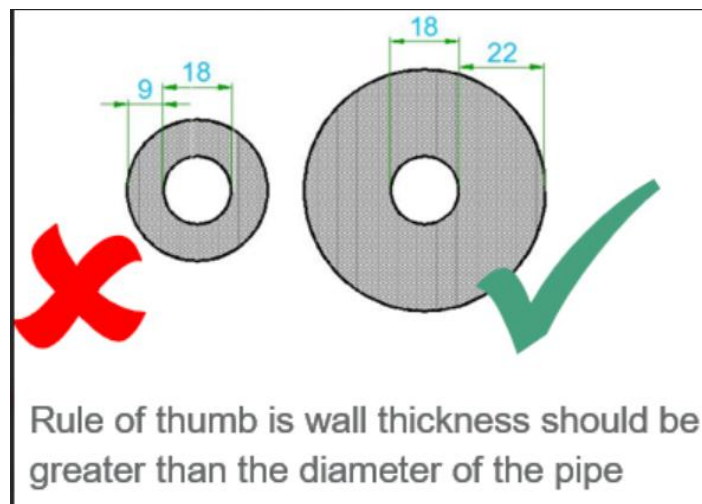
This technical bulletin outlines common reworks noted by SEAI during inspection of attic insulation works. The methods described below are intended as guidance. All measures must be installed as per the Domestic Technical Standards and Specification (DTSS) and in accordance with the Contractors Code of Practice. Please see the Contractors Support page for further information: <https://www.seai.ie/grants/supports-for-contractors/>. Appendix 2 of the Quality Assurance and Disciplinary Procedures (QADP) document contains a full list of checks, used by SEAI inspectors. This list should be used as a guide to check your work, prior to completing and signing the Declaration of Works (DoW) form.

1. Pipe insulation



 <p>Figure 1: Incorrect Installation</p>	 <p>Figure 2: Correct Installation</p>
<p>Incorrect Method:</p> <ul style="list-style-type: none">- No pipework insulation installed	<p>Correct Method:</p> <ul style="list-style-type: none">- All pipework fully insulated to Scheme Standard

Scheme Standard (DTSS) - all pipework should be insulated in unheated areas of the roof space (using approved materials) when installing attic insulation. If pipework is not sufficiently robust to withstand the installation of insulation, the pipework should be replaced.

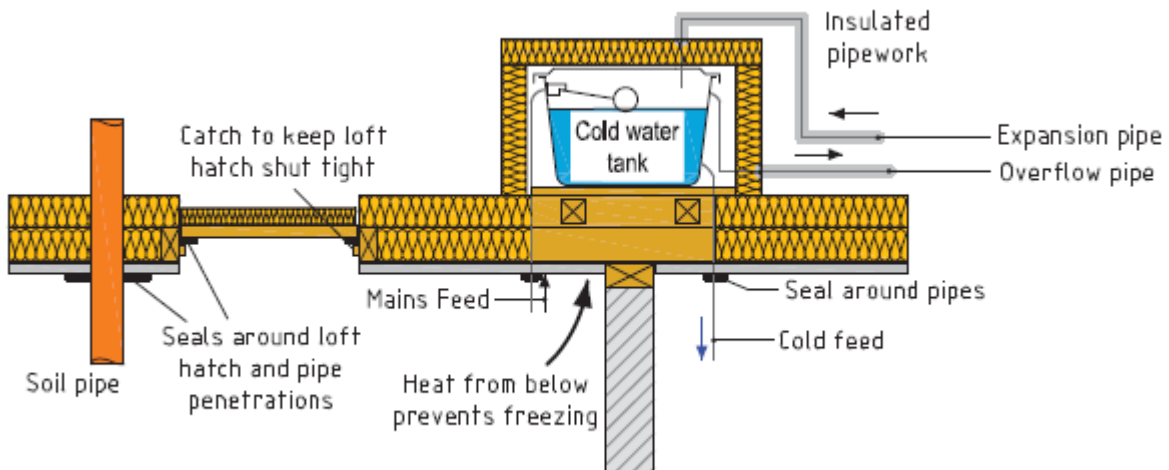
When it comes to the thickness of insulation on the pipe, the insulation thickness must comply with the DTSS and S.R. 54 *Code of practice for the energy efficient retrofit of dwellings*. As a rule of thumb for installers, it is important to remember that the thickness of the insulation must be greater than the pipe diameter, as shown below.





2. Water Storage Tank Insulation

 <p>Figure 3: Incorrect Installation</p>	 <p>Figure 4: Correct Installation</p>
<p>Incorrect Method:</p> <ul style="list-style-type: none"> - No insulation fitted 	<p>Correct Method:</p> <ul style="list-style-type: none"> - Insulated to scheme standard

Scheme Standard (DTSS) - water storage tanks should be insulated in unheated areas of the roof space when installing attic insulation. No gaps should be left between the insulation surrounding the cold-water storage. If the water storage tank is not sufficiently robust to withstand the installation of insulation, the water storage tank should be replaced. The following image, taken from *S.R. 54 Code of practice for the energy efficient retrofit of dwellings*, displays an indication of insulating water tanks and sealing penetrations to roof:





3. Electrical

 <p>Figure 5: Incorrect Installation</p>	 <p>Figure 6: Correct Installation</p>
<p>Incorrect Method:</p> <ul style="list-style-type: none"> - Recessed ceiling lights not protected to Scheme Standard - High Powered Cables Covered 	<p>Correct Method:</p> <ul style="list-style-type: none"> - Recessed ceiling lights protected as per Scheme Standard - High Powered Cables should not be covered, serious health & safety risk

Scheme Standard (DTSS) - Contractors to use purpose-made recessed down light covers (tested to BS EN 60598-1 *Luminaires. General requirements and tests*) or retain insulation at 75mm from recessed light fittings.

Increase in non-compliance of ‘High Powered Cables covered’ in previous 18 months. This poses a potential very **serious health & safety risk** to the Homeowner if high powered cables are covered while insulating the attic space. Please consult appendix 2 of the QADP and comply with associated checklist.

4. Ventilation

 <p>Figure 5: Incorrect Installation</p>	 <p>Figure 6: Correct Installation</p>
<p>Incorrect Method:</p> <ul style="list-style-type: none"> - Insufficient ventilation 	<p>Correct Method:</p> <ul style="list-style-type: none"> - Sufficient ventilation

Scheme Standard (DTSS) - attention should be given to ventilation and condensation requirements of the attic in relation to the materials used. The installed insulation must not impede cross-flow ventilation. All ventilation in roof/attic insulation should meet the requirements of DTSS and S.R. 54 *Code of practice for the energy efficient retrofit of dwellings*, published by the National Standards Authority of Ireland (NSAI). The S.R. 54 *Code of practice for the energy efficient retrofit of dwellings* provides further detailed information on required ventilation practices when it comes to ventilating cold pitched roofs, room in roof space and warm pitched roofs with internal and/or external insulation.

5. Other common reworks

Boarded Walkways not Fitted to Standard

In every roof space where cold water tanks or other fitted appliances occur, the Contractor must construct a permanent boarded walkway from the roof access hatch to any areas that may require routine inspection or maintenance such as the tank ball valve position and / or the appliance location.

Insulation not as per Scheme Standard

Insulation products must comply with DTSS requirements and details must be included on the Declaration of Works form. Please be advised that in line with SEAI's DTSS, Section 6.4, NSAI Agrément-certified products must be used where there is a certified product of that type (e.g. NSAI certified spray foam products must be used). You must submit an NSAI Agrément certificate for any spray foam product used. Contractors who are installing NSAI certified spray foam products must also be an "Approved Installer" of the spray foam manufacturers product. The Contractor must demonstrate their inclusion on the list or certification by the manufacturer.

Hatch Insulation not to Scheme Standard

The Contractor must insulate the roof access hatch to the same thermal value as the main attic. Draught strip shall be fitted to all sides of the attic hatch.

Insulation Depth not Installed as Specification

The Contractor must ensure that, in the case of insulation depth, that the insulation is laid to the correct depth as in accordance with the product specification in order to achieve required U-Value.

No NSAI Certificate (or equivalent) for Spray Foam Insulation

The Contractor must ensure that, in order for the works to meet required insulation standards of the DTSS, there must be an NSAI Certificate (or equivalent) for spray foam insulation left on site for inspection. This ensures the spray foam product which has been used in the roof insulation is NSAI certified (or equivalent) and that the Contractor is on the approved NSAI Agrément list of product installers for this certified spray foam product.

w: www.seai.ie

e: info@seai.ie

t: 01 8082100

