

Traditional Homes Pilot

Application Guide for One Stop Shops

(including guidance for Traditional Building Professionals)



IMPORTANT NOTICES

- It is the responsibility of each applicant, before making a submission, to ensure that they have read and fully understood <u>Improving Energy Efficiency in Traditional</u> <u>Buildings: Guidance for Specifiers and Installers (DHLHG)</u>, all documentation associated with this programme, the application process and associated technical requirements.
- The Traditional Homes Pilot 2024 is subject to any State aid clearances required from the Commission of the European Union and any consents, clearances or licenses which might be required from any other competent body. SEAI reserves the right to alter or amend any aspect of this programme as a consequence of any directions, conditions, or requirements of any such consents, clearances or licenses.
- SEAI reserve the right to update this document. For the avoidance of doubt, the applicable version is the one which published on the SEAI website on the closing date for receipt of applications.
- SEAI accepts no liability or responsibility, whether for breach of contract, negligence or otherwise, in respect of any claim or cause of action arising out of, or concerning, any equipment, product, work, system or installation in respect of which grant approval was given by SEAI.

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1 Introduction

5.1 Pilot Overview

The Sustainable Energy Authority of Ireland (SEAI) is pleased to announce the launch of the Traditional Homes Pilot project 2024 as a separate strand under the National Home Energy Upgrade Scheme. This pilot seeks to gain a detailed understanding of the technical aspects, materials, products or supply and fit costs associated with the solutions required for traditional homes.

The Climate Action Plan includes target for the delivery of 500,000 home energy upgrades to a B2 energy rating or cost optimal equivalent standard, and the installation of 400,000 heat pumps by 2030.

SEAI provides grants through a variety of existing home energy upgrade programmes, including the Better Energy Homes, Warmer Homes Scheme, Community Energy Grants and National Home Energy Upgrade schemes. These programmes will continue to evolve in the context of the National Retrofit Programme (NRP).

These programmes provide support to homeowners to improve their home subject to the energy efficiency measure meeting certain standards and requirements. Generally, materials and products are required to be Irish Agrément certified or equivalent, demonstrating compliance with Building Regulations Part D (Materials and Workmanship). The materials that would be used to upgrade traditionally built homes typically have not been Agrément certified to these standards due to a variety of reasons.

In February this year the Department of Housing, Local Government & Heritage (DHLGH) launched guidance on improving the energy efficiency in traditional buildings – <u>Improving Energy Efficiency in Traditional</u> <u>Buildings: Guidance for Specifiers and Installers (DHLHG 2023)</u>. Guidance on the upgrading of modern construction, including early solid concrete walls and early twin-leafed or cavity wall construction, can be found in S.R. 54:2014&A2:2022 Code of Practice for the Energy Efficient Retrofit of Dwellings.

The current technical specifications for the energy upgrade schemes are described in the SEAI Domestic Technical Standards & Specifications. This document addresses modern construction methods but has limitations when considering solutions for traditionally built homes. As a result, the grant schemes to date have not supported traditional homes with the solutions identified in the DHLGH guidance. This pilot programme is proposed to gain detailed understanding of the technical aspects, materials, products or supply and fit costs associated with the solutions required for traditional homes.

This pilot will be run under the National Home Energy Upgrade scheme where traditional home upgrades will be delivered for homeowners through registered One Stop Shops, supported by a qualified Traditional Building Professional (TBP), engaged from project commencement.

Grant applications should be made through One Stop Shops. The One Stop Shop will provide an energy assessment, retrofit and technical design working in consultation with the TBP, end to end project management and quality assurance. Applications from individual homeowners are not permitted under this Call.

5.2 Pilot Objectives

This research pilot:

- aims to support the Climate Action Plan target for the delivery of 500,000 home energy upgrades to BER B2 or a cost optimal equivalent standard.
- will provide further guidance to the market on appropriate design, specification and installation considerations when retrofitting traditional homes.
- will allow SEAI to review the appropriateness of existing standards and their suitability for the retrofitting of traditional homes under their existing grant programmes.

5.3 Sample size, typology, and timeline.

The Traditional Homes Pilot seeks to engage a total of 100 homes (made up of separate application packages). The pilot will run for more than one year and will be open to all traditional home building typologies providing they meet the scheme requirements.

5.4 What is a "Traditional Building"?

There are a wide variety of traditional buildings throughout the country. These mainly include those built with solid masonry walls of brick, stone, or clay, using lime-based mortars, often with a lime or earthen-based render finish, single-glazed timber or metal-framed windows and a timber-framed roof usually clad with slate but often with tiles, copper, lead or, less commonly, corrugated iron or thatch.

These types of buildings perform differently from modern construction. Their thermal mass allows them to heat up and cool down more slowly. They also manage moisture differently allowing moisture to move in a controlled way into and through their semi-permeable fabric. External lime render was sometimes applied as a weathering layer to reduce the amount of water absorbed whilst still allowing the wall to breath. They also rely on nature in the form of the wind and sunshine, as well as the buildings heating and natural ventilation (through windows, doors, and chimneys) to stay dry. They act like a balanced system which when in good condition and with regular maintenance perform well. However, any changes to the system through any individual alteration if not correctly undertaken can cause problems such as overheating or mould growth. Therefore, it is critical that any finishes or materials used on traditional walls, such as mortars and plasters, be vapour-permeable supporting the absorption and evaporation of moisture.

As reported by 2016 census records, 16% of all private homes in Ireland (c.270,000) were constructed prior to 1940, which were predominately of solid masonry, traditional construction.

There are 43,073 protected structures recorded in Ireland which include domestic and non-domestic buildings and other structures.

A selection of typical traditional wall build-ups is shown in **Figure 1**, but it should be noted that this is not a definitive list. Variations in materials, construction and thicknesses are to be expected.

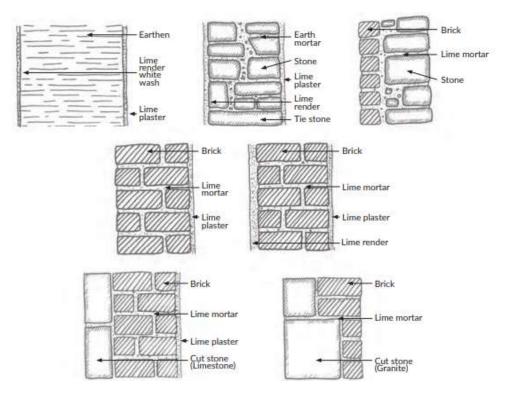


Figure 1: Selection of typical traditional wall build-ups

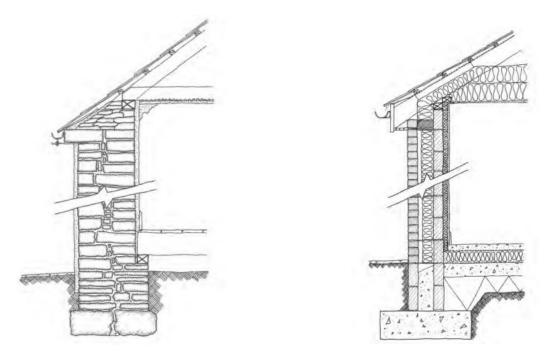


Figure 2: Typical solid masonry wall

Figure 3: Typical modern cavity wall

Figure 1: Selection of typical traditional wall build-ups; Department of Housing, Local Government and Heritage (2023), Improving Energy Efficiency in Traditional Buildings: Guidance for Specifiers and Installers.

Figure 2: Typical solid masonry wall; Department of Housing, Local Government and Heritage (2023), Improving Energy Efficiency in Traditional Buildings: Guidance for Specifiers and Installers.

Figure 3: Typical modern cavity wall; Department of Housing, Local Government and Heritage (2023), Improving Energy Efficiency in Traditional Buildings: Guidance for Specifiers and Installers.

5.5 Historic character, Protected Structures & Architectural Conservation areas

It is important any retrofit works does not irreparably damage the historic building fabric or undermine the building's character. In developing the Retrofit Plan (see Section 5.1 below)¹ for the building, early engagement with the local authority building control officer is important. Similarly, where an installation would impact on the character of a protected structure, a proposed protected structure, or a building located in an ACA (*Architectural Conservation Area*), early consultation with the local authority architectural conservation officer is also important. The aim should be to improve energy efficiency as far as is reasonably practicable, taking care not to prejudice the character of the building or increase the risk of long-term deterioration of the building fabric.

Care must still be taken with non-protected traditional buildings as energy-efficiency upgrades can adversely affect the character or the fabric of these buildings if incorrectly implemented. A traditional building professional must be appointed by the homeowner to advise on the impact of any works proposed.

Care must also be taken to ensure statutory obligations are addressed where applicable. Consideration should be given to planning legislation, protected structures, architectural conservation areas, national monument legislation, wildlife legislation, building control legislation and building regulations. See section 1.3 of the guidance document *Improving Energy Efficiency in Traditional Buildings: Guidance for Specifiers and Installers (DHLHG)* for further information.

Protected Structures

A protected structure is defined as any structure or specified part of a structure that is included in the RPS of the planning authority. By definition, protection extends to the interior of the structure, any other structures within the curtilage and their interiors. Planning permission is required for all works that would materially affect the character of a protected structure, a proposed protected structure or any element of the structure that contributes to its special interest.

Architectural Conservation Areas (ACA)

Under the Planning and Development Act 2000 (as amended), an ACA is a place, area, group of structures or townscape that: is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest, or contributes to the appreciation of a protected structure. Carrying out works to the exterior of a structure located in an ACA, which would materially affect the character of the area, requires planning permission.

An example of works requiring planning permission include adding solar panels or other renewable energy systems to buildings or erecting free-standing installations within the ACA.

Where there is doubt as to whether external works would affect the character of an ACA, advice should be sought from the architectural conservation officer in the local authority.

National Monuments Acts

Structures and sites may be protected under the National Monument Acts 1930 to 2014. When dealing with older buildings, it is important to establish their legal status by checking if they are included in the Record of Monuments and Places (RMP). Buildings subject to the National Monuments Acts are exempt from the requirements of the Building Regulations under Class 8, third schedule of the Building Regulations 1997 (SI 497 of 1997). Any works to a traditional home that is subject to the National Monuments Acts should engage with the National Monuments Service and the local authority architectural conservation officer, heritage officer and/or archaeologist for advice and guidance.

1. For more detail, see Section 3.2 (Developing a Retrofit Strategy) of <u>Improving Energy Efficiency in Traditional</u> <u>Buildings Guidance for Specifiers and Installers</u>

2 Key roles:

2.1 One Stop Shop

Energy efficiency grants for the upgrading of traditional homes will be provided through the National Home Energy Upgrade Scheme (NHEUS, otherwise known as the One Stop Shop service) and will be delivered through SEAI's registered One Stop Shop providers via the OSS (One Stop Shop) portal. The OSS will support the homeowner in providing a streamlined process offering expert advice, grant management, quality assurance, project co-ordination, project management and aftercare. It is important the One Stop Shop is involved in the project from the outset to ensure proposed retrofit measures are successfully integrated.

2.2 Traditional Building Professional

The energy efficiency upgrading of traditional buildings should generally be undertaken by competent specifiers and installers with the right skills and experience, in line with <u>Improving Energy Efficiency in</u> <u>Traditional Buildings: Guidance for Specifiers and Installers (DHLHG)</u>.

The following must be appointed by the homeowner and will be required to sign the Traditional Homes Declaration of Works ², provided they are competent in relation to the particular works involved:

- (a) Architects that are on the register maintained by the RIAI under Part 3 of the Building Control Act 2007; or
- (b) Building Surveyors that are on the register maintained by the SCSI under Part 5 of the Building Control Act 2007; or
- (c) Chartered Engineers on the register maintained by Engineers Ireland under section 7 of the Institution of Civil Engineers of Ireland (Charter Amendment) Act 1969.

The Traditional Building Professional must be competent, and meet the qualification requirement in Table 1 below, to carry out their design and to co-ordinate the design activities of others for the works concerned. They must be involved in the project from the outset.

The Traditional Building Professional must have Professional Indemnity insurance in place to cover the project type and scale.

| Building works specifier | Qualification | Additional qualifications/competencies |
|--------------------------|---|---|
| Architect | RIAI-registered architect | RIAI Accredited Conservation Architect ³ relevant experience in the cost-optimal thermal upgrade of traditional buildings |
| Building surveyor | SCSI-registered building surveyor | Conservation accreditation ⁴ + an understanding of applied building physics relevant to traditional buildings. Relevant experience in the thermal upgrade of traditional buildings |
| Structural engineer | Engineers Ireland-registered structural engineer | Chartered engineer: Conservation Accreditation Register for Engineers ⁵ Relevant experience in the cost-optimal thermal upgrade of traditional buildings |

2. This declaration does not take precedence over the provisions of the Building Control Acts, and the Building Control Regulations.

- 3. See <u>https://www.riai.ie/work-with-an-architect/conservation-skills</u>.
- 4. See <u>https://scsi.ie/building-conservation-accreditation/</u>
- 5. See https://www.engineersireland.ie/Professionals/Communities-Groups/Engineering-Divisions/Structures-and-construction/Conservation-Accreditation-Register-for-Engineers

Where the selected Traditional Building Professional does not have conservation accreditation, the applicant will be required to outline the relevant conservation qualifications and demonstrated conservation experience of the chosen professional. The building professional should have demonstrable competence in the relevant area of building conservation, an understanding of applied building physics relevant to traditional buildings and experience in the thermal and cost-optimal upgrade of traditional buildings. In this instance supporting documentation will be required to be submitted to SEAI for review prior to approval. This can be done by emailing <u>onestopshop@seai.ie</u> or if the One stop Shop is already engaged on the project, they can submit this on the applicant's behalf.

The Traditional Building Professional should be supported, where required, by ancillary certificates from other members of the design team and by certificates from specialist sub-contractors.

To support sign off, the Traditional Building Professional is required to coordinate the inspection of the works by themselves and others and to certify the works on completion.

3 The eligibility criteria:

The energy upgrades are required to meet general scheme requirements including:

- Pre works BER of B3 or worse.
- Post works BER of B2 or better (projects delivering a significant energy upgrade but falling just below the required B2 level can be discussed with the SEAI to review eligibility)
- Primary energy uplift of at least 100kWh/m²/year (as per B2 eligibility note above)
- Measures installed must meet the scheme's operational and technical requirements. The SEAI <u>Domestic Technical Standards & Specifications</u> (DTSS) and <u>Improving Energy Efficiency in Traditional</u> <u>Buildings: Guidance for Specifiers and Installers (DHLHG)</u> details the technical requirements for the Scheme. In lieu of Irish Agrément certification or equivalent for specified materials, a Traditional Building Professional must confirm they are 'proper materials' suitable for their intended use under Irish site conditions, and in accordance with the Building Regulations.
- A Traditional Building Professional must be engaged to oversee the works and specification of material proposed.

Where the HLI (Heat Loss Indicator) is within the range of >2.3 and ≤3.0 W/m2K, the project may be eligible for the HLI Research project.

The pilot will offer the same grants at the same level as available in the NHEUs which can be delivered by registered One Stop Shop.

4 Process for a grant supported traditional home upgrade:

A high-level overview of the process is outlined below:

Homeowner appoints an independent Traditional Building Professional (TBP). The One Stop shop may support the homeowner in identifying a suitably qualified TBP to fulfil this role. The Homeowner may also come to the OSS with the TBP engaged.

The One Stop Shop & Homeowner work together to ensure the Traditional Building Professional meets the qualification and competency requirement outlined in Table 1.

The Traditional Building Professional in conjunction with the One Stop Shop (OSS pathway) will define the whole house retrofit strategy and scope of works. The Traditional Building Professional will specify "proper materials" suitable for their intended use. The OSS will focus on other energy efficiency measures e.g., heat pump installation.

The Traditional Building Professional will be part of the upgrade from the outset conducting the necessary due diligence activities to ensure works are completed in accordance with the requirement specified.

It is recommended the Homeowner / Traditional Building Professional, supported by the One Stop Shop should engage with the Local Authority Architectural Conservation officer to discuss the merits of the scheme and consider any historical features that should be retained.

Registered One Stop Shop applies for grant support via the OSS portal. Details reviewed on the system and if approved a grant letter of offer is issued. The standard One Stop Shop process applies, e.g., pre works BER is required.

Works are carried out in accordance with the specified design.

The One Stop Shop uploads the signed Traditional Building Declaration of Works to the OSS portal. This is signed by the Traditional Building Professional. SEAI are advised of TBP qualifications & experience.

Grant request for payment is reviewed before being issued to One Stop Shop

Technical requirements:

5.1 Retrofit Plan

All work on traditional buildings requires an approach which is specific to their context. A holistic or wholebuilding approach to energy upgrading is advisable for all traditional buildings regardless of their protection status. A whole-building approach integrates fabric, services (including heating and ventilation systems) and human behaviour with the buildings context. It also considers its historical significance and conservation needs.

All grant applications must be accompanied by a Retrofit Plan in accordance with EN 16883:2017. This standard provides guidance on developing a retrofit strategy for traditional and historic buildings. It includes the steps necessary to identify the appropriate energy-efficiency improvements for a particular building.

The procedure can be broken down into 10 clear steps, namely:

- Step 1: Initiate the process.
- Step 2: Assess the building.
- Step 3: Specify objectives and targets.
- Step 4: Assess and select measures for improved energy performance.
- Step 5: Undertake risk mitigation measures.
- Step 6: Create a short list of measures and review their impact.
- Step 7: Revise objectives and energy-efficiency targets
- Step 8: Review with the statutory authority (as required)
- Step 9: Appoint suitably qualified contractors/specialists.
- Step 10: Implement, document, and evaluate.

Section 3.2 in *Improving Energy Efficiency in Traditional Buildings: Guidance for Specifiers and Installers* (*DHLHG*) provides further details on the actions recommended within each step.

Note:

Not all steps will be required in every case and further statutory requirements may apply.

5.2 Minimum Standards

Table 2 describes the minimum technical requirement for each energy upgrade measure. Where the Traditional Building Professional specifies a higher u-value for any measure to support the natural transfer of moisture and heat in vapour permeable materials, this will be approved for grant support where required (e.g., 0.55 W/m²K wall u-value on masonry wall insulated internally). Similar applies to instances where the B2 and 100kWh/m²/year requirement cannot be achieved due to design constraints.

| Measure | Requirement ^{1, 2} (U-value or notes) |
|---|--|
| Heat Pump | |
| CH System (HP) | Domestic-Technical-Standards-and-Specifications.pdf |
| Heat Pump A2A | |
| Heating controls only | |
| Ceiling Insulation | U Value: 0.16 W/m ² K |
| Rafter Insulation (incl. flat roof) | U-value: 0.20 W/m ² K (0.22W/m ² K) |
| Cavity Wall Insulation | Domestic-Technical-Standards-and-Specifications.pdf |
| External Wall Insulation | |
| Internal Wall Insulation | U-value: 0.50 W/m ² K |
| Windows | 1.4 W/m ² K (Window Replacement) |
| | Dwellings on the Record of Protected Structures / ACA 2.4 W/m²K (secondary glazing) replacement window envelopes must, in as much as is physically feasible, achieve a U-value for the glazing of envelopes of 2.1 W/m2K. |
| External Doors | 1.4 W/m ² K (Door Replacement) |
| | Dwellings on the Record of Protected Structures / ACA replacement window envelopes must, in as much as is physically feasible, achieve a U-value for the glazing of envelopes of 2.1 W/m ² K. |
| Floor Insulation | U-value: 0.36 W/m ² K (or 0.15 W/m ² K for underfloor heating) |
| Solar Hot Water | |
| Solar PV | |
| Mechanical Ventilation | Domestic-Technical-Standards-and-Specifications.pdf |
| Air tightness (test + airtightnes measures. 5m3/hr/m2 post work) | 5 |
| Home Energy Assessment | NHEUS requirements |
| Project Management and Heat Pump Bonus | NHEUS requirements |
| • | by the Traditional Building Professional and in accordance with the <u>Improving</u> ildings: Guidance for Specifiers and Installers (DHLHG) and the <u>SEAI Domestic</u> - |

<u>Technical-Standards-and-Specifications</u> where applicable.

 For buildings of architectural or historical interests or permeable traditional construction, refer to Part L of the Building Regulations, paragraph 0.6.

Table 2

Confirmation from the Traditional Building Professional on compliance with Building Regulations is required where appropriate vapour permeable material specified are not Irish Agrément certified.

Note: Some works may require planning permission in protected buildings (RPS/ACA) refer to TBP for guidance.

5.3 Building Energy rating (BER)

To ensure robust verified data is collected, the applicant must ensure that selected dwellings are assessed by independent BER and Airtightness assessors.

Please note that all homes require a pre- and post-works Building Energy Rating (BER)

5.4 Suitability of retrofit measures

Section 3.4 (Retrofit Measures) in the DHLGH guidance document <u>Improving Energy Efficiency in Traditional</u> <u>Buildings: Guidance for Specifiers and Installers (DHLHG)</u> provides further details on the actions recommended within each step. provides guidance on the general compatibility of typical retrofit measures with a traditional building, this table is for guidance only each building will require assessment on a case-by-case basis and will require the guidance of the Traditional building professional engaged on the project.

5.5 Material Certification

Any materials used should comply with building regulations Parts D and L. TGD (Technical Guidance Document) D defines proper materials as materials that are fit for the use for which they are intended and for the conditions in which they are to be used, and includes materials that:

- bear a CE marking in accordance with the provisions of the Construction Products Regulation,
- comply with an appropriate harmonised standard or European Technical Assessment in accordance with the provisions of the Construction Products Regulation, or;
- comply with an appropriate Irish Standard or Irish Agrément Certificate or equivalent with an alternative national technical specification of any state that is a contracting party to the Agreement on the European Economic Area, which provides in use an equivalent level of safety and suitability.

In the absence of Irish Agrément certification or equivalent for specified materials, a Traditional Building Professional must confirm they are 'proper materials' suitable for their intended use under Irish site conditions, and in accordance with the Building Regulations. For this reason, the early engagement with the local authority building control officer – as per Section 3.2 (Developing a Retrofit Strategy) of Improving Energy Efficiency in Traditional Buildings Guidance for Specifiers and Installers – is important.

5.6 General Requirements

Home energy upgrade works must be completed in accordance with the technical requirements outlined in the Departments guidance document the DHLGH guidance document <u>Improving Energy Efficiency in</u> <u>Traditional Buildings: Guidance for Specifiers and Installers (DHLHG)</u> and the <u>SEAI Domestic-Technical-Standards-and-Specifications</u> where applicable.

5.6.1 Product standards and specification

All products used must be new, fit for purpose, improve the energy efficiency of the building, and have no detrimental impact on the structure, viability, quality or safety of the property. All products must meet applicable product standards and regulations, and any additional requirements detailed in this document.

The insulation system must be approved by the Irish Agrément (or equivalent) and / or specified as "proper materials" suitable for their intended use in accordance with the Building Regulations.

Works shall be carried out in accordance with best practice and technical guidance documents, including but not limited to:

- the DHLGH guidance document <u>Improving Energy Efficiency in Traditional Buildings: Guidance for</u> <u>Specifiers and Installers (DHLHG)</u>
- Building Regulations Technical Guidance Documents (Latest updates of Part L, Part B, Part C, Part D, Part F, Part J, Part M in particular).
- The System Supplier/ Product Manufacturer Guidelines

5.6.2 Installation standards and specifications

All works must be carried out in accordance with: (i) the relevant Irish Standard (IS) or relevant British Standard (BS) and any other applicable European or international standards, to ensure compliance with their technical requirements and best practice; (ii) all applicable law; and (iii) using reasonable skill, care and diligence.

This guidance is intended to assist with meeting SEAI Scheme requirements for each energy upgrade and does not supersede or extend beyond the requirements set out in the applicable Building Regulations.

5.7 Secondary Glazing

In certain situations, alterations to or the removal of, historic windows, doors and any special associated features may not be considered acceptable. The local authority's architectural conservation officer should be consulted in the early stage of the design process for advice.

Secondary glazing is typically single or double glazing within a metal, PVC, or timber frame.

The secondary glazing system must conform to the relevant building regulations and standards, including but not limited to:

- EN 1279-1 (Glass in building. Insulating glass units. Generalities, dimensional tolerances, and rules for the system description)
- EN 1279-2 (Glass in building. Insulating glass units. Long term test method and requirements for moisture penetration)
- BS 6262 Glazing for buildings. Code of practice for safety related to human impact.
- BS 6375: Performance of windows and doors
- BS EN 410:2011 Glass in building. Determination of luminous and solar characteristics of glazing
- BS EN 673:2011 Glass in building. Determination of thermal transmittance (U value). Calculation method
- BS 8206-2:2008 Lighting for buildings. Code of practice for daylighting
- BS EN 12898:2001 Glass in building. Determination of the emissivity

Secondary glazing system must be installed as per the

- Manufacturer's guidelines,
- The Code of practice for the survey and installation of windows and
- The installer must be competent to install window Glazing Envelope in accordance with Code of practice for the survey and installation of windows and external doorsets (BS 8213-4:2016) and the manufacturer's guidelines as a minimum requirement and BS 8000-0 Workmanship on construction sites. Introduction and general principles

Thermal Performance:

The secondary glazing must contribute to improving the thermal insulation of the building, achieving a minimum U-value of 2.4 W/m²K or better.

Certified U-values for composite systems that include secondary glazing, or for replacement glazing solutions, may be calculated in accordance with ISO 10077-1&2 by a specialist, if required.

5.8 Ancillary Certification

The Traditional Building Professional should be supported, where required, by ancillary certificates from other members of the design team and by certificates from specialist sub-contractors.

To support sign off the Traditional Building Professional is required to coordinate the inspection of the works by themselves and others and to certify the works on completion.

Apart from the Traditional Building Professional signing the Declaration of Works, as indicated above, there is likely to be a range of certifiers on most projects that confirm compliance of element(s) of the building, design or works with Building Regulations. Ancillary certifiers may include:

- Architects and Architectural Technologists/Technicians.
- Consulting Engineers (especially structural/civil and mechanical/electrical) appointed to design, inspect, and certify the relevant elements of the works.
- Building surveyors
- Thermal bridge modeller
- Hygrothermal modeller
- Ventilation validator
- Air permeability tester
- Builder, sub-contractors, suppliers, and manufacturers, both in relation to certifying Design and Construction, and also in relation to components or assemblies supplied for the works, and/or in relation to tests.

Every certifier should exercise reasonable skill, care, and diligence in the exercise of their duties. Where appropriate, they should also have experience in working on traditional buildings. The individual certifiers should undertake to inspect and to cooperate with the other members of the design team in accordance with the overall inspection plan. They should also provide the necessary ancillary certificates to the traditional building professional.

6 Levels of funding & Measures available

The measures and grant amounts available are the same for all homeowners under the OSS service. Please see link below for further details.

One Stop Shop Services | Home Energy Grants | SEAI

| OSS Service | Detached | Semi-D / End Tce | Mid Terrace | Apartment |
|---|---------------|---------------------|-------------|-----------|
| Heat Pump | | €6,500 | | €4,500 |
| Central Heating System for Heat Pump | | €2,000 | | €1,000 |
| Heat Pump Air-to-Air | €3,500 | | | |
| Heating Controls | €700 | | | |
| Launch bonus | €2,000 | | | |
| Ceiling Insulation | €1,500 | €1,300 | €1,200 | €800 |
| Rafter Insulation | €3,000 | €3,000 | €2,000 | €1,500 |
| Cavity Wall Insulation | €1,700 | €1,200 | €800 | €700 |
| External Wall Insulation | €8,000 | €6,000 | €3,500 | €3,000 |
| Internal Wall Insulation | €4,500 | €3,500 | €2,000 | €1,500 |
| Windows (Complete Upgrade) * | €4,000 | €3,000 | €1,800 | €1,500 |
| External Doors (max. 2) | €800 per door | | | |
| Floor Insulation | €3,500 | | | |
| Solar Thermal | €1,200 | | | |
| Solar PV | Up to €2,100 | | | |
| Mechanical Ventilation | €1,500 | | | |
| Air Tightness | €1,000 | | | |
| Home Energy Assessment | €350 | | | |
| Project Management | €2,000 | €1,600 | €1,200 | €800 |

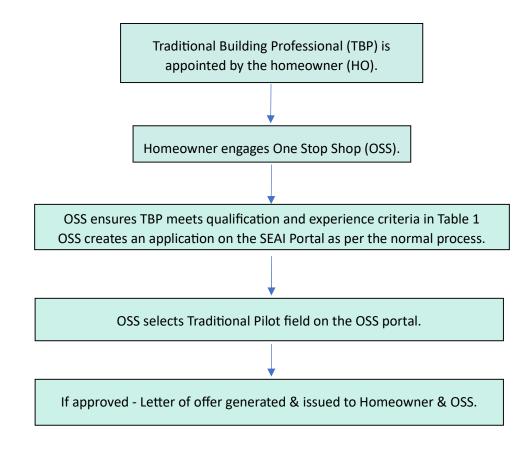
Table 3 – National Home Energy Upgrade Scheme (One Stop Shop service) grants

* In buildings where historic windows and doors are to be retained, secondary glazing systems can be supported by the windows grant providing it meets the schemes requirements.

7 Application Process

7.1 How to apply

The grant application is completed through the national home energy upgrade scheme online portal, where funding is provided on an individual home basis. The diagram below outlines at high level the standard application process:



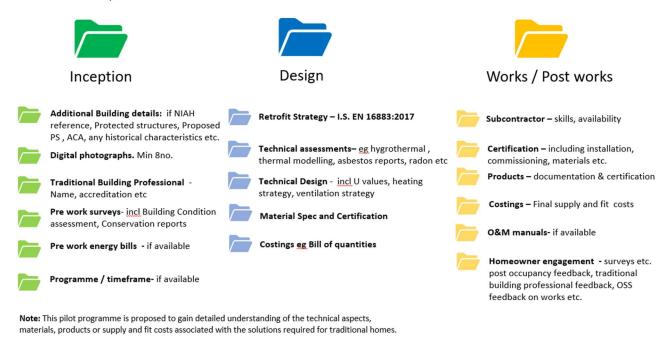
Note:

The OSS SEAI Portal **Admin user** must be the person who completes the form.

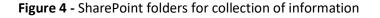
7.2 Supporting Documentation

The Traditional homes pilot seeks to gain a detailed understanding of the technical aspects, materials, products or supply and fit costs associated with the solutions required for traditional homes. A Traditional homes pilot folder has been created on SharePoint for the One Stop Shop to upload the required information. This will help develop an understanding of the requirements for the future grant funding for Traditional Homes.

Figure 4 below outlines the SharePoint sub folders and the key data required where applicable to the project.



Traditional homes pilot - SharePoint folders for collection of information:



8 Publicity and Case Studies

The aim to of this pilot programme is to gain detailed understanding of the technical aspects, materials, products or supply and fit costs associated with the solutions required for traditional homes.

At the completion of the home energy upgrades, SEAI will engage with the applicant with a view to developing a short case study which sets out the main elements of the project, critical success factors / learnings. These may be used for further analysis or inclusion in reports from SEAI and will provide more information for the wider industry in relation to retrofit of traditional buildings.

Also, SEAI will seek to contact homeowners and participants to request their participation in surveys (telephone or questionnaire) to determine the impact and achievements of the project and may develop and publish case studies (protecting as appropriate all personal, confidential, or commercially sensitive information/data).

8.1 Homeowner contact preference form

The National home energy upgrade scheme – contact preference form should be completed by all homeowners and uploaded to the portal at application stage.

| National Home Energy Upgrade Scheme – Contact Preference Form V1.3 | | | |
|---|-------------------------------|---------------------|--|
| The Sustainable Energy Authority of I National Home Energy Upgrade, 'One experience of the programme. Selecting 'Yes' does not oblige you to voluntary. | e Stop Shop' Scheme to gather | information on your | |
| One Stop Shop Application Number (completed by One Stop Shop) | | | |
| Homeowner name | | | |
| Homeowner signature | | | |
| Date | | | |
| Would you, as the homeowner and r National Home Energy Upgrade scher contact you in relation to your experi purposes? | me, be happy for SEAI to | Yes No | |
| If you answered Yes above, please pr | rovide your email address: | • | |
| | | | |
| Withdrawing your consent | | | |
| If you selected 'Yes' above, you can s onestopshop@seai.ie. Details of how to opt out of receiving | | | |

Data Protection and Privacy Notice: SEAI fully respects your right to privacy. If you return this form to SEAI, we will collect and process your personal data, which you provide to us here, for the purposes of contacting you with research surveys as set out above. Your personal data will be shared only as necessary with employees of SEAI and third parties providing services on our behalf. We will only retain your data for as long as is necessary for the purposes above, and in accordance with data protection law. For more information about your personal data rights, and how SEAI collects, holds and processes your personal data, please refer to the Data Protection and Privacy statement which is available on our on scheme webpage www.seai.ie/grants/national-home-retrofit/. It also details how to exercise those rights, and what to do if you require more information or wish to make a complaint.

9 Useful Resources:

A Living Tradition: A Strategy to Enhance the Understanding, Minding and Handing on of Our Built Vernacular Heritage. Dublin: Department of Housing, Local Government and Heritage; Government of Ireland (2021a)<u>https://www.buildingsofireland.ie/app/uploads/2021/12/A-Living-Tradition.pdf</u>

BR262:2022 – Thermal insulation; avoiding risks.

BR 443 Conventions for U-value Calculations, BRE press, Anderson B, (2006)<u>https://bregroup.com/wp-content/uploads/2019/10/BR443-October-2019_consult.pdf</u>

BR 497, 2nd edition (2016); Conventions for Calculating Linear Thermal Transmittance and Temperature Factors; Building Research Establishment; Ward, T., Hannah, G. and Sanders, C.

Bringing Back Homes – Manual for the Reuse of Existing Buildings. Dublin:

Department of Housing, Planning and Local Government; Government of Ireland (2018) <u>gov.ie - Bringing</u> <u>Back Homes - Manual for the Reuse of Existing Buildings (www.gov.ie)</u>

BS 5250:2021 – Code of practice for the control of moisture in buildings

Code of Practice for Inspecting and Certifying Buildings and Works, Department of Housing, Planning and Local Government; Government of Ireland (2016)<u>https://www.gov.ie/pdf/?file=https://assets.gov.ie/80497/7c5e1298-58b3-4444-a8ee-f1c589f131c2.pdf#page=1</u>

Government of Ireland (2007–2020) Advice Series including:

• Energy Efficiency in Traditional Buildings (2010a)

https://www.buildingsofireland.ie/app/uploads/2019/10/Energy-Efficiency-in-Traditional-Buildings-2010.pdf

• Maintenance – a Guide to the Care of Older Buildings (2007a)

https://www.buildingsofireland.ie/app/uploads/2019/10/Maintenance-A-Guide-to-the-Care-of-Older-Buildings-2007.pdf

• Roofs – a Guide to the Repair of Historic Roofs (2010b)

https://www.buildingsofireland.ie/app/uploads/2019/10/Roofs-A-Guide-to-the-Repair-of-Historic-Roofs-2010.pdf

• Windows – a Guide to the Repair of Historic Windows (2007b)

https://www.buildingsofireland.ie/app/uploads/2019/10/Windows-A-Guide-to-the-Repair-of-Historic-Windows-2007.pdf

Historic Environment Scotland Guide to Energy Retrofit of Traditional Buildings. Edinburgh: Historic Environment Scotland; Jenkins, M. and Curtis, R. (2021)<u>https://www.historicenvironment.scot/archives-and-research/publication/?publicationid=47c9f2eb-1ade-4a76-a775-add0008972f3</u>

Improving Energy Efficiency in Traditional Buildings: Guidance for Specifiers and Installers. Department of Housing, Local Government and Heritage

(2023)<u>https://www.gov.ie/pdf/?file=https://assets.gov.ie/279129/adb2c10d-86d7-4632-8368-65faba79ad22.pdf#page=null</u>

I.S. 440:2009+A1:2014. Timber frame construction, dwellings and other buildings. Dublin: NSAI

I.S. EN ISO 6946:2017&LC:2021. Building components and building elements - Thermal resistance and thermal transmittance - Calculation methods. Dublin: NSAI

I.S. EN ISO 9001:2015 Quality management systems - Requirements. Dublin: NSAI

I.S. EN ISO 9972:2015. Thermal Performance of Buildings - Determination of Air Permeability of Buildings - Fan Pressurisation Method (ISO 9972:2015). Dublin: NSAI

I.S. EN ISO 10211:2017. Thermal Bridges in Building Construction - Heat Flows and Surface Temperatures - Detailed Calculations (ISO 10211:2017). Dublin: NSAI

I.S. EN ISO 13370:2017. Thermal performance of buildings — Heat transfer via the ground — Calculation methods. Dublin: NSAI

I.S. EN ISO 13788:2012 Hygrothermal performance of building components and building elements.

I.S. EN 15026:2007. Hygrothermal performance of building components and building elements -Assessment of moisture transfer by numerical simulation. Dublin: NSAI

I.S. EN 16883:2017. Conservation of Cultural Heritage - Guidelines for Improving the Energy Performance of Historic Buildings. Dublin: NSAI

Moisture in buildings; an integrated approach to risk assessment and guidance Neil May and Chris Sanders Bsi <u>https://sdfoundation.org.uk/downloads/BSI-White-Paper-Moisture-In-Buildings.PDF</u>

S.R. 54:2014 & A2:2022 Code of Practice for the Energy Efficient Retrofit of Dwellings. Dublin: National Standards Authority of Ireland Government of Ireland (2014 and 2022) <u>https://shop.standards.ie/en-ie/standards/s-r-54-2014-a2-2022-877610 saig nsai nsai 3214983/</u>

Sustainable Traditional Building Alliance (2017) Responsible Retrofit Guidance Wheel. London: STBA. <u>https://responsible-retrofit.org/greenwheel/</u>

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Document History

| Revision | Date | Reason for change | Change |
|----------|----------|--|--------|
| | | | Owner |
| 1.0 | 16/10/24 | Document created | SW |
| 1.1 | 31/10/24 | Homeowner contact preference form updated | SW |
| 1.2 | 28/03/25 | Detail added on Traditional Building Professional qualifications | SW |