

**PROCEDURAL GUIDANCE ON CERTIFICATION
(including information to be submitted
with a Building Warrant Application)**

April 2010
Version 2.0 (2017)



**The Scottish
Government**

TABLE OF CONTENTS

1. INTRODUCTION
 2. CERTIFICATES OF DESIGN
 - 2.1 Level of information with a building warrant
 - 2.2 Amendment to building warrant
 - 2.3 Amendment to warrant – Staged building warrant
 - 2.4 Schedule 1 and Form Q
 - 2.5 Form Q – Multiple buildings on a building warrant
 - 2.6 Form Q – Temporary occupation or use of a building
 - 2.7 Form Q – Validation by verifier
 - 2.8 Changes to Approved Certifier of Design
 3. CERTIFICATES OF CONSTRUCTION
 - 3.1 Amendment to warrant following completion certificate submission
 - 3.2 Completion certificates – Multiple buildings on a building warrant
- ANNEX A – Level of Information to be submitted with a building warrant
- Certification of Design (Building Structures)
- ANNEX B – Level of Information to be submitted with a building warrant
- Certification of Design (Section 6 – Energy) in Domestic Buildings
 - Certification of Design (Section 6 Energy) in Non Domestic Buildings
- ANNEX C – Use of Third Party Designed Details
- Certification of Design (Building Structures) – Schedule 1 and Form Q

VERSION RECORD

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1. INTRODUCTION

1.1 Background

The Building (Scotland) Act 2003 establishes a role for suitably qualified people, businesses or other bodies, when appointed by the Scottish Ministers, to certify that certain design or construction work complies with the building regulations. Two roles are designated, Approved Certifiers of Design and Approved Certifiers of Construction, both of which certify compliance with the building regulations, as laid down in the scope of the certification scheme run by the scheme provider.

The verifier must check the validity of a certificate and may only accept it if:

- the person is registered as an Approved Certifier on the date of signature; and
- the firm is registered as an Approved Body on the date of signature by the certification coordinator; and
- both are registered under the same scheme which is relevant to the work being certified.

The verifier should also check that the certificate relates to the warrant application or completion certificate submission for example, building address, description of works and description of stages are consistent. A certificate may also be limited by the scope of the scheme and particular designations.

A certificate of design must certify all the work covered by the warrant application or amendment to warrant application. A certificate of construction must certify all the work covered by the completion certificate (see 3.2). In all cases no work can be excluded.

1.2 Liaison groups

Liaison groups comprising the key stakeholders involved in certification under the Building (Scotland) Act 2003 were set up in 2007 and 2008 and comprised representatives of scheme providers, local authority verifiers and the Building Standards Division of the Scottish Government (BSD). Three groups were formed, one for certification of design of building structures, one for certification of design for energy and the other for certification of construction for electrical installations.

A number of issues were raised at the meetings and discussed in detail. There were some common themes and it was agreed that the outcome of these discussions should be issued as guidance to assist all stakeholders and promote a consistent approach across Scotland.

This guidance has been produced jointly by the scheme providers, representatives of local authority verifiers and the BSD. It is intended to provide specific advice on procedures when an Approved Certifier of Design or Construction is used. The aim is to encourage a consistent approach.

2. CERTIFICATES OF DESIGN

2.1 Level of information to be submitted with a building warrant

An application for building warrant or amendment to warrant must be accompanied by plans and other information listed in schedules 1 and 2 of the Building (Procedure) (Scotland) Regulations 2004 as amended. The verifier has discretion over the extent of information that should be provided however, there must be sufficient detail for them to be satisfied that the work will comply with building regulations. This is further expanded in the Scottish Building Standards Procedural Handbook.

When a certificate from an Approved Certifier of Design is provided the verifier only needs to check the validity of the certificate. They do not check the design of the certified work and there may be less detail provided with the application. **However in all cases the applicant must provide enough information on the certified work to assist any site inspections the verifier wishes to make.**

The certificate of design must cover all of the work subject to building warrant approval. For the avoidance of doubt, it is important that the description provided on the certificate of design is accurate and consistent with the description on the application for building warrant, or application for amendment to warrant. Detailed guidance on the level of information relating to each certification scheme is included in **Annex A** (Building Structures) and **Annex B** (Energy).

2.2 Amendment to building warrant

When a building warrant has been granted and the approved design changes, an amendment to warrant is required before the changes can be carried out. When the warrant has been granted on the basis of a certificate from an Approved Certifier of Design, any subsequent amendment to the design could have an effect on the certified work. The Approved Certifier of Design must be informed of all changes to certified and non-certified work and must consider the relevance of the changes to the matters originally certified and also check the compliance of the changed design. If necessary they must issue a new certificate for the amended design or provide confirmation in writing that the changes have no impact on the certified design.

Therefore either a new certificate of design (with a new Schedule 1, if appropriate- see 2.4 below), or a confirmation letter stating that the current certificate is still valid will need to be submitted with the application for amendment to warrant. The following table provides the appropriate guidance –

Amendment to warrant due to –			
Type of change:	1. Change <u>to</u> the certified work	2. Change <u>affecting</u> the certified work	Change <u>not</u> affecting the certified work
Certifier action:	Check of existing design	Check of existing design	Assessment required
	New certificate required	New certificate required	Confirmation letter required

This procedure should also be followed for staged warrants which require an amendment to warrant to progress onto the next stage of work.

Notwithstanding the above, there may be situations where a verifier does not require an amendment for a minor change. In these circumstances, the Approved Certifier of Design may agree with the verifier that the impact of the change is minor and the Approved Certifier of Design may provide a letter confirming the adequacy of the change to the design.

2.3 Amendment to warrant – Staged building warrant

Some projects are dealt with using a 'staged warrant' approach which allows work to start before the design of all of the building elements is complete. For example, a building might not be fully designed until the eventual occupant is known. Also, specialist subcontractors or suppliers, who are often needed to finalise the detailed design of certain elements, may not be appointed until late in the procurement process.

In such cases the applicant must, after discussion with the Approved Certifier(s) involved in the project, agree with the verifier which stages are appropriate.

This allows the warrant for the whole project to be granted with a condition that work on the identified later stage(s) cannot start until an amendment to warrant for the next stage(s) has been granted.

The 'staged warrant' consists of the building warrant followed by one or more planned amendments covering the further stages and therefore, the guidance given in 2.2 for amendments to warrants is appropriate for staged warrants.

When an Approved Certifier is used for a staged warrant, the certificate of design confirms that the design up to and including the particular stage of construction is certified. Therefore care must be taken to ensure the certificates of design align with the planned building warrant stages.

2.4 Schedule 1 and Form Q

On some projects, a staged warrant may not be appropriate to cover the detailed design by specialist subcontractors or suppliers who may not be appointed until late in the procurement process. The certification procedure of Schedule 1 and Form Q can be used to accommodate this.

If the procedure is appropriate, the element will be listed on Schedule 1 of the certificate of design and a performance specification will be provided as part of the warrant application.

When this procedure is not appropriate i.e. for the design of elements that are not permitted on Schedule 1 (see Annex C), a staged warrant approach should be used to include the elements in question in a later stage. A staged warrant approach should

also be used if a performance specification or other relevant information is not available.

When there are elements on Schedule 1, the Approved Certifier should issue a Notice of Finalisation of Design Details (Form Q). This demonstrates that the design of the element has been finalised and complies with the performance specification.

There are three versions of Form Q, depending on the situation –

- ‘Final’ Form Q – this covers all elements on Schedule 1 of the certificate of design and should be submitted to the verifier with the completion certificate
- ‘Interim’ Form Q – this version can be used to cover individual Schedule 1 elements as they are signed off (i.e before the ‘final’ Form Q can be issued).
- ‘Interim multi-plot’ Form Q – this version can be used to deal with individual buildings on a building warrant that covers multiple buildings (see 2.6).

An Approved Certifier can issue an ‘interim’ Form Q to sign off individual elements as the project progresses to support the pre-emptive nature of the building standards system. An ‘interim’ Form Q should be submitted to the verifier before the Schedule 1 element is commenced on site. The verifier might want to detail the elements in the construction compliance and notification plan (CCNP) issued with the building warrant.

Schedule 1 of certificates for amendments to warrant will record all elements i.e new elements and elements from previous certificates. Elements on Schedule 1 that, as a result of an amendment become no longer applicable, will remain on Schedule 1 but will be marked as ‘no longer applicable’ on Form Q. The ‘final’ Form Q will list every Schedule 1 element marked with either the ‘sign off’ date or, if appropriate, ‘no longer applicable’.

When an Approved Certifier of Design has used Schedule 1, the verifier must ensure that a valid Form Q is submitted before they accept the completion certificate. The ‘final’ Form Q covers all Schedule 1 elements on the certificate of design.

When an individual element on Schedule 1 has commenced on site, the verifier should ensure that an ‘interim’ Form Q has been submitted for that element.

When a building warrant covers multiple buildings, an ‘interim multi-plot’ Form Q should be used for the completion of individual buildings (see 2.5).

Details of the elements that can be included on Schedule 1 for the Certification of Design (Building Structures) Scheme are included in **Annex C**. The details are taken from SER Ltd [Certification Performance Criteria Guidance B1.4](#). and relate to the risk group of the building.

The principle of Schedule 1 and Form Q has also been incorporated into the two certification of design schemes for section 6 – energy that cover domestic and non-domestic buildings. However the energy design schemes do not incorporate the procedures for generating an ‘interim’ Form Q or ‘interim multi-plot’ Form Q.

2.5 Form Q – Multiple buildings on a building warrant

A single building warrant may cover multiple buildings. For new dwellings, separate completion certificates must be submitted for each new dwelling covered by the warrant. For other building types, the relevant person may choose to submit a single completion certificate for all buildings covered by the warrant or separate ones for each building.

When the relevant person intends to submit separate completion certificates for each building, an 'interim multi-plot' Form Q should be used for each building. This will cover the Schedule 1 elements that relate to the building covered by the individual completion certificate.

An 'interim' Form Q can still be used to sign off an individual Schedule 1 element, but only when the element has been finalised for all buildings covered by the building warrant.

When the completion certificate for the last building is submitted, a 'final' Form Q should be submitted which covers all the Schedule 1 elements on the certificate of design.

In all cases, a completion certificate should not be accepted unless the relevant valid Form Q has been submitted. For temporary occupation or use see 2.6.

To allow separate completion certificates for individual buildings to be accepted, an 'interim multi-plot' Form Q should be submitted to the verifier. This should cover those Schedule 1 elements relating to the particular building or plot.

The final completion certificate for the last building should not be accepted unless a valid 'final' Form Q has been provided covering all Schedule 1 elements on the certificate.

For the energy design schemes where the 'interim multi-plot' Form Q procedure is not in place, written confirmation should be submitted to the verifier. This should identify the same matters detailed in Form Q but with limited coverage of those elements relating to the particular building or plot.

2.6 Form Q – Temporary occupation or use of a building

If occupation or use of a new building is required before submission and acceptance of a completion certificate, the verifier may consider granting temporary occupation or use. If so the verifier should still be notified using the relevant Form Q that the Schedule 1 elements relating to the building have been finalised.

Generally, to allow temporary occupation or use to be granted, a 'final' Form Q should be submitted to the verifier to cover all Schedule 1 elements on the certificate of design. However if there are any elements still to be signed off, an 'interim' Form Q should be submitted.

Where the building warrant covers separate buildings, to allow temporary occupation or use to be granted for an individual building, an ‘interim multi-plot’ Form Q should be submitted to the verifier. This should cover those elements relating to the particular building or plot.

For the energy design schemes where the ‘interim’ Form Q or ‘interim multi-plot’ Form Q procedures are not in place, written confirmation should be submitted to the verifier. This should identify the same matters detailed in Form Q but with limited coverage of those elements relating to the particular building or plot.

2.7 Form Q – Validation by verifier

When the design of the Schedule 1 elements relating to the warrant have been finalised and the Approved Certifier is satisfied, the relevant Form Q must be submitted to the verifier.

The verifier should validate the relevant Form Q in the same way as they validate a certificate of design. This is by checking that the Approved Certifier and Approved Body were approved at the date of signing of the form and that the form relates to the warrant application.

If the signature of the Approved Certifier changes from that shown on the original certificate of design, the verifier should raise any concerns with the Approved Body but if the Approved Body changes, any concerns should be raised directly with the scheme provider.

2.8 Changes to Approved Certifier of Design

It is expected that the Approved Body and Approved Certifier will deal with the design through to completion i.e. they will certify amendments to warrant and issue the ‘final’ Form Q. However there may be exceptional circumstances where this might not be possible. Examples include the Approved Certifier changing employer, suffering ill-health or retiring. Also, the Approved Certifier or the Approved Body could have been suspended or terminated from the scheme.

A new Approved Certifier of Design will need to consider the impact of any changes to the previously certified design and deal with amendments to warrants, Schedule 1 and Form Q as described above.

3. CERTIFICATES OF CONSTRUCTION

3.1 Amendment to warrant

When a completion certificate is not accepted by a verifier this may result in changes to the work. In this case an amendment to warrant may be required. A new completion certificate must be submitted incorporating the amendment details.

When the amendment to warrant results in changes to the certified work then a new certificate from the Approved Certifier of Construction should be issued.

If there is no change to the certified work then written confirmation should be provided from the Approved Certifier that an assessment of the changes has been done. The following table provides the appropriate guidance –

Amendment to warrant due to –			
Type of change:	1. Change <u>to</u> the certified work	2. Change <u>affecting</u> the certified work	Change <u>not</u> affecting the certified work
Certifier action:	Check of existing construction	Check of existing construction	Assessment of existing construction required
	New certificate required	New certificate required	Confirmation letter required

3.2 Completion certificates – Multiple buildings on a building warrant

As explained in 2.6 a building warrant may cover multiple buildings. A completion certificate is required for each individual dwelling and for non-dwellings the applicant may choose to submit individual completion certificates or just one for all the buildings on the warrant. When an Approved Certifier of Construction is used, their certificate must be submitted with the completion certificate.

When the building warrant covers separate buildings, each completion certificate should be accompanied by a certificate from an Approved Certifier of Construction.

ANNEX A – Level of Information to be submitted with a building warrant • Certification of Design (Building Structures)

1.0 Introduction

This annex has been produced jointly by Structural Engineers Registration Ltd (SER), the Building Standards Division of the Scottish Government (BSD) and the Scottish Association of Building Standards Managers (SABSM) on behalf of the local authority Verifiers.

The annex provides guidance, to those making application to a local authority for a building warrant, on the structural information that should accompany a warrant application when the design of the structure is being certified using a certificate under the SER Certification scheme. The aim of this document is to encourage a common approach to the supply of information across all of the 32 local authority Verifiers.

When an SER certificate is supplied to the Verifier as part of a building warrant submission it is not necessary to also supply structural calculations. In all other respects the minimum level of information that should be shown on the warrant plans accompanying the application will be identical whether an SER certificate is being used or not. When details yet to be designed by a specialist contractor have been listed in the Schedule 1 accompanying the design certificate typical details and a performance specification for those elements must still be provided although full details may not be available.

When an SER certificate is not supplied the Verifier may seek, in addition to the warrant plans, structural calculations, reports and other supporting information.

Timber framed structures have become the dominant structural form for low-rise housing in Scotland. This annex therefore includes guidance aimed specifically to ensure Verifiers are provided with the necessary information to enable a warrant application to be processed.

2.0 Statutory Requirements

An application for building warrant or to amend an existing warrant must be accompanied by various plans and other information listed in schedule 2 of the Building (Procedure) (Scotland) Regulations. These regulations make clear that the Verifier has discretion over the extent to which the information must be provided. In general the warrant plans should contain sufficient information to allow the Verifier to undertake meaningful site inspections. Further details regarding the plans to accompany the application are given in the [Scottish Building Standards Procedural Handbook](#).

All applications should be accompanied by general arrangement drawings comprising:

- a plan of the foundations, each floor and any roof
- sections through the building
- an elevation of each face of the building.

Information that must appear on the warrant plans will include:

- the level of the site of the building, lowest floor and adjacent ground (including any road), all in relation to one another and some known datum.
- the position, materials and dimensions of foundations, walls, windows (including opening area and direction of opening), doors (including direction of opening), floors, roofs, chimneys and flues, ventilators and ventilation ducts, stairs, landings and

balconies, protective barriers and such other parts of the building as the verifier requests.

- details of construction including any frame and size and position of reinforcing material.

Not all of the information accompanying an application need be submitted in the form of plans. The procedure regulations allow for information also to be provided in the form of reports or schedules which could include suitably annotated drawings when appropriate.

3.0 How This Guidance Should Be Used

This guidance is supplied in the form of checklists that may be used by applicants and their agents to check that the correct information has been assembled prior to the submission of the warrant application. It can also be used by Approved Certifiers to check that they have seen a full range of information that has been submitted. Two checklists have been supplied; one covering new build houses¹ and one covering all other domestic and non-domestic buildings.

The checklists cover the major structural elements for the most common forms of construction. They do not for example cover steel framed houses, ancillary structures such as retaining walls that have a direct impact on the structure of the building or free standing walls to which requirement of the regulations apply. The same general principles may however be applied.

The following steps are suggested as a means of ensuring that a sufficient level of information is being provided with the warrant application.

- | | |
|--------|--|
| Step 1 | Check that sufficient structural plans of the proposed building have been prepared to provide the general level of information required by the procedure regulations as reproduced in Section 2 above. |
| Step 2 | Check that the information listed in the relevant checklist has been shown on the warrant plans. |
| Step 3 | Check that any relevant information that is provided by means of a report or schedule has been included with the building warrant submission. |

The checklists should not be interpreted as defining the scope or extent of the structure of a building. The responsibility for checking that all structural elements have been included within the scope of the design certificate remains with the certifier.

4.0 Timber Framed Housing

Various methods are used to procure, design and construct timber frame housing. The volume house builders will generally rely on specialist kit manufacturers assembling timber panel components in factory conditions off-site with quality control processes in place. A significant proportion of housing is however procured from small local building companies often assembling the timber frame by hand in joiner shops or on site. The choice of procurement route will often depend on the number of units involved and the geographical location of the site.

¹ A "house" is defined by Regulation 2 of the Building (Scotland) Regulations 2004 (which are reproduced in the list of defined terms which form Appendix A to the Technical Handbook) as a dwelling on one or more stories, either detached or forming part of a building from all other parts of which it is divided only vertically.

It is recognised by Verifiers that there can be contractual difficulties in obtaining the frame drawings at early stages in projects.

The use of overmarked drawings together with typical standard details to indicate the required information will be acceptable as long as the final product clearly achieves the aim of providing sufficient information to permit a site inspection by the Verifier. Care will be required to make sure that the package provided achieves a reasonable standard such that it is legible, clear as to what is intended and clearly cross referenced to standard details where appropriate. However, Verifiers may not accept overmarked drawings where the structural intention is not sufficiently clear. SER recommend to Approved Certifiers that when designs are certified on the basis of overmarked drawings these should carry the SER stamp.

Where the design is being certified using the SER procedure some detailed aspects of the design may be listed within Schedule 1 to the SER design certificate provided a full performance specification for these details is also included within the warrant plans. It is not acceptable to list the full design of the entire kit within schedule 1.

The timber kit forms the major component of the house structure but must be designed to work in conjunction with other elements that are often delivered by a variety of specialist contractors. Typically roof trusses, foundations, cladding materials and major beam/lintel components will not be designed or supplied by a kit manufacturer. Structural design can be carried out by specialist consultants or in-house engineers employed directly by the kit manufacturer or may be carried out by a structural engineer employed by the client. This fragmentation of the procurement process places a responsibility on the Verifier, or in the case of certified work the Approved Certifier, to ensure that individual elements of the building are designed to work as a cohesive unit. Particular attention must be paid to connections.

Applicants for Building Warrants may choose to stage their application if they are unable to provide the verifier with sufficiently detailed plans at the time when the application is lodged.

Checklist 1 – All Houses

Building Element	Information to be shown on the warrant plans	Incl	n/a
Ground Conditions	A description of the soil/rock type onto which the foundation will be constructed and a note of the required bearing capacity. [See also note 1]		
Mineral consolidation	Limits of the consolidation perimeter		
Piling	Pile and ground beam general arrangement to include, commencement level, cut off level, design load and typical pile cap details.		
Vibro compaction Ground improvement	Anticipated layout of stone columns; diameters and notional centres; required safe bearing capacity and details of site testing.		
Spread foundations	Typical details including dimensions, change of level; material specification and typical reinforcement details where appropriate.		
Walls	All walls that are necessary for the stability of the structure must be shown.[See note 5]		
	Leaf construction and dimensions, cavity width, mortar designation, wall tie type and spacing,		
	Span, dimension and material of beams and lintels, padstone details and bearing requirements.		
	Wind posts and fixings		
Cladding	Details of any external cladding material, glazing and its fixing to the structure of the house		
Roofs	General plan of truss layout. [See note 5]		
	Typical truss shapes.		
	Loading to be sustained, on rafters and ties including location of water tanks.		
	Support details, and typical tying down details.		
	Plan of roof showing stability bracing and location / centres of tying down details		
Beams and Lintels	Material, location, dimensions, bearing and lateral restraint.		
Fixings and supports	Details of spacing and fixing of restraint ties between external walls, floors and roof trusses at both rafter and ceiling tie level		
Protective barriers / handrails	Location and typical construction details and design loading.		
Floors	Materials, dimensions, centres, span and span direction of structural flooring materials including trimming details for openings.		
Earth retaining structures	Typical details of retaining walls included within the scope of the warrant application; layout, dimensions, construction and typical reinforcement details. [See note 2]		

Additional requirement for Timber Framed Houses

Underbuilding	Details of underbuilding and panel tie down (including internal racking panels) to foundations / sole plate restraint to underbuilding,		
Walls	Stud general arrangement and dimensions including cripple studs and the locations of any additional studs required to accommodate high local loads from roof trusses, water tanks etc. [See Note 3]		
Walls	All timber framed walls that are necessary for the stability of the structure must be shown		
Walls	Nailing Schedule and platform connection to wall panels. [See note 4]		

- Note 1 Applicants may need to supply the Verifier with a copy of the ground investigation report in relation to matters other than structure such as ground contamination.
- Note 2 Basements and ground slab details may also need to show information relating to the location of DPM's, tanking and thermal insulation materials, required by other non-structural standards, where these effect the construction of the structure.
- Note 3 This information may be provided on overmarked drawings. It is necessary to determine the size and spacing of wall studs in order to complete thermal insulation calculations
- Note 4 When the structural design is certified using the SER certificate it is permissible to include these details within schedule 1 to the certificate provided a detailed performance specification providing details of loads to be resisted is included with the plans.
- Note 5 When the house is constructed using a steel or concrete frame this should be detailed as described in the checklist 2

Checklist 2 - All buildings other than Houses

Foundations and Substructure

Building Element	Information to be shown on the warrant plans	Incl.	n/a
Ground Conditions	A description of the soil/rock type onto which the foundation will be constructed and a note of the required bearing capacity. [See also note 1]		
Mineral consolidation	Limits of the consolidation perimeter		
Basements	Layout, dimensions and construction details. [See note 2]		
Piling	Pile and pile cap general arrangement to include, commencement level, cut off level, design load and typical pile cap details.		
Vibro compaction Ground improvement	Anticipated layout of stone columns; diameters and notional centres; required safe bearing capacity and details of site testing.		
Spread foundations	Typical details including dimensions, change of level; material specification and typical reinforcement details where appropriate.		
Earth retaining structures	Typical details of retaining walls included within the scope of the warrant application; layout, dimensions, construction and typical reinforcement details. [See note 2]		

Primary Superstructure

Building Element	Information to be shown on the warrant plans	Incl.	n/a
Steel Framed Buildings	Typical frames layout and dimensions for: main beams, secondary beams, and columns, together with applied loading; Typical main connection details. Bracing details. Details and layout of composite beam shear studs and corrosion protection measures.		
Concrete framed buildings	Typical frames, main beams, secondary beams, and columns, together with loading requirements; Typical beam, column reinforcement details together with typical joint details.		
Masonry buildings	All masonry walls that are necessary for the stability of the structure must be shown.		
	Leaf construction and dimensions, cavity width, masonry strength, mortar designation, wall tie type and spacing,		
	Span, dimension and material of beams and lintels, padstone details and bearing requirements.		
	Wind posts and fixings		
Timber frame buildings	All timber framed walls that are necessary for the stability of the structure must be shown; Nailing Schedule, Panel tie down to foundations, sole plate restraint to underbuilding, plan of studs and cripple studs, panel sheathing, lintels, platform connection to panels, wall tie type and spacing.		

Building Element	Information to be shown on the warrant plans	Incl	n/a
Floors (General)	Materials, dimensions, span and span direction of structural flooring materials including trimming details for openings. Design superimposed load.		
Floors (Concrete)	General dimensions e.g., width, thickness, etc and typical reinforcement details where applicable. For composite metal decks: generic type, gauge and temporary propping requirement if applicable. Two way spanning or single span plus direction of span. Typical bearing details together with typical fixing and tying details, etc, as appropriate.		
Timber roofs	General plan of truss layout, Typical truss shapes, Loading to be sustained, on rafters and ties, Plan of roof showing stability bracing and location / centres of tying down details		

Secondary Structure

Building Element	Information to be shown on the warrant plans	Incl	n/a
Roofs	Dimensions and spacing of purlins and fixings, cladding fixings, sheeting specification and design load.		
	Plan of roof showing stability bracing and location / centres of tying down details		
Cladding systems	Dimensions and spacing of sheeting rails and fixings, cladding fixings, sheeting specification and design load.		
Stairs	Layout and structural details.		
Fixings and supports	Restraint ties between external walls, floors & roof trusses		
Ties and connections	Typical details of ties and connections not covered elsewhere.		
Internal (nonloadbearing walls)	Typical fixing details for major internal non-loadbearing walls e.g. where opening large warehouse doors may apply pressures.		
Glazing	Support arrangements and fixing details for large glazed panels (with minimum dimension greater than 1200mm or any glazing that is less than 800mm above floor level). Glass specification for load bearing glazing elements.		
Protective barriers	Typical balustrade / handrail details, connection loadings.		

- Note 1 Applicants may need to supply the Verifier with a copy of the ground investigation report in relation to matters other than structure such as ground contamination.
- Note 2 Basements and ground slab details may also need to show information relating to the location of DPM's, tanking and thermal insulation materials, required by other non-structural standards, where these effect the construction of the structure.

ANNEX B – Level of Information to be submitted with a building warrant

- **Certification of Design (Section 6 – Energy) in Domestic Buildings**
- **Certification of Design (Section 6 – Energy) in Non-Domestic Buildings**

1.0 Introduction

This annex has been produced jointly by BRE-Global and RIAS Services Ltd the two providers of Section 6 (Energy) Certification Schemes, the Building Standards Division of the Scottish Government (BSD) and the Scottish Association of Building Standards Managers (SABSM) on behalf of the local authority Verifiers.

The annex provides guidance, to those making application to a local authority for a building warrant, on the energy information that should accompany a warrant application when the design of the energy performance is being certified using a certificate under either the BRE or RIAS - Energy Design Certification Schemes. The aim of this document is to encourage a common approach to the supply of information across all of the 32 local authority Verifiers.

This annex does not deal with the requirement for the provision of an Energy Performance Certificate (EPC) on completion of a new building, or for an existing building where required by The Energy Performance of Buildings (Scotland) Regulations 2008²

The Design of Section 6 (Energy) can be certified for new buildings and for extensions, alterations and conversions of existing buildings, both domestic and non-domestic. A Certificate of Design must address all parts of Section 6 relevant to the application it accompanies. This will include any calculations undertaken to demonstrate the performance of the building insulation envelope and fixed building services.

Alteration, extension or conversion of buildings does not attract standard 6.1 (carbon dioxide emissions), instead following the elemental route set out in standards 6.2 to 6.6 and 6.10, for the performance of the building insulation envelope and fixed building services. However, use of the carbon compliance methodology may be an option in some such projects where greater flexibility is needed and there is sufficient information on the existing building.

In all respects, the information that should be provided as part of the building warrant application will be identical whether a Section 6 (Energy) Certificate is being used or not.

When elements of design are to be produced by a specialist contractor and are listed in the Schedule 1 form accompanying the certificate of design, the intended performance specification and any relevant supporting information for such elements must still be provided.

When a Section 6 (Energy) Certificate is supplied the Verifier is not required to review the energy calculations, reports and other supporting information supplied in support of the building warrant application. They will, however, check to ensure that adequate information is provided to allow verification of work during the construction phase and on submission of a Completion Certificate. Accordingly, as with any other application, the verifier retains the opportunity to ask for further, relevant information in this respect.

2.0 Statutory Requirements

An application for building warrant or to amend an existing warrant must be accompanied by information sufficient to allow the verifier to both check compliance and issue a warrant and carry out any subsequent enquiry on site. Minimum provisions are identified in schedule 2 of the Building (Procedure) (Scotland) Regulations. These regulations make clear that the Verifier has discretion over the extent to which the information must be provided.

² http://www.opsi.gov.uk/legislation/scotland/ssi2008/ssi_20080309_en_1

Any application must contain sufficient information to allow the Verifier to undertake meaningful site inspections. Further details regarding the plans to accompany the application are given under section 3.2 of the [Scottish Building Standards Procedural Handbook](#).

All applications should be accompanied by general arrangement drawings, including:

- a plan of the foundation, each floor and any roof
- sections through the building
- an elevation of each face of the building

Together with such information as may be required to identify and confirm the inputs to energy calculations such as:

- the construction and thermal performance of the building envelope;
- the specification and performance of all fixed building services installations (heating/cooling, hot water, lighting and ventilation), including equipment efficiencies and system controls;
- details of any low carbon equipment, such as renewable energy and microgeneration systems; and
- details of any methods employed to control or benefit from solar gain

Not all of the information accompanying an application need be submitted in the form of plans. The procedure regulations allow for information also to be provided in the form of reports or schedules.

3.0 How This Guidance Should Be Used

This guidance is supplied in a form that may be used by applicants and their agents to check that the correct information has been assembled prior to the submission of the warrant application. It can also be used by Approved Certifiers to check that they have received information sufficient to allow full assessment of proposals and the issue of a Certificate of Design.

The following steps are suggested as a means of ensuring that a sufficient level of information is being provided with the warrant application.

- | | |
|--------|--|
| Step 1 | Check that sufficient general arrangement, construction details and services installation plans of the proposed building have been prepared to provide the general level of information required by the procedure regulations as summarised in Section 2 above. |
| Step 2 | Check that the information listed in the checklist (6.0) has been shown on plans and supporting information, reports and schedules and that this is reflected in any energy calculation(s) for the project and assessment of compliance with minimum provisions within published guidance. |
| Step 3 | Prior to issue of a Certificate of Design, confirm that the information used in any energy calculation(s) for the project and in assessment of compliance is included in the building warrant submission. This will only usually be necessary where the Approved Certifier is not also the party submitting the building warrant application.. |

4.0 Demonstrating Compliance

The manner in which compliance must be demonstrated, will vary with the nature of the proposed works.

All works must address minimum performances for building fabric (standard 6.2) and fixed building services (standards 6.3 to 6.6), either as specified in guidance or through acceptance of an equivalent solution by the verifier. In the case of a Certificate of Design, it is the Certifier that accepts responsibility for the validity of any alternative solution.

In the case of conversions, standards 6.2 to 6.6 can be met as far as is reasonable practicable (see schedule 2 to regulation 4). In such cases there is the expectation that standards will be met in full unless there is very clear evidence to support a reduced level of performance. Such evidence should be recorded in the project file.

In addition, new buildings that are not the subject of the limitations to standard 6.1 (carbon dioxide emissions) must demonstrate that CO₂ emissions are limited to a defined level, as set out in guidance and demonstrated through the use of one of the UK approved methodologies (SAP for dwellings and SBEM/DSM for non-domestic buildings). For new dwellings, the option of a simplified approach to compliance with standard 6.1 without the need for a SAP calculation is available (see clause 6.1.6).

Note that whilst standards 6.7 & 6.8 do not address design issues, the Certifier should ensure that the need to meet the subsequent commissioning and provision of information on installed services is clearly identified to the party who has engaged their services.

The methodologies by which compliance with the regulations can be demonstrated vary with each case.

5.0 Energy Performance Certificates

When a Section 6 (Energy) Certificate is supplied to the Verifier as part of a building warrant submission, a copy of the underlying energy calculation(s)³ should also be provided. However, EPCs that the SAP, SBEM/DSM calculations generate should not be provided at application stage and, if received, should be discarded by the Verifier.

Where projects require an EPC on completion, regardless of whether certified or not, the location and methodology for production of the EPC should be identified within the submission.

³ Energy Calculations include U value calculations, compensatory heat loss calculations, DER/BER and TER calculations

6.0 Information checklist

The information checklist should not be interpreted as defining the scope or extent of the energy performance of a building. The responsibility for checking that all aspects of the energy performance of the building have been included within the scope of the Section 6 (Energy) certificate remains with the certifier.

Checklist

Element	Information to be shown on the warrant plans	Incl	n/a
External Envelope	<p>A description of the build-up of the construction together with a U-value for all areas of differing construction,, repeating and non-repeating thermal bridging calculations and assertions and intended infiltration rate for envelope, as used in the energy calculations.</p> <p>For manufactured elements, such as doors, windows and glazing, confirmation of U values, frame factors and any other relevant performance information.</p>		
Heating and Hot Water	<p>General description of heating system, including distribution system, heat emitting devices and control devices and ancillary components (such as pumps, valves and insulation). Specification of components and performance. Requirements for labelling, commissioning and operation. Provide manufacturers information where products specified.</p>		
Ventilation	<p>General description of ventilation system, including details of fan units, distribution duct work, controls and ancillary components (such as terminals and insulation). Specification of components and performance. Requirements for labelling, commissioning and operation. Provide manufacturers information where products specified.</p>		
Cooling	<p>General description of cooling system including details of chiller units, pipe/ductwork, controls and ancillary components (such as terminals, valves, pumps and insulation). Specification of components and performance. Requirements for labelling, commissioning and operation. Provide manufacturers information where products specified.</p>		
Fuel Type	<p>Confirmation of fuel(s) used, together with metering provisions, where applicable.</p>		

Renewable And Micro Generation	Details of any low carbon equipment, such as renewable energy and micro-generation systems. General description of system, specification of components and performance, requirements for labelling, commissioning and operation. Where specific systems specified, provide manufacturer's information to confirm performance together with any reports necessary to substantiate asserted performance (for example, ground conditions / bore hole reports where a ground source heat pump has been specified).		
Lighting	Detail of lighting system – luminaires, lamps and control systems, including type, disposition and efficacy of lamps/luminaires.		
Shading	Details of orientation and any obstructions (where known) and any methods employed to control or benefit from solar gain, used within assessment of building energy performance.		
Performance Testing	Note any post-completion performance testing expected (e.g. airtightness) to substantiate assertions made within the Energy Calculations. Provide a brief method statement for such tests (information and sources are provided in guidance within Handbooks).		

Every Certifier must prepare adequate records of the certification process they have undertaken and the designs that they have certified as outlined by each of the Scheme Providers. These records will be kept by the Certification Coordinator.

ANNEX C – Use of Third Party Designed Details

• Certification of Design (Building Structures) – Schedule 1 and Form Q

This annex provides details of the elements that can be included on Schedule 1 for the Certification of Design (Building Structures) Scheme. The details are taken from SER Ltd [Certification Performance Criteria Guidance B1.4](#).

Building Types	Schedule 1 may be used for:
<p>Building Risk Groups 1A/1B:</p> <ul style="list-style-type: none"> • Detached, semi-detached and terraced houses or extensions to houses of not more than 4 storeys, without basement storeys; • Carports, Conservatories and Greenhouses; • Domestic garages and other small single leaf buildings not more than 1 storey; • Agricultural and related buildings. 	<ul style="list-style-type: none"> • Piling; • Vibro stone or concrete columns; • Precast foundation systems; • Precast concrete floor units; • Precast concrete stairs; • Timber roof trusses; • Steelwork connections; • Protective barriers; • Glazing.
<p>Building Risk Groups 2A/2B:</p> <ul style="list-style-type: none"> • Houses of 5 storeys; • Flats and maisonettes not more than 15 storeys; • Hotels not more than 15 storeys; • Shared residential accommodation, residential care buildings and other residential buildings all not more than 15 storeys; • Offices not more than 15 storeys; • Factories (Class 2) not more than 3 storeys; • Shops and enclosed shopping centres not more than 3 storeys and with each storey area more than 2,000m² or; more than 3 storeys but not more than 15 storeys; • Educational buildings; not more than 15 storeys • Hospitals not more than 3 storeys • Assembly buildings (other than educational buildings), entertainment buildings and other buildings accessible to the general public all not more than 2 storeys and all with each storey area more than 2,000m² but not more than 5,000m²; • Open sided car parks and storage building (Class 2) not more than 6 storeys. 	<ul style="list-style-type: none"> • Piling; • Vibro stone or concrete columns; • Precast foundation systems; • Precast concrete floor units; • Precast concrete stairs; • Timber roof trusses; • Steelwork connections.
<p>Building Risk Group 3:</p> <ul style="list-style-type: none"> • All other buildings. 	<ul style="list-style-type: none"> • Not applicable