



Guidance Note 8 Managing Post Certification Design Changes

Introduction

A Certifier will sign the design certificate following an examination of plans, specifications and other documents some, but not all, of which will accompany the building warrant application lodged with the Verifier (Local Authority). The plans that accompany the building warrant application should illustrate the design that has been certified. It is not uncommon for designs to continue to evolve up to and even beyond the point at which construction drawings are issued. Any alteration of the design following certification, where the change is not subsequently approved by the Certifier, could result in the safety of the structure being compromised.

The purpose of this Guidance Note is to provide certifiers and their clients with guidance on the risks associated with post certification design changes and to suggest some strategies for managing these risks.

The guidance contained in this note has incorporated the views of practising certifiers obtained during a previous consultation exercise during 2007.

The Need for Document Controls

An application for building warrant must be accompanied by plans that show the proposed construction of the building. This is a requirement of the Building (Procedure) (Scotland) Regulations 2004 and further guidance is given in the Procedural Handbook issued by SBSA (now the Scottish Government Building Standards Division). Full plans must be submitted regardless of whether or not the application is accompanied by a design certificate from an Approved Certifier. One of the reasons why verifiers need this information is to enable them to undertake site inspections to check that a building has been constructed in accordance with the building warrant and the certified design. This is particularly important as it enables the Verifier and the person who will certify completion of the building to keep track of changes to the approved design and identify when amendments to the warrant are required.

The building warrant application will generally be made by someone other than the certifier of the structural design (often the applicant or an architect working on behalf of a developer). As a consequence the Certifier may not have complete control over the plans that are submitted to the Verifier along with the design certificate. The possibility exists that a design, different from the one that has been certified, can be submitted to the Verifier. Even where the certified design is the one on which the warrant has been granted the design may change before construction commences on site.

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The possibility of this situation arising becomes more likely when:

- The structural designer has not prepared structural drawings and some or all of the structural details are over marked on the architectural plans;
- The procurement mechanism passes responsibility for significant elements of the design to the contractor
- The Certifier has not seen all of the plans that are submitted to the Verifier and is unaware of some aspect of the design which has a structural significance.
- The Body responsible for the structural design that has been certified has no involvement with the supervision or inspection of works on site.

Risk Assessment for the Control of Documents

SER strongly recommends that Approved Certifiers and their employing Approved Bodies develop strategies for managing the risks associated with post certification design changes. They should particularly guard against the possibility that the plans on which the certification was based may be different from those that are submitted to the Verifier. Factors that should be considered in the risk appraisal process should include:

- Whether the Approved Body responsible for the Certifier is also the lead structural design organisation with a responsibility for site inspections that would provide the designers with an opportunity to check that construction on site complies with the certified design.
- The level of control the organisation employing the structural designer has over the production of warrant plans.
- The safety implications of design changes that could be made without the knowledge of the Certifier.
- Previous experience of working with the client, architect or agent responsible for lodging the building warrants application.
- The size and complexity of the project.

SER wishes to avoid the certification process being impeded by unnecessary administration and recommends therefore that Approved Bodies develop strategies for managing these risks and apply them as appropriate to suit individual projects. Where the risk associated with post certification design changes is assessed as being medium or high a more rigorous control mechanism should be adopted than would be the case for low risk situations.

Strategies for Managing Risk

It is already common practice for Approved Bodies to issue a list or register of drawings and revision numbers along with the application plans sent to the applicant (or the appointed agent) for issue to the Verifier. This is the minimum requirement of the SER Scheme to ensure the control of documents and ensure that the plans listed are those on which the certification has been based.


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In situations where the Certifier has minimal control over the issue of the structural drawings he / she should make clear to the person responsible for the issue of construction drawings the need to ensure that post certification changes to the design will not be covered by the certificate and may require to be certified with an amendment to the building warrant. This may be done by letter or on a standard form for this purpose to suit the existing practice of the Approved Body. Copies of any documentation issued for this purpose should be retained for audit.

Certifiers should be aware that they cannot rely upon the Verifier to check that drawings accompanying the application are the same as those listed in any document the they may choose to append to their certificate. SER has been advised that Verifiers do not consider this as being part of their statutory responsibility. Where the Certifier has identified a higher risk situation other more secure methods of ensuring that the certified design is submitted, may be required.

Where a better level of document control is required this can be achieved by stamping plans and other relevant documents, on which the certification has been based, with an easily identified SER stamp.

On application to SER an Approved Certifier of Design can be issued with an individual stamp containing the Approved Certifier name and SER Registration number. Space is provided for the certifier to enter by hand the certificate number to which the plan or document relates. In order to provide flexibility of employment the Approved Body SER Registration Number is left blank to be hand completed. The stamp is illustrated below.

 Structural Engineers Registration Ltd	
Certificate Number	
Approved Certifier Name	J D Smith
Registration Number	SER1-D-00003
Approved Body Number	SER1-DB-

Alternatively the same information may be given in a box on CAD drawings.

Whilst the use of this stamp is discretionary its use will indicate a considered approach to higher risk situations. The stamp is intended for use where the Certifier has little or no control over the drawings that are to be issued to the Verifier and/or has identified a high risk of post certification design changes, with a structural significance, that have not been approved by the Certifier, being introduced at construction stage. Certifiers may initial the stamp if they feel this would provide an additional level of security.

Amendments to Warrant

Whenever there are changes to the design after the building warrant has been granted an application to amend the warrant should be made to the Verifier. When the amendment has a structural content then this must be certified. It is important that clients or their agents notify the certifier of all changes to certified and non-certified work to allow the certifier to consider the relevance of the changes. The Certifier will need to reassess the effect of the amendment on the structure of the

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building and issue a new certificate of design to the Verifier along with the amendment to warrant application. Where the Verifier is unsure of the structural implications of an amendment then a letter may be requested from the Certifier stating that the change is of no significance in relation to the certified design.

Keeping Records

SER will wish to examine copies of the certified plans when conducting an audit. Approved Bodies should therefore retain copies of all plans, calculations and reports on which certification was based until the possibility of these being required for audit has passed. It is unlikely that this will exceed five years as every Approved Body should be audited at least once within that timescale.

Note: Approved Bodies may retain this information for much longer periods depending on their general archiving policy and contractual obligations.

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