

A NEW BUILDING STANDARDS SYSTEM FOR SCOTLAND



Guidance for Clients employing Structural Designers in Scotland

In 2003 the Scottish Parliament passed an Act that will replace the existing system of building control in Scotland. The Act introduces a new Building Standards system that will come into force on 1 May 2005 bringing important changes to the system for ensuring the safe design of building structure.

This leaflet has been prepared to explain the implications of the new system to building owners or developers who, under the Building (Scotland) Act 2003, have full responsibility for compliance with the regulations. They can establish compliance in relation to structural design by appointing an Approved Certifier of Design (Building Structures).

New arrangements for certifying structural design will bring significant benefits to Clients but will also require many changes to habitual custom and practice in order to realise these benefits.

The need for change

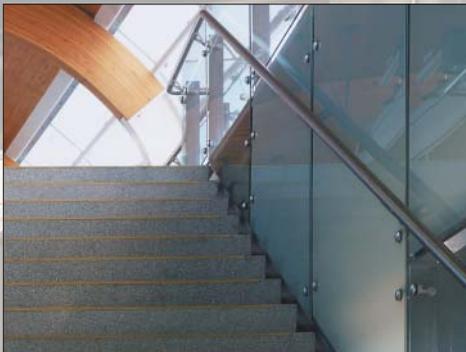
Prior to 1992 all structural calculations and drawings were submitted to local authorities for checking as part of the warrant application. Regulations introduced in 1992 opened up the possibility of self-certification of structure by chartered Civil or Structural Engineers. These regulations have however become widely

regarded as inadequate to provide an acceptable level of public safety as the absence of a statutory checking requirement made the possibility of human error a serious risk. A further problem arose from a lack of common understanding as to how much of the development was "structure" and therefore covered by the certificate. After 1 May 2005 the option of self certification will no longer be available.

Certification under the new Act is grounded in the principle that experienced, competent and responsible professionals can certify compliance with the Building Regulations without any further check by local authorities, provided that they are employed by reputable companies operating proper checking procedures. This approach is however optional and it will still be possible to submit calculations to local authorities for checking as a means of obtaining a building warrant.

The Structural Engineers Registration Ltd (SER) Scheme

The removal of the self-certification option presented a serious risk of disruption to the building warrant process. The professional Institutions representing Civil and Structural Engineering have responded to this situation by offering a structural certification scheme that meets the stringent requirements set down by the Scottish Building Standards Agency (SBSA).



The SBSA, on behalf of the Scottish Ministers, have approved a Registration Scheme operated by Structural Engineers Registration Ltd (SER) to cover the design of building structure.

Registration under the Scheme will be available to individual Chartered Civil or Structural Engineers who have met certain criteria, have passed an independent assessment of their competence and experience, and agree to subject their certification activities to audit by SER.

Certifiers approved under this Scheme must also be employed by firms that have been accepted for registration as Approved Bodies and these will also be subject to audit.

Failure by Approved Certifiers to fulfil their obligations will be identified through a system of rigorous independent audits, potentially leading to a loss of registration and criminal prosecution in instances of 'reckless' certification. For instance, signing a certificate in respect of design work that has not yet been completed may lead to disciplinary action or prosecution.

In brief, the new Scheme requires:

- Registration of Approved Certifiers of Design.
- Registration of Approved Bodies.
- Approved Certifiers of Design to have lengthy experience of the design of building structures.
- Independent auditing of the certification activities of approved Certifiers and Approved Bodies.
- Specialised training and professional development (CPD) for certifiers and design staff.
- Appropriate professional indemnity insurance.



An important feature of the new system is that one Certifier is required to take an overview of the entire building structure covered by a Building Warrant application, and for any amendments to the initial application. No matter how many designers or suppliers are involved, the Certifier must understand and certify the design of the building structure as a whole. In addition a design certificate must only relate to design work which has been completed, and checked for compliance with the Regulations.

Implications for Clients

Improved standards of structural safety will not be achieved without some level of increased cost. Engineers offering certification services will be required to undertake an increased range of checking and design activities and will be subject to external audit of the way in which they undertake this role.

Clients employing Approved Certifiers will receive a reduction in the Building Warrant fee paid to the local authority however they must appreciate that there will be additional work for the design consultant undertaking the certification role. The amount of additional work will depend upon the complexity of the design and crucially on the extent to which parts of the structure are designed by others, for example supplier designed elements.

Clients are advised to discuss the benefits of this certification approach, and the implications on levels of professional fees, with the engineering consultant prior to their appointment.

Why appoint a Certifier

Using an Approved Certifier is not mandatory. The Professional Institutions have however introduced this scheme as they believe it offers a real advancement in the standards of safety together with major savings in the time required to obtain warrant approval for structure, enabling an early commencement of work on site.

Eventually all aspects of the Regulations may become certified thereby greatly enhancing the speed at which building consents are obtained. The Institutions of Civil and Structural Engineers are leading the way in providing a service to clients that will in time extend to other design professions.

Matters not currently covered by certification

Clients may employ their engineering consultant for a number of aspects of design that are not currently within the scope of the scheme and therefore will still be subject to scrutiny by the Verifier (the local authority):

The design and calculations for these elements will still have to be submitted to the local authority. These include, for example:

- Fire Engineering design
- Demolitions covered by Regulation 10
- Site preparation for the removal or containment of harmful substances
- Flooding
- Drainage schemes

Although these, and other, aspects of the regulations are not covered by the design certificate the structural design should be carried out with due regard to the entire scope of the regulations and should not prejudice compliance with non certified aspects of the regulations and technical standards, including those listed above.

Approval of non certified design

The alternative route to achieving a Warrant is to submit design calculations and drawings to the Verifier, which must decide how it is to check whether the design complies with the regulations. Some Verifiers employ in-house Chartered Engineers to check warrant applications, others may not. The Scottish Building Standards Agency (SBSA) will audit Verifiers, including the way in which they verify applications that do not include Certificates of Design (Building Structures).

It is likely that any uncertified submissions will take longer to verify, because for certified submissions the certifier has already checked the design and the verifier will only check the registration of the Approved Certifier and Approved Body.

Further information

The new system of Approved Certifiers is administered by the Scottish Building Standards Agency (SBSA), and SBSA have published information on the new system on their website (www.sbsa.gov.uk).

Full details of the SER scheme may be found at www.SER-Ltd.com.