

Scheme for Certification of Design (Building Structures)



Guidance Note 3 Options for Certification

In order to download a certificate from the SER website the certifier is required to record the method that has been used to certify the design

The certifier can choose between a number of options, which may be used in conjunction, for undertaking the certification for a project. Whichever option is chosen, for each aspect of the design, it must be recorded along with the reasons for that choice for future audit. This Technical Bulletin is intended to explain the intention behind the options offered by the system.

It is important to appreciate that certification and checking are separate activities. Certification cannot be delegated to a third party while design checks can only be undertaken by an individual with the necessary experience in the particular aspect of the check. Further guidance on certification checking is provided in Technical Bulletin 2.

Appendix A, while not exhaustive, has been provided to assist the certifier identify structural elements that may be encountered on a project and the information that will be necessary for the certifier to undertake the task.

Option	Notes on Suitability
Option 1 Certifier Is also Designer	In this case an independent check of the design must be undertaken in accordance with the Approved Bodies structural checking practice
Option 2 Certifier is also checker	<ol style="list-style-type: none">1. In this case the certifier cannot also be the designer. (But see option 5)2. Certifier may only check those aspects of the design for which he/she is sufficiently experienced.3. Normally the certifier would undertake the check for loading assumptions and overall stability.4. The certifier may be checking the work of other employees in the same company or may be carrying out a detailed check on a design prepared by others.

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Option	Notes on Suitability
<p>Option 3 Certifier made independent assessment</p>	<ol style="list-style-type: none"> 1. This option is only appropriate to situations where a value judgement is required that would not normally be subject to an independent check. 2. This option should be used where senior members of staff are reviewing designs carried out by staff under their control but where detailed design checks have been carried out by others (eg very large projects where 1 individual cannot carry out or check all design work). 3. The certifiers must make, and record, reasonable enquiries to satisfy themselves of the adequacy of both the design and the check. The Certifier should be satisfied that checks have been carried out by competent persons in accordance with the recommendations of Technical Bulletin 2. 4. This option is also appropriate for reviewing the scope and adequacy of reports and investigations and design assumptions such as the general approach to disproportionate collapse. 5. Certifier should always be responsible for reviewing assumptions made by designer regarding compliance with Regulation 12 (Conversions)
<p>Option 4 Certifier relied on competence of an identified third party.</p>	<ol style="list-style-type: none"> 1. Examples of where this would be appropriate might be for elements of the design undertaken by a specialist sub-contractor or structural components covered by independent testing certification or to specific aspects of a project where the certifier has inadequate experience of the particular type of construction and has to rely on the advice of a specialist or expert to enable him to certify that particular aspect of the work. 2. The certifier retains responsibility for the integrity of the checking process and must make sufficient enquiry regarding the competence of the designer and checker, the level of check undertaken and factors out with the remit of the checker. 3. The certifier may not rely solely on a statement or certificate issued by the third party without being personally satisfied as to the adequacy of the check.
<p>Option 5 Certifier is the Designer and has also carried out a self check of the design</p>	<p>This is only appropriate for minor works. It is intended to be used for the circumstances associated with Risk Classification RC1 described in Technical Bulletin 2</p>

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Appendix A:

CHECKLIST OF STRUCTURAL ELEMENTS

It is the responsibility of the Certifier to identify all of the structural elements that should be covered by the design certificate. The following list is intended to assist with that process however it should not be regarded as exhaustive.

Design Feature	Sub-Options	Information To Be Supplied To Certifier		
		Calculations	Drawings	Other Information
Details of Structural Design Team	Design team organisation			Names of companies providing structural design and scope of their appointment
	Designers and checkers			Details of individuals responsible for design / checking including qualifications and experience
General Design Overview	Condition assessment of existing building		As built	Report on condition
	Loading assessment	yes		
	Overall Stability	yes		Statement of approach
	Disproportionate collapse			Statement of approach
	Site investigation scope and application to ground conditions		BH/TP locations	Ground investigation report
	Bearing capacity	yes		
	Mineral stability / grouting		yes	Specification
Sub-structures	Basement Raft Spread foundations	Yes	Yes	Specification
	Underpinning	Yes	Yes	Specification & method statement
	Piles minipiles Cantilever retaining wall Piled retaining wall Mass gravity wall	Yes	Yes	Specification
	Anchored wall	Yes	Yes	Specification and details of anchoring system
Ground Improvement	Dynamic Compaction Vibro compaction		Yes	Specification
Structural Fire Protection	Elements of Structure		Yes	Period of fire resistance and method/specification for achieving required standard
	Portal Frames			Boundary condition requirement

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Design Feature	Sub-Options	Information To Be Supplied To Certifier		
		Calculations	Drawings	Other Information
Principal Superstructure	Structural Frame Suspended floor(s) Loadbearing Walls Slab on Solid Shearwalls Racking panels Stair enclosure(s) Staircase Roof structure Link bridges Galleries and catwalks	Yes	Yes	Specification
Building Envelope	Curtain wall Masonry / brick / block Rainscreen cladding Overcladding Glazing Roof cladding	Yes	Yes	Specification Calculations may be replaced by appropriate test certification
	Movement joints		Yes	Specification for construction
	Wall ties			Certification reference
	Fixings	Yes	Yes	Calculation may be replaced by appropriate test certification
Secondary Structure	Protective barriers	Yes	Yes	Specification and fixings details
	Internal Partitions	Yes	Yes	Calculations may be replaced by appropriate test certification for proprietary systems
Other Structure	Canopies Balconies Catwalks and gangways Tank supports Stages and raised platforms Tiered seating	Yes	Yes	Specification - Calculations may be replaced by appropriate test certification for proprietary systems