

Calculation Model Design & Check Certificate

Project:		Number:	
Area:			
Calculation:			

The design organisation confirms that:

- 1) the calculation model has been executed in line with *Calculation models: guidance for the use of software for engineering calculations* (IStructE), the design brief model document, and the calculation package meets the acceptance criteria,
- 2) the Designer has self-checked the calculation package,
- 3) the Technical Manager has reviewed the Model Document and calculation package.

Design organisation:			
Supervised Engineer/Designer:			
Qualifications ¹ :			
Signed:		Date:	
Technical Manager:			
Qualifications ¹ :			
Signed:		Date:	

The check organisation confirms that:

- 1) checking has been executed in line with *Calculation models: guidance for the use of software for engineering calculations* (IStructE),
- 2) data is accurate, complete, and appropriate,
- 3) methods used are suitable and correctly applied,
- 4) results are consistent with inputs and expectations,
- 5) outputs are clear and aligned.

Check organisation:			
Checking Engineer:			
Qualifications ¹ :			
Signed:		Date:	

Calculation Model Design & Check Certificate (continued)

Checking category (tick appropriate):

Category 0 Category 1 Category 2 Category 3

Checking independence (tick appropriate):

Same person as designer Same design team Same organisation External organisation

Information provided to checker and when (tick appropriate):

	Provided from beginning	Provided upon completion of check
Design brief	<input type="checkbox"/>	<input type="checkbox"/>
Drawings and specifications	<input type="checkbox"/>	<input type="checkbox"/>
Model document	<input type="checkbox"/>	<input type="checkbox"/>
Analysis	<input type="checkbox"/>	<input type="checkbox"/>
Inputs	<input type="checkbox"/>	<input type="checkbox"/>
Assumptions	<input type="checkbox"/>	<input type="checkbox"/>
Outputs	<input type="checkbox"/>	<input type="checkbox"/>
Design	<input type="checkbox"/>	<input type="checkbox"/>
Inputs	<input type="checkbox"/>	<input type="checkbox"/>
Assumptions	<input type="checkbox"/>	<input type="checkbox"/>
Outputs	<input type="checkbox"/>	<input type="checkbox"/>
Details	<input type="checkbox"/>	<input type="checkbox"/>

Level of detail carried out for checks (tick appropriate):

	Process ²	Spot checks on critical areas ³	Basic-level checks ⁴	Full detailed-level checks ⁵
Design brief	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Drawings and specifications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Model document	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Design	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Details	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1 CEng in structural engineering

2 Process: The checking engineer has reviewed the overall design process and confirms that all required analysis and calculations have been performed, ensuring that the design complies with relevant codes and standards.

3 Spot checks on critical areas: The checking engineer has performed spot checks on key structural elements to identify potential failure modes that could pose a significant risk to life safety or lead to critical structural failure.

4 Basic-level checks: The checking engineer has conducted a basic review of the design, focusing on identifying failure modes that could lead to a catastrophic structural collapse or significant damage.

5 Full detailed-level checks: The checking engineer has conducted a comprehensive review of all aspects of the analysis and design, checking every element in detail to ensure compliance with relevant standards, codes, and safety factors.