Jersey Scheme for Certification of Design (Building Structures)



Certification Performance Criteria Guidance

B2.2 Overall Stability

Performance Criteria

Certifiers shall satisfy themselves that adequate measures have been taken to ensure the stability of the building and the stability of any part of another building.

Background

Certifiers shall take particular responsibility for checking the stability of the building. The general concepts necessary to ensure stability are described in the Institution of Structural Engineers publication 'Stability of Buildings Parts 1 and 2: General philosophy and framed bracing'.

The stability of existing adjacent buildings can be affected if the design and construction of a new building does not take into account any potential impacts on existing buildings. This could lead to a risk of collapse or damage to existing buildings with a consequent risk to public safety.

Particular attention needs to be paid to alterations to existing buildings to ensure that the removal or alteration of a structural element has not reduced the stability of the building to an unacceptable degree.

Guidance

The extent of any stability check will be appropriate to the size and complexity of the structure. On medium to large projects the Certifier should ensure that a sufficiently detailed analysis of the building under lateral loads so that the effect on the resisting elements and on the foundations can be assessed.

For minor alterations or small robust single storey domestic extensions the absence of a stability check should be covered by a stability statement confirming why a numerical assessment has not been carried out.

When carrying out internal and/or external alterations to an existing building involving the removal of walls, an assessment of the impact on the overall stability of the building, or on adjacent buildings is to be carried out.





Examples of Major Non-conformances

Absence of or grossly inadequate statement describing how stability of the building will be achieved.

Absence of or grossly inadequate consideration of the factors that could affect the stability of an adjacent building.

Absence of or grossly inadequate checked calculations, or other justification, showing how the lateral loads will be distributed to the resisting elements.

Examples of Improvement Issues

Inadequate statement describing how stability of the building will be achieved.

Inadequate consideration of the factors that could affect the stability of an adjacent building.

Inadequate checked calculations, or other justification, showing how the lateral loads will be distributed to the resisting elements.

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