



Certification Performance Criteria Guidance

B2.3 Disproportionate Collapse

Performance Criteria

Certifiers shall satisfy themselves that an adequate risk assessment has been undertaken to identify the measures required to satisfy Requirement 1.3.

Background

Requirement 1.3 requires that buildings of 5 or more storeys must be designed to accommodate unforeseen or accidental actions in such a way as to prevent the extent of any resulting collapse being disproportionate to the cause of the collapse.

The risk level and accidental actions that should be considered when undertaking the structural design of a building for disproportionate collapse should be in accordance with the recommendations of BS EN1991-1-7:2006.

Where buildings of certain classes are specifically required to be designed to resist disproportionate collapse this should be carried out in accordance with the provisions of the Eurocode appropriate for the structural materials used.

Guidance

Detailed guidance on designing for disproportionate collapse may be found in IStructE publication 'Practical guide to structural robustness and disproportionate collapse in buildings'.

The Certifier must ensure that a risk based methodology has been employed to identify when measures specifically intended to address this requirement should be applied to the building and that this process and the measures required have been adequately documented.

The risk classification of the building and the measures to be adopted should be recorded.

Where alterations are being proposed to blocks of flats or terraced buildings reasonable steps should be taken to investigate and consider the structural configuration, and the presence or absence of adequate ties, in the properties above/below/ immediately adjacent (on either side) of the property being altered.

Examples of Major Non-conformances

The risk assessment has clearly failed to identify the measures required to meet the requirements of the Standards.

Failure to demonstrate that a risk appraisal concerning the need to take account of this aspect of the design has been undertaken.

Failure to demonstrate how the measures intended to address the specific requirements arising out of the risk appraisal will be applied as part of the design of the building.

Examples of Improvement Issues

Inadequate risk appraisal.

Inadequate demonstration of the measures being taken to address the specific requirements arising out of the risk appraisal.

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