



Certification Performance Criteria Guidance

B8.2 Single Storey Portal Framed Buildings

Performance Criteria

Certifiers shall satisfy themselves that there has been adequate enquiry regarding the ability of the structure to support the external wall and provide the fire separation required by the regulations.

Background

The Bye-laws require that a building must be designed so that in the event of fire its stability is maintained for a reasonable period.

Certifiers are not required to certify that the requirement has been achieved as that is outside the scope of the scheme; however, Certifiers must satisfy themselves that there has been adequate enquiry regarding the provisions, including fire protection, specified to ensure adequate performance of the structure in a fire.

Guidance

Single storey buildings do not generally require fire protection; however an important exception to this is the case of an external wall which must retain its stability to prevent the spread of fire to an adjacent building (referred to as a boundary condition). It is generally accepted that, in the case of single storey portal frames, rafters may be left unprotected provided the stanchion base has been designed to resist overturning moments arising from the collapse of unprotected parts of the building.

The Certifier must be satisfied that there has been adequate communication between the members of the design team to ensure that an adequate level and scope of fire protection to the structure is delivered.

It is important that there is evidence of communication between the structural designer and the specifier of the structural fire protection system regarding the fire resistance and protection of the structure.

The Certifier must see that any effect the provisions have on the design and specification of the structure has been considered.

Examples of Major Non-conformances

Failure to make adequate enquiry as to whether a single storey steel portal framed building should be designed for a fire boundary condition.

Failure to undertake design calculations and detailing in accordance with the Steel Construction Institute Publication: 'Single Storey Steel Framed Buildings in Fire Boundary Conditions' where these are required.

Examples of Improvement Issues

Inadequate or insufficient consideration of the measures required to be implemented where there is a fire boundary condition.

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