



Certification Performance Criteria Guidance

B6.2 Protective Barriers

Revision A

Performance Criteria

Certifiers shall satisfy themselves that adequate details of any pedestrian or vehicle barriers have been prepared and that there are sufficient calculations to demonstrate the adequacy of the design and that there is evidence that the design and details have had the appropriate level of checking.

Where Schedule 1 has been used Certifiers must satisfy themselves that adequate details have been prepared and that there are sufficient preliminary calculations or other evidence to demonstrate the adequacy of the solution proposed.

Where a Form Q is required, Certifiers shall review the calculations and details for the finalised design and satisfy themselves that they meet the requirements of the appropriate performance specification.

Background

Standards 4.4 and 4.12 require the provision of protection for pedestrians and vehicles respectively to changes in level within the building. Protection may take various forms including walls, partitions, fixed glazing handrails or parapets.

The Guidance contained within the Technical Handbooks recommends that these should be capable of withstanding the loads specified in BS EN 1991-1-1/PD 6688-1-1

Guidance

The certifier must see that any elements that form part of a building which will act as protective barriers have been designed and detailed to meet the requirements of Standard 1.1.

It is important that the design of the barrier fixings and the design of the structure to which any protective barrier is attached is also considered.

Often the information that will be required for certification of the protective barriers will be not be available when the initial warrant application is made and therefore the protective barriers may have to be part of a staged warrant application with being deferred until the design has been completed and checked and all the information required by BSD's 'Procedural Guidance on Certification including information to be submitted with a Building Warrant Application' April 2010 version 2 (sometimes referred to as the Blue Book) can be submitted to the Verifier.

Where appropriate, the certification of the design of protective barriers in buildings in Risk Groups 1A and 1B may be carried out using the third party designed details option, with the work included on Schedule 1. Detailed guidance on the use of this option is given in B1.4. It should be noted that this option is only to be used where the finalisation of the design is being carried out by a specialist contractor; the warrant drawings must contain sufficient details of the initial or conceptual design and there must be adequate justification for this design and that of the supporting structure.

Care must be taken to see that the deflection of all parts of the barriers are checked against recommended limits.

Examples of Major Non-conformances

Absence of or grossly inadequate evidence of the Certifier's review of the design of any protective barriers.

The design of any protective barriers clearly does not meet the requirements of Standard 1.1.

Absence of or grossly inadequate details of the protective barriers and their fixings.

Absence of or grossly inadequate calculations or other justification demonstrating the ability of the protective barriers and their fixings to support the required loads.

Absence of or grossly inadequate consideration of the ability of the supporting structure to withstand the loads from the barrier.

Absence of or grossly inadequate performance specification and details on the warrant plans, where the barriers were included on Schedule 1

Absence of or grossly inadequate calculations, etc. to justify the preliminary design shown on the warrant plans where the barriers were included on Schedule 1.

Absence of or grossly inadequate evidence to demonstrate that a review of a third party's finalised design for the protective barriers had been carried out by the Certifier before an interim or final Form Q was signed. (RC1 buildings only)

Examples of Improvement Issues

Insufficient evidence of the Certifier's review of the design of any protective barriers.

Inadequate details of the protective barriers and their fixings.

Inadequate calculations or other justification demonstrating the ability of protective barriers and their fixings to support the required loads.

Inadequate consideration of the ability of the supporting structure to withstand the loads from the barrier.

Inadequate performance specification and details on the warrant plans, where the barriers were included on Schedule 1

Inadequate or insufficient calculations, etc. to justify the preliminary design shown on the warrant plans where the barriers were included on Schedule 1

Insufficient evidence to demonstrate that a review of a third party's finalised design for the protective barriers had been carried out by the Certifier before an interim or final Form Q was signed. (RC1 buildings only)

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