

SINGAPORE STANDARD
Specification for performance
requirements for strength and robustness
(including methods of test) for partition
walls

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for strength and robustness (including methods of
test) for partition walls**

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Foreword

This Singapore Standard was prepared by the Technical Committee on Architectural Practice under the direction of the Construction Industry Practice Committee (CIPC) as this standard complements SS CP 90 – 'Code of practice for design and installation of partition walls' which is under the purview of CIPC. This standard is however approved by Building Materials Products Standards Committee as specifications are within the scope of this committee.

This standard is an adoption of British Standard BS 5234 : Part 2 and was implemented with the permission of the British Standards Institution.

Acknowledgement is made for the use of information from BS 5234 : Part 2.

NOTE

1. *Singapore Standards (SSs) and Technical References (TRs) are reviewed periodically to keep abreast of technical changes, technological developments and industry practices. The changes are documented through the issue of either amendments or revisions.*
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Specification for performance requirements for strength and robustness (including methods of test) for partition walls

Section One – General

1.1 Scope

This Singapore Standard specifies the performance requirements for strength and robustness of a sample partition wall when tested by the methods given in the annexes.

The partition wall specimen to be tested is defined and includes a doorset and the surface finish of the partition where this is supplied as part of the partition wall.

Partition wall grade can be derived when all the relevant tests are applied to the test specimen and, where specified, to the specimen right-angle partition wall junction.

Performance levels are given for each requirement tested based on the frequency and/or intensity of the loads on the partition wall.

Methods of test are given for stiffness, hard and soft body impacts, door slamming, crowd pressure and for anchorages for lightweight fittings, wash basins and wall cupboards.

NOTE 1 – Tests may be used individually or in combination.

A specimen right-angle junction is required to be tested for surface damage and perforation by a small hard body and for its resistance to damage by impact from a large soft body. Other junctions may be tested by the methods given in this standard but such tests are beyond its scope.

Lightweight and heavyweight anchorage tests specify brackets that are to be used to evaluate the performance level of the partition wall. Proprietary brackets may not be substituted to demonstrate conformance to this standard. Alternative test brackets may be used but such tests are beyond the scope of this standard.

*As amended
Nov 2014*

The requirements tested may be applied to a partition wall regardless of the materials used in its construction. However, it would be unnecessary and/or inappropriate to apply some tests to some forms of construction; for example, screens or WC cubicles, hard body impact test on the glass of glazed partition walls, etc. Masonry partition walls should be designed for structural requirements in accordance with PD 6697, BS EN 1996-1-1, BS EN 1996-1-2, BS EN 1996-2 and BS EN 1996-3. However, the design of some masonry partition walls may need modification to achieve some of the performance criteria when tested by the methods given in this standard.

This standard does not include requirements for wind loading.

*As amended
Nov 2014*

NOTE 2 – If the partition wall specimen, when tested for crowd pressure as given in Annex G, meets the requirement of 0.75 kN/m this may be sufficient to satisfy the wind loading requirement. (See Clause 2.4.4 of SS CP 90).

1.2 References

This standard incorporates, by reference, provisions from specific editions of other publications. These references are cited at the appropriate points in the text and the publications are listed at the end of the standard.

Subsequent amendments to, or revisions of, any of these publications apply to this standard only when incorporated in it by updating or revision.

For other publications that provide information or guidance, editions of these publications current at the time of issue of this standard are listed but reference should be made to the latest editions.