

B1 Structure

Buildings will withstand likely loads, including wind, earthquake, live and dead loads (people and building contents).

This clause sets requirements around the combination of loads that buildings, building elements and sitework are likely to experience during construction, alteration and throughout their lives.

The performance requirements outline how buildings should be stable, not degrade and withstand physical conditions to protect lives and other property. It makes due allowance for the intended use of a building, the consequence of failure and other limitations.

[Record of amendments \(https://www.building.govt.nz/building-code-compliance/how-the-building-code-works/different-ways-to-comply/acceptable-solutions-and-verification-methods/record-of-amendments/\)](https://www.building.govt.nz/building-code-compliance/how-the-building-code-works/different-ways-to-comply/acceptable-solutions-and-verification-methods/record-of-amendments/) is a record of changes to the Acceptable Solutions, Verification Methods and handbooks.

Updates

Updates to the Building Code will make it easier to comply

27 JUNE 2019

Updates to the Building Code will be published on 27 June 2019 following MBIE's public consultation and analysis of submissions.

[\(https://www.building.govt.nz/about-building-performance/news-and-updates/all-news-and-updates/updates-to-the-building-code-will-make-it-easier-to-comply/\)](https://www.building.govt.nz/about-building-performance/news-and-updates/all-news-and-updates/updates-to-the-building-code-will-make-it-easier-to-comply/)

MBIE to consult twice yearly on changes to the Building Code System

10 AUGUST 2018

MBIE will now consult twice yearly to ensure Acceptable Solutions and Verification Methods are up to date.

[\(https://www.building.govt.nz/about-building-performance/news-and-updates/all-news-and-updates/bc-update-237/\)](https://www.building.govt.nz/about-building-performance/news-and-updates/all-news-and-updates/bc-update-237/)

View all related news and updates [\(https://www.building.govt.nz/search/?bcc%5B%5D=b1-structure&area=news-and-updates&show=all&action_doSearch=Search&sort=recent#results\)](https://www.building.govt.nz/search/?bcc%5B%5D=b1-structure&area=news-and-updates&show=all&action_doSearch=Search&sort=recent#results)

Acceptable Solutions and Verification Methods

Current version

<http://mbie5.cwp.govt.nz/building-code-compliance/b1-stability/b1-structure/>

Previous versions

These are issued by MBIE to provide one way of complying with the Building Code and must be accepted by BCAs as demonstrating compliance with the related clauses of the Building Code. Using them is not mandatory.

1st edition, amendment 19

[PDF 1.6 MB]

Effective from 28 November 2019

(<https://www.building.govt.nz/assets/Uploads/building-code-compliance/b-stability/b1-structure/asvm/b1-structure-1st-edition-amendment-19.pdf>)

1st edition, amendment 19 replacement pages

[PDF 629 KB]

(<https://www.building.govt.nz/assets/Uploads/building-code-compliance/b-stability/b1-structure/asvm/b1-structure-1st-edition-amendment-19-rp.pdf>)

Acceptable Solutions and Verification Methods

(<https://www.building.govt.nz/building-code-compliance/how-the-building-code-works/different-ways-to-comply/acceptable-solutions-and-verification-methods/>) (AS and VMs) were called compliance documents. Some still have the “compliance document” title but the AS or VMs they contain are valid and unaffected by the name change.

Version history (<https://www.building.govt.nz/building-code-compliance/b-stability/b1-structure/b1-acceptable-solutions-and-verification-methods/>)

Standards

Standards are frequently referred to in Acceptable Solutions and Verification Methods. They provide practical information and guidelines for building solutions.

Over 120 building standards used for Building Code compliance are now available for free download.

See the free standards relating to Code Clause B1 (<https://www.standards.govt.nz/sponsored-standards/building-standards/?buildingcode=B1>).

All standards, including the funded ones, can be accessed through the Standards New Zealand website (<https://www.standards.govt.nz/>).

NZS 3604:2011 Timber-framed buildings

If you are familiar with common methods and details for designing and constructing timber-framed buildings, this handbook will provide a useful reference. It contains a collection of figures and tables extracted from NZS 3604:2011 Timber-framed buildings, with some associated text. This information is commonly used in the design and construction of timber-framed buildings up to three storeys in height including residential buildings, garages and decks.

1st edition, amendment 18

[PDF 1.5 MB]

(<https://www.building.govt.nz/assets/Uploads/building-code-compliance/b-stability/b1-structure/asvm/b1-structure-1st-edition-amendment-18.pdf>)

1st edition, amendment 18 replacement pages

[PDF 679 KB]

(<https://www.building.govt.nz/assets/Uploads/building-code-compliance/b-stability/b1-structure/asvm/b1-structure-1st-edition-amendment-18-rp.pdf>)

1st edition, amendment 17

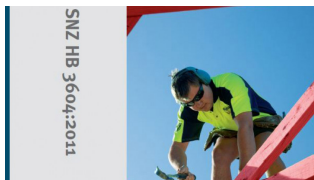
[PDF 1.4 MB]

(<https://www.building.govt.nz/assets/Uploads/building-code-compliance/b-stability/b1-structure/asvm/b1-structure-1st-edition-amendment-17.pdf>)

1st edition, amendment 17 replacement pages

[PDF 291 KB]

(<https://www.building.govt.nz/assets/Uploads/building-code-compliance/b-stability/b1-structure/asvm/b1-structure-1st-edition-amendment-17-rp.pdf>)



SNZ HB 3604:2011 Timber-framed buildings

Download a free copy
[\(https://www.standards.govt.nz/sponsored-standards/building-standards/nzs3604/\)](https://www.standards.govt.nz/sponsored-standards/building-standards/nzs3604/)

Guidance

These documents are provided for assistance. They are not intended as a means of establishing compliance with the Building Act or Building Code, and they do not have the same status accorded to Acceptable Solutions and Verification Methods under the Act.



Seismic assessment of existing buildings

The Engineering Assessment Guidelines are used by engineers to carry out seismic assessments of existing buildings.

[\(https://www.building.govt.nz/building-code-compliance/b-stability/b1-structure/seismic-assessment-existing-buildings/\)](https://www.building.govt.nz/building-code-compliance/b-stability/b1-structure/seismic-assessment-existing-buildings/)



Altering an existing building

This guide helps to determine the requirements for proposed alterations to existing buildings and how these can be met.

[\(https://www.building.govt.nz/building-code-compliance/b-stability/b1-structure/altering-existing-building/\)](https://www.building.govt.nz/building-code-compliance/b-stability/b1-structure/altering-existing-building/)

View all related guidance [\(https://www.building.govt.nz/search/?bcc%5B%5D=b1-structure&area=guidance&show=all&action_doSearch=Search&sort=recent#results\)](https://www.building.govt.nz/search/?bcc%5B%5D=b1-structure&area=guidance&show=all&action_doSearch=Search&sort=recent#results)

Related Determinations

Determinations are made by MBIE on matters of doubt or dispute to do with building work. Rulings are legally binding in relation to each case. Circumstances in one case may differ to others.

2019/065: The refusal to grant a building consent for District Court buildings due to the disputed importance levels

<p>This determination considers the authority's purported refusal to grant a
<http://mbie5.cwp.govt.nz/building-code-compliance/b-stability/b1-structure/>

2019/060: Regarding compliance with Building Code Clause B1 Structure of a multi-storey steel framed building

<p>This determination considers the compliance of a recently-completed

building consent for seismic strengthening work because the authority did not agree with the importance level classification proposed by the structural engineer. The determination discusses whether the subject building should be classified as Importance Level 2 or Importance Level 3 as set out in AS/NZS 1170.0. This standard is referenced by Verification Method B1/VM1, which is a means of compliance with Building Code Clause B1 Structure. </p>

[\(https://www.building.govt.nz/resolving-problems/resolution-options/determinations/determinations-issued/determination-2019-065/\)](https://www.building.govt.nz/resolving-problems/resolution-options/determinations/determinations-issued/determination-2019-065/)

eight-storey steel framed building. Specific aspects of the completed frame had been brought to the notice of the authority, and the authority also questioned work carried out that varied from the approved consent. The determination considers the compliance of these matters in respect of Building Code Clause B1 Structure</p>

[\(https://www.building.govt.nz/resolving-problems/resolution-options/determinations/determinations-issued/determination-2019-060/\)](https://www.building.govt.nz/resolving-problems/resolution-options/determinations/determinations-issued/determination-2019-060/)

[View 335 Determinations related to Structure](#)

https://www.building.govt.nz/resolving-problems/resolution-options/determinations/determinations-issued/?bcc%5B%5D=b1-structure&action_doSearch=Search#results

Related building products

All products, systems and construction methods that have achieved CodeMark status will be listed with their most up to date certificate.

[View 111 certified building products associated with Structure \(https://www.building.govt.nz/building-code-compliance/product-assurance-and-multiproof/codemark/product-certificate-register/?&bcc%5B%5D=b1-structure&action_doSearch=Search#results\)](https://www.building.govt.nz/building-code-compliance/product-assurance-and-multiproof/codemark/product-certificate-register/?&bcc%5B%5D=b1-structure&action_doSearch=Search#results)



**MINISTRY OF BUSINESS,
INNOVATION & EMPLOYMENT**
HĪKINA WHAKATUTUKI

New Zealand Government