

C6 Structural stability

Structural stability during fire: buildings remain stable during fire (likelihood of failure or collapse).

This clause takes into account factors affecting the fire severity and its impact on structural stability. It requires structural systems to provide firefighters with safe access to floors, during and after fire. It protects from the collapse of building elements with lesser fire resistance, so they do not consequentially cause the collapse of elements of a higher fire resistance.

C1 provides objectives for each of the C clauses.

Most of the guidance applies to all of the C clauses and some relates to a specific clause.

There may be specific products and determinations under each code clause.

The 2019 1st edition of C/AS2 combining C/AS2-C/AS7 is summarised in this [fact sheet \(https://www.building.govt.nz/building-code-compliance/c-protection-from-fire/c-clauses-c1-c6/fact-sheet-for-the-first-edition-2019-fire-acceptable-solution-cas2/\)](https://www.building.govt.nz/building-code-compliance/c-protection-from-fire/c-clauses-c1-c6/fact-sheet-for-the-first-edition-2019-fire-acceptable-solution-cas2/).

[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/)

Corrections to 2019 C/AS2 Acceptable Solution

25 OCTOBER 2019

Three immediate corrections to the 2019 C/AS2 Acceptable Solution are being made with effect from 31 October 2019.

[\(https://www.building.govt.nz/about-building-performance/news-and-updates/all-news-and-updates/corrections-to-2019-cas2-acceptable-solution/\)](https://www.building.govt.nz/about-building-performance/news-and-updates/all-news-and-updates/corrections-to-2019-cas2-acceptable-solution/)

View all related news and updates (https://www.building.govt.nz/search/?bcc%5B%5D=c6-structural-stability&area=news-and-updates&show=all&action_doSearch=Search&sort=recent#results)

Acceptable Solutions and Verification Methods

Current version

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.

C/AS2, 1st edition 2019

[PDF 6.7 MB]

Effective from 27 June 2019 (<https://www.building.govt.nz/assets/Uploads/building-code-compliance/c-protection-from-fire/asvm/cas2-protection-from-fire-1st-edition-2019.pdf>)

Clauses C1–C6 and Clause A3 Building importance levels

[PDF 538 KB]

Effective from 1 July 2014 (<https://www.building.govt.nz/assets/Uploads/building-code-compliance/c-protection-from-fire/asvm/c1-c6-protection-from-fire-a3.pdf>)

C/VM1 & C/AS1, amendment 4

[PDF 1 MB]

Effective from 1 January 2017 (<https://www.building.govt.nz/assets/Uploads/building-code-compliance/c-protection-from-fire/asvm/cvm1-cas1-protection-from-fire-amendment-4.pdf>)

C/VM1 & C/AS1, amendment 4 replacement pages

[PDF 675 KB]

(<https://www.building.govt.nz/assets/Uploads/cvm1-cas1-protection-from-fire-amendment-4-rp.pdf>)

C/VM2, amendment 5

[PDF 1 MB]

Effective from 24 November 2017 (<https://www.building.govt.nz/assets/Uploads/building-code-compliance/c-protection-from-fire/asvm/cvm2-protection-from-fire-amendment-5.pdf>)

C/VM2, amendment 5 replacement pages

[PDF 616 KB]

(<https://www.building.govt.nz/assets/Uploads/cvm2-protection-from-fire-amendment5-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 \(https://www.building.govt.nz/building-code-compliance/c-protection-from-fire/c-clauses-c1-c6/acceptable-solutions-and-verification-methods/\)](https://www.building.govt.nz/building-code-compliance/c-protection-from-fire/c-clauses-c1-c6/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 C6 (<https://www.standards.govt.nz/sponsored-standards/building-standards/?buildingcode=C6>).

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

Guidance

These documents are provided to assist Building Consent Authorities, building owners, designers and persons who carry out building work.

Fire performance of external wall cladding systems

Significant high-rise fire events globally have increased our understanding of how fire spreads externally and within modern facade construction. This has prompted MBIE to review the current methods used to demonstrate compliance of external wall cladding systems with building regulations' fire safety objectives. In particular, how New Zealand requirements should be interpreted and whether international alternative fire test and evaluation methods are suitable for use here.

(<https://www.building.govt.nz/building-code-compliance/c-protection-from-fire/c-clauses-c1-c6/fire-performance-of-external-wall-cladding-systems/>)

Alternative solutions for Building Code clause C Protection from Fire

Develop alternative solutions for complying with Building Code clauses C1-C6 Protection from Fire.

(<https://www.building.govt.nz/building-code-compliance/c-protection-from-fire/c-clauses-c1-c6/alternative-solutions-building-code-c-protection-fire/>)

View all related guidance (https://www.building.govt.nz/search/?bcc%5B%5D=c6-structural-stability&area=guidance&show=all&action_doSearch=Search&sort=recent#results)

Related Determinations

A determination is a binding decision made by the Ministry of Business, Innovation and Employment. It provides a way of solving disputes or questions about the rules that apply to buildings, how buildings are used, building accessibility, health and safety.

2018/055: Compliance of a warehouse fitout with the fire safety requirements of the Building Code

This determination considers the compliance of a warehouse fitout, comprising a storage racking system and a mezzanine floor, with the fire

<http://mbie5.cwp.govt.nz/building-code-compliance/c-protection-from-fire/c6-structural-stability/>

2009/100: Refusal of an amendment to the fire engineering design forming part of a building consent for a multi-storey office building

13 NOVEMBER 2009

safety requirements of the Building Code. The determination considers whether the fitout was part of the original building as it was intended to be built, or whether it can be considered an alteration to an existing building.</p>

[\(https://www.building.govt.nz/resolving-problems/resolution-options/determinations/determinations-issued/determination-2018-055/\)](https://www.building.govt.nz/resolving-problems/resolution-options/determinations/determinations-issued/determination-2018-055/)

<p>N/A</p>

[\(https://www.building.govt.nz/resolving-problems/resolution-options/determinations/determinations-issued/determination-2009-100/\)](https://www.building.govt.nz/resolving-problems/resolution-options/determinations/determinations-issued/determination-2009-100/)

View 2 Determinations related to C6 Structural stability

https://www.building.govt.nz/resolving-problems/resolution-options/determinations/determinations-issued/?bcc%5B%5D=c6-structural-stability&action_doSearch=Search#results

Related building products

Product certification is a voluntary scheme that provides an easily-understood and robust way to show that a building product or system meets the requirements of the New Zealand Building Code.

View 5 certified building products associated with C6 Structural stability https://www.building.govt.nz/building-code-compliance/product-assurance-and-multiproof/codemark/product-certificate-register/?&bcc%5B%5D=c6-structural-stability&action_doSearch=Search#results



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

New Zealand Government