

# New Zealand Building Code Handbook Third Edition

Prepared by the Department of Building and Housing

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# New Zealand Government

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#### **Document Status**

The most recent version of this document, as detailed in the Document History, is approved by the Chief Executive of the Department of Building and Housing. It is effective from 10 October 2011 and supersedes all previous versions of this document.

People using this document should check for amendments on a regular basis. The Department of Building and Housing may amend any part of any document at any time. Up-to-date versions of documents are available from www.dbh.govt.nz



# Preface

# 1.0 INTRODUCTION

- **1.1** This preface provides an introduction to building controls in New Zealand. This section shows the relationship between the New Zealand Building Code (the Building Code) and various other Provisions that ensure buildings in New Zealand are safe and healthy to use.
- **1.2** The preface provides a convenient user reference. However, legal interpretation must be based on the actual wording of the Building Act 2004 (the Building Act), and amendments and respective Building Regulations.

#### 2.0 BUILDING CONTROL FRAMEWORK

The regulation and performance of buildings sits under the following three-part framework.

- The **Building Act**, which contains the provisions for regulating building work.
- The various Building Regulations, which contain prescribed forms, list specified systems, define 'change the use' and 'moderate earthquake', and set out the rate of levy and fees for determinations.
- The Building Code, contained in Schedule 1
   of the Building Regulations 1992, which sets
   performance standards all new building work
   must meet, and covers aspects such as
   stability, fire safety, access, moisture, safety
   of users, services and facilities, and energy
   efficiency.

The pyramid below illustrates the legislation that forms the building control framework governed by the Building Act.

**BUILDING ACT 2004** 

**BUILDING REGULATIONS** 

THE NEW ZEALAND BUILDING CODE

JECTIVE FUNCTIONAL REQUIREMENT PERFORMANCE



# 2.1 The Building Act 2004

The Building Act provides the mandatory framework for the building control system to be followed when undertaking building work in New Zealand. It applies to all:

- buildings including Crown buildings, except those which may be exempt for reasons of national security
- components in a building, including plumbing, electrical and mechanical installations.

The Building Act should be read taking into account the changes under the Building Amendment Act 2005 and any subsequent amendments (copies are on www.legislation.govt.nz).

# 2.1.1 Purpose

The Building Act aims to improve control of and encourage better practices in building design and construction to provide greater assurance to consumers.

This means:

- more clarity on the standards we expect buildings to meet
- more guidance on how these standards can be met
- more certainty that capable people are undertaking building design, construction and inspection
- more scrutiny in the building consent and inspection process
- better protection for homeowners through the introduction of mandatory warranties.

The purpose of the Building Act is:

- to provide for regulation of building work
- to ensure that people can use buildings safely without endangering their health
- to ensure people can escape a building in case of fire
- to ensure buildings have attributes that contribute appropriately to the health, physical independence and wellbeing of the people who use them

 to ensure buildings are designed, constructed and able to be used in ways that promote sustainable development.

# 2.1.2 Principles

The Building Act does not contain an equivalent to section 47 of the Building Act 1991 (the former Act), which contained guidance on how a territorial authority should exercise its powers.

Under section 4 of the Building Act (section 6 under the former Act), principles to be applied in performing functions or duties, or exercising powers under the Building Act, now have greater importance. Section 4 should be taken into account when performing functions, duties or exercising powers relating to the granting of waivers or modifications of the Building Code, and the adoption and review of policies on dangerous, earthquake-prone or insanitary buildings.

The Building Act re-states many of the principles outlined in the former Act, and makes explicit some of the implied principles of that legislation (for example, that innovation is important). However, some significant new concepts have been introduced, including a particular focus on the household unit, as well as considering the whole-of-life costs of building work.

The following is a summary of the Building Act principles.

- Household units have an important role in the lives of the people who use them, and are accorded a special focus.
- The Building Code as it relates to household units is important, and household units need to comply with the Building Code.
- Maintenance requirements of household units need to be reasonable, and owners of household units need to be aware of the maintenance requirements of their household units.
- Harmful effects on human health resulting from the use of building methods, products, design or building work need to be prevented or minimised.



- Buildings need to be durable.
- Special traditional and cultural aspects of the intended use of a building need to be recognised.
- The whole-of-life costs of a building need to be considered.
- Standards are important in achieving compliance with the Building Code for building design and construction.
- Innovation in methods of building design and construction is important.
- People who undertake a rescue operation or firefighting in a building need to be able to expect a reasonable level of protection from injury or illness while doing so.
- The extent and effects of the spread of fire need to be limited to protect other household units and other property.
- Other property needs to be protected from physical damage resulting from the construction, use and demolition of a building.
- People with disabilities need to be able to enter and carry out normal activities and processes in a building.
- Buildings of significant cultural, historical or heritage value need to be preserved.
- Energy use in buildings needs to be efficient.
- The use of renewable sources of energy needs to be encouraged.
- Material use in buildings needs to be efficient and sustainable.
- Water use in buildings needs to be efficient and promote water conservation.
- Waste generated during the construction process needs to be reduced.

# 2.1.3 Application

The Building Act applies to:

- building construction, alteration, demolition or removal
- maintenance of a building's specified systems, such as lifts and fire protection installations.

The Building Act does not cover:

- planning and resource management
- occupational safety and health.

# 2.1.4 Structure

The Building Act has five parts.

Part 1: Contains the purpose and principles of the Building Act, together with an overview, commencement dates for various Provisions and definitions. These sections provide an important reference when reading and interpreting the Building Act.

Part 2 (and Schedules 1 and 2): Outlines matters relating to the Building Code and building control (such as building consents), including requirements of building work, requirements for the use of buildings, Provisions for certain categories of buildings and Provisions for the safety of dams.

Part 3: Sets out the functions, duties and powers of the Chief Executive of the Department of Building and Housing (the Department), territorial authorities, regional authorities and building consent authorities. It also deals with the accreditation and registration of building consent authorities, accreditation of dam owners, and product certification.

Part 4 (and Schedule 3): Covers matters relating to the licensing and disciplining of building practitioners.

Part 5 (and Schedule 4): Describes miscellaneous matters, including offences and criminal proceedings, implied terms of contracts, regulation-making powers, amendments to other enactments and the repeal of the former Act, and the transitional Provisions from the former Act to the Building Act.



# 2.2 Building Regulations

Building Regulations are made under and in accordance with the Building Act.

A number of regulations have been made under the Building Act. Currently (as at May 2007) there are seven sets of regulations.

- Building Regulations 1992, made under the former Act and which include the Building Code. These regulations have been amended by the Building (Forms) Regulations 2004 so that only certain parts remain in force. Parts still in force are: Schedule 1 (Building Code), Regulation 3, Forms 16 & 17 (and Regulation 4 and Schedule 2 where they relate to these forms).
- 2. Building (Forms) Regulations 2004, as amended by the Building (Forms) Amendment Regulations 2005, which prescribes forms to be used under the Building Act.
- 3. Building (Specified Systems, Change the Use, and Earthquake-prone Buildings) Regulations 2005, as amended by the Building (Specified Systems, Change the Use, and Earthquake-Prone Buildings) Amendment Regulations 2005. These regulations outline and define the following terms.
  - Specified systems the building systems that must be listed on compliance schedules and are subject to specific inspection and maintenance procedures. Schedule 1 provides the list of specified systems.
  - Change the use to determine when a change in a building's use will require upgrading to meet certain requirements of the Building Act. Schedule 2 determines the use of all or parts of buildings.
  - Moderate earthquake to define a moderate earthquake in relation to a building.
- Building (Fee for Determinations) Regulations 2005
- 5. Building Levy Order 2005
- 6. Building (Accreditation of Building

- Consent Authorities) Regulations 2006
- 7. Building (Consent Authority
  Accreditation Fees) Regulations 2007
- 8. Building (Designation of Building work Licence Classes) Order 2007
- Building (Design Work Declared to be Building Work) Order 2007
- 10. Building Practitioners (Licensing Fees and Levy) Regulations 2007
- Building (Registration of Building Consent Authorities) Regulations 2007
- 12. Building (Infringement Offences, Fees, and Forms) Regulations 2007
- 13. Building Practitioners (Register of Licensed Building Practitioners) Regulations 2008
- 14. Building (Dam Safety) Regulations 2008
- 15. Building Practitioners (Complaints and Disciplinary Procedures) Regulations 2008
- 16. Building (Product Certification)
  Regulations 2008
- 17. Building (Building Consent Authority Transition) Order 2008
- 18. Building (National Multiple-use Approval)
  Regulations 2009
- 19. Building (Minor Variations) Regulations2009
- 20. Building (Designation of Building Work Licensing Classes) Order 2010
- 21. Building Practitioners (Licensing Fees and Levy) Regulations 2010
- 22. Building Practitioners (Register of Licensed Building Practitioners)
  Regulations 2010

Amend 11 Sep 2010

- 23. Canterbury Earthquake (Building Act) order 2010
- 24.Building (National Multiple-use Approval) Regulations 2011

Amend 12 Oct 2011

Note: these regulations can be found at www.legislation.govt.nz

# 2.3 The New Zealand Building Code

The Building Code is contained in Schedule 1 of the Building Regulations 1992. The Building Code contains compulsory rules for all new building work.



#### 2.3.1 Content

The Building Code sets out performance criteria that building work must meet. It covers aspects such as structural stability, fire safety, access, moisture control, durability, services and facilities, and energy efficiency.

The Building Code does not prescribe how work should be done, but states how completed building work and its parts must perform.

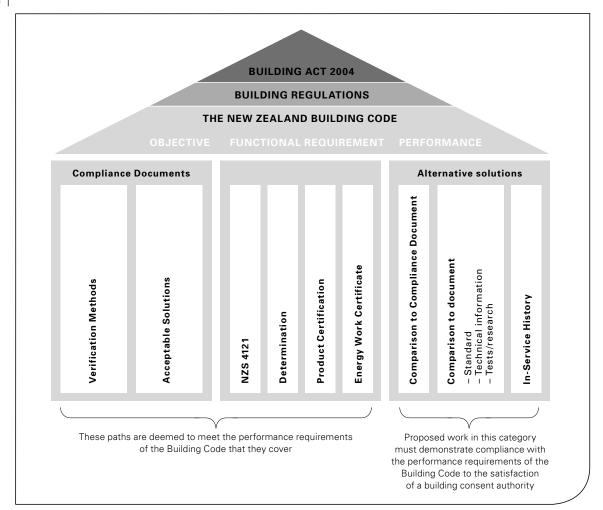
An advantage of a performance-based Building Code is flexibility. It contains no prescriptive requirements stipulating that certain products or designs must be used. This flexibility allows developments and innovation in building design, technology and systems.

## 2.3.2 Structure

The Building Code consists of two preliminary clauses and 35 technical clauses. Each technical clause has three levels that describe the requirements for the clause and is listed below.

- Objective Social objectives the building must achieve.
- **2. Functional requirement** Functions the building must perform to meet the Objective.
- 3. Performance The performance criteria the building must achieve. By meeting the performance criteria, the Objective and Functional requirement can be achieved.

Amend 11 Sep 2010





#### 3.0 COMPLIANCE PATHS

Compliance with the Building Code can be demonstrated using various pathways. Understanding the New Zealand building control framework will help a building consent applicant decide which path is most suitable when designing and constructing building work.

The diagram below illustrates the hierarchy of New Zealand building controls, including the various compliance paths.

The top three tiers of the pyramid (the Building Act and Building Regulations) show mandatory building legislation that must be followed, as explained in the previous section.

The rest of the diagram shows various paths that may be used to demonstrate compliance with the Building Code. Compliance with the Building Code must be demonstrated using one or more of the paths. The applicant can choose which path(s) to follow.

With the exception of alternative solutions, the paths illustrated on the previous page must be accepted by the building consent authority as meeting the performance requirements of the Building Code. These pathways are discussed below.

#### **Compliance Documents** 3.1

Compliance Documents provide details for construction that, if followed, result in compliance with the Building Code. They are published by the Department. (Note: Compliance Documents were previously known as Approved Documents, and were published by the former Building Industry Authority.)

A design that complies with Compliance Documents must be accepted by a building consent authority as complying with the Building Code.

There is one Compliance Document for each of the 35 technical clauses in the Building Code. Each Compliance Document contains at least a Verification Method or an Acceptable Solution, and usually has both. However, some Compliance Documents have more than one Verification Method or Acceptable Solution.

For example, the Compliance Document for Clause B1 of the Building Code has two Verification Methods and three Acceptable Solutions.

Verification Methods and Acceptable Solutions are usually referred to by their Building Code clauses and unique identification numbers. Some examples are listed below.

- The Acceptable Solutions for Clause E2 External Moisture are known as E2/AS1. E2/AS2 and E2/AS3.
- The Acceptable Solution for Clause G4
- The Acceptable Solution for Clause G1 Personal Hygiene is known as G1/AS1.

Ventilation is known as G4/AS1.

• The Verification Methods for Clause B1 Structure are known as B1/VM1 and B1/VM4

Amend 11

Amend 11

Sep 2010

Amend 12

Oct 2011

#### 3.1.1 Verification Methods

Verification Methods are tests or calculation methods that prescribe one way to comply with the Building Code. Verification Methods can include:

- · calculation methods: using recognised analytical methods and mathematical models
- laboratory tests: using tests (sometimes to destruction) on prototype components and systems
- tests-in-situ: which may involve examination of plans and verification by test, where compliance with specified numbers, dimensions or locations is required (nondestructive tests, such as pipe pressure tests, are also included).

# 3.1.2 Acceptable Solutions

These are simple step-by-step instructions that show one way to comply with the Building Code.

# 3.2 Product certification

The Building Act contains provisions for a voluntary product certification scheme that will enable product manufacturers to have their products certified as meeting nominated Performance requirements of the Building Code.



Building products or methods that are used in accordance with a product certificate as provided by section 269 of the Building Act must be accepted as complying with the Building Code.

# 3.3 Energy work certificate

Energy work is defined as gasfitting work or prescribed electrical work. An energy work certificate certifies that energy work complies with either the Electricity Act 1992 or the Gas Act 1992.

An energy work certificate must be accepted as establishing compliance with the relevant Performance requirements of the Building Code.

## 3.4 New Zealand Standard NZS 4121

Section 119 of the Building Act specifies that NZS 4121, the code of practice for design for access and use of buildings by persons with disabilities (and any modification of that Standard), is to be taken as a Compliance Document.

#### 3.5 Determinations

A determination is a binding decision made by the Department. It provides a way of solving disputes or answering questions relating to the Building Code and territorial authority/building consent authority/regional authority decisions under the Building Act.

A range of matters can be determined, including:

- whether a building or building work complies with the Building Code
- a building consent authority's decision on a building consent, a notice to fix, a code compliance certificate (CCC) or a compliance schedule
- a territorial authority's decision to issue a building consent subject to a waiver or modification
- a territorial authority's decision on a certificate of acceptance, a compliance schedule, a notice to fix, or a certificate for public use
- a regional authority's or territorial authority's exercise or failure to exercise its powers under the Building Act.

#### 3.6 Alternative solutions

An alternative solution is a building solution that differs, in part or wholly, from the solutions offered by the Compliance Documents (an Acceptable Solution or Verification Method), but achieves compliance with the performance requirements of the Building Code to the satisfaction of the building consent authority.

There may be a number of reasons for the use of an alternative solution.

- There may not be a Compliance Document for the proposed construction, for example, if no Compliance Document is available for on-site effluent disposal.
- The building work may incorporate unusual design features that fall outside the scope of a Compliance Document.

Whatever the reason for using an alternative solution, the Building Code, being performance-based, allows for innovation and applicants have the freedom to propose an innovative solution. Refer to 2.3 'The New Zealand Building Code'.

# 3.7 Producer statements

A producer statement is a statement supplied by or on behalf of an applicant for a building consent, or by or on behalf of a person who has been granted a building consent. It is a statement that certain work will be, or has been, carried out in accordance with certain technical specifications.

Producer statements were introduced by the former Act and are no longer expressly referred to in the Building Act. A building consent authority may, at their discretion, accept and consider a producer statement as part of the plans or specifications for a building consent. This will assist the building consent authority in deciding whether it is satisfied on reasonable grounds the provisions of the Building Code will be met if the building work is completed in accordance with the plans and specifications. A building consent authority should have a formal procedure or policy in place for the use and consideration of producer statements, especially if a producer statement(s) will be required to prove building work complies with a building consent.



# 4.0 THE PARTIES AND THEIR RESPONSIBILITIES

Five principal parties are responsible for ensuring that buildings are safe and sanitary in line with the Building Act.

# 4.1 The Department of Building and Housing (the Department)

The Department has a range of statutory responsibilities for building and housing, and administers New Zealand's building legislation. The Department's building control functions include:

- advising the Minister for Building and Construction on matters relating to building control
- administering and reviewing the Building Code
- producing and maintaining Compliance Documents that specify prescriptive methods as a means of complying with the Building Code
- providing information, guidance, and advice on building controls to all sectors of the building industry and consumers
- implementing, administering and monitoring a system of regulatory controls for a vibrant sector with skilled building professionals
- making determinations, or technical rulings, on matters of interpretation, doubt or dispute.

#### 4.2 Territorial authorities

Territorial authorities are responsible for enforcing the Building Act, Regulations and the Building Code in their areas of jurisdiction.

They are responsible for:

- gaining accreditation as a building consent authority
- registering as a building consent authority
- performing the functions of a building consent authority

- · issuing project information memoranda
- granting waivers or modifications of the Building Code (not including waivers or modifications relating to access and facilities for people with disabilities)
- issuing certificates of acceptance
- issuing certificates for public use
- determining the extent to which buildings must comply with the Building Code if they are altered, or their use is changed or where there is a specified intended life change
- enforcing the provisions relating to annual building warrants of fitness
- issuing certain notices provided for under the Building Act
- · keeping records
- ensuring dangerous, insanitary and earthquake prone buildings are identified and appropriate action taken to remove any danger or insanitary condition
- amending compliance schedules
- carrying out other functions and duties specified in the Building Act.

# 4.3 Building consent authorities

Building consent authorities are responsible for:

- · issuing building consents
- inspecting building work for which they granted a building consent
- issuing notices to fix
- · issuing code compliance certificates
- issuing compliance schedules and amending them where the specified systems are affected by building work
- carrying out other functions and duties specified in the Building Act.



# 4.4 Regional authorities

Regional authorities are responsible for:

- performing the functions of a building consent authority to the extent that those functions relate to dams
- considering and approving dam classifications
- considering and approving dam safety assurance programmes
- administering the Building Act, relating to dam classifications, dam safety assurance programmes and dam compliance certificates
- enforcing provisions of the Building Code and the Building Act and regulations that relate to dams
- adopting a policy on dangerous dams.

# 4.5 Building owners

Building owners are responsible for:

- detailing work proposals on plans and specifications, including proposals for the inspection and routine maintenance of the specified systems for the purposes of the compliance schedule (if applicable)
- applying for building consents (and amendments to building consents) and project information memoranda
- constructing buildings in accordance with the 'approved plans and specifications'
- organising inspections at given stages as building work progresses
- collecting energy work certificates
- applying for a code compliance certificate as soon as any work carried out under a building consent granted to them is completed
- maintaining buildings in a safe and sanitary manner
- ensuring any specified systems in their building are performing and will continue

to perform to the performance standards

- supplying the annual building warrant of fitness, if applicable
- notifying the territorial authority if a change of use, extension of life, or subdivision is proposed
- paying any fees as required by the Building Act.

# 4.6 Licensed building practitioners

The Building Act set up a licensed building practitioners (LBP) scheme to promote, recognise and support professional skills and behaviour in the building industry. The scheme has seven licence classes covering designers, site supervisors and trades people, such as carpenters, roofers, plasterers and bricklayers.

To become licensed, building practitioners must show they meet the standard for the licence class appropriate for them. Details of LBPs are held on a public register at www.dbh.govt.nz/lbp-register

Once licensed, LBPs are responsible for notifying territorial authorities of breaches of building consents.

From March 2012, it is expected that restricted building work on houses and small-medium sized apartment buildings will only be able to be carried out or supervised by LBPs.

Restricted building work is design and building work that is critical to the integrity of a house or small-medium sized apartment building. It will cover aspects of the primary structure, external moisture management and fire design.

From March 2012:

 any plans and specifications containing restricted building work (relating to design work) must be accompanied by a memorandum issued by the LBP who carried out or supervised the design work, stating that the design work complies with the Building Code

Amend 11 Sep 2010



 if an application for a building consent relates to restricted building work, the names of the LBPs carrying out or supervising that work must be given to the building consent authority in the application (if known) or once the work commences, or when the application for the code compliance certificate is made.

Amend 11 Sep 2010 The most up-to-date information on the LBP scheme is at www.dbh.govt.nz/lbp

# 4.7 Past building control parties

#### 4.7.1 The Building Industry Authority

The Building Industry Authority (the Authority) was a Crown entity, established under the former Act as the sole regulatory authority for building controls in New Zealand. The introduction of the Building Act 2004 has seen the dissolution of the Authority and transfer of its responsibilities to the Department.

## 4.7.2 Building certifier

A building certifier was a person approved by the Authority under the former Act to issue building certificates with respect to specific provisions of the Building Code. A building certifier may have been employed by a building owner as an alternative to using the territorial authority for checking technical proposals and performing inspections. Building certifiers are not provided for under the Building Act except for certain transitional arrangements.

# 5.0 BUILDING COMPLIANCE PROVISIONS

# 5.1 Project information memoranda (sections 31 to 39)

A project information memorandum (PIM) provides information known to the territorial authority/regional authority about land, and requirements of the Building Act and other Acts that might be relevant to proposed building work. A PIM is specific to the site and project.

A PIM is a legal document and may have a notice attached to it requiring the owner to obtain other approvals or consents required by other legislation, such as the Resource Management Act 1991, prior to any work commencing on the project. For example, a PIM might include the fact that the height of a building may contravene a rule in the District Plan, meaning that before work commences, a separate resource consent is required from the territorial authority planning unit.

An application for a building consent is deemed to include an application for a PIM, unless one has been previously issued for the project and this is supplied with the building consent application. In most cases, PIMs and building consents are applied for in a single application. They will be processed as separate applications, but may be issued separately or jointly.

If the application for a PIM affects a registered historic place, historic area, wahi tapu, or wahi tapu area, and a PIM has not been issued for the building work to which the application applies, then the territorial authority must notify the New Zealand Historic Places Trust within five days after receiving the application.

If the territorial authority considers a development contribution under the Local Government Act 2002 is payable by the owner, it may attach a notice (Form 3) that advises the applicant that a code compliance certificate will not be issued until the development contribution is paid.

# 5.2 Building consents (sections 40 to 52)

A building consent is the formal approval, under section 49 of the Building Act, permitting an applicant to undertake building work in accordance with the plans and specifications approved by the building consent authority. Building work is the construction, alteration, demolition or removal of a building and includes sitework.

A person cannot carry out building work except in accordance with a building consent. There are some exemptions (see sections 41 and 43 and Schedule 1 of the Building Act), but section 17 still requires building work to be carried out in accordance with the Building Code, even if no building consent is required.



## 5.2.1 Alterations (Section 112)

Where proposed building work involves an alteration to an existing building, the consent must not be granted unless the building consent authority is satisfied that all new building work complies with the Building Code and:

- the altered building will comply as nearly as is reasonably practicable with the Building Code provisions for means of escape from fire and access and facilities for people with disabilities, and
- the altered building will continue to comply with the other provisions of the Building Code to at least the same extent as before the alteration.

However, a territorial authority may allow the alteration of an existing building without complying with provisions of the Building Code specified by the territorial authority, if the territorial authority is satisfied that:

- if the building were required to comply with the relevant provisions of the Building Code, the alterations would not take place, and
- the alteration will result in improvements to attributes of the building that relate to means of escape from fire or access and facilities for persons with disabilities, and
- the improvements mentioned above outweigh any detriment that is likely to arise as a result of the building not complying with the relevant provisions of the Building Code.

# 5.2.2 Change of use (sections 114 and 115)

Uses of buildings are defined in Schedule 2 of the Building (Specified Systems, Change the Use, and Earthquake-Prone Buildings) Regulations 2005.

A change of use arises when two criteria are met. The first criterion is that a building's use must change from one use in Schedule 2 to a different use in Schedule 2. The second criterion is the result of that change (first criterion) means the requirements for compliance with the Building Code for the new use are additional to, or more onerous than, the requirements for the old use.

See Regulations 5 and 6 of the Building (Specified Systems, Change the Use, and Earthquake-Prone Buildings) Regulations 2005.

An owner of a building must give written notice to the territorial authority/regional authority if they propose to change the use of a building.

Where the owner proposes to change the use of a building to one or more household units, where household units did not exist before, they must obtain written notice from the territorial authority. This must state that the territorial authority is satisfied, on reasonable grounds, that the building, in its new use, will comply as nearly as is reasonably practicable, with the Building Code in all respects (usually through the issue of a building consent).

For any other change of use proposal, the owner must get written notice from the territorial authority/regional authority, stating that the authority is satisfied, on reasonable grounds, that the building, in its new use, will comply, as nearly as is reasonably practicable, with every provision of the Building Code that relates to either or both of the following matters:

- means of escape from fire, protection of other property, sanitary facilities, structural performance, and fire-rating performance
- access and facilities for people with disabilities (if this is a requirement under section 118 of the Building Act).

The territorial authority/regional authority must also be satisfied that the building will continue to comply with the other provisions of the Building Code to at least the same extent as before the change of use.

### 5.2.3 Extension of life (sections 114 and 116)

Where a building with a specified intended life is issued with a building consent that is subject to the condition that the building be altered before the end of its life, an 'extension of life' can be obtained.

An owner of a building must give written notice to the territorial authority/regional authority if it proposes to extend the life of a building.



The territorial authority/regional authority can only give its consent to the extension of life if it is satisfied that:

- the building has been altered in accordance with the original condition
- the alteration complies with section 112 of the Building Act (Alterations).

# 5.2.4 Subdivision (sections 114 and 116A)

An owner of a building must give written notice to the territorial authority if it proposes to subdivide land in a manner that affects a building.

The territorial authority can only issue a certificate under section 224(f) (relating to cross lease, company lease, and unit titles) of the Resource Management Act 1991 for the purpose of giving effect to a subdivision affecting a building or part of a building, if it is satisfied that the building will comply as nearly as reasonably practicable with every provision of the Building Code that relates to one or more of the following.

- Means of escape from fire
- Access and facilities for people with disabilities
- Protection of other property

The building must also continue to comply with other provisions of the Building Code to at least the same extent as it did before the application for subdivision was made.

# 5.2.5 Access for persons with disabilities (sections 117 to 120 and Schedule 2)

Any building (including parts of a building such as a driveway) that is open to the public, whether or not they are charged for entry, must have reasonable and adequate provision for access, parking and sanitary facilities for people with disabilities who may be expected to work or visit that building and carry out normal activities and processes in that building.

The most recent version of NZS 4121 Code of Practice for Design for Access and Use of Buildings by Persons with Disabilities is to be taken as a Compliance Document.

# 5.3 Code compliance certificate (sections 91 to 95)

A code compliance certificate (CCC) is a formal statement, issued under section 95 of the Building Act, which states that building work carried out under a building consent application complies with that building consent. A CCC provides assurance to the owner and subsequent property owners that the approved plans and specifications have been followed.

A CCC is not issued until all building work has been completed as per the plans and specifications submitted with the building consent application.

A CCC must be applied for after all building work carried out under a building consent granted to the owner is completed.

An application for a CCC where the building work was carried out under a consent granted under the former Act must be considered and determined as if the Building Act had not been passed. However, section 43(2) of the former Act must be read as if a CCC may only be issued if the territorial authority is satisfied that the building work complies with the Building Code that applied at the time the building consent was granted.

# 5.4 Certificates of acceptance (sections 96 to 99)

Certificates of acceptance were introduced by the Building Act. The certificate confirms that, to the extent an inspection was able to be carried out, the building work complies with the Building Code. A certificate of acceptance therefore has some similarities to a CCC in that it will provide some verification for a building owner, or future building owner, that all or part of the work is compliant.



A certificate of acceptance can be obtained in situations where:

- work has been done without a building consent when one should have been obtained
- a building consent authority or building certifier is unable or refuses to issue a CCC
- verification is required of urgent building work carried out under section 42 of the Building Act.

A certificate of acceptance can also be used in limited circumstances in relation to section 363B.

A certificate of acceptance is based on verification with the Building Code that was in place at the time of application. It is not based on what was in place at the time a building consent was granted, or should have been applied for, or when the work was actually carried out.

# 5.5 Notices to fix (sections 163 to 168)

A notice to fix is a statutory notice requiring a person to remedy a breach of the Building Act or Regulations under the Act. A notice to fix can be issued for all breaches of the Building Act, including non-complying building work, and for an incorrect building warrant of fitness or a compliance schedule that is not being properly complied with. A notice to fix can state that all or any building work must cease immediately.

A building consent authority, regional authority or a territorial authority must issue a notice to fix for any contravention of the Building Act and Building Regulations under section 164 of the Building Act. When a notice to fix has been issued by a building consent authority that is not a territorial authority or a regional authority, the matter is then handed to the territorial authority or regional authority to decide whether the notice has been complied with.

Some examples of where notices could be issued include:

- carrying out building work other than in accordance with a building consent
- displaying an incorrect building warrant of fitness
- changing the use of a building without notifying the territorial authority or regional authority.

# 5.6 Compliance schedules (sections 100 to 107)

A compliance schedule lists specified systems within a building. The compliance schedule for a building must identify which specified systems are present, the performance standards for those systems, and how those systems will be inspected and maintained to ensure they continue to function.

For more information on compliance schedules, see the Compliance Schedule Handbook.

# 5.7 Building warrants of fitness (sections 108 to 111)

A building warrant of fitness (BWoF) is a statement supplied by a building owner, to the territorial authority confirming that the systems specified in the compliance schedule for their building have been maintained and checked in accordance with the compliance schedule for the previous 12 months, and will continue to perform as required. For more information on building warrants of fitness, see the Compliance Schedule Handbook.



# 5.8 Certificates for public use (section 363A)

A certificate for public use is a new safety provision under the Building Act. It is a tool that can be used to certify that premises or parts of premises affected by building work are safe to be used by the public. Certificates for public use can only be used where a building consent has been granted for the building work but no CCC has yet been issued. Certificates for public use do not relieve the owner of a building from the obligation to apply for a CCC after all the building work has been carried out.

# 5.9 Building certificate

A building certificate was a formal confirmation by a building certifier that specific aspects of a building would or do comply with the Building Code. A territorial authority was obliged to accept such a certificate. Building certificates were allowed for under the former Act, but are only included under the new Building Act as transitional allowances to phase them out.



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# A General Provisions

#### **CLAUSE A1—CLASSIFIED USES**

# 1.0 EXPLANATION

- **1.0.1** For the purposes of this building code *buildings* are classified according to type, under seven categories.
- **1.0.2** A *building* with a given classified use may have one or more intended uses as defined in the Act.

#### 2.0 HOUSING

**2.0.1** Applies to *buildings* or use where there is self care and service (internal management). There are three types:

#### 2.0.2 Detached Dwellings

Applies to a *building* or use where a group of people live as a single household or family. Examples: a holiday cottage, boarding house accommodating fewer than 6 people, dwelling or hut.

# 2.0.3 Multi-unit Dwelling

Applies to a *building* or use which contains more than one separate household or family. Examples: an attached dwelling, flat or multi-unit apartment.

#### 2.0.4 Group Dwelling

Applies to a *building* or use where groups of people live as one large extended family. Examples: within a commune or marae.

#### 3.0 COMMUNAL RESIDENTIAL

**3.0.1** Applies to *buildings* or use where assistance or care is extended to the *principal users*. There are two types:

#### 3.0.2 Community Service

Applies to a residential *building* or use where limited assistance or care is extended to the *principal users*. Examples: a boarding house, hall of residence, holiday cabin, [*backcountry hut*,] hostel, hotel, motel, nurses' home, retirement village, time-share accommodation, a work camp, or camping ground.

# 3.0.3 Community Care

Applies to a residential *building* or use where a large degree of assistance or care is extended to the *principal users*. There are two types:

- (a) **Unrestrained**; where the *principal users* are free to come and go. Examples: a hospital, an old people's home or a health camp.
- (b) **Restrained**; where the *principal users* are legally or physically constrained in their movements. Examples: a borstal or drug rehabilitation centre, an old people's home where substantial care is extended, a prison or hospital.

## 4.0 COMMUNAL NON-RESIDENTIAL

**4.0.1** Applies to a *building* or use being a meeting place for people where care and service is provided by people other than the *principal users*. There are two types:

# 4.0.2 Assembly Service

Applies to a *building* or use where limited care and service is provided. Examples: a church, cinema, clubroom, hall, museum, public swimming pool, stadium, theatre, or whare runanga (the assembly house).

Schedule 1 clause A1 3.0.2: amended, on 31 October 2008, by regulation 4 of the Building (Building Code: Backcountry Huts) Amendment Regulations 2008 (SR 2008/358).



#### **CLAUSE A1—CLASSIFIED USES** (continued)

# 4.0.3 Assembly Care

Applies to a *building* or use where a large degree of care and service is provided. Examples: an [early childhood education and care centre], college, day care institution, centre for handicapped persons, kindergarten, school or university.

#### 5.0 COMMERCIAL

**5.0.1** Applies to a *building* or use in which any natural resources, goods, services or money are either developed, sold, exchanged or stored. Examples: an amusement park, auction room, bank, car-park, catering facility, coffee bar, computer centre, fire station, funeral parlour, hairdresser, library, office (commercial or government), police station, post office, public laundry, radio station, restaurant, service station, shop, showroom, storage facility, television station or transport terminal.

#### 6.0 INDUSTRIAL

**6.0.1** Applies to a *building* or use where people use material and physical effort to:

- (a) extract or convert natural resources,
- (b) produce goods or energy from natural or converted resources,
- (c) repair goods, or
- (d) store goods (ensuing from the industrial process).

Examples: an agricultural building, agricultural processing facility, aircraft hanger, factory, power station, sewage treatment works, warehouse or utility.

#### 7.0 OUTBUILDINGS

**7.0.1** Applies to a *building* or use which may be included within each classified use but are not intended for human habitation, and are accessory to the principal use of associated *buildings*. Examples: a carport, farm *building*, garage, greenhouse, machinery room, private swimming pool, public toilet, or shed.

# 8.0 ANCILLARY

**8.0.1** Applies to a *building* or use not for human habitation and which may be exempted from some amenity provisions, but which are required to comply with structural and safety-related aspects of the *building code*. Examples: a bridge, derrick, fence, free standing outdoor fireplace, jetty, mast, path, platform, pylon, retaining wall, tank, tunnel or dam.

Schedule 1 clause A1 4.0.3: amended, on 1 December 2008, by section 60(2) of the Education Amendment Act 2006 (2006 No 19).

**CLAUSE A2—INTERPRETATION** 



This Clause of the New Zealand Building Code lists defined words used within the Code.
Those definitions, plus defined word or terms used in the Compliance Documents, are included in the section on definitions in this Handbook.

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# **B** Stability

#### **CLAUSE B1—STRUCTURE**

#### **Provisions**

#### **OBJECTIVE**

**B1.1** The objective of this provision is to:

- (a) Safeguard people from injury caused by structural failure,
- (b) Safeguard people from loss of *amenity* caused by structural behaviour, and
- (c) Protect other property from physical damage caused by structural failure.

# **FUNCTIONAL REQUIREMENT**

**B1.2** Buildings, building elements and sitework shall withstand the combination of loads that they are likely to experience during construction or alteration and throughout their lives.

#### **PERFORMANCE**

- **B1.3.1** Buildings, building elements and sitework shall have a low probability of rupturing, becoming unstable, losing equilibrium, or collapsing during construction or alteration and throughout their lives.
- **B1.3.2** Buildings, building elements and sitework shall have a low probability of causing loss of amenity through undue deformation, vibratory response, degradation, or other physical characteristics throughout their lives, or during construction or alteration when the building is in use.
- **B1.3.3** Account shall be taken of all physical conditions likely to affect the stability of *buildings*, *building elements* and *sitework*, including:
- (a) Self-weight,
- (b) Imposed gravity loads arising from use,
- (c) Temperature,
- (d) Earth pressure,
- (e) Water and other liquids,
- (f) Earthquake,
- (g) Snow,
- (h) Wind,
- (i) Fire,

Limits on application



# **CLAUSE B1—STRUCTURE** (continued)

#### **Provisions**

- (j) Impact,
- (k) Explosion,
- (I) Reversing or fluctuating effects,
- (m) Differential movement,
- (n) Vegetation,
- (o) Adverse effects due to insufficient separation from other *buildings*,
- (p) Influence of equipment, services, non-structural elements and contents.
- (q) Time dependent effects including creep and shrinkage, and
- (r) Removal of support.
- B1.3.4 Due allowance shall be made for:
- (a) The consequences of failure,
- (b) The intended use of the building,
- (c) Effects of uncertainties resulting from construction activities, or the sequence in which construction activities occur,
- (d) Variation in the properties of materials and the characteristics of the site, and
- (e) Accuracy limitations inherent in the methods used to predict the stability of *buildings*.
- **B1.3.5** The demolition of *buildings* shall be carried out in a way that avoids the likelihood of premature collapse.
- **B1.3.6** *Sitework*, where necessary, shall be carried out to:
- (a) Provide stability for *construction* on the site, and
- (b) Avoid the likelihood of damage to *other* property.
- **B1.3.7** Any *sitework* and associated supports shall take account of the effects of:
- (a) Changes in ground water level,
- (b) Water, weather and vegetation, and
- (c) Ground loss and slumping.

# Limits on application



#### **CLAUSE B2—DURABILITY**

#### **Provisions**

# **OBJECTIVE**

**B2.1** The objective of this provision is to ensure that a *building* will throughout its life continue to satisfy the other objectives of this code.

# **FUNCTIONAL REQUIREMENT**

**B2.2** Building materials, components and construction methods shall be sufficiently durable to ensure that the building, without reconstruction or major renovation, satisfies the other functional requirements of this code throughout the life of the building.

#### **PERFORMANCE**

- **B2.3.1** Building elements must, with only normal maintenance, continue to satisfy the performance requirements of this code for the lesser of the *specified intended life* of the *building*, if stated, or:
- (a) The life of the *building*, being not less than 50 years, if:
- (i) Those *building elements* (including floors, walls, and fixings) provide structural stability to the *building*, or
- (ii) Those *building elements* are difficult to access or replace, or
- (iii) Failure of those building elements to comply with the building code would go undetected during both normal use and maintenance of the building
- (b) 15 years if:
- (i) Those building elements (including the building envelope, exposed plumbing in the subfloor space, and in-built chimneys and flues) are moderately difficult to access or replace, or
- (ii) Failure of those building elements to comply with the building code would go undetected during normal use of the building, but would be easily detected during normal maintenance.

# Limits on application

Performance B2.3.1 applies from the time of issue of the applicable code compliance certificate. Building elements are not required to satisfy a durability performance which exceeds the specified intended life of the building

Clause B2.3 Schedule was substituted, as from 11 September 1997, by regulation 2 Building Amendment Regulations 1997 (SR 1997/156).



# **CLAUSE B2—DURABILITY** (continued)

## **Provisions**

- (c) 5 years if:
- (i) The *building elements* (including services, linings, renewable protective coatings, and *fixtures*) are easy to access and replace, and
- (ii) Failure of those *building elements* to comply with the *building code* would be easily detected during normal use of the *building*.
- **B2.3.2** Individual *building elements* which are components of a *building* system and are difficult to access or replace must either:
- (a) All have the same durability, or
- (b) Be installed in a manner that permits the replacement of building elements of lesser durability without removing building elements that have greater durability and are not specifically designed for removal and replacement.

# Limits on application



# C Fire Safety

# **CLAUSE C1—OUTBREAK OF FIRE**

#### **Provisions**

#### **OBJECTIVE**

**C1.1** The objective of this provision is to safeguard people from injury or illness caused by *fire*.

# **FUNCTIONAL REQUIREMENT**

**C1.2** In *buildings* fixed appliances using the controlled combustion of solid, liquid or gaseous fuel, shall be installed in a way which reduces the likelihood of *fire*.

#### **PERFORMANCE**

**C1.3.1** Fixed appliances and services shall be installed so as to avoid the accumulation of gases within the installation and in *building* spaces, where heat or ignition could cause uncontrolled combustion or explosion.

**C1.3.2** Fixed appliances shall be installed in a manner that does not raise the temperature of any *building element* by heat transfer or concentration to a level that would adversely affect its physical or mechanical properties or function

# Limits on application



#### **CLAUSE C2—MEANS OF ESCAPE**

#### **Provisions**

#### **OBJECTIVE**

**C2.1** The objective of this provision is to:

- (a) Safeguard people from injury or illness from a *fire* while escaping to a *safe place*, and
- (b) Facilitate fire rescue operations.

# **FUNCTIONAL REQUIREMENT**

- **C2.2** *Buildings* shall be provided with [*means* of escape from fire] which:
- (a) Give people adequate time to reach a safe place without being overcome by the effects of fire, and
- (b) Give fire service personnel *adequate* time to undertake rescue operations.

#### **PERFORMANCE**

- **C2.3.1** The number of *open paths* available to each person escaping to an *exitway* or *final exit* shall be appropriate to:
- (a) The travel distance.
- (b) The number of occupants,
- (c) The fire hazard, and
- (d) The fire safety systems installed in the firecell.
- **C2.3.2** The number of *exitways* or *final exits* available to each person shall be appropriate to:
- (a) The open path travel distance,
- (b) The building height,
- (c) The number of occupants,
- (d) The fire hazard, and
- (e) The *fire safety systems* installed in the *building*.
- C2.3.3 Escape routes shall be:
- (a) Of *adequate* size for the number of occupants,
- (b) Free of obstruction in the direction of escape,

Limits on application

[Performance C2.3.3(b) must not prevent a door that forms part of an escape route from being locked if the person who locks it is satisfied that no one is in that part of the building served by the escape route and that no one is likely to enter that part of the building, except in an emergency, without unlocking that door.]

Clause C2.2 was amended, as from 3 January 2002, by regulation 3(1) Building Amendment Regulations 2001 (SR 2001/374), by substituting the words ""means of escape from fire" for the words ""escape routes".

Clause C2.3.3(b) was amended, as from 3 January 2002, by regulation 3(2) Building Amendment Regulations 2001 (SR 2001/374), by inserting, adjacent to clause C2.3.3(b) in the column headed ""Limits on application", the words ""Performance C2.3.3(b) must not prevent a door that forms part of an escape route from being locked if the person who locks it is satisfied that no one is in that part of the building served by the escape route and that no one is likely to enter that part of the building, except in an emergency, without unlocking that door.""



# **CLAUSE C2—MEANS OF ESCAPE** (continued)

# **Provisions**

- (c) Of length appropriate to the mobility of the people using them,
- (d) Resistant to the spread of *fire* as required by Clause C3 "Spread of Fire",
- (e) Easy to find as required by Clause F8 "Signs",
- [(f) Provided with systems for visibility during failure of the main lighting, as required by Clause F6 "Visibility in escape routes", and]
- (g) Easy and safe to use as required by Clause D1.3.3 "Access Routes".

# Limits on application

Clause C2.3.3(f) was substituted, as from 21 June 2007, by regulation 6(3) Building Amendment Regulations 2007 (SR 2007/124).



#### **CLAUSE C3—SPREAD OF FIRE**

#### **Provisions**

#### **OBJECTIVE**

C3.1 The objective of this provision is to:

- (a) Safeguard people from injury or illness when evacuating a *building* during *fire*.
- (b) Provide protection to fire service personnel during firefighting operations.
- (c) Protect adjacent household units[, other residential units,] and other property from the effects of fire.
- (d) Safeguard the environment from adverse effects of *fire*.

#### **FUNCTIONAL REQUIREMENT**

**C3.2** *Building*s shall be provided with safeguards against *fire* spread so that:

- (a) Occupants have time to escape to a *safe place* without being overcome by the effects of *fire*,
- (b) Firefighters may undertake rescue operations and protect property,
- (c) Adjacent household units[, other residential units,] and other property are protected from damage, and
- (d) Significant quantities of *hazardous substances* are not released to the environment during *fire*.

# **PERFORMANCE**

**C3.3.1** Interior surface finishes on walls, floors, ceilings and suspended *building elements*, shall resist the spread of *fire* and limit the generation of toxic gases, smoke and heat, to a degree appropriate to:

- (a) The travel distance,
- (b) The number of occupants,
- (c) The fire hazard, and
- (d) The active  $\it fire\ safety\ systems$  installed in the  $\it building$ .

#### Limits on application

Requirement C3.2(d) applies only to *buildings* where significant quantities of *hazardous substances* are stored or processed.

Clause C3.1(c) was amended, as from 3 January 2002, by regulation 3(3) Building Amendment Regulations 2001 (SR 2001/374), by inserting after the words ""household units", the words "", other residential units,".



#### **CLAUSE C3—SPREAD OF FIRE** (continued)

#### **Provisions**

**C3.3.2** Fire separations shall be provided within buildings to avoid the spread of fire and smoke to:

- (a) Other firecells,
- (b) Spaces intended for sleeping, and
- (c) Household units within the same building or adjacent buildings.
- [(d) other property.]
- C3.3.3 Fire separations shall:
- (a) Where openings occur, be provided with *fire resisting closures* to maintain the *integrity* of the *fire separations* for an *adequate* time, and
- (b) Where penetrations occur, maintain the fire resistance rating of the fire separation.
- **C3.3.4** Concealed spaces and cavities within buildings shall be sealed and subdivided where necessary to inhibit the unseen spread of *fire* and smoke.
- **C3.3.5** External walls and roofs shall have resistance to the spread of fire, appropriate to the fire load within the building and to the proximity of other household units[, other residential units,] and other property.
- **C3.3.6** Automatic *fire* suppression systems shall be installed where people would otherwise be:
- (a) Unlikely to reach a safe place in adequate time because of the number of storeys in the building,
- (b) Required to remain within the *building* without proceeding directly to a *final exit*, or where the *evacuation time* is excessive,
- (c) Unlikely to reach a safe place due to confinement under institutional care because of mental or physical disability, illness or legal detention, and the evacuation time is excessive, or
- (d) At high risk due to the *fire load* and *fire hazard* within the *building*.

#### Limits on application

[Performance C3.3.2(b) does not apply to *Detached Dwellings* or within household units of Multi-unit Dwellings.]

Performance C3.3.4 shall not apply to *Detached Dwellings*.

Clause C3.2(c) was amended, as from 3 January 2002, by regulation 3(4) Building Amendment Regulations 2001 (SR 2001/374), by inserting after the words ""household units", the words "", other residential units,"".

Clause C3.3.2 was amended, as from 3 January 2002, by regulation 3(5) Building Amendment Regulations 2001 (SR 2001/374), by adding the following paragraph: ""(d) other property."" and repealing, adjacent to clause C3.3.2 in the column headed ""Limits on application"", the words ""Performance C3.3.2 shall not apply to Detached Dwellings, or within household units of Multi-unit Dwellings." and inserting, adjacent to clause C3.3.2(b) in the column headed ""Limits on application"", the words ""Performance C3.3.2(b) does not apply to Detached Dwellings or within household units of Multi-unit Dwellings."

Clause C3.3.5 was amended, as from 3 January 2002, by regulation 3(6) Building Amendment Regulations 2001 (SR 2001/374), by inserting after the words ""household units", the words "", other residential units,".



# **CLAUSE C3—SPREAD OF FIRE** (continued)

#### **Provisions**

- **C3.3.7** Air conditioning and mechanical ventilation systems shall be constructed to avoid circulation of smoke and *fire* between *firecells*.
- **C3.3.8** Where an automatic smoke control system is installed, it shall be constructed to:
- (a) Avoid the spread of fire and smoke between firecells, and
- (b) Protect *escape routes* from smoke until the occupants have reached a *safe place*.
- **C3.3.9** The *fire safety systems* installed shall facilitate the specific needs of fire service personnel to:
- (a) Carry out rescue operations, and
- (b) Control the spread of fire.
- **C3.3.10** Environmental protection systems shall ensure a low probability of *hazardous substances* being released to:
- (a) Soils, vegetation or natural waters,
- (b) The atmosphere, and
- (c) Sewers or public drains.

# Limits on application

[Performance C3.3.9 does not apply to backcountry huts.]

Performance C3.3.10 applies only to buildings where significant quantities of hazardous substances are stored or processed.

Schedule 1 clause C3.3.9: amended, on 31 October 2008, by regulation 6 of the Building (Building Code: Backcountry Huts) Amendment Regulations 2008 (SR 2008/358).



#### **CLAUSE C4—STRUCTURAL STABILITY DURING FIRE**

#### **Provisions**

# OBJECTIVE

C4.1 The objective of this provision is to:

- (a) Safeguard people from injury due to loss of structural stability during *fire*, and
- (b) Protect household units and other property from damage due to structural instability caused by fire.

# **FUNCTIONAL REQUIREMENT**

- **C4.2** *Building*s shall be constructed to maintain structural stability during *fire* to:
- (a) Allow people *adequate* time to evacuate safely,
- (b) Allow fire service personnel *adequate* time to undertake rescue and firefighting operations, and
- (c) Avoid collapse and consequential damage to adjacent household units or other property.

# **PERFORMANCE**

- **C4.3.1** Structural elements of *buildings* shall have *fire* resistance appropriate to the function of the elements, the *fire load*, the *fire intensity*, the *fire hazard*, the height of the *buildings* and the *fire* control facilities external to and within them.
- **C4.3.2** Structural elements shall have a *fire* resistance of no less than that of any element to which they provide support within the same *firecell*.
- **C4.3.3** Collapse of elements having lesser *fire* resistance shall not cause the consequential collapse of elements required to have a higher *fire* resistance.

# Limits on application

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# D Access

#### **CLAUSE D1—ACCESS ROUTES**

#### **Provisions**

#### **OBJECTIVE**

- D1.1 The objective of this provision is:
- (a) Safeguard people from injury during movement into, within and out of *buildings*,
- (b) Safeguard people from injury resulting from the movement of vehicles into, within and out of *buildings*, and
- (c) Ensure that *people with disabilities* are able to enter and carry out normal activities and functions within *buildings*.

#### **FUNCTIONAL REQUIREMENT**

- **D1.2.1** *Buildings* shall be provided with reasonable and adequate access to enable safe and easy movement of people.
- **D1.2.2** Where a *building* is provided with loading or parking spaces, they shall be constructed to permit safe and easy unloading and movement of vehicles, and to avoid conflict between vehicles and pedestrians.

#### **PERFORMANCE**

- D1.3.1 Access routes shall enable people to:
- (a) Safely and easily approach the main entrance of *buildings* from the apron or *construction* edge of a *building*,
- (b) Enter buildings,
- (c) Move into spaces within *buildings* by such means as corridors, doors, stairs, ramps and lifts,
- (d) Manoeuvre and park cars, and
- (e) Manoeuvre and park delivery vehicles required to use the loading space.
- **D1.3.2** At least one *access route* shall have features to enable *people with disabilities* to:
- (a) Approach the *building* from the street boundary or, where required to be provided, the *building* car park,
- (b) Have access to the internal space served by the principal access, and
- (c) Have access to and within those spaces where they may be expected to work or visit, or which contain facilities for personal hygiene as required by Clause G1 "Personal Hygiene".

# Limits on application

Objective D1.1(c) shall apply only to those *buildings* to which [section 47A of the Act] applies.

Requirement D1.2.1 shall not apply to *Ancillary buildings* or *Outbuildings*.

Note: Section 47A is in the Building Act 1991. The equivalent section in the Building Act 2004 is section 118.

Performance D1.3.2 shall not apply to *Housing*, *Outbuildings*, [backcountry huts,] Ancillary buildings, and to Industrial buildings where no more than 10 people are employed.

The limits on application to clause D1.1(c) were amended consequential on the Health Reforms (Transitional Provisions) Act 1993, as from 29 December 2000, by regulation 4(1) Building Amendment Regulations 2000 (SR 2000/119), by substituting the expression "section 47A of the Act" for the expression "section 25 of the Disabled Persons Community Welfare Act 1975".

Schedule 1 clause D1.3.2: amended, on 31 October 2008, by regulation 7 of the Building (Building Code: Backcountry Huts) Amendment Regulations 2008 (SR 2008/358).



## **CLAUSE D1—ACCESS ROUTES** (continued)

#### **Provisions**

#### D1.3.3 Access routes shall:

- (a) Have adequate activity space,
- (b) Be free from dangerous obstructions and from any projections likely to cause an obstruction.
- (c) Have a safe cross fall, and safe slope in the direction of travel,
- (d) Have adequate slip-resistant walking surfaces under all conditions of normal use,
- (e) Include stairs to allow access to upper floors irrespective of whether an escalator or lift has been provided,
- (f) Have stair treads, and ladder treads or rungs which:
- (i) provide adequate footing, and
- (ii) have uniform rise within each flight and for consecutive flights,
- (g) Have stair treads with a leading edge that can be easily seen,
- (h) Have stair treads which prevent children falling through or becoming held fast between treads, where open risers are used,
- (i) Not contain isolated steps,
- (j) Have smooth, reachable and graspable handrails to provide support and to assist with movement along a stair or ladder,
- (k) Have handrails of adequate strength and rigidity as required by Clause B1 "Structure",
- (I) Have landings of appropriate dimensions and at appropriate intervals along a stair or ramp to prevent undue fatique.
- (m) Have landings of appropriate dimensions where a door opens from or onto a stair, ramp or ladder so that the door does not create a hazard, and
- (n) Have any automatically controlled doors constructed to avoid the risk of people becoming caught or being struck by moving parts.

# Limits on application

Performance D1.3.3(h) shall not apply within *Industrial buildings*, *Outbuildings* and *Ancillary buildings*.

Performance D1.3.3(i) shall not apply with *Detached Dwellings* or within household units of Multi-unit Dwellings, or to Outbuildings and Ancillary buildings.

Performance D1.3.3(j) shall not apply to isolated steps.



# **CLAUSE D1—ACCESS ROUTES** (continued)

#### **Provisions**

- **D1.3.4** An *accessible route*, in addition to the requirement of Clause D1.3.3, shall:
- (a) Be easy to find, as required by Clause F8 "Signs",
- (b) Have adequate activity space to enable a person in a wheelchair to negotiate the route while permitting an ambulant person to pass,
- (c) Include a lift complying with Clause D2 "Mechanical Installations for Access" to upper floors where:
- (i) buildings are four or more storeys high,
- (ii) buildings are three storeys high and have a total design occupancy of 50 or more persons on the two upper floors,
- (iii) buildings are two storeys high and have a total design occupancy of 40 or more persons on the upper floor, or
- (iv) an upper floor, irrespective of design occupancy, is to be used for the purposes of public reception areas of banks, central, regional and local government offices and facilities, hospitals, medical and dental surgeries and medical, paramedical and other primary health care centres,
- (d) Contain no thresholds or upstands forming a barrier to an unaided wheelchair user,
- (e) Have means to prevent the wheel of a wheelchair dropping over the side of the *accessible route*,
- (f) Have doors and related hardware which are easily used,
- (g) Not include spiral stairs, or stairs having open risers.
- (h) Have stair treads with leading edge which is rounded, and
- (i) Have handrails on both sides of the accessible route when the slope of the route exceeds 1 in 20. The handrails shall be continuous along both sides of the stair, ramp and landing except where the handrail is interrupted by a doorway.

# Limits on application



# **CLAUSE D1—ACCESS ROUTES** (continued)

## **Provisions**

- **D1.3.5** Vehicle spaces and circulation routes shall have:
- (a) Dimensions appropriate to the intended use,
- (b) Appropriate crossfall, and slope in the direction of travel,
- (c) Adequate queuing and circulation space, and
- (d) Adequate sight distances.
- **D1.3.6** Vehicle spaces for use by *people* with disabilities, shall, in addition to the requirements of Clause D1.3.5, be:
- (a) Provided in sufficient numbers,
- (b) Located to avoid conflict between vehicles and people using or moving to or from the space, and
- (c) Easy to find as required by Clause F8 Signs.



## **CLAUSE D2—MECHANICAL INSTALLATIONS FOR ACCESS**

## **Provisions**

## **OBJECTIVE**

D2.1 The objective of this provision is to:

- (a) Safeguard people from injury and loss of amenity while using mechanical installations for movement into, within and out of *buildings*.
- (b) Safeguard maintenance personnel from injury while servicing mechanical installations for access, and
- (c) Ensure that *people with disabilities* are able to carry out normal activities and processes within *buildings*.

## **FUNCTIONAL REQUIREMENT**

**D2.2** Mechanical installations for access into, within and out of *buildings* shall provide for the safe and easy movement of people, and for the safety of maintenance personnel.

## **PERFORMANCE**

**D2.3.1** Mechanical installations for access shall:

- (a) Move people safely, and stop and hold as required for the normal use of the installation, for all loads up to and including 25% in excess of the rated load.
- (b) Not produce excessive acceleration or deceleration.
- (c) Be constructed to avoid the likelihood of people falling, tripping, becoming caught, being able to touch or be struck by moving parts, sharp edges or projections, under both normal and reasonably foreseeable abnormal conditions of use.
- (d) Be constructed to prevent collision between components, or between components and the *building*,
- (e) Have a control system that ensures safe abnormal operation in the event of overloading or failure of any single component, and
- (f) Be capable of being isolated for inspection, testing and maintenance.

## Limits on application

Objective D2.1(c) shall apply only to those *buildings* to which [section 47A of the Act] applies.

Note: Section 47A is in the Building Act 1991. The equivalent section in the Building Act 2004 is section 118.

The limits on application to clause D2.1(c) were amended consequential on the Health Reforms (Transitional Provisions) Act 1993, as from 29 December 2000, by regulation 4(1) Building Amendment Regulations 2000 (SR 2000/119), by substituting the expression "section 47A of the Act" for the expression "section 25 of the Disabled Persons Community Welfare Act 1975".



# **CLAUSE D2—MECHANICAL INSTALLATIONS FOR ACCESS (continued)**

#### **Provisions**

**D2.3.2** Mechanical installations for access shall be provided with:

- (a) Adequate control over normal use, to ensure people's safety throughout any operation involving starting, stopping or changing the direction of travel,
- (b) Notification of position, where people are fully enclosed and the installation serves more than two levels,
- (c) Adequate lighting and ventilation for both normal and emergency use, and
- (d) Signs as required by Clause F8 "Signs",
- **D2.3.3** Mechanical installations for access shall, for emergency purposes, be provided with a means of:
- (a) Calling outside help,
- (b) Releasing people safely,
- (c) Safeguarding people from exposure to *hazardous* situations, and
- (d) Allowing authorised personnel to override the normal running procedure and take exclusive control of the installation.
- **D2.3.4** Potentially dangerous equipment shall be located in spaces which:
- (a) Are secure from unauthorised entry and contain only equipment associated with the installation,
- (b) Are appropriately sized and suitably guarded to provide *adequate* safe working areas for maintenance personnel,
- (c) Are provided with *adequate* power and lighting for maintenance, and
- (d) Have an environment that ensures the safe operation of the equipment under all likely conditions of use.

# Limits on application

Performance D2.3.3(d) shall not apply to installations travelling less than 15m vertically.



## **CLAUSE D2—MECHANICAL INSTALLATIONS FOR ACCESS (continued)**

## **Provisions**

**D2.3.5** Mechanical installations on *accessible routes* shall:

- (a) Where the passenger conveyor is manually controlled, provide:
- (i) controls which are easily identifiable and easy to use,
- (ii) adequate notification that the passenger conveyor has registered a summoning call, and
- (iii) adequate notification that the passenger conveyor has arrived, and of its future direction of travel,
- (b) Where the passenger conveyor is fully enclosed and serves more than two levels, provide an *adequate* means of informing occupants of their location,
- (c) Where appropriate, have doors which:
- (i) are power operated,
- (ii) are readily distinguishable from their surroundings, and
- (iii) where automatic, remain open sufficiently long to enable *people with disabilities* to pass through, and
- (d) Have *handrails* within the passenger conveyor.

# NEW ZEALAND LINDING COM I A I DE COM

# E Moisture

## **CLAUSE E1—SURFACE WATER**

#### **Provisions**

## **OBJECTIVE**

**E1.1** The objective of this provision is to:

- (a) Safeguard people from injury or illness, and *other property* from damage, caused by *surface water*, and
- (b) Protect the outfalls of drainage systems.

## **FUNCTIONAL REQUIREMENT**

**E1.2** Buildings and sitework shall be constructed in a way that protects people and other property from the adverse effects of surface water.

## PERFORMANCE

- **E1.3.1** [Except as otherwise required under the Resource Management Act 1991 for the protection of other property, *surface water*], resulting from [an event] having a 10% probability of occurring annually and which is collected or concentrated by *buildings* or *sitework*, shall be disposed of in a way that avoids the likelihood of damage or nuisance to *other property*.
- **E1.3.2** *Surface water,* resulting from [an event] having a 2% probability of occurring annually, shall not enter *buildings*.
- **E1.3.3** Drainage systems for the disposal of *surface water* shall be constructed to:
- (a) Convey *surface water* to an appropriate *outfall* using gravity flow where possible,
- (b) Avoid the likelihood of blockages,
- (c) Avoid the likelihood of leakage, penetration by roots, or the entry of ground water where pipes or lined channels are used,
- (d) Provide reasonable access for maintenance and clearing blockages,
- (e) Avoid the likelihood of damage to any outfall, in a manner acceptable to the network utility operator, and
- (f) Avoid the likelihood of damage from superimposed loads or normal ground movements.

# Limits on application

Performance E1.3.2 shall apply only to *Housing*, *Communal Residential* and *Communal Non-residential buildings*.

Clause E1.3.1 was amended, as from 22 December 1994, by regulation 3(2)(e) and (f) Building Regulations 1992, Amendment No 1 (SR 1994/263) by substituting the words "Except as otherwise required under the Resource Management Act 1991 for the protection of other property, surface water" for the words ""Surface water".

Clause E1.3.1 was amended, as from 3 January 2002, by regulation 3(7) Building Amendment Regulations 2001 (SR 2001/374), by substituting the words "an event" for the words "a storm".

Clause E1.3.2 was amended, as from 3 January 2002, by regulation 3(8) Building Amendment Regulations 2001 (SR 2001/374), by substituting the words "an event" for the words "a storm".



## [CLAUSE E2—EXTERNAL MOISTURE

## **Provisions**

## **OBJECTIVE**

**E2.1** The objective of this provision is to safeguard people from illness or injury that could result from external moisture entering the *building*.

# **FUNCTIONAL REQUIREMENT**

**E2.2** Buildings must be constructed to provide adequate resistance to penetration by, and the accumulation of, moisture from the outside.

## **PERFORMANCE**

- **E2.3.1** Roofs must shed precipitated moisture. In locations subject to snowfalls, roofs must also shed melted snow.
- **E2.3.2** Roofs and exterior walls must prevent the penetration of water that could cause undue dampness, damage to *building elements*, or both.
- **E2.3.3** Walls, floors, and structural elements in contact with, or in close proximity to, the ground must not absorb or transmit moisture in quantities that could cause undue dampness, damage to building elements, or both.
- **E2.3.4** Building elements susceptible to damage must be protected from the adverse effects of moisture entering the space below suspended floors.
- **E2.3.5** Concealed spaces and cavities in buildings must be constructed in a way that prevents external moisture being accumulated or transferred and causing condensation, fungal growth, or the degradation of building elements.
- **E2.3.6** Excess moisture present at the completion of *construction* must be capable of being dissipated without permanent damage to *building elements*.

## Limits on application

Requirement E2.2 does not apply to *buildings* (for example, certain bus shelters, and certain *buildings* used for horticulture or for equipment for washing motor vehicles automatically) if moisture from the outside penetrating them, or accumulating within them, or both, is unlikely to impair significantly all or any of their *amenity*, durability, and stability.

Clause E2 was substituted, as from 21 June 2007, by regulation 4 Building Amendment Regulations 2007 (SR 2007/124).



# [CLAUSE E2—EXTERNAL MOISTURE (continued)

## **Provisions**

**E2.3.7** *Building elements* must be constructed in a way that makes due allowance for the following:

- (a) the consequences of failure:
- (b) the effects of uncertainties resulting from *construction* or from the sequence in which different aspects of *construction* occur:
- (c) variation in the properties of materials and in the characteristics of the site.



## [CLAUSE E3—INTERNAL MOISTURE

## **Provisions**

## **OBJECTIVE**

E3.1 The objective of this provision is to—

- (a) Safeguard people against illness, injury, or loss of *amenity* that could result from accumulation of internal moisture: and
- (b) Protect household units and other property from damage caused by free water from another household unit in the same building.

## **FUNCTIONAL REQUIREMENT**

- **E3.2** Buildings must be constructed to avoid the likelihood of—
- (a) Fungal growth or the accumulation of contaminants on linings and other building elements; and
- (b) Free water overflow penetrat- ing to an adjoining *household unit*; and
- (c) Damage to *building elements* caused by the presence of moisture.

### **PERFORMANCE**

- **E3.3.1** An *adequate* combination of *thermal resistance*, ventilation, and space temperature must be provided to all *habitable spaces*, bathrooms, laundries, and other spaces where moisture may be generated or may accumulate.
- **E3.3.2** Freewater from accidental overflow from sanitary fixtures or sanitary appliances must be disposed of in a way that avoids loss of amenity or damage to household units or other property.
- **E3.3.3** Floor surfaces of any space containing sanitary fixtures or sanitary appliances must be impervious and easily cleaned.
- **E3.3.4** Wall surfaces adjacent to *sanitary fixtures* or *sanitary appliances* must be *impervious* and easily cleaned.
- **E3.3.5** Surfaces of *building elements* likely to be splashed or become contaminated in the course of the *intended use* of the *building*, must be *impervious* and easily cleaned.
- **E3.3.6** Surfaces of *building elements* likely to be splashed must be constructed in a way that prevents water splash from penetrating behind linings or into *concealed spaces*.

## Limits on application

Performance E3.3.1 does not apply to Communal Non-residential, Commercial, Industrial, Outbuildings, or Ancillary buildings.

Clause E3 was substituted, as from 14 October 2004, by regulation 3 Building Amendment Regulations 2004 (SR 2004/317).



# F Safety of Users

## **CLAUSE F1—HAZARDOUS AGENTS ON SITE**

## **Provisions**

## **OBJECTIVE**

**F1.1** The objective of this provision is to safeguard people from injury or illness caused by *hazardous* agents or *contaminants* on a site.

# **FUNCTIONAL REQUIREMENT**

**F1.2** Buildings shall be constructed to avoid the likelihood of people within the building being adversely affected by hazardous agents or contaminants on the site.

## **PERFORMANCE**

- **F1.3.1** Sites shall be assessed to determine the presence and potential threat of any *hazardous* agents or *contaminants*.
- **F1.3.2** The likely effect of any *hazardous* agent or *contaminant* on people shall be determined taking account of:
- (a) The intended use of the building,
- (b) The nature, potency or toxicity of the *hazardous* agent or *contaminant*, and,
- (c) The protection afforded by the *building* envelope and *building* systems.



## **CLAUSE F2—HAZARDOUS BUILDING MATERIALS**

## **Provisions**

## **OBJECTIVE**

**F2.1** The objective of this provision is to safeguard people from injury and illness caused by exposure to *hazardous building* materials.

# **FUNCTIONAL REQUIREMENT**

**F2.2** *Building* materials which are potentially *hazardous*, shall be used in ways that avoid undue risk to people.

# **PERFORMANCE**

- **F2.3.1** The quantities of gas, liquid, radiation or solid particles emitted by materials used in the *construction* of *buildings*, shall not give rise to harmful concentrations at the surface of the material where the material is exposed, or in the atmosphere of any space.
- **F2.3.2** Transparent panels capable of being mistaken for an unimpeded path of travel shall be marked to make them visible.
- **F2.3.3** Glass or other brittle materials with which people are likely to come into contact shall:
- (a) If broken on impact, break in a way which is unlikely to cause injury, or
- (b) Resist a reasonably foreseeable impact without breaking, or
- (c) Be protected from impact.

# Limits on application

Performance F2.3.2 does not apply to *Housing* 



## **CLAUSE F3—HAZARDOUS SUBSTANCES AND PROCESSES**

#### **Provisions**

## **OBJECTIVE**

**F3.1** The objective of this provision is to safeguard people from injury or illness, and *other property* from damage, caused by *hazardous substances* or processes in *buildings*.

# **FUNCTIONAL REQUIREMENT**

**F3.2** Buildings where hazardous substances are stored and hazardous processes undertaken, shall be constructed to provide adequate protection to people and to other property.

## **PERFORMANCE**

- **F3.3** Spaces in *buildings* where *hazardous substances* are stored, handled or used, or where hazardous processes are undertaken, shall be located and constructed to protect people, and *other property*, under both normal and reasonably foreseeable abnormal conditions, and shall be provided with:
- (a) Means of restricting unauthorised access.
- (b) Means of preventing *hazardous* substances, or other materials unacceptable to the *network utility operator*, from entering *sewers* or public *drains*,
- (c) Means of allowing the harmless release of pressure where there is a significant risk of explosion occurring.
- (d) Protected ignition sources where flammable or explosive goods are stored,
- (e) Means of rendering harmless by ventilation, containment, dilution, or chemical or biological action, any radioactive, toxic or flammable vapours, gases or materials which may escape from pipes, vessels or containers,
- (f) Impervious, easily cleaned surface finishes on *building elements* likely to be splashed or become contaminated in the course of the *intended use* of the *building*, and
- (g) Signs as required by Clause F8 "Signs".



#### **CLAUSE F4—SAFETY FROM FALLING**

#### **Provisions**

#### **OBJECTIVE**

**F4.1** The objective of this provision is to safeguard people from injury caused by falling.

## **FUNCTIONAL REQUIREMENT**

F4.2 Buildings shall be constructed to reduce the likelihood of accidental fall.

## **PERFORMANCE**

**F4.3.1** Where people could fall 1 metre or more from an opening in the external envelope or floor of a *building*, or from a sudden change of level within or associated with a *building*, a barrier shall be provided.

**F4.3.2** Roofs with permanent access shall have barriers provided.

**F4.3.3** Swimming pools having a depth of water exceeding 400mm, shall [have barriers provided].

# F4.3.4 Barriers shall:

- (a) Be continuous and extend for the full extent of the hazard,
- (b) Be of appropriate height,
- (c) Be constructed with adequate rigidity,
- (d) Be of *adequate* strength to withstand the foreseeable impact of people and, where appropriate, the static pressure of people pressing against them,
- (e) Be constructed to prevent people from falling through them, and
- [(f) In the case of a swimming pool, restrict the access of children under 6 years of age to the pool or the immediate pool area.]
- [(g) Restrict the passage of children under 6 years of age when provided to guard a change of level in areas likely to be frequented by them.]

# Limits on application

Performance F4.3.1 shall not apply where such a barrier would be incompatible with the *intended use* of an area, or to temporary barriers on *construction* sites where the possible fall is less than 3 metres [, or to *buildings* providing pedestrian access in remote locations where the route served presents similar natural hazards].

Performance F4.3.3 shall not apply to any pool exempted under section 5 of the Fencing of Swimming Pools Act 1987.

[Performance F4.3.4(f) shall not apply to any pool exempted under section 5 of the Fencing of Swimming Pools Act 1987.]

Clause F4.3.1 was amended, as from 3 January 2002, by regulation 3(9) Building Amendment Regulations 2001 (SR 2001/374), by adding, to the entry adjacent to clause F4.3.1 in the column headed ""Limits on application", the words "", or to buildings providing pedestrian access in remote locations where the route served presents similar natural hazards".

Clause F4.3.3 was amended, as from 22 December 1994, by regulation 5(1) Buildings Regulations 1992, Amendment No 1 (SR 1994/263) by substituting the words "have barriers provided" for the words "be constructed with a barrier to restrict access to the pool or the immediate pool area, by children under 6 years of age".

Clause F4.3.4 was amended, as from 22 December 1994, by regulation 5(2) Buildings Regulations 1992, Amendment No 1 (SR 1994/263) by substituting para (f), inserting the text opposite para (f), and inserting para (g).

Clause F4.3.4(h) was inserted, as from 21 June 2007, by regulation 5 Building Amendment Regulations 2007 (SR 2007/124).



# **CLAUSE F4—SAFETY FROM FALLING (continued)**

## **Provisions**

- [(h) Be constructed so that they are not readily able to be used as seats.]
- **F4.3.5** Barriers to swimming pools shall have in addition to performance F4.3.4:
- [(a) All gates and doors fitted with latching devices not readily operated by children, and constructed to automatically close and latch when released from any stationary position 150mm or more from the closed and secured position, but excluding sliding and sliding-folding doors that give access to the immediate pool surround from a building that forms part of the barrier, and]
- (b) No permanent objects on the outside of the barrier that could provide a climbing step.

## Limits on application

[Performance F4.3.4(h) does not apply to *Housing*.]

Clause F4.3.5 was amended, as from 22 December 1994, by regulation 5(3) Buildings Regulations 1992, Amendment No 1 (SR 1994/263) by substituting para (a).



## **CLAUSE F5—CONSTRUCTION AND DEMOLITION HAZARDS**

## **Provisions**

## **OBJECTIVE**

**F5.1** The objective of this provision is to safeguard people from injury, and *other property* from damage, caused by *construction* or demolition site hazards.

# **FUNCTIONAL REQUIREMENT**

**[F5.2]** Construction and demolition work on buildings shall be performed in a manner that avoids the likelihood of:

- (a) Objects falling onto people on or off the site,
- (b) Objects falling on property off the site,
- (c) Other hazards arising on the site affecting people off the site and *other* property, and
- (d) Unauthorised entry of children to hazards on the site.

## PERFORMANCE

- **F5.3.1** Suitable *construction* methods shall be used to avoid the likelihood of tools or materials falling onto places where people might be present.
- **F5.3.2** Where *construction* or demolition work presents a hazard in places to which the public has access, barriers shall be provided and shall:
- (a) Be of appropriate height and construction to prevent site hazards from harming traffic or passersby,
- (b) Be difficult to climb,
- (c) Have no opening other than those approved by the *territorial authority* for access and viewing,
- (d) Have no gates or doors which project beyond the site when opened,
- (e) Contain no projection that would be a hazard to traffic or people, and
- (f) Be clearly marked where the barrier itself may otherwise present a hazard to traffic or passersby.

Limits on application

Clause F5 was amended, as from 22 December 1994, by regulation 6 Buildings Regulations 1992, Amendment No 1 (SR 1994/263) by substituting the expression ""F5.2"" for the expression ""F5" immediately under the heading ""FUNCTIONAL REQUIREMENT"".



# **CLAUSE F5—CONSTRUCTION AND DEMOLITION HAZARDS** (continued)

## **Provisions**

**F5.3.3** Where a *construction* or demolition site contains any hazard which might be expected to attract the unauthorised entry of children, the hazard shall be enclosed to restrict access by children.

**F5.3.4** Suitable barriers shall be constructed to provide a safe route for people where lifting equipment creates a risk of accident from objects falling on a place of public access, or where a similar risk results from the height at which *construction* or demolition work is being carried out.



## [CLAUSE F6—VISIBILITY IN ESCAPE ROUTES

#### **Provisions**

#### **OBJECTIVE**

**F6.1** The objective of this provision is to help safeguard people from injury in *escape routes* during failure of the main lighting.

# **FUNCTIONAL REQUIREMENT**

**F6.2** Specified features in escape routes must be made reasonably visible by lighting systems, other systems, or both, during failure of the main lighting.

## **PERFORMANCE**

**F6.3.1** Specified features in escape routes must, when the systems for visibility are at their design level, be reasonably visible.

**F6.3.2** The systems for visibility must operate to the following percentages of their design levels within the following times after failure of the main lighting:

- (a) 80% in 0.5 seconds in locations (examples of which are given by performance F6.3.3) where there is a high risk of injury due to delay in operation of the systems for visibility; and
- (b) 10% in 0.5 seconds, and 80% in 30 seconds, in stairs and in locations that are unfamiliar to users; and
- (c) 10% in 20 seconds, and 80% in 60 seconds, in all other locations.

## Limits on application

Requirement F6.2 does not apply to Detached Dwellings, household units within Multi-unit Dwellings, Outbuildings, [[backcountry huts,]] or Ancillary buildings.

Performance F6.3.1 does not apply to specified features in the initial 20 metres of an escape route if the risk of injury, or impediment to movement of people, due to the specified features not being visible is low (for example, because people are familiar with the escape route, the escape route is level, and people do not require assistance to escape).

Schedule 1 clause F6.2: amended, on 31 October 2008, by regulation 8 of the Building (Building Code: Backcountry Huts) Amendment Regulations 2008 (SR 2008/358).

Clause F6.2 was amended, as from 22 December 1994, by regulation 7(1) Buildings Regulations 1992, Amendment No 1 (SR 1994/263) by substituting the word ""Ancillary" for the word ""Ancillary".

Clause F6.3.1 was amended, as from 22 December 1994, by regulation 7(2) Buildings Regulations 1992, Amendment No 1 (SR 1994/263) by inserting the words "or 30 minutes, whichever is the greater".

Clause F6 was substituted, as from 21 June 2007, by regulation 6(1) Building Amendment Regulations 2007 (SR 2007/124).



# [CLAUSE F6—VISIBILITY IN ESCAPE ROUTES (continued)

## **Provisions**

- **F6.3.3** Examples of locations (referred to in performance F6.3.2(a)) where there is a high risk of injury due to delay in operation of the systems for visibility include:
- (a) areas where dangerous machinery is installed:
- (b) areas where hazardous processes take place:
- (c) clinical areas of hospitals:
- (d) prisons and other *building*s in which people are detained:
- (e) any part of an *escape route* designed for use at any time by more than 250 people.
- **F6.3.4** The systems for visibility must operate continuously in *building*s or parts of *building*s in the following risk groups for the following periods after failure of the main lighting:
- (a) *risk group A*, until restoration of the main lighting system:
- (b) risk group B, 90 minutes:
- (c) risk group C, 30 minutes.
- **F6.3.5** Despite performance F6.3.4, if a building or part of a building falls into both risk group A and risk group B, the systems for visibility must operate for whichever is the longer of the periods specified in performance F6.3.4(a) and (b).
- **F6.3.6** Signs to indicate *escape routes* must be provided as required by Clause F8"Signs".



## **CLAUSE F7—WARNING SYSTEMS**

## **Provisions**

## **OBJECTIVE**

**F7.1** The objective of this provision is to safeguard people from injury or illness due to lack of awareness of an emergency.

## **FUNCTIONAL REQUIREMENT**

**F7.2** Buildings shall be provided with appropriate means of warning people to escape to a safe place [in an emergency].

## **PERFORMANCE**

**F7.3.1** A means of warning must alert people to the emergency in *adequate* time for them to reach a *safe place*.

**F7.3.2** Appropriate means of detection and warning for *fire* must be provided within each *household unit*.

**F7.3.3** Appropriate means of warning for *fire* and other emergencies must be provided in *buildings* as necessary to satisfy the other performance requirements of this code.

## Limits on application

Performance F7.3 does not apply to *Out-buildings*[, *backcountry huts*,] or *Ancillary buildings*.

Clause F7.2 was amended, as from 24 April 2003, by regulation 3(1) Buildings Amendment Regulations (SR 2003/61) by adding the words ""in an emergency"".

Clause F7.3 was amended, as from 22 December 1994, by regulation 8 Buildings Regulations 1992, Amendment No 1 (SR 1994/263) by substituting the word ""Ancillary" for the word ""Ancillary".

Clause F7.3 was substituted, as from 24 April 2003, by regulation 3(2) Buildings Amendment Regulations (SR 2003/61).

Schedule 1 clause F7.3.1: amended, on 31 October 2008, by regulation 9 of the Building (Building Code: Backcountry Huts) Amendment Regulations 2008 (SR 2008/358).



## **CLAUSE F8—SIGNS**

#### **Provisions**

## **OBJECTIVE**

**F8.1** The objective of this provision is to:

- (a) Safeguard people from injury or illness resulting from inadequate identification of escape routes, or of hazards within or about the building.
- (b) Safeguard people from loss of *amenity* due to inadequate direction, and
- (c) Ensure that *people with disabilities* are to carry out normal activities and processes within *buildings*.

## **FUNCTIONAL REQUIREMENT**

**F8.2** Signs shall be provided in and about *building*s to identify:

- (a) Escape routes,
- (b) Emergency related safety features,
- (c) Potential hazards, and
- (d) Accessible routes and facilities for people with disabilities.

#### **PERFORMANCE**

- **F8.3.1** Signs shall be clearly visible and readily understandable under all conditions of foreseeable use.
- **F8.3.2** Signs indicating potential hazards shall be provided in sufficient locations to notify people before they encounter the hazard.
- F8.3.3 Signs to facilitate escape shall:
- (a) Be provided in sufficient locations to identify *escape routes* and guide people to a *safe place*, and
- [(b) Remain visible during failure of the main lighting for the period required by performance F6.3.4 and performance F6.3.5.]
- **F8.3.4** Signs shall be provided in sufficient locations to identify *accessible routes* and facilities provided for *people with disabilities*.

# Limits on application

Objective F8.1(c) shall apply only to those *building*s to which [section 47A of the Act] applies.

Requirement F8.2 shall not apply to *Detached Dwellings*, or within household units of Multi-unit Dwellings.

Note: Section 47A is in the Building Act 1991. The equivalent section in the Building Act 2004 is section 118.

The limits on application to clause F8.1(c) were amended consequential on the Health Reforms (Transitional Provisions) Act 1993, as from 29 December 2000, by regulation 4(1) Building Amendment Regulations 2000 (SR 2000/119), by substituting the expression "section 47A of the Act" for the expression "section 25 of the Disabled Persons Community Welfare Act 1975".

Clause F8.3.3(b) was substituted, as from 21 June 2007, by regulation 6(4) Building Amendment Regulations 2007 (SR 2007/124).



# G Services and Facilities

#### **CLAUSE G1—PERSONAL HYGIENE**

#### **Provisions**

## **OBJECTIVE**

- G1.1 The objective of this provision is to:
- (a) Safeguard people from illness caused by infection or contamination,
- (b) Safeguard people from loss of *amenity* arising from the absence of appropriate personal hygiene facilities, and
- (c) Ensure *people with disabilities* are able to carry out normal activities and processes within *buildings*.

## **FUNCTIONAL REQUIREMENT**

**G1.2** *Buildings* shall be provided with appropriate spaces and facilities for personal hygiene.

#### **PERFORMANCE**

- **G1.3.1** Sanitary fixtures shall be provided in sufficient number and be appropriate for the people who are intended to use them.
- **G1.3.2** *Sanitary fixtures* shall be located, constructed and installed to:
- (a) Facilitate sanitation,
- (b) Avoid risk of food contamination,
- (c) Avoid harbouring dirt or germs,
- (d) Provide appropriate privacy,
- (e) Avoid affecting occupants of adjacent spaces from the presence of unpleasant odours, accumulation of offensive matter, or other source of annoyance,
- (f) Allow effective cleaning,
- (g) Discharge to a plumbing and drainage system as required by clause G13 "Foul water" when water-borne disposal is used, and
- (h) Provide a healthy safe disposal system when non-water-borne disposal is used.
- **G1.3.3** Facilities for personal hygiene shall be provided in convenient locations.
- **G1.3.4** Personal hygiene facilities provided for *people with disabilities* shall be accessible

## Limits on application

Objective G1.1(c) shall apply only to those *buildings* to which [section 47A of the Act] applies.

Note: Section 47A is in the Building Act 1991. The equivalent section in the Building Act 2004 is section 118.

Performance G1.3.4 shall not apply to *Housing*, *Outbuildings*, [backcountry huts,] Ancillary buildings, and to Industrial buildings where no more than 10 people are employed.

The limits on application to clause G1.1(c) were amended consequential on the Health Reforms (Transitional Provisions) Act 1993, as from 29 December 2000, by regulation 4(1) Building Amendment Regulations 2000 (SR 2000/119), by substituting the expression "section 47A of the Act" for the expression "section 25 of the Disabled Persons Community Welfare Act 1975".

Schedule 1 clause G1.3.4: amended, on 31 October 2008, by regulation 10 of the Building (Building Code: Backcountry Huts) Amendment Regulations 2008 (SR 2008/358).



## **CLAUSE G2—LAUNDERING**

#### **Provisions**

## **OBJECTIVE**

**G2.1** The objective of this provision is to ensure:

- (a) Adequate amenities for people to do laundering, and
- (b) That *people with disabilities* are able to carry out normal activities and processes within *buildings*.

## **FUNCTIONAL REQUIREMENT**

**G2.2** *Building*s shall be provided with *adequate* space and facilities for laundering.

# **PERFORMANCE**

- **G2.3.1** Facilities shall have capacity for the *intended use*, and consist of *fixtures*, or space and services for appliances.
- **G2.3.2** Space shall be *adequate* in size to provide for the installation and use of *fixtures* or appliances.
- **G2.3.3** Space and facilities shall be provided within each accommodation unit or may be grouped elsewhere in a convenient location.
- **G2.3.4** Accessible facilities shall be provided for people with disabilities.

# Limits on application

Objective G2.1(b) shall apply to those *buildings* to which [section 47A of the Act] applies.

Requirement G2.2 shall apply only to *Housing*, old people's homes, early childhood centres, camping grounds and work camps.

Note: Section 47A is in the Building Act 1991. The equivalent section in the Building Act 2004 is section 118.

Performance G2.3.4 shall apply only to camping grounds.

The limits on application to clause G2.1(b) were amended consequential on the Health Reforms (Transitional Provisions) Act 1993, as from 29 December 2000, by regulation 4(1) Building Amendment Regulations 2000 (SR 2000/119), by substituting the expression "section 47A of the Act" for the expression "section 25 of the Disabled Persons Community Welfare Act 1975".



## CLAUSE G3—FOOD PREPARATION AND PREVENTION OF CONTAMINATION

#### **Provisions**

#### **OBJECTIVE**

G3.1 The objective of this provision is to:

- (a) Safeguard people from illness due to contamination,
- (b) Enable hygienic food preparation without loss of *amenity*, and
- (c) Ensure that *people with disabilities* are able to carry out normal activities and processes within *buildings*.

# **FUNCTIONAL REQUIREMENT**

**G3.2.1** Buildings shall be provided with space and facilities for the hygienic storage, preparation and cooking of food, that are adequate for the intended use of the building.

**G3.2.2** *Buildings* used for the storage, manufacture or processing of food, including animal products, shall be constructed to safeguard the contents from contamination

**[G3.2.3]** Buildings used for the medical treatment of humans or animals, or the reception of dead bodies, shall be constructed to avoid the spread of contamination from the building contents.

# **PERFORMANCE**

**G3.3.1** Food preparation facilities shall be hygienic and include:

- (a) Space for a refrigerator, or a perishable food storage area capable of being cooled and protected from vermin and insects,
- (b) Means for food rinsing, utensil washing and waste water disposal,
- (c) Means for cooking food, and
- (d) Space and a surface for food preparation.

## Limits on application

Objective G3.1(c) shall apply only to those *buildings* to which [section 47A of the Act] applies.

Requirement G3.2.1 shall apply to *Housing*, work camps, old people's homes and early childhood centres, and where appropriate shall also apply to *Commercial* and *Industrial buildings* whose intended uses include the manufacture, preparation, packaging or storage of food.

Note: Section 47A is in the Building Act 1991. The equivalent section in the Building Act 2004 is section 118.

Performance G3.3.1(a) and (b) shall apply to *Housing*, work camps, old people's homes, early childhood centres and *Commercial* or *Industrial buildings* whose *intended uses* include the handling of perishable food.

Performance G3.3.1(c) shall apply to *Housing*, work camps, old people's homes and early childhood centres.

Performance G3.3.1(d) shall apply to *Housing*, work camps, old people's homes and early childhood centres.

Clause G3 was amended, as from 22 December 1994, by regulation 9 Buildings Regulations 1992, Amendment No 1 (SR 1994/263) by substituting the expression ""G3.2.3"" for the expression ""G3.2.2"" where it secondly occurred under the heading ""FUNCTIONAL REQUIREMENT"".

The limits on application to clause G3.1(c) were amended consequential on the Health Reforms (Transitional Provisions) Act 1993, as from 29 December 2000, by regulation 4(1) Building Amendment Regulations 2000 (SR 2000/119), by substituting the expression "section 47A of the Act" for the expression "section 25 of the Disabled Persons Community Welfare Act 1975".



# CLAUSE G3—FOOD PREPARATION AND PREVENTION OF CONTAMINATION (continued)

#### **Provisions**

- **G3.3.2** Spaces for food preparation and utensil washing shall have:
- (a) Interior linings and work surfaces shall be *impervious* and easily cleaned,
- (b) All building elements constructed with materials which are free from hazardous substances which could cause contamination to the building contents, and
- (c) Exposed *building elements* located and shaped to avoid the accumulation of dirt.
- **G3.3.3** An *adequate* energy supply shall be provided, appropriately located for use by cooking and refrigeration appliances.
- **G3.3.4** Space and facilities shall be provided within each *household unit*, or grouped elsewhere in a convenient location.
- **G3.3.5** Where facilities are provided for *people with disabilities* they shall be *accessible*.
- **G3.3.6** Spaces in *buildings* shall be protected from the likelihood of contamination or vermin entering areas used for the storage, processing or preparation of food, and shall have a means of preventing contamination spreading from these areas to other spaces.

# Limits on application

Performance G3.3.2(b) shall apply to *Housing*, work camps, old people's homes and early childhood centres, and where appropriate shall also apply to *Commercial* and *Industrial buildings* whose *intended uses* include the manufacture, preparation, packaging or storage of food.

Performance G3.3.2(c) shall not apply to *Housing*.

Performance G3.3.5 shall apply only to camping grounds and *accessible* accommodation units in *Communal Residential buildings*.

Performance G3.3.6 shall apply to Commercial or Industrial buildings whose intended uses include the handling of perishable food, the medical treatment of humans or animals, the slaughter of animals or the reception of dead bodies.



## **CLAUSE G4—VENTILATION**

## **Provisions**

## **OBJECTIVE**

**G4.1** The objective of this provision is to safeguard people from illness or loss of *amenity* due to lack of fresh air.

# **FUNCTIONAL REQUIREMENT**

**G4.2** Spaces within *buildings* shall be provided with *adequate* ventilation consistent with their maximum occupancy [and their intended use].

#### **PERFORMANCE**

- **G4.3.1** Spaces within *buildings* shall have means of ventilation with *outdoor air* that will provide an *adequate* number of air changes to maintain air purity.
- **G4.3.2** Mechanical air-handling systems shall be constructed and maintained in a manner that prevents harmful bacteria, pathogens and allergens from multiplying within them.
- **G4.3.3** *Building*s shall have a means of collecting or otherwise removing the following products from the spaces in which they are generated:
- (a) Cooking fumes and odours,
- (b) [Moisture] from laundering, utensil washing, bathing and showering,
- (c) Odours from sanitary and waste storage spaces,
- (d) Gaseous by-products and excessive moisture from commercial or industrial processes,
- (e) Poisonous fumes and gases,
- (f) Flammable fumes and gases,
- (g) Airborne particles,
- (h) Bacteria, viruses or other pathogens, or
- (i) Products of combustion.
- **G4.3.4** Contaminated air shall be disposed of in a way which avoids creating a nuisance or hazard to people and *other property*.
- **G4.3.5** The quantities of air supplied for ventilation shall meet the additional demands of any fixed *combustion* appliances.

Limits on application

Clause G4.2 Schedule was amended, as from 11 September 1997, by regulation 3(1) Building Amendment Regulations 1997 (SR 1997/156) by inserting the words "and their intended use".

Clause G4.3.3(b) Schedule was amended, as from 11 September 1997, by regulation 3(1) Building Amendment Regulations 1997 (SR 1997/156) by substituting the word ""Moisture" for the word ""Steam".



#### **CLAUSE G5—INTERIOR ENVIRONMENT**

#### **Provisions**

## **OBJECTIVE**

**G5.1** The objective of this provision is to:

- (a) Safeguard people from illness caused by low air temperature,
- (b) Safeguard people from injury or loss of amenity caused by inadequate activity space.
- (c) Safeguard people from injury caused by unsafe installations, and
- (d) Ensure that *people with disabilities* are able to carry out normal activities and processes within *buildings*.

# **FUNCTIONAL REQUIREMENT**

- **G5.2.1** *Building*s shall be constructed to provide:
- (a) An *adequate*, controlled interior temperature,
- (b) Adequate activity space for the intended use, and
- (c) Accessible spaces and facilities.
- **G5.2.2** Heating appliances in *buildings* shall be installed in a way that reduces the likelihood of injury.

## **PERFORMANCE**

- **G5.3.1** Habitable spaces, bathrooms and recreation rooms shall have provision for maintaining the internal temperature at no less than 16°C measured at 750mm above floor level, while the space is *adequately* ventilated.
- **G5.3.2** Heating appliances, and any attached cables, pipes or other fittings shall be securely fixed in place.
- **G5.3.3** *Habitable spaces* shall have sufficient space for activity, furniture, and sanitary and mobility aids.
- **G5.3.4** Where reception counters or desks are provided for public use, at least one counter or desk shall be *accessible*.

# Limits on application

Objective G5.1(d) shall apply to those *buildings* to which [section 47A of the Act] applies.

Requirement G5.2.1(a) shall apply only to *habitable spaces*, bathrooms and recreation rooms in old people's homes and early childhood centres.

Requirement G5.2.1(b) shall apply only to [old people's homes].

Requirement G5.2.1(c) shall apply only to Communal Residential, Communal Non-residential, and Commercial buildings.

Performance G5.3.1 shall apply only to old people's homes an early childhood centres.

Performance G5.3.2 shall apply only to old people's homes and early childhood centres.

Performance G5.3.3 shall apply only to old people's homes.

Performance G5.3.4 applies only to Communal Residential, Communal Non-Residential, and Commercial buildings.

Clause G5 was amended, as from 22 December 1994, by regulation 10 Buildings Regulations 1992, Amendment No 1 (SR 1994/263) by substituting the expression ""old people's homes"" for the expression ""old people's homes" in italics in the second column, opposite clause G5.2.1(b)

The limits on application to clause G5.1(d) were amended consequential on the Health Reforms (Transitional Provisions) Act 1993, as from 29 December 2000, by regulation 4(1) Building Amendment Regulations 2000 (SR 2000/119), by substituting the expression "section 47A of the Act" for the expression "section 25 of the Disabled Persons Community Welfare Act 1975".

Note: Section 47A is in the Building Act 1991. The equivalent section in the Building Act 2004 is section 118.



# **CLAUSE G5—INTERIOR ENVIRONMENT** (continued)

## **Provisions**

**G5.3.5** *Building*s shall be provided with listening systems which enable enhanced hearing by people with hearing aids.

**G5.3.6** Enhanced listening systems shall be identified by signs complying with Clause F8 "Signs".

# Limits on application

Performance G5.3.5 applies only to:

- (a) Communal Non-Residential assembly spaces occupied by more than 250 people, and
- (b) Any theatre, cinema, or public hall, and
- (c) Assembly spaces in old people's homes occupied by more than 20 people.



## **CLAUSE G6—AIRBORNE AND IMPACT SOUND**

## **Provisions**

# **OBJECTIVE**

**G6.1** The objective of this provision is to safeguard people from illness or loss of *amenity* as a result of undue noise being transmitted between abutting occupancies.

# **FUNCTIONAL REQUIREMENT**

**G6.2** Building elements which are common between occupancies, shall be constructed to prevent undue noise transmission from other occupancies or common spaces, to the habitable spaces of household units.

## **PERFORMANCE**

**G6.3.1** The *Sound Transmission Class* of walls, floors and ceilings, shall be no less than 55.

**G6.3.2** The *Impact Insulation Class* of floors shall be no less than 55.



## **CLAUSE G7—NATURAL LIGHT**

## **Provisions**

# **OBJECTIVE**

**G7.1** The objective of this provision is to safeguard people from illness or loss of *amenity* due to isolation from natural light and the outside environment.

# **FUNCTIONAL REQUIREMENT**

**G7.2** Habitable spaces shall provide adequate openings for natural light and for a visual awareness of the outside environment.

## **PERFORMANCE**

**G7.3.1** Natural light shall provide an *illuminance* of no less than 30 lux at floor level for 75 percent of the *standard year*.

**G7.3.2** Openings to give awareness of the outside shall be transparent and provided in suitable locations.

## Limits on application

Requirement G7.2 shall apply only to *Housing*, old people's homes and early childhood centres.



# **CLAUSE G8—ARTIFICIAL LIGHT**

#### **Provisions**

## **OBJECTIVE**

**G8.1** The objective of this provision is to safeguard people from injury due to lack of *adequate* lighting.

## **FUNCTIONAL REQUIREMENT**

**G8.2** Spaces within *buildings* used by people, shall be provided with *adequate* artificial lighting which, when activated in the absence of sufficient natural light, will enable safe movement.

## **PERFORMANCE**

**G8.3** *Illuminance* at floor level shall be no less than 20 lux.

# Limits on application

Requirement G8.2 shall apply to:

- (a) All exitways in Multi-unit Dwellings, Group Dwellings and Communal Residential [(except backcountry huts)], Communal Non-residential, Commercial and Industrial buildings.
- (b) All access routes except those in Outbuildings [, backcountry huts,] and Ancillary buildings, and
- (c) All common spaces within Multiunit Dwellings, Group Dwellings, and Communal Residential [(except backcountry huts)] and Communal Non-residential buildings.

[Performance G8.3 does not apply during a failure of the main lighting, when the requirements in Clause F6 "Visibility in escape routes" apply.]

Schedule 1 clause G8.2 paragraph (a): amended, on 31 October 2008, by regulation 11(1) of the Building (Building Code: Backcountry Huts) Amendment Regulations 2008 (SR 2008/358).

Schedule 1 clause G8.2 paragraph (b): amended, on 31 October 2008, by regulation 11(2) of the Building (Building Code: Backcountry Huts) Amendment Regulations 2008 (SR 2008/358).

Schedule 1 clause G8.2 paragraph (c): amended, on 31 October 2008, by regulation 11(3) of the Building (Building Code: Backcountry Huts) Amendment Regulations 2008 (SR 2008/358).

Clause G8.3 was amended, as from 21 June 2007, by regulation 6(5) Building Amendment Regulations 2007 (SR 2007/124) by substituting the limit on application.



## **CLAUSE G9—ELECTRICITY**

## **Provisions**

#### **OBJECTIVE**

**G9.1** The objective of this provision is to ensure that:

- (a) In *buildings* supplied with electricity, the *electrical installation* has safeguards against outbreak of *fire* and personal injury, and
- (b) People with disabilities are able to carry out normal activities and processes within buildings.

# **FUNCTIONAL REQUIREMENT**

**G9.2** Where provided in a *building*, *electrical installations* shall be safe for their *intended use*.

## **PERFORMANCE**

- **G9.3.1** The *electrical installation* shall incorporate systems to:
- (a) Protect people from contact with parts of the installation which are live during normal operation, and to prevent parts of the installation or other *building elements* becoming live during fault conditions,
- (b) Permit the safe isolation of the installation and of electrical fittings and appliances.
- (c) Safeguard people from excessive temperatures resulting from either normal operation of electrical equipment, or from currents which could exceed the installation rating.
- (d) Safeguard people from injury which may result from electromechanical stress in electrical components caused by currents in excess of the installation rating,
- (e) Protect *building elements* from risk of ignition, impairment of their physical or mechanical properties, or function, due to temperature increases resulting from heat transfer or electric arc,
- (f) Operate safely in its intended environment, and
- (g) Safeguard against ignition of the surrounding atmosphere where it is potentially flammable or explosive.

## Limits on application

Objective G9.1(b) shall apply only to those *building*s to which [section 47A of the Act] applies.

Note: Section 47A is in the Building Act 1991. The equivalent section in the Building Act 2004 is section 118.

The limits on application to clause G9.1(b) were amended consequential on the Health Reforms (Transitional Provisions) Act 1993, as from 29 December 2000, by regulation 4(1) Building Amendment Regulations 2000 (SR 2000/119), by substituting the expression "section 47A of the Act" for the expression "section 25 of the Disabled Persons Community Welfare Act 1975".



# **CLAUSE G9—ELECTRICITY** (continued)

## **Provisions**

- **G9.3.2** An *electrical installation* supplying an essential service shall:
- (a) Maintain the supply for a time appropriate to that service, and
- (b) Be capable of being isolated from the supply system, independently of the remainder of the installation.
- **G9.3.3** An *electrical installation* connected to an *electrical supply system*, shall contain safeguards which protect the safety features of the external supply.
- **G9.3.4** In *building*s intended for use by *people with disabilities*, light switches and plug socket outlets shall be *accessible* and usable.

# Limits on application

Performance G9.3.4 shall not apply to Housing, *Outbuildings*, *Ancillary buildings*, and to *Industrial buildings* where no more than 10 people are employed.



## **CLAUSE G10—PIPED SERVICES**

## **Provisions**

## **OBJECTIVE**

**G10.1** The objective of this provision is to safeguard people from injury or illness caused by extreme temperatures or *hazardous substances* associated with *building* services.

# **FUNCTIONAL REQUIREMENT**

**G10.2** In *buildings* provided with potentially *hazardous* services containing hot, cold, flammable, corrosive or toxic fluids, the installations shall be constructed to provide *adequate* safety for people.

## **PERFORMANCE**

**G10.3.1** Piping systems shall be constructed to avoid the likelihood of:

- (a) Significant leakage or damage during normal or reasonably foreseeable abnormal conditions.
- (b) Detrimental contamination of the contents by other substances,
- (c) Adverse interaction between services, or between piping and electrical systems, and
- (d) People having contact with pipes which could cause them harm.
- **G10.3.2** Provision shall be made for the ready removal of moisture or condensate in gas pipes.
- **G10.3.3** Pipes shall be protected against corrosion in the environment of their use.
- **G10.3.4** Piping systems shall be identified with markings if the contents are not readily apparent from the location or associated equipment.
- **G10.3.5** Enclosed spaces shall be constructed to avoid the likelihood of accumulating vented or leaking gas.
- **G10.3.6** Piped systems shall have isolation devices which permit the installation or individual items of apparatus to be isolated from the supply system, for maintenance, testing, fault detection and repair.



## CLAUSE G11—GAS AS AN ENERGY SOURCE

#### **Provisions**

## **OBJECTIVE**

G11.1 The objective of this provision is to:

- (a) Safeguard people from injury arising from the use of gas as an energy source,
- (b) Safeguard people and *other property* from the risk of *fire* or explosion, and
- (c) Safeguard people from loss of *amenity* due to the gas supply being inadequate for the *intended use*.

## **FUNCTIONAL REQUIREMENT**

**G11.2** In *buildings* where gas is used as an energy source, the supply system shall be safe and *adequate* for its *intended use*.

## **PERFORMANCE**

- **G11.3.1** Supply systems shall be constructed to maintain a safe pressure range appropriate to the appliances and the type of gas used.
- **G11.3.2** The gas supply to all appliances in a single ventilated space, shall be fitted with an automatic cut-off activated by failure of any continuous forced ventilation system used for combustion, ventilation or safe operation of a fixed gas appliance.
- **G11.3.3** A flued fixed gas appliance shall have no adverse interaction with any other flued appliance.
- **G11.3.4** Supply systems shall have isolation devices which permit the whole installation, or individual items of apparatus, to be isolated from the supply for maintenance, testing, fault detection or repair.
- **G11.3.5** Where gas is supplied from an external source, the supply system within *buildings* shall be constructed to avoid the likelihood of:
- (a) Contamination of the external supply from other gas sources within the *building*,
- (b) Adverse effects on the pressure of the external supply, and
- (c) The external supply pipe acting as an earthing conductor.
- **G11.3.6** The location and installation of meters and service risers shall meet the requirements of the *network utility operator*.



## [CLAUSE G12—WATER SUPPLIES

## **Provisions**

## **OBJECTIVE**

G12.1 The objective of this provision is to—

- (a) safeguard people from illness or injury caused by contaminated water:
- (b) safeguard people from injury caused by hot water system explosion, or from contact with excessively hot water:
- (c) safeguard people from loss of *amenity* arising from—
- (i) a lack of hot water for personal hygiene; or
- (ii) water for human consumption that is offensive in appearance, odour, or taste:
- (d) ensure that *people with disabilities* are able to carry out normal activities and functions within *buildings*.

## **FUNCTIONAL REQUIREMENT**

**G12.2** Buildings provided with water outlets, sanitary fixtures, or sanitary appliances must have safe and adequate water supplies.

## **PERFORMANCE**

**G12.3.1** Water intended for human consumption, food preparation, utensil washing, or oral hygiene must be potable

**G12.3.2** A potable water supply system must be—

- (a) protected from contamination; and
- (b) installed in a manner that avoids the likelihood of contamination within the system and the *water main*; and
- (c) installed using components that will not contaminate the water.
- **G12.3.3** A non-potable water supply system used for personal hygiene must be installed in a manner that avoids the likelihood of illness or injury being caused by the system.
- **G12.3.4** Water pipes and outlets provided with non-potable water must be clearly identified.

# Limits on application

Objective G12.1(d) applies only to those *buildings* to which section 47A of the Act applies.

Note: Section 47A is in the Building Act 1991. The equivalent section in the Building Act 2004 is section 118.

[[Performance G12.3.1 does not apply to *backcountry huts*.]]

Clause G12 was substituted, as from 3 January 2002, by regulation 3(10) Building Amendment Regulations 2001 (SR 2001/374).

Schedule 1 clause G12.3.1: amended, on 31 October 2008, by regulation 12 of the Building (Building Code: Backcountry Huts) Amendment Regulations 2008 (SR 2008/358).

The limits on application to clause G12.1(d) were amended consequential on the Health Reforms (Transitional Provisions) Act 1993, as from 29 December 2000, by regulation 4(1) Building Amendment Regulations 2000 (SR 2000/119), by substituting the expression "section 47A of the Act" for the expression "section 25 of the Disabled Persons Community Welfare Act 1975".



## **CLAUSE G12—WATER SUPPLIES** (continued)

## **Provisions**

**G12.3.5** Sanitary fixtures and sanitary appliances must be provided with hot water when intended to be used for—

- (a) utensil washing; and
- (b) personal washing, showering, or bathing

**G12.3.6** If hot water is provided to *sanitary fixtures* and *sanitary appliances* used for personal hygiene, it must be delivered at a temperature that avoids the likelihood of scalding.

**G12.3.7** Water supply systems must be installed in a manner that—

- (a) pipes water to sanitary fixtures and sanitary appliances at flow rates that are adequate for the correct functioning of those fixtures and appliances under normal conditions; and
- (b) avoids the likelihood of leakage; and
- (c) allows reasonable access to components likely to need maintenance; and
- (d) allows the system and any backflow prevention devices to be isolated for testing and maintenance.
- **G12.3.8** Vessels used for producing or storing hot water must be provided with safety features that—
- (a) relieve excessive pressure during both normal and abnormal conditions; and
- (b) limit temperatures to avoid the likelihood of flash steam production in the event of rupture.

**G12.3.9** A *hot water system* must be capable of being controlled to prevent the growth of legionella bacteria.

**G12.3.10** Water supply taps must be accessible and usable for people with disabilities.

# Limits on application

Performance G12.3.5(b) applies to only *housing*, retirement homes, and early childhood centres.

Performance G12.3.10 applies only to those *buildings* to which section 47A of the Act applies.]

Note: Section 47A is in the Building Act 1991. The equivalent section in the Building Act 2004 is section 118.

Clause G12.3.7 was amended, as from 22 December 1994, by regulation 11 Buildings Regulations 1992, Amendment No 1 (SR 1994/263) by substituting the word ""legionella" for the word "legionalla".



## **CLAUSE G13—FOUL WATER**

## **Provisions**

## **OBJECTIVE**

**G13.1** The objective of this provision is to:

- (a) Safeguard people from illness due to infection or contamination resulting from personal hygiene activities, and
- (b) Safeguard people from loss of *amenity* due to the presence of unpleasant odours or the accumulation of offensive matter resulting from *foul water* disposal.

## **FUNCTIONAL REQUIREMENT**

**[G13.2** Buildings in which sanitary fixtures and sanitary appliances using water-borne waste disposal are installed must be provided with—]

- [(a) an adequate plumbing and drainage system to carry foul water to appropriate outfalls; and]
- [(b) if no sewer is available, an adequate system for the storage, treatment, and disposal of foul water.]

#### **PERFORMANCE**

**G13.3.1** The *plumbing system* shall be constructed to:

- (a) Convey foul water from buildings to a drainage system,
- (b) Avoid the likelihood of blockage and leakage,
- (c) Avoid the likelihood of foul air and gases entering *building*s, and
- (d) provide reasonable access for maintenance and clearing blockages.

**G13.3.2** The drainage system shall:

- (a) Convey foul water to an appropriate outfall,
- (b) Be constructed to avoid the likelihood of blockage,
- (c) Be supported, jointed and protected in a way that will avoid the likelihood of penetration of roots or the entry of ground water,
- (d) Be provided with reasonable access for maintenance and clearing blockages,

Limits on application

Clause G13.2 was substituted, as from 21 June 2007, by regulation 7(1) Building Amendment Regulations 2007 (SR 2007/124).



#### **CLAUSE G13—FOUL WATER** (continued)

#### **Provisions**

- (e) Be ventilated to avoid the likelihood of foul air and gases accumulating in the drainage system and *sewer*, and
- (f) Be constructed to avoid the likelihood of damage from superimposed loads or normal ground movement.
- **G13.3.3** Where a *sewer* connection is available, the drainage system shall be connected to the *sewer*, and the connection shall be made in a manner that avoids damage to the *sewer* and is to the approval of the *network utility operator*.
- **[G13.3.4** If no sewer is available, facilities for the storage, treatment, and disposal of foul water must be constructed—]
- [(a) with adequate capacity for the volume of foul water and the frequency of disposal; and]
- [(b) with adequate vehicle access for collection if required; and]
- [(c) to avoid the likelihood of contamination of any potable water supplies in compliance with Clause G12 "Water supplies": and]
- [(d) to avoid the likelihood of contamination of soils, ground water, and waterways except as permitted under the Resource Management Act 1991; and]
- [(e) from materials that are impervious both to the *foul water* for which disposal is required, and to water; and]
- [(f) to avoid the likelihood of blockage and leakage; and]
- [(g) to avoid the likelihood of foul air and gases accumulating within or entering into buildings; and]
- [(h) to avoid the likelihood of unauthorised access by people; and]
- [(i) to permit easy cleaning and maintenance; and]
- [(j) to avoid the likelihood of damage from superimposed loads or normal ground movement; and]
- [(k) if those facilities are buried underground, to resist hydrostatic uplift pressures.]

## Limits on application

Clause G13.3.4 was substituted, as from 21 June 2007, by regulation 7(2) Building Amendment Regulations 2007 (SR 2007/124).



#### **CLAUSE G14—INDUSTRIAL LIQUID WASTE**

#### **Provisions**

#### **OBJECTIVE**

**G14.1** The objective of this provision is to safeguard people from injury or illness caused by infection or contamination resulting from industrial liquid waste.

# **FUNCTIONAL REQUIREMENT**

**G14.2** *Buildings*, in which industrial liquid waste is generated shall be provided with *adequate* spaces and facilities for the safe and hygienic collection, holding, treatment and disposal of the waste.

#### **PERFORMANCE**

- **G14.3.1** Industrial liquid waste shall be conveyed to storage containers and within disposal systems in a way which will:
- (a) Transfer wastes from *buildings* safely and hygienically,
- (b) Avoid the likelihood of blockage and leakage,
- (c) Avoid the likelihood of foul air and gases entering *building*s, and
- (d) Provide reasonable access for clearing of blockages.

**[G14.3.2** Facilities for the storage, treatment, and disposal of industrial liquid waste must be constructed—]

- [(a) with adequate capacity for the volume of waste and the frequency of disposal; and]
- [(b) with *adequate* vehicle access for collection if required; and]
- [(c) to avoid the likelihood of contamination of any potable water supplies in compliance with Clause G12 "Water supplies"; and]
- [(d) to avoid the likelihood of contamination of soils, ground water, and waterways except as permitted under the Resource Management Act 1991; and]
- [(e) from materials that are impervious both to the waste for which disposal is required, and to water; and]
- [(f) to avoid the likelihood of blockage and leakage; and]

#### Limits on application

Clause G14.3.2. (d) was amended, as from 22 December 1994, by regulation 12 Building Regulations 1992, Amendment No 1 (SR 1994/263) by omitting the words ""by a resource consent given"".

Clause G14.3.2 was substituted, as from 21 June 2007, by regulation 8 Building Amendment Regulations 2007 (SR 2007/124)



# **CLAUSE G14—INDUSTRIAL LIQUID WASTE** (continued)

#### **Provisions**

- [(g) to avoid the likelihood of foul air and gases accumulating within or entering into buildings; and]
- [(h) to avoid the likelihood of unauthorised access by people; and]
- [(i) to permit easy cleaning and maintenance; and]
- [(j) to avoid the likelihood of damage from superimposed loads or normal ground movement; and]
- [(k) if those facilities are buried underground, to resist hydrostatic uplift pressures.]

# Limits on application



#### **CLAUSE G15—SOLID WASTE**

#### **Provisions**

#### **OBJECTIVE**

**G15.1** The objective of this provision is to safeguard people from injury or illness caused by infection or contamination from solid waste.

## **FUNCTIONAL REQUIREMENT**

**G15.2** *Buildings* shall be provided with space and facilities for the collection, and safe hygienic holding prior to disposal, of solid waste arising from the *intended use* of the *buildings*.

#### **PERFORMANCE**

- **G15.3.1** Where provision is made within *buildings* for the collection and temporary holding of solid waste, the spaces provided shall be:
- (a) Of sufficient size for the volume of waste and frequency of disposal,
- (b) Provided with reasonable access for the depositing and collection of the waste,
- (c) Capable of maintaining sanitary conditions having regard to the types of waste and storage containers, and
- (d) Capable of maintaining the appropriate temperature for the type of waste stored.
- **G15.3.2** Where a rubbish chute is provided, it shall be located and constructed to:
- (a) Convey the solid waste to an appropriate storage container,
- (b) Avoid the likelihood of blockage or leakage,
- (c) Permit easy cleaning and maintenance,
- (d) Avoid the likelihood of foul air or gases accumulating or entering the *building*,
- (e) Avoid the likelihood of the spread of *fire* beyond the refuse chute,
- (f) Have openings that allow waste to be [safely] deposited in the chute, and
- (g) Restrict access by children, animals and vermin.

**G15.3.3** Where it is acceptable to the *network utility operator*, solid waste which has been suitably treated for disposal to a *sewer* may be discharged via a *foul water drain* complying with Clause G13 "Foul water".

#### Limits on application

Requirement G15.2 shall not apply to *Detached Dwellings*, *household units* of *Multi-unit Dwellings*, *Outbuildings* or *Ancilliary buildings* if there is independent access or private open space at ground level.

Clause G15.3.2(f) was amended, as from 22 December 1994, by regulation 13 Buildings Regulations 1992, Amendment No 1 (SR 1994/263) by substituting the word ""safety"" for the word "safety".



# H Energy Efficiency

#### **[CLAUSE H1—ENERGY EFFICIENCY PROVISIONS**

#### **Provisions**

#### **OBJECTIVE**

**H1.1** The objective of this provision is to facilitate efficient use of energy.

# **FUNCTIONAL REQUIREMENT**

**H1.2** Buildings must be constructed to achieve an adequate degree of energy efficiency when that energy is used for—

[[(a) modifying temperature, modifying humidity, providing ventilation, or doing all or any of those things; or]]

(b) providing hot water to [[and from]] sanitary fixtures or sanitary appliances, or both; or

(c) providing artificial lighting

#### **PERFORMANCE**

**H1.3.1** The *building* envelope enclosing spaces where the temperature or humidity (or both) are modified must be constructed to—

- (a) provide adequate thermal resistance; and
- (b) limit uncontrollable airflow.

H1.3.2 ...

[[H1.3.2A ...

[[H1.3.2B ...

[[ [H1.3.2C] ...

[[ [H1.3.2D] ...

[[ **[H1.3.2E** *Buildings* must be constructed to ensure that their *building performance index* does not exceed 1.55.]

**H1.3.3** Account must be taken of physical conditions likely to affect energy performance of *buildings*, including—

- (a) the thermal mass of building elements; and
- (b) the building orientation and shape; and
- (c) the airtightness of the *building* envelope; and

#### Limits on application

Objective H 1.1 applies only when the energy is sourced from a *network utility operator* or a depletable energy resource.

[[Requirement H1.2(a) does not apply to assembly service buildings, industrial buildings, outbuildings, or ancillary buildings.]]

Requirement H1.2(c) applies only to commercial buildings and communal non-residential buildings whose floor area is greater than 300 m<sup>2</sup>.

[Performance H1.3.2E applies only to *Housing*.] ]]

Clause H1 was substituted, as from 29 December 2000, by regulation 5 Building Amendment Regulations 2000 (SR 2000/119).

Schedule 1 clause H1.2(a): substituted, on 1 February 2009, by regulation 5 of the Building (Building Code: Energy Efficiency of Temperature, Humidity, and Ventilation Systems) Amendment Regulations 2008 (SR 2008/97).

Schedule 1 clause H1.2(b): amended, on 1 February 2009, by regulation 4 of the Building (Building Code: Energy Efficiency of Domestic Hot Water Systems) Amendment Regulations 2008 (SR 2009/256).

Schedule 1 clause H1.3.2: revoked, on 31 October 2007, by regulation 5 of the Building Amendment Regulations (No 2) 2007 (SR 2007/226). Schedule 1 clause H1.3.2A: revoked, on 30 June 2008, by regulation 6 of the Building Amendment Regulations (No 2) 2007 (SR 2007/226).



#### **CLAUSE H1—ENERGY EFFICIENCY PROVISIONS** (continued)

#### **Provisions**

- (d) the heat gains from services, processes and occupants; and
- (e) the local climate; and
- (f) heat gains from solar radiation.

[[H1.3.4 Systems for the heating, storage, or distribution of hot water to and from sanitary fixtures or sanitary appliances must, having regard to the energy source used,—]]

- [[(a) limit the energy lost in the heating process; and]]
- [[(b) be constructed to limit heat losses from storage vessels and from distribution systems; and]]
- [[(c) be constructed to facilitate the efficient use of hot water.]]
- H.1.3.5 Artificial lighting fixtures must-
- (a) be located and sized to limit energy use, consistent with the *intended use* of space;
   and
- (b) be fitted with a means to enable light intensities to be reduced, consistent with reduced activity in the space.

**[[H1.3.6** HVAC systems must be located, constructed, and installed to—]]

- [[(a) limit energy use, consistent with the *intended use* of space; and]]
- [[(b) enable them to be maintained to ensure their use of energy remains limited, consistent with the *intended use* of space.]]

## Limits on application

[[Performance H1.3.4(b) does not apply to individual storage vessels that are greater than 700 litres in capacity.]]

[[Performance H1.3.4(c) applies only to *housing*.]]

Performance H1.3.5 does not apply to lighting provided solely to meet the requirements of clause F6.

[[Performance H1.3.6 applies only to commercial buildings.]]

 $Schedule\ 1\ clause\ H1.3.2B:\ revoked,\ on\ 30\ June\ 2008,\ by\ regulation\ 6\ of\ the\ Building\ Amendment\ Regulations\ (No\ 2)\ 2007\ (SR\ 2007/226).$ 

Schedule 1 clause H1.3.2C: revoked, on 30 September 2008, by regulation 7(1) of the Building Amendment Regulations (No 2) 2007 (SR 2007/226).

Schedule 1 clause H1.3.2C: inserted, on 30 June 2008, by regulation 6 of the Building Amendment Regulations (No 2) 2007 (SR 2007/226).

Schedule 1 clause H1.3.2D: revoked, on 30 September 2008, by regulation 7(1) of the Building Amendment Regulations (No 2) 2007 (SR 2007/226).

 $Schedule\ 1\ clause\ H1.3.2D:\ inserted,\ on\ 30\ June\ 2008,\ by\ regulation\ 6\ of\ the\ Building\ Amendment\ Regulations\ (No\ 2)\ 2007\ (SR\ 2007/226).$ 

Schedule 1 clause H1.3.2E: inserted, on 30 September 2008, by regulation 7(1) of the Building Amendment Regulations (No 2) 2007 (SR 2007/226).

Schedule 1 clause H1.3.4: substituted, on 1 February 2009, by regulation 5 of the Building (Building Code: Energy Efficiency of Domestic Hot Water Systems) Amendment Regulations 2008 (SR 2009/256).

Schedule 1 clause H1.3.6: added, on 1 February 2009, by regulation 6 of the Building (Building Code: Energy Efficiency of Temperature, Humidity, and Ventilation Systems) Amendment Regulations 2008 (SR 2008/97).



# Publications Referenced in Handbook and Compliance Documents

For the purposes of New Zealand Building Code compliance, acceptable reference documents include only the quoted edition and specific amendments as listed below.

Dates in brackets indicate that the Standard was reviewed and reissued without change that year.

Compliance Documents in which the particular references are quoted are identified by the relevant Building Code Clause and the number of the Verification Method or Acceptable Solution.

For example: B1/VM1/AS3 indicates that the reference occurs in Verification Method 1, and Acceptable Solution 3 of the Compliance Document for Clause B1 Structure.

Where references are quoted in the Compliance Schedule Handbook, these are identified by the letters HB and the relevant section. For example: HB/SS 3 indicates that the reference occurs in the content guide for SS 3 in the Compliance Schedule Handbook.

Places where the reference documents are quoted, are more specifically identified by paragraph or table, in the reference list contained in each Compliance Document.

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# Standards New Zealand NZS/BS 21: 1985 Specification for pipe threads for tubes and fittings

where pressure-tight joints are made on the threads (metric dimensions)

Amend: 1

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Where quoted

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		Where quoted
NZS/BS 476:- Part 20: 1987	Fire tests on building materials and structures  Method for determination of the fire resistance of elements of construction (general principles)  Amend: 6487	<b>C</b> /AS1 <b>C</b> /AS1
Part 21: 1987	Methods for determination of the fire resistance of loadbearing elements of construction	<b>C</b> /AS1
Part 22: 1987	Methods for determination of the fire resistance of non-loadbearing elements of construction	<b>C</b> /AS1
NZS/BS 970:-	Specification for wrought steels for mechanical and allied engineering purposes	
Part 1: 1991	General inspection and testing procedures and specific requirements for carbon, carbon manganese, alloy and stainless steels  Amend: 1	<b>E1</b> /AS1
NZS 1170: Part 5: 2004	Structural Design Actions Earthquake design actions – New Zealand standard	<b>B1</b> /VM1, <b>G12</b> /AS2
AS/NZS 1170: Part 0: 2002	Structural Design Actions General principles Amends: 1, 2 and 4	<b>B1</b> /VM1/AS1/VM4, <b>C</b> /AS1, <b>G12</b> /AS2 <b>G10</b> /AS1
Part 1: 2002	Permanent, imposed and other actions  Amend: 1	<b>B1</b> /VM1/AS1/VM4, <b>G12</b> /AS2
Part 2: 2002	Wind Actions Amend: 1	<b>B1</b> /VM1/AS1/VM4, <b>G12</b> /AS2
Part 3: 2003	Snow and ice actions  Amend: 1	<b>B1</b> /VM1/AS1/VM4, <b>G12</b> /AS2
AS/NZS 1221: 1997	7 Fire hose reels Amend: 1	<b>C</b> /AS1
AS/NZS 1254: 200	2 Unplasticised PVC pipes and fittings for storm and surface water applications	<b>E1</b> /AS1
AS/NZS 1260: 200	2 PVC pipes and fittings for drain, waste and vent applications	SH/AS1
AS/NZS 1260: 200	9 PVC-U Pipes and fittings for drain, waste and vent application	E1/AS1, G13/AS1/AS2, G14/VM1
NZS/BS 1387: 198 (1990)	5 Specification for screwed and socketed steel tubes and tubulars and for plain end steel tubes suitable for welding or screwing to BS 21 pipe threads Amend: 1	<b>G10</b> /AS1, <b>G12</b> /AS1, <b>G14</b> /VM1
AS 1397: 2001	Steel sheet and strip – Hot-dipped zinc-coated or aluminium/zinc-coated	<b>E1</b> /AS1
AS/NZS 1477: 200	6 PVC pipes and fittings for pressure applications  Amend: 1	<b>G12</b> /AS1, <b>G14</b> /VM1
AS/NZS 1530:- Part 3: 1999	Methods for fire tests on building materials, components and structures Simultaneous determination of ignitability, flame propagation, heat release and smoke release	<b>C</b> /AS1

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Amend 12 Oct 2011	AS/NZS 1546: 200 Part 1:	08 On-site domestic wastewater treatment units Septic tanks	<b>G14</b> /VM1
	AS/NZS 1547: 200	00 On-site domestic wastewater management	<b>G13</b> /VM4
	AS/NZS 1604: Part 3: 2002	Specification for preservative treatment Plywood	SH/AS1
	AS/NZS 1646: 200	77 Elastomeric seals for waterworks purposes	<b>G13</b> /AS2
Amend 11 Sep 2010	NZS/AS 1657: 199	2 Fixed platforms, walkways, stairways and ladders – Design, construction and installation (known as the SAA Code for fixed platforms, walkways, stairways, and ladders)	<b>D1</b> /AS1
	AS/NZS 1664:- Part 1: 1997	Aluminium structures Limit state design Amend: 1	<b>B1</b> /VM1
Amend 11 Sep 2010	AS/NZS 1668:-	The use of ventilation and air conditioning in buildings	
	Part 1: 1998	Fire and smoke control in multi-compartment buildings	<b>C</b> /AS1, <b>F7</b> /AS1
Amend 11 Sep 2010	AS/NZS 1680: Part 1: 2006	Interior and workplace lighting General principles and recommendations	<b>F6</b> /AS1
· 	AS/NZS 1730: 199	96 Washbasins	<b>G1</b> /AS1
Amend 12 Oct 2011	AS/NZS 1734: 19	97 Aluminium and aluminium alloys – Flat sheet, coiled sheet and plate	E1/AS1, E2/AS1 SH/AS1
	AS/NZS 1748: 199	7 Timber – Stress graded – Product requirements for mechanically stress-graded timber	<b>B1</b> /VM1
Amend 11 Sep 2010	AS/NZS 1859 Part 1: 2002	Reconstituted wood-based panels Particleboard	SH/AS1
Amend 12	AS/NZS 1905:-	Components for the protection of openings in fire-resistant walls	
Oct 2011	Part 1: 1997	Fire-resistant doorsets	<b>HB</b> /SS 15
		95 Baths for ablutionary purposes	<b>G1</b> /AS1
	AS/NZS 2032: 200	06 Installation of PVC pipe systems  Amend: 1	<b>B1</b> /AS1, <b>E1</b> /AS1, <b>G12</b> /AS1, <b>G13</b> /AS1/AS2/AS3,
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	AS/NZS 2269: 200	4 Plywood – Structural	SH/AS1	
	AS/NZS 2269: 200	8 Plywood – Structural	<b>E2</b> /AS1	Modified 1 Aug 2011
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	AS/NZS 2699:	Built-in components for masonry construction.	SH/AS1	
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Amend 12 Oct 2011	AS/NZS 2728: 2007	7 Prefinished/prepainted sheet metal products for interior/exterior building applications	<b>E2</b> /AS1, <b>SH</b> /AS1
Amend 11 Sep 2010		– Performance requirements	
Amend 12 Oct 2011	AS/NZS 2845:- Part 1: 2010	Water supply Materials, design and performance requirements	<b>G12</b> /AS1
	AS/NZS 2904: 1995	5 Damp-proof courses and flashings	<b>E2</b> /AS1
Amend 11 Sep 2010	AS/NZS 2908: Part 2: 2000	Cellulose-cement products Flat sheet	<b>E2</b> /AS1, <b>SH</b> /AS1
	AS/NZS 2918: 200 <sup>-2</sup>	1 Domestic solid fuel burning appliances – installation	<b>B1</b> /AS3 <b>C</b> /AS1, <b>SH</b> /AS1
	AS/NZS 3000: 200	7 Electrical installations Amend: 1	<b>G9</b> /VM1/AS1
	NZS 3101:- Part 1: 2006	Concrete structures standard The design of concrete structures Amend: 1, 2	<b>B2</b> /AS1 <b>B1</b> /VM1
	NZS 3106: 2009	Design of concrete structures for the storage of liquids	<b>B1</b> /VM1, <b>G14</b> /VM1
Amend 11 Sep 2010	NZS 3109: 1997	Specification for concrete construction  Amend: 1, 2	<b>B1</b> /AS3, <b>SH</b> /AS1
Amend 11 Sep 2010	NZS 3112:- Part 2: 1986	Methods of test for concrete Tests relating to the determination of strength of concrete  Amend: 1, 2	<b>B1</b> /AS3
	NZS 3114: 1987	Specification for concrete surface finishes  Amend: 1	<b>D1</b> /AS1, <b>G15</b> /AS1
Amend 12 Oct 2011	NZS 3116: 2002	Concrete segmental and flagstone paving Amend: 1	<b>D1</b> /AS1
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Amend 11	AS/NZS 3350.2.35:	1999 Safety of household and similar electrical appliances – Particular requirements – Instantaneous water heaters  Amends: 1, 2	<b>G12</b> /AS1, <b>SH</b> /AS1
Sep 2010	NZS 3404:- Part 1: 1997	Steel structures standard Steel structures standard Amend: 1, 2	<b>B1</b> /VM1



			Where quoted
	AS/NZS 3500:- Part 1: 2003	National plumbing and drainage code Water services	<b>G12</b> /VM1/AS1
	Part 2: 2003	Amend: 1 Sanitary plumbing and drainage Amend: 1	<b>G13</b> /AS1/VM2/AS2/ AS3
Amend 11 Sep 2010	Part 4: 2003	Heated water services  Amend: 1	<b>G12</b> /VM1/AS1/AS2
	Part 5: 2003	Domestic installation	SH/AS1
	NZS 3501: 1976	Specification for copper tubes for water, gas, and sanitation  Amend: 1, 2 and 3	G10/AS1, G13/AS1/AS2 G12/AS1
	NZS 3502: 1976	Specification for copper and copper alloy tubes for general engineering purposes	<b>G10</b> /AS1
Amend 11 Sep 2010	AS/NZS 3518: 200	04 Acrylonitrile butadiene styrene (ABS) compounds pipes and fittings for pressure applications	<b>G13</b> /AS2, <b>G14</b> /VM1
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	NZS/BS 3601: 198 (1993)	7 Specification for carbon steel pipes and tubes with specified room temperature properties for pressure purposes  Amend: 1, 2	<b>G10</b> /AS1
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	Part 1: 2003	Timber and wood-based products for use in building	<b>B2</b> /AS1, <b>E2</b> /AS1 <b>SH</b> /AS1
	NZS 3603: 1993	Timber structures standard  Amend: 1, 2 (Applies to building work consented prior to 1 April 2007)	<b>B1</b> /VM1/VM4
		Amend: 1, 2, 4 (Applies to building work consented on or after 1 April 2007)	SH/AS1
	NZS 3604: 1990	Timber framed buildings	<b>G12</b> /AS2
Amend 12 Oct 2011	NZS 3604: 1999	Timber framed buildings  Amend: 1, 2	<b>B2</b> /AS1, <b>E1</b> /AS1, <b>G12</b> /AS2, <b>G13</b> /AS2, <b>SH</b> /AS1
	NZS 3604: 2011	Timber framed buildings	<b>B1</b> /AS1/AS3, <b>E2</b> /VM1/AS1/AS2 <b>G12</b> /AS2
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	NZS 3605: 2001	Timber piles and poles for use in building	<b>B1</b> /VM4, <b>SH</b> /AS1
Amend 11 Sep 2010	NZS 3617: 1979	Specification for profiles of weatherboards, fascia boards, and flooring	<b>E2</b> /AS1, <b>SH</b> /AS1
Amend 11 Sep 2010	NZS 3622: 2004	Verification of timber properties  Amend: 1	<b>B1</b> /VM1, <b>SH</b> /AS1



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	NZS 3631: 1988	New Zealand timber grading rules	SH/AS1
Amend 12 Oct 2011	NZS 3640: 2003	Chemical preservation of round and sawn timber  Amend: 1, 2	<b>B1</b> /VM4
Amend 11 Sep 2010	NZS 3640: 2003	Chemical preservation of round and sawn timber Amend: 4	SH/AS1
Amend 12 Oct 2011	NZS 3640: 2003	Chemical preservation of round and sawn timber Amend: 1, 2, 3, 4	<b>B2</b> /AS1
I	AS/NZS 3661:- Part 1: 1993 Part 2: 1994	Slip resistance of pedestrian surfaces Requirements Guide to the reduction of slip hazards	<b>D1</b> /VM1/AS1 <b>D1</b> /AS1
Amend 11 Sep 2010	AS/NZS 3666:-	Air-handling and water systems of buildings	
Amend 11   Sep 2010	Part 1: 2002	Microbial Control  Design, installation and commissioning  Operation and maintaneous	<b>G4</b> /AS1
Amend 11   Sep 2010	Part 2: 2002 Part 3: 2000	Operation and maintenance Performance-based maintenance of cooling water systems	<b>G4</b> /AS1, <b>HB</b> /SS 9 <b>HB</b> /SS 9
Amend 11 Sep 2010	NZS/AS 3725: 200	7 Design for installation of buried concrete pipes	<b>B1</b> /VM1
	AS/NZS 3837: 1998	8 Method of test for heat and smoke release rates for materials and products using an oxygen consumption calorimeter	<b>C</b> /AS1
Amend 11 Sep 2010	AS/NZS 3869: 199	9 Domestic solid fuel burning appliances –  Design and construction	<b>B1</b> /AS3
	AS/NZS 3896: 1998	8 Waters – Examination for legionellae including Legionella pneumophila  Amend: 1	HB/SS 9
Amend 12 Oct 2011 Amend 11 Sep 2010	AS/NZS 4020: 200	5 Testing of products for use in contact with drinking water	<b>E2</b> /AS1, <b>G12</b> /AS1
	AS/NZS 4058: 200	7 Pre cast concrete pipes(pressure and non-pressure)	<b>B1</b> /VM1, <b>E1</b> /AS1, <b>G13</b> /AS2, <b>G14</b> /VM1
Amend 11 Sep 2010	NZS 4121: 2001	Design for access and mobility – Buildings and associated facilities	<b>D1</b> /AS1, <b>G1</b> /AS1, <b>G5</b> /AS1, <b>SH</b> /AS1
Amends 11 and 12	AS/NZS 4129: 200	8 Fillings for polyethylene (PE) pipes for pressure applications	<b>G12</b> /AS1, <b>G14</b> /VM1
Amend 12 Oct 2011	AS/NZS 4130: 200	3 Polyethylene (PE) pipe for pressure applications  Amend: 1	<b>E1</b> /AS1
, , , , ,	AS/NZS 4130: 200	9 Polyethylene (PE) pipe for pressure applications  Amend: 1	<b>G12</b> /AS1, <b>G13</b> /AS2, <b>G14</b> /VM1
Amend 12 Oct 2011 Amend 11 Sep 2010	AS/NZS 4200: Part 1: 1994	Pliable building membranes and underlays Materials Amend: 1	SH/AS1



Amend 12 Oct 2011			Where quoted
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Amend 11 Sep 2010	NZS 4203: 1992	Code of practice for general structural design and design loadings for buildings  Corrigendum: 1	<b>G12</b> /AS2
	NZS 4206: 1992	Concrete interlocking roofing tiles	<b>E2</b> /AS1, <b>SH</b> /AS1
Amend 11 Sep 2010	NZS 4210: 2001	Code of practice for masonry construction: materials and workmanship  Amend: 1	<b>B1</b> /AS3, <b>SH</b> /AS1
Amend 11 Sep 2010	NZS 4211: 1985	Specification for performance of windows  Amend: 1, 2, 3	SH/AS1
	NZS 4211: 2008	Specification for performance of windows	<b>B1</b> /VM1, <b>E2</b> /VM1/AS1
Amend 12 Oct 2011 Amend 11	NZS 4214: 2006	Methods of determining the total thermal resistance of parts of buildings	<b>E3</b> /AS1, <b>G5</b> /AS1, <b>H1</b> /VM1/AS1
Sep 2010	NZS 4217:-	Pressed metal tile roofs	
Amend 11 Sep 2010	Part 1: 1980 Part 2: 1980	Specification for roofing tiles and their accessories Code of practice for preparation of the structure and the laying and fixing of metal roofing tiles	E2/AS1, SH/AS1 E2/AS1, SH/AS1
Amend 11 Sep 2010	NZS 4218: 2004	Energy efficiency – housing and small building envelope	<b>H1</b> /VM1/AS1
Amends 11 and 12	NZS 4219: 1983	Specification for seismic resistance of engineering systems in buildings  Amend: 1, 2	<b>G10</b> /AS1, <b>G14</b> /VM1
Amend 12 Oct 2011	NZS 4219: 2009	Specification for seismic resistance of engineering systems in buildings	<b>B1</b> /VM1
	NZS 4223:-	Code of practice for glazing in buildings	
	Part 1: 2008	Glass selection and glazing	<b>B1</b> /AS1, <b>SH</b> /AS1
Amend 11 Sep 2010	Part 2: 1985	The selection and installation of manufactured sealed insulating glass units  Amend: 1, 2	<b>B1</b> /AS1, <b>SH</b> /AS1
ا ا	Part 3: 1999	Human impact safety requirements	<b>B1</b> /AS1, <b>F2</b> /AS1, <b>SH</b> /AS1
Amend 11 Sep 2010	Part 4: 2008	Wind, dead, snow, and live actions	<b>B1</b> /AS1, <b>SH</b> /AS1
	NZS 4229: 1999	Concrete masonry buildings not requiring specific engineering design  Amend: 1	<b>B1</b> /AS1/AS3, <b>E1</b> /AS1, <b>G13</b> /AS2



			Where quoted
Amend 11 Sep 2010	NZS 4230: 2004	Design of reinforced concrete masonry structures Amend: 1	<b>B1</b> /VM1
	NZS 4231: 1985	Specification for self-luminous exit signs  Amend: A	<b>F8</b> /AS1
	NZS 4232:- Part 2: 1988	Performance criteria for fire resisting enclosures Fire resisting glazing systems	<b>HB</b> /SS 15 <b>C/</b> AS1
	NZS HB 4236: 200	02 Masonary veneer wall cladding	<b>E2</b> /AS1
	NZS 4239: 1993	Automatic sliding door assemblies  Amend: A	HB/SS 3
Amend 11 Sep 2010	NZS 4243: Part 1: 2007 Part 2: 2007	Energy efficiency – large buildings Building thermal envelope Lighting	<b>H1</b> /VM1/AS1 <b>H1</b> /VM1/AS1
	NZS 4246: 2006	Energy efficiency – Installing insulation in residential buildings	<b>SH</b> /AS1
Amend 12 Oct 2011	NZS 4251:- Part 1: 2007	Solid plastering Cement plaster for walls, ceilings and soffits	<b>B1</b> /AS1, <b>B2</b> /AS1, <b>E2</b> /AS1
Amend 11 Sep 2010	AS/NZS 4256: Part 2: 1994	Plastic roof and wall cladding materials Unplasticized polyvinyl chloride (uPVC) building sheets	<b>E2</b> /AS1, <b>SH</b> /AS1
Amend 12 Oct 2011	AS/NZS 4284: 200	8 Testing of building facades	<b>E2</b> /VM1
	NZS 4297: 1998	Engineering design for earth buildings	<b>B1</b> /VM1, <b>B2</b> /AS1
Amend 11	NZS 4298: 1998	Materials and workmanship for earth buildings  Amend: 1	<b>E2</b> /AS2
Sep 2010   Amend 11   Sep 2010	NZS 4299: 1998	Earth buildings not requiring specific design  Amend: 1	<b>B1</b> /AS1, <b>B2</b> /AS1, <b>E2</b> /AS2
	NZS 4303: 1990	Ventilation for acceptable indoor air quality	<b>G4</b> /AS1
Amend 11 Sep 2010	NZS 4304: 2002	Health care waste management	<b>G15</b> /AS1
	NZS 4305: 1996	Energy efficiency – domestic type hot water systems	<b>H1</b> /AS1
	AS/NZS 4331: 199 Part 1:	Steel flanges	<b>G10</b> /AS1, <b>G14</b> /VM1
Amend 11 Sep 2010	Part 2: Part 3:	Cast iron flanges Copper alloy and composite flanges	<b>G10</b> /AS1, <b>G14</b> /VM1 <b>G14</b> /VM1
	NZS 4332: 1997	Non-domestic passenger and goods lifts	<b>D2</b> /AS1, <b>F6</b> /AS1, <b>HB</b> /SS 8
Amend 11 Sep 2010	AS/NZS 4401: 200	16 High density polyethylene (PE-HD) pipes and fittings for soil and waste discharge (low and high temperature) systems inside buildings	<b>G13</b> /AS1, <b>G14</b> /VM1



			Where quoted
	NZS 4402:- Part 2:-	Methods of testing soils for civil engineering purposes Soil classification tests	<b>B1</b> /VM1
Amend 11   Sep 2010	Test 2.2: 1986 Test 2.6: 1986 Part 4:-	Determination of the liquid limit Determination of the linear shrinkage Soil compaction tests	<b>B1</b> /Defs, <b>SH</b> /AS1 <b>B1</b> /Defs
	Test 4.2.3: 1988	Related densities	<b>B1</b> /VM4
Amend 11 Sep 2010	NZS 4431: 1989	Code of practice for earth fill for residential development  Amend: 1	<b>B1</b> /VM1, <b>E2</b> /AS2 <b>SH</b> /AS1
	NZS 4442: 1988	Welded steel pipes and fittings for water, sewage and medium pressure gas	E1/AS1, G13/AS2, G14/VM1
	AS/NZS 4455: 199	97 Masonry units and segmental pavers	SH/AS1
	AS/NZS 4456: 200	Masonry unit and segmental pavers –  Methods of test  Amend: 1, 2	SH/AS1
	NZS 4503: 2005	Hand operated fire fighting equipment	<b>C</b> /AS1
Amend 11 Sep 2010			
Amend 12 Oct 2011 Amend 11 Sep 2010	NZS 4510: 2008	Fire hydrant systems for buildings  Amend: 1	<b>C</b> /AS1, <b>HB</b> /SS 6
	NZS 4512: 2010	Fire detection and alarm systems in buildings	<b>C</b> /AS1, <b>HB</b> /SS 2, <b>HB</b> /SS 15, <b>F7</b> /AS1
	NZS 4515: 2009	Fire sprinkler systems for life safety in sleeping occupancies (up to 2000 m²)	<b>C</b> /AS1, <b>HB</b> /SS 1, <b>F7</b> /AS1
	NZS 4520: 2010	Fire resistant doorsets	<b>C</b> /AS1
Amend 12 Oct 2011	AS/NZS 4534: 2000	6 Zinc and zinc/aluminium-alloy coatings on steel wire	<b>E2</b> /AS1
	NZS 4541: 2007	Automatic fire sprinkler systems  Amend: 1	<b>C</b> /AS1, <b>F7</b> /AS1 <b>HB</b> /SS 1
	AS/NZS 4586: 200	04 Slip resistance classification of new pedestrian surface materials	SH/AS1
Amend 11 Sep 2010	AS/NZS 4600: 2009	5 Cold-formed steel structures	<b>B1</b> /VM1
	NZS 4602: 1988	Low pressure copper thermal storage electric water heaters  Amend: 1	<b>G12</b> /AS1
Amend 11   Sep 2010	NZS 4603: 1985	Installation of low pressure thermal storage electric water heaters with copper cylinders (open vented systems)  Amend: 1	<b>G12</b> /AS1, <b>SH</b> /AS1



		1	Where quoted
	NZS 4606:-	Storage water heaters	
Amend 11 Sep 2010	Part 1: 1989	General requirements	<b>G12</b> /AS1, <b>SH</b> /AS1
Amend 11 Sep 2010	Part 2: 1989	Amend: 1, 2, 3 Specific requirements for water heaters with single shells	SH/AS1
Amend 11 Sep 2010	Part 3: 1992	Amend: A  Specific requirements for water heaters with composite shells  Amend: A	<b>G12</b> /AS1, <b>SH</b> /AS1 <b>G12</b> /AS1
	NZS 4607: 1989	Installation of thermal storage electric water heaters: valve vented systems	<b>G12</b> /AS1
	NZS 4608: 1992	Control valves for hot water systems	<b>G12</b> /AS1
1	NZS 4613: 1986	Domestic solar water heaters	<b>G12</b> /AS1/AS2
Amend 11 Sep 2010	NZS 4614: 1986	Installation of domestic solar water heating systems	<b>G12</b> /AS2
	NZS 4617: 1989	Tempering (3-port mixing) valves	<b>G12</b> /AS1
Amend 11   Sep 2010	AS/NZS 4671: 200	01 Steel reinforcing materials	SH/AS1
Amend 12 Oct 2011	AS/NZS 4671: 200	01 Steel Reinforcing Materials  Amend: 1	<b>B1</b> /AS1/AS3
Amend 12 Oct 2011	AS/NZS 4680: 20	06 Hot-dip galvanised (zinc) coating on fabricated ferrous articles	<b>B1</b> /AS3, <b>E2</b> /AS1, <b>SH</b> /AS1
	AS/NZS 4692: Part 2: 2005	Electric water heaters  Minimum Energy Performance Standards (MEPS) requirements and energy labelling	<b>G12</b> /AS2
Amend 11	AS/NZS 4740: 2000	Natural ventilaters – classification and performance	<b>G4</b> /AS1
Sep 2010 I	AS/NZS 4765: 20	07 Modified polyvinyl chloride (PVC-M) pipes for pressure applications	<b>G14</b> /VM1
	AS/NZS 4858: 200	04 Wet area membranes	<b>E2</b> /AS1
	AS/NZS 4859:- Part 1: 2002	Materials for the thermal insulation of buildings General criteria and technical provisions	<b>H1</b> /AS1
	AS/NZS 4936: 200	O2 Air admittance valves for use in sanitary plumbing and drainage systems.	<b>G13</b> /AS1, <b>SH</b> /AS1
Amend 11 Sep 2010	AS/NZS 5000.1 20	005 Electric cables – Polymeric insulated – For working voltages up to and including 0.6/1 (1.2) kV Amend: 1	<b>G12</b> /AS1
	AS/NZS 5000.2 20	006 Electric cables – Polymeric insulated Part 2: For working voltages up to and including 450/750 v.	<b>G12</b> /AS1
Amend 12 Oct 2011	AS/NZS 5065: 2009	5 Polyethylene and polypropylene pipe and fittings for drainage and sewerage applications  Amend: 1	E1/AS1, G13/AS2



			Where quoted
I	NZS/BS 5252: 1976	6 Framework for colour co-ordination for building purposes  Amend: 1	<b>F8/</b> AS1
	NZS 5261: 2003	Gas installation  Amend: 1, 2	C/AS1, G4/AS1, G10/VM1/AS1, G11/AS1, SH/AS1
Amend 11 Sep 2010	NZS 5262: 2003	Gas appliance safety  Amend: 1	SH/AS1
	NZS 5807:-	Code of practice for industrial identification by	
	Part 2: 1980	colour, wording or other coding Identification of contents of piping, conduit and ducts Amend: 1, 2	<b>G10</b> /AS1 <b>G12</b> /AS1
Amend 12 Oct 2011			
Amend 11 Sep 2010	NZS 6214: 1988	Thermostats and thermal cutouts for domestic thermal storage electric water heaters (alternating current only)	<b>G12</b> /AS1
Amends 11 and 12	NZS 6703: 1984	Code of practice for interior lighting design	<b>G7</b> /AS1/VM1 <b>G8</b> /VM1
Amend 11 Sep 2010	NZS 6742: 1971	Code of practice for emergency lighting in buildings	<b>F8</b> /AS1, <b>HB</b> /SS 4
Amend 11 Sep 2010	NZS 7601: 1978	Specification for polyethylene pipe (Type 3) for cold water services	<b>G12</b> /AS1, <b>G14</b> /VM1
Amend 11 Sep 2010	NZS 7602: 1977	Specification for polyethylene pipe (Type 5) for cold water services  Amend: 1	<b>G12</b> /AS1
Amend 11 Sep 2010	NZS 7610: 1991	Blue polyethylene pipes up to nominal size 63 for below ground use for potable water <i>Amend: 1, 2, A</i>	<b>G12</b> /AS1
	NZS 7646: 1978	Specification for polyethylene pipes and fittings for gas reticulation	<b>G10</b> /AS1
	SNZ HB 8630: 200	9 Tracks and outdoor visitor structures	<b>B1</b> /VM1
Amend 11 Sep 2010	AS/NZS 60335 Part 2.30: 2009	Household and similar electrical Safety appliance – Particular requirements for room heaters	SH/AS1



			Where quoted
	Standards Austr	alia	
	AS D26: 1972	Tube fittings with Dryseal American standard taper pipe and unified threads for automotive and industrial use	<b>G10</b> /AS1
Amend 12 Oct 2011			
	AS 1111:	ISO metric hexagon bolts and screws – Product grades A and B	SH/AS1
Amend 11 Sep 2010	Part 1: 2000 Part 2: 2000	Bolts Screws	
Amend 11 Sep 2010	AS 1167:- Part 1: 2005	Welding and brazing – Filler metals Filler metal for brazing and braze welding	<b>G10</b> /AS1
Amend 12   Oct 2011	AS 1214: 1983	Hot-dip galvanised coatings on threaded fasteners (ISO metric coarse thread series)	SH/AS1
Amend 12 Oct 2011	AS 1229: 2002	Laundry troughs	<b>G2</b> /AS1
Amend 11 Sep 2010			
	AS 1273: 1991	Unplasticized PVC (uPVC) downpipe and fittings for rainwater	<b>E1</b> /AS1
	AS 1308: 1987	Electric water heaters – Thermostats and thermal cut-outs <i>Amend:</i> 1	<b>G12</b> /AS1
Amend 11 Sep 2010	AS 1357:- Part 1: 2009 Part 2: 2005	Water valves for use with unvented water heaters Protection valves <i>Amend: 1, 2</i> Control valves <i>Amend: 1, 2</i>	<b>G12</b> /AS1 <b>G12</b> /AS1
	AS 1366:- Part 1: 1992	Rigid cellular plastics sheets for thermal insulation Rigid cellular polyurethane (RC/PUR)  Amend: 1	<b>C</b> /AS1
	Part 2: 1992 Part 3: 1992	Rigid cellular polyisocyanurate (RC/PIR) Rigid cellular polystyrene – moulded (RC/PS-M)  Amend: 1	<b>C</b> /AS1 <b>C</b> /AS1, <b>E2</b> /AS1
	Part 4: 1989	Rigid cellular polystyrene – extruded (RC/PS-E)	<b>C</b> /AS1, <b>E2</b> /AS1
Amends 11 and 12	AS 1397: 2001	Steel sheet and strip – Hot-dip zinc-coated or aluminium/zinc-coated	<b>B1</b> /AS3, <b>E2</b> /AS1, <b>SH</b> /AS1
	AS 1432: 2004	Copper tubes for plumbing, gasfitting and drainage applications	<b>G10</b> /AS1
Amend 12 Oct 2011			
Amend 11 Sep 2010			



			Where quoted
	AS 1530:-	Methods for fire tests on building materials,	
Amend 11	De v. 1, 1004	components and structures	0/404
Sep 2010	Part 1: 1994 Part 2: 1993	Combustibility test for materials  Test for flammability of materials	<b>C</b> /AS1 <b>C</b> /AS1
Amend 12 Oct 2011	Part 4: 2005	Fire-resistance tests of elements of building construction	<b>C</b> /AS1
	AS 1566: 1997	Cooper and copper alloys – Rolled flat products	<b>E2</b> /AS1
Amend 11 Sep 2010	AS 1579: 2001	Arc welded steel pipes and fittings for water and waste water	E1/AS1, G13/AS2
Amend 11 Sep 2010	AS 1589: 2001	Copper and copper alloy waste fittings	<b>G13</b> /AS1
	AS 1646: 2007	Elastomeric seals for waterworks purposes	<b>E1</b> /AS1
	AS 1668:-	The use of mechanical ventilation and air-	<b>G4</b> /AS1
Amend 12 Oct 2011	Part 2: 2002	conditioning in buildings  Ventilation design for indoor-air containment control  Amend: 1, 2	<b>G4</b> /AS1
	AS 1670:-	Fire detection, warning, control and intercom systems  – System design, installation and commissioning	
	Part 6: 1997	Smoke alarms	<b>F7</b> /AS1
	AS 1691: 1985	Domestic oil-fired appliances – installation	C/AS1
Amend 11 Sep 2010	AS 1741: 1991	Vitrified clay pipes and fittings with flexible joints – Sewerage quality	<b>E1</b> /AS1, <b>G14</b> /VM1
Amend 11			
Sep 2010	AS 1804: 1976	Soft lead sheet and strip	<b>E2</b> /AS1, <b>SH</b> /AS1
	AS 1851: 2005	Maintenance of fire protection equipment	<b>HB</b> /SS 1, SS 2, SS 5, SS 9, SS 13, SS 15
Amend 12 Oct 2011	AS 1976: 1992	Vitreous china used in sanitary appliances	<b>G1</b> /AS1
	AS 2033: 2008	Installation of polyethylene pipe systems	<b>G14</b> /VM1, <b>E1</b> /AS1
Amend 11 Sep 2010	AS 2049: 2002	Roof tiles	<b>E2</b> /AS1, <b>SH</b> /AS1
	AS 2050: 2002	Installation of roof tiles	<b>E2</b> /VM1
Amend 12 Oct 2011	AS 2159: 1995	Rules for the design and installation of piling (known as the SAA Piling Code)  Amend: 1	<b>B1</b> /VM4
	AS 2220:-	Emergency warning and intercommunication systems in buildings	
	Part 1: 1989 Part 2: 1989	Equipment design and manufacture System design, installation and commissioning	<b>C</b> /AS1 <b>C</b> /AS1



			Where quoted
Amend 11   Sep 2010   Amend 12   Oct 2011	AS 2293: Part 1: 2005	Emergency escape lighting and exit signs for buildings System design, installation and operation  Amend: 1	<b>F6</b> /AS1
Amend 12   Oct 2011	Part 2: 1995	Inspection and maintenance  Amend: 1,2	<b>F6</b> /AS1
Amend 12   Oct 2011	Part 3: 2005	Emergency escape luminaires and exit signs  Amend: 1	<b>F6</b> /AS1
	AS 2845:-	Water supply – Mechanical backflow prevention devices	
Amend 12   Oct 2011	Part 3: 1993	Field testing and maintenance  Amend: 1	<b>G12</b> /AS1, <b>HB</b> /SS 7
Amend 11 Sep 2010	AS 2870: 1996	Residential slabs and footings – Construction	SH/AS1
	AS 2887: 1993	Plastic waste fittings	<b>G13</b> /AS1
	AS 2890:- Part 1: 2004	Parking facilities Off-street parking Amend: 1	<b>D1</b> /AS1
Amend 12 Oct 2011	Part 2: 2002	Off-street commercial facilities  Amend: 1	<b>D1</b> /AS1
Amend 11 Sep 2010	AS 3566 Part 2: 2002	Self-drilling screws for the building and construction industries  Corrosion resistance	<b>E2</b> /AS1, <b>SH/</b> AS1
	AS 3571: 2009	Plastic piping systems – Glass reinforced thermoplastics (GRP) systems based on unsaturated polyester (UP) resin – pressure and non-pressure drainage and sewerage (ISO 10467: 2004 MOD)	<b>G13</b> /AS2
Amend 12 Oct 2011	AS 3588: 1996	Shower bases and shower modules	<b>G1</b> /AS1
Amend 12	AS 3688: 2005	Water supply – Copper and copper alloy compression and capillary fittings and threaded end connectors	<b>G10</b> /AS1
Oct 2011   Amends		Amend: 1,2	
11 and 12	AS 3690: 2009	Installation of ABS pipe systems	<b>G14</b> /VM1
Amend 11   Sep 2010	AS 3706:- Part 1: 2003	Geotextiles – Methods of test General requirements, sampling, conditioning, basic physical properties and statistical analysis	<b>E1</b> /VM1
Amend 11 Sep 2010	AS 3730  Part 6: 1991  Part 7: 1992  Part 8: 1992  Part 9: 1992  Part 10: 1992	Guide to the properties of paints for buildings Solvent-borne – Exterior – Full gloss enamel Latex – Exterior – Flat Latex – Exterior – Low gloss Latex – Exterior – Semi-gloss Latex – Exterior – Gloss	<b>SH/</b> AS1



			Where quoted
ĺ	AS 3730	Guide to the properties of paints for buildings	<b>E2</b> /AS1
	Part 6: 2006	Solvent-borne – Exterior – Full gloss enamel	<b>E2</b> /AS1
	Part 7: 2006	Latex – Exterior – Flat	<b>E2</b> /AS1
	Part 8: 2006	Latex – Exterior – Low gloss	<b>E2</b> /AS1
	Part 9: 2006	Latex – Exterior – Semi-gloss	<b>E2</b> /AS1
Amend 12 Oct 2011	Part 10: 2006	Latex – Exterior – Gloss	<b>E2</b> /AS1
	AS 3786: 1993	Smoke alarms	<b>F7</b> /AS1
Amend 12   Oct 2011		Amend: 1, 2, 3, 4	
Amend 11 Sep 2010			
	AS 4046	Methods of testing roof tiles	
Amend 12 Oct 2011	Part 9: 2002	Determination of dynamic weather resistance	<b>E2</b> /AS1
	AS 4072:-	Components for the protection of openings in	<b>C</b> /AS1
		fire-resistant separating elements	
	Part 1: 2005	Service penetrations and control joints	<b>C</b> /AS1
Amend 12 Oct 2011			
Amend 11 Sep 2010	AS 4139: 2003	Fibre reinforced concrete pipes and fittings	<b>G13</b> /AS2
	AS 4178: 1994	Electromagnetic door holders	HB/SS 3
	AS 4276:-		
Amend 12 Oct 2011	Part 3.1: 2007	Water plate microbiology – Pour plate method using plate count agar	<b>HB</b> /SS 9
	AS 4290: 2000	Design and installation of revolving doors  Amend: 1, 2	HB/SS 3
	AS 5007: 2007	Powered doors for pedestrian access and egress	<b>HB</b> /SS 3
Amend 12 Oct 2011	AS 60188.4: 2007	Hearing aids – magnetic field strength in audio- frequency induction loops for hearing aid purposes	<b>HB</b> /SS 12



			Where quoted
	British Standards	Institution	
Amend 12   Oct 2011	BS 10: 2009	Specification for flanges and bolting for pipes, valves and fittings	<b>G10</b> /AS1
	BS 143,		
Amend 12 Oct 2011	and BS 1256: 2000	Threaded pipe fittings in malleable cast iron and cast copper alloy  Amend: 1, 2, 3, 4	<b>G10</b> /AS1, <b>G14</b> /VM1
	BSDD 175: 1988	Code of practice for the identification of potentially contaminated land and its investigation	<b>F1</b> /VM1
Amend 11   Sep 2010	BS 437: 2008	Specification for cast iron spigot and socket drain pipes and fittings  Amend: 5877	<b>G13</b> /AS2
	BS 585:- Part 1: 1989	Wood stairs Specification for stairs with closed risers for domestic use, including straight and winder flights and quarter or half landings	<b>D1</b> /AS1
ı	BS EN 988: 1997	Zinc and zinc alloys. Specification for rolled flat products for building	<b>E2</b> /AS1
	BS EN 1044:1999	Brazing. Filler metals	<b>G10</b> /AS1
Amend 12 Oct 2011	BS EN 1172: 1997	Copper and copper alloys – sheet and strip for building	<b>E1</b> /AS1
	BS EN 1490: 2000	Building valves. Combined temperature and pressure relief valves. Tests and requirements	<b>G12</b> /AS1
	BS EN 1491: 2000	Building valves. Expansion valves. Tests and requirements	<b>G12</b> /AS1
	BS EN 1567: 1999	Building valves. Water pressure reducing valves and combination water reducing valves.  Requirements and tests.	<b>G12</b> /AS1
Amend 11 Sep 2010	BS EN 1595: 1997	Pressure equipment made from borosilicate glass 3.3 – general rules for design, manufacture and testing	<b>G14</b> /VM1
Amend 12 Oct 2011			



			Where quoted
	BS EN 1759 Part 1: 2004	Flanges and their joints. Circular flanges for pipes, valves, fittings and accessories, class-designated. Steel flanges, NPS 1/2 to 24.	<b>E1</b> /AS1
Amend 11 Sep 2010			
Amend 11 Sep 2010			
Amend 12 Oct 2011 Amend 11	BS 2971: 1991	Specification for Class II arc welding of carbon steel pipework for carrying fluids	<b>G14</b> /VM1
Sep 2010   Amend 12   Oct 2011	BS 3402: 1969	Specification for quality of vitreous china sanitary appliances	<b>G1</b> /AS1
	BS 3799: 1974 (1994)	Specification for steel pipe fittings, screwed and socket-welding for the petroleum industry	<b>G10</b> /AS1
Amend 11 Sep 2010	BS 4790: 1996	Method for determination of the effects of a small source of ignition on textile floor coverings (hot metal nut method)	<b>C</b> /AS1
Amend 11 Sep 2010	BS 4991: 1974 (19	982) Specification for propylene copolymer pressure pipe	<b>G14</b> /VM1
30p 2010	BS 5287: 1996	Specification for assessment and labelling of textile floor coverings tested to BS 4790	<b>C</b> /AS1
	BS 5378:- Part 1: 1980	Safety signs and colours Specification for colour and design	<b>F8</b> /AS1
	BS 5395:- Part 2: 1984	Stairs, ladders and walkways Code of practice for the design of helical and spiral stairs	<b>D1</b> /AS1
	BS 5446:-	Components of automatic fire alarm systems for residential premises	
I	Part 1: 1990	Specification for self-contained smoke alarms and point-type smoke detectors  Amends: 6863, 7648, 9628	<b>F7</b> /AS1
Amend 11 Sep 2010	DC 6027.	Code of practice for the Diappine decima installation	
Amer		Code of practice for the Planning, design, installation and use of permanently installed access equipment Suspended access equipment Travelling ladders and gantries	<b>HB</b> /SS 10 <b>HB</b> /SS 10
Sep	2010		

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			Where quoted
	BS 6374:-	Lining of equipment with polymeric materials for the process industries	
	Part 1: 1985 Part 2: 1984	Specification for lining with sheet thermoplastics Specification for lining with non-sheet applied	<b>G14</b> /VM1 <b>G14</b> /VM1
	Part 3: 1984	thermoplastics Specification for lining with stoved thermosetting resins	<b>G14</b> /VM1
	Part 4: 1984	Specification for lining with cold curing thermosetting resins	<b>G14</b> /VM1
	Part 5: 1985	Specification for lining with rubbers	<b>G14</b> /VM1
	BS 6464: 1984	Specification for reinforced plastics pipes, fittings and joints for process plants	<b>G14</b> /VM1
I	BS 6538: 1987 Part 3: 1987	Air permeanence of paper and board  Method for determination of air permeanence using the Garley apparatus	<b>E2</b> /AS1
	BS 6920:-	Suitability of non-metallic products for use in contact with water intended for human consumption with regard to their effect on the quality of the water	
	Part 1: 2000	Specification	<b>G12</b> /AS1
Amend 11	Part 2: 2000	Methods of tests	<b>G12</b> /AS1
Sep 2010	Part 3: 2000	High temperature tests	<b>G12</b> /AS1
Amend 12 Oct 2011			
	BS 7159: 1989	Code of practice for design and construction of glass-reinforced plastics (GRP) piping systems for individual plants or sites	<b>G14</b> /VM1
	BS 7777: 1993	Flat bottomed, vertical, cylindrical storage tanks for low temperature service Part 1: Guide to the general provisions applying for design, construction and installation Part 2: Specification for design and construction of single, double and full containment metal tanks for the storage of liquified gas at temperatures down to –165°C Part 3: Recommendations for the design and construction of prestressed and reinforced	<b>G14</b> /VM1
Amend 11 Sep 2010		concrete tanks and tank foundations and for the design and installation of tank insulation, tank lines and tank coating	
	BS 8004: 1986	Code of practice for foundations	<b>B1</b> /VM4
Amend 11 Sep 2010	BS EN 10241: 200	0 Steel threaded pipe fittings	<b>G10</b> /AS1
Amend 12 Oct 2011	BS EN 10253-2: 20	2007 Butt-welding pipe fittings – non-alloy and ferric alloy steels with specific inspection requirements	<b>G10</b> /AS1



			Where quoted
Amend 12 Oct 2011	BS EN 10253-3: 20	2008 Butt-welding pipe fittings – wrought austenitic and austenitic-ferritic (duplex) stainless steels without specific inspection requirements	<b>G10</b> /AS1
Amend 11 Sep 2010	BS EN 12056-2: 20	000 Gravity drainage systems inside buildings. Sanitary pipework, layout and calculation	<b>G13</b> /VM1
Amend 12 Oct 2011	BS EN 12285: Part 1: 2003	Workshop fabricated steel tanks Horizontal cylindrical single skin and double skin tanks for the underground storage of flammable and non-flammable water polluting liquids	<b>G14</b> /VM1
	Part 2: 2005	Horizontal cylindrical single skin and double skin tanks for the aboveground storage of flammable and non-flammable water polluting liquids	<b>G14</b> /VM1
	BS EN 12585: 199	9 Glass plant, pipeline and fittings – Pipeline and fittings DN 15 to 1000 – compatibility and interchangeability	<b>G14</b> /VM1
Amend 12   Oct 2011	BS EN 13121-3: 20	008 GRP tanks and vessels for use above ground.  Design and workmanship  Amend: 1 (2010)	<b>G14</b> /VM1
Amend 11 Sep 2010	BS EN 14324: 200	4 Brazing. Guidance on the application of brazed joints	<b>G10</b> /AS1
	New Zealand Pub	olications	
	Building Research	h Association of New Zealand	
Amend 11 Sep 2010	_	h Association of New Zealand  80: 1995 Thin flooring materials – 2. Preparation and laying.  Appendix 1	<b>E2</b> /AS1, <b>SH</b> /AS1
	BRANZ Bulletin 33	80: 1995 Thin flooring materials – 2. Preparation and laying.	E2/AS1, SH/AS1  E2/AS1, SH/AS1
Sep 2010   Amend 11	BRANZ Bulletin 33  BRANZ Bulletin 41  BRANZ EM 4: 200	80: 1995 Thin flooring materials – 2. Preparation and laying.  Appendix 1	
Sep 2010   Amend 11	BRANZ Bulletin 33 BRANZ Bulletin 41 BRANZ EM 4: 200	30: 1995 Thin flooring materials – 2. Preparation and laying.  Appendix 1  1: 2001 Recommended timber cladding profiles  5 Evaluation method for jointing systems for flush	<b>E2</b> /AS1, <b>SH</b> /AS1
Sep 2010   Amend 11	BRANZ Bulletin 33  BRANZ Bulletin 41  BRANZ EM 4: 200  BRANZ EM 5: 200	80: 1995 Thin flooring materials – 2. Preparation and laying.  Appendix 1  1: 2001 Recommended timber cladding profiles  5 Evaluation method for jointing systems for flush finished fibre cement sheet  5 Evaluation method for adhesives and seam tapes	<b>E2</b> /AS1, <b>SH</b> /AS1 <b>E2</b> /AS1
Amend 11 Sep 2010	BRANZ Bulletin 33  BRANZ Bulletin 41  BRANZ EM 4: 200  BRANZ EM 5: 200  BRANZ EM 6: 201	80: 1995 Thin flooring materials – 2. Preparation and laying.  Appendix 1  1: 2001 Recommended timber cladding profiles  15 Evaluation method for jointing systems for flush finished fibre cement sheet  15 Evaluation method for adhesives and seam tapes for butyl and EPDM rubber membranes  11 Evaluation method for window and door support	E2/AS1, SH/AS1 E2/AS1 E2/AS1
Amend 11 Sep 2010	BRANZ Bulletin 33  BRANZ Bulletin 41  BRANZ EM 4: 200  BRANZ EM 5: 200  BRANZ EM 6: 201  BRANZ House Ins	80: 1995 Thin flooring materials – 2. Preparation and laying.  Appendix 1  1: 2001 Recommended timber cladding profiles  55 Evaluation method for jointing systems for flush finished fibre cement sheet  15 Evaluation method for adhesives and seam tapes for butyl and EPDM rubber membranes  11 Evaluation method for window and door support mechanisms or bars	E2/AS1, SH/AS1 E2/AS1 E2/AS1 E2/AS1
Amend 11   Sep 2010   Amend 12   Oct 2011   Amend 11	BRANZ Bulletin 33  BRANZ Bulletin 41  BRANZ EM 4: 200  BRANZ EM 5: 200  BRANZ EM 6: 201  BRANZ House Ins  BRANZ Paper C1:	80: 1995 Thin flooring materials – 2. Preparation and laying.  Appendix 1  1: 2001 Recommended timber cladding profiles  5 Evaluation method for jointing systems for flush finished fibre cement sheet  5 Evaluation method for adhesives and seam tapes for butyl and EPDM rubber membranes  11 Evaluation method for window and door support mechanisms or bars  ulation Guide: 1995  1978 A construction guide to home insulation	E2/AS1, SH/AS1 E2/AS1 E2/AS1 E2/AS1 E3/AS1, SH/AS1
Amend 11   Sep 2010   Amend 12   Oct 2011   Amend 11	BRANZ Bulletin 33  BRANZ Bulletin 41  BRANZ EM 4: 200  BRANZ EM 5: 200  BRANZ EM 6: 201  BRANZ House Ins  BRANZ Paper C1:  BRANZ Technical	80: 1995 Thin flooring materials – 2. Preparation and laying.  Appendix 1  1: 2001 Recommended timber cladding profiles  15 Evaluation method for jointing systems for flush finished fibre cement sheet  15 Evaluation method for adhesives and seam tapes for butyl and EPDM rubber membranes  11 Evaluation method for window and door support mechanisms or bars  12 ulation Guide: 1995  1978 A construction guide to home insulation (second edition)  13 paper P21: 1991 A wall bracing test and	E2/AS1, SH/AS1 E2/AS1 E2/AS1 E2/AS1 E3/AS1, SH/AS1 E3/AS1



BRANZ Evaluation Method EM1 Structural joints – strength and stiffness evaluation

SH/AS1

Where quoted

ALF 3: The 'Annual Loss Factor' Method. A design tool for energy efficient houses, 3<sup>rd</sup> edition (April 2000)

Albrecht Stoecklein and Mark Bassett

H1/Defs

Cement & Concrete Association of New Zealand

CCANZ CP01: 2011 Code of Practice for weathertight concrete and concrete masonry construction

**E2**/AS3

Master Plumbers, Gasfitters and Drainlayers NZ Inc and Water New Zealand

**G12**/AS1, **HB**/SS 7

NZ Backflow testing standard 2011AS1 3.6.1 b), 3.7.2 Field testing of backflow prevention devices and verification of air gaps

**New Zealand Metal Roofing Manufacturers Inc** 

New Zealand Metal Roof and Wall Cladding Code of Practice: 2008

**E2**/AS1

The National Association of Steel Framed Housing Inc (NASH)

NASH Standard: Residential and Low Rise Steel Framing Part 1 2010 Design Criteria **B1**/AS1

Amend 12 Oct 2011

#### **Government Departments and Agencies**

# **Department of Labour**

Workplace exposure standards and biological indices for New Zealand: 1992

F1/VM1, G4/VM1

#### Ministry of Agriculture and Fisheries

MQ 1: 1988 Qual approvals manual

**G3/**AS1

# **Ministry of Economic Development**

NZECP 34: 2001 Electrical safety distances

NZECP 36: 1993 Harmonic levels

NZECP 51: 2004 Homeowner/occupier's electrical wiring work

G9/VM1

G9/AS1

Installation of recessed luminaires and auxiliary

equipment

**C**/AS1, **G9**/AS1

#### Ministry of Health

NZECP 54: 2001

Ministry of Health: 2005 Drinking Water Standards for New Zealand SH/AS1

Ministry of Health: 2006 Household water supplies: the selection, SH/AS1

operation and maintenance of individual

household water supplies

in domestic installations

Amend 11 Sep 2010



Where quoted

		Timoro quotou
	Ministry of Transport	
	Power Lift Rules: 1989	<b>D2</b> /AS2, <b>HB</b> /SS 8
	Rules for power lifts not exceeding 750 watts (one horsepower): 1985	<b>D2</b> /AS2, <b>HB</b> /SS 8
	SCION	
Amend 12 Oct 2011	Measurement of moisture content of wood	<b>E2</b> /AS1
	National Institute of Water and Atmospheric Research Ltd (NIWA)	
Amend 11	Temperature Normals for New Zealand 1961-1990	H1/Defs
Sep 2010	by A I Tomlinson and J Sansom (ISBN 0478083343)	
Amend 12		
Oct 2011	New Zealand Legislation	
Amend 11 Sep 2010	Chartered Professional Engineers of New Zealand Act 2002	<b>B1</b> /VM1
	Fencing of Swimming Pools Act 1987	<b>F4</b> /AS1
Amend 12 Oct 2011	Fire Safety and Evacuation of Buildings Regulations 2006	<b>C</b> /AS1
	Gas Regulations 1993	<b>G12</b> /AS1
	Hazardous Substances and New Organisms Act 1996	<b>F3</b> /VM1
	Hazardous Substances (Classification) Regulations 2001	<b>F3</b> /VM1
	Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001	<b>F3</b> /VM1
	Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004	<b>F3</b> /VM1
Amend 11 Sep 2010	Hazardous Substances (Disposal) Regulations 2001	<b>G14</b> /VM1
	Hazardous Substances (Emergency Management) Regulations 2001	<b>F3</b> /VM1
	Health & Safety in Employment Act 1992	HB/SS 9
Amend 11 Sep 2010	Plumbers, Gasfitters, and Drainlayers Act 2006	SH/AS1
	Resource Management Act 1991	<b>E1</b> /VM1, <b>G14</b> /VM1
Amend 11 Sep 2010	Resource Management (National Environment Standards relating to certain Pollutants, Dioxins and other Toxins) Regulations: 2004 (NESAQ)	SH/AS1
	New Zealand Geomechanics Society	
	Guidelines for the field descriptions of soils and rocks in engineering use. Nov 1988	<b>B1</b> /VM1
Amend 12 Oct 2011	Australian Publications	
	Building Control Commission, State of Victoria, Australia	
	Smoke management in large spaces in buildings: 1998 Milke and Klote	<b>C</b> /AS1



Australia/NZ Pub	plications	Where quoted	
Australian and N	lew Zealand Environment and Conservation		
Guidelines for assistes: 1992	essment and management of contaminated	<b>F1</b> /VM1	
British Publicatio	British Publications		
Building Researc	h Establishment (UK)		
	n sheet DAS 131: May 1989 Combustible external plastics insulation: parriers	<b>C</b> /AS1	
•	1988 ce of external thermal insulation for walls in ildings. Rogowski B.F., Ramaprasad R., Southern J.R.	<b>C</b> /AS1	
BRE Report 186: Design principle Morgan and Ga	es for smoke ventilation in enclosed shopping centres.	<b>C</b> /AS1	
BRE Report 258: Design approac Hansell and Mo	ches for smoke control in atrium buildings.	<b>C</b> /AS1	
Chartered Institu	ition of Building Services Engineers, London		
CIBSE Code Serie Air distribution s		<b>G4</b> /VM1/AS1	
International Pub	olications		
EIFS Industry Me	embers Association		
EIMA 101.91: 199	2 Standard Guide for resin of resin coated glass fibre mesh in exterior insulation and finish systems (EIFS), Class PB.	<b>E2</b> /AS1	
The European Co	ommittee for Standardisation		
EN 81:-  Part 1: 1998  Part 2: 1998	Safety rules for the construction and installation of lifts Electric lifts Hydraulic lifts	<b>D2</b> /AS1, <b>HB</b> /SS 8 <b>D2</b> /AS1, <b>HB</b> /SS 8	
EN 115: 1983	Safety rules for the construction of escalators and passenger conveyors	<b>D2</b> /AS3, <b>HB</b> /SS 8	
EN 12380: 1999	Air admittance valves for drainage systems  – Requirements and test methods	<b>G13</b> /AS1	
Eurocode DD ENV			
Eurocode 1:	Basis of design actions on structures		



# International Standards Organisation, Geneva

ICBO Evaluation Services Inc AC148: Acceptance criteria for

flashing materials

ISO 140/VII: 1978 Field measurements of impact sound insulation

of floors

**E2**/AS1

Where quoted

**G6**/VM1

Amend 11 Sep 2010

ISO 9223: 1992 Corrosion of metals and alloys; corrosivity of

atmospheres; classification

Amend 11 | ISO 11600: 2002 Building Construction – Jointing products

Classification and requirements for sealants

Amend 11 So/TS 15510: 2003 Stainless steels – chemical composition

**E2**/AS1

**E2/AS1, SH/AS1** 

**E2/AS1, SH/AS1** 

Amend 12 Oct 2011

# World Health Organisation/Food and Agriculture Organisation

Environmental Health Criteria 70

"Environment health criteria" for various chemicals

Evaluation of certain food additives and contaminants, Technical report series 776

Geneva: 1989

IARC Monographs on the evaluation of carcinogenic risks to humans for individual chemicals, groups of chemicals, or processes. Published by the International Agency for Research on Cancer

Principles for the safety assessment of food additives and contaminants in food,

Geneva: 1987

**F1**/VM1

**F1**/VM1

**F1**/VM1

**F1**/VM1



			Where quoted
	United States of	America Publications	
Amend 11			
Sep 2010 I	American Nationa	al Standards Institute and	
	American Society	of Mechanical Engineers	
	ANSI/ASME B16.1	: 1989 Cast iron pipe flanges and flanged fittings, Class 25, 125, 250 and 800	<b>G10</b> /AS1
Amend 11 Sep 2010	ANSI/ASME B16.3	: 1985 Malleable-iron threaded fittings, Classes 150 and 300	<b>G10</b> /AS1
Amend 11 Sep 2010	ANSI/ASME B16.5	: 1988 Pipe flanges and flanged fittings, steel-nickel alloy and other special alloys	<b>G10</b> /AS1
	ANSI/ASME B16.9	: 1990 Factory-made wrought steel butt-welding fittings	<b>G10</b> /AS1
A	ANSI B16.11: 1980	Forged steel fittings, socket-welding and threaded	<b>G10</b> /AS1
Amend 11 Sep 2010	American Petrole	um Institute	
	API SPEC 5L: 1991	1 Specification for line pipe	<b>G10</b> /AS1
Amend 11 Sep 2010	API STD 1104: 198	38 Welding of pipelines and related facilities	<b>G10</b> /AS1
	American Society Conditioning Eng	of Heating, Refrigeration and Air ineers (ASHRAE)	
	Design of smoke r	nanagement systems. Klote and Milke 1992	<b>C</b> /AS1
	American Society	of Sanitary Engineers	
	ASSE 1050: 1991	Performance requirements for air admittance valves for plumbing DWV systems stack type devices	<b>G13</b> /AS1
	ASSE 1051: 1992	Performance requirements for air admittance valves for plumbing drainage systems	<b>G13</b> /AS1
	American Society	for Testing and Materials	
Amend 11 Sep 2010	ASTM A 53 – 90a	Specification for pipe, steel, black and hot-dipped, zinc-coated welded and seamless	<b>G10</b> /AS1
	ASTM A 106 – 91a	Specification for seamless carbon steel pipe for high temperature service	<b>G10</b> /AS1
Amend 12 Oct 2011			



		Where quoted
	ASTM D 1143: 1981 Test method for piles under static axial compressive load	<b>B1</b> /VM4
Amend 12 Oct 2011		
Amends   11 and 12	ASTM C 1549: 2009 Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer	SH/AS1
	ASTM C 1549: 2009 Standard Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer	<b>E2</b> /AS1
Amend 12 Oct 2011	ASTM D 1667: 2005 Standard Test Specification for Flexible Cellular  Materials – Vinyl Chloride Polymers and Capolymers (Closed-cell foam)	<b>E2</b> /AS1
	ASTM D 2240: 2005 Standard Test method for Rubber Property	<b>E2</b> /AS1
Amend 12 Oct 2011	ASTM D 6134: 1997 Standard Specification for Vulcanised Rubber Sheets Used in Waterproofing Systems	SH/AS1
Amend 11   Sep 2010	ASTM D 6134: 2007 Standard Specification for Vulcanised Rubber Sheets Used in Waterproofing Systems	<b>E2</b> /AS1
Amend 12 Oct 2011	ASTM E 96: 1992 Standard test methods for water vapour transmission of materials	SH/AS1
	ASTM E 96: 2005 Standard test methods for water vapour transmission of materials	<b>E2</b> /AS1
Amend 12 Oct 2011	ASTM E104: 2002 Standard Practice for Maintaining Constant Relative Humidity by Means of Aqueous Solutions	<b>E2</b> /AS1
	ASTM E 336: 1990 Method for measurement of airborne sound insulation in buildings	<b>G6</b> /VM1
	ASTM E 413: 1987 Classification for rating sound insulation	<b>G6</b> /VM1
	ASTM E 492: 1990 Test method for laboratory measurement of impact sound transmission through floor-ceiling assemblies using a tapping machine	<b>G6</b> /VM1
Amends 10 and 11	ASTM E 903: 1996 Standard Test Method for Solar Absorbance, Reflectance, and Transmittance of Materials Using Integrating Spheres	SH/AS1
	ASTM E 989: 1989 Classification for determination of impact insulation class (IIC)	<b>G6</b> /VM1
	ASTM E 2098: 2000 Standard Test Method for Determining Tensile  Breaking Strength of Glass Fibre Reinforcing Mesh for Use in Class PB Exterior Insulation and Finish Systems (EIFS), after Exposure to a Sodium Hydroxide Solution	<b>E2</b> /AS1



			Where quoted
	ASTM E 2134: 200	O1 Standard Test Method for Evaluation the Tensile- Adhesion Performance of an Exterior Insulation amd Finish System (EIFS)	<b>E2</b> /AS1
Amend 12 Oct 2011	ASTM G 154: 200	6 Standard Practice for Operating Fluorescent Light Apparatus for UV Exposure of Nonmetallic Materials	<b>E2</b> /AS1
Amend 12 Oct 2011	ASTM G 155: 200	5 Standard Practice for Operating Xenon Arc Light Apparatus for UV Exposure of Nonmetallic Materials	<b>E2</b> /AS1
	International Con		
	Uniform Building (	Code Standard 4.1: 1997  Proscenium fire safety curtains	<b>C/</b> AS1
	Uniform Building (	Code Standard 26-2: 1997  Test method for the evaluation of thermal barriers	<b>C</b> /AS1
	National Fire Pro		
Amend 11   Sep 2010	NFPA 92B: 1995	Guide for smoke management systems in malls, atria and large areas	<b>C</b> /AS1
	NFPA 285: 1998	Standard method of test for the evaluation of flammability characteristics of exterior non load bearing wall assemblies containing components using the intermediate scale, multi-storey test apparatus	<b>C</b> /AS1
	United States En	vironmental Protection Agency (EPA)	
Amend 11   Sep 2010	USEPA SW 846: 1986 Test methods for evaluating solid waste		<b>F1</b> /VM1
	EPA/540/1 – 89/002: 1989 Risk assessment guidance for Superfund, Vol 1. Human health evaluation manual (Part A) Interim final. Prepared by USEPA Office of Emergency and Remedial Response		<b>F1</b> /VM1
	Federal Specification Standard TT-S-00230C: Elastomeric type, cold applied single component for caulking, sealing, and glazing in buildings, building areas (plazas, decks, pavements, and other structures)		<b>E2</b> /AS1, <b>SH</b> /AS1
	Cross-connection Control Manual: 1989		HB/SS 7



# **United States Public Health Service**

Toxicological profiles on individual chemicals. Prepared by the Agency for Toxicological Substances and Disease Registry, in collaboration with the US Environmental Protection Agency

# **Miscellaneous Publication**

Casarett and Doull's Toxicology. The basic science of poisons. 4th ed. Macmillan. New York 1991. Klassen CD, Amdur MO, Doull J (Eds)

# Where quoted

**F1**/VM1

**F1**/VM1



# **Definitions**

Many of the definitions in this section come from the Building Act 2004, regulations, including the Building Code, and Compliance Documents. Although every effort has been made to ensure definitions are accurate at the time of publication, it is possible that definitions may become out of date as changes occur to the legislation and Compliance Documents. In the event there is any discrepancy between the definitions in this section and the definitions in the legislation or Compliance Documents, the definitions in the legislation and Compliance Documents will prevail.

Note that some legislation and Compliance Documents may contain different definitions for the terms listed below. When using particular legislation or a Compliance Document, reference should be made to the definitions provided in that document.

#### Source Key:

**BA04** Building Act 2004

**BR1** Building Regulations 1992

BR2 Building (Specified Systems, Change the Use, and Earthquake-prone Buildings)

Regulations 2005

**Code** New Zealand Building Code

**EA** Electricity Act 1992 **FSA** Fire Service Act 1975

**HB** Handbook

**HSNOA** Hazardous Substances and New Organisms Act 1996

**LGA** Local Government Act 1974 or 2002

**PGDA** Plumbers, Gasfitters, and Drainlayers Act 1976

**RA** Railway Act 2005

**RMA** Resource Management Act 1991

CD-(Code clause) Compliance Document for given Code clause (eg, CD-G13)

**DG** Builidng Consent Authority Development Guide

Amend 11 Sep 2010

Dofinition

**Simple House** Simple House Acceptable Solution

Definition	Source
A	
Abutment The part of the valley side against which the dam is constructed.	DG
<b>Acceptable risk</b> The level of risk the public is prepared to accept without further management. The risk is the combination of the probability and the consequence of a specified hazardous event.	DG
<b>Acceptable Solution</b> means a solution that must be accepted as complying with the <i>Building Code</i> .	BA04
<b>Access chamber</b> A chamber with working space at <i>drain</i> level through which the <i>drain</i> passes either as an open channel or as a pipe incorporating an <i>inspection point</i> .	CD-E1, CD-G13
<b>Access point</b> A place where access may be made to a <i>drain</i> or <i>discharge pipe</i> for inspection, cleaning or maintenance; and may include a <i>cleaning eye</i> , <i>inspection point</i> , <i>rodding point</i> , <i>inspection chamber</i> or <i>access chamber</i> .	CD-G13
Access route A continuous route that permits people and goods to move	Code

Cauraa

a building, and between spaces within a building.

between the apron or construction edge of the building to spaces within



Definition	Source
Accessible Having features to permit use by people with disabilities.	Code
Accessible route An access route usable by people with disabilities. It shall be a continuous route that can be negotiated unaided by a wheelchair user. The route shall extend from street boundary or car parking area to those spaces within the building required to be accessible to enable people with disabilities to carry out normal activities and processes within the building.	Code
<b>Accessible stairway</b> A <i>stairway</i> having features for use by a <i>person with</i> a <i>disability. Buildings</i> required to be <i>accessible</i> shall have at least one <i>accessible</i> stairway leading off an <i>accessible</i> route whether or not a lift is provided.	CD-C
<b>Accreditation certificate</b> means a certificate that was issued by the Building Industry Authority under the Building Act 1991.	НВ
COMMENT:  Accreditation certificates have become product certificates under the Building Act 2004 and are subject to the product certification scheme under the Building Act 2004.	
<b>Active conductor</b> Any conductor in which the electrical potential differs from that of a neutral conductor or earth.	CD-F8
Adequate means Adequate to achieve the objectives of the Building Code.	Code
<b>Adjacent building</b> A nearby <i>building</i> , including an adjoining <i>building</i> , whether or not erected on <i>other property</i> .	Code
<b>Air gap</b> The vertical distance through air between the lowest point of the water supply outlet and the <i>flood level rim</i> of the equipment or the <i>fixture</i> into which the outlet discharges.	CD-G12
<b>Air admittance valve</b> A valve that allows air to enter but not to escape in order to limit pressure fluctuations within the sanitary plumbing or drainage system.	CD-G13
<b>Air seal</b> A continuous seal fitted between a window or door reveal and the surrounding wall <i>framing</i> to prevent the flow of air into the interior of the <i>building</i> .	CD-E2
Allotment has the meaning given to it by section 10 of the Building Act 2004.	BA04
Section 10 states: "(1) In this Act, unless the context otherwise requires, allotment means	

- "(1) In this Act, unless the context otherwise requires, **allotment** means a parcel of land—
  - (a) that is a continuous area of land; and
  - (b) whose boundaries are shown on a survey plan, whether or not as a subdivision—
    - (i) approved by way of a subdivision consent granted under the Resource Management Act 1991; or
    - (ii) allowed or granted under any other Act; and
  - (c) that is-
    - (i) subject to the Land Transfer Act 1952 and comprised in 1 certificate of title or for which 1 certificate of title could be issued under that Act; or
    - (ii) not subject to that Act and was acquired by its owner under 1 instrument of conveyance



Definition Source (2) For the purposes of subsection (1), an allotment is taken— (a) to be a continuous area of land even if part of it is physically separated from any other part by a road or in any other manner, unless the division of the allotment into those parts has been allowed by a subdivision consent granted under the Resource Management Act 1991 or a subdivision approval under any former enactment relating to the subdivision of land: (b) to include the balance of any land from which any allotment is being or has been subdivided." **BA04** Alter in relation to a building, includes to rebuild, re-erect, repair, enlarge and extend the building. Alternative solution means a solution that is compliant with the Building Code HB but is not part of the Compliance Document. Aluminium flashings Aluminium flashings shall be a minimum thickness Simple House of 0.7 mm, and formed from 5000 series in accordance with AS/NZS 1734 and, where pre-painted, have a factory-applied finish complying with AS/NZS 2728. Aluminium-zinc coated steel flashings Aluminium-zinc coated steel Simple House flashings shall be: (a) BMT 0.55 mm minimum of steel for flashings generally (b) BMT 0.4 mm of steel for roll-formed roll-top ridge flashings (c) in aluminium-zinc coating of AZ150 to AS 1397, with a factory-applied finish in accordance with AS/NZS 2728 Type 4, and in sea spray zone and corrosion zone 1 the factory-applied finish shall be Type 5 minimum. Amenity means an attribute of a building which contributes to the health, Code physical independence, and well being of the building's users but which is not associated with disease or a specific illness. CD-E2 Anti-ponding board A board laid under the lowest row of concrete and clay roof tiles and supports the roof underlay. The board is sloped to ensure moisture under the tiles is directed to the exterior of the roof. **Appliance hearth** A layer of *non-combustible* material under or near an CD-C appliance. It may be either part of the building structure or an overlay on a combustible floor. **Approved temperature data** means the temperature data contained in Code CD-H1 A I Tomlinson and J Sansom, Temperature Normals for New Zealand for period 1961 to 1990 (NIWA, ISBN 0478083343). **Appurtenant structure**, in relation to a dam, means a structure that is integral **BA04** to the proper functioning of the dam. **Apron flashing** A near flat or sloping *flashing* with a vertical upstand, CD-E2

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used at junctions between roofs and walls.



Asbestos as defined by the Health and Safety in Employment (Asbestos) Regulations 1983 means:

CD-F2

- (a) Actinolite, amosite, chrysotile, crocidolite, fibrous anthophyllite, or tremolite; or
- (b) A mixture containing a mineral specified in paragraph a) of this definition; or
- (c) A material that is composed wholly or partly of any such mineral; or
- (d) A material or article that is contaminated by any such material.

Asbestos now has the meaning given to it by Regulation 2 of the Health and Safety in Employment (Asbestos) Regulations 1998. This meaning is:

- (a) Amosite, chrysotile, crocidolite, fibrous actinolite, fibrous anthophyllite, or fibrous tremolite; or
- (b) A mixture containing a mineral specified in paragraph (a); or
- (c) A material that is composed wholly or partly of a mineral specified in paragraph (a); or
- (d) A material or article that is contaminated by a mineral specified in paragraph (a):

Atmospheric burner A burner system where all the air for combustion is induced by the inspirating effect of a gas injector and/or by natural draught in the combustion chamber without mechanical assistance.

CD-G4

Attached garage A garage that shares a common wall or walls with a habitable building, and is enclosed by roof and wall claddings that are continuous

CD-E2

with the habitable part of the building.

Authority means the Building Industry Authority that was established under the Building Act 1991.

HB

#### COMMENT:

The Authority was dissolved under the Building Act 2004 and its functions and powers transferred to the Department of Building and Housing.

### В

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# Backcountry hut means a building that-

Code

- (a) is located on land that is administered by the Department of Conservation for conservation, recreational, scientific, or other related purposes, including any land administered under any of the following:
  - (i) the Conservation Act 1987:
  - (ii) the National Parks Act 1980:
  - (iii) the Reserves Act 1977; and
- (b)is intended to provide overnight shelter to any person who may visit and who carries his or her own food, bedding, clothing, and outdoor equipment; and
- (c) contains only basic facilities, which may include (but are not limited to) any or all of the following:
  - (i) sleeping platforms or bunks:
  - (ii) mattresses:
  - (iii) food preparation surfaces:

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Source

	Definition	Source
	(iv)appliances for heating:	
	(v) appliances for cooking:	
	(vi)toilets; and	
	(d)has been certified by the Director-General as being in a location that wheelchair users are unlikely to be able to visit; and	
	(e)is intended to be able to sleep—	
	(i) no more than 20 people in its backcountry hut sleeping area; and	
	(ii) no more than 40 people in total; and	
	(f) does not contain any connection, except by <i>radiocommunications</i> , to a <i>network utility operator</i> ]	
	<b>Backcountry hut sleeping area</b> means the area of a backcountry hut that contains sleeping platforms, bunks, or beds that are—	Code
	(a) within the same room as a food preparation or eating area; or	
	(b)in a fully enclosed room that is separate from any food preparation or eating area and has—	
	(i) internal walls that limit the spread of fire; and	
Amend 11 Sep 2010	(ii) the means of direct egress to outside the hut.	
	<b>Backflow</b> A flowing back or reversal of the normal direction of the flow caused by <i>back-pressure</i> and includes <i>back-siphonage</i> .	CD-C
	Backflow prevention device A device that prevents backflow.	CD-C, CD-G12
Amend 11 Sep 2010	<b>Backing rod</b> Closed cell polyethylene foam (PEF) rod inserted into gap to provide backing support for foam <i>air seal</i> or <i>sealant</i> .	Simple House
	<b>Back-pressure</b> A <i>backflow</i> condition caused by the downstream pressure becoming greater than the supply pressure.	CD-G12
	<b>Back-siphonage</b> <i>Backflow</i> condition caused by the supply pressure becoming less than the downstream pressure.	CD-G12
	<b>Baluster</b> A post providing the support for the top and bottom rails of a barrier.	CD-B1, CD-B2
Amend 11 Sep 2010	<b>Baluster</b> An infil member that provides support for the top and bottom rails of a barrier.	Simple House
	Balustrade The infill parts of a barrier (typically between floor and top rail).	CD-B2, CD-F4
	Basement Any firecell or part of a firecell below the level of the lowest final exit.	CD-C
	COMMENT:  Because <i>fire safety precautions</i> are increased with increases in <i>escape height</i> , the precautions for <i>basements</i> increase with <i>basement</i> depth. Thus a single floor <i>building</i> with one <i>basement</i> level is treated as a two floor <i>building</i> , a single floor <i>building</i> with three <i>basement</i> levels as a four floor <i>building</i> and the requirements of C/AS1 Table 4.1 shall be applied downwards as opposed to upwards for levels above ground.	
	Base metal thickness (BMT) The thickness of the bare or base metal before	CD-E2
A 1 d d	any subsequent coating, such as galvanizing.	
Amend 11   Sep 2010	Batten See ceiling batten, tile batten.	Simple House



Definition	Source
<b>Bird's beak</b> A double fold applied to the edge of a horizontal metal <i>flashing</i> to stiffen the edge and to assist in deflecting moisture away from the <i>cladding system</i> below. Refer also <i>Kick-out</i> and <i>Drip edge</i> .	CD-E2
COMMENT:  A bird's beak is used at the bottom of a capping to deflect water away from the enclosed balustrade cladding.	
<b>Blocking</b> Solid timber having the same depth as the joists and set at right angles between the joists to stiffen and prevent them from buckling.	Simple House
<b>Bond</b> , <b>running</b> or <b>stretcher</b> The <i>bond</i> when the units of each course overlap the units in the preceding course by between 25% and 75% of the length of the units.	Simple House
<b>Bottom plate</b> A plate placed under the bottom end of <i>studs</i> .	Simple House
<b>Boundary</b> means any <i>boundary</i> which is shown on a survey plan approved by the Chief Surveyor and which is deposited in the Titles Office whether or not a new title has been issued.	CD-C
<b>Boundary joist</b> A joist running along the outer ends of the floor joists.	CD-B1
<b>Bracing</b> Any method employed to provide lateral support to a <i>building</i> .	Simple House
<b>Bracing capacity</b> Strength of <i>bracing</i> of a whole <i>building</i> or of elements within a <i>building</i> . <i>Bracing capacity</i> is measured in <i>bracing units</i> (BUs).	Simple House
<b>Bracing demand</b> The horizontal forces to be resisted by a whole <i>building</i> or by an element within a <i>building</i> . These horizontal forces are a result of wind or earthquake action. <i>Bracing demand</i> forces are measured in <i>bracing units</i> (BUs).	Simple House
<b>Bracing line</b> A line along or across a <i>building</i> containing <i>wall bracing elements</i> .	Simple House
<b>Bracing rating</b> The lateral load resistance assigned, for example, to a <i>wall bracing</i> system.	Simple House
Bracing unit (BU) A bracing unit is a measure of:	Simple House
(a) the horizontal force ( <i>bracing demand</i> ) on the <i>building</i> (1 kiloNewton is equal to 20 bracing units)	
(b) the resistance to horizontal force (bracing capacity) of building elements.	
<b>Branch discharge pipe</b> A <i>discharge pipe</i> that serves one or more <i>fixture discharge pipes</i> for any one floor.	CD-G13
Branch vent pipe A vent pipe that serves two or more fixture vent pipes.	CD-G13
<b>Building</b> has the meaning given to it by sections 8 and 9 of the <i>Building Act 2004</i> .	BA04
Section 8 states:	
<ul> <li>"8 Building: what it means and includes:</li> <li>(1) In this Act, unless the context otherwise requires, building—</li> <li>(a) means a temporary or permanent movable or immovable structure (including a structure intended for occupation by people, animals,</li> </ul>	

 (a) means a temporary or permanent movable or immovable structure (including a structure intended for occupation by people, animals, machinery, or chattels); and

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- (b) includes—
  - (i) a mechanical, electrical, or other system; and
  - (ii) a fence as defined in section 2 of the Fencing of Swimming Pools Act 1987; and2(1) of the Land Transport Act 1998) that is immovable
    - and is occupied by people on a permanent or long term basis; and
  - (iii) a vehicle or motor vehicle (including a vehicle or motor vehicle as defined in section
  - (iv) a mast pole or a telecommunication aerial that is on, or forms part of, a building and that is more than 7 m in height above the point of its attachment or base support (except a dish aerial that is less than 2 m wide); and
- (c) includes any 2 or more buildings that, on completion of building work, are intended to be managed as one building with a common use and a common set of ownership arrangements; and
- (d) includes the non-moving parts of a cable car attached to or servicing a building; and
- (e) after 30 March 2008, includes the moving parts of a cable car attached to or servicing a building
- (2) Subsection (1)(b)(i) only applies if-
  - (a) the mechanical, electrical, or other system is attached to the structure referred to in subsection (1)(a); and
  - (b) the system—
    - (i) is required by the Building Code; or
    - (ii) if installed, is required to comply with the Building Code.
- (3) Subsection (1)(c) only applies in relation to—
  - (a) subpart 2 of Part 2; and
  - (b) a building consent; and
  - (c) a code compliance certificate; and
  - (d) a compliance schedule.
- (4) This section is subject to section 9."

#### Section 9 states:

# "9 Building: what it does not include

In this Act, building does not include—

- (a) a NUO system, or part of a NUO system, that—
  - (i) is external to the building; and
  - (ii) is connected to, or is intended to be connected to, the building to provide for the successful functioning of the NUO system in accordance with the system's intended design and purpose; and
  - (iii) is not a mast pole or a telecommunication aerial that is on, or forms part of, a building; or
- (b) cranes (including any cranes as defined in regulations made under the Health and Safety in Employment Act 1992); or
- (c) any of the following, whether or not incorporated within another structure:
  - (i) ski tows:
  - (ii) other similar stand-alone machinery systems; or



- (d) any description of vessel, boat, ferry, or craft used in navigation—
  - (i) whether or not it has a means of propulsion; and
  - (ii) regardless of what that means of propulsion is; or
- (e) aircraft (including any machine that can derive support in the atmosphere from the reactions of the air otherwise than by the reactions of the air against the surface of the earth); or
- (f) any offshore installation (as defined in section 222 of the Maritime Transport Act 1994) to be used for petroleum mining; or
- (g) containers as defined in section 2(1) of the Hazardous Substances and New Organisms Act 1996; or
- (h) magazines as defined in section 222 of the Hazardous Substances and New Organisms Act 1996; or
  - (i) scaffolding used in the course of the construction process; or
- (i) falsework."

Building Act 2004 (the Building Act) means the principal legislation dealing with building controls in New Zealand.

#### COMMENT:

The Building Act applies to the construction, alteration, and demolition of new and existing buildings throughout New Zealand.

**Building certifier** means a *person* approved as a *building certifier* by the Authority under the former Act.

HB

HB

### COMMENT:

Building certifiers are not provided for under the Building Act 2004. There are no longer any building certifiers.

Building Code means the regulations made under section 400 of the Building Act 2004.

**BA04** 

#### COMMENT:

No regulations have yet been made under section 400 of the Building Act 2004. However, the Building Code is currently the First Schedule of the Building Regulations 1992, which continue in force under regulation 8(2) of the Building Forms (Regulations) 2004.

**Building consent** means a consent to carry out *building work* granted by a building consent authority under section 49 of the Building Act 2004. **BA04** 

Building consent A consent issued by a building consent authority for building

work to begin in accordance with the approved plans and specifications. **BA04** 

Simple House

Building consent accreditation body means the person referred to in section 248(2) of the Building Act 2004.

**BA04** 

Building consent authority (BCA) means a person whose name is entered in the register referred to in section 273(1)(a) of the Building Act 2004.

Code

Building element Any structural and non-structural component and assembly incorporated into or associated with a building. Included are fixtures, services, drains, permanent mechanical installations for access, glazing, partitions, ceilings and temporary supports.

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Definition Source Building height The vertical distance between the floor level of the lowest Code final exit from the building; and the highest occupied floor level containing or supporting any purpose group other than IE, IA or ID, or penthouses used to enclose stairways, liftshafts or machinery rooms located on or within the roof. Building levy means a levy payable under section 53 of the Building Act 2004. **BA04** Building method or product has the meaning given to it by section 20 **BA04** of the Building Act 2004. Section 20(2)(c) states: "(c) building methods, methods of construction, building design, or building materials (building methods or products) that have a current product certificate issued under section 269." Building performance index (BPI) in relation to a building, means the heating Code energy of the building divided by the product of the heating degrees total and the sum of the floor area and the total wall area, and so is calculated in

 $\mathsf{BPI} = \frac{\mathit{heating energy}}{\mathit{heating degrees total x}}$   $\mathit{(floor area + total wall area)}$ 

accordance with the following formula:

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Building work— BA04

(a) means work—

- (i) for, or in connection with, the *construction*, *alteration*, demolition, or removal of a *building*; and
- (ii) on an *allotment* that is likely to affect the extent to which an existing *building* on that *allotment* complies with the *Building Code*; and

(b) includes sitework; and

- (c) includes design work (relating to *building work*) that is design work of a kind declared by the Governor-General by Order in Council to be restricted *building work* for the purposes of this Act; and
- (d)in Part **4**, and the definition in this section of "supervise", also includes design work (relating to building work) of a kind declared by the Governor-General by Order in Council to be *building work* for the purposes of Part **4**]

**Building warrant of fitness (BWoF)** means the warrant of fitness an *owner* of a *building* must supply to a *territorial authority* under section 108 of the *Building Act 2004.* 

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Building wrap or building underlay See wall underlay.

Simple House



Definition Source Butt flashing A preformed wall flashing, used to flash windows and corners CD-E2 on horizontal profiled metal wall cladding. A butt flashing is shaped to underflash the cladding, with the cladding butting against the exposed box portion of the flashing. Butyl rubber and EPDM flashings Butyl rubber and EPDM flashings shall be Simple House a minimum thickness of 1.0 mm, and shall comply with the following parts of Table 1 in ASTM D6134: (b) tensile strength (c) elongation (d) water absorption (e) water vapour transmission (f) heat aging followed by: i) tensile strength ii) elongation. C Cable car-**BA04** (a) means a vehicle— (i) that carries people or goods on or along an inclined plane or a suspended (ii) that operates wholly or partly outside of a building; And (iii) the traction for which is supplied by a cable or any other means; but (b) does not include a lift that carries people or goods between the floors of a building. Cantilevered deck A deck where no support is provided at the outer CD-E2 extremities of the deck. COMMENT: Cantilevered decks are often constructed by extending framing members through the cladding beyond the building face. Cantilevered decks are sometimes known as balconies. **Canterbury earthquake region** is the area contained within the boundaries CD-B1 of the Christchurch City Council, the Selwyn District Council and the Waimakariri District Council. **Capacity** The load resistance of a connector or fixing. Simple House CD-E2 Capping A flashing formed to cover the top of an enclosed balustrade or parapet. Also known as a coping. CD-C Cavity barrier A construction provided to close openings within a concealed space against the passage of fire, or to restrict the spread of fire within such spaces. Cavity batten A vertical packing member used to create a drained cavity CD-E2 as part of a cladding system.

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Definition	Source
<b>Cavity spacer</b> A short block used to provide intermittent support for fixings or pipe penetrations through a <i>drained cavity</i> , while not interrupting drainage within the cavity.	CD-E2
A <i>cavity spacer</i> is required to be set to a slight fall (5° minimum from horizonta to allow drainage of any moisture from the top.	il)
Cavity wall A term used to describe a wall that incorporates a drained cavity.	CD-E2
<b>Ceiling batten</b> A horizontal member fixed below <i>rafters</i> , or truss bottom chords to which the ceiling <i>lining</i> is attached.	Simple House
<b>Certificate of acceptance</b> means a certificate issued under section 96 of the <i>Building Act 2004</i> .	BA04
<b>Certificate for public use</b> means a certificate issued under section 363A of the <i>Building Act 2004</i> .	НВ
Change the use for the purposes of sections 114 and 115 of the Building Act 2004, change the use, in relation to a building, means to change the use (determined in accordance with regulation 6) of all or a part of the building from one use (the old use) to another (the new use) and with the result that the requirements for compliance with the Building Code in relation to the new use are additional to, or more onerous than, the requirements for compliance with the Building Code in relation to the old use.	<b>BR2</b>
<b>Check valve (or non-return valve)</b> A valve that permits flow in one direction but prevents a return flow and is part of a <i>backflow prevention device</i> .	CD-G12
<b>Chimney</b> A <i>non-combustible</i> structure which encloses one or more <i>flues</i> , <i>fireplaces</i> or other heating appliances.	CD-B1, CD-C, CD-G4
Chimney back The non-combustible wall forming the back of a fireplace.	CD-B1, CD-C
Chimney base That part of a chimney which houses the fireplace.	CD-B1
<b>Chimney breast</b> The front <i>fireplace</i> wall <i>construction</i> above the <i>fireplace</i> opening.	CD-C
Chimney jambs The side walls of a fireplace.	CD-B1, CD-C
<b>Cladding</b> The exterior weather-resistant surface of a <i>building</i> .	CD-E2
COMMENT: Includes any supporting substrate and, if applicable, surface treatment.	
<b>Cladding system</b> The outside or exterior weather-resistant surface of a <i>building</i> including <i>roof cladding</i> and <i>roof underlays</i> , wall <i>cladding</i> and <i>wall underlays</i> , and cavity components, rooflights, windows, doors and all penetrations, <i>flashin</i> seals, joints and junctions.	
Where required by this Acceptable Solution, the <i>cladding system</i> shall include a <i>drained cavity</i> .	
<b>Cladding system</b> The weatherproof wall or <i>roof</i> enclosure of a <i>building</i> , including underlays, <i>claddings</i> and their fixings, windows, doors and all penetrations, <i>flashings</i> , seals, joints and junctions.	Simple House
Classified use means a classified use listed in clause A1 of the Building Code.	. BR1

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Definition	Source
<b>Cleared ground level (CGL)</b> The <i>ground level</i> after completion of site excavation and removal of all harmful material, but before excavation for <i>foundations</i> .	Simple House
<b>Code compliance certificate</b> means a certificate issued by a <i>building consent</i> authority under section 95 of the <i>Building Act 2004</i> .	BA04
<b>Combined waste pipe</b> A <i>discharge pipe</i> which serves two or more <i>waste pipes</i> .	CD-G13
Combustible See non-combustible.	CD-B1, CD-C
<b>Combustion appliance</b> A slow combustion stove, a free standing metal cone fireplace, a cast iron pot belly stove, an oil burning space heater, or a vented gas burning heater.	Code
<b>Common extract duct</b> A mechanical ventilation duct that extracts from different household units, and may contain air, moisture and contaminant.	CD-G4
<b>Common ramp</b> A ramp which is used, or intended to be used by the public whether as of right or not, and is not a <i>service ramp</i> or <i>accessible</i> ramp.	CD-D1
<b>Common stairway</b> A <i>stairway</i> which is used, or intended to be used, by the public whether as of right or not, and is not a <i>private stairway</i> , <i>service stairway</i> or <i>accessible stairway</i> .	CD-D1
<b>Compliance document</b> has the meaning given to it by section 22 of the <i>Building Act 2004</i> .	BA04
Section 22 states:	
<ul> <li>"22. Compliance document for use in establishing compliance with Building Code</li> <li>(1) The chief executive may, by notice in the Gazette, issue a document for use in establishing compliance with the Building Code (a Compliance Document).</li> <li>(2) A person who complies with a Compliance Document must, for the purposes of this Act, be treated as having complied with the provisions of the Building Code to which the document relates.</li> <li>(3) Subsection (2) is subject to any regulations referred to in section 20".</li> </ul>	_
<b>Compliance schedule</b> means a <i>compliance schedule</i> required under section 100 of the <i>Building Act 2004</i> .	BA04
<b>Compliance schedule statement</b> means a statement issued by a <i>territorial</i> or <i>regional authority</i> referred to in section 105(e) of the Building Act 2004.	НВ
<b>Concealed space</b> Any part of the space within a <i>building</i> that cannot be seen from an <i>occupied space</i> .	Code
COMMENT:  This term includes any ceiling space, roof space, space under a raised floor (such as computer rooms, floors, or stages), plenums, spaces under a tiered floor, "left-over spaces" created when some structural element or the like has been covered in; small service or duct spaces within the volume of a <i>firecell</i> and the like, but not a <i>protected shaft</i> .	
Concrete slab shrinkage control joint A line along which the horizontal strength of the slab is deliberately reduced so that any shrinkage in the slab	Simple House

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will result in a crack forming along that line.



Definition Source Constant pressure means subjected to the sustained force of fluid forming the DG reservoir. When there is no water in a reservoir, there is no pressure. When a reservoir is partially filled, there is a constant pressure - in terms of it being a pressure sustained in time. Construct in relation to a building, includes to design, build, erect, prefabricate, **BA04** and relocate the building. **RMA** Contaminant includes any substance (including gases, odorous compounds, liquids, solids, and microorganisms) or energy (excluding noise) or heat, that either by itself or in combination with the same, similar, or other substances, energy, or heat. (a) When discharged into water, changes or is likely to change the physical, chemical, or biological condition of water, or (b) When discharged onto or into land or into air, changes or is likely to change the physical, chemical, or biological condition of the land or air onto or into which it is discharged. Controlled area That area where the use of radioactive material or an irradiating CD-F8 apparatus may, in the opinion of the licensee, present a hazard to persons within that area. Control joint A joint designed to prevent damage by accommodating CD-E2 movement. See also Expansion joint. **Cross connection** Any actual or potential connection between a *potable water* **CD-G12** supply and a source of contamination. **D** A deformed reinforcing bar of the stated *diameter* in millimetres. Simple House Dam **BA04** (a) means an artificial barrier, and its appurtenant structures, that— (i) is constructed to hold back water or other fluid under constant pressure so as to form a reservoir; and (ii) is used for the storage, control, or diversion of water or other fluid; and (iii) retains 3 or more metres depth, and holds 20,000 or more cubic metres volume, of water or other fluid; and (b) includes—

# (c) does not include a stopbank designed to control floodwaters. COMMENT:

(iii) a canal; but

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20,000 cubic metres is equivalent to six Olympic size swimming pools. Note: An Olympic swimming pool size is 50 m long x 25 m wide x 2 m deep.

(ii) a natural feature that has been significantly modified to function as a dam; and

(i) a flood control dam; and



Definition	Source
Dam safety assurance programme means a dam safety assurance programme prepared by an owner of a dam under section 140 of the Building Act 2004.	BA04
COMMENT: In order for dams to maintain their integrity ongoing monitoring, maintenance and repair is essential. For those dams classified as medium or high potential impact, dam owners have to prepare and submit a safety assurance programme to the regional authority on an annual basis.	
<b>Dam compliance certificate</b> A certificate issued by the owner of a <i>dam</i> annually stating that all procedures in the <i>dam safety assurance programme</i> have been fully complied with during the previous 12 months.	DG
<b>Damp-proof course (DPC)</b> A narrow strip (generally up to 300 mm wide) of <i>durable vapour barrier</i> placed between <i>building elements</i> to prevent the passage of moisture from one element to another.	CD-E2
<b>Damp-proof course (DPC)</b> A narrow strip (generally up to 300 mm wide) of <i>durable vapour barrier</i> greater than 90MN s/g to ASTM E96 and placed between <i>building elements</i> to prevent the passage of moisture from one element to another.	Simple House
<b>Damp-proof membrane (DPM)</b> A sheet material, coating or <i>vapour barrier</i> , having a low water vapour transmission, and used to prevent water and water vapour movement through concrete in contact with the ground. (Also known as a concrete underlay.)	CD-B2, CD-E2
<b>Dangerous goods</b> Any materials included in the UN classification, classes 2-5.	CD-F8
COMMENT: See Hazardous substance.	
<b>Dangerous goods workroom</b> A room reserved primarily for the use of <i>dangerous goods</i> of Class 3(a) or Class 3(b) (i.e. flammable liquids).	CD-F8
<b>Dead end</b> That part of an <i>open path</i> where escape is possible in only one direction.	CD-C
COMMENT:  A dead end ceases to exist where the escape route reaches a point in the open path which offers alternative directions of travel, or at a final exit or an exitway.	
<b>Deck</b> An open platform projecting from an exterior wall of a <i>building</i> and supported by <i>framing</i> . A <i>deck</i> may be over enclosed internal spaces, or may be open underneath.	CD-E2
Refer also Enclosed deck.	

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Also known as a balcony.



	Definition	Source
	<b>Department</b> means the Department of Building and Housing.	НВ
Amend 11 Sep 2010	<b>Department of Conservation</b> means the department of State established by section 5 of the Conservation Act 1987.	Code
	<b>Determination</b> means a determination made by the Chief Executive under subpart 1 of Part 3 of the <i>Building Act 2004</i> .	BA04
	<b>Developed length</b> The total length along the centre line of a pipe including fittings and bends.	CD-G13
Amend 11 Sep 2010	<b>Diagonal brace</b> A member of a framed <i>building</i> fixed diagonally and used to resist tension or compression or both.	Simple House
	Diameter (or bore) The nominal internal diameter.	CD-G12, CD-G13
	<b>Direct fixed</b> A term used to describe a wall <i>cladding</i> attached directly to the wall <i>framing</i> , without the use of a <i>drained cavity</i> .	CD-E2
Amend 11 Sep 2010	<b>Director-General</b> has the same meaning as in section 2(1) of the Conservation Act 1987.	Code
	<b>Discharge pipe</b> Any pipe that is intended to convey discharge from <i>sanitary fixtures</i> or <i>sanitary appliances</i> .	CD-G13
	<b>Discharge stack</b> A <i>discharge pipe</i> that has one or more <i>discharge pipe</i> connections, and which is vented at one end via a <i>discharge stack vent</i> .	CD-G13
	<b>Discharge stack vent</b> A <i>vent pipe</i> connected to the top of the <i>discharge stack</i> .	CD-G13
	<b>Discharge unit</b> The unit of measure for the discharge (hydraulic load) in the <i>plumbing system</i> , and is based on the rate, duration and frequency of discharge from a <i>sanitary fixture</i> or <i>sanitary appliance</i> .	CD-G13
	<b>Doorset</b> A complete assembly comprising a door leaf or leaves including any glazed or solid panels adjacent to or over the leaves within the door frame including hardware or other inbuilt features; and a door frame, if any, with its fixings to the wall and, for a sliding or tilting door, all guides and their respective fixings to the lintel, wall or sill.	CD-C, CD-F8
	<b>Dormer or dormer window</b> A framed structure that projects from a sloping roof, and has a window at its outer end.	CD-E2
	<b>Drain</b> A pipe normally laid below ground level including fittings and equipment and intended to convey <i>foul water</i> or <i>surface water</i> to an <i>outfall</i> .	Code
Amend 12   Oct 2011	<b>Drained cavity</b> A cavity space, immediately behind a wall <i>cladding</i> , that has vents at the base of the wall. Also known as a drained and vented cavity and referred to in E2/AS1 as a cavity or <i>drained cavity</i> .	CD-E2
	A <i>drained cavity</i> assists drying by allowing water which occasionally penetrates the wall <i>cladding system</i> to drain to the exterior of the <i>building</i> , and any remainin moisture to dry by evaporation. Where E2/AS1 requires a nominal 20 mm <i>drained cavity</i> , the depth shall be between limits of 18 mm and 25 mm. For definition of masonry veneer cavity refer to SNZ HB 4236.	=
	<b>Drain vent pipe</b> Any pipe which is intended to permit the movement of air	CD-G13

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into and out of the drain and sewer.



	Definition	Source
	<b>Draught diverter</b> A device, without moving parts, fitted in the <i>flue</i> of an appliance for isolating the combustion system from the effects of pressure changes in the secondary <i>flue</i> .	CD-G4, CD-C
	<b>Drip edge</b> Fold(s) applied to the edge of a horizontal metal <i>flashing</i> to deflect moisture away from the <i>cladding system</i> below. Refer also <i>Bird's beak</i> and <i>Kick-out</i> .	CD-E2
	<b>Durable</b> Resistant to wear and decay.	CD-B2
Amend 12   Oct 2011	<b>Dwang</b> A short (usually horizontal) member fixed between vertical <i>framing</i> timbers. Also known as nogging.	CD-E2
	E	
	<b>Early childhood centre</b> A facility used for the education or care of children under the age of six, and required to be licensed under the Education (Early Childhood Centres) Regulations 1998.	CD-C
Amend 12 Oct 2011	<b>Eaves</b> That part of the roof <i>construction</i> , including <i>cladding</i> , fascia and eaves gutter (spouting), that extends beyond the exterior face of the wall.	CD-E2
	<b>Eaves bearer</b> or <b>soffit bearer</b> or <b>sprocket</b> A horizontal member attached to the end of a truss or a <i>rafter</i> and to a <i>stud</i> , or a ribbon board, or a soffit plate, and to which the <i>eaves lining</i> is attached.	Simple House
Amend 11 Sep 2010	<b>EPDM</b> Ethylene Propylene Diene Monomer – a thermosetting synthetic rubber. See <b>butyl rubber</b> .	Simple House
	<b>EIFS (Exterior Insulation and Finish System)</b> A polystyrene sheet-based <i>cladding system</i> that uses mesh reinforced polymer-modified cement-based or polymer-based plaster base coats and a protective top coating.	CD-E2
	<b>Electrical fixed appliance</b> An electrical appliance which is fixed-wired to the <i>electrical installation</i> , or intended to remain permanently attached and form part of the <i>building</i> .	Code
	<b>Electrical installation</b> Any <i>electrical fixed appliances</i> and components used in the reticulation of electricity, which are intended to remain permanently attached to and form part of the <i>building</i> .	Code
	<b>Electrical supply system</b> The source of electricity external to the <i>electrical installation</i> .	Code
	<b>Electrolytic corrosion</b> Galvanic corrosion commonly resulting from the contact of two dissimilar metals when an electrolyte such as water is present.	CD-E2
Amend 12   Oct 2011	<b>Enclosed balustrade</b> A timber-framed barrier with <i>cladding</i> across all exposed faces. Refer also Parapet.	CD-E2
	<b>Enclosed deck</b> A <i>deck</i> , whether over an interior or exterior space, that has an impermeable upper surface and is closed on the underside. May also be known as a balcony.	CD-E2
	Energy work means—	BA04
	(a) gasfitting; or	
	(b) prescribed electrical work	



Definition	Source
<b>Energy work certificate</b> means a certificate of the kind referred to in section 19(1)(e) of the <i>Building Act 2004</i> .	BA04
<b>Envelope complexity</b> The categorisation of the complexity of the total <i>building</i> envelope into one of four classes, depending on the particular features of the <i>building</i> as specified in E2/AS1.	CD-E2
<b>EPDM (Ethylene Propylene Diene Monomer)</b> A thermosetting synthetic rubber used as a resilient part of a sealing washer, or as a roof <i>membrane</i> .	CD-E2
<b>Equivalent aerodynamic area</b> The area of an equivalent aerodynamically perfect orifice, and equals the penetration area required by the natural ventilation device multiplied by the discharge coefficient determined under test.	CD-G4
<b>Escape height</b> The height between the floor level in the <i>firecell</i> being considered and the floor level of the required <i>final exit</i> which is the greatest vertical distance above or below that <i>firecell</i> .	CD-C, CD-F3 CD-F6
COMMENT:  1. It is necessary only to use the greatest height to the exits required for the <i>firecell</i> being considered, even though the <i>building</i> may have other <i>final exits</i> at lower or higher levels.	
2. Where the <i>firecell</i> contains <i>intermediate floors</i> , or upper floors within <i>household units</i> the <i>escape height</i> shall be measured from the floor having the greatest vertical separation from the <i>final exit</i> .	
<b>Escape route</b> A continuous unobstructed route from any <i>occupied space</i> in a <i>building</i> to a <i>final exit</i> to enable occupants to reach a <i>safe place</i> , and shall comprise one or more of the following: <i>open paths, protected paths</i> and <i>safe paths</i> .	Code
<b>COMMENT:</b> Doors are not obstructions in an <i>escape route</i> provided they comply with C/AS1 Part 3 and D1/AS1.	
<b>Essential service</b> In the context of an <i>electrical installation</i> means emergency lighting, firemen's lifts, alarms, water pumps, sprinklers, detectors, ventilation systems and public address systems necessary for the safety of people in <i>buildings</i>	Code
<b>Estimated value</b> in relation to <i>building work</i> , means the estimated aggregate of the values, determined in accordance with section 10 of the Goods and Services Tax Act 1985, of all goods and services to be supplied for the <i>building work</i> .	BA04
<b>Evacuation time</b> The time taken by the occupants of the <i>building</i> to evacuate the <i>building</i> to a <i>final exit</i> .	Code
<b>Exitway</b> All parts of an <i>escape route</i> protected by <i>fire</i> or <i>smoke separations</i> , or by distance when exposed to open air, and terminating at a <i>final exit</i> .	Code
<b>Expansion joint</b> A joint designed to prevent damage by accommodating movement. See also <i>Control joint</i> .	CD-E2



Definition Source **External wall** Any exterior face of a building within 30° of vertical, consisting Code of primary and/or secondary elements intended to provide protection against the outdoor environment, but which may also contain unprotected areas. COMMENT: A roof is an external wall if within 30° of the vertical. External wall An outer wall of a building. Simple House External wall Any vertical exterior face of a building consisting of primary and/or CD-E2 secondary elements intended to provide protection against the outdoor environment. F Factor of safety in relation to any building means the ratio of resisting forces CD-B1 to applied forces for a given loading condition. It is generally expressed to two significant figures. **Falsework**, in relation to *building work* or the maintenance of a *building*,—` **BA04** (a) means any temporary structure or framework used to support materials, equipment, or an assembly; and (b) includes steel tubes, adjustable steel props, proprietary frames, or other means used to support a permanent structure until it becomes self-supporting; but (c) does not include scaffolding or cranes used for support. **Final exit** The point at which an *escape route* terminates by giving direct access Code to a safe place. COMMENT: Final exits are commonly the external doors from a ground floor, but this applies only if such doors open directly onto a safe place. If a safe place can be reached only by passing down an alley, or across a bridge, then the final exit is not reached until the end of such an alley or bridge. Final exits, therefore, should be seen strictly as a point of arrival, rather than as any particular element of a building. They are determined entirely by the definition of safe place. Finished ground level (FGL) The level of the ground against any part of a building CD-E2 after all backfilling and/or landscaping and/or surface paving has been completed. Fire The state of combustion during which flammable materials burn producing Code heat, toxic gases, or smoke or flame or any combination of these. Firecell Any space including a group of contiguous spaces on the same Code or different levels within a building, which is enclosed by any combination of fire separations, external walls, roofs, and floors. COMMENT: Floors, in this context, includes ground floors and those in which the underside is exposed to the external environment (eg, when cantilevered). Note also that internal floors between firecells are fire separations. Firecell rating (F) The fire resistence rating (FRR) intended to prevent fire CD-C spread to another firecell, for sufficient time to provide for safe evacuation of occupants and protection of adjacent housing units and sleeping areas in the building of fire origin and fire fighters engaged in fire fighting and

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rescue operations.



#### COMMENT:

- 1. The purpose of the *firecell rating* is to prevent premature collapse of elements of structure in order to protect:
  - (a) The occupants, some of whom may have to remain in the *building* for some time while evacuation proceeds, particularly if the *building* is a large one.
  - (b) Adjacent household units and sleeping areas in the building of fire origin.
  - (c) Fire fighters engaged on rescue and fire fighting operations (although this is limited because property protection in the *building* of origin is not a matter covered by the New Zealand Building Code except as required by b) above).
- 2. The use of the *F rating* to determine the *FRR* of a *primary* or *secondary element* is discussed in C/AS1 Part 5.

**Fire damper** A device with a specified *FRR* complete with fixings and operating mechanism for automatically closing off an airway where it passes through a *fire separation*.

# CD-C

#### COMMENT:

An airway may be a duct, plenum, ceiling space, roof space or similar construction used for the passage of ventilating air.

**Fire door** A *doorset*, single or multi-leaf, having a specific *fire resistance rating*, and in certain situations a smoke control capability, and forming part of a *fire separation*. The door, in the event of *fire*, if not already closed, will close automatically and be self latching.

# CD-C

# COMMENT:

Requirements for fire doors are given in C/AS1 Paragraphs 6.19.1 and 6.19.8 and Appendix C, Paragraph C 8.1.

**Fire hazard** means the danger of potential harm and degree of exposure arising from—

BA04

- (a) the start and spread of fire; and
- (b) the smoke and gases that are generated by the start and spread of fire.

**Fire hazard category (FHC)** The number (graded 1 to 4 in order of increasing severity), used to classify *purpose groups* or activities having a similar *fire hazard*, and where fully developed *fires* are likely to have similar impact on the structural stability of the *building*.

# CD-C

#### COMMENT:

Fire hazard categories are identified in C/AS1 Table 2.1.

**Fire intensity** The rate release of calorific energy in watts, determined either theoretically or empirically, as applicable.

Code

**Fire load** The sum of the net calorific values of the *combustible* contents which can reasonably be expected to burn within a *firecell*, including furnishings, built-in and removable materials, and *building elements*. The calorific values shall be determined at the ambient moisture content or humidity. (The unit of measurement is MJ.)

Code

**Fire load energy density (FLED)** The total *fire load* divided by the *firecell* floor area. In this calculation the floor area shall include circulation and service spaces, but exclude *exitways* and *protected shafts*.

CD-C



#### COMMENT:

The total *fire load* is converted to *fire load* energy terms in megajoules (MJ) for calculation of the FLED (MJ/m²).

**Fireplace** A space formed by the *chimney back*, the *chimney jambs*, and the *chimney breast* in which fuel is burned for the purpose of heating the room into which it opens.

CD-C, CD-B1

**Fire resistance rating (FRR)** The term used to describe the minimum *fire* resistance required of *primary* and *secondary elements* as determined in the *standard test* for *fire* resistance, or in accordance with a specific calculation method verified by experimental data from standard *fire* resistance tests. It comprises three numbers giving the time in minutes for which each of the criteria *stability, integrity* and *insulation* are satisfied, and is presented always in that order.

CD-C

# COMMENT:

- 1. Examples of FRRs are:
  - (a) 30/30/15 indicating stability 30 minutes, integrity 30 minutes, insulation 15 minutes.
  - (b) 30/-/- indicating stability 30 minutes, but no time requirement for integrity or insulation.
  - (c) -/15/15 indicating no time requirement for *stability*, but 15 minutes for *integrity* and *insulation*.
  - (d) 60/30/x indicating *stability* of 60 minutes, *integrity* of 30 minutes, and a requirement for *insulation* from C/AS1 Paragraph 5.6.4.
- 2. C/AS1 Part 5 gives more information on FRRs.

**Fire resisting closure** A *fire* rated device or assembly for closing an opening through a *fire separation*. It shall have a *FRR* of no less than that required for the *fire separation*.

Code

# COMMENT:

A *fire resisting closure* is intended to include *fire doors, fire* windows or access panels. In this context the opening may be used to permit passage of people or goods, or to transmit light, but does not include an opening to permit the passage of *building* services.

**Fire resisting glazing** Fixed or openable glazing, complete with frame and fixings, mullions, transoms and glazing beads, with a specified *FRR* and complying with NZS 4232: Part 2.

CD-C

#### COMMENT:

- 1. The requirement for *fire resisting glazing* will not be met by ordinary window glass, or safety glasses, but rather by wired glass, or by special *fire* resisting glass shown by test to perform adequately. The nature and design of the frames also have an effect on the performance of *fire resisting glazing*.
- 2. Openable glazing is required by NZS 4232 Part 2 to be fitted with an automatic device which, in the event of *fire*, will close and latch the window sash.

**Fire safety precautions (FSPs)** The combination of all methods used in a *building* to warn people of an emergency, provide for safe evacuation, and restrict the spread of *fire*, and includes both active and passive protection.

CD-C, CD-F7

# COMMENT:

This definition has the same meaning and wording as the definition of "fire safety systems" in the Building Regulations.



Definition	Source
<b>Fire safety systems</b> The combination of all methods used in a <i>building</i> to warn people of an emergency, provide for safe evacuation, and restrict the spread of <i>fire</i> , and includes both active and passive protection.	Code
<b>Fire separation</b> Any <i>building element</i> which separates <i>firecells</i> or <i>firecells</i> and <i>safe paths</i> , and provides a specific <i>fire resistance rating</i> .	Code
<b>Fire shutter</b> A <i>fire</i> rated device, complete with fixings and operating mechanism, for automatically closing off an opening in a <i>fire separation</i> or <i>protected shaft</i> .	CD-C
<b>Fire stop</b> A material or method of <i>construction</i> used to restrict the spread of <i>fire</i> within or through <i>fire separations</i> , and having a <i>FRR</i> no less than that of the <i>fire separation</i> .	CD-C
<b>COMMENT:</b> Fire stops are mainly used to seal around penetrations, but can also be used to seal narrow gaps between building elements.	
<b>Fixture</b> An article intended to remain permanently attached to and form part of a <i>building</i> .	Code
<b>Fixture discharge pipe</b> A <i>discharge pipe</i> that is used to convey waste from a single <i>sanitary fixture</i> or <i>sanitary appliance</i> to a <i>branch discharge pipe</i> , a <i>discharge stack</i> , or directly to a <i>drain</i> . It does not include any pipes forming part of a <i>sanitary appliance</i> .	CD-G13
<b>Fixture vent pipe (trap vent)</b> A <i>vent pipe</i> that is connected to a <i>fixture discharge pipe</i> or the <i>sanitary fixture</i> itself.	CD-G13
<b>Flame barrier</b> A material or system applied or installed to protect another building element from flame contact. The protection shall be effective for no less than 10 minutes exposure in the standard test for fire resistance.	CD-C
<ol> <li>COMMENT:</li> <li>The principal use of <i>flame barriers</i> is to delay ignition of <i>foamed plastics</i> materials.</li> <li>Refer to Appendix C Paragraph C10.1 of C/AS1 for details of the test requirements for <i>flame barriers</i>.</li> </ol>	
<b>Flame safeguard system</b> A system consisting of a flame detector(s) plus associated circuitry, integral components, valves and interlocks the function of which is to shut off the fuel supply to the burner(s) in the event of ignition failure or flame failure.	CD-G11
<b>Flammability index (FI)</b> That index number for flammability, which is determined according to the <i>standard test</i> method for flammability of thin flexible materials.	CD-C
<b>Flashing</b> A component, formed from a rigid or flexible <i>waterproof</i> material, that drains or deflects water back outside the <i>cladding system</i> .	CD-E2
<b>Flexible flashing tape</b> A flexible self-adhesive <i>waterproof</i> tape. Usually used as an accessory for <i>wall underlays</i> , to seal corners and intersections.	CD-E2

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Definition	Source
Flexible flashing tape A flexible self-adhesive waterproof tape. Usually used as an accessory for wall underlays to seal corners and intersections	Simple House
<b>Flood level rim</b> The top edge at which water can overflow from equipment or a <i>fixture</i> .	CD-G12
<b>Floor area</b> , in relation to a <i>building</i> , means the <i>floor area</i> (expressed in squar metres) of all interior spaces used for activities normally associated with domestic living.	e <b>Code</b>
<b>Floor waste</b> An outlet located at the low point of a graded floor or in a level floor designed to receive accidental or intentional discharges.	CD-E3, CD-G13
<b>Floor waste gully</b> A disconnector gully for installation inside a <i>building</i> , for use with a floor grating or waste outlet fitting on a riser pipe and with provision, where required, for connection of waste pipes for <i>sanitary fixtures</i> .	Simple House
<b>Floor waste pipe</b> A pipe that receives the discharge from a <i>floor waste</i> and that discharges outside the <i>building</i> or to the <i>foul water</i> drainage or sanitary <i>plumbing system</i> .	CD-G13
<b>Flue</b> The passage through which the products of combustion are conveyed to the outside.	CD-B1, CD-B2, CD-C, CD-G4, CD-G11
Flue liner Pipes or linings of fire clay, metal or fire brick, surrounding flues.	CD-C
<b>Flue system</b> A series of interconnecting <i>flue</i> pipe casings which form a safe passage <i>(flue)</i> for conveying products of combustion from within an appliance to the outside of a <i>building</i> or structure.	<b>CD-C</b>
<b>Flush-finished</b> The description of a <i>cladding</i> and joints system which relies on a protective coating applied to the face of the <i>cladding</i> to prevent the penetration of water.	CD-E2
<b>Foamed plastics</b> <i>Combustible</i> foamed plastic polymeric materials of low density (typically less than 100 kg/m³) and are classified as cellular polymers which are manufactured by creating a multitude of fine voids (typically 90 to 98%) distributed more or less uniformly throughout the produ Examples of <i>foamed plastics</i> are latex foams, polyethylene foams, polyvinyl chloride foams, expanded or extruded polystyrene foams, phenolic foams, ureaformaldehyde foams, polyurethane foams and polychloropene foams.	CD-C
COMMENT:  1. Foamed plastics may be rigid or flexible, but rigid foams are the most common in building products. When burnt they tend to generate high levels of heat energy (kJ/kg) and varying quantities of smoke and other toxic gases depending on the nature and volum of the particular product.	е
2. Where doubt exists as to whether a <i>building</i> material is <i>foamed plastics</i> , an opinion should be sought from a <i>person</i> or organisation with appropriate skill and experience in <i>fire</i> engineering. That opinion should be included with the <i>building consent</i> application to the <i>building consent authority</i> .	1

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**Footing** That portion of a *foundation* bearing on the ground and any adjoining portion that is reinforced so as to resist the bearing forces.

**Simple House** 



Definition	Source
<b>Forced or induced draught appliance</b> An appliance where all or part of the air for combustion is provided by a fan or other mechanical device which is an integral part of the combustion system.	CD-G4
Former Act means the Building Act 1991.	BA04
Foul water The discharge from any sanitary fixture or sanitary appliance.	Code
<b>Foul water drainage system</b> <i>Drains,</i> joints and fittings normally laid underground and used specifically for the conveyance of water from the <i>plumbing system</i> to an <i>outfall.</i>	Code
<b>Foundation</b> Those parts of a <i>building</i> transmitting and distributing loads to the ground through a <i>footing</i> .	Simple House
<b>Framing</b> Timber members to which <i>lining</i> , <i>cladding</i> , flooring, or decking is attached; or which are depended upon for supporting the structure, or for resisting forces applied to it.	CD-E2
<b>Free outlet (push through)</b> In the context of <i>storage water heaters</i> means a <i>water heater</i> with a tap on the cold water inlet so designed that the hot water is discharged through an open outlet.	CD-G12
<b>Functional requirements</b> in relation to a <i>building</i> , means those functions which a <i>building</i> is to perform for the purposes of the <i>Building Act 2004</i> .	BA04
G	
<b>Gable</b> Triangular part of an <i>external wall</i> between the planes of the <i>roof</i> and the line of the <i>eaves</i> .	Simple House
Galvanised steel flashings Galvanised steel flashings shall be:	Simple House
(a) BMT of 0.55 mm minimum for flashings generally	
(b) BMT of 0.4 mm minimum for roll-formed roll-top ridge flashings	
(c) Hot-dipped zinc coated Z275 with a factory-applied finish that complies with AS/NZS 2728 Type 4, and in Sea Spray and corrosion Zone 1 the factory-applied finish shall be Type 5 minimum.	
<b>Gantry</b> A structure covering a public way providing protection from both the side and overhead.	CD-F5
<b>Gasfitting</b> has the meaning given to it by section 2 of the Plumbers, Gasfitters, and Drainlayers Act 1976.	BA04/PGDA
Section 2 states:	
"(a) The work of fixing or unfixing pipes (including flue and ventilation pipes) beyond the outlet of any gas measurement system supplying a consumer or gas refueller with gas (or, where there is no such gas measurement system, beyond the custody transfer point of the place at which gas is	

- supplied to a consumer or gas refueller):
- (b) The work of fixing or unfixing pipes (including flue and ventilation pipes) that convey gas from any gas storage container in the possession or control of a consumer or gas refueller, and-



- (i) In the case of liquefied petroleum gas, that are downstream of the first regulator beyond that container; or
- (ii) In the case of any other gas or where there is no such regulator (in the case of liquefied petroleum gas), that are downstream of the outlet valve of the container:
- (c) The work of fixing or unfixing the whole or part of the control system of any gas appliance but does not include—
- (d) Work on any gas storage container, including its fixing or unfixing; or
- (e) Work on any gas transmission system or distribution system; or
- (f) Work on any pipes or fittings supplied with liquefied petroleum gas from any gas storage container or containers that contains, or together contain, less than 15 kilograms net weight of liquefied petroleum gas; or
- (g) Work in any circumstances where the exclusions in section 3(2) of the Gas Act 1992 apply:]"

**Gather** That part of a *chimney* where the transition from *fireplace* to stack occurs.

CD-B1

**Good ground** means any soil or rock capable of permanently withstanding an ultimate bearing pressure of 300 kPa (i.e. an allowable bearing pressure of 100 kPa using a *factor of safety* of 3.0), but excludes:

CD-B1

- (a) Potentially compressible ground such as topsoil, soft soils such as clay which can be moulded easily in the fingers, and uncompacted loose gravel which contains obvious voids,
- (b) Expansive soils being those that have a liquid limit of more than 50% when tested in accordance with NZS 4402 Test 2.2, and a linear shrinkage of more than 15% when tested, from the liquid limit, in accordance with NZS 4402 Test 2.6, and
- (c) Any ground which could forseeably experience movement of 25 mm or greater for any reason including one or a combination of: land instability, ground creep, subsidence, (liquefaction, lateral spread for the *Canterbury earthquake region* only), seasonal swelling and shrinking, frost heave, changing ground water level, erosion, dissolution of soil in water, and effects of tree roots.

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#### COMMENT:

Soils (excepting those described in (a), (b) and (c) above) tested with a dynamic cone penetrometer in accordance with NZS 4402 Test 6.5.2, shall be acceptable as *good ground* for *building* foundations if penetration resistance is no less than:

- (a) 3 blows per 75 mm at depths no greater than the footing width.
- (b) 2 blows per 75 mm at depths greater than the footing width.

Depths shall be measured from the underside of the proposed footing.



**Good ground** Any soil or rock capable of permanently withstanding an ultimate bearing pressure of 300 kPa (ie, an allowable bearing pressure of 100 kPa using a *factor of safety* of 3.0) but excluding:

Simple House

- (a) potentially compressible ground such as top soil, soft soils such as clay which can be moulded easily in the fingers, and uncompacted loose gravel which contains obvious voids;
- (b) expansive soils being those that have a liquid limit of more than 50% when tested in accordance with NZS 4402 Test 2.2, and a linear shrinkage of more than 15% when tested from the liquid limit in accordance with NZS 4402 Test 2.6, and
- (c) any ground which could foreseeably experience movement of 25 mm or greater for any reason including one or a combination of: land instability, ground creep, subsidence, seasonal swelling and shrinkage, frost heave, changing ground water level, erosion, dissolution of soil in water, and effects of tree roots.

(Note that soils, excepting those described in (a), (b) and (c) above, tested with a dynamic cone penetrometer in accordance with NZS 4402 Test 6.5.2, shall be acceptable as *good ground* for *building foundations* if penetration resistance is no less than:

- (i) 3 blows per 75 mm at depths no greater than the footing width
- (ii) 2 blows per 75 mm at depths greater than the footing width.

Depths shall be measured from the underside of the proposed footing.)

**Grease trap** A device designed to intercept grease in a *foul water* discharge.

CD-G13, CD-G14

**Gross floor area** The area contained within the outside face of the exterior timber wall *framing* of a *simple house*.

Simple House

Simple House

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#### Ground level See cleared ground level, finished ground level.

CD-C

**Group sleeping area** A *firecell* containing communal sleeping accommodation for a specified number of people who may or may not be known to one another. Partial subdivision within the *firecell* is permitted with specific limitation including that no *occupied space* is fully enclosed and all *occupied spaces* are open and available to all occupants at any time. A *group sleeping area firecell* may include spaces for associated direct support functions, such as hygiene facilities and tea making (not cooking) activities, for use by the occupants. It does not include spaces, such as waiting rooms, lounges, dining rooms or kitchens, providing a communal service function for all occupants.

### COMMENT:

- 1. Examples of *group sleeping area firecells* are dormitories, hospital wards, *wharenui*, backpacker hostels and ski lodges.
- 2. The maximum number of people permitted in a *group sleeping area firecell*, and the permitted form of subdivision, will depend on the ability of the occupants to react to the presence of *fire* and escape to a *safe place*.

**Gully trap** A fitting designed to prevent foul air escaping from the drainage system and used to receive the discharge from *waste pipes*.

**CD-G13** 



Н

**Habitable space** A space used for activities normally associated with domestic **Code** living, but excludes any bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, clothes-drying room, or other space of a specialised nature occupied neither frequently nor for extended periods.

**Handrail** A rail to provide support to, or assist with the movement of a *person*. **Code** 

**Hazardous** Creating an unreasonable risk to people of bodily injury or deterioration of health.

**Hazardous substance** Has the meaning given to it by section 2 of the Fire Service Act 1975 and section 2 of the Hazardous Substances and New Organisms Act 1996

Code/FSA/ HSNOA

Code

Section 2 of the Fire Service Act 1975 states:

#### "Hazardous substance" means

- (a) Any hazardous substance as defined in section 2 of the Hazardous Substances and New Organisms Act 1996; and
- (b) Any infectious or radioactive substance that may impair human, animal, or plant" health:

Section 2 of the Hazardous Substances and New Organisms Act 1996 states:

- "Hazardous substance" means, unless expressly provided otherwise by regulations, any substance—
- (a) With one or more of the following intrinsic properties:
  - (i) Explosiveness:
  - (ii) Flammability:
  - (iii) A capacity to oxidise
  - (iv) Corrosiveness:
  - (v) Toxicity (including chronic toxicity
  - (vi) Ecotoxicity, with or without bioaccumulation; or
- (b) Which on contact with air or water (other than air or water where the temperature or pressure has been artificially increased or decreased) generates a substance with any one or more of the properties specified in paragraph (a) of this definition."

**Hearth** The insulating floor under the *fire* and in front and at the sides of the *fireplace*.

CD-B1, CD-C

**Heating degrees**, in relation to a location and a *heating month*, means the degrees obtained by subtracting from a base temperature of 14°C the mean (calculated using the *approved temperature data*) of the outdoor temperatures at that location during that month.

Code

**Heating degrees total**, in relation to a location and a year, means whichever is the greater of the following:

Code

(a) the value of 12 and

(b) the sum of all the *heating degrees* (calculated using the *approved temperature data*) for all of the *heating months* of the year.

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Definition Source **Heating energy**, in relation to a *building*, means the energy from a *network* Code utility operator or a depletable resource (expressed in kilowatt-hours, and calculated using the Building Research Association of New Zealand's ALF 3, The 'Annual Loss Factor' Method, A design tool for energy efficient houses (3rd edition, April 2000) or some other method that can be correlated with that manual) needed to maintain the building at all times within a year at a constant internal temperature under the following standard conditions: (a) a continuous temperature of 20°C throughout the building (b) an air change rate of 1 change per hour or the actual air leakage rate, whichever is the greater (c) a heat emission contribution arising from internal heat sources for any period in the year of 1000 kilowatt-hours for the first 50 m<sup>2</sup> of floor area, and 10 kilowatt-hours for every additional square metre of floor area (d) no allowance for— (i) carpets or (ii) blinds, curtains, or drapes, on windows (e) windows to have a shading coefficient of 0.6 (made up of 0.8 for windows and recesses and 0.75 for site shading). Code Heating month, in relation to a location, means a month in which a base temperature of 14°C is greater than the mean (calculated using the approved temperature data) of the outdoor temperatures at that location during that month. CD-E2 Hem A flat fold, not completely closed, applied to the edge of a metal flashing. **Hidden gutter** A gutter located within the boundaries of the roof *framing*. CD-E2 Hidden gutters may also be known as secret gutters or internal gutters. See also Valley gutters. COMMENT: Hidden gutters are distinct from gutters or spouting that are externally located beyond the bounds of the roof and wall framing. CD-F5 **Hoarding** A structure alongside a public way providing side protection but no overhead protection. CD-C, CD-F7, **Hold-open device** A device which holds a *smoke control door* or *fire door* open during normal use, but is released by deactivating the device by an automatic CD-F8 fire detection system, allowing the door to close automatically under the action of a self-closing device. CD-E2 **Hook** An open fold applied to the edge of a metal *flashing*.

A hook is distinct from a hem, as it is open at an acute angle rather than flattened.



Definition	Source
Household unit	BA04
(a) means a <i>building</i> or group of <i>buildings</i> , or part of a <i>building</i> or group of <i>buildings</i> , that is—	
(i) used, or intended to be used, only or mainly for residential purposes; and	
(ii) occupied, or intended to be occupied, exclusively as the home or residence of not more than 1 household; but	
(b) does not include a hostel, boarding house, or other specialised accommodation.	
<b>Household unit</b> For a <i>simple house</i> , means a <i>building</i> or part of a <i>building</i> that is used or intended to be used for residential purposes.	Simple House
<b>HVAC</b> An abbreviation for heating, ventilating and airconditioning.	CD-C, CD-F7
<b>HVAC system</b> for the purposes of performance H1.3.6 and in relation to a building, means a mechanical, electrical, or other system for modifying air temperature, modifying air humidity, providing ventilation, or doing all or any of those things, in a space within the building.	Code
I	
<b>Illuminance</b> The luminous flux falling onto a unit area of surface.	Code
Impact insulation class (IIC) A single number rating derived from measured values of normalized impact sound pressure levels in accordance with Method ASTM E 492, Annex A1, Laboratory Measurement of Impact Sound Transmission Through Floor-Ceiling Assemblies Using the Tapping Machine. It provides an estimate of the impact sound insulating performance of a floor-ceiling assembly.	Code
Impervious That which does not allow the passage of moisture.	Code
<b>Independent qualified person (IQP)</b> means a <i>person</i> accepted by a <i>territorial authority</i> in accordance with section 438 of the <i>Building Act 2004</i> as being qualified to carry out the inspection, maintenance, and reporting procedures required for a <i>specified system</i> stated in a <i>compliance schedule</i> .	НВ
<b>Inspection chamber</b> A chamber with working space at ground level through which the <i>drain</i> passes either as an open channel or as a pipe incorporating an <i>inspection point</i> .	CD-E1, CD-G13
<b>Inspection point</b> A removable cap at <i>drain</i> level through which access may be made for cleaning and inspecting the drainage system.	CD-E1, CD-G13
<b>Insulating material</b> A material that has a thermal conductivity of less than 0.07 W/mK.	CD-C, CD-E3
<b>Insulation</b> In the context of <i>fire</i> protection, the time in minutes for which a prototype specimen of a <i>fire separation</i> , when subjected to the <i>standard test</i>	Code

for fire resistance, has limited the transmission of heat through the specimen.

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**Integrity** In the context of *fire* protection, the time in minutes for which a prototype specimen of a *fire separation*, when subjected to the *standard test* for *fire* resistance, has prevented the passage of flame or hot gases.

Code

#### COMMENT:

The precise meaning of *integrity* depends on the type of *building elements* being treated and how it is defined in the *standard test* being used.

Intended use in relation to a building,—

**BA04** 

- (a) includes any or all of the following:
  - (i) any reasonably foreseeable occasional use that is not incompatible with the intended use:
  - (ii) normal maintenance:
  - (iii) activities undertaken in response to *fire* or any other reasonably foreseeable emergency; but

(b) does not include any other maintenance and repairs or rebuilding.

**Interceptor trap** A device which will separate and retain desired liquids and solids from a liquid stream and which will provide a water barrier to prevent foul air or gas from entering any downstream system.

CD-G14

**Intermediate floor** Any upper floor within a *firecell* and which is not *fire* separated from the floor below. Upper floors within *household units* need not meet the specific *fire* safety requirements which apply to *intermediate floors* in all other situations.

CD-C

# COMMENT:

- 1. An *intermediate floor* may be open to the *firecell* or enclosed with non-*fire* rated *construction*. If enclosed with *fire* rated walls another *firecell* is created.
- 2. *Household units* occur only in *purpose groups* SR and SH. Life safety provisions are governed by the limitations in permitted *open path* lengths.

Amend 11 Sep 2010

Internal wall A wall other than an external wall.

Simple House

# Κ

**Kerb ramp** means a short ramp either cutting through a kerb or built up to the kerb.

CD-D1

**Kick-out** A single fold applied to the edge of a horizontal metal *flashing* to deflect moisture away from the *cladding system* below. Refer also *Bird's beak*.

CD-E2

# COMMENT:

A *kick-out* is used at the bottom of a *capping* or other *flashing* to deflect water away from the *cladding* below.



	Definition	Source
	L	
	Lead flashings Lead sheet flashings that:	Simple House
Amend 11 Sep 2010	(a) comply with AS 1804, and (b) have a minimum unit mass of 17 kg/m².	
	<b>Licensee</b> A <i>person</i> holding a licence issued under the Radiation Protection Act 1965 and for the time being in force.	CD-F8
	<b>Licensed building practitioner</b> means a building practitioner whose name is, for the time being, entered in the register established and maintained under section 298(1) of the <i>Building Act 2004</i> .	BA04
Amend 11 Sep 2010	<b>Lightweight wall cladding</b> Timber weatherboard (bevel-back or rusticated) or flat sheet (plywood or fibre-cement) <i>wall claddings</i> for use in this [Simple House] <i>Acceptable Solution</i> .	Simple House
	<b>Limited area atrium</b> A single <i>firecell</i> in which individual <i>occupied spaces</i> at different levels open onto a common enclosed space. Limitations are placed on the number of <i>intermediate floors</i> (no more than two levels), individual floor areas and permitted <i>occupant load</i> , depending on the provisions for smoke detection, smoke control and the <i>means of escape from fire</i> .	CD-C
	<b>COMMENT:</b> Typical <i>limited area atrium buildings</i> are small shopping malls, and motel complexes with a central atrium feature open to a number of floors.	
	Lining The rigid sheet covering for a wall, ceiling or other interior surface.	CD-E2
	<b>Lintel</b> A horizontal <i>framing</i> member spanning an opening in a wall.	Simple House
	Loadbearing stud A stud in a loadbearing wall.	Simple House
	<b>Loadbearing wall</b> A wall supporting vertical loading from a <i>roof</i> .	Simple House
Amend 11 Sep 2010	<b>Loaded dimension</b> The loaded dimension of structural elements which support other members at right angles. Refer to [SH/AS1] Figure 5.2.2.	Simple House
	<b>Lock-out</b> The safety shut down condition of the control system such that re-start cannot be accomplished without manual resetting.	CD-C, CD-G11
	M	
Amend 11 Sep 2010	<b>M</b> A steel bolt of the stated <i>diameter</i> in millimetres.	Simple House
	<b>Main private stairway</b> A <i>private stairway</i> intended to provide access to and between frequently used spaces such as living areas, kitchens and garages, and includes all exterior <i>private stairways</i> .	CD-D1
	Masonry tiles Clay or concrete tile roof cladding.	CD-E2
	Masonry veneer Clay or concrete block veneer cladding.	CD-E2



	Definition	Source
	Means of escape from fire, in relation to a building that has a floor area,—	BA04
	(a) means continuous unobstructed routes of travel from any part of the floor area of that <i>building</i> to a place of safety, and	
	(b)includes all active and passive protection features required to warn people of <i>fire</i> and to assist in protecting people from the effects of <i>fire</i> in the course of their escape from the <i>fire</i> .	
Amend 11 Sep 2010	<b>Member span</b> The clear distance between supports, measured along the member.	Simple House
	<b>Membrane</b> A non-metallic material, usually synthetic, used as a fully supported roof <i>cladding</i> , <i>deck</i> surface or, in conjunction with other <i>claddings</i> , as gutters or <i>flashings</i> .	CD-E2
	<b>Minister</b> means the Minister of the Crown who, under the authority of a warrant or with the authority of the Prime Minister, is responsible for the administration of the <i>Building Act 2004</i> .	BA04
	<b>Minor private stairway</b> A <i>private stairway</i> not on a main thoroughfare, and intended to provide infrequent access to a single room which is not a living area or kitchen.	CD-D1
Amend 11 Sep 2010	<b>MSG</b> Machine stress graded refers to timber that is initially sorted by machine, calibrated to NZS 3603. See also <b>VSG</b> .	Simple House
	<b>Multi-unit dwelling</b> Applies to a <i>building</i> or use which contains more than one separate household or family.	CD-C
	COMMENT: For fire safety purposes each household unit is a separate firecell.	
	N	
	Natural draught The flow produced by the tendency of warmed gases to rise.	CD-G4
	<b>Natural hazard</b> has the meaning given to it by section 71 of the Building Act 2004.	BA04
	Section 71(3) states:  "(3) In this section and sections 72 to 74, natural hazard means any of the following:  (a) erosion (including coastal erosion, bank erosion, and sheet erosion):  (b) falling debris (including soil, rock, snow, and ice):  (c) subsidence:  (d) inundation (including flooding, overland flow, storm surge, tidal effects, and ponding):  (e) slippage."	

Net openable area is the area of windows or doors or other opening measured

Amend 11 Sep 2010 on the face dimensions of the openable building element concerned.

CD-G4



	Definition	Source
	Network utility operator means a person who—	BA04
	(a) undertakes or proposes to undertake the distribution or transmission by pipeline of natural or manufactured gas, petroleum, biofuel, or geothermal energy; or	
	(b) operates or proposes to operate a network for the purpose of—	
	(i) telecommunication as defined in section 5 of the Telecommunications Act 2001; or	
	(ii) radiocommunications as defined in section 2(1) of the Radiocommunications Act 1989; or	
	(c) is an electricity operator or electricity distributor as defined in section 2 of the Electricity Act 1992 for the purpose of line function services as defined in that section; or	
	(d)undertakes or proposes to undertake the distribution of water for supply (including irrigation); or	
	(e) undertakes or proposes to undertake a drainage or sewerage system	
	Nogging See dwang	Simple House
	<b>Nominal pile width</b> The least width of a pile in side view and is equal to the diameter in round piles.	CD-B1
	<b>Non-combustible</b> Materials shall be classified as <i>non-combustible</i> or <i>combustible</i> when tested to: AS 1530 – Part 1.	CD-B1, CD-C
	Non-loadbearing stud A stud in a non-loadbearing wall.	Simple House
	Non-loadbearing wall A wall other than a loadbearing wall.	Simple House
	<b>Non-return valve</b> A valve that permits flow in one direction but prevents a return flow and is part of a hot or cold water system.	CD-G12
	<b>Nosing</b> The rounded projecting edge of a stair tread.	CD-D1, CD-F4
	<b>Notice to fix</b> has the meaning given to it by section 164(2) of the <i>Building Act 2004</i> .	BA04
	Section 164(2) states:	
	"(2) A responsible authority must issue to the specified person concerned	
	<ul> <li>a notice (a notice to fix) requiring the person—</li> <li>(a) to remedy the contravention of, or to comply with, this Act or the regulations; or</li> </ul>	
	<ul><li>(b) to correct the warrant of fitness; or</li><li>(c) to properly comply with the inspection, maintenance, or reporting procedures stated in the compliance schedule."</li></ul>	
	<b>Notional boundary</b> The <i>boundary</i> which for <i>fire</i> safety purposes, is assumed to exist between two <i>buildings</i> on the same property under a single land title.	CD-C
	<b>COMMENT:</b> A <i>notional boundary</i> may be located anywhere between the two <i>buildings</i> on the same property. It is not fixed and for the purposes of calculating permitted unprotected areas of each <i>building</i> it can be moved towards the other <i>building</i> thus maximising the permitted <i>unprotected area</i> .	
	<b>NUO system</b> means a system owned or controlled by a <i>network utility operator</i> .	BA04
\ \	NZBC New Zealand Building Code.	CD-E2

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Definition	Source
0	
<b>Occupant load</b> The greatest number of people likely to occupy a particular space within a <i>building</i> . It is determined by:	CD-C, CD-F6, CD-F7
(a) Multiplying the number of people per $m^2$ (occupant density) for the activity being undertaken, by the total floor area, or	
(b) For sleeping areas, counting the number of beds, or	
(c) For fixed seating areas, counting the number of seats.	
<b>Occupied space</b> Any space within a <i>building</i> in which a <i>person</i> will be present from time to time during the <i>intended use</i> of the <i>building</i> .	Code
<b>Open path</b> That part of an <i>escape route</i> (including <i>dead ends</i> ) not protected by <i>fire</i> or <i>smoke separations</i> , and which terminates at a <i>final exit</i> or <i>exitway</i> .	Code
<b>Open space</b> includes land on which there is and will be no <i>buildings</i> and which has no roof over any part of it other than overhanging eaves.	CD-C
<b>Open vented storage water heater</b> A <i>water heater</i> incorporating a <i>vent pipe</i> which is permanently open to the atmosphere.	CD-G12
Other property—	BA04
(a) means any land or buildings, or part of any land or buildings, that are—	
(i) not held under the same allotment; or	
(ii) not held under the same ownership; and	
(b)includes a road	
Outdoor air Air as typically comprising by volume:	Code
(i) oxygen 20.94%	
(ii) carbon dioxide 0.03%	
(iii) nitrogen and other inert gases 79.03%.	
<b>Outfall</b> That part of the disposal system receiving <i>surface water</i> or <i>foul water</i> from the drainage system. For <i>foul water</i> , the <i>outfall</i> may include a <i>sewer</i> or a septic tank. For <i>surface water</i> , the <i>outfall</i> may include a natural water course, kerb and channel, or soakage system.	Code
<b>Over-pressure protection</b> Devices preventing the pressure in piping or appliances from exceeding a predetermined value.	CD-G11
Owner, in relation to land and any buildings on the land,—	BA04
(a) means the <i>person</i> who—	
(i) is entitled to the rack rent from the land; or	
(ii) would be so entitled if the land were let to a tenant at a rack rent; and	
(b)includes—	
(i) the owner of the fee simple of the land; and	
(ii) any <i>person</i> who has agreed in writing, whether conditionally or unconditionally, to purchase the land or any leasehold estate or interest in the land or to take a lease of the land and who is bound by the agreement because the agreement is still in force.	



	Definition	Source
	P	
	<b>Parallel flashing</b> A roof <i>flashing</i> that runs along the roof slope, parallel to the roof <i>cladding</i> profile. Also known as a longitudinal <i>flashing</i> .	CD-E2
2	<b>Parapet</b> A timber-framed wall that extends above the level of the roof <i>cladding</i> . Refer also Enclosed balustrade.	CD-E2
1 0	<b>Passive stack ventilator</b> A system including a ventilation shaft which uses natural draught to ventilate spaces.	CD-G4
	<b>Penetration</b> A pipe, cable or duct passing through an opening in a <i>fire separation</i> .	CD-C
	<b>Penstocks</b> are conduits to control the flow of water in water supply, hydroelectric power and sewerage systems. Penstocks are normally equipped with a gate system and surge tank.	DG
	<b>People with disabilities</b> People whose ability to use <i>buildings</i> is affected by mental, physical, hearing or sight impairment.	Code
	<b>Performance criteria</b> in relation to a <i>building</i> , means those qualitative or quantitative criteria that the <i>building</i> is required to satisfy in performing its <i>functional requirement</i> .	BA04
1 0	<b>Permanent opening</b> An opening which cannot be closed, this implies that doors, windows etc are NOT permanent openings, although door undercuts are.	CD-G4
	Person includes—	BA04
	(a) the Crown; and	
	(b) a corporation sole; and	
2	(c) a body of persons (whether corporate or unincorporate)	
	<b>Person with a disability</b> means a <i>person</i> who has an impairment or a combination of impairments that limits the extent to which the <i>person</i> can engage in the activities, pursuits, and processes of everyday life, including, without limitation, any of the following:	BA04
	(a) a physical, sensory, neurological, or intellectual impairment:	
	(b) a mental illness.	
	<b>Piping system</b> An assembly of pipes, pipe fittings, gaskets, bolting and pipe supports.	CD-G14
	<b>Pitch line</b> The line joining the leading edge or <i>nosings</i> (if any) of successive stair treads within a single flight of <i>stairs</i> .	<b>CD-F4</b> (Sep 07)
	Plans and specifications—	BA04
	(a) means the drawings, specifications, and other documents according to which a <i>building</i> is proposed to be <i>constructed</i> , <i>altered</i> , demolished, or removed; and	
	(b) includes the proposed procedures for inspection during the <i>construction</i> , <i>alteration</i> , demolition, or removal of a <i>building</i> ; and	
	(c) in the case of the construction or alteration of a building, also includes—	
	(i) the intended use of the building; and	
\	(ii) the <i>specified systems</i> that the applicant for <i>building consent</i> considers will be required to be included in a <i>compliance schedule</i> required under section 100; and	



Definition	Source
(iii) the proposed procedures for inspection and routine maintenance for the purposes of the <i>compliance schedule</i> for those <i>specified systems</i> .	
<b>Plate</b> A timber member supported by a <i>foundation</i> or <i>studs</i> to support and distribute the load from floors, walls, <i>roofs</i> or ceilings. See <b>bottom plate</b> , <b>top plate</b> .	Simple Hous
<b>Plumbing system</b> Pipes, joints and fittings laid above ground and used for the conveyance of <i>foul water</i> to the <i>foul water drain</i> , and includes <i>vent pipes</i> .	Code
Post An isolated vertical member acting as a support.	Simple Hous
Potable (and potable water) Water that is suitable for human consumption.	CD-G12
<b>Potential impact classification</b> is related to the consequence (effects) of the <i>dam</i> failing, if it should release its stored contents. Consequences include loss of life, socio-economic, financial and environmental.	DG
<b>Prescribed electrical work</b> has the meaning given to it by section 2(1) of the Electricity Act 1992.	BA04, EA
<b>Primary element</b> A <i>building element</i> providing the basic load bearing capacity to the structure, and which if affected by <i>fire</i> may initiate instability or premature structural collapse.	CD-B2, CD-C
COMMENT:	
Suspended floors in multi-storey buildings are primary elements.	
<b>Principal user</b> A member of the primary group for which a <i>building</i> was constructed, and therefore explicitly excludes <i>persons</i> or groups of <i>persons</i> providing care or control of that <i>principal user</i> group.	Code
Privacy The situation of being withdrawn from view.	CD-G1
<b>Private stairway</b> A <i>stairway</i> used, or intended to be used, by the occupants of a single <i>household unit</i> .	CD-D1
<b>Privy</b> A private room containing a receptacle (other than a WC) or an excavation for excreted liquid or solid human waste, and with a means of disposal or containment of the waste.	CD-G1
Producer statements are formal statements supplied by or on behalf of	НВ
(i) an applicant for a building consent, or	
(ii) by or on behalf of a person who has carried out building work.	
that can be accepted by a <i>building consent authority</i> as verification that certain work will be or has been carried out in accordance with nominated performance requirements of the <i>Building Code</i> .	
<b>COMMENT:</b> Although no longer expressly referred to in the <i>Building Act 2004</i> , these could be accepted and considered as part of the plans or specifications.	
<b>Product certificate</b> means a certificate issued under section 269 of the <i>Building Act 2004</i> that a <i>building consent authority</i> must accept as establishing compliance with the <i>Building Code</i> .	НВ



Definition	Source
<b>Property</b> includes land, <i>buildings</i> , and goods; but does not include incorporeal forms of <i>property</i> .	BA04
<b>Proprietary fasteners</b> <i>Proprietary fasteners</i> may be used where the fixing capacity of fixings are specifically identified in this [SH/AS1] <i>Acceptable Solution</i> .	Simple House
Manufacturers of a timber connector or fixing shall provide the following information on each package of fixings, or on a securely attached label:	
(a) the name, or registered trade name, or make and address of manufacturer	
(b) the materials used in manufacture including fasteners and corrosion protection	l
(c) the load capacity of the timber connector or fixing in kN determined in accordance with the following equation:	
$R = \varphi \times Q_k \times n \times k$	
Where:	
<ul> <li>R = connector capacity in kN</li> <li>φ = capacity reduction factor from NZS 3603</li> <li>Q<sub>k</sub> = characteristic value obtained by test in accordance with BRANZ Evaluation Method EM1 or AS/NZS 2699: Part 2 as appropriate</li> <li>n = number of tested elements making up the complete joint</li> <li>k = modification factors from NZS 3603 (Section 4) as appropriate to specific application.</li> </ul>	
(d) fastener's requirements	
(e) details of intended use	
(f) durability in accordance with Paragraph 2.5.4.	
<b>Protected path</b> That portion of an <i>exitway</i> within a <i>firecell</i> which is protected from the effects of smoke by <i>smoke separations</i> .	Code
<b>Protected shaft</b> A space, other than a <i>safe path</i> , enclosed by <i>fire separations</i> or <i>external walls</i> used to house <i>building</i> services, lifts, or conveyors which pass from one <i>firecell</i> to another.	CD-C
<b>Purlin</b> A horizontal member laid to span across <i>rafters</i> or trusses, and to which the roof <i>cladding</i> is attached.	CD-E2
Purlin Includes tile batten. A horizontal member laid to span across rafters	Simple House

Amend 11 Sep 2010

**Purpose group** The classification of spaces within a *building* according to the activity for which the spaces are used.

or trusses and to which the *roof cladding* is attached.



	Definition	Source
	R	
Amend 11 Sep 2010	<b>R</b> A plain round reinforcing bar of the stated <i>diameter</i> in millimetres.	Simple House
	<b>R-value</b> The common abbreviation for describing the values of both <i>thermal resistance</i> and <i>total thermal resistance</i> .	CD-E3, CD-G5, CD-H1
	<b>Radiocommunications</b> has the same meaning as in section 2(1) of the Radiocommunications Act 1989.	
	<b>Rafter</b> A <i>framing</i> timber, normally parallel to the slope of the roof, providing support for sarking, <i>purlins</i> or roof <i>cladding</i> .	CD-E2
Amend 11 Sep 2010	<b>Rafter</b> A <i>framing</i> timber normally parallel to the slope of the <i>roof</i> and providing support for the <i>purlins</i> or <i>roof</i> covering, or ceiling <i>lining</i> .	Simple House
	<b>Railway line</b> has the meaning ascribed to it by section 2 of the Transport Services Licensing Act 1989.	CD-C, RA
	The definition of 'Railway line' in the Transport Services Licensing Act 1989 has been repealed by the Railways Act 2005. Section 4 of the Railways Act 2005 now contains the definition for "railway line".	
	Section 4 states	
	"railway line" —	
	<ul><li>(a) means a single rail or set of rails, having a gauge of 550 mm or greater between them, laid for the purposes of transporting people or goods by rail; and</li></ul>	
	(b) includes—	
	<ul><li>(i) sleepers, associated formation and ballast, tunnels, and bridges; and</li><li>(ii) in relation to a single rail or set of rails that are laid on a road for the purposes of 1 or more light rail vehicles,—</li></ul>	
	<ul><li>(A) any area between the rails; and</li><li>(B) the area that extends 500 mm outside the extremity of any light rail vehicle being used on that single rail or set of rails; and</li></ul>	
	(iii) a set of rails, having a gauge of less than 550 mm between them, that is designated as a railway line in regulations made under	
	section 59(I); and (iv) except as provided in subparagraph (ii), any area within 5 m of a single	
	rail or within 5 m of a line drawn midway between a set of rails; but	
	(c) excludes—	
	(i) a railway line that is part of a railway used as an amusement device as defined in section 21A(1) of the Machinery Act 1950:	
	<ul><li>(ii) a railway line excluded by regulations made under section 59(m):</li><li>(iii) a railway line that exclusively serves private cable cars".</li></ul>	
	<b>Reasonably visible</b> , in relation to a <i>specified feature</i> , and for the purposes of Clause F6, means that the <i>specified feature</i> is visible to a person who—	Code
	(a) is 10 metres from it, or the greatest distance from it that it is possible to go in the open space surrounding it, whichever is the lesser; and	
Amend 11 Sep 2010	(b) has sight that is not defective, or is corrected (for example, by an optical appliance).	



Definition	Source
<b>Reflectance</b> The ratio of the flux reflected from a surface to the flux incident on it.	CD-G7, CD-G8
Regional authority means—	BA04
(a) a regional council; or	
(b)a unitary authority	
<b>Regional council</b> has the meaning given to it by section 5(1) of the Local Government Act 2002.	BA04
<b>Registrar</b> has the meaning given to it by section 282 of the <i>Building Act 2004</i> .	BA04
<b>Regulations</b> means regulations in force under the <i>Building Act 2004</i> .	BA04
<b>Regulator</b> A device which automatically regulates the pressure or volume of gas passing through it to a predetermined level.	CD-G10, CD-G11
<b>Reinforcement</b> Any form of reinforcing rod, bar or mesh that complies with the relevant requirements of NZS 3109.	Simple House
Relevant boundary means the boundary of an allotment which is other	CD-C

**Relevant boundary** means the *boundary* of an *allotment* which is *other property* in relation to the *building* concerned and from which is measured the separation between the *building* and that *other property*. For the *external wall* of any *building*, the *relevant boundary* shall be the nearest of the following *boundaries*:

- (a) A boundary of a freehold allotment, except that where the other property is a road, railway line or public open space the relevant boundary is the boundary on the far side of that other property.
- (b) A boundary of a cross-lease or of a company lease or licence, except that where the other property is open space to which the lessee or licensee of the building concerned has an exclusive right of access and occupation or to which two or more occupiers have rights of access and occupation the relevant boundary is the boundary on the far side of that other property.
- (c) A boundary shown on a unit plan excluding a boundary between a principal unit and its accessory unit, except that where the other property is open space which is common property, the relevant boundary is the boundary on the far side of that other property.



Definition Source

#### COMMENT:

- 1. Where an easement, such as a right of way, occurs within an allotment, the relevant boundary shall remain the same as if the easement did not exist.
- 2. Boundaries within a cross-lease or company lease or licence are shown on a survey plan. In some cases the boundary is the external wall or roof of a building.
- 3. The unit title boundaries of principal units, accessory units, and common property are shown in the unit plan. A boundary is frequently an internal or external wall, an upper floor, or the roof of a building.
- 4. A wall along a boundary between two allotments is called a "party wall" when the owners of the allotments each have legal rights in respect of that wall registered by way of easements on one or both titles. An internal wall between cross-leases, company leases, or unit titles, or between one of them and common property, is not generally called a party wall but in that case also the lessees, unit title holders, or corporate body concerned each have legal rights in respect of that wall. Such a wall separates areas which are other property in relation to each other, but the wall itself is part of each property. The fire protection consequence of that legal concept is that such a wall can be regarded as a fire separation providing protection against horizontal fire spread in each direction. In other words, that wall may provide the appropriate FRR instead of each property having its own wall of that FRR.

Relief vent A vent pipe which is connected to a discharge stack below the lowest branch connection and which connects at its upper end to the discharge stack vent or terminates as an open vent.

**CD-G13** 

Reservoir Body of water impounded by one or more dams or dikes, inclusive of its shores and banks and of any facility or installation necessary for its operation.

DG

Ribbon board Includes soffit plate. A horizontal framing timber secured to, or checked into, the edges of studs and supporting eaves bearers.

Simple House

**Ridge beam** A single beam that supports *rafters* of a *skillion roof*.

Simple House

**Risk group A**, for the purposes of performance F6.3.4 and performance F6.3.5, **Code** means buildings—

(a) whose occupants are required to remain in the building until the main lighting system is restored; or

(b) whose evacuation time is longer than 90 minutes.

Risk group B, for the purposes of performance F6.3.4 and performance F6.3.5, Code means buildings-

(a) whose evacuation time is 30 minutes or longer but not longer than 90 minutes; or

(b) whose occupant load is more than 1 000.

Amend 11 Sep 2010 Risk group C, for the purposes of performance F6.3.4, means buildings not in risk group A or risk group B.

Code

**Reservoir capacity** Total or gross storage capacity of the *reservoir* at full supply level.

DG

**Risk matrix** A table that allows the calculation of a *risk score* by the allocation and summing of scores for a range of design and location factors applying to a specific building design.

CD-E2



	Definition	Source
	<b>Risk score</b> An aggregated numerical score for a proposed <i>building</i> as defined by E2/AS1.The <i>risk score</i> is determined by completion of the <i>risk matrix</i> .	CD-E2
	<b>Road</b> has the meaning ascribed to it by section 315 of the Local Government Act 1974 and includes a public place and also includes a motorway.	CD-C/LGA
	<b>Rodding point</b> A removable cap at ground level through which access may be made for cleaning and inspecting the drainage system.	CD-E1, CD-G13
Amend 12 Oct 2011	<b>Roof</b> That part of a <i>building</i> having its upper surface exposed to the outside and at an angle of 60° or less to the horizontal.	CD-E2
Amend 11 Sep 2010	<b>Roof</b> That part of the <i>building</i> having its upper surface exposed to the outside and at an angle of between 10° and 35° to the horizontal. See <b>skillion roof</b> .	Simple House
Amend 12   Oct 2011	<b>Roof underlay</b> An absorbent permeable building paper that absorbs or collects condensation or water in association with <i>roof cladding</i> performance.	CD-E2
	<b>Roof underlay</b> An absorbent, permeable paper that absorbs or collects condensation or water that may penetrate the <i>roof cladding</i> .	Simple House
	The <i>roof underlay</i> shall have the properties in Table 23 of the <i>Acceptable Solution</i> E2/AS1 for Building Code Clause E2 External Moisture:	
	(a) absorbency of 100 g/m² or greater	
	(b) vapour resistance 7 MN s/g or less	
	(c) water resistance of 100 mm or greater	
	(d) pH of extract of between 6.0 and 9.0	
	(e) shrinkage no more than 0.5%	
Amend 11 Sep 2010	(f) mechanical edge tear and tensile strength to AS/NZS 4200.	
1	<b>Room-sealed appliance</b> An appliance designed so that air for combustion neither enters from, nor combustion products enter into, the room in which the appliance is located.	CD-G4
Amend 11 Sep 2010	Running bonds, See bond	Simple House
	s	
	<b>Saddle flashing</b> A <i>flashing</i> used to weatherproof the junction between a horizontal and vertical surface.	CD-E2
	<b>Safe path</b> That part of an <i>exitway</i> which is protected from the effects of <i>fire</i> by <i>fire separations</i> , <i>external walls</i> , or by distance when exposed to open air.	Code
	<b>Safe place</b> A place of safety in the vicinity of a <i>building</i> , from which people may safely disperse after escaping the effects of a <i>fire</i> . It may be a place such as a street, <i>open space</i> , public space or an <i>adjacent building</i> .	Code
	<b>Safety colour (green, red or yellow)</b> A colour of specified properties to which a safety meaning is attributed.	CD-F8
	<b>Safety glass</b> means a glass so treated or combined with other materials as to reduce the likelihood of injury to <i>persons</i> when it is cracked or broken.	CD-F2



	Definition	Source
	<b>Safety shut-off system</b> An arrangement of valves and associated control systems which shuts off the supply of gas when required by a device which senses an unsafe condition.	CD-G10
	<b>Safety sign</b> A particular type of sign which comprises a geometric form and a <i>safety colour</i> , together with a <i>safety symbol</i> or text (that is, words, letters, numbers or a combination of these) and gives a particular safety message.	CD-F8
	Safety symbol means a graphic symbol used in a safety sign.	CD-F8
	<b>Sanitary appliance</b> An appliance which is intended to be used for <i>sanitation</i> , but which is not a <i>sanitary fixture</i> . Included are machines for washing dishes and clothes.	Code
	Sanitary fixture Any fixture which is intended to be used for sanitation.	Code
	<b>Sanitation</b> The term used to describe the activities of washing and/or excretion carried out in a manner or condition such that the effect on health is minimised, with regard to dirt and infection.	Code
	<b>Scaffolding</b> used in the course of the <i>construction</i> process, means any structure framework, swinging stage, suspended <i>scaffolding</i> , or boatswain's chair, that is of a temporary nature and that is used or intended to be used for: the support or protection of workers engaged in, or in connection with <i>construction</i> work for the purpose of carrying out that work, or the support of materials used in connection with the work; and includes any plank, coupling, fastening, fitting, or device used in connection with the <i>construction</i> , erection, or use of <i>scaffolding</i> .	, BA04
	<b>Scupper</b> An opening in a <i>parapet</i> or <i>enclosed balustrade</i> to allow water to drain into a rainwater head.	CD-E2
1	<b>Sealant</b> A flexible neutral cure sealant for gap filling and weatherproofing that complies with:	Simple House
	(a) Type F, Class 20 LM or 25 LM of ISO 11600, or	
	(b) low modulus Type II Class A of Federal Specification TT-S-00230C.	
	<b>Secondary element</b> A <i>building element</i> not providing load bearing capacity to the structure and if affected by <i>fire</i> , instability or collapse of the <i>building</i> structure will not occur.	CD-B2, CD-C
	<b>Secondary flow path</b> The path over which <i>surface water</i> will follow if the drainage system becomes overloaded or inoperative.	CD-E1
	<b>Secondary private stairway</b> A <i>private stairway</i> other than a <i>main</i> or <i>minor private stairway</i> , intended to provide access to another floor containing only bedrooms, bathroom or similar accommodation.	CD-D1
	<b>Service ramp</b> means a ramp that is used, or intended to be used, infrequently by service personnel to gain access to spaces for the purposes of maintenance and the movement of goods.	CD-D1
	<b>Service stairway</b> means a <i>stairway</i> that is used, or intended to be used, infrequently by service personnel to gain access to spaces for the purposes of maintenance and the movement of goods.	CD-D1
	<b>Sewer</b> A <i>drain</i> that is under the control of, or maintained by, a <i>network utility operator</i> .	Code



	Definition	Source
Amend 12 Oct 2011	<b>Sill support bar</b> A bar or mechanism complying with EM6, E2/VM1 tests, and Clause B2 of the <i>Building Code</i> , and used to support the weight of aluminium window and door joinery that is installed over drained cavities.	CD-E2
Amend 11 Sep 2010	<b>Simple house</b> A house that is described in Section 1 of this [SH/AS1] <i>Acceptable Solution.</i>	Simple House
	<b>Sitework</b> means work on a <i>building</i> site, including earthworks, preparatory to, or associated with the <i>construction</i> , <i>alteration</i> , demolition, or removal of a <i>building</i> .	BA04
Amend 11 Sep 2010	<b>Skillion roof</b> A pitched <i>roof</i> where the ceiling <i>lining</i> is parallel and close to the <i>roof cladding</i> . The <i>roof</i> may be mono-pitch or may consist of more than one <i>roof</i> plane. These <i>roofs</i> may have <i>rafters</i> exposed below the ceiling.	Simple House
	<b>Smokecell</b> A space within a <i>building</i> which is enclosed by an envelope of <i>smoke separations</i> , or <i>external walls</i> , roofs, and floors.	CD-C
	<b>Smoke control door</b> A <i>doorset</i> with closefitting single or multi-leaves which are impermeable to the passage of smoke, fitted with smoke seals and installed within a <i>smoke separation</i> . The door, in the event of smoke, if not already closed, will close automatically and be held closed.	CD-C
	<ul><li>COMMENT:</li><li>1. A smoke control door may be held closed by use of a door closer. The door need not be latched.</li></ul>	
	2. Requirements for <i>smoke control doors</i> are given in C/AS1 Paragraph 6.19.1 and 6.19.8, and Appendix C Paragraph C8.1.	
	<b>Smoke developed index (SDI)</b> That index number for smoke developed when determined according to the <i>standard test</i> method for measuring the properties of lining materials.	CD-C
	<b>Smoke separation</b> Any vertical, horizontal or inclined <i>building element</i> with <i>known smoke-stopping</i> or <i>smoke-leakage characteristics</i> .	Code
	<b>Socket outlet</b> An accessory fixed to a wall or ceiling and designed to accept a plug that extends the electrical supply to an appliance by means of a flexible cable.	CD-G2
	Soffit bearer See eaves bearer.	Simple House
Amend 11 Sep 2010	Soffit plate See ribbon board.	Simple House
	<b>Soft edge</b> A compatible soft edging seamed onto <i>flashings</i> to provide closure to profiled <i>cladding</i> .	CD-E2
	<b>Soil fixture</b> A <i>sanitary fixture</i> constructed to receive solid and/or liquid excreted human waste. It includes bedpan disposal units, slop sinks, urinals, water closet pans, and water-flushed sanitary towel disposal units.	CD-G1, CD-G13
	<b>Sound transmission class (STC)</b> A single number rating derived from measured values of transmission loss in accordance with classification ASTM E 413, Determination of Sound Transmission Class. It provides an estimate of the performance of a partition in certain common sound insulation situations.	Code
Amend 11 Sep 2010	<b>Spacing</b> or <b>spaced</b> The distance at which members are spaced, measured centre to centre.	Simple House

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	Definition	Source
Amend 11 Sep 2010	Spans See member span and support span.	Simple House
Amend 12 Oct 2011	<b>Specific design</b> Design and detailing for compliance with the <i>Building Code</i> , of a proposed part or parts of a <i>building</i> which are not shown in this Acceptable Solution.	CD-E2
	<b>Specific design</b> Design and detailing of a proposed <i>building</i> or parts of a <i>building</i> , demonstrating compliance with the Building Code, that shall be provided to the <i>building consent authority</i> for assessment and approval as part of the <i>building consent</i> process. <i>Buildings</i> , or parts of <i>buildings</i> , requiring <i>specific design</i> are beyond the scope of the <i>Simple House Acceptable Solution</i> .	Simple House
	<b>Specified features</b> , for the purposes of Clause F6, means the following:	Code
	(a) building elements that may act as obstructions:	
	(b) safety features required under clauses of the <i>Building Code</i> other than Clause F6 (for example, <i>handrails</i> required under Clause D1):	
	(c) changes in direction:	
	(d)stairs and ramps:	
	(e)escape doors:	
Amend 11 Sep 2010	(f) entries to a safe place.	
	<b>Specified intended life</b> has the meaning given to it by section 113(3) of the Building Act 2004.	BA04
	Section 113(3) states:	
	"(3) In subsection (2), <b>specified intended life</b> , in relation to a building, means the period of time, as stated in an application for a building consent or in the consent itself, for which the building is proposed to be used for its intended use."	
	Specified system—	BA04
	(a) means a system or feature that—	
	(i) is contained in a building; and	
	<ul><li>(ii) contributes to the proper functioning of the building (for example, an automatic sprinkler system);</li></ul>	
	And	
	(iii) is declared by the Governor-General, by Order in Council, to be a <i>specified</i> system for the purposes of this Act; and	
	(b) includes a cable car.	
	<b>Spread of flame index (SFI)</b> That index number for spread of flame which is determined according to the <i>standard test</i> method for measuring the properties of lining materials.	CD-C
	<b>Spillway</b> Weir, channel, conduit, tunnel, gate or other structure designed to permit discharges from the reservoir.	DG



Definition	Source
<b>Stability</b> In the context of <i>fire</i> protection, the time in minutes for which a prototype specimen of a <i>primary element</i> , when subject to the <i>standard test</i> for <i>fire</i> resistance, has continued to carry its <i>fire</i> design load without failure.	Code
COMMENT: The fire design load should be as specified in B1/VM1.	
<b>Stairway</b> A series of steps or stairs with or without landings, including all necessary <i>handrails</i> and giving access between two different levels.	CD-C, CD-D1
Stainless steel flashings Stainless steel flashings shall be:	Simple House
(a) minimum thickness of 0.45 mm, and	
(b) Type 304 or 316 stainless steel in accordance with Table 1 of ISO/TS 15510.	
<b>Stanchion</b> A connecting device, fixed into the structure of a <i>building</i> , that provides support for <i>handrails</i> , aerials and similar structures.	CD-E2
<b>Standards</b> means specifications for <i>building</i> materials, methods, processes or practices that provide a basis for determining consistent and acceptable minimum levels of quality, performance, safety and reliability.	НВ
COMMENT:  Standards are developed by organisations that are recognised by the Government.  In New Zealand, standards are developed by a trading arm of the Standards Council, a crown entity operating under the Standards Act 1988. In Australia, standards are developed by Standards Australia, which is recognised through a memorandum of understanding with the Commonwealth Government.	
<b>Standard test</b> A test method which is recognised as being appropriate for the <i>fire</i> protection properties being assessed.	CD-C
COMMENT: A list of <i>standard test</i> methods is given in Appendix C of C/AS1.	
<b>Standard year</b> For the purposes of determining natural lighting, the hours between 8 am and 5 pm each day with an allowance being made for daylight saving.	Code
<b>Statutory authority</b> means an authority or organisation that has the statutory power to classify or register land or <i>buildings</i> for any purpose.	BA04
<b>Stopend</b> A turn-up at the upper edge of profiled metal <i>cladding</i> , or at the end of gutters and some types of <i>flashings</i> .	CD-E2
<b>COMMENT:</b> A <i>stopend</i> assists the control of moisture by ensuring any moisture reaching the edge of the roofing is deflected from further entry.	
<b>Storage water heater</b> A <i>water tank</i> with an integral <i>water heater</i> for the storage of hot water.	CD-G12
<b>Storey</b> That portion of a <i>building</i> included between the upper surface of any floor and the upper surface of the floor immediately above, except the top <i>storey</i> shall be that portion of a <i>building</i> included between the upper surface of the topmost floor and the ceiling or roof above.	CD-E2

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<b>Strength reduction factor</b> The factor by which the ultimate strength is multiplied to obtain the design strength.	CD-B1
COMMENT:  NZS 4203: 1992 uses the terms ideal strength in place of ultimate strength, and dependable strength in place of design strength.	
Stretcher bonds, See bond	Simple House
<b>Structural fire endurance rating (S)</b> The <i>fire resistance rating (FRR)</i> intended to prevent <i>fire</i> spread or structural collapse for the complete burnout of the <i>firecell</i> .	CD-C
<b>Stucco</b> A wall <i>cladding system</i> formed from reinforced solid plaster over a rigid or non-rigid backing.	CD-E2
<b>Stud</b> A vertical <i>framing</i> timber.	CD-E2
<b>Suite</b> A <i>firecell</i> providing residential accommodation for the exclusive use of one <i>person</i> or of several people known to one another. It comprises one or more rooms for sleeping and may include spaces used for associated domestic activities such as hygiene and cooking.	CD-C, CD-F7
COMMENT:	
<ol> <li>Bed numbers are limited to 6 in purpose groups SC and SD or 12 in purpose group SA in accordance with C/AS1 Paragraphs 6.6.5 and 6.7.6. Examples may be found in hotels, motels and residential care facilities, such as old people's homes or in hospices providing temporary family accommodation.</li> </ol>	
2. It is assumed that the social cohesion of the occupants by virtue of the personal relationship (as family members, friends or associates) would ensure that any individual, becoming aware of <i>fire</i> , would naturally assist others within the <i>firecell</i> to escape. The term <i>suite</i> does not apply to a group of bedrooms where each room is available to different "key-holders". In some cases a <i>suite</i> may be a single bedroom.	
<b>Sump</b> A chamber which is installed in the <i>drain</i> and incorporates features to intercept and retain silt, gravel and other debris.	CD-E1
<b>Supervise</b> , in relation to <i>building work</i> , means provide control or direction and oversight of the <i>building work</i> to an extent that is sufficient to ensure that the <i>building work</i> —	BA04
(a) is performed competently; and	
(b) complies with the building consent under which it is carried out.	
<b>Support span</b> A clear distance along a member between supports, measured in plan (horizontally).	Simple House
<b>Surface finish</b> The combination of a surface coating and substrate material on surfaces of <i>building elements</i> exposed to view. It can be an applied decorative coating or the uncoated <i>building element</i> itself. For interior surfaces the requirements are evaluated in terms of <i>SFI</i> and <i>SDI</i> . For exterior surfaces the requirements are evaluated in terms of rate of heat release as determined by Appendix C, Paragraph C9.1.	CD-C
<b>Surface water</b> All naturally occurring water, other than sub-surface water, which results from rainfall on the site or water flowing onto the site, including that flowing from a <i>drain</i> , stream, river, lake or sea.	Code



**Definition** Source Т Tailing dam Dam constructed to retain tailings or other waste materials from DG mining or industrial operations. **CD-G10** Tailpipe A device placed at the low point of a gas piping system to collect condensate, and from which the condensate may be removed. Territorial authority (TA) means a city council or district council named in **BA04** Part 2 of Schedule 2 of the Local Government Act 2002; and— (a) in relation to land within the district of a territorial authority, or a building on or proposed to be built on any such land, means that territorial authority; and (b)in relation to any part of a coastal marine area (within the meaning of the Resource Management Act 1991) that is not within the district of a territorial authority, or a building on or proposed to be built on any such part, means the territorial authority whose district is adjacent to that part. **Territorial authority** City or district council (as named in Schedule 2, Part 2 Simple House of the Local Government Act 2002) responsible for community wellbeing and development, environmental health and safety (including building control, civil defence, and environmental health matters), infrastructure (roading and transport, sewerage, water/stormwater), recreation and culture, and resource management including land use planning and development control. Theatre A place of assembly intended for the production and viewing of CD-C. performing arts, and consisting of an auditorium and stage with provision **CD-F4** (Sep 07) for raising and suspending stage scenery above and clear of the working area. **Thermal resistance** The resistance to heat flow of a given component of Code a building element. It is equal to the air temperature difference (°C) needed to produce unit heat flux (W/m²) through unit area (m²) under steady conditions. The units are °Cm<sup>2</sup>/W. Threshold A sill to an external door, or the floor under an internal door. CD-D1 Tile batten See purlin. Simple House **Top plate** A plate placed over the top end of *studs*. Simple House Total thermal resistance The overall air-to-air thermal resistance across all CD-E3, CD-G5 components of a building element such as a wall, roof or floor. (This includes the surface resistances which may vary with environmental changes eg, temperature and humidity, but for most purposes can be regarded as having standard values as given in NZS 4214.) **Total wall area**, in relation to a building, means the sum (expressed in square Code metres) of the following: Simple House (a) the wall area of the building; and

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(b) the area (expressed in square metres) of all vertical glazing in external walls of the building.



Definition	Source
Town gas A manufactured gas.	CD-G11
<b>Toxic environment</b> An environment that contains <i>contaminants</i> that can contaminate the water supply in concentrations greater than those included in the New Zealand Drinking Water Standard 1995.	CD-G12
<b>Trade</b> means any trade, business, industry, profession, occupation, activity of commerce, or undertaking relating to—	BA04
(a) the supply or acquisition of goods or services; or	
(b) the acquisition of household units or any interest in land.	
<b>Transverse flashing</b> A roof <i>flashing</i> that runs across the roof slope, at right angles to the roof <i>cladding</i> profile.	CD-E2
<b>Trap</b> A chamber which is installed in the <i>drain</i> and incorporates features to intercept and retain floatable debris.	CD-E1
<b>Trapezoidal</b> A type of profiled metal <i>cladding</i> with symmetrical or asymmetrical crests, with troughs between the crests.	CD-E2
<b>Travel distance</b> The length of the <i>escape route</i> as a whole or the individual lengths of its parts, namely:	Code
(a) Open paths	
(b) Protected paths and	
(c) Safe paths.	
<b>Trickle ventilator</b> A controllable ventilation opening through the external envelope to the outside to provide background ventilation.	CD-G4
<b>Trimmer</b> A member supporting the wall <i>framing</i> beneath, or over an opening in a <i>non-loadbearing wall</i> and carrying wind loads to the <i>trimmer studs</i> .	Simple House
Trimmer stud A stud located on the side of an opening.	Simple House
<b>Trough profile</b> A type of profiled metal <i>cladding</i> comprising vertical ribs with flat, or lightly profiled pans between the ribs. Also known as ribbed, secret fixed or tray profile.	CD-E2



**Definition** Source U Underlay The material used behind a roof or wall cladding. Refer Wall underlay CD-E2 and Roof underlay. Unisex facilities Facilities available for use by either sex. CD-G1 COMMENT: Unisex facilities may also be described as both gender facilities. Unitary authority has the meaning given to it by section 5(1) of the BA04/LGA Local Government Act 2002. Section 5(1) states: "unitary authority" means a territorial authority that has the responsibilities, duties, and powers of a regional council conferred on it under-(a) the provisions of any Act; or (b) an Order in Council giving effect to a reorganisation scheme" Universal access Where elements and spaces are accessible to and usable Simple House by people of all ages and abilities to the greatest extent possible. **Unprotected area** in relation to an *external wall* of a *building* means: Code (a) Any part of the external wall which has less than the required FRR. For example, a non fire rated window, door or other opening or sheet metal. (b) Any part of the external wall which has combustible material more than 1.0mm thick attached to or applied to its external face, whether for cladding or any other purpose. uPVC flashings uPVC flashings shall be a minimum of 0.75 mm thick and: Simple House (a) comply with the requirements of the following Clauses of AS/NZS 4256: Part 2: ii) Clause 9.2 Impact resistance iii) Clause 9.3 Tensile strength iv) Clause 9.4 Colourfastness and impact resistance following ultraviolet light exposure. (b) where exposed to the weather, shall also comply with Section 8 of AS/NZS 4256: Part 2. (c) have a finish colour with a reflectance of 40% or more, when measured in accordance with ASTM C1549 or ASTM E903. Valley board A board laid to support a valley gutter. Simple House CD-E2 Valley gutter A gutter running down the valley formed by the intersection of two pitched roof surfaces. Valve vented storage water heater (unvented storage water heater) **CD-G12** A storage water heater in which the required venting to the atmosphere is controlled by a valve. CD-B2 Vapour barrier Sheet material or coating having a low water-vapour transmission, and used to minimise water-vapour penetration in buildings. (Vapour barriers are sometimes referred to as damp-proof membranes.)

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Definition	Source
<b>Vent line</b> A pipe or tube which conveys gas to a safe place outside the building from a gas pressure regulator relief valve.	CD-G10
<b>Vent pipe</b> A pipe for the purpose of protecting <i>water seals</i> that at its upper end is either open to the atmosphere or fitted with an <i>air admittance</i> valve and that at its lower end is connected to a <i>discharge pipe</i> .	CD-G13
<b>Verification Method</b> means a method by which compliance with the <i>Building Code</i> may be verified.	BA04
<b>VSG</b> Visual stress graded, refers to verified timber that is initially sorted visuall in accordance with NZS 3603. See also <b>MSG</b> .	y Simple House
w	
Wall refer External wall.	CD-E2
<b>Wall area</b> , in relation to a <i>building</i> , means the area (expressed in square metres) of internally-exposed <i>external walls</i> , including any door openings, of the <i>building</i> .	Code
Wall bracing element A section of wall that performs a bracing function.	Simple House
<b>Wall underlay</b> An absorbent synthetic wrap used as part of the wall <i>cladding system</i> to assist the control of moisture by ensuring moisture which may occasionally penetrate the wall <i>cladding</i> is directed back to the exterior of the <i>building</i> .	Simple House
The wall underlay shall have the properties in Table 23 of the Acceptable Solution E2/AS1 for Building Code Clause E2 External Moisture:	
(a) absorbency – no requirement	
(b)vapour resistance 7 MN s/g or less	
(c) water resistance of 20 mm or greater	
(d)pH of extract of between 6.0 and 9.0	
(e)shrinkage no more than 0.5%	
(f) mechanical edge tear and tensile strength to AS/NZS 4200.	
<b>Wall underlay</b> A building paper, synthetic material or rigid sheathing used as par of the <i>wall cladding system</i> to assist the control of moisture by ensuring moisture which occasionally penetrates the <i>wall cladding</i> is directed back to the exterior of the <i>building</i> .	ıre
<b>Waste pipe</b> A <i>discharge pipe</i> that conveys the discharge from <i>waste water fixtures</i> to a <i>gully trap</i> .	CD-G13
<b>Waste water fixture</b> A <i>sanitary fixture</i> or <i>sanitary appliance</i> used to receive wastes, and which is not a <i>soil fixture</i> .	CD-G13
Water heater A device for heating water.	CD-B2, CD-G12
<b>Water main</b> A water supply pipe that is under the control, or maintained by a <i>network utility operator</i> .	Code
<b>Waterproof and waterproofing</b> The complete and total resistance of a <i>building element</i> to the ingress of any moisture.	CD-E2
Water seal The depth of water that can be retained in a water trap.	CD-G2, CD-G1



Definition	Source
<b>Water supply system</b> Pipes, fittings and tanks used or intended to be used for the storage and reticulation of water from a <i>water main</i> or other water source to <i>sanitary fixtures</i> , <i>sanitary appliances</i> and fittings within a <i>building</i> .	Code
Water tank (vessel) A covered fixed container for storing hot or cold water.	CD-G12
<b>Water trap</b> A fitting designed to retain a depth of water that prevents foul air and gases escaping from the <i>plumbing system</i> or <i>foul water drainage system</i> and entering a <i>building</i> .	CD-G2, CD-G13
<b>Weathertightness and weathertight</b> Terms used to describe the resistance of a <i>building</i> to the weather. <i>Weathertightness</i> is a state where water is prevented from entering and accumulating behind the <i>cladding</i> in amounts that can cause undue dampness or damage to the <i>building elements</i> .	CD-E2
COMMENT:  The term weathertightness is not necessarily the same as waterproof. However, a weathertight building, even under severe weather conditions, is expected to limit moisture ingress to inconsequential amounts, insufficient to cause undue dampness inside buildings and damage to building elements. Moisture that may occasionally enter is able to harmlessly escape or evaporate.	
<b>Weathertightness</b> and <b>weathertight</b> Terms used to describe the resistance of a <i>building</i> to the weather.	Simple House
<b>Wet area</b> An area within a <i>building</i> supplied with water from a water supply system including bathrooms and showers, laundries, sanitary compartments and kitchen areas.	Simple House
Wetwall The exterior cladding on a wall with a drained cavity.	CD-E2
<b>Wharenui</b> A communal meeting house having a large open floor area used for both assembly and sleeping in the traditional Maori manner.	CD-C, CD-H1
<b>Wind zone</b> Categorisation of wind force experienced on a particular site as determined in NZS 3604, Section 5.	CD-E2
COMMENT:  Maximum ultimate limit state speeds are:  Low wind zone = wind speed of 32 m/s  Medium wind zone = wind speed of 37 m/s  High wind zone = wind speed of 44 m/s  Very high wind zone = wind speed of 50 m/s  Extra high wind zone = wind speed of 55 m/s.  Specific design is required for wind speeds greater than 55 m/s.	
Wire dog Galvanised or stainless steel wire, D or Z shaped nail, spiked at	Simple House
each end. Used for fixing timber together to resist uplift	•
Working day means any day except—	BA04
(a) Saturday, Sunday, Good Friday, Easter Monday, Anzac Day, the Sovereign's Birthday, Labour Day, and Waitangi Day; and	
(b) the day observed in the appropriate area as the anniversary of the province	

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of which the area forms a part; and

the close of 10 January in the following year.

(c) a day in the period beginning on 20 December in any year and ending with



# Index

(Revised by Amendment 6)

This is a complete index for the New Zealand Building Code and Compliance Documents.

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see Structure, loads



#### D

Dampness see External Moisture, Internal Moisture Dams see Ancillary buildings Dangerous goods see also Hazardous Building Materials, Hazardous Substances and Processes see Early childhood centres, Communal non-residential buildings Dead ends see Escape routes Amend 12 see also Membrane roofs and decks see also Enclosed Balustrades pergolas ...... **E2/AS1** 7.2.2, Figure 15 slatted timber decks to walls ...... E2/AS1 7.2.1, Figure 15 Amend 12 Oct 2011 concrete slab ...... E2/AS1 Paragraph 7.3.2.1, Figure 17B Amend 12 Oct 2011 Amend 12 Oct 2011 Deflections see Structure Demolition see Construction and Demolition Hazards see also Commercial buildings Design Amend 11 Sep 2010 Amend 11 Sep 2010 drains see Drains Amends 11 and 12 foundations see Foundations Amend 12 Oct 2011 Amend 11 Sep 2010 Amend 11 Sep 2010 Amend 12 Oct 2011 windows see Windows



Design loads see Structure, loads Detached dwellings see Housing Differential movement see Structure, loads Disabled persons see a Person with a disability Figures 6 and 11, Table 4 waste pipes 5.3.1, 5.6, Figures 7 to 9, Tables 3, 4 and 6 see also Discharge pipes, Pipes Figures 7 and 8, Table 6, **G13/AS2** 4.1.5, Figure 5 Domestic buildings see Housing Doors see also Windows and doors NZBC/D1.3.4 (f), D1.3.1 (c), D1.3.3 (n), D1.3.4 (f), D2.3.5 (c), F5.3.2 (d); C/AS1 3.9.1, 3.11.6, 6.19.4; D1/AS1 7.0, Figure 27: fire doors **C/AS1** 3.3.1 b), 3.6.1 c), 3.11.9, 3.17.9, 3.17.13, 6.19.2 a), C7.1, Figures 3.29 to 3.31, Table 6.1; revolving doors, automatic doors and Figure 3.26; **D1/AS1** 7.0.6, Figure 29 Sep 2010 Figures 3.27, 3.28 and 6.1, Table 6.1

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Amend 11

Doors (continued)



visibilityvision panels	D1/AS1 7.0.6 D1/AS1 7.0.4 C/AS1 3.17.6, 5.8.10 D1/AS1 7.0.3
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bedding and backfilling alternative solutions materials placing and compacting proximity to buildings trench slope trench width bends bubble-up chamber system connections	E1/AS1 3.9, 3.9.2, Figure 13; G13/AS2 Figure 7 E1/AS1 3.9.8 E1/AS1 3.9.5; G13/AS2 Table 1 E1/AS1 3.9.6; G13/AS2 5.5 E1/AS1 3.9.7, Figure 14; E1/AS1 3.9.3 E1/AS1 3.9.4 G13/AS2 3.1 E1/AS1 3.4.2, Figures 6 and 7 G13/AS2 5.2, Figure 7
access points  access chambers  inspection chambers  inspection points  rodding points  alignment  see also Drain, layout bedding and backfilling  alternative solutions  materials  placing and compacting proximity to buildings  trench slope  trench width  bends  bubble-up chamber system. connections	G13.3.3, G15.3.3; B1/VM1 11.0, B1/AS1 6.0; G13/AS1 4.2.2 d), G13/AS2 1.0 E1/AS1 3.7, 3.7.3, 3.7.7, 3.7.8 E1/VM1 5.0.1, E1/AS1 3.7.1, 3.7.2 b), 3.7.4, 3.7.5, Figure 12 E1/AS1 3.7.1, 3.7.2 b), 3.7.4, 3.7.5, Figure 11 E1/AS1 3.7.1, 3.7.2 a), Figure 10 E1/AS1 3.3, 3.7.3 a), Figures 4 and 5 E1/AS1 3.9, 3.9.2, Figure 13; G13/AS2 Figure 7 E1/AS1 3.9.5; G13/AS2 Table 1 E1/AS1 3.9.5; G13/AS2 Table 1 E1/AS1 3.9.6; G13/AS2 5.5 E1/AS1 3.9.7, Figure 14; E1/AS1 3.9.4 G13/AS2 3.1 E1/AS1 3.4.2, Figures 6 and 7 G13/AS2 3.2.1, Figure 1

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bends	
bubble-up chamber system	<b>E1/AS1</b> 3.4.2, Figures 6 and 7
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construction	<b>G13/AS2</b> 5.2, Figure 7
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disused drains	<b>G13/AS2</b> 5.10
downstream water systems	<b>E1/VM1</b> 4.3
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installation	<b>G13/AS2</b> 5.0, 5.5
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high pressure air test	<b>E1/VM1</b> 8.3
low pressure air test	<b>E1/VM1</b> 8.2
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see Maintenance access to drains	
materials	.E1/AS1 3.1, Table 1; G13/AS2 2.0, Table 1
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pipe water, upstream of site	<b>E1/VM1</b> 4.1
quantity	<b>E1/VM1</b> 4.1.10
tailwater depth	<b>E1/VM1</b> 4.1.6, 4.1.7
proximity to buildings	<b>G13/AS2</b> 5.6, Figure 8
secondary flow	<b>E1/VM1</b> 4.0, 4.1.11 <b>E1/AS1</b> 1.0.1 d
downstream drainage	<b>E1/VM1</b> 4.3
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## Drains (continued)

site – outfall protection	<b>E1/VM1</b> 7.0
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	<b>E1/VM1</b> 1.0.4, 3.2, Figures 6 and 7
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minimum size	<b>E1/VM1</b> 3.1
minimum velocity	<b>E1/VM1</b> 6.0
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Drinking fountains	<b>G13/AS1</b> Table 2
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	B2; B2/VM1 1.0, B2/AS1 1.2, Figure 1NZBC/B2.3
code compliance certificate	_
code compliance certificateease of access and replacement	NZBC/B2.3
code compliance certificateease of access and replacementevaluation	
code compliance certificateease of access and replacementevaluationexamples of requirement	
code compliance certificateease of access and replacementevaluationexamples of requirementgeneric materials	NZBC/B2.3 B2/AS1 1.2.1 B2/VM1 1.0, B2/AS1 1.2, Figure 1 B2/AS1 1.3.1, Table 1
code compliance certificateease of access and replacementevaluationexamples of requirementgeneric materialsin service history	NZBC/B2.3  B2/AS1 1.2.1  B2/VM1 1.0, B2/AS1 1.2, Figure 1  B2/AS1 1.3.1, Table 1  B2/AS1 3.0
code compliance certificateease of access and replacementevaluationexamples of requirementgeneric materialsin service historylaboratory testing	NZBC/B2.3  B2/AS1 1.2.1  B2/VM1 1.0, B2/AS1 1.2, Figure 1  B2/AS1 1.3.1, Table 1  B2/AS1 3.0  B2/VM1 1.1
code compliance certificate	NZBC/B2.3  B2/AS1 1.2.1  B2/VM1 1.0, B2/AS1 1.2, Figure 1  B2/AS1 1.3.1, Table 1  B2/AS1 3.0  B2/VM1 1.1  B2/VM1 1.1
code compliance certificate	NZBC/B2.3  B2/AS1 1.2.1  B2/VM1 1.0, B2/AS1 1.2, Figure 1  B2/AS1 3.1, Table 1  B2/AS1 3.0  B2/VM1 1.1  B2/VM1 1.1  B2/VM1 1.2  B2/VM1 1.3
code compliance certificate	NZBC/B2.3  B2/AS1 1.2.1  B2/VM1 1.0, B2/AS1 1.2, Figure 1  B2/AS1 3.1, Table 1  B2/AS1 3.0  B2/VM1 1.1  B2/VM1 1.2  B2/VM1 1.3  NZBC/B1.3.1, B2.1, B2.3
code compliance certificate	NZBC/B2.3  B2/AS1 1.2.1  B2/VM1 1.0, B2/AS1 1.2, Figure 1  B2/AS1 3.1, Table 1  B2/AS1 3.0  B2/VM1 1.1  B2/VM1 1.2  B2/VM1 1.3  NZBC/B1.3.1, B2.1, B2.3  B2/AS1 Table 1
code compliance certificate	NZBC/B2.3  B2/AS1 1.2.1  B2/VM1 1.0, B2/AS1 1.2, Figure 1  B2/AS1 3.1, Table 1  B2/AS1 3.0  B2/VM1 1.1  B2/VM1 1.2  B2/VM1 1.3  NZBC/B1.3.1, B2.1, B2.3  B2/AS1 Table 1  B2/AS1 Table 1
code compliance certificate	NZBC/B2.3  B2/AS1 1.2.1  B2/VM1 1.0, B2/AS1 1.2, Figure 1  B2/AS1 3.0, B2/AS1 3.0  B2/VM1 1.1  B2/VM1 1.2  B2/VM1 1.3  NZBC/B1.3.1, B2.1, B2.3  B2/AS1 Table 1  B2/AS1 Table 1  B2/AS1 Table 1
code compliance certificate	NZBC/B2.3  B2/AS1 1.2.1  B2/VM1 1.0, B2/AS1 1.2, Figure 1  B2/AS1 3.0, B2/AS1 3.0  B2/VM1 1.1  B2/VM1 1.2  B2/VM1 1.3  NZBC/B1.3.1, B2.1, B2.3  B2/AS1 Table 1
code compliance certificate	NZBC/B2.3  B2/AS1 1.2.1  B2/VM1 1.0, B2/AS1 1.2, Figure 1  B2/AS1 3.0, B2/AS1 3.0  B2/VM1 1.1  B2/VM1 1.2  B2/VM1 1.3  NZBC/B1.3.1, B2.1, B2.3  B2/AS1 Table 1  B2/AS1 Table 1  B2/AS1 Table 1  B2/AS1 Table 1  B2/AS1 2.0  B2/AS1 2.1

Dynamic loads

see Structure, loads



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	Early childhood centres	NZBC/G2.2, G3.2.1, G3.3.1 (a) to (d),G5.2.1 (a), G5.3.1, G5.3.2, G7.2, G12.3.4; G2/AS1 Table 1; G3/AS1 1.0.1; G5/AS1 1.0.3
	see also Communal non-residential b	uildings
Amend 11 Sep 2010	Earth buildings	<b>B2/AS1</b> 3.4, <b>E2/AS2</b> 1.0
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	Earth retaining structures	<b>B1/VM4</b> 2.0.3
Amend 11 Sep 2010	Earthquakes see <b>Structure</b> , loads	
	Ease of access and replacement	<b>B2/AS1</b> 1.2.1
	Effluents	<b>B1/VM4</b> A1.2.1 f)
Amend 12	EIFS	<b>E2/AS1</b> 9.9
Oct 2011		<b>E2/AS1</b> 9.9.5
	<u> </u>	E2/AS1 9.9.6
	9	<b>E2/AS1</b> 9.9.6.4 <b>E2/AS1</b> 9.9.6.3
		<b>E2/AS1</b> 9.9.6.1
	<u> </u>	<b>E2/AS1</b> 9.9.6.2
	EIFS/floor slab junction	<b>E2/AS1</b> 9.9.7, Figure 125
	9	<b>E2/AS1</b> 9.9.2
		<b>E2/AS1</b> 9.9.4, Table 23
Amend 12	9	E2/AS1 9.9.4.4
Oct 2011	<u> </u>	<b>E2/AS1</b> 9.9.4.1, Table 24 <b>E2/AS1</b> 9.9.4.2
	*	<b>E2/AS1</b> 9.9.4.3, Figure 124
1	, , , , , , , , , , , , , , , , , , , ,	
Amend 12 Oct 2011		
0012011		<b>E2/AS1</b> 9.9.1
		<b>E2/AS1</b> 9.9.3
	9	<b>E2/AS1</b> 9.9.3.2 <b>E2/AS1</b> 9.9.3.1
		<b>E2/AS1</b> 9.9.3.1
	·	s <b>E2/AS1</b> 9.9.10.2, Figure 129
Amend 12		<b>E2/AS1</b> 9.9.10.1, Figures 129 and 130
Oct 2011	metal cappings	<b>E2/AS1</b> 9.9.10.2, Figures 12, 13 and 130
Amend 12	· ·	<b>E2/AS1</b> 9.9.8, Figure 126
Oct 2011	windows and doors	<b>E2/AS1</b> 9.9.9, Figures 17c, 127 and 128
	Electrical codes of practice	<b>G9/VM1</b> 1.0.1, <b>G9/AS1</b> 1.0.1
	•	G9
		NZBC/G9.1, G9.2, G9.3.1 to G9.3.3; G9/VM1 1.0
	g g	on
		NZBC/G9.3.1 (d)
		NZBC/G9.3.3
		NZBC/G9.3.4
	light switches	
		<b>G9/AS1</b> 2.0.1 c)
	temperature	NZBC/G9.3.1 (c) (d)
	Emergency lighting see Lighting for Emergency	



Amend 12 Oct 2011	Enclosed balustrades	<b>E2/AS1</b> 7.4, 9.3.9, 9.4.8, 9.5.5, 9.6.9.8, 9.7.7, 9.8.7, 9.9.10, Figures 101 and 102, Table 3
Amend 12 Oct 2011	balustrade-to-wall junctions	<b>E2/AS1</b> 7.4.3, Figures 18 and 62 <b>E2/AS1</b> 7.4.2, Figures 11-12 <b>E2/AS1</b> 7.4.1
Amend 12 Oct 2011	EIFS-toppedflush-finished topped balustrades	<b>E2/AS1</b> 9.9.10, Figure 129 <b>E2/AS1</b> 9.7.7.1, Figure 117 <b>E2/AS1</b> 7.4.4, Table 7, Figure 5
Amend 12 Oct 2011		
Amend 12 Oct 2011	stanchions	<b>E2/AS1</b> 7.4.5, Figure 19
	building on sloping sites and	
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		S
	Method 2	<b>C/AS1</b> 7.3.4 a), 7.3.6 to 7.3.8,
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		<b>C/AS1</b> 7.3.4 b), .3.8, 7.3.12, 7.6, Figure 7.8
	Method 4C/AS1	I 7.3.4 c), 7.3.9, 7.7, Figure 7.9, Tables 7.3 and 7.4
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	Energy Efficiency	<b>H1; E3/AS1</b> 1.1.5;
		NZBC/H1.3.2; H1/VM1 1.2
	heat gain	NZBC/H1.3.3 (d) (f); H1/AS1 4.0
	heat loss	NZBC/H1.3.4
	8	NZBC/H1.3.2
	indoor temperature and humidity	NZBC/H1.2 (a), H1.3.1
	Energy efficiency provisions	<b>H1/AS1</b> 3.0
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	Coldi float galli	
	Entrances	
	principal	<b>D1/AS1</b> 1.1.1
	Environment see Interior Environment	
	Escalators	
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		3.18.1, 4.5.10 b), 5.3.3 c), 7.10.3 Comment
		7.9.10, Figure 3.20, Table 4.1
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		Figures 3.1 to 3.5, Tables 3.1 and 3.2;
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	9 1	<b>C/AS1</b> 3.17
	exitwaysC/AS1	3.3.2 a), 3.11, 3.12, 6.9.1, 6.16.7, A2.1.1 Type 16,
	ovtornal aviturava	Figures 3.3 and 3.20, Tables 2.1, 6.1 to 6.3
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	pressurisation see Fire safety precautions	
	see rije salety precautions	



	Escape routes; exitways (continued)	
	split level exitways	
	ventilation of enclosed exity	vays
	external	
		<b>C/AS1</b> 3.3.3, 3.3.6 b), 3.9.8, 6.20.4 c)
	=	es <b>C/AS1</b> 3.3
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		Figures 3.3, 3.4 and 3.6, Tables 3.2 and 3.4
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Sep 2010		
	•	C/AS1 3.3.6
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	open paths	<b>C/AS1</b> 2.2.8, 3.1.2, 3.1.3, 3.1.5, 3.3.2 f),
		3.3.7, 3.4.1, 3.4.2, 3.8, 3.9, 3.17.3 a),
		3.17.5 a), A2.1.1 Type 16, Figures 3.1, 3.7,
		3.9, 3.12 and 3.16, Table 3.3
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	intermediate floors	
	January 0/401 1 2	3.4.6, 3.9.13, Figure 3.9
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		<b>C/AS1</b> 3.4.8 a)
	special cases	<b>C/AS1</b> 3.9
	aisles	
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	fixed seating	<b>C/AS1</b> 3.9.3, Figures 3.13 to 3.15, Table 3.4
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		3.28 and 3.30, Tables 2.1 and 6.1
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		<b>C/AS1</b> 3.1.3, 3.4.1, 3.4.4, 6.13.1 a), Table 3.3
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#### NEW ZEALAND BUILDING CODE HANDBOOK



Escape routes (continued)
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Explosion   See Structure, loads, and Hazardous Substances and Processes		signs	<b>C/AS1</b> 3.20
basements		single escape routes	<b>C/AS1</b> 3.15
bridges.		active purpose groups	<b>C/AS1</b> 3.15.3, 3.15.4
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external stairways		bridges	<b>C/AS1</b> 3.15.7, Figure 3.23
intermediate floors			
internal stairs		•	
Sleeping purpose groups			
Split level exitways   C/AS1 3.15.8, Figure 3.24			
Stairs			_
Equipotential bonding   G12/AS1 9.0			
Equipotential bonding			
earth bonding conductors   G12/AS1 9.3   installation of conductors   G12/AS1 9.2   G12/AS1 9.2   G12/AS1 9.2   Figure 9.1		surface finishes	<b>C/AS1</b> 3.3.2 h), 3.4.2 e), Table 6.2
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Evacuation time		Escape through adjacent firecell	<b>C/AS1</b> 3.9.12, Figure 3.16
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Exitways	\ 11	Evacuation time	NZBC/F6.3.1
Explosives see also Hazardous Substances and Processes, Class 1 Explosives see also Hazardous Substances and Processes, Class 1 Explosives  External Moisture	Sep 2010		
External Moisture		see Structure, loads, and Hazardous Substance	s and Processes
Concealed spaces   NZBC/E2.3.5		·	, Class 1 Explosives
Control   Cont		External Moisture	
Concrete and concrete masonry buildings   E2/AS3 1.0	∆mend 12 ⊥		E2
external walls   moisture present at completion of construction   NZBC/E2.3.6   qualifications   E2/AS1 1.5, 8.2.2, 8.3.2, 8.4.2, 8.5.2, 9.2.3, 9.3.4.1, 9.4.3, 9.5.3, 9.6.2, 9.7.2.1, 9.8.3, 9.9.2   roofs   NZBC/E2.3.1, E2.3.2   scope   E2/VM1 1.2, E2/AS1 1.0   construction excluded   E2/AS1 1.2.3   acoustics   E2/AS1 1.2.3   commercial and industrial roofing   E2/VM1 3.0   outbuildings   E2/AS1 1.2.1   skillion roofs   E2/VM1 3.0   spread of flame   E2/AS1 1.2.2   attached garages   E2/AS1 1.2.2   attached garages   E2/AS1 1.1   construction included   E2/AS1 1.1   provisions for snow   E2/AS1 1.3   qualifications   E2/AS1 1.5   specific design   E2/AS1 1.4   windows and doors   E2/AS1 9.1.10.1   snow   NZBC/E2.3.1	Oct 2011		NZBC/E2.3.5
moisture present at completion of construction   NZBC/E2.3.6		concrete and concrete masonry buildings	NZBC/E2.3.5 E2/AS3 1.0
qualifications   E2/AS1 1.5, 8.2.2, 8.3.2, 8.4.2, 8.5.2, 9.2.3, 9.3.4.1, 9.4.3, 9.5.3, 9.6.2, 9.7.2.1, 9.8.3, 9.9.2     roofs   NZBC/E2.3.1, E2.3.2     scope   E2/VM1 1.2, E2/AS1 1.0     construction excluded   E2/AS1 1.2.3     acoustics   E2/AS1 1.2.3     commercial and industrial roofing   E2/VM1 3.0     outbuildings   E2/AS1 1.2.1     skillion roofs   E2/VM1 3.0     spread of flame   E2/AS1 1.2.2     attached garages   E2/AS1 1.2.2     attached garages   E2/AS1 1.1     construction included   E2/AS1 1.1     provisions for snow   E2/AS1 1.3     qualifications   E2/AS1 1.5     specific design   E2/AS1 9.1.10.1     snow   NZBC/E2.3.1     NZBC/E		concrete and concrete masonry buildings	NZBC/E2.3.5 E2/AS3 1.0
Section   Sect		concrete and concrete masonry buildingselements in contact with the groundexternal walls	NZBC/E2.3.5 E2/AS3 1.0 NZBC/E2.3.3 NZBC/E2.3.2
roofs		concrete and concrete masonry buildingselements in contact with the groundexternal wallsexternal walls	NZBC/E2.3.5 E2/AS3 1.0 NZBC/E2.3.3 NZBC/E2.3.2 NZBC/E2.3.6
Scope	Amend 12	concrete and concrete masonry buildingselements in contact with the groundexternal wallsmoisture present at completion of constructionqualifications	NZBC/E2.3.5 
Construction excluded   E2/AS1 1.2     acoustics   E2/AS1 1.2.3     commercial and industrial roofing   E2/VM1 3.0     outbuildings   E2/VM1 3.0     outbuildings   E2/VM1 3.0     skillion roofs   E2/VM1 3.0     spread of flame   E2/AS1 1.2.2     attached garages   E2/AS1 1.2.2     attached garages   E2/AS1 1.1     construction included   E2/AS1 1.1     provisions for snow   E2/AS1 1.1     qualifications   E2/AS1 1.5     specific design   E2/AS1 1.4     windows and doors   E2/AS1 9.1.0.1     snow   NZBC/E2.3.1	Amend 12   Oct 2011	concrete and concrete masonry buildingselements in contact with the groundexternal wallsmoisture present at completion of constructionqualifications	NZBC/E2.3.5 
acoustics		concrete and concrete masonry buildingselements in contact with the groundexternal walls	NZBC/E2.3.5
Commercial and industrial roofing.   E2/VM1 3.0		concrete and concrete masonry buildings	NZBC/E2.3.5
Outbuildings		concrete and concrete masonry buildings	NZBC/E2.3.5
Skillion roofs		concrete and concrete masonry buildings	NZBC/E2.3.5 E2/AS3 1.0 NZBC/E2.3.3 NZBC/E2.3.2 NZBC/E2.3.6 1.1.5, 8.2.2, 8.3.2, 8.4.2, 8.5.2, 9.2.3, 4.3, 9.5.3, 9.6.2, 9.7.2.1, 9.8.3, 9.9.2 NZBC/E2.3.1, E2.3.2 E2/VM1 1.2, E2/AS1 1.0 E2/AS1 1.2.3
Spread of flame		concrete and concrete masonry buildings	NZBC/E2.3.5 E2/AS3 1.0 NZBC/E2.3.3 NZBC/E2.3.2 NZBC/E2.3.6 1.1.5, 8.2.2, 8.3.2, 8.4.2, 8.5.2, 9.2.3, 4.3, 9.5.3, 9.6.2, 9.7.2.1, 9.8.3, 9.9.2 NZBC/E2.3.1, E2.3.2 E2/VM1 1.2, E2/AS1 1.0 E2/AS1 1.2.3
Attached garages   E2/AS1 1.1		concrete and concrete masonry buildings	NZBC/E2.3.5 E2/AS3 1.0 NZBC/E2.3.3 NZBC/E2.3.2 NZBC/E2.3.6 1 1.5, 8.2.2, 8.3.2, 8.4.2, 8.5.2, 9.2.3, 4.3, 9.5.3, 9.6.2, 9.7.2.1, 9.8.3, 9.9.2 NZBC/E2.3.1, E2.3.2 E2/VM1 1.2, E2/AS1 1.0 E2/AS1 1.2.3 E2/VM1 3.0 E2/VM1 3.0
construction included       E2/AS1 1.1         provisions for snow       E2/AS1 1.3         qualifications       E2/AS1 1.5         specific design       E2/AS1 1.4         windows and doors       E2/AS1 9.1.10.1         snow       NZBC/E2.3.1		concrete and concrete masonry buildings	NZBC/E2.3.5 E2/AS3 1.0 NZBC/E2.3.3 NZBC/E2.3.2 NZBC/E2.3.6 1.1.5, 8.2.2, 8.3.2, 8.4.2, 8.5.2, 9.2.3, 4.3, 9.5.3, 9.6.2, 9.7.2.1, 9.8.3, 9.9.2 NZBC/E2.3.1, E2.3.2 E2/VM1 1.2, E2/AS1 1.0 E2/AS1 1.2.3 E2/VM1 3.0 E2/AS1 1.2.3
provisions for snow E2/AS1 1.3 qualifications E2/AS1 1.5 specific design E2/AS1 1.4 windows and doors E2/AS1 9.1.10.1 snow NZBC/E2.3.1	Oct 2011	concrete and concrete masonry buildings elements in contact with the ground external walls moisture present at completion of construction qualifications  E2/AS1  9.3.4.1, 9  roofs scope  construction excluded acoustics commercial and industrial roofing outbuildings skillion roofs spread of flame	NZBC/E2.3.5 E2/AS3 1.0 NZBC/E2.3.3 NZBC/E2.3.2 NZBC/E2.3.6 1 1.5, 8.2.2, 8.3.2, 8.4.2, 8.5.2, 9.2.3, 4.3, 9.5.3, 9.6.2, 9.7.2.1, 9.8.3, 9.9.2 NZBC/E2.3.1, E2.3.2 E2/VM1 1.2, E2/AS1 1.0 E2/AS1 1.2.3 E2/VM1 3.0 E2/AS1 1.2.1 E2/VM1 3.0 E2/AS1 1.2.1 E2/VM1 3.0 E2/AS1 1.2.2
qualifications	Oct 2011	concrete and concrete masonry buildings elements in contact with the ground external walls moisture present at completion of construction qualifications  E2/AS1  9.3.4.1, 9  roofs scope  construction excluded acoustics commercial and industrial roofing outbuildings skillion roofs spread of flame attached garages	NZBC/E2.3.5 E2/AS3 1.0 NZBC/E2.3.3 NZBC/E2.3.2 NZBC/E2.3.6 1 1.5, 8.2.2, 8.3.2, 8.4.2, 8.5.2, 9.2.3, 4.3, 9.5.3, 9.6.2, 9.7.2.1, 9.8.3, 9.9.2 NZBC/E2.3.1, E2.3.2 E2/VM1 1.2, E2/AS1 1.0 E2/AS1 1.2.3 E2/VM1 3.0 E2/AS1 1.2.1 E2/VM1 3.0 E2/AS1 1.2.1 E2/VM1 3.0 E2/AS1 1.2.2 E2/AS1 1.2.2 E2/AS1 1.2.2
specific design	Oct 2011	concrete and concrete masonry buildings elements in contact with the ground external walls moisture present at completion of construction qualifications  E2/AS1  9.3.4.1, 9  roofs scope  construction excluded acoustics commercial and industrial roofing outbuildings skillion roofs spread of flame attached garages construction included	NZBC/E2.3.5 E2/AS3 1.0 NZBC/E2.3.3 NZBC/E2.3.2 NZBC/E2.3.6 1 1.5, 8.2.2, 8.3.2, 8.4.2, 8.5.2, 9.2.3, 4.3, 9.5.3, 9.6.2, 9.7.2.1, 9.8.3, 9.9.2 NZBC/E2.3.1, E2.3.2 E2/VM1 1.2, E2/AS1 1.0 E2/AS1 1.2.3 E2/VM1 3.0 E2/AS1 1.2.1 E2/VM1 3.0 E2/AS1 1.2.1 E2/AS1 1.2.2 E2/AS1 1.2.2 E2/AS1 1.2.2
windows and doors	Oct 2011	concrete and concrete masonry buildings	NZBC/E2.3.5 E2/AS3 1.0 NZBC/E2.3.3 NZBC/E2.3.2 NZBC/E2.3.6 1 1.5, 8.2.2, 8.3.2, 8.4.2, 8.5.2, 9.2.3, 4.3, 9.5.3, 9.6.2, 9.7.2.1, 9.8.3, 9.9.2 NZBC/E2.3.1, E2.3.2 E2/VM1 1.2, E2/AS1 1.0 E2/AS1 1.2.3 E2/VM1 3.0 E2/AS1 1.2.1 E2/VM1 3.0 E2/AS1 1.2.1 E2/AS1 1.2.2 E2/AS1 1.2.1 E2/AS1 1.2.2
snow	Oct 2011	concrete and concrete masonry buildings elements in contact with the ground external walls moisture present at completion of construction qualifications  E2/AS1  9.3.4.1, 9  roofs scope  construction excluded acoustics commercial and industrial roofing outbuildings skillion roofs spread of flame attached garages construction included provisions for snow qualifications.	NZBC/E2.3.5 E2/AS3 1.0 NZBC/E2.3.3 NZBC/E2.3.2 NZBC/E2.3.6 1 1.5, 8.2.2, 8.3.2, 8.4.2, 8.5.2, 9.2.3, 4.3, 9.5.3, 9.6.2, 9.7.2.1, 9.8.3, 9.9.2 NZBC/E2.3.1, E2.3.2 E2/VM1 1.2, E2/AS1 1.0 E2/AS1 1.2.3 E2/VM1 3.0 E2/AS1 1.2.1 E2/AS1 1.2.1 E2/AS1 1.2.2 E2/AS1 1.2.2 E2/AS1 1.2.2 E2/AS1 1.2.3 E2/AS1 1.2.1 E2/AS1 1.3.0 E2/AS1 1.3.0 E2/AS1 1.3.0 E2/AS1 1.3.0 E2/AS1 1.3.0 E2/AS1 1.3.0
·	Oct 2011	concrete and concrete masonry buildings elements in contact with the ground external walls moisture present at completion of construction qualifications  E2/AS1  9.3.4.1, 9  roofs scope  construction excluded acoustics commercial and industrial roofing outbuildings skillion roofs spread of flame attached garages construction included provisions for snow qualifications. specific design.	NZBC/E2.3.5 E2/AS3 1.0 NZBC/E2.3.3 NZBC/E2.3.2 NZBC/E2.3.6 1 1.5, 8.2.2, 8.3.2, 8.4.2, 8.5.2, 9.2.3, 4.3, 9.5.3, 9.6.2, 9.7.2.1, 9.8.3, 9.9.2 NZBC/E2.3.1, E2.3.2 E2/VM1 1.2, E2/AS1 1.0 E2/AS1 1.2.3 E2/VM1 3.0 E2/AS1 1.2.1 E2/AS1 1.2.1 E2/AS1 1.2.2 E2/AS1 1.2.2 E2/AS1 1.2.2 E2/AS1 1.2.3 E2/AS1 1.2.1 E2/AS1 1.3.0
	Oct 2011	concrete and concrete masonry buildings elements in contact with the ground external walls moisture present at completion of construction qualifications  E2/AS1  9.3.4.1, 9  roofs scope  construction excluded acoustics commercial and industrial roofing outbuildings skillion roofs spread of flame attached garages construction included provisions for snow qualifications specific design. windows and doors	NZBC/E2.3.5 E2/AS3 1.0 NZBC/E2.3.3 NZBC/E2.3.2 NZBC/E2.3.6 1.1.5, 8.2.2, 8.3.2, 8.4.2, 8.5.2, 9.2.3, 4.3, 9.5.3, 9.6.2, 9.7.2.1, 9.8.3, 9.9.2 NZBC/E2.3.1, E2.3.2 E2/VM1 1.2, E2/AS1 1.0 E2/AS1 1.2.3 E2/VM1 3.0 E2/AS1 1.2.1 E2/VM1 3.0 E2/AS1 1.2.2 E2/AS1 1.2.2 E2/AS1 1.2.2 E2/AS1 1.2.2 E2/AS1 1.3 E2/AS1 1.1 E2/AS1 1.1 E2/AS1 1.3 E2/AS1 1.3 E2/AS1 1.3 E2/AS1 1.4 E2/AS1 1.4



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### F

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Fire safety

# $\it see$ Means of Escape, Outbreak of Fire, Spread of Fire, Structural Stability during Fire

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Sep 2010		<b>F7/AS1</b> 1.2.5, 1.2.8, 1.3.2, 1.3.4
mend 11	fire sprinkler systems	F7/404 10 F 10 0 10 F 1 F 1
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mend 11		
	·	
	fire alarm systems	
	emergency lighting in exitways	<b>F7/AS1</b> 1.5.2
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	· ·	NZBC/G14.3.2 (c)
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# J K L

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# M

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	o .	<b>E2/AS1</b> 2.5.1 <b>B2/AS1</b> 2.2
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1	•	<b>E2/AS1</b> 6.4, Figures 9 and 10
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S S	see Personal Hygiene, Launde Contamination, Ventilation, li Natural Light, Artificial Light, Water Supply, Foul Water, Inc Sewers see Foul Water SFI see Spread of flame index Sheds see Outbuildings	nterior Environment, Airborne and Impact Sound, Electricity, Piped Services,Gas as an Energy Source
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S S S	see Personal Hygiene, Launde Contamination, Ventilation, It Natural Light, Artificial Light, Water Supply, Foul Water, Inc Sewers see Foul Water SFI see Spread of flame index Sheds see Outbuildings Shops see Commercial buildings	nterior Environment, Airborne and Impact Sound, Electricity, Piped Services,Gas as an Energy Source dustrial Liquid Waste, Solid Waste  8.2.2, 3.3, Figures 4 and 5; <b>G1/AS1</b> 2.5, Figures 5 and 8,
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		NZBC/B1.3.3
	•	NZBC/B1.3.3
	·	NZBC/B1.3.3
	•	NZBC/B1.3.3
	explosion	services
	·	NZBC/B1.3.3
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	{10 year return period}	
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	and Electricity, Engravy Efficiency, Interior English	
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	Piped Services, Solid Waste, Structure, load, W Temperature control see Interior Environment, interior temperature Temperature/pressure relief valves	ater SuppliesG12/AS1 6.4.1, Figure 8, Table 6
	Piped Services, Solid Waste, Structure, load, Waste, S	ater SuppliesG12/AS1 6.4.1, Figure 8, Table 6
	Piped Services, Solid Waste, Structure, load, W Temperature control see Interior Environment, interior temperature Temperature/pressure relief valves	### Additional Control of Control
ı	Piped Services, Solid Waste, Structure, load, Waste, S	### Add to Supplies  #### Add to Supplies  ###################################
	Piped Services, Solid Waste, Structure, load, Waste, S	### Add to Supplies  #### Add to Supplies  ###################################
Amend 11	Piped Services, Solid Waste, Structure, load, Waste, S	### Add to Supplies  #### Add to Supplies  ###################################
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Sep 2010	Piped Services, Solid Waste, Structure, load, Waste See Interior Environment, interior temperature  Temperature/pressure relief valves	### Add to Supplies  #### Add to Supplies  ###################################
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Sep 2010	Piped Services, Solid Waste, Structure, load, Waste See Interior Environment, interior temperature  Temperature/pressure relief valves	### Additional Content of Content
Sep 2010 Amend 11 Sep 2010	Piped Services, Solid Waste, Structure, load, Waste See Interior Environment, interior temperature  Temperature/pressure relief valves	### Add to Supplies  #### Add to Supplies  ###################################
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Sep 2010 Amend 11 Sep 2010 Amend 11	Piped Services, Solid Waste, Structure, load, Waste Services, Solid Waste, Structure, load, Waste Services, Solid Waste, Structure, load, Waste Services, Se	### Supplies  ### G12/AS1 6.4.1, Figure 8, Table 6  ### G12/AS1 6.6.5  ### G12/AS1 6.7, Figures 12 and 13  ### C/AS1 Appendix C  ### C/AS1 C8.1  ### C/AS1 C6.1  ### C/AS1 C7.1  ### C/AS1 C9.1  ### C/AS1 C3.1  ### C/AS1 C3.1  ### C/AS1 C3.1  ### C/AS1 C5.1  ### C/AS1 C5.1  ### C/AS1 C4.1
Sep 2010 Amend 11 Sep 2010 Amend 11	Piped Services, Solid Waste, Structure, load, Waste Services, Solid Waste, Structure, load, Waste Services, Solid Waste, Structure, load, Waste Services, Se	### Add Company Compan
Sep 2010 Amend 11 Sep 2010 Amend 11	Piped Services, Solid Waste, Structure, load, Waste Interior Environment, interior temperature  Temperature/pressure relief valves	### Case Supplies  ### Case Supp
Sep 2010 Amend 11 Sep 2010 Amend 11	Piped Services, Solid Waste, Structure, load, Waste Interior Environment, interior temperature  Temperature/pressure relief valves	### Supplies  #### Supplies  #### G12/AS1 6.4.1, Figure 8, Table 6  ### G12/AS1 6.6.5  #### C/AS1 6.7, Figures 12 and 13  ### C/AS1 Appendix C  ### C/AS1 C8.1  ### C/AS1 C6.1  ### C/AS1 C7.1  ### C/AS1 C3.1  ### C/AS1 C3.1  ### C/AS1 C3.1  ### C/AS1 C3.1  ### C/AS1 C4.1  ### NZBC/G5.3.5  #### E3/AS1 1.1.4 d)  ###################################
Sep 2010 Amend 11 Sep 2010 Amend 11	Piped Services, Solid Waste, Structure, load, Waste Interior control see Interior Environment, interior temperature  Temperature/pressure relief valves	### Supplies  ### Supplies  ### G12/AS1 6.4.1, Figure 8, Table 6  ### G12/AS1 6.6.5  ### G12/AS1 6.7, Figures 12 and 13  ### C/AS1 Appendix C  ### C/AS1 C8.1  ### C/AS1 C7.1  ### C/AS1 C9.1  ### C/AS1 C3.1  ### C/AS1 C3.1  ### C/AS1 C3.1  ### C/AS1 C3.1  ### C/AS1 C4.1  ### NZBC/G5.3.5  #### E3/AS1 1.1.4 d)  ###################################
Sep 2010 Amend 11 Sep 2010 Amend 11	Piped Services, Solid Waste, Structure, load, Waste Interior control see Interior Environment, interior temperature  Temperature/pressure relief valves installation relief valve drains  Test methods fire properties of external wall cladding systems fire resistance fire resisting closures flammability of floor coverings flammability of membrane structures flammability of suspended flexible fabrics non-combustibility of materials properties of lining materials  Theatres see also Communal non-residential  Thermal break Thermal resistance (R-value) E3/AS1 1.1; alternative solution	### Supplies  ### G12/AS1 6.4.1, Figure 8, Table 6  ### G12/AS1 6.6.5  ### G12/AS1 6.7, Figures 12 and 13  ### C/AS1 Appendix C  ### C/AS1 C8.1  ### C/AS1 C9.1  ### C/AS1 C9.1  ### C/AS1 C3.1  ### C/AS1 C3.1  ### C/AS1 C4.1  ### NZBC/G5.3.5  #### E3/AS1 1.1.4 d)  #### H1/VM1 1.4, H1/AS1 2.1.1, 2.2, 2.3  #### E3/AS1 1.1.5  #### E3/AS1 1.1.3
Sep 2010 Amend 11 Sep 2010 Amend 11	Piped Services, Solid Waste, Structure, load, Waste Interior control see Interior Environment, interior temperature  Temperature/pressure relief valves installation relief valve drains  Test methods fire properties of external wall cladding systems fire resistance fire resisting closures flammability of floor coverings flammability of membrane structures flammability of suspended flexible fabrics non-combustibility of materials properties of lining materials  Theatres see also Communal non-residential  Thermal resistance (R-value) E3/AS1 1.1; alternative solution materials and installation.	### Supplies  ### G12/AS1 6.4.1, Figure 8, Table 6  ### G12/AS1 6.6.5  ### G12/AS1 6.7, Figures 12 and 13  ### C/AS1 Appendix C  ### C/AS1 C8.1  ### C/AS1 C6.1  ### C/AS1 C7.1  ### C/AS1 C9.1  ### C/AS1 C3.1  ### C/AS1 C3.1  ### C/AS1 C3.1  ### C/AS1 C4.1  ### NZBC/G5.3.5  ### E3/AS1 1.1.4 d)  #### H1/VM1 1.4, H1/AS1 2.1.1, 2.2, 2.3  #### E3/AS1 1.1.5  #### E3/AS1 1.1.3  #### G12/AS1 6.3.1, 6.5.1
Sep 2010 Amend 11 Sep 2010 Amend 11	Piped Services, Solid Waste, Structure, load, Waste Interior control see Interior Environment, interior temperature  Temperature/pressure relief valves	### Supplies  ### Supplies  ### G12/AS1 6.4.1, Figure 8, Table 6  ### G12/AS1 6.6.5  ### C/AS1 6.7, Figures 12 and 13  ### C/AS1 Appendix C  ### C/AS1 C8.1  ### C/AS1 C8.1  ### C/AS1 C9.1  ### C/AS1 C3.1  ### C/AS1 C4.1  ### NZBC/G5.3.5  #### E3/AS1 1.1.4 d)  #### H1/VM1 1.4, H1/AS1 2.1.1, 2.2, 2.3  #### E3/AS1 1.1.3  #### G12/AS1 6.3.1, 6.5.1  #### D1/AS1 1.3.2

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Oct 2011	fixings	<b>E2/AS1</b> 9.4.3.1, Tables 20 and 24
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	loading spaces	<b>D1/AS1</b> 11.0.2
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	•	G4/AS1 1.4
Amend 11	contaminated air	
Sep 2010	discharge systems	<b>G4/AS1</b> 1.5.1 f)
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Sep 2010	natural smoke ventilation	tion units with one external wall
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Amend 11		<b>F6/AS1</b> 1.1
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	concrete slabs concrete ground slabs (except n	
	concrete slabs concrete ground slabs (except n garages and openings to garage	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
	concrete slabs concrete ground slabs (except n garages and openings to garage masonry veneer clearances	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
	concrete slabs concrete ground slabs (except n garages and openings to garage masonry veneer clearances	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
Amend 12	concrete slabs concrete ground slabs (except n garages and openings to garage masonry veneer clearances	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
Amend 12 Oct 2011	concrete slabs concrete ground slabs (except n garages and openings to garage masonry veneer clearances timber floor framing	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
	concrete slabs  concrete ground slabs (except n garages and openings to garage masonry veneer clearances timber floor framing	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
	concrete slabs  concrete ground slabs (except n garages and openings to garage masonry veneer clearances timber floor framing  drained cavities cavity battens	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
	concrete slabs  concrete ground slabs (except n garages and openings to garage masonry veneer clearances timber floor framing  drained cavities cavity battens	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
	concrete slabs  concrete ground slabs (except n garages and openings to garage masonry veneer clearances timber floor framing  drained cavities cavity battens limitations	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
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	concrete slabs	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
	concrete slabs	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
	concrete slabs	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
	concrete slabs	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
	concrete slabs	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
	concrete slabs	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
	concrete slabs	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
	concrete slabs	E2/AS1 9.1.3.1, Figure 65 nasonry veneer)
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Oct 2011	·	<b>E2/AS1</b> 9.1.10.1
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Amend 11	9	NZBC/G12.2
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	• •	
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		NZBC/G12.3.6 (c)
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	•	
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Amend 12	risk score	<b>E2/AS1</b> 3.1.2, Table 2
Oct 2011	wall claddings	<b>E2/AS1</b> 3.3, Table 3
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Oct 2011	scope	<b>E2/AS1</b> 9.1.10.1
Amend 12	treatment of opening	
Oct 2011	used for escape	
	vertical profile: windows and doors	
	window and door heads	
	windows and doors in cavity walls	
	Transcorre and deere in early transcommin	Figures 85, 86, 91, 116 and 128
	windows and doors in direct fixed weatherbo	9 , , ,
		9.9.9, Figures 81-84,
		90, 115 and 127
Amend 12	window and door jambs	<b>E2/AS1</b> 9.1.10.6, Table 7
Oct 2011	window and door sills	<b>E2/AS1</b> 9.1.10.5, Figures 17C and 17D
	Work camps	NZBC/G2.2, G3.2.1, G3.3.1 (a) to (d); G2/AS1 Table 1; G3/AS1 1.0.1
	see also Communal residential, community s	

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