

Consolidated Performance Requirements









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Introduction to the National Construction Code (NCC)

About the NCC

The NCC is Australia's primary set of technical design and construction provisions for buildings. As a performance-based code, it sets the minimum required level for the safety, health, amenity, accessibility and sustainability of certain buildings. It primarily applies to the design and construction of new buildings, and plumbing and drainage systems in new and existing buildings. In some cases it may also apply to structures associated with buildings and new building work or new plumbing and drainage work in existing buildings.

The Australian Building Codes Board (ABCB), on behalf of the Australian Government and each State and Territory government, produces and maintains the NCC. When determining the content of the NCC, the ABCB seeks to—

- ensure requirements have a rigorously tested rationale; and
- effectively and proportionally address applicable issues; and
- create benefits to society that outweigh costs; and
- consider non-regulatory alternatives; and
- consider the competitive effects of regulation; and
- not be unnecessarily restrictive.

The primary users of the NCC include architects, builders, plumbers, building surveyors, hydraulic consultants, engineers and other building and plumbing related professions and trades.

Format of the NCC

The NCC is published in three volumes. The Building Code of Australia (BCA) is Volumes One and Two of the NCC and the Plumbing Code of Australia (PCA) is Volume Three of the NCC.

Components of the NCC

The NCC provides the technical provisions for the design and construction of buildings and other structures, and plumbing and drainage systems.

NCC Volume One primarily covers the design and construction of multi-residential, commercial, industrial and public assembly buildings and some associated structures.

NCC Volume Two primarily covers the design and construction of smaller scale buildings including houses, small sheds, carports and some associated structures.

NCC Volume Three covers the design, construction and maintenance of plumbing and drainage systems in new and existing buildings.

Each volume contains-

- Governing Requirements; and
- Performance Requirements; and
- compliance options to meet the NCC requirements; and
- State and Territory variations and additions.

The NCC uses building classifications to identify requirements for different intended purposes of buildings or parts of buildings. A building classification relates to the characteristics and the intended use of the building. Information on building classifications is found in Part A6 of the Governing Requirements.

Legislative arrangements and the NCC

The NCC is given legal effect through State and Territory, or other statutory authority, building and plumbing legislation. These Acts and Regulations set out the legal framework and administration mechanisms for the NCC to support the design and construction of buildings.

The dates of adoption of the NCC are determined by State and Territory building and plumbing administrations.

How to use the NCC

Each volume of the NCC is split into two main sections:

- Administrative requirements contained within the Governing Requirements.
- Technical requirements contained within the remaining sections of the NCC.

The Governing Requirements provide the rules and instructions for using and complying with the NCC. They are vital in understanding how the technical requirements of the NCC should be applied to any particular situation. The Governing Requirements are also important in understanding how the NCC fits with the building and plumbing regulatory framework within Australia.

NCC clause numbering system

The NCC uses a uniform clause numbering system across each of its three volumes. This system is called Section-Part-Type-Clause (SPTC). In each clause number—

- The first letter indicates which NCC Section sits within, or if the letter S is used, that the clause is part of a Specification. The letter S is used in place of a Section indicator because the same Specification may be called up in several different Sections of the NCC.
- The first number indicates the number of each Part within a Section, or the number of a Specification. Parts are numbered sequentially within each Section, starting at 1. Specifications are numbered sequentially across all three volumes, also starting at 1.
- The second letter indicates the clause Type. It will be G, O, F, P, V, D or C and these are explained below.
- The second number is the clause number within each Part or Specification.

The clause Types used in the NCC are as follows:

- G = Governing requirement (mandatory)
- O = Objective (guidance)
- F = Functional Statement (guidance)
- P = Performance Requirement (mandatory)
- V = Verification Method (optional)
- D = Deemed-to-Satisfy Provision (optional)
- C = Clause in a Specification (clauses in Specifications may be mandatory or optional, depending on how the Specification is called up by the NCC).

Informative parts of the NCC (e.g. Introduction to the NCC) are not numbered and do not have numbered paragraphs. This helps make it easy to see that their content is information only and does not contain any regulatory requirements.

All Volumes	General Requirements				
Part A1	Interpreting the NCC				
	Governing Requirements				
	A1G1	Scope of NCC Volume One			
	A1G2	Scope of NCC Volume Two			
	A1G3	Scope of NCC Volume Three			
	A1G4	Interpretation			
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	A5G4	Evidence of suitability — Volume Three (PCA)			
	A5G5	Fire-resistance of building elements			
	A5G6	Fire hazard properties			
	A5G7	Resistance to the incipient spread of fire			
	A5G8	Labelling of Aluminium Composite Panels			
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	A6G1	Determining a building classification			
	A6G2	Class 1 buildings			
	A6G3	Class 2 buildings			
	A6G4	Class 3 buildings			
	A6G5	Class 4 buildings			
	A6G6	Class 5 buildings			
	A6G7	Class 6 buildings			
	A6G8	Class 7 buildings			

	A6G9	Class 8 buildings	
	A6G10	Class 9 buildings	
	A6G11	Class 10 buildings and structures	
	A6G12	Multiple classifications	
Part A7	Part A7 United buildings		
	Governing Requirements		
	A7G1	United buildings	
	A7G2	Alterations in a united building	

Part A1 Interpreting the NCC

Introduction to this Part

This Part explains important concepts on how the NCC must be interpreted and applied. There are certain conventions and approaches that need to be taken into account when using the NCC. This includes interpreting specific language and terms. This is critical to understanding the intended technical and legal meaning of the NCC. This Part also explains the difference between the mandatory Parts of the NCC and the Parts that are only explanatory or guidance in nature.

Governing Requirements

A1G1 Scope of NCC Volume One

[New for 2022]

NCC Volume One contains the requirements for-

- (a) all Class 2 to 9 buildings; and
- (b) access requirements for people with a disability in Class 1b and 10a buildings; and
- (c) certain Class 10b structures including access requirements for people with a disability in Class 10b *swimming pools*.

A1G2 Scope of NCC Volume Two

[New for 2022]

NCC Volume Two contains the requirements for—

- (a) Class 1 and 10a buildings (other than access requirements for people with a disability in Class 1b and 10a buildings); and
- (b) certain Class 10b structures (other than access requirements for people with a disability in Class 10b *swimming pools*); and
- (c) Class 10c private bushfire shelters.

A1G3 Scope of NCC Volume Three

[New for 2022]

- (1) NCC Volume Three contains technical requirements for the design, construction, installation, replacement, repair, alteration and maintenance for *plumbing* and *drainage* systems in new and existing buildings.
- (2) NCC Volume Three applies to these systems in all classes of buildings whenever *plumbing* and *drainage* work is carried out.
- (3) NCC Volume Three additionally applies to *sites* where services are designed, constructed, installed, replaced, repaired, altered and maintained independently of buildings.
- (4) NCC Volume Three applies from the *point of connection* to the point of discharge.

A1G4 Interpretation

[2019: A1.0]

- (1) The following components of the NCC are non-mandatory and informative:
 - (a) Content identified as "explanatory information".
 - (b) The "Introduction" information, located at the beginning of each Volume, Section or Part.

- (2) Words in italics must be interpreted in accordance with-
 - (a) definitions provided in Schedule 1, unless the contrary intention appears; and
 - (b) additional definitions in State or Territory appendices, as appropriate.
- (3) The NCC must be interpreted and applied in accordance with the following:
 - (a) A reference to a building is a reference to an entire building or part of a building (as the case requires).
 - (b) A reference to *plumbing or drainage solution*, or *product* in Volume Three is a reference to an entire installation, system or *product*, or part of an installation, system or *product* (as the case requires).
 - (c) A reference in a *Performance Requirement* to "the degree necessary" means-
 - (i) that consideration of all the criteria referred to in the *Performance Requirement* will determine the outcome appropriate to the circumstances; and
 - (ii) that in certain cases it may not be necessary to incorporate any specific measures to meet the relevant *Performance Requirement.*
 - (d) An "Application" statement is mandatory and is provided to specify where and when a requirement or provision applies.
 - (e) A "Limitation" statement is mandatory and is provided to specify where and when the application of a requirement or provision is limited to a certain circumstance.
 - (f) An "Exemption" statement is mandatory and is provided to specify where or when a requirement or provision does not need to be complied with.
 - (g) A "Note" is part of a provision or requirement and provides additional mandatory instructions.
 - (h) Figures in the NCC-
 - (i) are used to illustrate specific issues referenced in the associated text; and
 - (ii) are not to be construed as containing all design information that is *required* for that particular building element or situation.
 - (i) The definitions, symbols and abbreviations listed in Schedule 1.
- (4) A reference to a building class is a reference to all the sub-classifications of that class.
- (5) The following sub-classifications apply:
 - (a) Classes 1a and 1b are sub-classifications of Class 1.
 - (b) Classes 7a and 7b are sub-classifications of Class 7.
 - (c) Classes 9a, 9b and 9c are sub-classifications of Class 9.
 - (d) Classes 10a, 10b and 10c are sub-classifications of Class 10.
- (6) A reference to a sub-classification is solely to that sub-classification.

TAS A1G4(7)

Notes

For Volume Three, if a word is not defined in Schedule 1, the meaning (if any) attributed to it under AS/NZS 3500.0 should be used unless the contrary intention appears.

Explanatory Information

Explanatory information and Introduction information contained in the NCC is non-mandatory and is provided for guidance purposes only. This informative material should be read in conjunction with the technical provisions of the NCC. Any statements made in the informative and guidance components of the NCC should not be taken to override the NCC. Unlike the NCC, which is adopted by legislation, the informative and guidance components are not called up into legislation and they do not cover State and Territory variations and additions. Because informative and guidance components of the NCC do not have regulatory force, the ABCB accepts no responsibility for its contents when applied to specific buildings or any liability which may result from its use.

Defined words provide the precise meaning and expressions of key words used for understanding and complying with the NCC. Where a word is not defined in the NCC, the relevant common meaning of the word should be used.

Generally, a reference to a building is a reference to the whole building, regardless of classification. However, when a

provision is applicable to a specific class or classes of building, that reference to a building may be a reference to the whole building or part of the building depending on how the building is classified.

Classes 1a and 1b, 7a and 7b, 9a, 9b and 9c, and 10a, 10b and 10c are separate classifications. In the NCC, when the designation 'a', 'b' or 'c' is not applied, the reference is to all buildings of the general class. For example, 'Class 9b' refers only to Class 9b buildings, but 'Class 9' refers to Classes 9a, 9b and 9c.

Whether a provision applies or not depends on the circumstances of the case and the circumstances in which the reference is made. For example, where a building has a single classification, a reference to a building in the NCC is understandably a reference to a whole building. However, where a building has parts of different classification, unless the contrary intention appears (i.e. there is a specific reference to the whole building), a reference to a building in the NCC is a reference to the relevant part of the building. This means that each part of the building must comply with the relevant provisions for its classification.

A number of the *Performance Requirements* of the NCC use the expression "to the degree necessary" or "appropriate to". These expressions provide flexibility by allowing appropriate authorities to determine the degree of compliance necessary in a particular case. Therefore, any part of the NCC that uses these expressions should be referenced against the requirements of the *appropriate authority*. For example, an *appropriate authority* might judge that an item need not be installed, or a particular level of performance be achieved.

Application, Limitation, and Exemption statements are used to identify provisions that may or may not apply in certain situations, to varying degrees.

Figures are used to explain the requirements of a particular clause. To ensure the context of the requirement is clearly understood, adjacent construction elements of the building that would normally be required in that particular situation are not always shown. Accordingly, aspects of figures that are not shown should not be interpreted as meaning these construction details are not *required*. Therefore a figure must not be used as an indication of the full construction requirements in a given situation, as the only available option, or a substitute for referencing appropriate construction requirements (in other sources) for a given clause.

Part A2 Compliance with the NCC

Introduction to this Part

This Part explains the possible methods of demonstrating compliance with the NCC. It explains the various compliance pathways within the NCC and the appropriate steps that must be taken for each of these pathways.

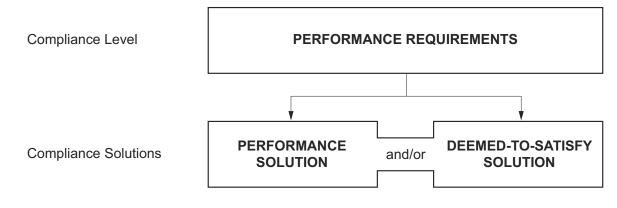
Governing Requirements

A2G1 Compliance

[2019: A2.0, A2.1]

- (1) Compliance with the NCC is achieved by complying with-
 - (a) the Governing Requirements of the NCC; and
 - (b) the Performance Requirements.
- (2) Performance Requirements are satisfied by one of the following, as shown in Figure A2G1:
 - (a) Performance Solution.
 - (b) Deemed-to-Satisfy Solution.
 - (c) A combination of (a) and (b).

Figure A2G1: NCC compliance structure



A2G2 Performance Solution

[2019: A2.2]

- (1) A Performance Solution is achieved by demonstrating-
 - (a) compliance with all relevant Performance Requirements; or
 - (b) the solution is at least equivalent to the Deemed-to-Satisfy Provisions.
- (2) A *Performance Solution* must be shown to comply with the relevant *Performance Requirements* through one or a combination of the following *Assessment Methods*:
 - (a) Evidence of suitability in accordance with Part A5 that shows the use of a material, product, *plumbing* and *drainage product*, form of construction or design meets the relevant *Performance Requirements*.
 - (b) A Verification Method including the following:
 - (i) The Verification Methods provided in the NCC.
 - (ii) Other *Verification Methods*, accepted by the *appropriate authority* that show compliance with the relevant *Performance Requirements*.

- (c) Expert Judgement.
- (d) Comparison with the *Deemed-to-Satisfy Provisions*.
- (3) Where a *Performance Requirement* is satisfied entirely by a *Performance Solution*, in order to comply with (1) the following method must be used to determine the *Performance Requirement* or *Performance Requirements* relevant to the *Performance Solution*:
 - (a) Identify the relevant *Performance Requirements* from the Section or Part to which the *Performance Solution* applies.
 - (b) Identify *Performance Requirements* from other Sections or Parts that are relevant to any aspects of the *Performance Solution* proposed or that are affected by the application of the *Performance Solution*.
- (4) Where a *Performance Requirement* is proposed to be satisfied by a *Performance Solution*, the following steps must be undertaken:
 - (a) Prepare a *performance-based design brief* in consultation with relevant stakeholders.
 - (b) Carry out analysis, as proposed by the performance-based design brief.
 - (c) Evaluate results from (4)(b) against the acceptance criteria in the performance-based design brief.
 - (d) Prepare a final report that includes-
 - (i) all *Performance Requirements* and/or *Deemed-to-Satisfy Provisions* identified through A2G2(3) or A2G4(3) as applicable; and
 - (ii) identification of all Assessment Methods used; and
 - (iii) details of steps (4)(a) to (4)(c); and
 - (iv) confirmation that the Performance Requirement has been met; and
 - (v) details of conditions or limitations, if any exist, regarding the *Performance Solution*.

VIC A2G2(5)

A2G3 Deemed-to-Satisfy Solution

[2019: A2.3]

- (1) A solution that complies with the *Deemed-to-Satisfy Provisions* is deemed to have met the *Performance Requirements*.
- (2) A *Deemed-to-Satisfy Solution* can show compliance with the *Deemed-to-Satisfy Provisions* through one or more of the following *Assessment Methods*:
 - (a) Evidence of suitability in accordance with Part A5 that shows the use of a material, product, *plumbing* and *drainage product*, form of construction or design meets a *Deemed-to-Satisfy Provision*.
 - (b) Expert Judgement.

A2G4 A combination of solutions

[2019: A2.4]

- (1) *Performance Requirements* may be satisfied by using a combination of *Performance Solutions* and *Deemed-to-Satisfy Solutions*.
- (2) When using a combination of solutions, compliance can be shown through the following, as appropriate:
 - (a) A2G2 for assessment against the relevant Performance Requirements.
 - (b) A2G3 for assessment against the relevant *Deemed-to-Satisfy Provisions*.
- (3) Where a Performance Requirement is satisfied by a Performance Solution in combination with a Deemed-to-Satisfy Solution, in order to comply with (1), the following method must be used to determine the Performance Requirement or Performance Requirements relevant to the Performance Solution:
 - (a) Identify the relevant *Deemed-to-Satisfy Provisions* of each Section or Part that are to be the subject of the *Performance Solution*.
 - (b) Identify the Performance Requirements from the same Sections or Parts that are relevant to the identified

Deemed-to-Satisfy Provisions.

(c) Identify *Performance Requirements* from other Sections or Parts that are relevant to any aspects of any *Performance Solution* proposed or that are affected by the application of the *Deemed-to-Satisfy Provisions* that are the subject of the *Performance Solution*.

Explanatory Information

To comply with the NCC, a solution must achieve compliance with the Governing Requirements and the *Performance Requirements*. The Governing Requirements contain requirements about how the *Performance Requirements* must be met.

Performance Requirements outline the minimum necessary standards different buildings or building elements must attain. The *Performance Requirements* are the only NCC technical provisions that must be satisfied.

In some instances, State and Territory variations and additions may also be applicable to certain *Performance Requirements*.

A solution may be partly a *Performance Solution* and partly a *Deemed-to-Satisfy Solution*. However, no matter what method is chosen, building proponents need to always meet the *Performance Requirements* of the NCC.

A2G2(2)(b)(ii) provides for the use of *Verification Methods* that are not listed in the NCC. A *Verification Method* may include—

- a calculation, using analytical methods or mathematical models; or
- a test, using a technical procedure, either on-site or in a laboratory, to directly measure the extent to which the *Performance Requirements* have been met; or
- an inspection (and inspection report); or
- any other acceptable form of certification.

Any Verification Method used must be acceptable to the appropriate authority.

A *Performance Solution* must comply with all applicable *Performance Requirements* of the NCC. A *Performance Solution* provides a tailored solution to meet the intended objective of the *Performance Requirements*. A *Performance Solution* must comply with all relevant *Performance Requirements* and must be verified using one or a combination of the following *Assessment Methods*:

- Evidence of suitability.
- Verification Method.
- Expert Judgement.
- Comparison with the Deemed-to-Satisfy Provisions.

For example, building proponents who wish to know what has to be done to satisfy the fire safety *Performance Requirements* for a particular building can either follow the *Deemed-to-Satisfy Provisions* or develop a *Performance Solution*. Guidance on how to develop *Performance Solutions* can be found on the ABCB website at: www.abcb.gov.au. The ABCB Resource Library contains information on the development of *Performance Solutions* for both building and plumbing.

A *Deemed-to-Satisfy Solution* is achieved by following all appropriate *Deemed-to-Satisfy Provisions* in the NCC. The *Deemed-to-Satisfy Provisions* are prescriptive (i.e. like a recipe book, they tell you how, what and in which location things must be done). They include materials, components, design factors, and construction methods that, if used, are deemed to meet the *Performance Requirements*, hence the term "Deemed-to-Satisfy".

A Deemed-to-Satisfy Solution may be verified using one or a combination of the following Assessment Methods:

- Evidence of suitability.
- Expert Judgement.

Some *Performance Requirements* are without *Deemed-to-Satisfy Solutions*. Compliance with these *Performance Requirements* must be achieved by using a *Performance Solution*.

When designing a building or *plumbing* or *drainage* system, both *Performance Solutions* and *Deemed-to-Satisfy Solutions* can be used to achieve compliance with *Performance Requirements*. A combination of solutions may be used to satisfy a single *Performance Requirement*. This may include occasions where a specific *Performance Requirement* covers a number of elements of a building or *plumbing* or *drainage* system.

No NCC provision can be considered in isolation. Any departure from the Deemed-to-Satisfy Provisions for a

Performance Solution needs to be assessed against the relevant *Performance Requirements* within the relevant NCC Section or Part. Additionally, the proposed *Performance Solution* may also impact on other *Performance Requirements* in other Sections or Parts. Thus, these additional *Performance Requirements* need to be considered in relation to the subject *Performance Solution*. A2G2(3) and A2G4(3) set out the methods for determining which *Performance Requirements* are relevant.

It is important that a holistic approach is used when determining the appropriate *Performance Requirements*.

A2G4(2)(a) references A2G2. Therefore, when using a combination of *Performance Solutions* and *Deemed-to-Satisfy Solutions* it is necessary to comply with A2G2(4) where a *Performance Requirement* is proposed to be satisfied by a *Performance Solution*.

More information on NCC compliance methods is located at www.abcb.gov.au.

Part A3 Application of the NCC in States and Territories

Introduction to this Part

This Part explains applying the NCC in accordance with State or Territory legislation. The NCC has legal effect through references in relevant State or Territory building and plumbing legislation.

Although the NCC is a nationally consistent code, there are some situations where a State or Territory enforces a variation, addition or deletion to it. This Part also explains how these variations, additions and deletions apply.

Governing Requirements

A3G1 State and Territory compliance

[2019: A3.0]

(1) For application within a particular State or Territory, the volumes of the NCC comprise inclusively of-

- (a) Sections A to G, I and J and associated schedules of Volume One; and
- (b) Sections A and H and associated schedules of Volume Two; and
- (c) Sections A to E and associated schedules of Volume Three.
- (2) State and Territory variations, additions and deletions must be complied with in conjunction with the NCC.
- (3) The NCC is subject to, and may be overridden by, State or Territory legislation.
- (4) State and Territory variations, additions and deletions are contained in the following Schedules:
 - (a) Schedule 3: Commonwealth of Australia.
 - (b) Schedule 4: Australian Capital Territory.
 - (c) Schedule 5: New South Wales.
 - (d) Schedule 6: Northern Territory.
 - (e) Schedule 7: Queensland.
 - (f) Schedule 8: South Australia.
 - (g) Schedule 9: Tasmania.
 - (h) Schedule 10: Victoria.
 - (i) Schedule 11: Western Australia.
- (5) State and Territory variations and deletions are identified throughout the NCC.

Explanatory Information

The NCC is given legal effect by building regulatory legislation in each State and Territory. This legislation consists of an Act of Parliament and subordinate legislation which empowers the regulation of certain aspects of building and plumbing, and contains the administrative provisions necessary to give effect to the legislation.

Although the NCC is a national code, in some instances it is necessary for a State or Territory to vary or apply additional requirements specific to their jurisdiction. A3G1(2) highlights that these variations, additions or deletions must be applied in conjunction with the NCC provisions. Typically, these variations, additions or deletions override the requirements contained within the NCC.

Any provision of the NCC may be overridden by, or subject to, State or Territory legislation. The NCC must therefore be read in conjunction with that legislation. Any queries on such matters should be referred to the State or Territory authority responsible for building and plumbing regulatory matters.

Where a requirement or provision of the NCC is subject to a State or Territory variation, addition, or deletion, a reference to the appropriate provision in the applicable State or Territory schedule is included with that requirement or provision.

Part A4 Referenced documents

Introduction to this Part

This Part explains how documents referenced in the NCC are adopted and applied. The NCC itself does not contain details of every design and construction requirement for a building or *plumbing* or *drainage* system. As such, the NCC calls upon or "references" other documents with this information. These are called NCC referenced documents. Examples of such documents are Australian Standards, ABCB protocols, ABCB standards and other publications.

There are multiple types of referenced documents. A primary referenced document is one referenced in Schedule 2 of the NCC. A secondary referenced document is one referenced in a primary referenced document. Other referenced documents are referenced by secondary and subsequently referenced documents.

Governing Requirements

A4G1 Referenced documents

[2019: A4.0]

- (1) A reference in the NCC to a document refers to the edition or issues and any amendment listed in Schedule 2.
- (2) A document referenced in the NCC is only applicable in the context in which the document is quoted.

TAS A4G1(3)

- (3) Where a new edition, issue or amendment of a primary referenced document is not listed in Schedule 2, the new edition, issue or amendment is not referenced for the purpose of the NCC.
- (4) Any document referenced in a primary referenced document is known as a secondary referenced document.
- (5) A reference in a primary referenced document to a secondary or other referenced document is a reference to the document as it existed at the time of publication of the primary referenced document.

Applications

A4G1 applies to documents referenced in the ABCB Housing Provisions in the same way as for documents referenced within any other part of the NCC.

Exemptions

If the secondary or other referenced document is also a primary referenced document, A4G1(5) does not apply.

A4G2 Differences between referenced documents and the NCC

[2019: A4.1]

The NCC overrules any difference between the NCC (including the ABCB Housing Provisions) and a primary referenced document, including any secondary referenced document.

Applications

A4G2 applies to documents referenced in the ABCB Housing Provisions in the same way as for other documents referenced by Volumes One, Two or Three of the NCC.

A4G3 Adoption of referenced documents

[2019: A4.2]

The NCC does not require compliance with requirements in relation to the following matters where they are prescribed in a referenced document:

- (a) The rights, responsibilities or obligations between the manufacturer, supplier or purchaser.
- (b) The responsibilities of any tradesperson or other building operative, architect, engineer, authority, or other person or body.
- (c) The submission for approval of any material, building component, form or method of construction, to any person, authority or body other than those empowered under State or Territory legislation to give that approval.
- (d) The submission of a material, product, form of construction or design to any person, authority or body for opinion.
- (e) Any departure from the NCC, rule, specification or provision at the sole discretion of the manufacturer or purchaser, or by arrangement or agreement between the manufacturer and purchaser.

Applications

A4G3 applies to documents referenced in the ABCB Housing Provisions in the same way as for documents referenced within Volumes One, Two or Three of the NCC.

Explanatory Information

Schedule 2 is only mandatory to *Deemed-to-Satisfy Provisions*, Specifications and *Verification Methods*. However, referenced documents are only applicable to the NCC provision that references the document.

A proponent undertaking a *Performance Solution* can use any element or edition of any document, if they help satisfy the *Performance Requirements*. They do not need to use the documents listed in Schedule 2.

Schedule 2 lists the specific edition of the Standard or other document adopted, including any amendments considered appropriate for Schedule 2, the *Deemed-to-Satisfy Provisions*, Specifications or *Verification Methods*. Other editions of (or amendments to) the referenced document are not adopted and have no standing under the NCC.

A primary referenced document may refer to a secondary referenced document. A4G1(5) stipulates that the secondary referenced document is the edition of the document that existed at the time of publication of the primary referenced document. When another edition of (or amendment to) a secondary referenced document is released, subject to the exemption to A4G1, that edition (or amendment) is not adopted for the purposes of the primary referenced document.

A4G3 means that contractual matters or clauses defining responsibilities of various parties, and matters not appropriate for adoption in the NCC are not included when a document is called up in the NCC.

Part A5 Documentation of design and construction

Introduction to this Part

This Part explains the evidence needed to show that the NCC requirements are met and the solution is "fit for purpose". It covers the use of materials, products, forms of construction and designs. It details separate requirements for the BCA and PCA.

Examples of evidence to be prepared and retained include certificates, reports, calculations and any other documents or information showing compliance with the NCC requirements.

Governing Requirements

A5G1

Suitability

[2019: A5.0]

- (1) A building and *plumbing* or *drainage* installation must be constructed using materials, products, *plumbing products*, forms of construction and designs fit for their intended purpose to achieve the relevant requirements of the NCC.
- (2) For the purposes of (1), a material, product, *plumbing product*, form of construction or design is fit for purpose if it is—
 - (a) supported by evidence of suitability in accordance with-
 - (i) A5G2; and
 - (ii) A5G3 or A5G4 as appropriate; and
 - (b) constructed or installed in an appropriate manner.

Explanatory Information

A5G1 relates to the quality of work and materials needed to construct a building to meet NCC requirements. This means that—

- all people involved with construction must work skillfully in accordance with good trade practice; and
- all materials must be of a quality to fulfil their function/s within the building.

A5G1 only applies to matters normally covered by the NCC.

While A5G1 outlines quality of work and material demands, sometimes additional conditions may be required by-

- other Commonwealth, State or Territory legislation; and
- contracts that include either specific quality requirements, or requirements for specific materials and the like.

Explanatory Information: Example

Permit authorities would ordinarily not apply A5G1 to such matters as-

- plastering other than for fire rating, waterproofing of wet areas, and sound insulation; or
- painting other than that required for weatherproofing an *external wall*.

When determining which form of evidence will be used, it is important to consider the appropriateness of the evidence, as some forms of evidence may be more suitable to materials and products and others to designs and forms of construction. The requirement to consider appropriateness of the evidence is specified in A5G2(1).

A5G2 Evidence of suitability – Volumes One, Two and Three

[2019: A5.1]

- (1) The form of evidence used must be appropriate to the use of the material, product, *plumbing product*, form of construction or design to which it relates.
- (2) Any copy of documentary evidence submitted must be a complete copy of the original certificate, report or document.

Explanatory Information

For further guidance, refer to the ABCB Handbook for Evidence of Suitability.

All copies of documents provided as evidence must be unabridged copies of the originals. No part can be left incomplete.

A5G3 Evidence of suitability – Volumes One and Two (BCA)

[2019: A5.2]

- (1) Subject to A5G5, A5G6, A5G7 and A5G9, evidence to support that the use of a material, product, form of construction or design meets a *Performance Requirement* or a *Deemed-to-Satisfy Provision* may be in the form of any one, or any combination of the following:
 - (a) A current CodeMark Australia or CodeMark Certificate of Conformity.
 - (b) A current Certificate of Accreditation.
 - (c) A current certificate, other than a certificate described in (a) and (b), issued by a *certification body* stating that the properties and performance of a material, product, form of construction or design fulfil specific requirements of the BCA.
 - (d) A report issued by an Accredited Testing Laboratory that-
 - (i) demonstrates that a material, product or form of construction fulfils specific requirements of the BCA; and
 - (ii) sets out the tests the material, product or form of construction has been subjected to and the results of those tests and any other relevant information that has been relied upon to demonstrate it fulfils specific requirements of the BCA.
 - (e) A certificate or report from a professional engineer or other appropriately qualified person that—
 - (i) certifies that a material, product, form of construction or design fulfils specific requirements of the BCA; and
 - (ii) sets out the basis on which it is given and the extent to which relevant standards, specifications, rules, codes of practice or other publications have been relied upon to demonstrate it fulfils specific requirements of the BCA.
 - (f) Another form of documentary evidence, such as but not limited to a Product Technical Statement, that-
 - (i) demonstrates that a material, product, form of construction or design fulfils specific requirements of the BCA; and
 - (ii) sets out the basis on which it is given and the extent to which relevant standards, specifications, rules, codes of practice or other publications have been relied upon to demonstrate it fulfils specific requirements of the BCA.
- (2) Evidence to support that a calculation method complies with an ABCB protocol may be in the form of any one, or any combination of the following:
 - (a) A certificate from a professional engineer or other appropriately qualified person that—
 - (i) certifies that the calculation method complies with a relevant ABCB protocol; and
 - (ii) sets out the basis on which it is given and the extent to which relevant standards, specifications, rules, codes of practice and other publications have been relied upon.
 - (b) Another form of documentary evidence that correctly describes how the calculation method complies with a relevant ABCB protocol.

Applications

A5G3 is only applicable to NCC Volumes One and Two (BCA).

Notes

Current documentary evidence, such as a certificate or report, containing references to NCC 2019 provisions remains valid despite amended provision references in NCC 2022, subject to technical requirements remaining the same between editions.

Explanatory Information

A5G3 represents the minimum level of documentary evidence needed to show that a material, product, form of construction or design meets the relevant NCC requirements. The evidence can be required by:

- an appropriate authority;
- a party to a construction contract; or
- a person certifying compliance with the NCC.

If a building proponent does not produce exactly what is required, the evidence may be rejected.

It should be noted that 'design' may refer to engineering design, architectural design as well as product and material design.

A5G3(1)(f) allows for the use of alternative forms of documentary evidence to those included in A5G3(1)(a) to (e), as long as they comply with certain specified conditions.

An example of this arises when an authority carries out an inspection of a building site. The inspection alone would not be acceptable as evidence. However, if the authority compiled a written report detailing findings and conclusions from the inspection, then it may comply with the requirements of A5G3(1)(f).

A *Product Technical Statement* detailing the characteristics and merits of a particular product or system is also an example of another form of documentary evidence.

There is significant reliance by industry on the use of calculation methods, including software programs, for demonstrating compliance with the NCC. While there is no formal recognition of specific methods, A5G3(2) allows suitable evidence to be submitted to demonstrate that a calculation method (including a software program) complies with a relevant ABCB protocol that establishes the characteristics of a suitable calculation method.

If under a *Deemed-to-Satisfy Provision* a building element is *required* to have an FRL, then A5G3 may be used to provide evidence to show that the FRL has been determined in accordance with Specification 1 and 2.

In the case of a test report from an Accredited Testing Laboratory, the report may be either-

- the test report referred to in clause 2.16.2 of AS 1530.4 (also referred to as a full test report); or
- the regulatory information report referred to in clause 2.16.3 of AS 1530.4 (also referred to as a short-form report).

In both cases the report must be an unabridged copy of the original report. A test certificate referred to in clause 2.16.4 of AS 1530.4 on its own is not suitable for showing compliance with the NCC.

If a proposal uses a *Deemed-to-Satisfy Provision* that requires a building element to have *fire hazard properties*, then A5G3 may be used to provide evidence to support the proposal and show that the *fire hazard properties* have been determined in accordance with A5G6.

Refer to the guidance provided in the Guide to Volume One for further information on *fire hazard properties* which includes—

- Flammability Index; and
- Spread-of-Flame Index; and
- Smoke-Developed Index; and
- a material's group number; and
- smoke growth rate index.

The *Deemed-to-Satisfy Provisions* of the BCA contain a number of provisions requiring a ceiling to have a *resistance to the incipient spread of fire* to the space above itself. A5G7 sets out the method of determining the incipient spread of fire. The method is based on the method of determining the FRL of a building element and use of the *Standard Fire Test*.

A5G4 Evidence of suitability – Volume Three (PCA)

[2019: A5.3]

- (1) Any *product* that is intended for use in contact with *drinking water* must comply with the relevant requirements of AS/NZS 4020, verified in the form of either—
 - (a) a test report provided by an Accredited Testing Laboratory, in accordance with AS/NZS 4020; or
 - (b) a WaterMark Licence issued in accordance with (3), if it includes compliance with AS/NZS 4020.
- (2) Any *product* that contains copper alloy and is intended for use in contact with *drinking water* must have a *weighted average* lead content of not more than 0.25% verified in the form of either—
 - (a) a test report provided by an Accredited Testing Laboratory, in accordance with NSF/ANSI/CAN 372; or
 - (b) a *WaterMark Licence* issued in accordance with (3), if it includes compliance with NSF/ANSI/CAN 372.
- (3) A *product* of a type listed on the *WaterMark Schedule of Products* is deemed to be fit for its intended purpose if it has a *WaterMark Licence* issued in accordance with the WaterMark Scheme Rules.
- (4) A *product* of a type listed on the *Watermark Schedule of Excluded Products* requires evidence of suitability in the form of—
 - (a) a current certificate issued by a *certification body* stating that the properties and performance of a *product* can meet the requirements of the PCA; or
 - (b) a report issued by an Accredited Testing Laboratory that-
 - (i) demonstrates that the *product* complies with the relevant requirements of the PCA; and
 - (ii) sets out the tests the *product* has been submitted to and the results of those tests and any other relevant information that has been relied upon to demonstrate suitability for use in a *plumbing* or *drainage* installation.
- (5) Any *product* that is not covered by (3) or (4) must be subjected to a risk assessment in accordance with the WaterMark Scheme Rules.
- (6) Evidence to support that a design or system meets the relevant PCA *Performance Requirements* must be in the form of any one or any combination of the following:
 - (a) The design or system complies with a Deemed-to-Satisfy Provision.
 - (b) The design or system is a Performance Solution from a professional engineer or a recognised expert that-
 - (i) certifies that the design or system complies with the relevant requirements of the PCA; and
 - (ii) sets out the basis on which it is given and the extent to which relevant standards, specifications, rules, codes of practice or other publications have been relied upon.
 - (c) Any other form of documentary evidence that-
 - (i) demonstrates that a design or system complies with the relevant requirements of the PCA; and
 - (ii) sets out the basis on which it is given and the extent to which relevant standards, specifications, rules, codes of practice or other publications have been relied upon.

TAS A5G4(10) TAS A5G4(7) TAS A5G4(8) TAS A5G4(9)

Notes

On-site wastewater management systems larger than covered by the standards are exempt and a *Performance Solution* is required.

Notes

- (1) A5G4(2) does not take effect until the completion of the transition period specified by WaterMark Notice of Direction 2021/4.
- (2) Note 1 does not prevent the use of *products* certified in accordance with A5G4(2) prior to the completion of the transition period specified by the WaterMark Notice of Direction 2021/4.

Applications

Products subject to the requirements of A5G4(2) are specifically nominated in the *WaterMark Schedule of Products* and the *WaterMark Schedule of Excluded Products*.

Exemptions

(1) *Products* that are used exclusively for non-drinking uses such as manufacturing, industrial processing, irrigation or any other uses where water is not anticipated to be used for human consumption are excluded from the requirements of A5G4(2).

Explanatory Information

Some examples of products subject to A5G4(2) include the following:

- Copper alloy fittings.
- Stainless-steel braided hoses.
- Valves (such as valves for isolation, backflow prevention, alteration of pressure and temperature).
- Taps and mixers.
- Water meters.
- Pumps (for use with cold and heated water services).
- Water heaters.
- Residential water filtration equipment.
- Water dispensers (such as boiling and cooling units, drinking fountains and bottle fillers).
- Fire sprinkler systems connected to the cold water service that are not isolated from fixtures and fittings intended to supply water for human consumption.

Some examples of products excluded from the requirements of A5G4(2) include the following:

- Shower heads for bathing.
- Emergency showers, eye wash and/or face wash equipment.
- Pumps used for irrigation, fire-fighting or other non-drinking water purposes.
- Fire-fighting water services and equipment including residential fire sprinklers.
- Appliances, including washing machines and dishwashers.
- Commercial boilers associated with heating, ventilation and air-conditioning systems.
- Sanitary fixtures (such as toilets, cistern inlet valves, bidets and urinals.
- Non-drinking water systems (such as recycled water systems).

Product certification transition arrangements are outlined in Notices of Direction issued through the *WaterMark Certification Scheme*.

Lead is currently permitted in small proportions in the raw materials used to manufacture some *plumbing products*. Whilst the allowable lead levels permitted in *products* manufactured prior to 1 September 2025 ensures compliance with the Australian Drinking Water Guidelines, the use of products compliant with the lead levels in A5G4(2) is encouraged, to avoid the potential for adverse effects on human health.

A5G4(1) requires any *product* intended for use in contact with *drinking water* to comply with AS/NZS 4020. Compliance is achieved by passing the relevant tests set out in the Standard.

Evidence of compliance must then be provided in accordance with A5G4(1), under which there are two options. The first, at A5G4(1)(a), recognises test reports and certificates that cover compliance with AS/NZS 4020 only. The second, at A5G4(1)(b), recognises *WaterMark Licences* where compliance with AS/NZS 4020 is a requirement of the relevant *product* Standard or WaterMark Technical Specification.

For *products* that are of a type listed on the *WaterMark Schedule of Products*, A5G4(2) requires that these *products* have a *WaterMark Licence*. A *WaterMark Licence* reflects that the *product* has been certified and authorised in accordance with the WaterMark Scheme Rules.

For products that are not subject to WaterMark certification (i.e. excluded products), evidence that can be used to

support that the *product* is fit for its intended purpose is provided in A5G4(3). This may include demonstrating compliance with a *product* specification referenced in the *WaterMark Schedule of Excluded Products*, where one is available.

A5G4(4) provides that any *product* that is not listed on the *WaterMark Schedule of Products* or the *WaterMark Schedule of Excluded Products* must be subjected to a risk assessment in accordance with the WaterMark Scheme Rules. The risk assessment will determine whether the *product* in question requires certification and authorisation, or if it should be listed as an "excluded product". This in turn will determine the form of evidence of suitability applicable to the *product*.

Explanatory Information: What is WaterMark?

The *WaterMark Certification Scheme* is a mandatory certification scheme for *plumbing* and *drainage products* to ensure that these *products* are fit for purpose and appropriately authorised for use in a *plumbing* or *drainage* system.

The PCA, through Part A5, requires certain *plumbing* and *drainage products* to be certified and authorised for use in a *plumbing* or *drainage* system. These products are certified through the *WaterMark Certification Scheme* and listed on the WaterMark Product Database.

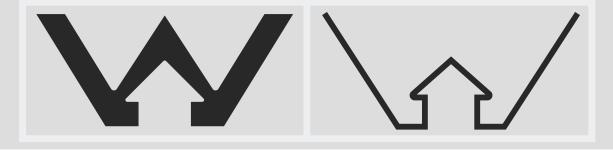
The *WaterMark Certification Scheme* is governed by the WaterMark Scheme Rules, which are available for download from the ABCB website at: www.abcb.gov.au. These rules set out the requirements for risk assessments, evaluation, certification, and the drafting of WaterMark Technical Specifications.

When a *product* is listed on the *WaterMark Schedule of Products* then, for it to be certified and authorised, the *product* must—

- be tested by an Accredited Testing Laboratory; and
- comply with an approved *product* specification (either a relevant existing *product* Standard or a WaterMark Technical Specification); and
- be manufactured in accordance with an approved Quality Assurance Program; and
- carry a scope of use.

Products that comply fully with the applicable requirements of the *WaterMark Certification Scheme* are then eligible to be certified by a *WaterMark Conformity Assessment Body* and listed on the WaterMark Product Database. Certified *products* are identifiable by the WaterMark certification trade mark, shown in Figure A5G4 below, that must be displayed on the *product* upon granting of a *WaterMark Licence*.

Figure A5G4 (explanatory): WaterMark Certification Scheme Trademarks



A5G5 Fire-resistance of building elements

[2019: A5.4]

Where a *Deemed-to-Satisfy Provision* requires a building element to have an FRL, it must be determined in accordance with Specifications 1 and 2.

A5G6 Fire hazard properties

[2019: A5.5]

Where a *Deemed-to-Satisfy Provision* requires a building component or assembly to have a *fire hazard property* it must be determined as follows:

- (a) For average specific extinction area, critical radiant flux and Flammability Index, as defined in Specification 1.
- (b) For Smoke-Developed Index and Spread-of-Flame Index, in accordance with Specification 3.

(c) For a material's *group number* or *smoke growth rate index* (SMOGRA_{RC}), in accordance with S7C4(2).

A5G7 Resistance to the incipient spread of fire

[2019: A5.6]

A ceiling is deemed to have a resistance to the incipient spread of fire to the space above itself if-

- (a) it is identical with a prototype that has been submitted to the *Standard Fire Test* and the *resistance to the incipient spread of fire* achieved by the prototype is confirmed in a report from an *Accredited Testing Laboratory* that—
 - (i) describes the method and conditions of the test and form of construction of the tested prototype in full; and
 - (ii) certifies that the application of restraint to the prototype complies with the Standard Fire Test; or
- (b) it differs in only a minor degree from a prototype tested under (a) and the *resistance to the incipient spread of fire* attributed to the ceiling is confirmed in a report from an *Accredited Testing Laboratory* that—
 - (i) certifies that the ceiling is capable of achieving the *resistance to the incipient spread of fire* despite the minor departures from the tested prototype; and
 - (ii) describes the materials, construction and conditions of restraint that are necessary to achieve the *resistance to the incipient spread of fire*.

A5G8 Labelling of Aluminium Composite Panels

[2019: A5.7]

An Aluminium Composite Panel must be labelled in accordance with SATS 5344.

A5G9 NatHERS

[New for 2022]

Where *house energy rating software* is *required* to be used, evidence of the *house energy rating software* output must be in the form of a NatHERS certificate issued in accordance with the NatHERS scheme.

Part A6 Building classification

Introduction to this Part

The NCC groups buildings and structures by the purpose for which they are designed, constructed or adapted to be used, assigning each type of building or structure with a classification. This Part explains how each building classification is defined and used in the NCC.

The building classifications are labelled "Class 1" through to "Class 10". Some classifications also have sub-classifications, referred to by a letter after the number (e.g. Class 1a).

The technical building requirements for Class 2 to 9 buildings are mostly covered by Volume One of the NCC and those for Class 1 and 10 are mostly covered by Volume Two of the NCC. Volume Three of the NCC covers *plumbing* and *drainage* requirements for all building classifications.

A building may have parts that have been designed, constructed or adapted for different purposes. In most cases, each of these parts is a separate classification. A building (or part of a building) may also have more than one such purpose and may be assigned more than one classification.

Governing Requirements

A6G1 Determining a building classification

[2019: A6.0]

- (1) The classification of a building or part of a building is determined by the purpose for which it is designed, constructed or adapted to be used.
- (2) Each part of a building must be classified according to its purpose and comply with all the appropriate requirements for its classification.
- (3) A room that contains a mechanical, thermal or electrical facility or the like that serves the building must have the same classification as the major part or principal use of the building or *fire compartment* in which it is situated.
- (4) Unless another classification is more suitable, an occupiable outdoor area must have the same classification as the part of the building to which it is associated.

Exemptions

- (1) For A6G1(1) where a part of a building has been designed, constructed or adapted for a different purpose and is less than 10% of the *floor area* of the *storey* it is situated on, the classification of the other part of the *storey* may apply to the whole *storey*.
- (2) A6G1(3) does not apply to an *electricity network substation*.

Limitations

Exemption (1) does not apply where the minor use of a building is a laboratory, a Class 9b *early childhood centre*, or a Class 2, 3 or 4 part of a building.

Explanatory Information

Classification is a process for understanding risks in a building or part, according to its use. It must be correctly undertaken to achieve NCC aims as appropriate to each building in each circumstance.

It is possible for a single building to have parts with different classifications. Part of a building can also have more than one classification. Where there is any conflict between what requirements the part should comply with, the more stringent requirement applies.

Where it is unclear which classification should apply, *appropriate authorities* have the discretion to decide. They base their decision on an assessment of the building proposal.

They will look at what classification the building most closely resembles. They will also take into account the likely *fire load*, plus, the likely consequences of any risks to the safety, health and amenity of people using the building.

Appropriate authorities will also look at any relevant court decisions or determinations of the State or Territory body responsible for considering appeals on building classification matters.

It should be noted that appeals body determinations and, in some States and Territories, certain court decisions are usually not precedent creating. Such decisions are determined on a case-by-case basis.

It should also be noted that State and Territory authorities responsible for building regulatory matters may have issued advice, interpretations or guidelines to assist practitioners in applying the correct classification to a building or part. Advice on such matters should be sought from the relevant authority.

Under Exemption (1) to A6G1, if 10% or less of the *floor area* of a *storey* is used for a purpose which could be classified differently to the remainder of that *storey*, that part may be classified as being the same as the remainder. Laboratories, *sole-occupancy units* in Class 2, 3 or 4 parts, and Class 9b *early childhood centres* are excluded from this concession (see Limitation to A6G1). The reason is that laboratories are considered to have a high *fire hazard* potential and classifying them with the remainder of the building could, in a majority of cases, endanger occupants of the other parts of the building which have a lower *fire hazard* potential. In relation to Class 9b *early childhood centres*, the intent is to ensure that these facilities cannot be regarded as another class and that the specific fire safety requirements applicable to Class 9b *early childhood centres* are implemented. Also, the intent is not to allow *sole-occupancy units* in Class 2, 3 or 4 parts to be regarded as another Class 6 and then not have any fire or sound insulation between the units and any other classification which may have a high *fire load* and could endanger the occupants of the Class 2, 3 or 4 parts.

If Exemption (1) to A6G1 is used, it should be remembered that it will still be necessary to use the occupant numbers in Volume One Table D2D18 for the particular use of the area. Likewise, the lighting and equipment levels, people occupancy and load profiles for the area of minor use for the purposes of Volume One Section J must be in accordance with the use of the area.

If the *storey* has a very large *floor area*, the 10% or less concession area may also be large, even though the rest of the building is classifiable as a building which ordinarily has a lower risk potential. An example of the application of this area concession could be as follows:

- If a single *storey* factory has an office that takes up 8% of the whole *storey's floor area*, the entire building (including the office) can be classified as being Class 8.
- However, if that office area takes up 12% of the *storey's floor area*, that area must be classified as Class 5, and the remainder of the building as Class 8.

Under A6G1(3) a plant room, machinery room, lift motor room or *boiler* room, have the same classification as the part of the building they are in. These kinds of rooms do not need to be ancillary or subordinate to the part of the building they are in, that is, the 10% criterion is not applicable.

There are specific provisions for these kinds of rooms. For example, Volume One Section C requires some of them to be fire separated from the remainder of the building (e.g. see C3D14 with regard to elements of the electricity supply system).

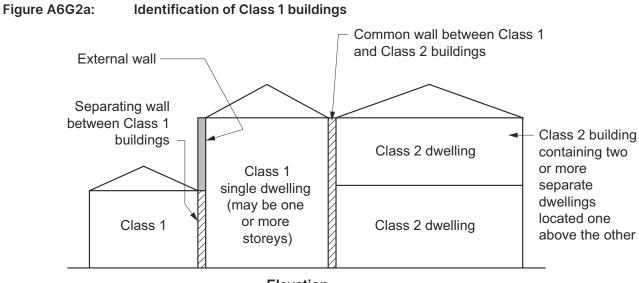
A6G2 Class 1 buildings

[2019: A6.1]

- (1) A Class 1 building is a dwelling.
- (2) Class 1 includes the following sub-classifications:
 - (a) Class 1a is one or more buildings, which together form a single dwelling including the following:
 - (i) A detached house.
 - (ii) One of a group of two or more attached dwellings, each being a building, separated by a *fire-resisting* wall, including a row house, terrace house, town house or villa unit.
 - (b) Class 1b is one or more buildings which together constitute-
 - (i) a boarding house, guest house, hostel or the like that—
 - (A) would ordinarily accommodate not more than 12 people; and
 - (B) have a total area of all floors not more than 300 m² (measured over the enclosing walls of the building or buildings); or

 $\overline{)}$

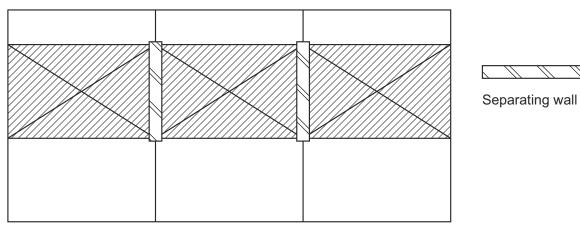
(ii) four or more single dwellings located on one allotment and used for short-term holiday accommodation.



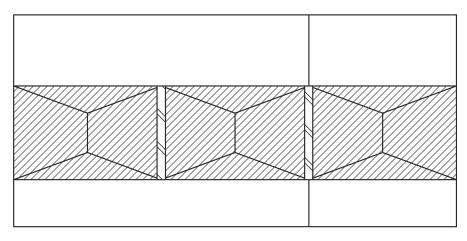
Elevation



Typical Class 1 building configurations



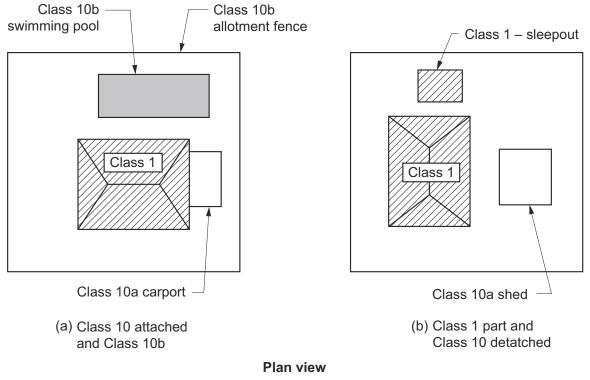
(a) 3 Class 1 buildings on 3 separate allotments



(b) 3 Class 1 buildings on 2 separate allotments







Notes

Figures A6G2a, A6G2b and A6G2c illustrates requirements of this provision.

Limitations

For A6G2, a Class 1 building cannot be located above or below another dwelling or another class of building, other than a *private garage*.

Explanatory Information

Class 1 buildings are primarily covered in Volumes Two and Three of the NCC. Class 1 buildings are not located above or below another dwelling, or another class of building other than a *private garage*.

A *sole-occupancy unit* used for residential purposes located over another *sole-occupancy unit* used for residential purposes will always be a Class 2 or Class 3 building (depending on the circumstances). It cannot be a Class 1 building.

A single Class 1 dwelling can be made up of more than one building. For example, it may include what is ordinarily called a house, plus one or more habitable 'outbuildings' such as sleepouts. Note that a habitable building such as a sleepout cannot be classified as a Class 10 building.

The height or number of storeys of a Class 1 building makes no difference to its classification.

Class 1b buildings used for short-term holiday accommodation include cabins in caravan parks, tourist parks, farm stay, holiday resorts and similar tourist accommodation. This accommodation itself is typically rented out on a commercial basis for short periods and generally does not require the signing of a lease agreement. Short-term accommodation can also be provided in a boarding house, guest house, hostel, bed and breakfast accommodation or the like.

Unlike a Class 1b building described in A6G2(2)(a), a Class 1b building described in A6G2(2)(b) does not have any *floor area* limitation. Therefore, if 4 or more single dwellings are located on the one allotment and used for short-term holiday accommodation, each single dwelling would be classified as a Class 1b building regardless of the *floor area* of each dwelling or the combined *floor area* of all of the dwellings.

See also Volume One D4D2(3) which contains an explanation of what is considered to be "one allotment".

The Class 1b classification can attract concessions applicable to Class 3 buildings. These concessions allow people to rent out rooms in a house, or run a bed and breakfast, without having to comply with the more stringent Class 3 requirements. The reasoning is that the smaller size of the building and its lower number of occupants represents reduced fire risks.

Apart from their use, the primary difference between Class 1a and Class 1b buildings is that the latter is required to have a greater number of smoke alarms and in some circumstances, access and features for people with a disability.

A6G3 Class 2 buildings

(1) A Class 2 building is a building containing two or more *sole-occupancy units*.

(2) Each sole-occupancy unit in a Class 2 building must be a separate dwelling.

Explanatory Information

A Class 2 building is one that includes more than one dwelling, each of which is generally solely occupied by one or more people to the exclusion of others.

Such buildings must not be otherwise classified as a Class 1 or Class 3 building or Class 4 part. See Explanatory Figure A6G3a for a typical configuration of Class 1 and Class 2 buildings.

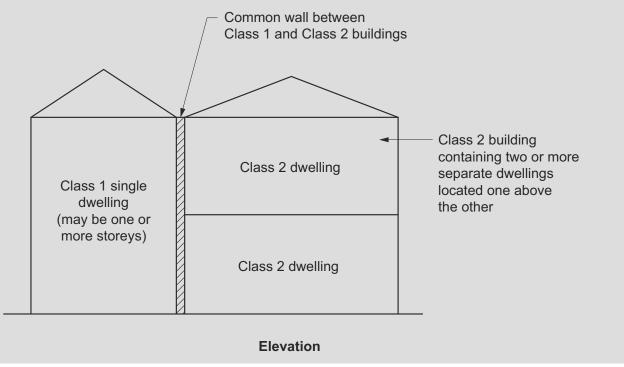
Where a sole-occupancy residential unit is located above another sole-occupancy residential unit, the building containing the units can be either a Class 2 or a Class 3 building, depending on the other circumstances of the building proposal.

Class 2 buildings can be single *storey* attached dwellings. Where there is any common space below such dwellings, they are Class 2 (and cannot be Class 1) irrespective of whether the space below is a *storey* or not (see Explanatory Figure A6G3b).

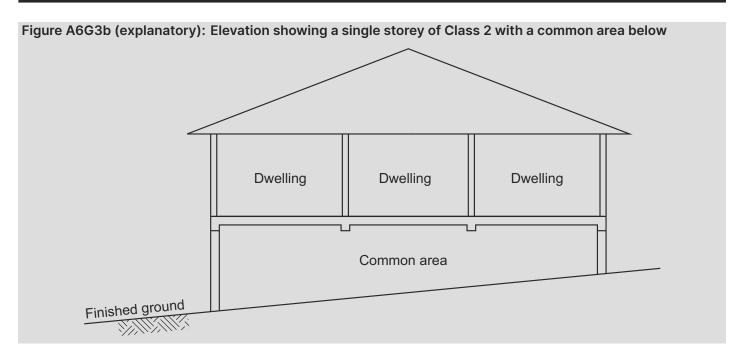
Class 2 buildings can be attached to buildings of another class. The attached Class 2 buildings need not be attached to one another, and need not be more than a single *storey*.

When two or more dwellings are attached to another class, they cannot be Class 4 parts, as any building can only contain one Class 4 dwelling.

Figure A6G3a (explanatory): Section showing a typical configuration of Class 1 and Class 2 buildings (with non-combustible roof coverings)



[2019: A6.2]



A6G4 Class 3 buildings

[2019: A6.3]

- (1) A Class 3 building is a residential building providing long-term or transient accommodation for a number of unrelated persons.
- (2) Class 3 buildings include the following:
 - (a) A boarding house, guest house, hostel, lodging house or backpacker accommodation.
 - (b) A residential part of a hotel or motel.
 - (c) A residential part of a *school*.
 - (d) Accommodation for the aged, children, or people with disability.
 - (e) A residential part of a *health-care building* which accommodates members of staff.
 - (f) A residential part of a *detention centre*.
 - (g) A residential care building.

Limitations

For A6G4, a Class 3 building is not a Class 1 or 2 building but may be a mixture of Class 3 and another class.

Explanatory Information

Class 3 buildings provide accommodation for unrelated people. The length of stay is unimportant.

Some exceptions to this classification include: certain bed and breakfast accommodation, boarding houses, guest houses, hostels, or lodging houses and the like which fall within the concession provided for Class 1b buildings.

Also, any sized building can be classified as Class 1 or Class 2 if it is used to house any number of unrelated people who jointly own or rent it, or share it on a non-rental basis with an owner or tenant.

It is not unusual for a manager's, owner's or caretaker's dwelling attached to a Class 3 building to be thought of as a Class 4 part of the Class 3 building. However, a Class 4 part of a building can only be part of a Class 5-9 building.

Accordingly, such dwellings are either classified as Class 1, Class 2 or Class 3, depending on the circumstances of the building proposal. However, a building could be a mixture of Class 3 and another class.

Class 3 buildings include—

- the residential parts of hotels and motels; and
- hotel or motel caretakers', managers' or owners' flats, noting that under certain circumstances such dwellings could

be Class 1, Class 2 or Class 3 buildings; and

- dormitory accommodation, in schools or elsewhere, noting that a dormitory is generally (but not always) considered to be a *sole-occupancy unit*; and
- bed and breakfast accommodation, a boarding house, guest house, hostel, or lodging house; and
- backpackers' accommodation; and
- a building which houses elderly people or other people who require special care (in some States or Territories it is not acceptable for a Class 1b building to be used to house elderly people or other people who require special care it is recommended the local building regulatory body be consulted); and
- workers' quarters, including shearers' or fruit pickers' accommodation, or hotel workers' accommodation.

A6G5 Class 4 buildings

[2019: A6.4]

Class 4 is a dwelling in a Class 5, 6, 7, 8 or 9 building if it is the only dwelling in the building.

Explanatory Information

Class 4 classification applies to some types of accommodation located within a Class 5-9 building. The most common include a caretaker's flat within a building; and accommodation over or otherwise connected to a shop.

A Class 4 part cannot be located within a Class 1, Class 2 or Class 3 building. There can only be one Class 4 dwelling in a building. If there are two or more dwellings, they are Class 1, Class 2, or possibly Class 3. These Class 1, Class 2 or Class 3 parts need not be attached to one another, nor be more than a single *storey*.

Where a Class 4 part of a building is rented out for accommodation purposes, it retains its Class 4 classification. However, if any other part of the principal building is used for accommodation, for example, the attached shop is converted into an additional flat, both flats become classifiable as Class 2 or, depending on their use, possibly Class 3.

A6G6 Class 5 buildings

[2019: A6.5]

A Class 5 building is an office building used for professional or commercial purposes.

Explanatory Information

Class 5 buildings include professional chambers or suites, lawyers' offices, government offices, advertising agencies and accountants' offices.

NSW A6G7

SA A6G7

A6G7 Class 6 buildings

[2019: A6.6]

- A Class 6 building is a shop or other building used for the sale of goods by retail or the supply of services direct to the public.
- (2) Class 6 buildings include the following:
 - (a) An eating room, cafe, restaurant, milk or soft-drink bar.
 - (b) A dining room, bar area that is not an assembly building, shop or kiosk part of a hotel or motel.
 - (c) A hairdresser's or barber's shop, public laundry, or undertaker's establishment.
 - (d) A supermarket or sale room, showroom, or service station.

Explanatory Information

A Class 6 building is a building where goods or services are directly sold or supplied to the public. Examples of a Class 6 building may include—

- a place where food or drink may be purchased such as a café or restaurant; or
- a dining room, bar area that is not an assembly building, shop or kiosk part of a hotel or motel; or
- a hairdresser's or barber's shop, public laundry, veterinarian; or
- supermarket or sale room, florist, showroom, or *service station*.

Service stations are Class 6 buildings. These are outlets used for the servicing of cars and the selling of fuel or other goods. The expression '*service station*' is not intended to cover buildings where panel beating, auto electrical, muffler replacement, tyre replacement and the like are solely carried out. Such buildings should be classified as Class 6, Class 7 or Class 8 buildings as the *appropriate authority* sees fit.

A6G8 Class 7 buildings

[2019: A6.7]

- (1) A Class 7 building is a storage-type building.
- (2) Class 7 includes the following sub-classifications:
 - (a) Class 7a a carpark.
 - (b) Class 7b a building that is used for storage, or display of goods or produce for sale by wholesale.

Explanatory Information

There are three basic types of Class 7 building. The first is a *carpark* as defined in the NCC. The second is a building used for storage, often referred to as a 'warehouse'. The third is a building used for the display of goods or produce for sale by wholesale. 'Wholesale' means sale to people in the trades or in the business of 'on-selling' goods and services to another party (including the public).

A6G9 Class 8 buildings

[2019: A6.8]

- (1) A Class 8 building is a process-type building.
- (2) Class 8 buildings include the following:
 - (a) A laboratory.
 - (b) A building in which the production, assembling, altering, repairing, packing, finishing, or cleaning of goods or produce for sale takes place.

Explanatory Information

The most common way to describe a Class 8 building is as a 'factory'. However, this can give a simplistic impression of the types of building which can fall within this classification.

For example—

- some laboratories, despite their often small size, have been included as Class 8 buildings principally because of their high *fire hazard*; and
- buildings used for altering or repairing (except *service stations*, which are specifically included in A6G7 as Class 6 buildings); and
- potteries; and
- food manufacturers (but not restaurants, which are specifically included in A6G7 as Class 6 buildings); and
- buildings used for the packing or processing of produce, such as a farm or horticultural building.

A6G10 Class 9 buildings

[2019: A6.9]

- (1) A Class 9 building is a building of a public nature.
- (2) Class 9 includes the following sub-classifications:
 - (a) Class 9a a *health-care building* including any parts of the building set aside as laboratories, and includes a *health-care building* used as a *residential care building*.
 - (b) Class 9b an *assembly building* including a trade workshop or laboratory in a primary or secondary *school*.
 - (c) Class 9c a *residential care building*.

Exemptions

A6G10(2)(b) excludes any parts of the building that are of another Class.

Explanatory Information

Class 9a buildings are *health-care buildings*, including day-care surgeries or procedure units and the like. See definition of *health-care building*. Laboratories that are part of a Class 9a building are Class 9a, despite the general classification of laboratories as Class 8 buildings.

Class 9b buildings are assembly buildings.

These buildings can include—

- theatres, cinemas and halls, churches, schools, early childhood centres, kindergartens, preschools and childminding centres; and
- indoor cricket, tennis, basketball centres and sport stadiums; and
- nightclubs, discotheques, bar areas providing live entertainment and/or containing a dance floor, public halls, dance halls and other places of entertainment; and
- snooker halls; and
- bus and railway stations.

Regarding the Exemption to A6G10(2)(b), a building could be a mixture of Class 9b and another class, or a Class 9b building could contain parts that are of another class, but be taken as a Class 9b building because of Exemption (1) to A6G1.

Class 9c buildings are *residential care buildings* that may contain residents who have various care level needs.

The Class 9c classification recognises that many residents progress through a continuum of care needs from low to high. Many older people enter residential care with low care needs (typically Class 3 facilities) but, as they age, require higher levels of care. In the past, such progression often necessitated the transfer of a hostel resident (Class 3) to a nursing home (Class 9a). This frequently had negative consequences for the health and well-being of the resident, for whom the hostel accommodation was home. It also led, at times, to the separation of couples with differing care needs.

Building designers should note that Class 3 buildings include hostels for the accommodation of the aged, and Class 9a buildings include nursing homes. It is important to be aware, however, that construction of Class 3 or 9a buildings may restrict the options available to the operators of a facility in relation to the profile of the residents they wish to accommodate. Where the potential exists for residents of varying care needs to be accommodated, consideration of the Class 9c provisions may be appropriate. The Class 9c classification allows for any mix of low and high care residents and is intended to allow the mix to change as the residents' care needs change over time, without the need to obtain any further consent or approval from the *appropriate authority*.

Multi-care level facilities are for residents who may require the full range of care services outlined by the Aged Care Act. Hence, it is not intended to restrict the resident type and provides maximum flexibility for service providers, residents and the community.

The NCC provisions for Class 9c buildings are based on minimal on duty on-site staff being available at any time. However, it is recognised that the staff numbers vary throughout the course of any one day, due to the care needs of the residents and the functioning of the facility. It is also recognised that the specific care needs of the residents may result in a greater minimum number of staff.

A6G11 Class 10 buildings and structures

[2019: A6.10]

- (1) A Class 10 building is a non-habitable building or structure.
- (2) Class 10 includes the following sub-classifications:
 - (a) Class 10a is a non-habitable building including a *private garage*, carport, shed or the like.
 - (b) Class 10b is a structure that is a fence, mast, antenna, retaining wall or free-standing wall or *swimming pool* or the like.
 - (c) Class 10c is a private bushfire shelter.

Explanatory Information

Class 10a buildings are non-habitable buildings. See Explanatory Figure A6G11 for an indication of some Class 10 building configurations.

Class 10b structures are non-habitable structures. There is no requirement for Class 10 buildings to be appurtenant to a building of any other Class, for example, a small shed standing on its own on an allotment and a toilet block in a park.

A habitable 'outbuilding' which is appurtenant to another building is generally part of that building. Again, habitable 'outbuildings' cannot be classified as Class 10 buildings.

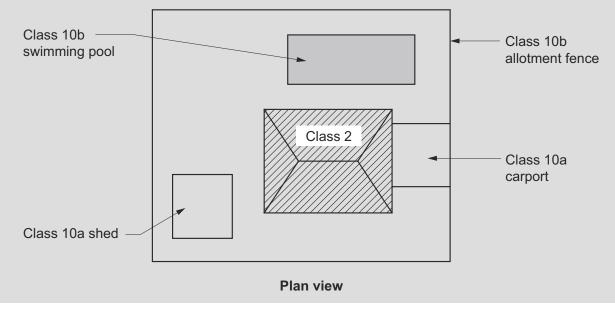
Typical outbuilding classifications include the following:

- A sleepout on the same allotment as a Class 1 building is part of the Class 1 building.
- A detached entertainment room on the same allotment as a Class 1 building, perhaps associated with a *swimming pool*, is part of the Class 1 building.
- A small toolshed, used for trade-related hobbies for non-commercial purposes or home repairs, on the same allotment as a Class 1 building, would be classified as a Class 10 building.

Provisions relating to Class 10c structures are only intended to address *private bushfire shelters* associated with a single Class 1a dwelling. These provisions are contained in Volume Two of the NCC.

Some States or Territories may exempt some Class 10 buildings or structures (often on the basis of height or size) from the need to have a building permit. Queries on this matter should be referred to the State or Territory body responsible for regulatory matters.

Figure A6G11 (explanatory): Examples of Class 10 buildings and structures



A6G12 Multiple classifications

[2019: A6.11]

A building (or part of a building) may be designed, constructed or adapted for multiple purposes and have more than one classification.

Applications

For A6G12, a building (or part of a building) must comply with all the relevant requirements that apply to each of the classifications for that building (or part of a building).

Explanatory Information: Difficult classifications — Class 2 or Class 3?

There is a fine line between a Class 2 building containing apartments or flats and a Class 3 motel building with units containing bathroom, laundry and cooking facilities, which may both be made available for short term holiday rental. When does a Class 3 motel unit become a Class 2 holiday flat and vice versa?

In general, an assessment will be based on the most likely use of the building by appropriate authorities.

Class 3 buildings, where the occupants are generally unfamiliar with the building and have minimum control over the safety of the building, represent a higher risk level and therefore require higher safety levels. In a case where the classification is unclear, a decision should be made according to the perceived risks inherent in the use of the building.

Explanatory Information: Difficult classifications — Class 6 or Class 7?

Class 7 buildings include those used to sell goods on the wholesale market, whereas Class 6 buildings are used to sell goods to the public.

Some establishments claim to sell goods to both the wholesale and retail markets. As a rule, however, if the general public has access to the building, it is considered a 'shop', and therefore a Class 6 building.

Explanatory Information: Difficult classifications — Hotel bars: Class 6 or 9b?

As can be seen from the definition of a Class 6 building, it includes a hotel bar which is not an *assembly building*. The bar includes the bar area and associated standing and seating areas. This clarifies that the bar extends beyond the serving area to include standing and sitting areas where patrons may drink alcohol or other beverages and consume food. The exclusion of an *assembly building* means that a bar providing live entertainment or containing a dance floor is not considered to be Class 6; it must be considered as Class 9b. However, when that use is minor compared with the remainder of the bar, such as a piano bar or the like where patrons only listen to music and there is no dance floor, the *appropriate authority* should exercise judgement on the predominant use and therefore the appropriate classification of the bar.

A Class 9b building is an *assembly building* which is defined to include a building where people may assemble for entertainment, recreational or sporting purposes.

A building may have more than one classification (see A6G12).

Explanatory Information: Buildings used for farming purposes

Buildings used for farming-type purposes are often very diverse in nature, occupancy, use and size. In some States or Territories, *appropriate authorities* may classify farm buildings as Class 10a, which covers non-habitable buildings. They would only make this decision if a classification of Class 7 or Class 8 would not be more appropriate.

When making their decision they consider the building's size, purpose, operations and the extent to which people are employed in the building. For example, it may be appropriate to classify a shed which is used to store a tractor as a Class 10a building.

The NCC has definitions of *farm building* and *farm shed* which are certain Class 7 and 8 buildings used for farming purposes. Concessions to specific *Deemed-to-Satisfy Provisions* apply to *farm buildings* and *farm sheds* in recognition of their often low risk features, and it is recommended that reference is made to the definitions of *farm building* and *farm shed* for further guidance which may assist determination of an appropriate NCC classification.

For example, if people are likely to be employed to stack materials/produce in a storage building or remove materials/produce from a storage building then a classification of Class 7b may be appropriate. Depending upon whether

the criteria in the definition of *farm shed* or *farm building* have been met, the associated *Deemed-to-Satisfy Provisions* in NCC Volume One Part I3 may apply.

Similarly if people are likely to be employed to pack or process materials/produce within a building, or employed to feed, clean or collect produce from animals or plants within a building then a classification of Class 8 may be appropriate. Depending upon whether the criteria in the definition of *farm shed* or *farm building* have been met, the associated *Deemed-to-Satisfy Provisions* in NCC Volume One Part I3 may apply.

However identification of low *fire load*, low occupant risk and low risk of fire spread should not be used as justification for choosing a less stringent building classification for a building under the *Deemed-to-Satisfy Provisions*. For example, if the intended use of a building is to grow or store a large amount of tomatoes, such as a large greenhouse, and there is likely to be only one to two persons in the building at any time, it is considered inappropriate to classify the building as a Class 10a under the *Deemed-to-Satisfy Provisions* and a classification of Class 7 or Class 8 would be more appropriate.

The *Deemed-to-Satisfy Provisions* for a Class 7 or Class 8 *farm building* or *farm shed* do not prevent the ability to consider or develop a *Performance Solution* for a particular building where the requirements may not be considered appropriate or are viewed as too stringent. Similarly if a Class 7 or 8 building used for farming purposes does not meet all the criteria to be considered a *farm building* or *farm shed* under the *Deemed-to-Satisfy Provisions*, this would not limit the ability to develop a *Performance Solution* which could contain features similar to those allowed under the *Deemed-to-Satisfy Provisions* for *farm buildings* or *farm sheds*.

For example, if a Class 8 commercial poultry building meets all the criteria to be considered a farm building under the *Deemed-to-Satisfy Provisions* other than the maximum *floor area* criteria, a *Performance Solution* could be developed to demonstrate that the concessions for a farm building under the *Deemed-to-Satisfy Provisions* are appropriate.

In regards to a *farm building* or *farm shed* where the purpose of the building is to park farm vehicles when not in use, as well as perhaps clean or polish the vehicle(s), it may be appropriate that this type of building is classified as a Class 7a.

However, a number of *farm buildings* and *farm sheds* are often not only used for the storage of farm vehicles, but to store supplies such as fuel, grain or hay. A Class 7a classification may still be appropriate where the majority of the shed's space is intended to be designated for the parking of vehicles. However, it may be more appropriate to classify some types of buildings as Class 7b, rather than Class 7a where a mixed use shed is intended.

Under A6G12 each part of a building (including the entire building) may have more than one classification. This means, for example, that it is permissible to classify part of a building as a Class 6/7 building, or a Class 5/6 building, or whatever is appropriate.

It is expected that this approach may be taken by a builder who is uncertain of what the precise use of a building will be after its sale, or to maximise the flexibility of the building's use.

Under the Application to A6G12, where a building has more than one classification the more stringent Class requirements will apply.

Part A7 United buildings

Introduction to this Part

This Part explains how multiple buildings can be considered as a united building. Where adjacent buildings are joined through openings in walls, they need not meet additional requirements if they jointly comply with the NCC as a single building.

Governing Requirements

A7G1 United buildings

[2019: A7.0]

Buildings are deemed united when two or more buildings adjoining each other are connected and used as one building.

Applications

- (1) For A7G1, two or more buildings are a united building if they are connected through openings in the walls dividing them and together comply with all the requirements of the NCC as though they are a single building.
- (2) A7G1 only applies to Class 2 to 9 buildings.

A7G2 Alterations in a united building

[2019: A7.1]

If, after *alterations* or any other building work, two or more of the buildings in A7G1 cease to be connected through openings in the dividing walls, each of those buildings not now connected must comply with all the requirements for a single building.

Explanatory Information

It is not unusual for authorities to receive plans proposing the connecting of two or more buildings. Connecting buildings could be achieved by breaking openings through walls, or by joining the buildings by a tunnel, bridge or covered walkway.

When connected, if the buildings jointly comply with all the requirements of the NCC applying as if they were a single building, they become a united building.

United buildings are not *required* to comply with additional NCC provisions. For example, any new openings do not require any form of fire protection not *required* of a single building.

Note, however, an *external wall*, which as a result of an interconnection becomes an *internal wall*, must comply with the requirements for an *internal wall*.

Interconnected buildings that do not jointly comply with all the requirements applicable to a single building, remain as separate buildings.

This raises the possible need for fire doors, or other forms of protection to be fitted to connecting openings.

Explanatory Information: Multiple allotments or ownership

The NCC does not concern itself with actually prohibiting or permitting the uniting of buildings in separate ownership or on separate allotments. Such matters are dealt with by the relevant local bodies.

Explanatory Information: Example of connection by bridge

In this example, Building A is connected to Building B by bridge C. There are four different options for designing such a proposal.

The first is a united building:

A, B and C are considered as a single structure and comply with the NCC.

The second is three separate buildings:

A, B and C are a fire-source feature to each of the others, and are separated by fire walls with the openings protected at the points of connection. In this case, C may require independent support and separate egress to a road or open space, that is not through Buildings A or B. In this case, attention should also be paid to the length of the bridge, as regards distance of travel to an *exit*.

The third option is the bridge as a portion of Building A:

In this option, A and C are one building, meeting all requirements of the NCC as a single or united building. B is a separate building, with suitable fire separation, including fire-doors at the point of interconnection. Bridge C could be supported off Building A, but not off Building B.

The fourth option is having the bridge as a portion of Building B:

In this option, B and C are one building, meeting all requirements of the NCC as a single or united building. A is a separate building, with suitable fire separation, including fire doors at the point of interconnection. Bridge C could be supported off Building B, but not off Building A.

In some cases, C will link A and B across a public road, including laneways and the like. Special approvals may be required from various *appropriate authorities*. However, in such cases—

- if C is supported by means other than off A and B, such support will generally only be permitted if there is no obstruction of the public road; and
- care will need to be taken in calculating the distance of travel to an *exit* if travel is required to be over C and the road is wide; and
- fire-separation may be necessary at each end of the bridge.

If the last stipulation is the case, the following matters need consideration:

- The bridge would probably need to be of fire-rated construction because *combustible* construction could provide a ready path for the transfer of fire, and *non-combustible* construction could, in a major fire, distort and collapse onto the road.
- The designer needs to take care that the bridge does not negate the fire separation between the *storeys* of the building.

Volume One	Performan	ce Requirements		
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	Performance Requirements			
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	B1P2	Structural resistance		
	B1P3	Glass installations at risk of human impact		
	B1P4	Buildings in flood areas		
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	C1P2	Spread of fire		
	C1P3	Spread of fire and smoke in health and residential care buildings		
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	C1P5	Behaviour of concrete external walls in a fire		
	C1P6	Fire protection of service equipment		
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Part B1 Structural provisions

Introduction to this Part

Performance Requirements

B1P1 Structural reliability

[2019: BP1.1]

- (1) By resisting the actions to which it may reasonably be expected to be subjected, a building or structure, during construction and use, with appropriate degrees of reliability, must—
 - (a) perform adequately under all reasonably expected design actions; and
 - (b) withstand extreme or frequently repeated design actions; and
 - (c) be designed to sustain local damage, with the structural system as a whole remaining stable and not being damaged to an extent disproportionate to the original local damage; and
 - (d) avoid causing damage to other properties.
- (2) The actions to be considered to satisfy (1) include but are not limited to-
 - (a) permanent actions (dead loads) including, for a Class 7b building, an additional notional permanent roof load of not less than 0.15 kPa to support the addition of solar photovoltaic panels; and
 - (b) imposed actions (live loads arising from occupancy and use); and
 - (c) wind action; and
 - (d) earthquake action; and
 - (e) snow action; and
 - (f) liquid pressure action; and
 - (g) ground water action; and
 - (h) rainwater action (including ponding action); and
 - (i) earth pressure action; and
 - (j) differential movement; and
 - (k) time dependent effects (including creep and shrinkage); and
 - (I) thermal effects; and
 - (m) ground movement caused by-
 - (i) swelling, shrinkage or freezing of the subsoil; and
 - (ii) landslip or subsidence; and
 - (iii) siteworks associated with the building or structure; and
 - (n) construction activity actions; and
 - (o) termite actions.

Exemptions

The requirement for an additional notional permanent roof load to support photovoltaic panels in B1P1(2)(a) does not apply to a Class 7b building—

- (a) where 100% of the roof area is shaded for more than 70% of daylight hours; or
- (b) with a roof area of not more than 55 m²; or
- (c) where more than 50% of the roof area is used as a terrace, *carpark*, roof garden, roof light or the like.

Notes

The requirement in B1P1(2)(a) to consider, for a Class 7b building, an additional notional permanent roof load of not less than 0.15 kPa to support the addition of solar photovoltaic panels does not take effect until 1 October 2023.

B1P2 Structural resistance

[2019: BP1.2]

B1P1

The structural resistance of materials and forms of construction must be determined using five percentile characteristic material properties with appropriate allowance for—

- (a) known construction activities; and
- (b) type of material; and
- (c) characteristics of the site; and
- (d) the degree of accuracy inherent in the methods used to assess the structural behaviour; and
- (e) action effects arising from the differential settlement of foundations, and from restrained dimensional changes due to temperature, moisture, shrinkage, creep and similar effects.

B1P3 Glass installations at risk of human impact

[2019: BP1.3]

Glass installations that are at risk of being subjected to human impact must have glazing that-

- (a) if broken on impact, will break in a way that is not likely to cause injury to people; and
- (b) resists a reasonably foreseeable human impact without breaking; and
- (c) is protected or marked in a way that will reduce the likelihood of human impact.

QLD B1P4

SA B1P4

B1P4 Buildings in flood areas

[2019: BP1.4]

- (1) A building in a *flood hazard area*, must be designed and constructed, to the degree necessary, to resist flotation, collapse or significant permanent movement resulting from the action of hydrostatic, hydrodynamic, erosion and scour, wind and other actions during the *defined flood event*.
- (2) The actions and requirements to be considered to satisfy (1) include but are not limited to-
 - (a) flood actions; and
 - (b) elevation requirements; and
 - (c) foundation and footing requirements; and
 - (d) requirements for enclosures below the flood hazard level; and
 - (e) requirements for structural connections; and
 - (f) material requirements; and
 - (g) requirements for utilities; and
 - (h) requirements for occupant egress.

Applications

B1P4 only applies to—

(a) a Class 2 or 3 building or a Class 4 part of a building; and

- (b) a Class 9a health-care building; and
- (c) a Class 9c building.

Part C1 Fire resistance

Introduction to this Part

Performance Requirements

C1P1 Structural stability during a fire

[2019: CP1]

A building must have elements which will, to the degree necessary, maintain structural stability during a fire appropriate to—

- (a) the function or use of the building; and
- (b) the *fire load*; and
- (c) the potential *fire intensity*; and
- (d) the fire hazard; and
- (e) the height of the building; and
- (f) its proximity to other property; and
- (g) any active *fire safety systems* installed in the building; and
- (h) the size of any *fire compartment*; and
- (i) fire brigade intervention; and
- (j) other elements they support; and
- (k) the evacuation time.
- C1P2

Spread of fire

[2019: CP2]

- (1) A building must have elements which will, to the degree necessary, avoid the spread of fire-
 - (a) to *exits*; and
 - (b) to sole-occupancy units and public corridors; and
 - (c) between buildings; and
 - (d) in a building.
- (2) Avoidance of the spread of fire referred to in (1) must be appropriate to-
 - (a) the function or use of the building; and
 - (b) the *fire load*; and
 - (c) the potential *fire intensity*; and
 - (d) the *fire hazard*; and
 - (e) the number of *storeys* in the building; and
 - (f) its proximity to other property; and
 - (g) any active *fire safety systems* installed in the building; and
 - (h) the size of any *fire compartment*; and
 - (i) fire brigade intervention; and
 - (j) other elements they support; and

(k) the evacuation time.

Applications

C1P2(1)(b) only applies to a Class 2 or 3 building or Class 4 part of a building.

C1P3 Spread of fire and smoke in health and residential care buildings

[2019: CP3]

A building must be protected from the spread of fire and smoke to allow sufficient time for the orderly evacuation of the building in an emergency.

Applications C1P3 only applies to—

(a) a patient care area of a Class 9a health-care building; and

(b) a Class 9c building.

C1P4 Safe conditions for evacuation

[2019: CP4]

To maintain tenable conditions during occupant evacuation, a material and an assembly must, to the degree necessary, resist the spread of fire and limit the generation of smoke and heat, and any toxic gases likely to be produced, appropriate to—

- (a) the *evacuation time*; and
- (b) the number, mobility and other characteristics of occupants; and
- (c) the function or use of the building; and
- (d) any active *fire safety systems* installed in the building.

Applications

C1P4 applies to linings, materials and assemblies in a Class 2 to 9 building.

C1P5 Behaviour of concrete external walls in a fire

[2019: CP5]

A concrete *external wall* that could collapse as a complete panel (e.g. tilt-up and pre-cast concrete) must be designed so that in the event of fire within the building the likelihood of outward collapse is avoided.

Limitations

C1P5 does not apply to a building having more than two *storeys* above ground level.

C1P6 Fire protection of service equipment

[2019: CP6]

A building must have elements, which will, to the degree necessary, avoid the spread of fire from service equipment having—

- (a) a high *fire hazard*; or
- (b) a potential for explosion resulting from a high fire hazard.

C1P7 Fire protection of emergency equipment

A building must have elements, which will, to the degree necessary, avoid the spread of fire so that emergency equipment provided in a building will continue to operate for a period of time necessary to ensure that the intended function of the equipment is maintained during a fire.

C1P8 Fire protection of openings and penetrations

[2019: CP8]

[2019: CP7]

Any building element provided to resist the spread of fire must be protected, to the degree necessary, so that an adequate level of performance is maintained—

- (a) where openings, construction joints and the like occur; and
- (b) where penetrations occur for building services.

C1P9 Fire brigade access

[2019: CP9]

Access must be provided to and around a building, to the degree necessary, for *fire brigade* vehicles and personnel to facilitate *fire brigade* intervention appropriate to—

- (a) the function or use of the building; and
- (b) the *fire load*; and
- (c) the potential *fire intensity*; and
- (d) the *fire hazard*; and
- (e) any active *fire safety systems* installed in the building; and
- (f) the size of any fire compartment.

Part D1 Access and egress

Introduction to this Part

Performance Requirements

D1P1 Access for people with a disability

[2019: DP1]

Access must be provided, to the degree necessary, to enable-

- (a) people to-
 - (i) approach the building from the road boundary and from any *accessible* carparking spaces associated with the building; and
 - (ii) approach the building from any accessible associated building; and
 - (iii) access work and public spaces, accommodation and facilities for personal hygiene; and
- (b) identification of accessways at appropriate locations which are easy to find.

Limitations

D1P1 does not apply to a Class 4 part of a building.

D1P2 Safe movement to and within a building

[2019: DP2]

So that people can move safely to and within a building, it must have-

- (a) walking surfaces with safe gradients; and
- (b) any doors installed to avoid the risk of occupants-
 - (i) having their egress impeded; or
 - (ii) being trapped in the building; and
- (c) any stairways and ramps with-
 - (i) slip-resistant walking surfaces on-
 - (A) ramps; and
 - (B) stairway treads or near the edge of the nosing; and
 - (ii) suitable handrails where necessary to assist and provide stability to people using the stairway or ramp; and
 - (iii) suitable landings to avoid undue fatigue; and
 - (iv) landings where a door opens from or onto the stairway or ramp so that the door does not create an obstruction; and
 - (v) in the case of a stairway, suitable safe passage in relation to the nature, volume and frequency of likely usage.

D1P3 Fall prevention barriers

(1) A barrier must be provided where people could fall—

[2019: DP3]

- (a) 1 m or more—
 - (i) from a floor or roof or through an opening (other than through an openable window) in the *external wall* of a building; or
 - (ii) due to a sudden change of level within or associated with a building; or
- (b) 2 m or more from a floor through an openable window-
 - (i) in a bedroom in a Class 2 or 3 building or a Class 4 part of a building; or
 - (ii) in a Class 9b early childhood centre; or
- (c) 4 m or more from a floor through an openable window not covered by (b).
- (2) A barrier required by (1) must be-
 - (a) continuous and extend for the full extent of the hazard; and
 - (b) of a height to protect people from accidentally falling from the floor or roof or through the opening or openable window; and
 - (c) constructed to prevent people from falling through the barrier; and
 - (d) capable of restricting the passage of children; and
 - (e) of strength and rigidity to withstand-
 - (i) the foreseeable impact of people; and
 - (ii) where appropriate, the static pressure of people pressing against it.

Limitations

- (1) D1P3 does not apply where such barrier would be incompatible with the intended use of an area such as a stage, loading dock or the like.
- (2) D1P3(2)(d) does not apply to-
 - (a) *fire-isolated stairways*, *fire-isolated ramps*, and other areas used primarily for emergency purposes, excluding external stairways and ramps; and
 - (b) Class 7 (other than carparks) and Class 8 buildings and parts of buildings containing those classifications.

D1P4

[2019: DP4]

Exits must be provided from a building to allow occupants to evacuate safely, with their number, location and dimensions being appropriate to—

- (a) the travel distance; and
- (b) the number, mobility and other characteristics of occupants; and
- (c) the function or use of the building; and

Exits

- (d) the height of the building; and
- (e) whether the *exit* is from above or below ground level.

D1P5 Fire-isolated exits

[2019: DP5]

To protect evacuating occupants from a fire in the building *exits* must be fire-isolated, to the degree necessary, appropriate to—

- (a) the number of storeys connected by the exits; and
- (b) the *fire safety system* installed in the building; and
- (c) the function or use of the building; and
- (d) the number of *storeys* passed through by the *exits*; and

(e) *fire brigade* intervention.

D1P6 Paths of travel to exits

So that occupants can safely evacuate the building, paths of travel to *exits* must have dimensions appropriate to—

- (a) the number, mobility and other characteristics of occupants; and
- (b) the function or use of the building.

Limitations

D1P6 does not apply to the internal parts of a sole-occupancy unit in a Class 2 or 3 building or Class 4 part of a building.

D1P7 Evacuation lifts

[2019: DP7]

Where a lift is intended to be used in addition to the *required exits* to assist occupants to evacuate a building safely, the type, number, location and fire-isolation must be appropriate to—

- (a) the travel distance to the lift; and
- (b) the number, mobility and other characteristics of occupants; and
- (c) the function or use of the building; and
- (d) the number of *storeys* connected by the lift; and
- (e) the fire safety system installed in the building; and
- (f) the waiting time, travel time and capacity of the lift; and
- (g) the reliability and availability of the lift; and
- (h) the emergency procedures for the building.

D1P8 Carparking for people with a disability

Carparking spaces for use by people with a disability must be-

- (a) provided, to the degree necessary, to give equitable access for carparking; and
- (b) designated and easy to find.

Limitations

D1P8 does not apply to a building where-

- (a) a parking service is provided; and
- (b) direct access to any carparking spaces by the general public or occupants is not available.

D1P9 Communication systems for people with hearing impairment

[2019: DP9]

An inbuilt communication system for entry, information, entertainment, or for the provision of a service, must be suitable for occupants who are deaf or hearing impaired.

Limitations

D1P9 does not apply to-

[2019: DP8]

[2019: DP6]

- (a) a Class 4 part of a building; or
- (b) an inbuilt communication system used only for emergency warning purposes.

Part E1 Fire fighting equipment

Introduction to this Part

Performance Requirements

E1P1 Fire hose reels

A fire hose reel system must be installed to the degree necessary to allow occupants to safely undertake initial attack on a fire appropriate to—

- (a) the size of the *fire compartment*; and
- (b) the function or use of the building; and
- (c) any other *fire safety systems* installed in the building; and
- (d) the *fire hazard*.

E1P2 Fire extinguishers

[2019: EP1.2]

[2019: EP1.1]

Fire extinguishers must be installed to the degree necessary to allow occupants to undertake initial attack on a fire appropriate to—

- (a) the function or use of the building; and
- (b) any other *fire safety systems* installed in the building; and
- (c) the *fire hazard*.

E1P3 Fire hydrants

[2019: EP1.3]

A fire hydrant system must be provided to the degree necessary to facilitate the needs of the fire brigade appropriate to-

- (a) fire-fighting operations; and
- (b) the *floor area* of the building; and
- (c) the fire hazard.

Applications

E1P3 only applies to a building where a *fire brigade* is available to attend.

E1P4 Automatic fire suppression systems

[2019: EP1.4]

An *automatic* fire suppression system must be installed to the degree necessary to control the development and spread of fire appropriate to—

- (a) the size of the *fire compartment*; and
- (b) the function or use of the building; and
- (c) the *fire hazard*; and

(d) the height of the building.

E1P5 Fire-fighting services in buildings under construction

[2019: EP1.5]

Suitable means of fire-fighting must be installed to the degree necessary in a building under construction to allow initial fire attack by construction workers and for the *fire brigade* to undertake attack on the fire appropriate to—

- (a) the *fire hazard*; and
- (b) the height the building has reached during its construction.

E1P6 Fire control centres

[2019: EP1.6]

Suitable facilities must be provided to the degree necessary in a building to co-ordinate *fire brigade* intervention during an emergency appropriate to—

- (a) the function or use of the building; and
- (b) the *floor area* of the building; and
- (c) the height of the building.

Part E2 Smoke hazard management

Introduction to this Part

Performance Requirements

E2P1 Automatic warning for sleeping occupants

[2019: EP2.1]

In a building providing sleeping accommodation, occupants must be provided with *automatic* warning on the detection of smoke so they may evacuate in the event of a fire to a *safe place*.

Applications

E2P1 only applies to a Class 2, 3, 9a or 9c building or Class 4 part of a building.

E2P2 Safe evacuation routes

[2019: EP2.2]

- (1) In the event of a fire in a building the conditions in any *evacuation route* must be maintained for the period of time occupants take to evacuate the part of the building so that—
 - (a) the temperature will not endanger human life; and
 - (b) the level of visibility will enable the evacuation route to be determined; and
 - (c) the level of toxicity will not endanger human life.
- (2) The period of time occupants take to evacuate referred to in (1) must be appropriate to-
 - (a) the number, mobility and other characteristics of the occupants; and
 - (b) the function or use of the building; and
 - (c) the travel distance and other characteristics of the building; and
 - (d) the *fire load*; and
 - (e) the potential *fire intensity*; and
 - (f) the *fire hazard*; and
 - (g) any active fire safety systems installed in the building; and
 - (h) fire brigade intervention.

Limitations

E2P2 does not apply to an open-deck carpark or open spectator stand.

Part E3 List installations

Introduction to this Part

Performance Requirements

E3P1 Stretcher facilities

[2019: EP3.1]

Stretcher facilities must be provided, to the degree necessary-

- (a) in at least one emergency lift *required* by E3P2; or
- (b) where an emergency lift is not *required* and a passenger lift is provided, in at least one lift, to serve each floor in the building served by the passenger lift.

E3P2 Emergency lifts

[2019: EP3.2]

One or more passenger lifts fitted as emergency lifts to serve each floor served by the lifts in a building must be installed to facilitate the activities of the *fire brigade* and other emergency services personnel.

Applications

E3P2 only applies to-

- (a) a building with an *effective height* of more than 25 m; and
- (b) a Class 9a building in which *patient care areas* are located at a level that does not have direct access to a road or *open space*.

E3P3 Emergency alerts

[2019: EP3.3]

Signs or other means must be provided to alert occupants about the use of a lift during an emergency.

E3P4 Lift access for people with a disability

[2019: EP3.4]

When a passenger lift is provided in a building *required* to be *accessible*, it must be suitable for use by people with a disability.

Part E4 Visibility in an emergency, exit signs and warning systems

Introduction to this Part

Performance Requirements

E4P1 Visibility in an emergency

[2019: EP4.1]

To facilitate safe evacuation in an emergency, a building must be provided with a system that-

- (a) ensures a level of visibility sufficient to enable *exits*, paths of travel to *exits* and any obstacles along a path of travel to an *exit* to be identified; and
- (b) activates instantaneously upon the failure of an artificial lighting system, to the degree necessary, appropriate to—
 - (i) the function or use of the building; and
 - (ii) the *floor area* of the building; and
 - (iii) the distance of travel to an exit.

Limitations

E4P1 does not apply to the internal parts of a *sole-occupancy unit* in a Class 2, 3 or 9c building or Class 4 part of a building.

E4P2 Identification of exits

[2019: EP4.2]

To facilitate evacuation, suitable signs or other means of identification must, to the degree necessary-

- (a) be provided to identify the location of *exits*; and
- (b) guide occupants to exits; and
- (c) be clearly visible to occupants; and
- (d) operate in the event of a power failure of the main lighting system for sufficient time for occupants to safely evacuate.

Limitations

E4P2 does not apply to the internal parts of a *sole-occupancy unit* in a Class 2 or 3 or Class 4 part of a building.

E4P3 Emergency warning and intercom systems

[2019: EP4.3]

To warn occupants of an emergency and assist evacuation of a building, an emergency warning and intercom system must be provided, to the degree necessary, appropriate to—

- (a) the floor area of the building; and
- (b) the function or use of the building; and
- (c) the height of the building.

Part F1 External waterproofing, rainwater management and rising damp

Introduction to this Part

Performance Requirements

F1P1 Managing rainwater impact on adjoining properties

[2019: FP1.1]

Surface water, resulting from a storm having an *annual exceedance probability* of 5% and which is collected or concentrated by a building or *sitework*, must be disposed of in a way that avoids the likelihood of damage or nuisance to any *other property*.

F1P2 Preventing rainwater from entering buildings

[2019: FP1.2]

Surface water, resulting from a storm having an annual exceedance probability of 1%, must not enter the building.

Limitations

F1P2 does not apply to—

- (a) a Class 7 or 8 building where in the particular case there is no necessity for compliance; or
- (b) a garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes; or
- (c) an open spectator stand or open-deck carpark.

F1P3 Rainwater drainage systems

[2019: FP1.3]

A drainage system for the disposal of *surface water* resulting from a storm having an *annual exceedance probability* of—

- (a) 5% must—
 - (i) convey surface water to an appropriate outfall; and
 - (ii) avoid surface water damaging the building; and
- (b) 1% must avoid the entry of *surface water* into a building.

SA F1P4

F1P4 Rising damp

Moisture from the ground must be prevented from causing-

- (a) undue dampness or deterioration of building elements; and
- (b) unhealthy or dangerous conditions, or loss of *amenity* for occupants.

Limitations

F1P4 does not apply to-

[2019: FP1.5]

- (a) a Class 7 or 8 building where in the particular case there is no necessity for compliance; or
- (b) a garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes; or
- (c) an open spectator stand or open-deck carpark.

Part F2 Wet areas and overflow protection

Introduction to this Part

Performance Requirements

SA F2P1

F2P1 Wet area overflows

[2019: FP1.6]

Overflow from a bathroom, laundry facility or the like must be prevented from penetrating to-

- (a) another *sole-occupancy unit* used for sleeping accommodation; and
- (b) a public space,

in a *storey* below in the same building.

F2P2 Wet areas

[2019: FP1.7]

To protect the structure of the building and to maintain the *amenity* of the occupants, water must be prevented from penetrating—

- (a) behind fittings and linings; and
- (b) into concealed spaces,

of sanitary compartments, bathrooms, laundries and the like.

Part F3 Roof and wall cladding

Introduction to this Part

Performance Requirements

F3P1 Weatherproofing

[2019: FP1.4]

A roof and *external wall* (including openings around *windows* and doors) must prevent the penetration of water that could cause—

- (a) unhealthy or dangerous conditions, or loss of *amenity* for occupants; and
- (b) undue dampness or deterioration of building elements.

Limitations

F3P1 does not apply to-

- (a) a Class 7 or 8 building where in the particular case there is no necessity for compliance; or
- (b) a garage, tool shed, sanitary compartment, or the like, forming part of a building used for other purposes; or
- (c) an open spectator stand or open-deck carpark.

Part F4 Sanitary and other facilities

Introduction to this Part

Performance Requirements

F4P1 Personal hygiene facilities

[2019: FP2.1]

Suitable sanitary facilities for personal hygiene must be provided in a convenient location within or associated with a building, to the degree necessary, appropriate to—

- (a) the function or use of the building; and
- (b) the number and gender of the occupants; and
- (c) the disability or other particular needs of the occupants.

VIC F4P2

F4P2 Laundry facilities

[2019: FP2.2]

Laundering facilities or space for laundering facilities and the means for the sanitary disposal of waste water must be provided in a convenient location within or associated with a building appropriate to the function or use of the building.

Applications

F4P2 only applies to-

- (a) a Class 2 building or Class 4 part of a building; and
- (b) a Class 9a health-care building; and
- (c) a Class 9b early childhood centre; and
- (d) a Class 9c building.

F4P3 Kitchen facilities

[2019: FP2.3]

A facility must be provided which includes-

- (a) a means for food rinsing, utensil washing and the sanitary disposal of associated waste water; and
- (b) a means for cooking food; and
- (c) a space for food preparation.

Applications

F4P3 only applies to-

- (a) a Class 2 building or Class 4 part of a building; and
- (b) a Class 9a health-care building; and
- (c) a Class 9b early childhood centre; and
- (d) a Class 9c building.

F4P4 Disposal of contaminated water from containers

[2019: FP2.4]

Suitable means must be provided in a building containing wards or bedrooms to facilitate the emptying of sewage or dirty water from containers.

Applications

F4P4 only applies to a Class 9a or 9c building.

F4P5 Construction of sanitary compartments to allow removal of unconscious people

[2019: FP2.5]

A *sanitary compartment* must be constructed with sufficient space or other means to permit an unconscious occupant to be removed from the compartment.

NSW F4P6

F4P6 Microbial control for water systems

[2019: FP2.6]

Hot water, warm water and cooling water systems installed in a building must control the accumulation of harmful levels of micro-organisms.

Limitations

F4P6 does not apply to a system serving only a single *sole-occupancy unit* in a Class 2 or 3 building or Class 4 part of a building.

Part F5 Room heights

Introduction to this Part

Performance Requirements

VIC F5P1

F5P1 Room or space heights

[2019: FP3.1]

A habitable room or space must have sufficient height that does not unduly interfere with its intended function.

Part F6 Light and ventilation

Introduction to this Part

Performance Requirements				
F6P1	Natural lighting			

Sufficient openings must be provided and distributed in a building, appropriate to the function or use of that part of the building so that natural light, when available, provides an *average daylight factor* of not less than 2%.

Applications F6P1 only applies to a Class 2, 3 or 9 building, or a Class 4 part of a building.

F6P2 Artificial lighting

Artificial lighting must be installed to provide an *illuminance* of not less than 20 lux appropriate to the function or use of the building to enable safe movement by occupants.

F6P3 Outdoor air supply

A space in a building used by occupants must be provided with means of ventilation with *outdoor air* which will maintain adequate air quality.

F6P4 Mechanical ventilation to control odours and contaminants

[2019: FP4.4]

A mechanical air-handling system installed in a building must control—

- (a) the circulation of objectionable odours; and
- (b) the accumulation of harmful contamination by micro-organisms, pathogens and toxins.

F6P5 Disposal of contaminated air

[2019: FP4.5]

Contaminated air must be disposed of in a manner which does not unduly create a nuisance or hazard to people in the building or *other property*.

[2019: FP4.1]

[2019: FP4.3]

[2019: FP4.2]

[2010:11 4.0]

Part F7 Sound transmission and insulation

Introduction to this Part

Performance Requirements

F7P1 Sound transmission through floors

[2019: FP5.1]

A floor separating *sole-occupancy units* or a *sole-occupancy unit* from a plant room, lift *shaft*, stairway, *public corridor*, public lobby, or the like, or parts of a different classification, must minimise the transmission of airborne and impact generated sound such that the separating floor, including the effect of services and their penetrations, has—

- (a) a weighted standardised level difference with spectrum adaptation term (D_{nT,w} + C_{tr}) not less than 45 for airborne sound; and
- (b) a weighted standardised impact sound pressure level $(L_{nT.w})$ not more than 62 for impact generated sound.

Applications

F7P1 only applies to a Class 2 or 3 building.

F7P2 Sound transmission through walls

[2019: FP5.2]

A wall, including services and their penetrations, must minimise the transmission of sound such that-

- (a) for airborne sound—
 - (i) a wall separating *sole-occupancy units* has a weighted standardised level difference with spectrum adaptation term $(D_{nT,w} + C_{tr})$ not less than 45; and
 - (ii) a wall separating a *sole-occupancy unit* from a plant room, lift *shaft*, stairway, *public corridor*, public lobby, or the like, or parts of a different classification, has a weighted standardised level difference (D_{nT,w}) not less than 45; and
 - (iii) any door assembly located in a wall that separates a *sole-occupancy unit* from a stairway, *public corridor*, public lobby, or the like, has a weighted standardised level difference (D_{nTw}) not less than 25; and
- (b) for impact generated sound, a wall must have sufficient sound insulation to prevent illness or loss of amenity to the occupants if the wall separates—
 - (i) a bathroom, *sanitary compartment*, laundry or kitchen in one *sole-occupancy unit* from a *habitable room* (other than a kitchen) in an adjoining *sole-occupancy unit*; or
 - (ii) a *sole-occupancy unit* from a plant room or lift *shaft*.

Applications

F7P2 only applies to a Class 2 or 3 building.

F7P3 Sound transmission through floors in a residential care building

[2019: FP5.4]

A floor separating *sole-occupancy units* must minimise the transmission of airborne and impact generated sound such that the separating floor, including the effect of services and their penetrations, has—

- (a) a weighted standardised level difference (D_{nT.w}) not less than 40 for airborne sound; and
- (b) a weighted standardised impact sound pressure level (L_{nT.w}) not more than 62 for impact generated sound.

Applications

F7P3 only applies to a Class 9c building.

F7P4 Sound transmission through walls in a residential care building

[2019: FP5.5]

- (1) A wall separating *sole-occupancy units*, or a *sole-occupancy unit* from a kitchen, bathroom, *sanitary compartment* (not being an associated ensuite), laundry, plant room or utilities room, including the effect of services and their penetrations, must minimise the transmission of—
 - (a) airborne sound such that the wall has a weighted standardised level difference $(D_{nT,w})$ not less than 40; and
 - (b) impact generated sound, if the wall separates a sole-occupancy unit from a kitchen or laundry.
- (2) Sound insulation *required* by (1) must be sufficient to prevent illness or loss of amenity to the occupants.

Applications

F7P4 only applies to a Class 9c building.

Part F8 Condensation management

Introduction to this Part

Performance Requirements

TAS F8P1

F8P1 Condensation and water vapour management

[2019: FP6.1]

Risks associated with water vapour and *condensation* must be managed to minimise their impact on the health of occupants.

Applications

F8P1 only applies to a *sole-occupancy unit* of a Class 2 building or Class 4 part of a building.

Part G1 Minor structures and components

Introduction to this Part

Performance Requirements

NT G1P1

G1P1 Swimming pool drainage

[2019: GP1.1]

A swimming pool must have adequate means of draining the pool in a manner which will not-

- (a) cause illness to people; or
- (b) affect other property.

NSW G1P2 NT G1P2 QLD G1P2 SA G1P2 TAS G1P2 VIC G1P2 G1P2 Swimming pool access and water recirculation systems

[2019: GP1.2]

- (1) A barrier must be provided to a *swimming pool* and must—
 - (a) be continuous for the full extent of the hazard; and
 - (b) be of a strength and rigidity to withstand the foreseeable impact of people; and
 - (c) restrict the access of young children to the pool and the immediate pool surrounds; and
 - (d) have any gates and doors fitted with latching devices not readily operated by young children, and constructed to automatically close and latch.
- (2) A *swimming pool* water recirculation system must incorporate safety measures to avoid entrapment of, or injury to, a person.

Applications

G1P2(2) only applies to a *swimming pool* with a depth of water more than 300 mm.

G1P3 Cool rooms

[2019: GP1.3]

Any refrigerated or cooling chamber, or the like which is of sufficient size for a person to enter must-

- (a) have adequate means of communicating with or alerting other occupants in the building in the case of an emergency; and
- (b) have a door which is-
 - (i) of adequate dimensions to allow occupants to readily escape; and

(ii) openable from inside without a key at all times.

G1P4 Vaults

Any strong-room, vault or the like which is of sufficient size for a person to enter must-

- (a) have adequate means of communicating with or alerting other occupants in the building in the case of an emergency; and
- (b) have internal lighting controllable only from within the room; and
- (c) have an external indicator that the room is occupied.

G1P5 Outdoor play spaces in early childhood centres

[2019: GP1.5]

[2019: GP1.4]

Fencing or other barriers must be provided around any outdoor play space, in which the design and height of the fencing or other barriers, including the—

- (a) design of gates and fittings; and
- (b) proximity of the barriers to any permanent structure on the property,

must ensure that children cannot go through, over or under the fencing or other barriers.

Applications

G1P5 only applies to a Class 9b early childhood centre.

TAS G1P6

Part G2 Boilers, pressure vessels, heating appliances, fireplaces, chimneys and flues

Introduction to this Part

Performance Requirements

G2P1 Combustion heating appliances

[2019: GP2.1]

Where provided in a building, a combustion appliance and its associated components, including an open fire-place, chimney, flue, chute, hopper or the like, must be installed—

- (a) to withstand the temperatures likely to be generated by the appliance; and
- (b) so that it does not raise the temperature of any building element to a level that would adversely affect the element's physical or mechanical properties or function; and
- (c) so that hot products of combustion will not—
 - (i) escape through the walls of the associated components; and
 - (ii) discharge in a position that will cause fire to spread to nearby *combustible* materials or allow smoke to penetrate through nearby *windows*, ventilation inlets, or the like.

G2P2 Boilers and pressure vessels

[2019: GP2.2]

When located in a building, *boilers* and *pressure vessels* must be installed to avoid, during reasonably foreseeable conditions, the likelihood of—

- (a) leakage from the vessel which could cause damage to the building; and
- (b) rupture or other mechanical damage of the vessel which could cause damage to the building or injury to occupants.

Part G4 Construction in alpine areas

Introduction to this Part

Performance Requirements

G4P1 External doorways

An external doorway from a building in an *alpine area* must be installed so that opening the door is not obstructed by snow or ice.

Applications

G4P1 applies to a building constructed in an *alpine area* and overrules other *Performance Requirements* of NCC Volume One.

G4P2 Structures forming pathways in snow conditions

A building in an *alpine area* containing external trafficable structures forming part of the means of egress must be constructed so that those structures remain, as far as practicable, useable under snow conditions.

Applications

G4P2 applies to a building constructed in an *alpine area* and overrules other *Performance Requirements* of NCC Volume One.

G4P3 Control of falling ice and snow

A building in an *alpine area* must be constructed so that snow or ice is not shed from the building onto the allotment, any adjoining allotment, road or public space in a location or manner that will—

- (a) obstruct a means of egress from any building to a road or *open space*; or
- (b) otherwise endanger people.

Applications

G4P3 applies to a building constructed in an *alpine area* and overrules other *Performance Requirements* of NCC Volume One.

G4P4 Fire safety systems in alpine areas

[2019: GP4.4]

[2019: GP4.1]

[2019: GP4.2]

[2019: GP4.3]

A building in an *alpine area* must have a *fire safety system* installed to—

- (a) facilitate fire-fighting operations; and
- (b) alert occupants in the event of an emergency.

Applications

G4P4 applies to a building constructed in an *alpine area* and overrules other *Performance Requirements* of NCC Volume One.

Part G7 Livable housing design

Introduction to this Part

Performance Requirements

G7P1 Livable housing design

[New for 2022]

Each sole-occupancy unit in a Class 2 building must be provided with-

- (a) at least one level and step-free entrance door into the *sole-occupancy unit* from an *accessible* part of the floor on which it is located; and
- (b) internal doors and corridors which facilitate unimpeded movement between spaces; and
- (c) a sanitary compartment that-
 - (i) facilitates independent access and use; and
 - (ii) is located on the entry level of the sole-occupancy unit; and
- (d) a shower that facilitates independent access and use; and
- (e) the walls of a *sanitary compartment* referred to in (c), the shower referred to in (d) and a bath (where installed, other than a freestanding bath) constructed so as to facilitate future installation of grabrails, or the like, in a way that minimises the removal of existing wall linings.

Applications

G7P1(a) only applies to a *sole-occupancy unit* that is located on an *accessible* floor.

Part J1 Energy use

Introduction to this Part

Performance Requirements	\$
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J1P1 Energy use

[2019: JP1]

A building, other than a *sole-occupancy unit* of a Class 2 building or a Class 4 part of a building, including its *services*, must have features that facilitate the efficient use of energy appropriate to—

- (a) the function and use of the building; and
- (b) the level of human comfort required for the building use; and
- (c) solar radiation being-
 - (i) utilised for heating; and
 - (ii) controlled to minimise energy for cooling; and
- (d) the energy source of the services; and
- (e) the sealing of the building *envelope* against air leakage; and
- (f) for a *conditioned space*, achieving an hourly *regulated energy* consumption, averaged over the annual *hours of operation*, of not more than—
 - (i) for a Class 6 building, 80 kJ/m².hr; and
 - (ii) for a Class 5, 7b, 8 or 9a building other than a ward area, or a Class 9b school, 43 kJ/m².hr; and
 - (iii) for all other building classifications, 15 kJ/m².hr.

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H8P1

Livable housing design

Part H1 Structure

Introduction to this Part

Performance Requirements

H1P1 Structural reliability and resistance

[2019: P2.1.1]

- (1) By resisting the actions to which it may reasonably be expected to be subjected, a building or structure, during construction and use, with appropriate degrees of reliability, must—
 - (a) perform adequately under all reasonably expected design actions; and
 - (b) withstand extreme or frequently repeated design actions; and
 - (c) be designed to sustain local damage, with the structural system as a remaining stable and not being damaged to an extent disproportionate to the original local damage; and
 - (d) avoid causing damage to other properties.
- (2) The actions to be considered to satisfy (1) include but are not limited to-
 - (a) permanent actions (dead loads); and
 - (b) imposed actions (live loads arising from occupancy and use); and
 - (c) wind action; and
 - (d) earthquake action; and
 - (e) snow action; and
 - (f) liquid pressure action; and
 - (g) ground water action; and
 - (h) rainwater action (including ponding action); and
 - (i) earth pressure action; and
 - (j) differential movement; and
 - (k) time dependent effects (including creep and shrinkage); and
 - (I) thermal effects; and
 - (m) ground movement caused by-
 - (i) swelling, shrinkage or freezing of the subsoil; and
 - (ii) landslip or subsidence; and
 - (iii) siteworks associated with the building or structure; and
 - (n) construction activity actions; and
 - (o) termite actions.
- (3) The structural resistance of materials and forms of construction must be determined using five percentile characteristic material properties with appropriate allowance for—
 - (a) known construction activities; and
 - (b) type of material; and
 - (c) characteristics of the site; and
 - (d) the degree of accuracy inherent in the methods used to assess the structural behaviour; and
 - (e) action effects arising from the differential settlement of foundations, and from restrained dimensional changes due to temperature, moisture, shrinkage, creep and similar effects.

- (4) Glass installations that are at risk of being subjected to human impact must have glazing that-
 - (a) if broken on impact, will break in a way that is not likely to cause injury to people; and
 - (b) resists a reasonably foreseeable human impact without breaking; and
 - (c) is protected or marked in a way that will reduce the likelihood of human impact.

QLD H1P2

SA H1P2

H1P2 Buildings in flood areas

[2019: P2.1.2]

- (1) A building in a *flood hazard area* must be designed and constructed, to the degree necessary, to resist flotation, collapse or significant permanent movement resulting from the action of hydrostatic, hydrodynamic, erosion and scour, wind and other actions during the *defined flood event*.
- (2) The actions and requirements to be considered to satisfy (1) include but are not limited to—
 - (a) flood actions; and
 - (b) elevation requirements; and
 - (c) foundation and footing requirements; and
 - (d) requirements for enclosures below the flood hazard level; and
 - (e) requirements for structural connections; and
 - (f) material requirements; and
 - (g) requirements for utilities; and
 - (h) requirements for occupant egress.

Limitations

H1P2 only applies to a Class 1 building.

Part H2 Damp and weatherproofing

Introduction to this Part

Performance Requirements

H2P1 Rainwater management

[2019: P2.2.1]

- (1) *Surface water*, resulting from a storm having an *annual exceedance probability* of 5% and which is collected or concentrated by a building or *sitework*, must be disposed of in a way that avoids the likelihood of damage or nuisance to any *other property*.
- (2) Surface water, resulting from a storm having an annual exceedance probability of 1% must not enter the building.
- (3) A drainage system for the disposal of *surface water* resulting from a storm having an *annual exceedance probability* of—
 - (a) 5% must—
 - (i) convey *surface water* to an appropriate *outfall*; and
 - (ii) avoid surface water damaging the building; and
 - (b) 1% must avoid the entry of *surface water* into a building.

Limitations

H2P1(2) does not apply to a Class 10 building except where its construction contributes to the weatherproofing of the Class 1 building.

H2P2 Weatherproofing

[2019: P2.2.2]

A roof and *external wall* (including openings around *windows* and doors) must prevent the penetration of water that could cause—

- (a) unhealthy or dangerous conditions, or loss of *amenity* for occupants; and
- (b) undue dampness or deterioration of building elements.

Limitations

H2P2(a) does not apply to a Class 10 building except where its construction contributes to the weatherproofing of the Class 1 building.

NSW H2P3

SA H2P3

H2P3

Moisture from the ground must be prevented from causing-

Rising damp

- (a) unhealthy or dangerous conditions, or loss of *amenity* for occupants; and
- (b) undue dampness or deterioration of building elements.

[2019: P2.2.3]

Limitations

H2P3 does not apply to a Class 10 building where in the particular case there is no necessity for compliance.

NT H2P4

H2P4 Drainage from swimming pools

[2019: P2.2.4]

A swimming pool must have adequate means of draining the pool in a manner which will not-

- (a) cause illness to people; or
- (b) affect other property.

Notes

The NCC Volume Two and the ABCB Housing Provisions do not contain any *Deemed-to-Satisfy Provisions* for this *Performance Requirement*.

Part H3 Fire safety

Introduction to this Part

Performance Requirements

H3P1 Spread of fire

SA H3P1(1)

- (1) A Class 1 building must be protected from the spread of fire such that the probability of a building not being able to withstand the design heat flux of 92.6 kW/m² for a period of 60 minutes shall not exceed 0.01, when located within 900 mm from the allotment boundary or within 1.8 m from another building on the same allotment from—
 - (a) another building other than an associated Class 10 building; and
 - (b) the allotment boundary, other than a boundary adjoining a road or public space (see Figure H3P1).
- (2) A Class 10a building must not significantly increase the risk of fire spread between Class 2 to 9 buildings.

Figure H3P1: Typical areas of potential fire spread

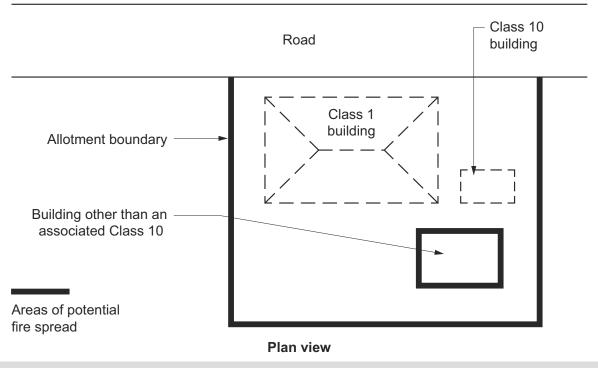


Figure Notes

This diagram indicates areas of potential fire spread. This situation will differ for corner allotments, etc.

H3P2 Automatic warning for occupants

[2019: P2.3.2]

[2019: P2.3.1]

In a Class 1 building, occupants must be provided with *automatic* warning on the detection of smoke with an *efficacy* greater than 0.95 and a *reliability* greater than 0.95, so that they may evacuate in the event of a fire to a place of safety appropriate to the—

(a) function and use of the building; and

- (b) occupant characteristics; and
- (c) *fire load* and combustion characteristics; and
- (d) potential *fire intensity*; and
- (e) fire hazard.

Part H4 Health and amenity

Introduction to this Part

Performance Requirements	
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H4P1 Wet areas

[2019: P2.4.1]

To protect the structure of the building and to maintain the *amenity* of the occupants, water must be prevented from penetrating—

- (a) behind fittings and linings; or
- (b) into concealed spaces,

of sanitary facilities, bathrooms, laundries and the like.

SA H4P1(2)

H4P2 Room heights

[2019: P2.4.2]

A room or space must be of a height that does not unduly interfere with its intended function.

H4P3 Personal hygiene and other facilities

[2019: P2.4.3]

- (1) Suitable sanitary facilities for personal hygiene must be provided in a convenient location within or associated with a building, appropriate to its function or use.
- (2) Laundering facilities or space for laundering facilities and the means for sanitary disposal of waste water must be provided in a convenient location within or associated with a building, appropriate to its function or use.
- (3) A food preparation facility must be provided which includes-
 - (a) a means for food rinsing, utensil washing and the sanitary disposal of associated waste water; and
 - (b) a means for cooking food; and
 - (c) a space for food preparation.
- (4) A *sanitary compartment* must be constructed with sufficient space or other means to enable an unconscious occupant to be removed from the compartment.

Applications

H4P3 only applies to a Class 1 building.

Explanatory Information

For the purposes of H4P3(2), waste water includes water soiled as a result of clothes washing, mopping floors and other domestic cleaning processes.

H4P4 Lighting

[2019: P2.4.4]

- (1) A *habitable room* must be provided with *windows*, where appropriate to the function or use of that part of the building, so that natural light, when available, provides an *average daylight factor* of not less than 2%.
- (2) Artificial lighting must be installed to provide an *illuminance* of not less than 20 lux appropriate to the function or use of the building to enable safe movement by occupants.

Applications

H4P4(2) only applies—

- (a) to sanitary compartments, bathrooms, shower rooms, airlocks, laundries and the like; and
- (b) if natural light of a suitable standard is not available.

Explanatory Information

H4P4(1) nominates a minimum *average daylight factor* for rooms provided with natural light. Note that H4V2 provides a method by which *average daylight factor* may be calculated.

To comply with H4P4(2), the level of artificial light must enable safe movement by occupants, appropriate to the use of the building. For example, in a movie room a lower level of lighting may be appropriate while a movie is being screened, however at the beginning and end of the movie when occupants are entering and exiting the movie room the minimum lighting level of 20 lux may be appropriate.

H4P5 Ventilation

[2019: P2.4.5]

- (1) A space within a building used by occupants must be provided with means of ventilation with *outdoor air* which will maintain adequate air quality.
- (2) A mechanical air-handling system installed in a building must control-
 - (a) the circulation of objectionable odours; and
 - (b) the accumulation of harmful contamination by micro-organisms, pathogens and toxins.
- (3) Contaminated air must be disposed of in a manner which does not unduly create a nuisance or hazard to people in the building or *other property*.

NT H4P6

H4P6 Sound insulation

[2019: P2.4.6]

- (1) Walls separating dwellings must, to provide insulation against the transmission of airborne sound, have a weighted standardised level difference with spectrum adaptation term $(D_{nT'w}+C_{tr})$ not less than 45.
- (2) Walls separating a bathroom, sanitary compartment, laundry or kitchen in a dwelling from a habitable room (other than a kitchen) in an adjoining dwelling, must provide insulation against impact generated sound sufficient to prevent illness or loss of amenity to the occupants.
- (3) The *required* sound insulation of walls must not be compromised by the incorporation or penetration of a pipe or other service element.

H4P7 Condensation and water vapour management

[2019: P2.4.7]

Risks associated with water vapour and *condensation* must be managed to minimise their impact on the health of occupants.

Applications

H4P7 only applies to a Class 1 building.

Part H5 Safe movement and access

Introduction to this Part

Performance Requirements

H5P1 Movement to and within a building

[2019: P2.5.1]

So that people can move safely to and within a building—

- (a) walking surfaces must have safe gradients; and
- (b) any stairway or ramp must-
 - (i) have suitable handrails where necessary to assist and provide stability to people using the stairway or ramp; and
 - (ii) have suitable landings to avoid undue fatigue of users; and
 - (iii) be suitable for safe passage in relation to the nature, volume and frequency of likely usage; and
 - (iv) have slip-resistant walking surfaces on ramps, and on stairway treads or near the edge of the nosing.

H5P2 Fall prevention barriers

[2019: P2.5.2]

- (1) A barrier must be provided where people could fall—
 - (a) 1 m or more—
 - (i) from a floor or roof or through an opening (other than through an openable window) in the external wall; or
 - (ii) due to a sudden change of level within or associated with a building; or
 - (b) 2 m or more from a floor through an openable window in a bedroom; or
 - (c) 4 m or more from a floor through an openable window not covered by (b).
- (2) A barrier required by (1) must be-
 - (a) continuous and extend for the full extent of the hazard; and
 - (b) of a height to protect people from accidentally falling from the floor or roof or through the opening or openable window; and
 - (c) constructed to prevent people from falling through the barrier; and
 - (d) capable of restricting the passage of children; and
 - (e) of strength and rigidity to withstand-
 - (i) the foreseeable impact of people; and
 - (ii) where appropriate, the static pressure of people pressing against it.

Part H6 Energy efficiency

Introduction to this Part

Performance Requirements

H6P1 Thermal performance

[2019: P2.6.1]

- (1) The total *heating load* of the *habitable rooms* and *conditioned spaces* in a building must not exceed the *heating load* limit in Specification 44.
- (2) The total *cooling load* of the *habitable rooms* and *conditioned spaces* in a building must not exceed the *cooling load* limit in Specification 44.
- (3) The total *thermal energy load* of the *habitable rooms* and *conditioned spaces* in a building must not exceed the *thermal energy load* limit in Specification 44.

H6P2 Energy usage

[2019: P2.6.2]

- (1) The energy value of a building's domestic services must not exceed 70% of the energy value with—
 - (a) a 3-star ducted heat pump, rated under the 2019 GEMS determination, heating all spaces that are provided with heating; and
 - (b) a 3-star ducted heat pump, rated under the 2019 GEMS determination, cooling all spaces that are provided with cooling; and
 - (c) a 5-star instantaneous gas water heater, rated under the 2017 GEMS determination, providing all domestic hot water; and
 - (d) a lighting power density of 4 W/m² serving all internal spaces that are provided with artificial lighting.
- (2) *Domestic services*, including any associated distribution system and components must, to the degree necessary, have features that facilitate the efficient use of energy appropriate to—
 - (a) the *domestic service* and its usage; and
 - (b) the geographic location of the building; and
 - (c) the location of the *domestic service*; and
 - (d) the energy source.

Part H7 Ancillary provisions and additional construction requirements

Introduction to this Part

Performance Requirements

NSW H7P1 NT H7P1 QLD H7P1

H7P1 Swimming pool access

[2019: P2.7.1]

A barrier must be provided to a *swimming pool* and must—

- (a) be continuous for the full extent of the hazard; and
- (b) be of a strength and rigidity to withstand the foreseeable impact of people; and
- (c) restrict the access of young children to the pool and the immediate pool surrounds; and
- (d) have any gates and doors fitted with latching devices not readily operated by young children, and constructed to automatically close and latch.

SA H7P1(2)

Applications

H7P1 only applies to a *swimming pool* with a depth of water more than 300 mm.

TAS H7P2

H7P2 Swimming pool reticulation systems

[2019: P2.7.2]

A *swimming pool* water recirculation system must incorporate safety measures to avoid entrapment of, or injury to, a person.

Applications

H7P2 only applies to a *swimming pool* with a depth of water more than 300 mm.

TAS H7P3

H7P3 Heating appliances

[2019: P2.7.3]

A heating appliance and its associated components within a building, including an open fire-place, chimney, or the like, must be installed—

- (a) to withstand the temperatures likely to be generated by the appliance; and
- (b) so that it does not raise the temperature of any building element to a level that would adversely affect the element's physical or mechanical properties or function; and
- (c) so that hot products of combustion will not—

- (i) escape through the walls of the associated components; and
- (ii) discharge in a position that will cause fire to spread to nearby *combustible* materials or allow smoke to penetrate through nearby *windows*, ventilation inlets, or the like in the building containing the heating appliance.

Explanatory Information

H7P3 is not intended to apply to inserted fireplaces fuelled by gas. Insert gas fireplaces may be regulated by relevant authorities responsible for gas installations in each State or Territory jurisdiction and may be required to comply with AS/NZS 5601 – Gas installations.

H7P4 Buildings in alpine areas

[2019: 2.7.4]

- (1) An external doorway from a building in an *alpine area* must be installed so that opening the door is not obstructed by snow or ice.
- (2) A building in an *alpine area* containing external trafficable structures forming part of the means of egress must be constructed so that they remain, as far as practicable, useable under snow conditions.
- (3) A building in an *alpine area* must be constructed so that snow or ice is not shed from the building onto the allotment, any adjoining allotment, road or public space in a location or manner that will—
 - (a) obstruct a means of egress from any building to a road or open space; or
 - (b) otherwise endanger people.

TAS H7P5

H7P5 Buildings in bushfire prone areas

[2019: P2.7.5]

A Class 1 building or a Class 10a building or deck associated with a Class 1 building that is constructed in a *designated bushfire prone area* must be designed and constructed to—

- (a) reduce the risk of ignition from a *design bushfire* with an annual exceedance probability not more than 1:50 years; and
- (b) take account of the assessed duration and intensity of the fire actions of the design bushfire; and
- (c) be designed to prevent internal ignition of the building and its contents; and
- (d) maintain the structural integrity of the building for the duration of the *design bushfire*.

H7P6 Private bushfire shelters

[2019: P2.7.6]

A *private bushfire shelter* must be designed and constructed to provide a tenable environment for occupants during a *design bushfire* with an annual probability of exceedance not more than 1:200 years, appropriate to the—

- (a) location of the *private bushfire shelter* relative to *fire hazards* including—
 - (i) predominant vegetation; and
 - (ii) adjacent buildings and structures; and
 - (iii) allotment boundaries; and
 - (iv) other combustible materials; and
- (b) occupancy of the *private bushfire shelter*; and
- (c) bushfire intensity having regard for the bushfire attack level; and
- (d) fire intensity from adjacent buildings and structures, allotment boundaries and other combustible materials; and

- (e) ready access to the private bushfire shelter from the associated dwelling and occupant egress after the fire; and
- (f) tenability within the private bushfire shelter for the estimated maximum period of occupancy; and
- (g) generation of smoke, heat and toxic gases from materials used to construct the private bushfire shelter; and
- (h) structural and fire loads and actions to which it may reasonably be subjected, appropriate to-
 - (i) the topography between the *private bushfire shelter* and the predominant vegetation or other *fire hazards*; and
 - (ii) the distance between the private bushfire shelter and the predominant vegetation or other fire hazards; and
 - (iii) the size of the potential fire source and *fire intensity*; and
 - (iv) wind loading; and
 - (v) potential impact from debris such as falling tree limbs; and
- (i) degree of external signage identifying the location of the private bushfire shelter; and
- (j) degree of internal signage identifying the design capacity and maximum period of occupancy; and
- (k) degree of occupant awareness of outside environmental conditions; and
- (I) degree of essential maintenance.

Applications

H7P6 only applies to a Class 10c building.

Notes

NCC Volume Two and the ABCB Housing Provisions do not contain any *Deemed-to-Satisfy Provisions* for H7P6, however the ABCB Performance Standard for Private Bushfire Shelters contains guidance for H7P6.

Part H8 Livable housing design

Introduction to this Part

Performance Requirements

H8P1 Livable housing design

[New for 2022]

A Class 1a building must be provided with-

- (a) a continuous and step-free path to a dwelling entrance door from either-
 - (i) the pedestrian entry at the allotment boundary; or
 - (ii) an appurtenant Class 10a garage or carport; or
 - (iii) a car parking space provided for the exclusive use of the occupants of the dwelling; and
- (b) at least one level and step-free entrance door into the dwelling from the access path required by (a); and
- (c) internal doors and corridors on the ground or entrance level which facilitate unimpeded movement between spaces; and
- (d) a sanitary compartment that-
 - (i) facilitates independent access and use; and
 - (ii) is located on the ground or entry level; and
- (e) a shower that facilitates independent access and use; and
- (f) the walls of the *sanitary compartment* referred to in (d), the shower referred to in (e) and a bath (where installed, other than a freestanding bath) constructed so as to facilitate future installation of grabrails, or the like, in a way that minimises the removal of existing wall linings.

Exemptions

H8P1(a) need not be complied with if-

- (a) step-free access cannot be provided from an appurtenant Class 10a garage or carport or a car parking space provided for the exclusive use of the occupants of the dwelling; and
- (b) due to *site* conditions, there is no other suitable location on which to construct the access path.

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Part B1 Cold water services

Introduction to this Part

Performance Requirements

B1P1 Cold water supply

[2019: BP1.1]

A cold water service must be connected to a *drinking water* supply.

Applications

- (1) B1P1 applies to cold water supplied for human consumption, food preparation, food utensil washing or personal hygiene.
- (2) B1P1 applies to automatic fire sprinkler systems when installed in accordance with FPAA101D Automatic Fire Sprinkler System Design and Installation Drinking Water Supply.

Explanatory Information: Unintentional heating of cold water services

- Where installed in a location subjected to extreme summer temperatures (such as the roof space of a building), cold water services have the potential to become unintentionally heated. This can pose a hazard as the cold water supply may reach temperatures in excess of 45° Celsius, increasing the potential for scalding.
- To reduce the likelihood of unintentional heating of cold water services, consideration should be given to-
 - (i) avoiding long runs of pipework in locations exposed to solar heat gain; or
 - (ii) applying insulation, either directly to the pipework, or by using additional ceiling insulation material between the pipework and the solar heat source.
- Avoidance of unintentional heating of cold water services in known areas of extreme summer temperatures may also assist in reducing water usage through drawing off of water which has become excessively heated.

B1P2 Velocity

[2019: BP1.2]

Cold water service pipework must ensure that the pipework water velocity does not exceed 3 metres per second for more than 1% of the time that water is required during the annual peak hour.

Explanatory Information

During the hour of heaviest usage expected to occur in a year, cold water service velocity of 3 metres per second must not be exceeded for 99% of the time downstream fixtures are in use.

B1P3 Access and isolation

[2019: BP1.2]

- (1) A cold water service must ensure access for maintenance of mechanical components and operational controls.
- (2) A cold water service must ensure the system, appliances and devices can be isolated for testing and maintenance.

B1P4 Water efficiency

NCC 2022 - Consolidated Requirements (1 May 2023)

A cold water service must ensure the efficient use of *drinking water* by-

- (a) limiting water usage from—
 - (i) a tap or outlet for a shower, basin, kitchen sink or laundry trough, to a flow rate of not more than 9 l/m; and
 - (ii) a cistern or flushing device for a urinal, to a flush volume of not more than 2.5 litres for each-
 - (A) single urinal stall; or
 - (B) 600 mm length of a continuous urinal wall; and
 - (iii) a dual flush cistern or flushing valve that is connected to a water closet pan to a flush volume of not more than—
 - (A) 6 and 3 litres; or
 - (B) 4.5 and 3 litres; or
- (b) water saving measures *equivalent* to or greater than those described in (a).

Applications

The flush volumes of B1P4 may be within a tolerance of-

- (a) ± 0.5 litres for the full flush of a 6/3 litre cistern; or
- (b) +0.5 litres for the reduced flush of a 6/3 litre cistern; or
- (c) ±0.2 litres for a 4.5/3 litre cistern.

Exemptions

The requirements of B1P4 do not apply to a vacuum *drainage* system.

TAS B1P5

B1P5 Pressure

[2019: BP1.2]

The points of discharge for a cold water service must-

- (a) have----
 - (i) a working pressure of not less than 50 kPa; and
 - (ii) a static pressure within the building of not more than 500 kPa; or
- (b) have water pressures suitable for the correct functioning of the fixture or appliance where water pressures outside of (a)(i) and (a)(ii) are required.

B1P6 Uncontrolled discharge

A cold water service must avoid failure or uncontrolled discharge.

[2019: BP1.2]

[2019: BP1.2]

Part B2 Heated water services

Introduction to this Part

Performance Requirements

B2P1 Heated water supply

A heated water service must be connected to a drinking water supply.

Applications

B2P1 applies to a *heated water* service used for human consumption, food preparation, food utensil washing or personal hygiene.

B2P2 Scald prevention

[2019: BP2.2]

Heated water supplied by a *heated water* service must be delivered from the point of discharge of fixtures and appliances at a temperature which is unlikely to scald.

Applications

B2P2 applies to fixtures and appliances used primarily for personal hygiene.

B2P3 Velocity

VIC B2P3(1)

The water velocity in *heated water* service pipework up to 65 °C must not exceed—

- (a) 3.0 m/s for more than 1% of the time that water is required during the peak hour in reticulated *heated water* systems; and
- (b) 1.2 m/s for the flow and 1.0 m/s for the return of a copper circulatory *heated water* service for more than 1% of the time that water is required during the peak hour; and
- (c) 1.0 m/s for the flow and return of a circulatory *heated water* service using other materials for more than 1% of the time that the water is required during the peak hour.

Explanatory Information

High velocities in *heated water* services can be a contributing factor to the erosion/corrosion of pipework. Consideration should be given to the appropriate velocities for the building based on water temperature, water chemistry and materials used.

B2P4 Access and isolation

VIC B2P4(1)

(1) Access must be available to heated water service pipework for maintenance of mechanical components and

[2019: BP2.3]

[2019: BP2.3]

[2019: BP2.1]

operational controls.

(2) *Heated water* service pipework, appliances and devices must be capable of being isolated for testing and maintenance.

B2P5 Pressure relief and temperature limitation

[2019: BP2.4]

Containers used for producing and/or storing *heated water* are to relieve excessive pressure and avoid flash steam production by—

- (a) relieving pressure so that the maximum rated working pressure, or 1400 kPa, whichever is the lesser, is not exceeded; and
- (b) limiting water temperatures to a maximum of 99 °C; or
- (c) other suitable means providing an equivalent level of safety to (a) and (b).

Applications

B2P5(a) has a tolerance of +5% or 14 kPa whichever is the greater.

B2P6 Legionella control

[2019: BP2.5]

Heated water must be stored and delivered under conditions which avoid the likelihood of the growth of a Legionella bacteria count greater than or equal to 10 Legionella colony forming units (cfu) per millilitre.

Explanatory Information

A risk assessment should be undertaken for the control and management of Legionella in *heated water* systems in *aged care*, *health-care* and other similar facilities with high risk occupants.

QLD B2P7

B2P7 Energy use and source

[2019: BP2.6]

- (1) A *heated water* service, including any associated distribution system and components, must ensure the efficient use of energy and water.
- (2) Features in B2P7(1) must be appropriate to the following:
 - (a) The *heated water* service and its usage.
 - (b) The geographic location of the building.
 - (c) The location of the *heated water* service.
 - (d) The energy or water source.

VIC B2P7(3)

Explanatory Information

Excessive 'dead water' draw-off, i.e. where cooled water from the supply pipe is drained off prior to delivery of *heated water*, can result in water and energy wastage.

To improve the efficiency of *heated water* systems, the design should consider factors such as the number of outlets, their purpose and expected typical usage, and the distance between the water heater and each of the outlets. The water heater should be positioned nearest to the most used outlets, or installed to provide consistent coverage of the building. Where this is not viable, the use of multiple water heaters or a flow and return pipe loop may need to be considered.

B2P7(2) permits the energy source of the *heated water* service to be considered. This means that the net energy obtained from *renewable energy* sources such as solar, geothermal, wind, and biofuels may be considered as 'free' energy in calculating the energy consumption. Similarly, heat reclaimed from another 'free' source such as a by-product from co-generation type processes as well as other industrial processes, which could otherwise be rejected from the building, could be considered as 'free' energy in calculating the energy in calculating the energy in calculating the energy in calculating the energy source from the building.

B2P8 Temperature

A *heated water* service must ensure that *heated water* is provided at appropriate temperatures for the correct functioning of the fixture or appliance.

TAS B2P9

B2P9 Pressure

The points of discharge for a *heated water* service must—

- (a) have—
 - (i) a working pressure of not less than 50 kPa; and
 - (ii) a static pressure within the building of not more than 500 kPa; or
- (b) have water pressures suitable for the correct functioning of the fixture or appliance where water pressures are outside of (a)(i) and (a)(ii) are required.

B2P10 Uncontrolled discharge

A *heated water* service must avoid failure or *uncontrolled discharge*.

B2P11 Water efficiency

A *heated water* service must ensure the efficient use of *drinking water* by limiting water use from a tap or outlet for a shower, basin, kitchen sink or laundry trough to a flow rate of not more than 9 l/m.

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[New for 2022]

[2019: BP2.3]

[2019: BP2.3]

[2019: BP2.3]

a working pressure of not less than 50 kPa; and

(ii) a static pressure within the building of not more than 500 kPa: or

Pressure

Non-drinking water services Part B3

Introduction to this Part

Performance Requirements

B3P1 Non-drinking water supply

A non-drinking water service must not have a cross-connection with a drinking water service.

Identification **B3P2**

VIC B3P3(1) Non-drinking water service pipework must ensure that pipework water velocity does not exceed 3 m/s for more than 1% of the time that the water is required during the annual peak hour.

(1) Pipes, pipe outlets, fittings, storage and holding tanks that are part of a non-drinking water service must be clearly

(2) A non-drinking water service must only be connected to outlets clearly identified for non-drinking use.

Explanatory Information

identified.

B3P3

B3P5

(a) have—

(i)

During the hour of heaviest usage in reticulated non-drinking services, a water velocity of 3 m/s must not be exceeded for 99% of the time that any downstream fixtures are in use.

B3P4 Access and isolation

Velocity

- (1) A non-drinking water service must ensure access for maintenance of mechanical components and operational controls.
- (2) A non-drinking water service must ensure the system, appliances and devices can be isolated for testing and maintenance.

[2019: BP3.3]

The points of discharge for a non-drinking water service must-

[2019: BP3.2]

[2019: BP3.3]

[2019: BP3.1]

[2019: BP3.3]

B3P6 Uncontrolled discharge

A non-drinking water service must avoid failure or uncontrolled discharge.

[2019: BP3.3]

Part B4 Fire-fighting water services

Introduction to this Part

Performance Requirements	
--------------------------	--

B4P1 Flow rate and pressure

A fire-fighting water service must ensure that the water supply flow and pressures to fire-fighting equipment are to be based on a minimum 95th percentile system performance for the correct functioning of the fire-fighting equipment.

B4P2 Access and isolation

(1) A fire-fighting water service must ensure access for maintenance of mechanical components and operational controls.

VIC B4P2(2)

(2) A fire-fighting water service must ensure the system can be isolated for testing and maintenance.

B4P3 Fire-fighting water storage

Water storage supplying fire-fighting systems must be sized suitably for the level of risk and supply arrangements.

B4P4 Uncontrolled discharge

A fire-fighting water service must avoid failure or *uncontrolled discharge*.

[2019: BP4.1]

[New for 2022]

[2019: BP4.1]

[2019: BP4.1]

Part B5 Cross-connection control

Introduction to this Part

Performance Requirements

B5P1 Contamination control

[2019: BP5.1]

Water services must be designed, constructed and installed to avoid contamination.

Applications

B5P1 applies to cold water, *heated water*, *non-drinking water* and fire-fighting water services.

Part B6 Rainwater services

Introduction to this Part

Performance Requirements

B6P1 Pressure

The points of discharge of a rainwater service must-

- (a) have---
 - (i) a working pressure of not less than 50 kPa; and
 - (ii) a static pressure within a building of not more than 500 kPa; or
- (b) have water pressures suitable for the correct functioning of the fixture or appliance where water pressures outside of (a)(i) and (a)(ii) are required.

B6P2 Velocity

[2019: BP6.2]

[2019: BP6.2]

A *rainwater service* must ensure pipework water velocity does not exceed 3 m/s for more than 1% of the time that the water is required during the normal peak flow.

Explanatory Information

During the hour of heaviest usage in reticulated *rainwater service* pipework, a velocity of 3 m/s must not be exceeded for 99% of the time that any downstream fixture is in use.

B6P3 Water efficiency

[2019: BP6.2]

A rainwater service must ensure the efficient use of water by-

- (a) limiting water usage from-
 - (i) a cistern or flushing device for a urinal, to a flush volume of not more than 2.5 litres for each-
 - (A) single urinal stall; or
 - (B) 600 mm length of a continuous urinal wall; and
 - (ii) a dual flush cistern or flushing valve that is connected to a water closet pan, to a flush volume of not more than—
 - (A) 6 and 3 litres; or
 - (B) 4.5 and 3 litres; and
 - (iii) other rainwater using fixtures and appliances, to an efficient level; or
- (b) other water saving measures which achieve *equivalent* or greater efficiency than (a).

Applications

The flush volumes of B6P3 may be within a tolerance of-

(a) ± 0.5 litres for the full flush of a 6/3 litre cistern; or

(c) ± 0.2 litres for a 4.5/3 litre cistern.

Exemptions

The requirements of B6P3(a)(ii) do not apply to a vacuum *drainage* system.

B6P4 Access and isolation

- (a) A *rainwater service* must ensure access for maintenance of mechanical components and operational controls.
- (b) A *rainwater service* must ensure the system, appliances and devices can be isolated for testing and maintenance.

B6P5	Identification	
		[2019: BP6.4]
Pipes and pipe ou	tlets that form part of a <i>rainwater service</i> must be clearly identified.	
B6P6	Uncontrolled discharge	

A rainwater service must avoid the likelihood of failure and uncontrolled discharge.

[2019: BP6.2]

[2019: BP6.2]

Part C1 Sanitary plumbing systems

Introduction to this Part

Performance Requirements		
C1P1	Disposal	
		[2019: CP1.1]

A sanitary *plumbing* system must ensure sewage or sullage is transferred to a sanitary *drainage* system or an *approved disposal* system.

Explanatory Information: Non-flushing (waterless) urinals

Where a non-flushing (waterless) urinal is to be installed to a sanitary *plumbing* system comprising copper, copper alloy or other metallic piping, undiluted discharge transported through such pipework may increase the likelihood of corrosion.

Practitioners should also be aware that undiluted discharge, transported through pipework of any material, can cause a build-up of struvite (ammonium magnesium phosphate) inside the pipework, potentially causing *blockage* within the sanitary *plumbing* system.

C1P2 Access

[2019: CP1.1]

A sanitary *plumbing* system must ensure access for maintenance of mechanical components, operational controls and for clearing *blockages*.

C1P3 Water efficiency

[2019: CP1.1]

A sanitary *plumbing* system must ensure efficient use of *drinking water* by—

- (a) limiting water usage from-
 - (i) a cistern or flushing device for a urinal, to a flush volume of not more than 2.5 litres for each-
 - (A) single urinal stall; or
 - (B) 600 mm length of a continuous urinal wall; and
 - (ii) a dual flush cistern or flushing valve that is connected to a water closet pan to a flush volume of not more than—
 - (A) 6 and 3 litres; or
 - (B) 4.5 and 3 litres; or
- (b) water saving measures *equivalent* to or greater than those described in (a).

Applications

The flush volume of C1P3 may be within a tolerance of-

- (a) ±0.5 litres for the full flush of a 6/3 litre cistern; or
- (b) +0.5 litres for the reduced flush of a 6/3 litre cistern; or
- (c) ±0.2 litres for a 4.5/3 litre cistern.

Exemptions

The requirements of C1P3 do not apply to a vacuum drainage system.

C1P4 Uncontrolled discharge

A sanitary plumbing system must avoid blockage or uncontrolled discharge.

C1P5 Ventilation

A sanitary *plumbing* system must ensure that ventilation is provided to avoid hydraulic load imbalance such that—

- (a) there is less than a 1% likelihood during the annual peak hour that when any fixture discharges, air pressure at any trap seal exceeds ±375 Pa difference from atmospheric pressure; or
- (b) an *equivalent* level of safety to human health is achieved as a system complying to (a).

Exemptions

C1P5 Ventilation does not apply to vacuum *drainage* systems.

C1P6 Contamination

A sanitary *plumbing* system must avoid—

- (a) entry of water, sewerage and sullage from the system into buildings; and
- (b) entry of foul gases from the system into buildings, such that-
 - (i) at pressures of up to ±375 Pa, water trap seals will not be reduced to depths less than 70 mm for trap seals in pressurised rooms and 25 mm for all other applications; or
 - (ii) an *equivalent* level of safety to human health is achieved as a system complying to (i); and
- (c) entry of *surface water*, subsurface water and stormwater into the system.

C1P7 Damage

A sanitary *plumbing* system must avoid damage from superimposed loads, ground movement or root penetration.

[2019: CP1.1]

[2019: CP1.1]

[2019: CP1.1]

[2019: CP1.1]

Part C2 Sanitary drainage systems

Introduction to this Part

Ре	Performance Requirements		
C2I	P1 Disposal		
	[2019: CP2.1]		
A sa syste	nitary <i>drainage</i> system must ensure sewage is transferred from a sanitary <i>plumbing</i> system to an <i>approved disposal</i> em.		
NT C	2P2		
C2I	P2 Swimming pool drainage		
	[2019: CP2.2]		
Asw	<i>imming pool</i> must have adequate means of draining the pool in a manner that will not—		
	(a) cause illness to people; or		
	(b) affect other property.		
C2I	P3 Access		
	[2019: CP2.1]		
A sa	nitary <i>drainage</i> system must ensure there is access for maintenance and clearing a <i>blockage</i> .		
C2I	P4 Ventilation		
021	[2019: CP2.1]		
• •	A sanitary drainage system must ensure there is adequate ventilation to avoid foul air and gases accumulating in the		
	sanitary <i>drainage</i> and sewerage system.		
(2)	A sanitary <i>drainage</i> system must ensure that ventilation is provided to avoid hydraulic load imbalance such that—		
	(a) there is less than a 1% likelihood during the annual peak hour that when any fixture discharges, air pressure at any trap seal exceeds ±375 Pa difference from atmospheric pressure; or		
	(b) an <i>equivalent</i> level of safety to human health is achieved as a system complying to (a).		
C2I	P5 Contamination		
	[2019:CP2.1]		
(1)	A sanitary drainage system must ensure protection against internal contamination.		
(2)	A sanitary <i>drainage</i> system must avoid the entry of water, foul air and gases from the system into buildings.		
(3)	A sanitary drainage system must avoid the entry of surface water, sub-surface water and stormwater into the system.		

C2P6 Uncontrolled discharge

A sanitary *drainage* system must avoid *blockage* and *uncontrolled discharge*.

C2P7 Damage

[2019: CP2.1]

[2019: CP2.1]

- (1) A sanitary drainage system must avoid damage from root penetration, superimposed loads or ground movement.
- (2) A sanitary *drainage* system must avoid damage to existing buildings or *siteworks*.
- (3) A sanitary *drainage* system must avoid damage to the *Network Utility Operator's* sewerage system or other *approved disposal system*.

Notes

There are no *Deemed-to-Satisfy Provisions* for sanitary *drainage* systems to address ground movement.

Part C3 On-site wastewater management

Introduction to this Part

Performance Requirements

C3P1 Health impacts

[New for 2022]

VIC C3P1(1)

On-site wastewater management systems must protect public health by ensuring that—

- (a) risks associated with the discharge of treated wastewater and/or the end product from a composting toilet to the environment are minimised; and
- (b) foul air and gasses are prevented from accumulating within or entering into buildings; and
- (c) the likelihood of contamination of the *drinking water* supply is avoided.

Explanatory Information

Wastewater contains a range of pathogens that can cause illness in humans. A well designed, maintained, and operated wastewater system improves sanitation and reduces the risk to public and environmental health. Poorly designed and maintained wastewater systems can result in, contamination of drinking water and recreational water sources, including those used for food production, as well as increased risks of direct wastewater contact by the public.

C3P2 Environmental impacts

[New for 2022]

On-site wastewater management systems must protect the environment by ensuring that-

- (a) surface water and ground water are not polluted: and
- (b) soil productivity is maintained or enhanced; and
- (c) the likelihood of contamination of soils, ground water and waterways is avoided.

C3P3 Community systems

[New for 2022]

On-site wastewater management systems must minimise the impacts on and maintain and enhance community *amenity*. They must ensure that the *on-site wastewater management system* design and its implementation contribute to improving and sustaining aesthetic values within individual properties and groups of properties.

C3P4 Discharge to a Network Utility Operator sewer

[New for 2022]

Where an *on-site wastewater management system* discharges to the *point of connection* of a *Network Utility Operator's* sewer system, the connection must comply with the *Network Utility Operator* requirements.

TAS C3P5 VIC C3P5

C3P5 General requirements

[New for 2022]

On-site wastewater management systems that facilitate on-site storage, treatment, disposal or re-use of wastewater must be designed and constructed—

- (a) with *required* treatment and storage capacity for the volume and make up of waste and frequency of discharge for disposal; and
- (b) with *required* size, strength and rigidity for the nature, flow rates, volume of wastes and/or waste products which must be processed; and
- (c) using materials which are impervious both to the waste for which disposal is required and to water; and
- (d) to avoid the likelihood of *surface water* and stormwater entering the system.

VIC C3P6

C3P6 Land application systems

[New for 2022]

(1) On-site wastewater management systems and associated land application systems must-

- (a) complete the treatment, uptake and absorption of the final effluent within the boundaries of the approved area; and
- (b) protect against internal contamination; and
- (c) provide ventilation to avoid the likelihood of foul air and gases from accumulating in the system.
- (2) On-site wastewater management systems and associated land application systems must-
 - (a) avoid the likelihood of the creation of unpleasant odours or the accumulation of offensive matter; and
 - (b) avoid the likelihood of stormwater run-off entering the system; and
 - (c) avoid the likelihood of root penetration or ingress of ground water entering the system; and
 - (d) avoid the likelihood of unintended or uncontrolled discharge; and
 - (e) avoid the likelihood of *blockage* and leakage; and
 - (f) avoid the likelihood of damage from superimposed loads or ground movement.

VIC C3P7

C3P7 Access for maintenance

[New for 2022]

- (1) On-site wastewater management systems that facilitate on-site storage, treatment, disposal or re-use of wastewater must—
 - (a) provide vehicle access for collection, if necessary; and
 - (b) avoid the likelihood of unauthorised access by people; and
 - (c) permit cleaning, maintenance, measurement and performance sampling.
- (2) Land application systems must-
 - (a) provide access, as required, for maintenance; and
 - (b) incorporate provisions, as required, for effective cleaning.

C3P8 Uncontrolled discharge

[New for 2022]

On-site wastewater management systems that facilitate on-site storage, treatment, disposal or re-use of wastewater must

avoid blockage or uncontrolled discharge.

C3P9 Identification

[New for 2022]

On-site wastewater management systems that facilitate on-site storage, treatment, disposal or re-use of wastewater must permit the manufacturer model, serial number and designed capacity to be easily accessed and identifiable after installation.

Part D1 Excessive noise

Introduction to this Part

Performance Requirements			
D1P1	Undue noise		

A *plumbing* and *drainage* system must not create undue noise.

D1P2 Excessive noise

[2019: DP1.2]

[2019: DP1.1]

- (1) A *plumbing* and *drainage* system must reduce the transmission of airborne and/or impact generated sound which may cause illness or *loss* of *amenity* to occupants.
- (2) The *required* sound insulation of a floor or wall must not be compromised by the incorporation or penetration of a *plumbing* or *drainage* system.

Applications

- D1P2 only applies to a *plumbing* or *drainage* system that is located in-
- (a) a separating wall of a Class 1 building; or
- (b) a Class 2, Class 3 or Class 9c building that is *required* to be sound rated.

Notes

- (1) Part F7 in Volume One of the NCC contains *Performance Requirements* F7P1 through to F7P4 which cover sound transmission and insulation in walls and floors of Class 2, Class 3 and Class 9c buildings.
- (2) Part H4 in Volume Two of the NCC contains *Performance Requirement* H4P6 which covers sound insulation of walls in Class 1 buildings.

Part E1 Facilities Introduction to this Part Performance Requirements E1P1 Facilities for people with disability

[2019: EP1.1]

Where a *plumbing* and *drainage* system is provided, supply taps or other operational controls must be *accessible* and suitable for use.

Schedule 1 Definitions Abbreviations

Symbols

Glossary

Abbreviations

Abbreviation	Definitions	
ABCB	Australian Building Codes Board	
AC	Alternating Current	
ACC	Acrylic conformal coating	
ACL	Acrylic latex	
ACP	Aluminium Composite Panel	
AIRAH	Australian Institute of Refrigeration, Air conditioning and Heating	
ANSI	American National Standards Institute	
AS	Australian Standard	
ASET	Available Safe Egress Time	
ASHRAE	American Society of Heating, Refrigerating and Air Conditioning Engineers	
ASTM	American Society for Testing and Materials	
BAL	Bushfire Attack Level	
BCA	Building Code of Australia	
BE	Fire blocks evacuation route	
CAN	National Standard of Canada	
ССТ	Correlated Colour Temperature	
CF	Challenging fire	
CHF	Critical Heat Flux	
CIBSE	Chartered Institution of Building Services Engineers	
CRF	Critical Radiant Flux	
CRI	Colour Rendering Index	
CS	Fire starts in a concealed space	
C _{SHGC}	Constant for solar heat gain	
CSIRO	Commonwealth Scientific and Industrial Research Organisation	
C _U	Constant for conductance	
DC	Direct Current	
FED	Fractional Effective Dose	
FI	Fire brigade intervention	
FRL	Fire Resistance Level	
FZ	Flame Zone	
GEMS	Greenhouse and Energy Minimum Standards	
GRP	Glass fibre reinforced polyester	
HDG	Hot dip galvanising	
HRR	Heat Release Rate	
HS	Horizontal fire spread	
IS	Rapid fire spread involving internal surface linings	
ISO	International Organisation for Standardisation	
IZS	Inorganic zinc silicate	
LED	Light-Emitting Diode	
MEPS	Minimum Energy Performance Standards	

Abbreviation	Definitions	
NABERS	National Australian Built Environment Rating System	
NASH	National Association of Steel-Framed Housing	
NATA	National Association of Testing Authorities Australia	
NatHERS	Nationwide House Energy Rating Scheme	
NCC	National Construction Code	
NSF	National Sanitation Foundation	
PBDB	Performance-based design brief	
PCA	Plumbing Code of Australia	
PMV	Predicted Mean Vote	
ppm	parts per million	
PUR	Polyurethane	
PVC	Polyvinyl chloride	
RC	Robustness check	
RSET	Required Safe Egress Time	
R _w	Weighted sound reduction index	
SF	Smouldering fire	
SHGC	Solar Heat Gain Coefficient	
SL	Square mesh	
SS	Structural stability and other property	
STC	Sound Transmission Class	
тм	Trench mesh	
UF	Unexpected catastrophic failure	
UPVC	Unplasticized polyvinyl chloride	
UT	Fire in normally unoccupied room threatening occupants of other rooms	
U-Value	Thermal transmittance	
VS	Vertical fire spread involving external cladding or external openings	
WC	Water closet	

Symbols

Symbols	Definitions
0	degree(s)
°C	degree(s) Celsius
°CDB	degree(s) Celsius Dry Bulb
°CWB	degree(s) Celsius Wet Bulb
-e/MJ	equivalent per Megajoule(s)
μm	micrometre
µg/N.s	Micrograms per newton-second
dB(A)	decibels "A" scale weighting network
f'c	Characteristic compressive strength of concrete at 28 days
f'y	Yield stress used in design
G	Permanent load
J	Joule(s)
J/kg.K	Joules per kilogram degree Kelvin
J/s.m ²	Joules per second square metre
К	Kelvin(s)
kg	kilogram(s)
kg/m	kilogram(s) per metre
kg/m²	kilogram(s) per square metre
kg/m ³	kilogram(s) per cubic metre
kJ/m².hour	kilojoules per square metre hour
km	kilometre(s)
kPa	kilopascal(s)
kW/m ²	kilowatt(s) per square metre
kW _{heating}	kilowatt(s) of heating
kWr	kilowatt(s) of refrigeration
L	litre(s)
L/min	litre(s) per minute
L/s	litre(s) per second
L/s.m ²	litre(s) per second square metre
Lumens/W	Lumens per Watt
Ix	lux
m	metre(s)
m/s	metre(s) per second
m²	square metre(s)
m².K/W	square metre Kelvin(s) per Watt
m ³	cubic metre(s)
m³/hour	cubic metre(s) per hour
m³/s	cubic metre(s) per second
mcd/m ²	millicandelas per square metre
min	minute(s)

Symbols	Definitions
MJ/hour	Megajoules per hour
MJ/m ² .annum	Megajoules per square metre annum
mm	millimetre(s)
mm ²	square millimetre(s)
MW	megawatt(s)
N	newton(s)
N/m	Newton(s) per metre
Ра	pascal(s)
Pa/m	pascal(s) per metre
Q	Imposed load
S	second(s)
ULS	Ultimate limit state
V	Volt(s)
W	Watt(s)
W _{input power}	Watts of input power
Wr/W _{input power}	Watts of thermal refrigeration per watt of input power
W/kW _{rej}	Watts per kilowatt of heat rejected
Wm ⁻¹ K ⁻¹	Watts per metre degree Kelvin
W/m ²	Watts per square metre
°south	degree south
%	percent
>	greater than
<	less than
≤	less than or equal to
2	equal to or more than

Glossary

Above ground rainwater tank: A rainwater tank that is not in any way set into the ground.

Accessible: Having features to enable use by people with a disability.

Accessway: A continuous accessible path of travel (as defined in AS 1428.1) to, into or within a building.

Accredited Testing Laboratory: One of the following:

- (a) An organisation accredited by the National Association of Testing Authorities Australia (NATA) to undertake the relevant tests.
- (b) An organisation outside Australia accredited to undertake the relevant tests by an authority recognised by NATA through a mutual recognition agreement.
- (c) An organisation recognised as being an Accredited Testing Laboratory under legislation at the time the test was undertaken.
- Activity support level: The degree to which occupants can undertake activities with respect to the likely activity traits and occupant traits.

Explanatory Information

This term is used to articulate whether the height of a room or space is sufficient and by what degree. This is achieved by having regard to the room or space's intended use by occupants, through consideration of the defined terms '*activity traits*' and '*occupant traits*'.

Activity traits: For the purposes of-

- (a) Volume One, the features of the activities that will be undertaken in a habitable room or space; or
- (b) Volume Two, the features of the activities that will be undertaken in a room or space.

Explanatory Information

This term is used to describe the characteristics of the activities that will be undertaken in a room or space.

For example, the activities likely to be undertaken in a bedroom, and the associated features are-

- sleeping a person laying horizontally; and
- resting a person laying horizontally or sitting upright on the bed; and
- leisure activities, such as reading a book a person sitting upright on the bed, with enough space to stretch their arms vertically; and
- dressing/changing clothes a person standing with enough space to stretch their arms vertically.

Administering body: The body responsible for administering the WaterMark Certification Scheme.

Aged care building: A Class 9c building for residential accommodation of aged persons who, due to varying degrees of incapacity associated with the ageing process, are provided with *personal care services* and 24 hour staff assistance to evacuate the building during an emergency.

NSW Aisle

SA Agriculture

- **Air-conditioning:** For the purposes of Section J of Volume One, a *service* that actively cools or heats the air within a space, but does not include a *service* that directly—
 - (a) cools or heats cold or hot rooms; or
 - (b) maintains specialised conditions for equipment or processes, where this is the main purpose of the *service*.
- Alarm zone: For the purposes of Specification 23, an area of a building protected by one or more smoke alarms connected to one alarm circuit.

Alpine area: An area given in Figure 1 and in Table 1 for specific locations, and is-

(a) likely to be subject to significant snowfalls; and

- (b) in New South Wales, the ACT or Victoria more than 1200 m above the Australian Height Datum; and
- (c) in Tasmania more than 900 m above the Australian Height Datum.

Table 1: Alpine areas where snow loads are significant

Location	Map identifier
Kiandra (NSW)	1
Mount Kosciuszko (NSW)	2
Perisher Valley (NSW)	3
Thredbo (NSW)	4
Cabramurra (NSW)	5
Charlotte Pass Village (NSW)	6
Diggers Creek (NSW)	7
Guthega Village (NSW)	8
Mount Blue Cow (NSW)	9
Mount Selwyn (NSW)	10
Perisher Range (NSW)	11
Rules Point (NSW)	12
Sawpit Creek (NSW)	13
Smiggin Holes (NSW)	14
Smiggin Range (NSW)	15
Three Mile Dam (NSW)	16
Wilsons Valley (NSW)	17
Falls Creek (Vic.), including Summit Area, Sun Valley and Village Bowl	18
Mount Baw Baw (Vic.)	19
Mount Buffalo (Vic.), including Chalet, Dingo Dell and Tatra	20
Mount Buller (Vic.), including Baldy and Village	21
Mount Hotham (Vic.), including Davenport and Village Centre	22
Dinner Plain (Vic.)	23
Lake Mountain (Vic.)	24
Mount Stirling (Vic.)	25
Ben Lomond Ski Field (Tas.)	26
Cradle Valley (Tas.)	27
Great Lake Area (Tas.)	28
Mount Field Ski Field (Tas.)	29



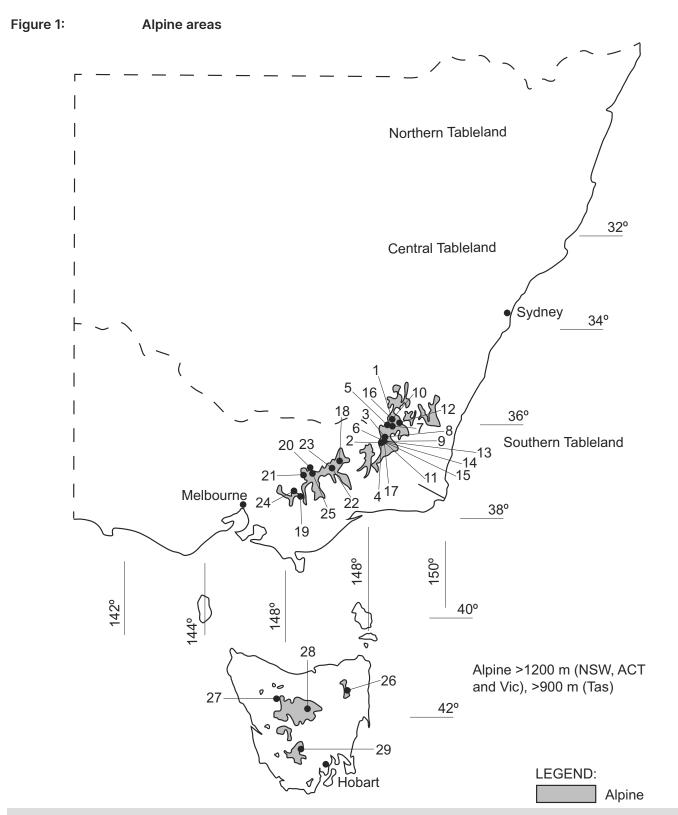


Figure Notes

This map is approximate only and altitude above Australian Height Datum must be used to determine whether the building falls into an *alpine area* region.

Explanatory Information

Alpine areas are located in New South Wales, Victoria and Tasmania.

Alpine areas are areas 1200 m or more above Australian Height Datum (AHD) for New South Wales, Australian Capital Territory and Victoria, and 900 m or more above AHD for Tasmania, as shown in Figure 1.

Alpine areas are considered to receive significant snowfalls (snowfalls that result in an average snow accumulation on

the ground of 175 mm or greater). Regions in New South Wales, the Australian Capital Territory and Victoria between 600 – 1200 m AHD are considered to be sub-alpine areas and may receive significant snowfalls, however unlike alpine areas the snow is unlikely to accumulate.

It is recommended that the *appropriate authority* be consulted to determine whether the building is located in an alpine area. AS/NZS 1170.3 also contains further detail in the identification of alpine areas and the altitude of the alpine regions of Australia.

In the Australian Capital Territory, Canberra is not designated as an alpine area as snow loads are not considered significant.

Alteration: In relation to a building, includes an addition or extension to a building.

Aluminium Composite Panel (ACP): Flat or profiled aluminium sheet material in composite with any type of materials.

Amenity: An attribute which contributes to the health, physical independence, comfort and well-being of people.

Ancillary element: An element that is secondary to and not an integral part of another element to which it is attached.

- Annual exceedance probability: The probability that a given rainfall total accumulated over a given duration will be exceeded in any one year.
- Annual greenhouse gas emissions: The theoretical amount of greenhouse gas emissions attributable to the energy used annually by a building's *services*, excluding kitchen exhaust and the like.

Appropriate authority: For the purposes of the Fire Safety Verification Method, means the relevant authority with the statutory responsibility to determine the particular matter satisfies the relevant *Performance Requirement*.

Explanatory Information

The *Appropriate Authority* is typically the building surveyor or building certifier charged with the statutory responsibility to determine building compliance and issue the building permit / approval and occupancy certificate / approval.

NSW Appropriate authority

Appropriate authority: The relevant authority with the statutory responsibility to determine the particular matter.

- **Appropriately qualified person:** A person recognised by the *appropriate authority* as having qualifications and/or experience in the relevant discipline in question.
- **Approved disposal system:** A system for the disposal of sewage, sullage or stormwater approved by an authority having jurisdiction.

Articulated masonry: Masonry construction in which special provisions have been made for movement by articulation.

NSW Assembly building

SA Assembly building

Assembly building: A building where people may assemble for-

- (a) civic, theatrical, social, political or religious purposes including a library, theatre, public hall or place of worship; or
- (b) educational purposes in a school, early childhood centre, preschool, or the like; or
- (c) entertainment, recreational or sporting purposes including-
 - (i) a discotheque, nightclub or a bar area of a hotel or motel providing live entertainment or containing a dance floor; or
 - (ii) a cinema; or
 - (iii) a sports stadium, sporting or other club; or
- (d) transit purposes including a bus station, railway station, airport or ferry terminal.

Assessment Method: A method that can be used for determining that a *Performance Solution* or *Deemed-to-Satisfy Solution* complies with the *Performance Requirements*.

Assumed cooling thermostat set point: The cooling thermostat set point used to calculate cooling degree hours, and

equal to $17.8 + 0.31T_m$, where T_m is the mean January outdoor air temperature measured in degrees Celsius.

Atrium: A space within a building that connects 2 or more storeys and-

- (a) is enclosed at the top by a floor or roof (including a glazed roof structure); and
- (b) includes any adjacent part of the building not separated by an appropriate barrier to fire; but
- (c) does not include a stairwell, rampwell or the space within a shaft; and
- (d) for the purposes of (a) a space is considered enclosed if the area of the enclosing floor or roof is greater than 50% of the area of the space, measured in plan, of any of the *storeys* connected by the space.

Atrium well: A space in an *atrium* bounded by the perimeter of the openings in the floors or by the perimeter of the floors and the *external walls*.

NSW Auditorium

Automatic: Designed to operate when activated by a heat, smoke or fire sensing device.

Available safe egress time (ASET)

- (1) The time between ignition of a fire and the onset of untenable conditions in a specific part of a building.
- (2) The time referred to in (1) is the calculated interval between the time of ignition of a fire and the time at which conditions become such that the occupant is unable to take effective action to escape to a place of safety.
- Average daylight factor: The ratio of the illumination level within a room provided by daylight to the level of daylight outside the building during overcast conditions.
- Average specific extinction area: The average specific extinction area for smoke as determined by AS 5637.1.
- **Backflow prevention device:** An air gap, break tank or mechanical device that is designed to prevent the unplanned reversal of flow of water or *contaminants* into the water service or a *Network Utility Operator's* water supply.
- Backpressure: A reversal of water flow caused by the downstream pressure becoming greater than the supply pressure.
- **Backsiphonage:** A reversal of flow of water caused by negative pressure in the distributing pipes of a water service or supply.
- **Backstage:** A space associated with, and adjacent to, a *stage* in a Class 9b building for scenery, props, equipment, dressing rooms, or the like.
- **Battery system:** One or more chemical cells connected in series, parallel or a combination of the two for the purpose of electrical energy storage.
- Blockage: An obstruction within a water service or sanitary plumbing or drainage system.
- **Boiler:** A vessel or an arrangement of vessels and interconnecting parts, wherein steam or other vapour is generated, or water or other liquid is heated at a pressure above that of the atmosphere, by the application of fire, the products of combustion, electrical power, or similar high temperature means, and—
 - (a) includes superheaters, reheaters, economisers, boiler piping, supports, mountings, valves, gauges, fittings, controls, the boiler settings and directly associated equipment; but
 - (b) excludes a fully flooded or pressurised system where water or other liquid is heated to a temperature lower than the normal atmospheric boiling temperature of the liquid.
- **Bond breaker:** A material used as part of a *waterproofing system* that prevents the *membrane* bonding to the substrate, bedding or lining.
- **Breaking surf:** Any area of salt water in which waves break on an average of at least 4 days per week but does not include white caps or choppy water.

Explanatory Information

Breaking surf normally occurs in areas exposed to the open sea. Breaking surf does not normally occur in sheltered areas, such as that which occurs around Port Phillip Bay, Sydney Harbour, Swan River, Derwent River and similar locations.

Building complexity criteria: Are used to determine the building complexity level of all or part of a building in accordance with Table 2, where building complexity criteria are as follows:

- (a) Attributes the building is designed or constructed with any of the following sub-criteria:
 - (i) An *effective height* of more than 25 m.
 - (ii) One or more *Performance Solutions* are used to demonstrate compliance with the *Performance Requirements* relating to material and systems for structural safety.

- (iii) One or more *Performance Solutions* are used to demonstrate compliance with the *Performance Requirements* relating to material and systems for fire safety.
- (iv) Is located in an area prone to natural disaster or adverse environmental conditions.
- (b) Class 2 all or part of the building is Class 2 of three or more storeys.
- (c) Occupant numbers the building is to be occupied by more than 100 people determined in accordance with D2D18.
- (d) Occupant characteristics the building is to be occupied by more than 10 people who will require assistance to evacuate the building in an emergency.
- (e) Importance Level the building is determined to be Importance Level 4 or 5.

Notes

The NCC currently does not include corresponding technical requirements relating to the defined term 'building complexity criteria' and the various building complexity levels. It is intended that these terms will be integrated into future editions of the NCC.

Table 2: Building complexity level

Building complexity level	Criteria
Low	The building meets only one of the following <i>building</i> <i>complexity criteria</i> : (a) (Attributes), (b) (Class 2), (c) (Occupant numbers) or (d) (Occupant characteristics)
Medium	The building meets two of the following <i>building</i> <i>complexity criteria</i> : (a) (Attributes), (b) (Class 2), (c) (Occupant numbers) or (d) (Occupant characteristics)
High	The building meets three of the following <i>building</i> <i>complexity criteria</i> : (a) (Attributes), (b) (Class 2), (c) (Occupant numbers) or (d) (Occupant characteristics)
Very high	The building meets all of the following <i>building complexity criteria</i> : (a) (Attributes), (b) (Class 2), (c) (Occupant numbers) and (d) (Occupant characteristics); or (e) (Building Importance Level 4 or 5)

Buried rainwater tank: A rainwater tank that is set into and completely covered by earth.

Burnout: Exposure to fire for a time that includes *fire growth*, full development, and decay in the absence of intervention or automatic suppression, beyond which the fire is no longer a threat to building elements intended to perform *loadbearing* or fire separation functions, or both.

SA Brush fence

SA Bulk grain storage facility

- **Carpark:** A building that is used for the parking of motor vehicles but is neither a *private garage* nor used for the servicing of vehicles, other than washing, cleaning or polishing.
- **Cavity:** A void between 2 leaves of masonry, or in masonry veneer construction, a void between a leaf of masonry and the supporting frame.

Cavity wall: For the purposes of F3V1 and H2V1, a wall that incorporates a drained cavity.

SA Cell type silo

TAS Centre-based care class 4 facility

TAS Centre-based care class 5 facility

- **Certificate of Accreditation:** A certificate issued by a State or Territory accreditation authority stating that the properties and performance of a building material or method of construction or design fulfil specific requirements of the NCC.
- **Certificate of Conformity:** A certificate issued under the ABCB scheme for products and systems certification stating that the properties and performance of a building material or method of construction or design fulfil specific requirements of the NCC.

Certification body: A person or organisation operating in the field of material, product, form of construction or design

certification that has been accredited by the Joint Accreditation System of Australia and New Zealand (JAS-ANZ), and is accredited for a purpose other than as part of the CodeMark Australia Certification Scheme or *WaterMark Certification Scheme*.

Characteristic: The occupant data to be used in the modelling of access solutions which define how an occupant interacts with a building, i.e. occupant movement speeds, turning ability, reach capability, perception of luminance contrast and hearing threshold.

VIC Children's service

- **Clad frame:** Timber or metal frame construction with exterior timber or sheet wall cladding that is not sensitive to minor movement and includes substructure masonry walls up to 1.5 m high.
- **Climate zone:** An area defined in Figure 2 and in Table 3 for specific locations, having energy efficiency provisions based on a range of similar climatic characteristics.

Table 3: Climate zones for thermal design

State	Location	Climate zone
ACT	Canberra	7
NSW	Albury	4
NSW	Armidale	7
NSW	Batemans Bay	6
NSW	Bathurst	7
NSW	Bega	6
NSW	Bellingen Shire - Dorrigo Plateau	7
NSW	Bellingen Shire - Valley & seaboard	2
NSW	Bourke	4
NSW	Broken Hill	4
NSW	Byron Bay	2
NSW	Cobar	4
NSW	Coffs Harbour	2
NSW	Dubbo	4
NSW	Goulburn	7
NSW	Grafton	2
NSW	Griffith	4
NSW	Ivanhoe	4
NSW	Lismore	2
NSW	Lord Howe Island	2
NSW	Moree	4
NSW	Newcastle	5
NSW	Nowra	6
NSW	Orange	7
NSW	Perisher - Smiggins	8
NSW	Port Macquarie	5
NSW	Sydney East	5
NSW	Sydney West	6
NSW	Tamworth	4
NSW	Thredbo	8
NSW	Wagga Wagga	4
NSW	Williamtown	5

State	Location	Climate zone
NSW	Wollongong	5
NSW	Yass	6
NT	Alice Springs	3
NT	Darwin	1
NT	Elliot	3
NT	Katherine	1
NT	Renner Springs	3
NT	Tennant Creek	3
QLD	Birdsville	3
QLD	Brisbane	2
QLD	Bundaberg	2
QLD	Cairns	1
QLD	Cooktown	1
QLD	Cunnamulla	3
QLD	Gladstone	2
QLD	Hervey Bay	2
QLD	Hughenden	3
QLD	Longreach	3
QLD	Mackay	2
QLD	Mount Isa	3
QLD	Normanton	1
QLD	Rockhampton	2
QLD	Roma	3
QLD	Southport	2
QLD	Toowoomba	5
QLD	Townsville	1
QLD	Warwick	5
QLD	Weipa	1
SA	Adelaide	5
SA	Bordertown	6
SA	Ceduna	5
SA	Cook	4
SA	Elliston	5
SA	Kingscote	6
SA	Leigh Creek	5
SA	Lobethal	6
SA	Loxton	5
SA	Naracoorte	6
SA	Marree	4
SA	Mount Gambier	6
SA	Murray Bridge	6
SA	Oodnadatta	4
SA	Port Augusta	4
SA	Port Lincoln	5
JA		5

State	Location	Climate zone
SA	Renmark	5
SA	Tarcoola	4
SA	Victor Harbour	6
SA		4
	Whyalla	7
TAS	Burnie	
TAS	Bicheno	7
TAS	Deloraine	7
TAS	Devonport	7
TAS	Flinders Island	7
TAS	Hobart	7
TAS	Huonville	7
TAS	King Island	7
TAS	Launceston	7
TAS	New Norfolk	7
TAS	Oatlands	7
TAS	Orford	7
TAS	Rossarden	7
TAS	Smithton	7
TAS	St Marys	7
TAS	Zeehan	7
VIC	Anglesea	6
VIC	Ararat	7
VIC	Bairnsdale	6
VIC	Ballarat	7
VIC	Benalla	6
VIC	Bendigo	6
VIC	Bright	7
VIC	Colac	6
VIC	Dandenong	6
VIC	Echuca	4
VIC	Geelong	6
VIC	Hamilton	7
VIC	Horsham	6
VIC	Melbourne	6
VIC	Mildura	4
VIC	Portland	6
VIC	Sale	6
VIC	Shepparton	4
VIC	Swan Hill	4
VIC		6
VIC	Traralgon	б 7
	Wangaratta	
VIC	Warrnambool	6
VIC	Wodonga	6
WA	Albany	6

State	Location	Climate zone
WA	Balladonia	4
WA	Broome	1
WA	Bunbury	5
WA	Carnarvon	3
WA	Christmas Island	1
WA	Cocos Island	1
WA	Derby	1
WA	Esperance	5
WA	Exmouth	1
WA	Geraldton	5
WA	Halls Creek	3
WA	Kalgoorlie-Boulder	4
WA	Karratha	1
WA	Meekatharra	4
WA	Northam	4
WA	Pemberton	6
WA	Perth	5
WA	Port Hedland	1
WA	Wagin	4
WA	Wyndham	1

Figure 2:

Climate zones for thermal design

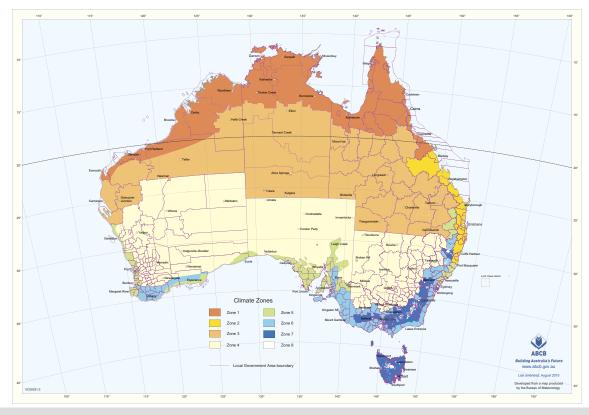


Figure Notes

- (1) This map can be viewed in enlargeable form on the ABCB website at abcb.gov.au.
- (2) A Zone 4 area in South Australia, other than a council area, at an altitude greater than 300 m above the

Australian Height Datum is to be considered as Zone 5.

- (3) The areas referred to in (2) have been defined in an enlarged format on the following maps produced by the Department of Planning, Transport and Infrastructure (these maps can be viewed on the Government of South Australia website at www.sa.gov.au):
 - (a) Adelaide Hills Climate Zone Map.
 - (b) Barossa Council Climate Zone Map.
 - (c) Regional Council of Goyder Climate Zone Map.
- (4) Locations in *climate zone* 8 are in *alpine areas*.

Combustible: Applied to-

- (a) a material means combustible as determined by AS 1530.1; and
- (b) construction or part of a building means constructed wholly or in part of combustible materials.

VIC Combustible cladding product

Common wall: For the purposes of-

- (a) Volume One, a wall that is common to adjoining buildings.
- (b) Volume Two and the ABCB Housing Provisions, a wall that is common to adjoining buildings other than Class 1 buildings.
- **Condensation:** The formation of moisture on the surface of a building element or material as a result of moist air coming into contact with a surface which is at a lower temperature.

Conditioned space: For the purposes of-

- (a) Volume One, a space within a building, including a ceiling or under-floor supply air plenum or return air plenum, where the environment is likely, by the intended use of the space, to have its temperature controlled by *air-conditioning*; or
- (b) Volume Two, a space within a building that is heated or cooled by the building's *domestic services*, excluding a non-*habitable room* in which a heater with a capacity of not more than 1.2 kW or 4.3 MJ/hour is installed.
- **Construction activity actions:** Actions due to stacking of building materials or the use of equipment, including cranes and trucks, during construction or actions which may be induced by floor to floor propping.
- **Containment protection:** The installation of a *backflow prevention device* at the *point of connection* of a *Network Utility Operator's* water supply to a site.
- **Contaminant:** Any substance (including gases, liquids, solids or micro-organisms), energy (excluding noise) or heat, that either by itself or in combination with the same, similar or other substances, energy or heat, changes or is likely to change the physical, chemical or biological condition of water.

NSW Continental seating

- **Controlled fill:** Material that has been placed and compacted in layers with compaction equipment (such as a vibrating plate) within a defined moisture range to a defined density requirement.
- **Cooling degree hours:** For any one hour when the mean outdoor air temperature is above the *assumed cooling thermostat set point*, the degree Celsius air temperature difference between the mean outdoor air temperature and the *assumed cooling thermostat set point*.
- **Cooling load:** The calculated amount of energy removed from the cooled spaces of the building annually by artificial means to maintain the desired temperatures in those spaces.

Critical radiant flux (CRF): The critical heat flux at extinguishment (CHF in kW/m²) as determined by AS ISO 9239.1.

Cross-connection: Any actual or potential connection between a water supply and any contaminant.

NSW Cross-over

Curtain wall: A non-loadbearing external wall that is not a panel wall.

- **Daily outdoor temperature range:** The difference between the maximum and minimum temperatures that occur in a day.
- **Damp-proof course (DPC):** A continuous layer of impervious material placed in a masonry wall or pier, or between a wall or pier and a floor, to prevent the upward or downward migration of water.

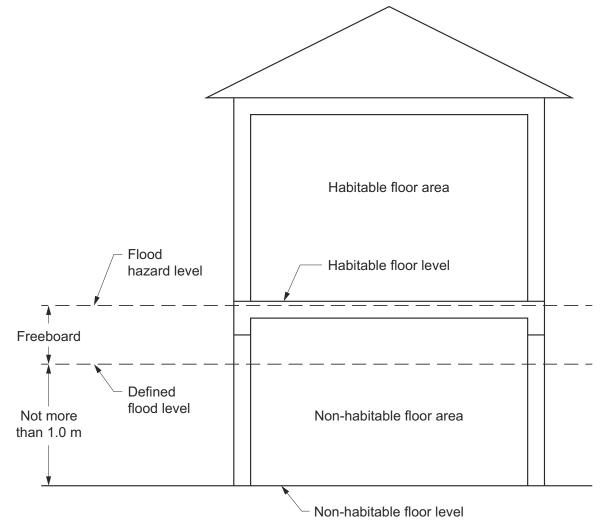
Deemed-to-Satisfy Provisions: Provisions which are deemed to satisfy the Performance Requirements.

Deemed-to-Satisfy Solution: A method of satisfying the Deemed-to-Satisfy Provisions.

Defined flood event (DFE): The flood event selected for the management of flood hazard for the location of specific development as determined by the *appropriate authority*.

Defined flood level (DFL): The flood level associated with a *defined flood event* relative to a specified datum (see Figure 3).

Figure 3: Identification of defined flood level, flood hazard level and freeboard



Dehumidification gram hours: For any one hour when the mean humidity is more than 15.7g/kg, the grams per kilogram of absolute humidity difference between the mean outdoor absolute humidity and 15.7g/kg.

NSW Designated bushfire prone area

- **Designated bushfire prone area:** Land which has been designated under a power of legislation as being subject, or likely to be subject, to bushfires.
- **Design bushfire:** The characteristics of a bushfire, its initiation, spread and development, which arises from weather conditions, topography and fuel (vegetation) in a given setting, used to determine *fire actions*.

Design fire: The quantitative description of a representation of a fire within the *design scenario*.

Design scenario: The specific scenario of which the sequence of events is quantified and a *fire safety engineering* analysis is conducted against.

WA Design wind speed

Design wind speed: The design gust wind speed for the area where the building is located, calculated in accordance with AS/NZS 1170.2 or AS 4055 (see Table 4 for wind classes).

Table 4:Wind classes

Non-cyclonic Region A and B	Cyclonic Region C and D
N1, N2, N3	C1
N4, N5, N6 (these wind classes are covered in the ABCB Housing Provisions Part 2.2).	C2, C3, C4 (these wind classes are covered in the ABCB Housing Provisions Part 2.2).

Table Notes

- (1) Wind classification map identifying wind regions is contained in ABCB Housing Provisions Part 2.2 (see Figure 2.2.3).
- (2) Information on wind classes for particular areas may be available from the appropriate authority.
- (3) "N" = non-cyclonic winds and "C" = cyclonic winds.
- **Detention centre:** A building in which persons are securely detained by means of the built structure including a prison, remand centre, juvenile detention centre, holding cells or psychiatric detention centre.

NSW Development consent

Direct fix cladding wall: For the purposes of F3V1 and H2V1, means a wall with cladding attached directly to the wall framing without the use of a drained cavity.

Discontinuous construction: Means-

- (a) a wall having a minimum 20 mm cavity between 2 separate leaves, and-
 - (i) for masonry, where wall ties are used to connect leaves, the ties are of the resilient type; and
 - (ii) for other than masonry, there is no mechanical linkage between the leaves, except at the periphery; and
- (b) a staggered stud wall is not deemed to be discontinuous construction.
- **Display glazing:** *Glazing* used to display retail goods in a shop or showroom directly adjacent to a walkway or footpath, but not including that used in a café or restaurant.

Domestic services: The basic engineering systems that use energy or control the use of energy; and-

- (a) includes—
 - (i) heating, air-conditioning, mechanical ventilation and artificial lighting; and
 - (ii) pumps and heaters for *swimming pools* and spa pools; and
 - (iii) heated water systems; and
 - (iv) on-site renewable energy equipment; but
- (b) excludes cooking facilities and portable appliances.

Drainage: Any part of-

- (a) a sanitary drainage system, including any liquid trade waste drainage; or
- (b) a stormwater drainage system.
- **Drainage flange:** A flange connected to a waste pipe, at the point at which it passes through the floor substrate, to prevent leakage and which enables tile bed drainage into the waste pipe.

Drainage riser: A waste pipe between the floor waste and the drainage system.

Drinking water: Water intended primarily for human consumption but which has other domestic uses.

Explanatory Information

See also the Australian Drinking Water Guidelines produced by the National Health and Medical Research Council.

TAS Early childhood centre

VIC Early childhood centre

Early childhood centre: Any premises or part thereof providing or intending to provide a centre-based education and care service within the meaning of the Education and Care Services National Law Act 2010 (Vic), the Education and Care Services National Regulations and centre-based services that are licensed or approved under State and Territory children's services law, but excludes education and care primarily provided to school aged children in outside school

hours settings.

- **Effective height:** The vertical distance between the floor of the lowest *storey* included in the calculation of *rise in storeys* and the floor of the topmost *storey* (excluding the topmost *storey* if it contains only heating, ventilating, lift or other equipment, water tanks or similar service units).
- **Efficacy:** The degree to which a system achieves a design objective given that it performs to a level consistent with the system specification during the relevant fire scenario.
- **Electricity network substation:** A building in which high voltage supply is converted or transformed and which is controlled by a licensed network service provider designated under a power of legislation.
- **Electric passenger lift:** A power-operated lift for raising or lowering people in a car in which the motion of the car is obtained from an electric motor mechanically coupled to the hoisting mechanism.
- **Electrohydraulic passenger lift:** A power-operated lift for raising or lowering people in a car in which the motion of the car is obtained from the action of liquid under pressure acting on a piston or ram, the pressure being generated by a pump driven by an individual electric motor.
- **Energy value:** The net cost to society including, but not limited to, costs to the building user, the environment and energy networks.

Engaged pier: A pier bonded to a masonry wall by course bonding of masonry units or by masonry ties.

NSW Entertainment venue

Envelope: For the purposes of-

- (a) Section J in NCC Volume One, the parts of a building's *fabric* that separate a *conditioned space* or *habitable room* from—
 - (i) the exterior of the building; or
 - (ii) a non-conditioned space including-
 - (A) the floor of a rooftop plant room, lift-machine room or the like; and
 - (B) the floor above a *carpark* or warehouse; and
 - (C) the common wall with a carpark, warehouse or the like; or
- (b) Part H6 in NCC Volume Two and Section 13 of the ABCB Housing Provisions, the parts of a building's *fabric* that separate artificially heated or cooled spaces from—
 - (i) the exterior of the building; or
 - (ii) other spaces that are not artificially heated or cooled.

Equivalent: Equivalent to the level of health, safety and amenity provided by the Deemed-to-Satisfy Provisions.

- **Evacuation route:** The continuous path of travel (including *exits, public corridors* and the like) from any part of a building, including within a *sole-occupancy unit* in a Class 2 or 3 building or Class 4 part, to a *safe place*.
- **Evacuation time:** The time calculated from when the emergency starts for the occupants of the building to evacuate to a *safe place*.

Exit: Means-

- (a) Any, or any combination of the following if they provide egress to a road or open space:
 - (i) An internal or external stairway.
 - (ii) A ramp.
 - (iii) A fire-isolated passageway.
 - (iv) A doorway opening to a road or open space; or
- (b) A horizontal exit or a fire-isolated passageway leading to a horizontal exit.

TAS Expert judgement

Expert judgement: The judgement of an expert who has the qualifications and experience to determine whether a *Performance Solution* or *Deemed-to-Satisfy Solution* complies with the *Performance Requirements*.

Explanatory Information

Contemporary and relevant qualifications and/or experience are necessary to determine whether a Performance

Solution complies with the *Performance Requirements*. The level of qualification and/or experience may differ depending on the complexity of the proposal and the requirements of the regulatory authority. Practitioners should seek advice from the authority having jurisdiction or *appropriate authority* for clarification as to what will be accepted.

External wall: For the purposes of-

- (a) Volume One, an outer wall of a building which is not a *common wall*; or
- (b) Volume Two, an outer wall of a building which is not a *separating wall*.

Extra-low voltage: A voltage not exceeding 50 V AC or 120 V ripple-free DC.

Fabric: The basic building structural elements and components of a building including the roof, ceilings, walls, glazing and floors.

SA Farm building

Farm building: A Class 7 or 8 building located on land primarily used for farming-

- (a) that is-
 - (i) used in connection with *farming*; or
 - (ii) used primarily to store one or more farm vehicles; or
 - (iii) a combination of (i) and (ii); and
- (b) in which the total number of persons accommodated at any time does not exceed one person per 200 m² of floor area or part thereof, up to a maximum of 8 persons; and
- (c) with a total *floor area* of not more than 3500 m².

Farming: Includes—

- (a) cultivating, propagating and harvesting plants or fungi or their products or parts, including seeds, spores, bulbs or the like, but does not include forestry; or
- (b) maintaining animals in any physical environment for the purposes of-
 - (i) breeding them; or
 - (ii) selling them; or
 - (iii) acquiring and selling their bodily produce such as milk, wool, eggs or the like; or
- (c) a combination of (a) and (b),

but does not include forestry or maintaining animals for sport or recreational purposes.

Farm shed: A single storey Class 7 or 8 building located on land primarily used for farming-

- (a) that is-
 - (i) used in connection with *farming*; or
 - (ii) used primarily to store one or more farm vehicles; or
 - (iii) a combination of (i) and (ii); and
- (b) occupied neither frequently nor for extended periods by people; and
- (c) in which the total number of persons accommodated at any time does not exceed 2; and
- (d) with a total *floor area* of more than 500 m^2 but not more than 2000 m^2 .

Farm vehicle: A vehicle used in connection with farming.

NSW Film

Finished ground level: The ground level adjacent to footing systems at the completion of construction and landscaping.

Fire actions: Each of the following:

- (a) airborne embers; and
- (b) burning debris and/or accumulated embers adjacent to building elements; and
- (c) heat transfer from combustible materials within the site; and
- (d) radiant heat from a bushfire front; and
- (e) flame contact from a bushfire front; and

- (f) the period of time post fire front subject to collapsing vegetation due to persistent combustion.
- **Fire brigade:** A statutory authority constituted under an Act of Parliament having as one of its functions, the protection of life and property from fire and other emergencies.
- Fire brigade station: For the purposes of E1D2(1)(b) and I3D9, means a state or territory government operated premises which is a station for a *fire brigade*.

Fire compartment: Either-

- (a) the total space of a building; or
- (b) when referred to in-
 - (i) the *Performance Requirements* any part of a building separated from the remainder by barriers to fire such as walls and/or floors having an appropriate resistance to the spread of fire with any openings adequately protected; or
 - (ii) the Deemed-to-Satisfy Provisions any part of a building separated from the remainder by walls and/or floors each having an FRL not less than that required for a fire wall for that type of construction and where all openings in the separating construction are protected in accordance with the Deemed-to-Satisfy Provisions of the relevant Part.
- Fire growth: The stage of fire development during which the *heat release rate* and the temperature of the fire are generally increasing.
- **Fire hazard:** The danger in terms of potential harm and degree of exposure arising from the start and spread of fire and the smoke and gases that are thereby generated.
- Fire hazard properties: The following properties of a material or assembly that indicate how they behave under specific fire test conditions:
 - (a) Average specific extinction area, critical radiant flux and Flammability Index, determined as defined in Schedule 1.
 - (b) *Smoke-Developed Index, smoke development rate* and *Spread-of-Flame Index*, determined in accordance with Specification 3.
 - (c) Group number and smoke growth rate index (SMOGRA_{RC}), determined in accordance with Specification 7.

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

- Fire-isolated passageway: A corridor, hallway or the like, of *fire-resisting construction*, which provides egress to or from a *fire-isolated stairway* or *fire-isolated ramp* or to a road or *open space*.
- Fire-isolated ramp: A ramp within a *fire-resisting* enclosure which provides egress from a *storey*.

Fire-isolated stairway: A stairway within a fire-resisting shaft and includes the floor and roof or top enclosing structure.

Fire load: The sum of the net calorific values of the *combustible* contents which can reasonably be expected to burn within a *fire compartment*, including furnishings, built-in and removable materials, and building elements.

Notes

The calorific values must be determined at the ambient moisture content or humidity (the unit of measurement is MJ).

Fire-protected timber: Fire-resisting timber building elements that comply with Specification 10.

Fire-protective covering: Any one or more of the following:

- (a) 13 mm fire-protective grade plasterboard.
- (b) 12 mm cellulose cement flat sheeting complying with AS/NZS 2908.2 or ISO 8336.
- (c) 12 mm fibrous plaster reinforced with 13 mm x 13 mm x 0.7 mm galvanised steel wire mesh located not more than 6 mm from the exposed face.
- (d) Other material not less fire-protective than 13 mm fire-protective grade plasterboard, fixed in accordance with the normal trade practice for a fire-protective covering.

Fire-resistance level (FRL): The grading periods in minutes determined in accordance with Specifications 1 and 2, for the following criteria—

- (a) *structural adequacy*; and
- (b) *integrity*; and

(c) insulation,

and expressed in that order.

Notes

A dash means there is no requirement for that criterion. For example, 90/–/– means there is no requirement for an FRL for *integrity* and *insulation*, and –/–/– means there is no requirement for an FRL.

Fire-resisting construction: For the purposes of Volume One, means one of the Types of construction referred to in Part C2 of Volume One.

Fire-resisting: For the purposes of-

- (a) Volume One, applied to a building element, having an FRL appropriate for that element; or
- (b) Volume Two, applied to a *structural member* or other part of a building, having the FRL *required* for that *structural member* or other part.
- **Fire safety engineering:** Application of engineering principles, rules and *expert judgement* based on a scientific appreciation of the fire phenomenon, often using specific *design scenario*, of the effects of fire and of the reaction and behaviour of people in order to—
 - (a) save life, protect property and preserve the environment and heritage from destructive fire; and
 - (b) quantify the hazards and risk of fire and its effects; and
 - (c) mitigate fire damage by proper design, construction, arrangement and use of buildings, materials, structures, industrial processes and transportation systems; and
 - (d) evaluate analytically the optimum protective and preventive measures, including design, installation and maintenance of active and passive fire and life safety systems, necessary to limit, within prescribed levels, the consequences of fire.

Fire safety system: One or any combination of the methods used in a building to-

- (a) warn people of an emergency; or
- (b) provide for safe evacuation; or
- (c) restrict the spread of fire; or
- (d) extinguish a fire,

and includes both active and passive systems.

Fire-source feature: Any one or more of the following:

- (a) The far boundary of a road, river, lake or the like adjoining the allotment.
- (b) A side or rear boundary of the allotment.
- (c) An external wall of another building on the allotment which is not a Class 10 building.

Fire wall: A wall with an appropriate resistance to the spread of fire that divides a storey or building into fire compartments.

Fixed wired: For the purposes of Specification 23, a system of electrical wiring (either AC or DC), in which cables are fixed or supported in position.

Flammability Index: The index number as determined by AS 1530.2.

VIC Flashing

- **Flashing:** A strip or sleeve of impervious material dressed, fitted or built-in to provide a barrier to water movement, or to divert the travel of water, or to cover a joint where water would otherwise penetrate to the interior of a building, and includes the following:
 - (a) Perimeter flashing: a flashing used at the floor-wall junction.
 - (b) Vertical flashing: a flashing used at wall junctions within *shower areas*.

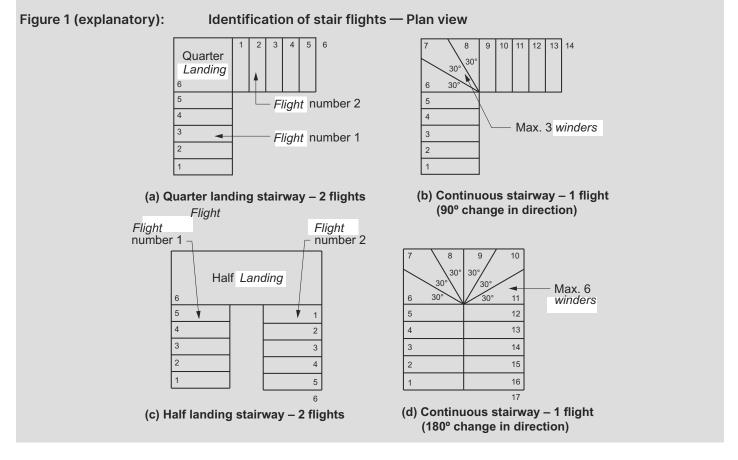
Flashover: In relation to fire hazard properties, means a heat release rate of 1 MW.

Flight: That part of a stair that has a continuous series of *risers*, including *risers* of *winders*, not interrupted by a *landing* or floor.

Explanatory Information

A *flight* is the part of a stair that has a continuous slope created by the nosing line of treads. The length of a *flight* is limited to restrict the distance a person could fall down a stair.

Quarter *landings*, as shown in Explanatory Figure 1, are considered sufficient to halt a person's fall and therefore are considered for the purposes of NCC Volume Two and the ABCB Housing Provisions not to be part of the *flight*.



VIC Flood hazard area

Flood hazard area: The *site* (whether or not mapped) encompassing land lower than the *flood hazard level* which has been determined by the *appropriate authority*.

Flood hazard level (FHL): The flood level used to determine the height of floors in a building and represents the *defined flood level* plus the *freeboard* (see Figure 3).

Floor area: For the purposes of-

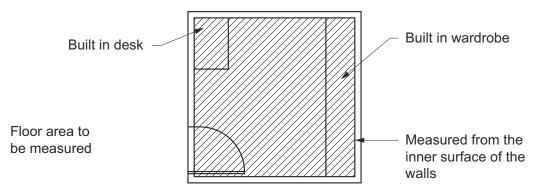
- (1) Volume One—
 - (a) in relation to a building the total area of all storeys; and
 - (b) in relation to a storey the area of all floors of that storey measured over the enclosing walls, and includes—
 - (i) the area of a *mezzanine* within the *storey*, measured within the finished surfaces of any *external walls*; and
 - (ii) the area occupied by any *internal wall* or partitions, any cupboard, or other built-in furniture, fixture or fitting; and
 - (iii) if there is no enclosing wall, an area which has a use that contributes to the *fire load* or impacts on the safety, health or amenity of the occupants in relation to the provisions of the BCA; and
 - (c) in relation to a room the area of the room measured within the internal finished surfaces of the walls, and includes the area occupied by any cupboard or other built-in furniture, fixture or fitting; and
 - (d) in relation to a *fire compartment* the total area of all floors within the *fire compartment* measured within the finished internal surfaces of the bounding construction, and if there is no bounding construction, includes an area which has a use which contributes to the *fire load*; and
 - (e) in relation to an *atrium* the total area of all floors within the *atrium* measured within the finished surfaces

of the bounding construction and if no bounding construction, within the external walls.

(2) Volume Two and the ABCB Housing Provisions, in relation to a room, the area of the room measured within the finished surfaces of the walls, and includes the area occupied by any cupboard or other built-in furniture, fixture or fitting (see Figure 4).

Figure 4:

Identification of floor area of a room

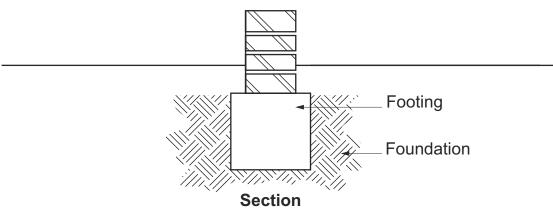


Floor waste: A grated inlet within a graded floor intended to drain the floor surface.

NSW Flying scenery

Foundation: The ground which supports the building (see Figure 5).

Figure 5: Identification of foundation



Fractional effective dose (FED): The fraction of the dose (of thermal effects) that would render a person of average susceptibility incapable of escape.

Explanatory Information

The definition for FED has been modified from the ISO definition to be made specific for the Fire Safety *Verification Method*. The use of CO or CO₂ as part of FED is not part of that *Verification Method*. This is because the ability to measure CO in a repeatable test varies by two orders of magnitude for common cellosic fuel.

VIC Freeboard

Freeboard: The height above the *defined flood level* as determined by the *appropriate authority*, used to compensate for effects such as wave action and localised hydraulic behaviour.

Fully developed fire: The state of total involvement of the majority of available combustible materials in a fire.

NSW Garage top dwelling

Glazing: For the purposes of—

- (a) Section J of Volume One, except for a sole-occupancy unit of a Class 2 building or a Class 4 part of a building-
 - (i) a transparent or translucent element and its supporting frame located in the envelope; and
 - (ii) includes a *window* other than a *roof light*; or
- (b) Section J of NCC Volume One, for a sole-occupancy unit of a Class 2 building or a Class 4 part of a building-

- (i) a translucent element and its supporting frame located in the external *fabric* of the building; and
- (ii) includes a *window* other than a *roof light*; or
- (c) Part H6 of NCC Volume Two and Section 13 of the ABCB Housing Provisions-
 - (i) a transparent or translucent element and its supporting frame located in the external *fabric* of the building; and
 - (ii) includes a *window* other than a *roof light*.
- **Going:** The horizontal dimension from the front to the back of a tread less any overhang from the next tread or *landing* above (see Figure 11.2.2f in the ABCB Housing Provisions).

Green Star: The building sustainability rating scheme managed by the Green Building Council of Australia.

NSW Grid

Group number: The number of one of 4 groups of materials used in the regulation of *fire hazard properties* and applied to materials used as a finish, surface, lining, or attachment to a wall or ceiling.

Habitable room: A room used for normal domestic activities, and-

- (a) includes a bedroom, living room, lounge room, music room, television room, kitchen, dining room, sewing room, study, playroom, family room, home theatre and sunroom; but
- (b) excludes a bathroom, laundry, water closet, pantry, walk-in wardrobe, corridor, hallway, lobby, photographic darkroom, clothes-drying room, and other spaces of a specialised nature occupied neither frequently nor for extended periods.
- Hazard Rating: A level of potential toxicity that may cause contamination in a *drinking water* system, having a rating of *Low Hazard*, *Medium Hazard* or *High Hazard*, determined in accordance with NCC Volume Three.
- **Health-care building:** A building whose occupants or patients undergoing medical treatment generally need physical assistance to evacuate the building during an emergency and includes—
 - (a) a public or private hospital; or
 - (b) a nursing home or similar facility for sick or disabled persons needing full-time care; or
 - (c) a clinic, day surgery or procedure unit where the effects of the predominant treatment administered involve patients becoming non-ambulatory and requiring supervised medical care on the premises for some time after the treatment.

Heated water: Water that has been intentionally heated; normally referred to as hot water or warm water.

- **Heating degree hours:** For any one hour when the mean outdoor air temperature is less than 15°C, the degrees Celsius temperature difference between the mean outdoor air temperature and 15°C.
- **Heating load:** The calculated amount of energy delivered to the heated spaces of the building annually by artificial means to maintain the desired temperatures in those spaces.

Heat release: The thermal energy produced by combustion (measured in kJ).

Heat release rate (HRR): The rate of thermal energy production generated by combustion, measured in kW (preferred) or MW.

High Hazard: Any condition, device or practice which, in connection with a water supply, has the potential to cause death.

High wind area: A region that is subject to design wind speed more than N3 or C1 (see Table 4).

Hob: The upstand at the perimeter of a shower area.

Horizontal exit: A required doorway between 2 parts of a building separated from each other by a fire wall.

VIC Hotel offering shared accommodation

Hours of operation: The number of hours when the occupancy of the building is greater than 20% of the peak occupancy.

House energy rating software: For the purposes of-

- (a) Volume One, software accredited under the Nationwide House Energy Rating Scheme (NatHERS); or
- (b) Volume Two-
 - (i) applied to H6V2—software accredited or previously accredited under the Nationwide House Energy Rating Scheme (NatHERS) and the additional functionality provided in non-regulatory mode; and
 - (ii) applied to Specification 42—software accredited under the Nationwide House Energy Rating Scheme (NatHERS).

Explanatory Information

The Nationwide House Energy Rating Scheme (NatHERS) refers to the Australian Governments' scheme that facilitates consistent energy ratings from software tools which are used to assess the potential thermal efficiency of dwelling envelopes.

Illuminance: The luminous flux falling onto a unit area of surface.

Illumination power density: The total of the power that will be consumed by the lights in a space, including any lamps, ballasts, current regulators and control devices other than those that are plugged into socket outlets for intermittent use such as floor standing lamps, desk lamps or work station lamps, divided by the area of the space, and expressed in W/m².

Explanatory Information

Illumination power density relates to the power consumed by the lighting system and includes the light source or luminaire and any control device. The power for the lighting system is the illumination power load. This approach is more complicated than the *lamp power density* approach but provides more flexibility for a dwelling with sophisticated control systems.

The area of the space refers to the area the lights serve. This could be considered a single room, open plan space, verandah, balcony or the like, or the total area of all these spaces.

Inclined lift: A power-operated device for raising or lowering people within a carriage that has one or more rigid guides on an inclined plane.

Individual protection: The installation of a *backflow prevention device* at the point where a water service connects to a single fixture or appliance.

NSW Information and education facility

Insulation: In relation to an FRL, the ability to maintain a temperature on the surface not exposed to the furnace below the limits specified in AS 1530.4.

Integrity: In relation to an FRL, the ability to resist the passage of flames and hot gases specified in AS 1530.4.

Internal wall: For the purposes of-

- (a) Volume One, excludes a common wall or a party wall; or
- (b) Volume Two, excludes a *separating wall*, common wall or party wall.

Interstitial condensation: The *condensation* of moisture on surfaces between material layers inside the building component.

Irrigation system: An irrigation system of the following types:

- (a) Type A— all permanently open outlets and piping more than 150 mm above finished surface level, not subject to ponding or *backpressure* and not involving injection systems.
- (b) Type B— irrigation systems in domestic or residential buildings with piping or outlets installed less than 150 mm above finished surface level and not involving injection systems.
- (c) Type C— irrigation systems in other than domestic or residential buildings with piping outlets less than 150 mm above finished surface level and not involving injection systems.
- (d) Type D— irrigation systems where fertilizers, herbicides, nematicides or the like are injected or siphoned into the system.

JAS-ANZ: The Joint Accreditation System of Australia and New Zealand.

Lamp power density: The total of the maximum power rating of the lamps in a space, other than those that are plugged into socket outlets for intermittent use such as floor standing lamps, desk lamps or work station lamps, divided by the area of the space, and expressed in W/m².

Explanatory Information

Lamp power density is a simple means of setting energy consumption at an efficient level for Class 1 and associated Class 10a buildings.

Lamp refers to the globe or globes that are to be installed in a permanently wired light fitting. The maximum power of

a lamp is usually marked on the fitting as the maximum allowable wattage.

The area of the space refers to the area the lights serve. This could be considered a single room, open plan space, verandah, balcony or the like, or the total area of all these spaces.

Landing: An area at the top or bottom of a *flight* or between two *flights*.

Latent heat gain: The heat gained by the vapourising of liquid without change of temperature.

- Lateral support: A support (including a footing, buttress, cross wall, beam, floor or braced roof structure) that effectively restrains a wall or pier at right angles to the face of the wall or pier.
- **Lead free:** Where a plumbing product or material in contact with *drinking water* has a *weighted average* lead content of not more than 0.25%.

NSW Licensed premises

WA Licensed premises

Lightweight construction: Construction which incorporates or comprises—

- (a) sheet or board material, plaster, render, sprayed application, or other material similarly susceptible to damage by impact, pressure or abrasion; or
- (b) concrete and concrete products containing pumice, perlite, vermiculite, or other soft material similarly susceptible to damage by impact, pressure or abrasion; or
- (c) masonry having a width of less than 70 mm.

Loadbearing: Intended to resist vertical forces additional to those due to its own weight.

Loadbearing wall: For the purposes of H1D4 and H2D3 of NCC Volume Two and Section 4 of the ABCB Housing Provisions, means any wall imposing on the footing a load greater than 10 kN/m.

Loss: Physical damage, financial loss or loss of amenity.

- Low Hazard: Any condition, device or practice which, in connection with a water supply, would constitute a nuisance by colour, odour or taste but does not have the potential to injure or endanger health.
- Low rainfall intensity area: An area with a 5 minute rainfall intensity for an *annual exceedance probability* of 5% of not more than 125 mm/hour.

Explanatory Information

Rainfall intensity figures can be obtained from Table 7.4.3d in the ABCB Housing Provisions.

- Low-rise, low-speed constant pressure lift: A power-operated low-rise, low-speed device for raising or lowering people with limited mobility on a carriage that is controlled by the application of constant pressure to a control.
- **Low-rise platform lift:** A power-operated device for raising or lowering people with limited mobility on a platform, that is controlled automatically or by the application of constant pressure to a control.

Low voltage: A voltage exceeding extra-low voltage, but not exceeding 1000 V AC or 1500 V DC.

- Luminance contrast: The light reflected from one surface or component, compared to the light reflected from another surface or component.
- Main water heater: The domestic hot water unit in a dwelling that is connected to at least one shower and the largest number of hot water outlets.

Main space conditioning: Either-

- (a) the heating or cooling equipment that serves at least 70% of the conditioned space of a dwelling; or
- (b) if no one heating or cooling equipment serves at least 70% of the *conditioned space* of the dwelling, the equipment that results in the highest net equivalent energy usage when calculated in accordance with J3D14(1)(a) of NCC Volume One or 13.6.2(1)(a) of the ABCB Housing Provisions.

Notes

- (1) If a multi-split *air-conditioning* unit is installed, it is considered to be a single heating or cooling *service*.
- (2) A series of separate heaters or coolers of the one type can be considered a single heater or cooler type with a performance level of that of the unit with the lowest efficiency.

Explanatory Information

The purpose of defining for main space conditioning is to provide criteria upon which the heating or cooling equipment should be selected when showing compliance with J3D14(1)(a) of NCC Volume One and 13.6.2(1)(a) of the ABCB Housing Provisions when more than one type and efficiency of equipment is present. In J3D14(1)(a) the formula that determines E_R allows the selection of only one heating or cooling system. This definition requires that if any one system serves at least 70% of the *floor area* that is heated or cooled it should be used as the basis of determining E_R . If, however, no one system serves at least 70% of the *floor area*, then the appliance that results in the highest net equivalent energy usage, when calculated in accordance with J3D14(1)(a)/13.6.2(1)(a), should be selected.

Massive timber: An element not less than 75 mm thick as measured in each direction formed from solid and laminated timber.

Maximum retained water level: The point where surface water will start to overflow out of the shower area.

Medium Hazard: Any condition, device or practice which, in connection with a water supply, has the potential to injure or endanger health.

Membrane: A barrier impervious to moisture.

Explanatory Information

A barrier may be a single or multi-part system.

Mezzanine: An intermediate floor within a room.

Minimum Energy Performance Standards (MEPS): The Minimum Energy Performance Standards for equipment and appliances established through the Greenhouse and Energy Minimum Standards Act 2012.

NSW Minimum lateral clearance

Mixed construction: A building consisting of more than one form of construction, particularly in double-storey buildings.

Mould: A fungal growth that can be produced from conditions such as dampness, darkness, or poor ventilation.

NABERS Energy: The National Australian Built Environment Rating Systems for energy efficiency, which is managed by the New South Wales Government.

Network Utility Operator: A person who-

- (a) undertakes the piped distribution of *drinking water* or *non-drinking water* for supply; or
- (b) is the operator of a sewerage system or a stormwater *drainage* system.

Explanatory Information

A Network Utility Operator in most States and Territories is the water and sewerage authority licensed to supply water and receive sewage and/or stormwater. The authority operates or proposes to operate a network that undertakes the distribution of water for supply and undertakes to receive sewage and/or stormwater drainage. This authority may be a licensed utility, local government body or council.

Non-combustible: Applied to-

- (a) a material means not deemed *combustible* as determined by AS 1530.1 Combustibility Tests for Materials; or
- (b) construction or part of a building means constructed wholly of materials that are not deemed *combustible*.

Non-drinking water: Water which is not intended primarily for human consumption.

Occupant traits: For the purposes of—

- (a) Volume One, the features, needs and profile of the occupants in a *habitable room* or space; or
- (b) Volume Two, the features, needs and profile of the occupants in a room or space.

Explanatory Information

For the purpose of Volume Two, this term is used to describe the characteristics of the occupants and their associated requirements in relation to a room or space.

For example, in relation to a bedroom, the following occupant characteristics and associated requirements should be

considered:

- Characteristics: height, mobility and how often the space will be used.
- Requirements: a sleeping space and a space to undertake leisure activities.

Occupiable outdoor area: A space on a roof, balcony or similar part of a building-

- (a) that is open to the sky; and
- (b) to which access is provided, other than access only for maintenance; and
- (c) that is not open space or directly connected with open space.

VIC On-site wastewater management system

On-site wastewater management system: A system that receives and/or treats wastewater generated and discharges the resulting effluent to an *approved disposal system* or re-use system.

Open-deck carpark: A carpark in which all parts of the parking *storeys* are cross-ventilated by permanent unobstructed openings in not fewer than 2 opposite or approximately opposite sides, and—

- (a) each side that provides ventilation is not less than $\frac{1}{6}$ of the area of any other side; and
- (b) the openings are not less than $\frac{1}{2}$ of the wall area of the side concerned.
- **Open space:** A space on the allotment, or a roof or similar part of a building adequately protected from fire, open to the sky and connected directly with a public road.

Open spectator stand: A tiered stand substantially open at the front.

Other property: All or any of the following-

- (a) any building on the same or an adjoining allotment; and
- (b) any adjoining allotment; and
- (c) a road.

Outdoor air: Air outside the building.

- **Outdoor air economy cycle:** A mode of operation of an *air-conditioning* system that, when the *outdoor air* thermodynamic properties are favourable, increases the quantity of *outdoor air* used to condition the space.
- **Outfall:** That part of the disposal system receiving *surface water* from the *drainage* system and may include a natural water course, kerb and channel, or soakage system.
- **Overflow device:** A device that provides relief to a water service, sanitary *plumbing* and *drainage* system, *rainwater service* or stormwater system to avoid the likelihood of *uncontrolled discharge*.
- Panel wall: A non-loadbearing external wall, in frame or similar construction, that is wholly supported at each storey.
- **Partially buried rainwater tank:** A rainwater tank that is not completely covered by earth but is partially set into the ground.
- **Patient care area:** A part of a *health-care building* normally used for the treatment, care, accommodation, recreation, dining and holding of patients including a *ward area* and *treatment area*.
- **Performance-based design brief (PBDB):** The report that defines the scope of work for the performance-based analysis, the technical basis for analysis, and the criteria for acceptance of any relevant *Performance Solution* as agreed by stakeholders.
- **Performance Requirement:** A requirement which states the level of performance which a *Performance Solution* or *Deemed-to-Satisfy Solution* must meet.
- **Performance Solution:** A method of complying with the *Performance Requirements* other than by a *Deemed-to-Satisfy Solution*.

Perimeter of building: For the purposes of Section 8 of the Housing Provisions, means the external envelope of a building.

TAS Permit Authority

Personal care services: Any of the following:

- (a) The provision of nursing care.
- (b) Assistance or supervision in-
 - (i) bathing, showering or personal hygiene; or

- (ii) toileting or continence management; or
- (iii) dressing or undressing; or
- (iv) consuming food.
- (c) The provision of direct physical assistance to a person with mobility problems.
- (d) The management of medication.
- (e) The provision of substantial rehabilitative or development assistance.
- **Piping:** For the purposes of Section J in Volume One or Part H6 in Volume Two, and Section 13 of the Housing Provisions, means an assembly of pipes, with or without valves or other fittings, connected together for the conveyance of liquids and gases.

NSW Planning for Bush Fire Protection

Pliable building membrane: A water barrier as classified by AS 4200.1.

VIC Plumbing

Plumbing: Any water service plumbing or sanitary plumbing system.

Plumbing or Drainage Solution: A solution which complies with the Performance Requirement and is a-

- (a) Performance Solution; or
- (b) Deemed-to-Satisfy Solution; or
- (c) combination of (a) and (b).

Point of connection: Any of the following:

- (a) For a cold water service, means the point where the cold water service connects to-
 - (i) the Network Utility Operator's water supply system; or
 - (ii) the point of isolation to an alternative water source where there is no *Network Utility Operator's* water supply available or is not utilised.
- (b) For a *heated water* service, means the point where the water heater connects to the cold water service downstream of the isolation valve.
- (c) For sanitary drainage, means the point where the on-site sanitary drainage system connects to-
 - (i) the Network Utility Operator's sewerage system; or
 - (ii) an on-site wastewater management system.
- (d) For sanitary *plumbing*, means the point where the sanitary *plumbing* system connects to the sanitary *drainage* system.
- (e) For a rainwater service, means the point where the rainwater service-
 - (i) connects to the point of isolation for the rainwater storage; or
 - (ii) draws water from the rainwater storage.
- (f) For stormwater disposal, means the point where the on-site stormwater drainage system connects to-
 - (i) the Network Utility Operator's stormwater system; or
 - (ii) an approved on-site disposal system.
- (g) For a fire-fighting water service, means the point where the service connects to-
 - (i) a cold water service, downstream of a backflow prevention device; or
 - (ii) the Network Utility Operator's water supply system; or
 - (iii) the point of isolation to an alternative water source.

Notes

A domestic fire sprinkler service conforming to FPAA101D is considered part of the cold water service.

Explanatory Information

The point of connection is usually determined by the Network Utility Operator according to the water and sewerage

Acts, Regulations and codes that apply within the *Network Utility Operator's* licensed area and/or jurisdiction.

WA Potable water

Predicted Mean Vote (PMV): The Predicted Mean Vote of the thermal perception of building occupants determined in accordance with ANSI/ASHRAE Standard 55.

Preformed shower base: A preformed, prefinished *vessel* installed as the finished floor of a shower compartment, and which is provided with a connection point to a sanitary *drainage* system.

Explanatory Information

Preformed shower bases are commonly made of plastics, composite materials, vitreous enamelled pressed steel, or stainless steel.

Pressure vessel: A vessel subject to internal or external pressure, including interconnected parts and components, valves, gauges and other fittings up to the first point of connection to connecting piping, and—

- (a) includes fire heaters and gas cylinders; but
- (b) excludes-
 - (i) any vessel that falls within the definition of a *boiler*; and
 - (ii) storage tanks and equipment tanks intended for storing liquids where the pressure at the top of the tank is not exceeding 1.4 kPa above or 0.06 kPa below atmospheric pressure; and
 - (iii) domestic-type hot water supply heaters and tanks; and
 - (iv) pressure vessels installed for the purposes of fire suppression or which serve a fire suppression system.

QLD Primary building element

Primary building element: For the purposes of—

- (a) Volume One, a member of a building designed specifically to take part of the loads specified in B1D3 and includes roof, ceiling, floor, stairway or ramp and wall framing members including bracing members designed for the specific purpose of acting as a brace to those members; or
- (b) Part 3.4 of the ABCB Housing Provisions, a member of a building designed specifically to take part of the building loads and includes roof, ceiling, floor, stairway or ramp and wall framing members including bracing members designed for the specific purpose of acting as a brace to those members.

Explanatory Information

The loads to which a building may be subjected are dead, live, wind, snow and earthquake loads. Further information on building loads can be found in the AS 1170 series of Standards.

Primary insulation layer: The most interior insulation layer of a wall or roof construction.

Private bushfire shelter: A structure associated with, but not attached to, or part of a Class 1a dwelling that may, as a last resort, provide shelter for occupants from immediate life threatening effects of a bushfire.

Private garage: For the purposes of—

- (a) Volume One-
 - (i) any garage associated with a Class 1 building; or
 - (ii) any single *storey* of a building of another Class containing not more than 3 vehicle spaces, if there is only one such *storey* in the building; or
 - (iii) any separate single *storey* garage associated with another building where such garage contains not more than 3 vehicle spaces; or
- (b) Volume Two—
 - (i) any garage associated with a Class 1 building; or
 - (ii) any separate single *storey* garage associated with another building where such garage contains not more than 3 vehicle spaces.

Product: Plumbing and drainage items within the scope of Volume Three including but not limited to-

- (a) materials, fixtures and components used in a *plumbing* or *drainage* installation; and
- (b) appliances and equipment connected to a *plumbing* or *drainage* system.

Product Technical Statement: A form of documentary evidence stating that the properties and performance of a building material, product or form of construction fulfil specific requirements of the NCC, and describes—

- (a) the application and intended use of the building material, product or form of construction; and
- (b) how the use of the building material, product or form of construction complies with the requirements of the NCC Volume One and Volume Two; and
- (c) any limitations and conditions of the use of the building material, product or form of construction relevant to (b).

Professional engineer: A person who is-

- (a) if legislation is applicable a registered professional engineer in the relevant discipline who has appropriate experience and competence in the relevant field; or
- (b) if legislation is not applicable-
 - (i) registered in the relevant discipline on the National Engineering Register (NER) of the Institution of Engineers Australia (which trades as 'Engineers Australia'); or
 - (ii) eligible to become registered on the Institution of Engineers Australia's NER and has appropriate experience and competence in the relevant field.

NSW Projection suite

TAS Public

WA Public building

Public corridor: An enclosed corridor, hallway or the like which-

- (a) serves as a means of egress from 2 or more *sole-occupancy units* to a *required exit* from the *storey* concerned; or
- (b) is *required* to be provided as a means of egress from any part of a *storey* to a *required exit*.
- Rainwater service: A water service which distributes water from the isolation valve of the rainwater storage to the rainwater points of discharge for purposes such as for clothes washing, urinal and water closet flushing and external hose cocks.
- **Rainwater storage:** Any storage of rainwater collected from a roof catchment area which is used to supply water for the primary purposes of drinking, personal hygiene or other uses.

Explanatory Information

Generally this applies to alternative water sources not supplied by a *Network Utility Operator*. This does not include *rainwater storage* for non-drinking purposes.

SA Rainwater tank

Rapid roller door: A door that opens and closes at a speed of not less than 0.5 m/s.

Recognised expert: A person with qualifications and experience in the area of *plumbing* or *drainage* in question recognised by the authority having jurisdiction.

Explanatory Information

A *recognised expert* is a person recognised by the authority having jurisdiction as qualified to provide evidence under A5G4(5). Generally, this means a hydraulic consultant or engineer, however the specific requirements are determined by the authority having jurisdiction.

Under A5G4(5), a report from a *recognised expert* may be used as evidence of suitability that a *product* listed on the *WaterMark Schedule of Excluded Products*, or a *plumbing* or *drainage* system, complies with a *Performance Requirement* or *Deemed-to-Satisfy Provisions*.

Reference building: For the purposes of—

- (a) Volume One, a hypothetical building that is used to calculate the maximum allowable-
 - (i) annual greenhouse gas emissions for the common area of a Class 2 building or a Class 3 to 9 building; or

- (ii) *heating load, cooling load* and *energy value* for a *sole-occupancy unit* of a Class 2 building or a Class 4 part of a building; or
- (b) Volume Two, a hypothetical building that is used to determine the maximum allowable *heating load* and *cooling load* for the proposed building.

Reflective insulation: A building membrane with a reflective surface such as a reflective foil laminate, reflective barrier, foil batt or the like capable of reducing radiant heat flow.

Explanatory Information

For Volume Two:

- Typical *R-Values* achieved by adding *reflective insulation* are given in the explanatory information accompanying Section 13 of the ABCB Housing Provisions. Information on specific products may be obtained from *reflective insulation* manufacturers.
- The surface of *reflective insulation* may be described in terms of its emittance (or infra-red emittance) or in terms of its reflectance (or solar reflectance). Generally, for the surface of a particular *reflective insulation*: emittance + reflectance = 1.
- Some types of *reflective insulation* may also serve the purposes of waterproofing or vapour proofing.
- **Regulated energy:** The energy consumed by a building's *services* minus the amount of *renewable energy* generated and used on *site*.
- **Reinforced masonry:** Masonry reinforced with steel reinforcement that is placed in a bed joint or grouted into a core to strengthen the masonry.

Reliability: The probability that a system performs to a level consistent with the system specification.

- **Renewable energy:** Energy that is derived from sources that are regenerated, replenished, or for all practical purposes cannot be depleted and the energy sources include, but are not limited to, solar, wind, hydroelectric, wave action and geothermal.
- Required: Required to satisfy a Performance Requirement or a Deemed-to-Satisfy Provision of the NCC as appropriate.
- Required safe egress time (RSET): The time required for safe evacuation of occupants to a place of safety prior to the onset of untenable conditions.
- **Residential aged care building:** A Class 3 or 9a building whose residents, due to their incapacity associated with the ageing process, are provided with physical assistance in conducting their daily activities and to evacuate the building during an emergency.
- **Residential care building:** A Class 3, 9a or 9c building which is a place of residence where 10% or more of persons who reside there need physical assistance in conducting their daily activities and to evacuate the building during an emergency (including any *aged care building* or *residential aged care building*) but does not include a hospital.

VIC Residential care building (Vic)

Resident use area: Part of a Class 9c building normally used by residents, and-

- (a) includes sole-occupancy units, lounges, dining areas, activity rooms and the like; but
- (b) excludes offices, storage areas, commercial kitchens, commercial laundries and other spaces not for the use of residents.
- **Resistance to the incipient spread of fire:** In relation to a ceiling membrane, means the ability of the membrane to insulate the space between the ceiling and roof, or ceiling and floor above, so as to limit the temperature rise of materials in this space to a level which will not permit the rapid and general spread of fire throughout the space.

Explanatory Information

Resistance to the incipient spread of fire refers to the ability of a ceiling to prevent the spread of fire and thermally insulate the space between the ceiling and the roof or floor above. "Resistance to the incipient spread of fire" is superior to "fire-resistance" because it requires a higher standard of heat insulation.

The definition is used in Volume Two for separating floors/ceilings for a Class 1a dwelling located above a non-appurtenant *private garage*.

Rise in storeys: The greatest number of storeys calculated in accordance with C2D3 of Volume One.

Riser: The height between consecutive treads and between each landing and continuous tread.

VIC Restricted children's service

Rolled fill: Material placed in layers and compacted by repeated rolling by an excavator.

SA Roof catchment area

Roof light: For the purposes of Section J and Part F6 in NCC Volume One, Part H6 in NCC Volume Two, and Part 10.5 and Section 13 of the ABCB Housing Provisions, a skylight, *window* or the like installed in a roof—

- (a) to permit natural light to enter the room below; and
- (b) at an angle between 0 and 70 degrees measured from the horizontal plane.

NSW Row

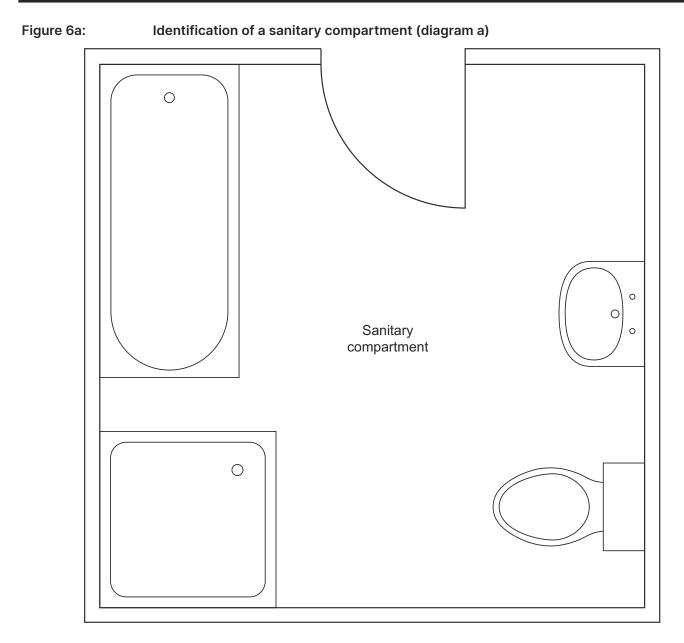
R-Value: The thermal resistance of a component calculated by dividing its thickness by its thermal conductivity, expressed in m².K/W.

Safe place: Either-

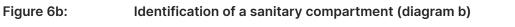
- (a) a place of safety within a building—
 - (i) which is not under threat from a fire; and
 - (ii) from which people must be able to safely disperse after escaping the effects of an emergency to a road or *open space*; or
- (b) a road or open space.

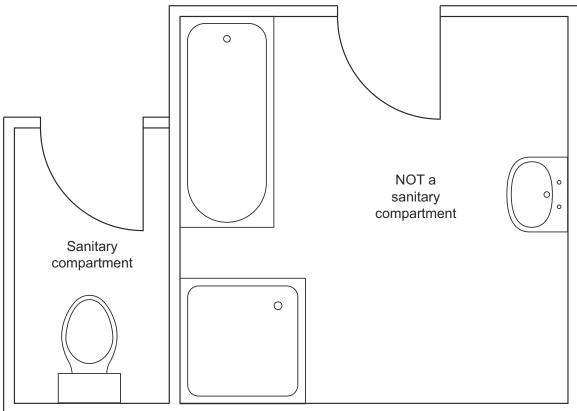
Sanitary compartment: A room or space containing a closet pan or urinal (see Figures 6a and 6b).

Definitions



Definitions





Sarking-type material: A material such as a *reflective insulation* or other flexible membrane of a type normally used for a purpose such as waterproofing, vapour management or thermal reflectance.

School: Includes a primary or secondary school, college, university or similar educational establishment.

TAS School age care facility

Screed: A layer of material (usually cement based) which sets in situ between a structural base and the finished floor material.

Self-closing: For the purposes of-

- (a) Volume One, applied to a door, means equipped with a device which returns the door to the fully closed position immediately after each opening; or
- (b) Volume Two, applied to a door or *window*, means equipped with a device which returns the door or *window* to the fully closed and latched position immediately after each manual opening.

Sensible heat gain: The heat gained which causes a change in temperature.

Separating element: A barrier that exhibits fire *integrity*, *structural adequacy*, *insulation*, or a combination of these for a period of time under specified conditions (often in accordance with AS 1530.4).

Separating wall: A wall that is common to adjoining Class 1 buildings (see Figure 7).

Definitions

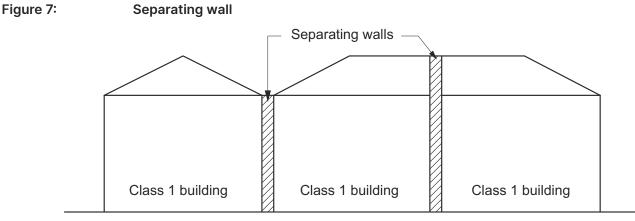




Figure Notes

In Volume Two a separating wall may also be known as a party wall and typically is *required* to be *fire-resisting* construction (see ABCB Housing Provisions Parts 9.2 and 9.3).

- **Service:** For the purposes of Section J in Volume One, means a mechanical or electrical system that uses energy to provide *air-conditioning*, mechanical ventilation, heated water supply, artificial lighting, vertical transport and the like within a building, but which does not include—
 - (a) systems used solely for emergency purposes; and
 - (b) cooking facilities; and
 - (c) portable appliances.
- **Service station:** A garage which is not a *private garage* and is for the servicing of vehicles, other than only washing, cleaning or polishing.

Shaft: The walls and other parts of a building bounding-

- (a) a well, other than an *atrium well*; or
- (b) a vertical chute, duct or similar passage, but not a chimney or flue.

VIC Shared accommodation building

Shower area: The area affected by water from a shower, including a shower over a bath and for a shower area that is—

- (a) Enclosed the area enclosed by walls or screens including hinged or sliding doors that contain the spread of water to within that space; or
- (b) Unenclosed the area where, under normal use, water from the shower rose is not contained within the shower area.

Shower screen: The panels, doors or windows enclosing or partially enclosing a *shower area*.

Single leaf masonry: Outer walls constructed with a single thickness of masonry unit.

Site: The part of the allotment of land on which a building stands or is to be erected.

Sitework: Work on or around a *site*, including earthworks, preparatory to or associated with the construction, *alteration*, demolition or removal of a building.

NSW Small live music or arts venue

SA Small arts venue

- Small-scale Technology Certificate: A certificate issued under the Commonwealth Government's Small-scale Renewable Energy Scheme.
- Small-sized, low-speed automatic lift: A restricted use power-operated device for the infrequent raising or lowering of people with limited mobility on a platform that is controlled automatically but has the capability of being electrically isolated by a key-lockable control.
- **Smoke-and-heat vent:** A vent, located in or near the roof for smoke and hot gases to escape if there is a fire in the building.

Smoke-Developed Index: The index number for smoke as determined by AS/NZS 1530.3.

Smoke development rate: The development rate for smoke as determined by testing flooring materials in accordance with AS ISO 9239.1.

Smoke growth rate index (SMOGRA_{RC}): The index number for smoke used in the regulation of *fire hazard properties* and applied to materials used as a finish, surface, lining or attachment to a wall or ceiling.

Solar admittance: The fraction of incident irradiance on a wall-glazing construction that adds heat to a building's space.

Sole-occupancy unit: A room or other part of a building for occupation by one or joint owner, lessee, tenant, or other occupier to the exclusion of any other owner, lessee, tenant, or other occupier and includes—

- (a) a dwelling; or
- (b) a room or suite of rooms in a Class 3 building which includes sleeping facilities; or
- (c) a room or suite of associated rooms in a Class 5, 6, 7, 8 or 9 building; or
- (d) a room or suite of associated rooms in a Class 9c building, which includes sleeping facilities and any area for the exclusive use of a resident.

NSW Spa pool

Spandrel panel: For the purposes of Section J, means the opaque part of a façade in curtain wall construction which is commonly adjacent to, and integrated with, *glazing*.

NSW Special fire protection purpose

- **Spiral stairway:** A stairway with a circular plan, winding around a central post with steps that radiate from a common centre or several radii (see Figures 11.2.2d and 11.2.2e in the ABCB Housing Provisions).
- Spread-of-Flame Index: The index number for spread of flame as determined by AS/NZS 1530.3.
- **Sprinkler alarm switch:** For the purposes of Specification 23, a device capable of sending an electrical signal to activate an alarm when a residential sprinkler head is activated (e.g. a flow switch).
- Stack bonded pier: A pier where the overlap of a masonry unit is not more than 25% of the length of the masonry unit below.

Stage: A floor or platform in a Class 9b building on which performances are presented before an audience.

Stairway platform lift: A power-operated device for raising or lowering people with limited mobility on a platform (with or without a chair) in the direction of a stairway.

Standard Fire Test: The Fire-resistance Tests of Elements of Building Construction as described in AS 1530.4.

SA Storage shed

- Storey: A space within a building which is situated between one floor level and the floor level next above, or if there is no floor above, the ceiling or roof above, but not—
 - (a) a space that contains only—
 - (i) a lift *shaft*, stairway or meter room; or
 - (ii) a bathroom, shower room, laundry, water closet, or other sanitary compartment; or
 - (iii) accommodation intended for not more than 3 vehicles; or
 - (iv) a combination of the above; or
 - (b) a *mezzanine*.
- **Structural adequacy:** In relation to an FRL, means the ability to maintain stability and adequate *loadbearing* capacity as determined by AS 1530.4.
- Structural member: A component or part of an assembly which provides vertical or lateral support to a building or structure.
- Surface water: All naturally occurring water, other than sub-surface water, which results from rainfall on or around the *site* or water flowing onto the *site*.
- **Swimming pool:** Any excavation or structure containing water and principally used, or that is designed, manufactured or adapted to be principally used for swimming, wading, paddling, or the like, including a bathing or wading pool, or spa.

Tapered tread: A stair tread with a walking area that grows smaller towards one end.

NSW Temporary structure

TAS Temporary structure

Thermal comfort level: The level of thermal comfort in a building expressed as a PMV sensation scale.

Thermal energy load: The sum of the *heating load* and the *cooling load*.

Total R-Value: The sum of the *R-Values* of the individual component layers in a composite element including any building material, insulating material, airspace, thermal bridging and associated surface resistances, expressed in m².K/W.

Total System Solar Heat Gain Coefficient (SHGC): For the purposes of-

- (a) Volume One, the fraction of incident irradiance on a *wall-glazing construction* or a *roof light* that adds heat to a building's space; or
- (b) Volume Two, the fraction of incident irradiance on *glazing* or a roof light that adds heat to a building's space.
- **Total System U-Value:** The thermal transmittance of the composite element allowing for the effect of any airspaces, thermal bridging and associated surface resistances, expressed in Wm⁻²K⁻¹.
- **Treatment area:** An area within a *patient care area* such as an operating theatre and rooms used for recovery, minor procedures, resuscitation, intensive care and coronary care from which a patient may not be readily moved.
- **Uncontrolled discharge:** Any unintentional release of fluid from a *plumbing* and *drainage* system and includes leakage and seepage.
- **Unique wall:** For the purposes of F3V1 in Volume One and H2V1 in Volume Two, a wall which is neither a *cavity wall* nor a *direct fix cladding wall*.
- **Unobstructed opening:** For the purposes of Section 8 of the ABCB Housing Provisions, a glazed area that a person could mistake for an open doorway or clearway and walk into the glazed panel.
- **Unprotected water service:** Unprotected water service means that the water service may be contaminated from a surrounding hazard.
- Unreinforced masonry: Masonry that is not reinforced.
- **Vapour permeance:** The degree that water vapour is able to diffuse through a material, measured in µg/N.s and tested in accordance with the ASTM-E96 Procedure B Water Method at 23°C 50% relative humidity.
- Vapour pressure: The pressure at which water vapour is in thermodynamic equilibrium with its condensed state.
- **Ventilation opening:** An opening in the *external wall*, floor or roof of a building designed to allow air movement into or out of the building by natural means including a permanent opening, an openable part of a *window*, a door or other device which can be held open.
- **Verification Method:** A test, inspection, calculation or other method that determines whether a *Performance Solution* complies with the relevant *Performance Requirements*.
- **Vessel:** For the purposes of Volume One and Part 10.2 of the ABCB Housing Provisions, an open, pre-formed, pre-finished concave receptacle capable of holding water, usually for the purpose of washing, including a basin, sink, bath, laundry tub and the like.
- Visibility: The maximum distance at which an object of defined size, brightness and contrast can be seen and recognised.

Voltage: A difference of potential, measured in Volts (V) and includes extra-low voltage and low voltage.

Volume: In relation to—

- (a) a building the volume of the total space of the building measured above the lowest floor (including, for a suspended floor, any subfloor space), over the enclosing walls, and to the underside of the roof covering; or
- (b) a *fire compartment* the volume of the total space of the *fire compartment* measured within the inner finished surfaces of the enclosing *fire-resisting* walls and/or floors, and—
 - (i) if there is no *fire-resisting* floor at the base of the *fire compartment*, measured above the finished surface of the lowest floor in the *fire compartment*; and
 - (ii) if there is no *fire-resisting* floor at the top of the *fire compartment*, measured to the underside of the roof covering of the *fire compartment*; and
 - (iii) if there is no *fire-resisting* wall, measured over the enclosing wall and if there is no enclosing wall, includes any space within the *fire compartment* that has a use which contributes to the *fire load*; or
- (c) an *atrium* the volume of the total space of the *atrium* measured within the finished surfaces of the bounding construction and if there is no bounding construction, within the *external walls*.
- **Waffle raft:** A stiffened raft with closely spaced ribs constructed on the ground and with slab panels supported between ribs.

- **Wall-glazing construction:** For the purposes of Section J in Volume One, the combination of wall and *glazing* components comprising the *envelope* of a building, excluding—
 - (a) display glazing; and
 - (b) opaque non-glazed openings such as doors, vents, penetrations and shutters.
- Ward area: That part of a *patient care area* for resident patients and may contain areas for accommodation, sleeping, associated living and nursing facilities.

Water control layer: A pliable building membrane or the exterior cladding when no pliable building membrane is present.

WaterMark Certification Scheme: The ABCB scheme for certifying and authorising plumbing and drainage products.

- WaterMark Conformity Assessment Body (WMCAB): A conformity assessment body registered with and accredited by the JAS-ANZ to conduct evaluations leading to *product* certification and contracted with the *administering body* to issue the WaterMark Licence.
- WaterMark Licence: A licence issued by a WaterMark Conformity Assessment Body.
- WaterMark Schedule of Excluded Products: The list maintained by the *administering body* of *products* excluded from the *WaterMark Certification Scheme*.
- WaterMark Schedule of Products: The list maintained by the *administering body* of *products* included in the *WaterMark Certification Scheme*, and the specifications to which the *products* can be certified.

Explanatory Information

The WaterMark Schedule of Products and the WaterMark Schedule of Excluded Products can be viewed on the ABCB website at www.abcb.gov.au.

Waterproof: The property of a material that does not allow water to penetrate through it.

- **Waterproofing system:** A combination of elements that are *required* to achieve a *waterproof* barrier as *required* by H4D2 and H4D3 including substrate, *membrane*, bond breakers, sealants, finishes and the like.
- Water resistant: The property of a system or material that restricts water movement and will not degrade under conditions of water.
- Water sensitive materials: Materials that have an inherent capacity to absorb water vapour and include timber, plasterboard, plywood, oriented strand board and the like.
- **Waterstop:** A vertical extension of the *waterproofing system* forming a barrier to prevent the passage of water in a floor or other horizontal surfaces.
- Watertight: Will not allow water to pass from the inside to the outside of the component or joint and vice versa.

Weighted average: Is calculated across the wetted surface area of a pipe, pipe fitting or plumbing fixture.

WA WELS

- Wet area: An area within a building supplied with water from a water supply system, which includes bathrooms, showers, laundries and *sanitary compartments* and excludes kitchens, bar areas, kitchenettes or domestic food and beverage preparation areas.
- Wetted surface area: Is calculated by the total sum of diameter (D) in contact with drinking water.

Winders: Treads within a straight flight that are used to change direction of the stair (see Explanatory Figure 1).

- **Window:** Includes a *roof light*, glass panel, glass block or brick, glass louvre, glazed sash, glazed door, or other device which transmits natural light directly from outside a building to the room concerned when in the closed position.
- Yield: The mass of a combustion product generated during combustion divided by the mass loss of the test specimen as specified in the *design fire*.
- **Zone protection:** The installation of a *backflow prevention device* at the point where a water service is connected to multiple fixtures or appliances, with no *backflow prevention device* installed as *individual protection* downstream of this point.

Schedule 2 Referenced Documents

The Standards and other documents listed in this Schedule are referenced in the NCC.

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS/NZS ISO 717 Part 1	2004	Acoustics — Rating of sound insulation in buildings and of building elements — Airborne sound insulation. (See Note 1)	F7V1, F7V2, F7V3, F7V4, F7D3	H4V4	10.7.2	N/A
AS ISO 717 Part 2	2004	Acoustics — Rating of sound insulation in buildings and of building elements — Impact sound insulation	F7V1, F7V3, F7D4	N/A	N/A	N/A
AS 1056 Part 1	1991	Storage water heaters — General requirements (incorporating amendments 1, 2, 3, 4 and 5)	N/A	N/A	N/A	B2D2
AS/NZS 1170 Part 0	2002	Structural design actions — General principles (incorporating amendments 1, 3 and 4)	B1V1, B1D2, Spec 4	H1V1, H1D7	2.2.2	N/A
AS/NZS 1170 Part 1	2002	Structural design actions — Permanent, imposed and other actions (incorporating amendments 1 and 2)	B1D3	N/A	2.2.3, 2.2.4, 8.3.1, 11.2.2, 11.2.3, 11.3.4	N/A
AS/NZS 1170 Part 2	2021	Structural design actions — Wind actions	B1D3, B1D4, Spec 4, F3V1, Schedule 1	H1D7, H2V1, Schedule 1	2.2.3, Schedule 1	Schedule 1
AS/NZS 1170 Part 3	2003	Structural design actions — Snow and ice actions (incorporating amendments 1 and 2)	B1D3	N/A	2.2.3	
AS 1170 Part 4	2007	Structural design actions — Earthquake actions in Australia (incorporating amendments 1 and 2)	B1D3	H1D4, H1D5, H1D6, H1D9	2.2.3	N/A
AS 1191	2002	Acoustics — Method for laboratory measurement of airborne sound transmission insulation of building elements	Spec 29	N/A	N/A	N/A
AS 1273	1991	Unplasticized PVC (UPVC) downpipe and fittings for rainwater	N/A	N/A	7.4.2	N/A
AS 1288	2021	Glass in buildings — Selection and installation	B1D4, Spec 11, Spec 12	H1D8	8.3.1	N/A
AS 1289.6.3.3	1997	Methods of testing soils for engineering purposes — Method 6.3.3: Soil strength and consolidation tests — Determination of the penetration resistance of a soil — Perth sand penetrometer test (incorporating amendment 1)	N/A	N/A	4.2.4	N/A

Table 1:

Schedule of referenced documents

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS 1397	2021	Continuous hot-dip metallic coated steel sheet and strip — Coatings of zinc and zinc alloyed with aluminium and magnesium (See Note 10)	N/A	N/A	7.2.2	N/A
AS 1428 Part 1	2009	Design for access and mobility — General requirements for access — New building work (incorporating amendments 1 and 2)	D3D11, D3D16, D3D22, D4D2, D4D3, D4D4, D4D7, D4D10, D4D11, D4D13, Spec 16, E3D10, F4D5, G4D5, Schedule 1	Schedule 1	Schedule 1	Schedule 1, E1D2
AS 1428 Part 1	2001	Design for access and mobility — General requirements for access — New building work	12D7, 12D8, 12D10, 12D15	N/A	N/A	E1D2
AS 1428 Part 1 (Supplement 1)	1993	Design for access and mobility — General requirements for access — Buildings — Commentary	I2D2	N/A	N/A	N/A
AS 1428 Part 2	1992	Design for access and mobility — Enhanced and additional requirements — Buildings and facilities	I2D2, I2D3, I2D4, I2D5, I2D7, I2D10, I2D11, I2D12, I2D13, I2D14	N/A	N/A	E1D2
AS 1428 Part 4	1992	Design for access and mobility — Tactile ground surface indicators for the orientation of people with vision impairment	I2D11	N/A	N/A	N/A
AS/NZS 1428 Part 4.1	2009	Design for access and mobility — Means to assist the orientation of people with vision impairment — Tactile ground surface indicators (incorporating amendments 1 and 2)	D4D9	N/A	N/A	N/A
AS 1530 Part 1	1994	Methods for fire tests on building materials, components and structures — Combustibility test for materials	Schedule 1	Schedule 1	Schedule 1	Schedule 1
AS 1530 Part 2	1993	Methods for fire tests on building materials, components and structures — Test for flammability of materials (incorporating amendment 1)	Schedule 1	Schedule 1	Schedule 1	Schedule 1

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
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	Schedule 1, Spec 3	Schedule 1, Spec 3	Schedule 1	Schedule 1, Spec 3
AS 1530 Part 4	2014	Methods for fire tests on building materials, components and structures — Fire resistance tests for elements of construction	C4D15, C4D16, Spec 9, Spec 10, Spec 13, Spec 14, Schedule 1, Spec 3	9.3.2, Schedule 1, Spec 3	Schedule 1	Schedule 1, Spec 3
AS 1530 Part 8.1	2018	Methods for fire tests on building materials, components and structures — Tests on elements of construction for buildings exposed to simulated bushfire attack — Radiant heat and small flaming sources	Spec 43	N/A	N/A	N/A
AS/NZS 1546 Part 1	2008	On-site domestic wastewater treatment units - Septic tanks	N/A	N/A	N/A	C3D2
AS/NZS 1546 Part 2	2008	On-site domestic wastewater treatment units - Waterless composting toilets	N/A	N/A	N/A	C3D3
AS 1546 Part 3	2017	On-site domestic wastewater treatment units - Secondary treatment systems (incorporating amendment 1)	N/A	N/A	N/A	C3D4
AS 1546 Part 4	2016	On-site domestic wastewater treatment units - Domestic greywater treatment systems	N/A	N/A	N/A	C3D5
AS/NZS 1547	2012	On-site domestic wastewater management	N/A	N/A	N/A	C3D6
AS 1562 Part 1	2018	Design and installation of sheet roof and wall cladding — Metal (See Note 2)	B1D4, F3D2, F3D5	H1D7	N/A	N/A
AS1562 Part 3	2006	Design and installation of sheet roof and wall cladding — Plastic	B1D4, F3D2	H1D7	N/A	N/A
AS 1657	2018	Fixed platforms, walkways, stairways and ladders — Design, construction and installation	D2D21, D2D22, D3D23, I1D6, I3D5	N/A	N/A	N/A
AS/NZS 1664 Part 1	1997	Aluminium structures — Limit state design (incorporating amendment 1)	B1D4	N/A	2.2.4	N/A
AS/NZS 1664 Part 2	1997	Aluminium structures — Allowable stress design (incorporating amendment 1)	B1D4	N/A	2.2.4	N/A

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS 1668 Part 1	2015	The use of ventilation and air conditioning in buildings — Fire and smoke control in buildings (incorporating amendment 1)	C3D13, C4D15, Spec 11, D2D12, Spec 19, E2D3, E2D4, E2D6, E2D7, E2D8, E2D9, E2D11, E2D12, E2D13, E2D16, E2D17, E2D19, F6D12, Spec 21, Spec 31	N/A	N/A	N/A
AS 1668 Part 2	2012	The use of ventilation and air conditioning in buildings — Mechanical ventilation in buildings (incorporating amendments 1 and 2)	E2D12, F6V1, F6D6, F6D11, F6D12, F8D4, J6D4	H4V3, H4D7	10.8.2	N/A
AS 1668 Part 4	2012	The use of ventilation and air conditioning in buildings — Natural ventilation of buildings	F6D11	N/A	N/A	N/A
AS 1670 Part 1	2018	Fire detection, warning, control and intercom systems — System design, installation and commissioning — Fire (incorporating amendment 1) (See Note 3)	C4D6, C4D7, C4D8, C4D9, C4D12, D3D26, E2D3, E2D10, G4D7, Spec 12, Spec 20, Spec 23, Spec 31	N/A	9.5.1	N/A
AS 1670 Part 3	2018	Fire detection, warning, control and intercom systems — System design, installation and commissioning — Fire alarm monitoring (incorporating amendment 1) (See Note 3)	Spec 20, Spec 23	N/A	N/A	N/A
AS 1670 Part 4	2018	Fire detection, warning, control and intercom systems — System design, installation and commissioning — Emergency warning and intercom systems (incorporating amendment 1) (See Note 3)	E3V2, E4D9, Spec 31	N/A	N/A	N/A
AS/NZS 1680 Part 0	2009	Interior lighting — Safe movement	F6D5	N/A	10.5.2	N/A
AS 1684 Part 2	2021	Residential timber-framed construction — Non-cyclonic areas	B1D4, B1D5, F1D8	H1D6	2.2.5, 4.2.13, 5.6.6, 6.2.1, 6.3.6, 7.5.2, 7.5.3, 7.5.4, 10.2.19, 10.2.20	N/A

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS 1684 Part 3	2021	Residential timber-framed construction — Cyclonic areas	B1D4, B1D5, F1D8	H1D6	2.2.5, 4.2.13, 5.6.6, 6.2.1, 6.3.6, 7.5.2, 7.5.3, 7.5.4, 10.2.19, 10.2.20	N/A
AS 1684 Part 4	2010	Residential timber-framed construction — Simplified — Non-cyclonic areas (incorporating amendment 1)	B1D4, B1D5, F1D8	H1D6	2.2.5, 4.2.13, 5.6.6, 6.2.1, 7.5.2, 7.5.3, 7.5.4, 10.2.19, 10.2.20	N/A
AS 1720 Part 1	2010	Timber structures — Design methods (incorporating amendments 1, 2 and 3)	B1V1, B1D4	H1V1, H1D6	4.2.13, 5.3.3	N/A
AS/NZS 1720 Part 4	2019	Timber structures — Fire resistance of timber elements	Spec 1	Spec 1	N/A	Spec 1
AS 1720 Part 5	2015	Timber structures — Nailplated timber roof trusses (incorporating amendment 1)	B1D4	H1D6	N/A	N/A
AS 1735 Part 11	1986	Lifts, escalators and moving walks — Fire rated landing doors	C4D11	N/A	N/A	N/A
AS 1735 Part 12	1999	Lifts, escalators and moving walks — Facilities for persons with disabilities (incorporating amendment 1)	E3D8, I2D6	N/A	N/A	N/A
AS/NZS 1859 Part 4	2018	Reconstituted wood based panels — Specifications — Wet process fibreboard	N/A	N/A	7.5.3, 7.5.4	N/A
AS 1860 Part 2	2006	Particleboard flooring — Installation (incorporating amendment 1)	B1D4	H1D6	N/A	N/A
AS 1905 Part 1	2015	Components for the protection of openings in fire-resistant walls — Fire-resistant doorsets (incorporating amendment 1)	C4D7, Spec 12	N/A	N/A	N/A
AS 1905 Part 2	2005	Components for the protection of openings in fire-resistant walls — Fire-resistant roller shutters	Spec 12	N/A	N/A	N/A
AS 1926 Part 1	2012	Swimming pool safety — Safety barriers for swimming pools	G1D2, G1D4	H7D2	N/A	N/A
AS 1926 Part 2	2007	Swimming pool safety — Location of safety barriers for swimming pools (incorporating amendments 1 and 2)	G1D2	H7D2	N/A	N/A
AS 1926 Part 3	2010	Swimming pool safety — Water recirculation systems (incorporating amendment 1)	G1D2	H7D2	N/A	N/A

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS 2047	2014	Windows and external glazed doors in buildings (incorporating amendments 1 and 2) (See Note 4)	B1D4, F3V1, F3D4, J5D5	H1D8, H2V1	13.4.4	N/A
AS 2049	2002	Roof tiles (incorporating amendment 1)	F3D2	H1D7	N/A	N/A
AS 2050	2018	Installation of roof tiles	B1D4, F3D2	H1D7	7.3.2	N/A
AS 2118 Part 1	2017	Automatic fire sprinkler systems — General systems (incorporating amendments 1 and 2)	C1V3, Spec 17, Spec 18	N/A	N/A	N/A
AS 2118 Part 4	2012	Automatic fire sprinkler systems — Sprinkler protection for accommodation buildings not exceeding four storeys in height	Spec 17, Spec 18	N/A	N/A	B4D3
AS 2118 Part 5	2008 (R 2020)	Automatic fire sprinkler systems - Home fire sprinkler systems	N/A	N/A	N/A	B4D3
AS 2118 Part 6	2012	Automatic fire sprinkler systems — Combined sprinkler and hydrant systems in multistorey buildings	Spec 17	N/A	N/A	B4D3
AS 2159	2009	Piling — Design and installation (incorporating amendment 1)	B1D4	H1D12	N/A	N/A
AS/NZS 2179 Part 1	2014	Specifications for rainwater goods, accessories and fasteners — Metal shape or sheet rainwater goods, and metal accessories and fasteners	N/A	N/A	7.4.2	N/A
AS/NZS 2269 Part 0	2012	Plywood — Structural — Specifications (incorporating amendment 1)	N/A	N/A	7.5.4	N/A
AS/NZS 2293 Part 1	2018	Emergency lighting and exit signs for buildings — System design, installation and operation (incorporating amendment 1)	E4D4, E4D8, Spec 25, I3D15	N/A	N/A	N/A
AS 2312 Part 1	2014	Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings — Paint coatings	N/A	N/A	6.3.9	N/A
AS/NZS 2312 Part 2	2014	Guide to the protection of structural steel against atmospheric corrosion by the use of protective coatings — Hot dip galvanizing	N/A	N/A	6.3.9	N/A
AS/NZS 2327	2017	Composite structures — Composite steel- concrete construction in buildings (incorporating amendment 1)	B1D4, Spec 1	Spec 1	2.2.4	Spec 1

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS 2419 Part 1	2021	Fire hydrant installations — System design, installation and commissioning	C3D13, E1D2, Spec 18, I3D9	N/A	N/A	B4D4
AS 2441	2005	Installation of fire hose reels (incorporating amendment 1)	E1D3	N/A	N/A	B4D5
AS 2444	2001	Portable fire extinguishers and fire blankets — Selection and location	E1D14, I3D11	N/A	N/A	N/A
AS 2665	2001	Smoke/heat venting systems — Design, installation and commissioning	Spec 22, Spec 31	N/A	N/A	N/A
AS 2699 Part 1	2020	Built-in components for masonry construction — Wall ties (See Note 9)	C2D10	N/A	5.6.5	N/A
AS 2699 Part 3	2020	Built-in components for masonry construction — Lintels and shelf angles (durability requirements) (See Note 9)	C2D10	N/A	5.6.7	N/A
AS 2870	2011	Residential slabs and footings	F1D7	H1D4, H1D5	3.4.2, 4.2.2, 4.2.6, 4.2.8, 4.2.11, 4.2.14, 4.2.15, 10.2.9	N/A
AS/NZS 2890 Part 6	2009	Parking facilities — Offstreet parking for people with disabilities	D4D6	N/A	N/A	N/A
AS/NZS 2904	1995	Damp-proof courses and flashings (incorporating amendments 1 and 2)	F1D6	N/A	5.7.3, 7.5.6, 12.3.3	N/A
AS/NZS 2908 Part 1	2000	Cellulose-cement products — Corrugated sheets	B1D4	N/A	N/A	N/A
AS/NZS 2908 Part 2	2000	Cellulose-cement products — Flat sheets	Schedule 1	Schedule 1	7.5.3, 7.5.4, 7.5.5, 10.2.9,10.2.10, Schedule 1	Schedule 1
AS/NZS 2918	2018	Domestic solid fuel burning appliances — Installation (See Note 8)	G2D2	H7D5	12.4.4, 12.4.5	N/A
AS/NZS 3013	2005	Electrical installations — Classification of the fire and mechanical performance of wiring system elements	C3D14	N/A	N/A	N/A
AS/NZS 3500 Part 0	2021	Plumbing and drainage — Glossary of terms	A1G4	A1G4	N/A	A1G4
AS/NZS 3500 Part 1	2018	Plumbing and drainage — Water services	N/A	N/A	N/A	B5D6

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS/NZS 3500 Part 1	2021	Plumbing and drainage — Water services	N/A	N/A	N/A	B1D3, B1D5, B1D6, B3D3, B5V1, B5D2, B5D3, B5D4, Spec 41, B6D2, B6D3, B6D5, B7D3,
AS/NZS 3500 Part 2	2021	Plumbing and drainage — Sanitary plumbing and drainage (incorporating amendment 1)	N/A	N/A	N/A	C1D3, C1V1, C1V2, C1V3, C1V4, C1V5, C2V2, C2D3, C2D4, C3D7
AS/NZS 3500 Part 3	2021	Plumbing and drainage — Stormwater drainage (See Note 11)	F1D3	H2D2, H2D6	7.4.3	N/A
AS/NZS 3500 Part 4	2021	Plumbing and drainage — Heated water services (incorporating amendment 1)	N/A	N/A	N/A	B2D2, B2D6, B2D7, B2D8, B2D9, B2D11
AS 3600	2018	Concrete structures (incorporating amendments 1 and 2)	B1V1, B1D4, Spec 1	H1V1, H1D4, Spec 1	3.4.2, 4.2.6, 4.2.10, 4.2.13, 5.3.3, 10.2.9	Spec 1
AS 3660 Part 1	2014	Termite management — New building work (incorporating amendment 1)	B1D4, F1D6	N/A	3.4.1, 3.4.2	N/A
AS 3660 Part 3	2014	Termite management — Assessment criteria for termite management systems	N/A	N/A	3.4.2	N/A
AS/NZS 3666 Part 1	2011	Air-handling and water systems of buildings — Microbial control — Design, installation and commissioning	F4D10, F6D6	N/A	N/A	N/A
AS 3700	2018	Masonry structures	B1D4, F3D5, Spec 1, Spec 2	H1D5, H2D4, Spec 1, Spec 2	5.3.3, 5.4.2, 5.6.3, 6.3.6, 10.2.9, 10.2.19, 10.2.20, 12.4.3	Spec 1, Spec 2
AS 3740	2021	Waterproofing of domestic wet areas	F2D2	H4D2, H4D3	10.2.20	N/A
AS 3786	2014	Smoke alarms using scattered light, transmitted light or ionization (incorporating amendment 1 and 2) (See Note 5)	Spec 20	N/A	9.5.1	N/A
AS/NZS 3823 Part 1.2	2012	Performance of electrical appliances — Air conditioners and heat pumps — Ducted air conditioners and air-to-air heat pumps — Testing and rating for performance	Spec 33, J6D12	N/A	N/A	N/A

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS 3959	2018	Construction of buildings in bushfire-prone areas (incorporating amendments 1 and 2)	C2D14, F8D5, G5D2, G5D3, Spec 43	H7D4	10.8.3	B1D4, B2D10, B3D4, C1D4, C2D5
AS/NZS 4020	2018	Testing of products for use in contact with drinking water (See Note 6)	A5G4	A5G4	N/A	A5G4
AS 4055	2021	Wind loads for housing	Schedule 1	H1D6, H1D8, Schedule 1	2.2.3, Schedule 1	Schedule 1
AS 4072 Part 1	2005	Components for the protection of openings in fire-resistant separating elements — Service penetrations and control joints (incorporating amendment 1)	C4D15, C4D16	N/A	9.3.2	N/A
AS 4100	2020	Steel structures	B1D4, Spec 1	H1D6, Spec 1	4.2.13, 5.6.7	Spec 1
AS 4200 Part 1	2017	Pliable building membranes and underlays — Materials (incorporating amendment 1)	F3D3, F8D3, Spec 36, Schedule 1	Schedule 1	7.3.4, 7.5.2, 7.5.8, 10.8.1, Schedule 1	Schedule 1
AS 4200 Part 2	2017	Pliable building membranes and underlays — Installation requirements (incorporating amendments 1 and 2)	F3D3, F8D3	N/A	10.8.1	N/A
AS/NZS 4234	2021	Heated water systems — Calculation of energy consumption	Spec 45	N/A	N/A	B2D2
AS 4254 Part 1	2021	Ductwork for air-handling systems in buildings — Flexible duct	Spec 7, J6D7	H3D2	13.7.4	N/A
AS 4254 Part 2	2012	Ductwork for air-handling systems in buildings — Rigid duct	Spec 7, J6D5, J6D7	N/A	13.7.4	N/A
AS/NZS 4284	2008	Testing of building facades	F3V1	H2V1	N/A	N/A
AS/NZS 4505	2012	Garage doors and other large access doors (incorporating amendment 1)	B1D4	N/A	2.2.4	N/A
AS 4552	2005	Gas fired water heaters for hot water supply and/or central heating	N/A	N/A	N/A	B2D2
AS 4586	2013	Slip resistance classification of new pedestrian surface materials (incorporating amendment 1) (See Note 7)	D3D11, D3D14, D3D15. Spec 27	N/A	11.2.4	N/A
AS 4597	1999	Installation of roof slates and shingles (Non- interlocking type)	B1D4, F3D2	H1D7	N/A	N/A
AS/NZS 4600	2018	Cold-formed steel structures	B1D4, Spec 1	H1D6, Spec 1	5.3.3, 6.3.6	Spec 1

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS 4654 Part 1	2012	Waterproofing membranes for external above-ground use — Materials	F1D5	H2D8	N/A	N/A
AS 4654 Part 2	2012	Waterproofing membranes for external above-ground use — Design and installation	C2D14, F1D4, F1D5	H2D8	N/A	N/A
AS 4678	2002	Earth-retaining structures	N/A	H1D3	N/A	N/A
AS 4773 Part 1	2015	Masonry in small buildings — Design (incorporating amendment 1)	N/A	H1D5, H2D4	5.6.3, 12.4.3	N/A
AS 4773 Part 2	2015	Masonry in small buildings — Construction (incorporating amendment 1)	N/A	H1D5, H2D4	5.6.3, 12.4.3	N/A
AS/NZS 4859 Part 1	2018	Thermal insulation materials for buildings — General criteria and technical provisions	J4D3, J6D6, J6D9	N/A	13.2.2, 13.7.2, 13.7.4	N/A
AS/NZS 4859 Part 2	2018	Thermal insulation materials for buildings — Design	J3D8, J4D3, Spec 36, Spec 37	N/A	13.2.5, 13.2.6	N/A
AS/NZS 4858	2004	Wet area membranes	N/A	N/A	10.2.8	N/A
AS 5113	2016	Classification of external walls of buildings based on reaction-to-fire performance (incorporating amendment 1)	C1V3	N/A	N/A	N/A
AS 5146 Part 1	2015	Reinforced autoclaved aerated concrete — Structures (incorporating amendment 1)	B1D4	H1D7	N/A	N/A
AS 5146 Part 3	2018	Reinforced autoclaved aerated concrete — Construction	B1D4, F3D5	N/A	N/A	N/A
AS 5216	2021	Design of post-installed and cast-in fastenings in concrete	B1D4	N/A	2.2.4	N/A
AS/NZS 5601 Part 1	2013	Gas installations — General installations	J1V4	H6V3	N/A	N/A
AS 5637 Part 1	2015	Determination of fire hazard properties — Wall and ceiling linings	Spec 7, Schedule	Schedule 1	Schedule 1	Schedule 1
AS ISO 9239 Part 1	2003	Reaction to fire tests for floorings — Determination of the burning behaviour using a radiant heat source	Schedule 1	Schedule 1	Schedule 1	Schedule 1
AS/NZS ISO 9972	2015	Thermal performance of buildings — Determination of air permeability of buildings — Fan pressurization method	J1V4	H6V3	N/A	N/A
AIRAH-DA07	2021	Criteria for moisture control design analysis in buildings	F8V1	H4V5	N/A	N/A

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AIRAH-DA09	1998	Air conditioning load estimation	Spec 35	N/A	N/A	N/A
AIRAH-DA28	2011	Building management and control systems	Spec 34	N/A	N/A	N/A
ANSI/ASHRAE Standard 55	2013	Thermal environmental conditions for human occupancy	Schedule 1	Schedule 1	Schedule 1	Schedule 1
ANSI/ASHRAE Standard 140	2007	Standard method of test for the evaluation of building energy analysis computer programs	J1V1, J1V2, J1V3, J1V5	H6V2	N/A	N/A
ASTM E2073-10	2010	Standard Test Method for Photopic Luminance of Photoluminescent (Phosphorescent) Markings	Spec 25	N/A	N/A	N/A
ASTM E72-15	2015	Standard Test Methods of Conducting Strength Tests of Panels for Building Construction	Spec 6	N/A	N/A	N/A
ASTM E695-03	2003	Standard Test Method of Measuring Relative Resistance of Wall, Floor and Roof Construction to Impact Loading	Spec 6	N/A	N/A	N/A
ASTM E96	2016	Standard Test Methods for Water Vapor Transmission of Materials	Schedule 1	Schedule 1	Schedule 1	Schedule 1
AHRI 460	2005	Performance rating of remote mechanical- draft air-cooled refrigerant condensers	J6D13	N/A	N/A	N/A
AHRI 551/591	2015	Performance rating of water-chilling and heat pump water-heating packages using the vapor compression cycle.	Spec 33, J6D11	N/A	N/A	N/A
ABCB	2022	Fire Safety Verification Method	C1V4	N/A	N/A	N/A
ABCB	2022	Housing Provisions Standard	N/A	Throughout	Throughout	N/A
ABCB	2022	Livable Housing Design	G7D2	H4D3, H8D2	3.3.3, 11.2.3	N/A
ABCB	2011	Protocol for Structural Software, Version 2011.2	B1D5	H1D6	2.2.5	N/A
ABCB	2012	Standard for Construction of Buildings in Flood Hazard Areas, Version 2012.3	B1D6	H1D10	N/A	N/A
ABCB	2022	Standard for NatHERS Heating and Cooling Load Limits, Version 2022.1	J3D3	Spec 42	N/A	N/A
ABCB	2022	Standard for Whole-of-Home Efficiency Factors	J3D14	N/A	13.6.2	N/A
CIBSE Guide A	2015	Environmental design	Spec 34, Spec 35, J4D3, J4D7	N/A	N/A	N/A

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
N/A	2002	Disability Standards for Accessible Public Transport	F4D12, I2D1	N/A	N/A	N/A
N/A	2010	Education and Care Services National Law Act (Vic)	Schedule 1	Schedule 1	Schedule 1	Schedule 1
European Union Commission Regulation 547/2012	2012	Eco-design requirements for water pumps	J6D8	N/A	N/A	N/A
European Union Commission Regulation 622/Annexx II, point 2	2012	Eco-design requirements for glandless standalone circulators and glandless circulators integrated in products	J6D8	N/A	N/A	N/A
FPAA101D	2021	Automatic Fire Sprinkler System Design and Installation — Drinking Water Supply	C1V3, C2D6, C2D13, C3D2, C3D7, C3D8, C4D6, C4D7, C4D8, C4D9, C4D12, Spec 5, Spec 7, D2D4, D2D17, D3D26, D3D30, E2D8, E2D9, E2D13, E2D14, E2D15, E2D16, E2D17, E2D16, E2D17, E2D19, E2D20, Spec 17, Spec 18, Spec 20, G3D1, G3D6, Spec 31, I1D2, Schedule 1	Schedule 1	Schedule 1	B4D3, Schedule 1, B1D5

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
FPAA101H	2018	Automatic Fire Sprinkler System Design and Installation — Hydrant Water Supply (incorporating amendment 1)	C1V3, C2D6, C2D13, C3D2, C3D7, C3D8, Spec 5, Spec 7, Spec 17, Spec 18, E2D8, E2D9, E2D13, E2D14, E2D15, E2D16, E2D17, E2D19, E2D20, Spec 20, G3D1, G3D6, Spec 31, I1D2	N/A	N/A	B4D3
ISO 140 Part 6	1998E	Acoustics — Measurement of sound insulation in buildings and of building elements — Laboratory measurements of impact sound insulation of floors	Spec 29	N/A	N/A	N/A
ISO 540	2008	Hard coal and coke — Determination of ash fusibility	Spec 13	N/A	N/A	N/A
ISO 8336	1993E	Fibre-cement flat sheets	Schedule 1	Schedule 1	7.5.3, 7.5.4, 7.5.5, Schedule 1	Schedule 1
ISO 25745 Part 2	2015	Energy performance of lifts, escalators and moving walks: Energy calculation and classification for lifts (elevators)	J7D8	N/A	N/A	N/A
NASH Standard	2021	Steel Framed Construction in Bushfire Areas	N/A	H7D4	N/A	N/A
NASH Standard Part 1	2005	Residential and Low Rise Steel Framing — Design Criteria (incorporating amendments A, B and C)	B1D4	H1D6	N/A	N/A
NASH Standard Part 2	2014	Residential and Low Rise Steel Framing — Design Solutions (incorporating amendment A)	B1D4, B1D5, F1D8	H1D6	2.2.5, 6.2.1, 6.3.6, 7.5.2, 7.5.3, 7.5.4, 10.2.19, 10.2.20	N/A
NSF/ ANSI/ CAN 372	2020	Drinking Water System Components - Lead Content	A5G4	A5G4	N/A	A5G4
N/A	N/A	Northern Territory Deemed to Comply Standards Manual	N/A	N/A	2.2.4	N/A
SA TS 5344	2019	Permanent labelling for Aluminium Composite Panel (ACP) products	A5G8	A5G8	N/A	A5G8
TN 61	N/A	Cement Concrete and Aggregates Australia — Technical note — Articulated walling	N/A	H1D4	N/A	N/A

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
WMK NOD 2021/4.2	2021	WaterMark Notice of Direction 2021/4.2 Certification transition arrangements for lea free plumbing products	d A5G4	A5G4	N/A	A5G4
Table Notes						
(1) For AS/NZ	S ISO 717.1:					
(a) Test re	ports based on AS	S 1276—1979 and issued prior to AS/NZS 1276.	1—1999 being refer	enced in the NCC i	remain valid.	
(b) The S	TC values in repor	ts based on AS 1276—1979 must be considered	I to be equivalent to	Rw values.		
(c) Test re	ports based on AS	S/NZS 1276.1 prepared after the NCC reference	date for AS/NZS 12	76.1—1999 must b	e based on that version.	
(d) Test re	ports based on IS	O 717-1—1996 and issued prior to AS/NZS ISO	717.1—2004 being	referenced in the N	NCC remain valid.	
(e) Report Standa		ZS ISO 717.1 relating to tests carried out after t	he NCC reference	date for AS/NZS IS	6O 717.1—2004 must rel	ate to the amende
		out based on AS 1562.1—1992 and issued prio C reference date for AS 1562.1 must relate to the		8 being referenced	I in the NCC remain valid	. Reports relating t
		nd AS1670.4, notwithstanding A4G1(5), until the a ay be used to meet the requirements of AS 1670	-			ble 1.8 of AS 1670.
(4) For AS 204	47:					
(a) Tests o	carried out under e	earlier editions of AS 2047 remain valid.				
(b) Report	ts based on AS 20	47 relating to tests carried out after the NCC refe	erence date for AS 2	047—2014 Amend	ment 2 must relate to the	amended Standar
(5) For AS 378	36:					
(a) Tests c	carried out under A	AS 3786—2014 Amendment 1 remain valid.				
(b) Report) Reports based on AS 3786 relating to tests carried out after the NCC reference date for AS 3786-2014 Amendment 2 must relate to the amended Standar					
•		005 edition of AS/NZS 4020 will continue to be ac must be based on the 2018 edition.	cepted until 1 May 2	2024. Test reports p	prepared after the NCC re	ference date for th
(7) For AS 458	36:					
(a) Test re	ports based on the	e 2004 edition of AS/NZS 4586 and issued prior	to the 2013 edition o	of AS 4586 being re	eferenced in the NCC rem	ain valid.
(b) Test re	Test reports prepared after the NCC reference date of the 2013 edition of AS 4586 must be based on that version.					
	For the purposes of assessing compliance, the slip-resistance classifications of V, W and X in reports based on the 2004 edition of AS/NZS 4586 may be onsidered to be equivalent to slip-resistance classifications of P5, P4 and P3 respectively in the 2013 edition of AS 4586.					
(d) Test re valid.	Test reports based on Appendix D of AS 4586—2013 and issued prior to the NCC reference date for AS 4586—2013 (incorporating Amendment 1) remain valid.					
	e) Test reports based on Appendix D of AS 4586—2013 and prepared after the NCC reference date for AS 4586—2013 (incorporating Amendment 1) must based on that version.					

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- (8) Tests carried out based on AS/NZS 2918—2001 and issued prior to AS/NZS 2918—2018 being referenced in the NCC remain valid. Reports relating to tests carried out after the NCC reference date for AS/NZS 2918 must relate to the revised Standard.
- (9) For AS 2699 Parts 1 and 3:
 - (a) For AS 2699.1, the 2000 edition has been retained for a transitional period ending on 30 April 2025.
 - (b) For AS 2699.3, the 2002 edition has been retained for a transitional period ending on 30 April 2025.
- (10) For AS 1397, the 2011 edition has been retained for a transitional period ending on 31 August 2023.
- (11) For AS/NZS 3500.3, the 2018 edition has been retained for a transitional period ending on 31 August 2023.

NSW Table 1 NT Table 1 QLD Table 1 SA Table 1 TAS Table 1 VIC Table 1 WA Table 1 Schedule 3 Commonwealth of Australia

Schedule 4Australian Capital Territory

Schedule 5	New South	n Wales	
All Volumes	General Requirements		
	Part A6	Building classification	
	NSW A6G7	Class 6 buildings	
Volume One	Performance Requirements		
	Part F4	Sanitary and other facilities	
	NSW F4P6	Microbial control for water systems	
	Part G1	Minor structures and components	
	NSW G1P2	Swimming pool access and water recirculation systems	
Volume Two	Performance Requirements		
	Part H2	Damp and weatherproofing	
	NSW H2P3	Rising damp	
	Part H7	Ancillary provisions and additional construction requirements	
	NSW H7P1	Swimming pool access	
Schedule 1	Definitions		
Schedule 2	Referenced Do	cuments	

All Volumes General Requirements

Part A6 Building classification

Delete A6G7 and insert NSW A6G7 as follows:

NSW A6G7 Class 6 buildings

[2019: NSW A6.6]

A Class 6 building is a shop or other building for sale of goods by retail or the supply of services direct to the public, including—

- (a) an eating room, cafe, restaurant, milk or soft drink bar; or
- (b) a dining room, bar, shop or kiosk part of a hotel or motel; or
- (c) a hairdresser's or barber's shop, public laundry, or undertaker's establishment; or
- (d) market or sale room, showroom, or service station; or
- (e) *small live music or arts venue.*

Volume One Performance Requirements

Part F4 Sanitary and other facilities

Delete F4P6 and insert NSW F4P6 as follows:

NSW F4P6 Microbial control for water systems

This clause has deliberately been left blank.

F4P6 does not apply in NSW as the installation of hot water, warm water and cooling water systems (and their operation and maintenance) is regulated in the Public Health Regulation 2012, under the Public Health Act 2010.

Part G1 Minor structures and components

Delete G1P2 and insert NSW G1P2 as follows:

NSW G1P2 Swimming pool access and water recirculation systems

[2019: NSW GP1.2]

- (1) A barrier must be provided to a *swimming pool* and must—
 - (a) be continuous for the full extent of the hazard; and
 - (b) be of a strength and rigidity to withstand the foreseeable impact of people; and
 - (c) restrict the access of young children to the pool and the immediate pool surrounds; and
 - (d) have any gates and doors fitted with latching devices not readily operated by young children, and constructed to automatically close and latch.
- (2) A *swimming pool* water recirculation system must incorporate safety measures to avoid entrapment of, or injury to, a person.

Applications

- (1) NSW G1P2(1) only applies to a *swimming pool* with a depth of water more than 300 mm, in conjunction with the Swimming Pools Act 1992 and the Swimming Pools Regulation 2018.
- (2) NSW G1P2(2) only applies to a *swimming pool* with a depth of water more than 300 mm.

Volume Two Performance Requirements

Part H2 Damp and weatherproofing

Delete H2P3 and insert NSW H2P3 as follows:

NSW H2P3 Rising damp

[2019: NSW P2.2.3]

(1) Moisture from the ground must be prevented from causing-

- (a) unhealthy or dangerous conditions, or loss of *amenity* for occupants; and
- (b) undue dampness or deterioration of building elements.
- (2) Barriers installed beneath slab on ground construction for the purposes of (1) must have a high resistance to damage during construction.

Limitations

NSW H2P3 does not apply to a Class 10 building where in the particular case there is no necessity for compliance.

Explanatory Information

The intent of requiring the barrier to have a high resistance to damage during construction is to increase the barrier's ability to resist punctures during construction. By being less susceptible to puncturing, the barrier will provide increased protection against moisture containing dissolved salts from coming into contact with the concrete slab.

Part H7 Ancillary provisions and additional construction requirements

Delete H7P1 and insert NSW H7P1 as follows:

NSW H7P1 Swimming pool access

[2019: NSW P2.7.1]

A barrier must be provided to a *swimming pool* and must—

- (a) be continuous for the full extent of the hazard; and
- (b) be of a strength and rigidity to withstand the foreseeable impact of people; and
- (c) restrict the access of young children to the pool and the immediate pool surrounds; and
- (d) have any gates and doors fitted with latching devices not readily operated by young children, and constructed to automatically close and latch.

Applications

H7P1 only applies to a swimming pool with a depth of water more than 300 mm, in conjunction with the Swimming Pools Act 1992 and the Swimming Pools Regulation 2018.

Schedule 1 Definitions

Aisle: A walkway at the end of *rows* of seating, not being *continental seating*, leading to a cross-over or to an egress doorway.

Appropriate authority

The relevant authority with the responsibility to determine the particular matter.

Assembly building

A building where people may assemble for-

- (a) civic, theatrical, social, political or religious purposes including a library, theatre, public hall or place of worship; or
- (b) educational purposes in a school, early childhood centre, preschool, or the like; or
- (c) entertainment, recreational or sporting purposes including-
 - (i) a cinema; or
 - (ii) a sports stadium, sporting or other club; or
- (d) transit purposes including a bus station, railway station, airport or ferry terminal.

Auditorium: A part of an *entertainment venue* used or intended to be used for the purposes of accommodating an audience to an entertainment.

Continental seating: Rows of seating in which the rows extend the full width of an auditorium without intervening aisles.

Cross-over: In relation to an *entertainment venue* or *temporary structure*, means a walkway between *aisles* or between an *aisle* and an egress doorway.

Designated bushfire prone area

Land that:

- (a) has been designated under legislation; or
- (b) has been identified under an environmental planning instrument, development control plan or in the course of processing and determining a development application,

as land that can support a bushfire or is likely to be subject to bushfire attack.

Development consent: Is as defined in the Environmental Planning and Assessment Act 1979.

Entertainment venue: Is as defined in the Environmental Planning and Assessment Regulation 2021.

Film: A cinematograph film of a size of 35 mm or greater.

Flying scenery: Scenery of a kind that is lifted above the stage floor by means of lines run from a grid.

Garage top dwelling: A Class 1a dwelling located above a Class 10a *private garage* which is not associated with that Class 1a dwelling and includes any internal entry stair serving the garage top dwelling.

Grid: A framework from which lines are run for the purpose of lifting flying scenery above the stage floor.

Information and education facility: Is as defined in the Standard Instrument—Principal Local Environment Plan.

Licensed premises: Is as defined in the Liquor Act 2007.

Minimum lateral clearance: A permanently unobstructed space having a height above floor level of not less than 2000 mm and a width of not less than the specified measurement.

- Planning for Bush Fire Protection: Is as prescribed by the Environmental Planning and Assessment Regulation 2021.
- **Projection suite:** Such part of an *entertainment venue* as is designed to accommodate apparatus used for projecting *films*.

Row: A row of seating-

- (a) between a wall or other barrier and an *aisle*; or
- (b) between 2 aisles.

Small live music or arts venue: The whole or part of a building-

- (a) in which cultural activities including live music, visual arts' displays, dancing, poetry and spoken word performances are provided to the public; and
- (b) that has a *floor area* of not more than 300 square metres; and
- (c) that has a rise in storeys of not more than 2; and
- (d) that occupies not more than 2 storeys including the ground floor storey; and
- (e) where pyrotechnics or theatrical smoke (smoke machines, hazers or the like) are not used.

Spa pool: Is as defined in the Swimming Pools Act 1992.

Special fire protection purpose: (As per Section 100B(6) of the Rural Fires Act 1997) means any of the following purposes:

- (a) a school,
- (b) a child care centre,
- (c) a hospital (including a hospital for the mentally ill or mentally disordered),
- (d) a hotel, motel or other tourist accommodation,
- (e) a building wholly or principally used as a home or other establishment for mentally incapacitated persons,
- (f) seniors housing within the meaning of State Environmental Planning Policy (Housing for Seniors or People with a Disability) 2004 (now SEPP (Housing) 2021),
- (g) a group home within the meaning of State Environmental Planning Policy No 9 Group Homes (now SEPP (Housing) 2021),
- (h) a retirement village,
- (i) any other purpose prescribed by the regulations (Rural Fires Regulation 2022).

Notes

For application of this definition in the BCA, the term "school" does not include a college, university or similar tertiary educational establishment.

Temporary structure: Either-

- (a) a booth, tent or other temporary enclosure, whether or not a part of the booth, tent or enclosure is permanent; or
- (b) a mobile structure.

Schedule 2 Referenced Documents

Insert NSW Table 1 as follows:

NSW Table 1: Schedule of referenced documents

No.	Date	Title	Volume One	Volume Two	Housing Provisions
AS/NZS 1596	2014	The Storage and Handling of LP Gas	NSW I4D61	N/A	N/A
AS 1603	2018	Automatic fire detection and alarm systems — Heat alarms (See Note 1)	N/A	N/A	NSW 9.5.1
AS 2001 Part 5.4	2005	Methods of test for textiles: Dimensional washing and drying procedures for textile texting	NSW S7C7	N/A	N/A
AS/NZS 3000	2018	Electrical installations (known as the Australian/New Zealand Wiring Rules)	NSW I5D14	N/A	N/A
AS/NZS 3002	2008	Electrical installations — Shows and carnivals	NSW I5D14	N/A	N/A
SSL	N/A	Appraisal Specification FAS102	NSW I4D46	N/A	N/A
NSW Legislation	1979	Environmental Planning and Assessment Act	NSW G5D3, NSW Schedule 1	NSW H7D4, NSW Schedule 1	NSW Schedule 1
NSW Legislation	2021	Environmental Planning and Assessment Regulation	NSW I4D1, NSW I4D46, NSW Schedule 1	NSW Schedule 1	NSW Schedule 1
NSW Legislation	2007	Liquor Act	NSW Schedule 1	NSW Schedule 1	NSW Schedule 1
NSW Legislation	1997	Rural Fires Act	NSW G5D3, NSW G5D4, NSW Schedule 1	NSW Schedule 1, NSW H7D4	NSW Schedule 1
NSW Legislation	N/A	Standard Instrument— Principal Local Environmental Plan	NSW Schedule 1	NSW Schedule 1	NSW Schedule 1
NSW Legislation	1992	Swimming Pools Act	NSW G1P2, NSW G1D2, NSW Schedule 1	NSW H7P1, NSW H7D2, NSW Schedule 1	NSW Schedule 1

New South Wales

No.	Date	Title	Volume One	Volume Two	Housing Provisions
NSW Legislation	2018	Swimming Pools Regulation	NSW G1P2, NSW G1D2	NSW H7P1, NSW H7D2	N/A
NSW Legislation	2011	Work Health and Safety Act	NSW G1D5	N/A	N/A

Table Notes

(1) Heat alarms complying with AS 1603.3 must be a class type A1 or A2.

Schedule 6	Northern T	erritory
Volume One	Performance Re	quirements
	Part G1	Minor structures and components
	NT G1P1	Swimming pool drainage
	NT G1P2	Swimming pool access and water recirculation systems
Volume Two	Performance Re	quirements
	Part H2	Damp and weatherproofing
	NT H2P4	Drainage from swimming pools
	Part H4	Health and amenity
	NT H4P6	Sound insulation
	Part H7	Ancillary provisions and additional construction requirements
	NT H7P1	Swimming pool access
Volume Three	Performance Re	quirements
	Part C2	Sanitary drainage systems
	NT C2P2	Swimming pool drainage
Schedule 2	Referenced Doc	uments

Volume One Performance Requirements

Part G1 Minor structures and components

Delete G1P1 and insert NT G1P1 as follows:

NT G1P1 Swimming pool drainage

This clause has deliberately been left blank.

Delete G1P2 and insert NT G1P2 as follows:

NT G1P2 Swimming pool access and water recirculation systems

[2019: NT GP1.2]

A *swimming pool* water recirculation system must incorporate safety measures to avoid entrapment of, or injury to, a person.

Applications

NT G1P2 only applies to a *swimming pool* with a depth of water more than 300 mm.

Volume Two Performance Requirements

Part H2 Damp and weatherproofing

Delete H2P4 and insert NT H2P4 as follows:

NT H2P4 Drainage from swimming pools

This clause has deliberately been left blank.

Part H4 Health and amenity

Delete H4P6 and insert NT H4P6 as follows:

NT H4P6 Sound insulation

[2019: NT P2.4.6]

- (1) Walls separating dwellings must provide insulation against the transmission of airborne and impact generated sound sufficient to prevent illness or loss of amenity to the occupants.
- (2) The *required* sound insulation of walls must not be compromised by the incorporation or penetration of a pipe or other service element.

Part H7 Ancillary provisions and additional construction requirements

Delete H7P1 and insert NT H7P1 as follows:

NT H7P1 Swimming pool access

This clause has deliberately been left blank.

Restriction of access to swimming pools in the Northern Territory is regulated under the Swimming Pool Safety Act.

Volume Three Performance Requirements

Part C2 Sanitary drainage systems

Delete C2P2 and insert NT C2P2 as follows:

NT C2P2 Swimming pool drainage

This clause has deliberately been left blank.

Schedule 2 Referenced Documents

Insert NT Table 1 as follows:

NT Table 1: Schedule of referenced documents

No.	Date	Title	Volume One	Volume Two	Housing Provisions
AS/NZS 1170 Part 2	2011	Structural design actions: Wind actions Amdt 1, 2, 3, 4 and 5	NT S4C3	N/A	N/A
AS 2047	2014	Windows and external glazed doors in buildings (incorporating amendments 1 and 2) See Note	B1D4, F3V1, F3D4	H1D8, H2V1	NT 13.4.4
AS 3660 Part 1	2014	Termite management: New building work	NT B1D4	N/A	NT 3.4.1(2), NT 3.4.2
AS 4254 Part 1	2012	Ductwork for air handling systems in buildings — Flexible duct	N/A	N/A	NT 13.7.4
AS 4254 Part 2	2012	Ductwork for air handling systems in buildings — Rigid duct	Spec 7	N/A	NT 13.7.4
AS/NZS 4859.1	2018	Thermal insulation materials for buildings — General criteria and technical provisions	N/A	N/A	NT 13.2.2, NT 13.7.4
BCA 2009	May 2009	Building Code of Australia	NT Section J	N/A	N/A
BCA 2019	May 2009	Building Code of Australia	NT Section J	N/A	N/A

Table Notes

For AS 2047:

(a) Tests carried out under earlier editions of AS 2047 remain valid.

(b) Reports based on AS 2047 relating to tests carried out after the NCC reference date for AS 2047—2014 Amendment 2 must relate to the amended Standard.

Schedule 7	Queensland	d
Volume One	Performance Re	quirements
	Part B1	Structural provisions
	QLD B1P4	Buildings in flood areas
	Part G1	Minor structures and components
	QLD G1P2	Swimming pool access and water recirculation systems
Volume Two	Performance Re	quirements
	Part H1	Structure
	QLD H1P2	Buildings in flood areas
	Part H7	Ancillary provisions and additional construction requirements
	QLD H7P1	Swimming pool access
Volume Three	Performance Re	quirements
	Part B2	Heated water services
	QLD B2P7	Energy use and source
Schedule 1	Definitions	
Schedule 2	Referenced Doc	uments

Volume One Performance Requirements

Part B1 Structural provisions

Delete B1P4 and insert QLD B1P4 as follows:

QLD B1P4 Buildings in flood areas

This clause has deliberately been left blank.

Building work in designated flood areas is regulated by the Building Act 1975 and the Queensland Development Code 3.5 - Construction of buildings in flood hazard areas

Part G1 Minor structures and components

Delete G1P2 and insert QLD G1P2 as follows:

QLD G1P2 Swimming pool access and water recirculation systems

[2019: QLD GP1.2]

A *swimming pool* water recirculation system must incorporate safety measures to avoid entrapment of, or injury to, a person.

Applications

QLD G1P2 only applies to a *swimming pool* with a depth of water more than 300 mm.

Volume Two Performance Requirements

Part H1 Structure

Delete H1P2 and insert QLD H1P2 as follows:

QLD H1P2 Buildings in flood areas

This clause has deliberately been left blank.

Building work in designated flood hazard areas is regulated by the Building Act 1975 and Development Code 3.5 - Construction of buildings in flood hazard areas.

Part H7 Ancillary provisions and additional construction requirements

Delete H7P1 and insert QLD H7P1 as follows:

QLD H7P1 Swimming pool access

This clause has deliberately been left blank.

Restriction of access to swimming pools in Queensland is regulated under the Building Act 1975.

Volume Three Performance Requirements

Part B2 Heated water services

Delete B2P7 and insert QLD B2P7 as follows:

QLD B2P7 Energy use and source

This clause has deliberately been left blank.

Schedule 1 Definitions

Primary building element

For the purposes of-

- (1) Volume One, a member of a building designed specifically to take part of the loads specified in B1D3 and includes roof, ceiling, floor, stairway or ramp and wall framing members including bracing members designed for the specific purpose of acting as a brace to those members; or
- (2) Volume Two—
 - (a) A member of a building specifically designed to take part of the building loads and includes roof, ceiling, floor, stairway or ramp and wall framing members including bracing members designed for the specific purpose of acting as a brace to those members; and
 - (b) door jambs, window frames and reveals, architraves and skirtings.

Explanatory Information

The loads to which a building may be subjected are dead, live, wind, snow and earthquake loads. Further information on building loads can be found in the AS 1170 series of Standards.

Schedule 2 Referenced Documents

Insert QLD Table 1 as follows:

QLD Table 1: Schedule of referenced documents

No.	Date	Title	Volume One	Volume Two	Housing Provisions
BCA 2009	May 2009	Building Code of Australia	QLD Section J	N/A	N/A
N/A	December 2017	Queensland Government, Department of Agriculture, Fisheries and Forestry – Construction timbers in Queensland: Book 1 and Book 2: Properties and specifications for satisfactory performance of construction timbers in Queensland – Class 1 and 10 buildings (Houses, carports, garages, greenhouses and sheds)	QLD B1D4	QLD H1D6	N/A
N/A	N/A	Building Act 1975	N/A	QLD H7P1, QLD H7D2	N/A
		Queensland Development Code MP 4.1 – Sustainable buildings	Section J	Part H6	Section 13

Schedule 8	South Aust	ralia
All Volumes	General Requirer	nents
	Part A6	Building classification
	SA A6G7	Class 6 buildings
Volume One	Performance Red	quirements
	Part B1	Structural provisions
	SA B1P4	Buildings in flood areas
	Part F1	External waterproofing, rainwater management and rising damp
	SA F1P4	Rising damp
	Part F2	Wet areas and overflow protection
	SA F2P1	Wet area overflows
	Part G1	Minor structures and components
	SA G1P2	Swimming pool access and water recirculation systems
Volume Two	Performance Red	quirements
	Part H1	Structure
	SA H1P2	Buildings in flood areas
	Part H2	Damp and weatherproofing
	SA H2P3	Rising damp
	Part H3	Fire safety
	H3P1	Spread of fire
	Part H4	Health and amenity
	H4P1	Wet areas
	Part H7	Ancillary provisions and additional construction requirements
	H7P1	Swimming pool access
Schedule 1	Definitions	
Schedule 2	Referenced Docu	uments

All Volumes General Requirements

Part A6 Building classification

Delete A6G7 and insert SA A6G7 as follows:

SA A6G7 Class 6 buildings

[2019: SA A6.6]

A Class 6 building is a shop or other building for the sale of goods by retail or the supply of services direct to the public, including—

- (a) an eating room, cafe, restaurant, milk or soft drink bar; or
- (b) a dining room, bar, shop or kiosk part of a hotel or motel; or
- (c) a hairdresser's or barber's shop, public laundry, or undertaker's establishment; or
- (d) market or sale room, showroom, or service station; or
- (e) a small arts venue.

Volume One Performance Requirements

Part B1 Structural provisions

Delete B1P4 and insert SA B1P4 as follows:

SA B1P4 Buildings in flood areas

This clause has deliberately been left blank.

Part F1 External waterproofing, rainwater management and rising damp

Delete F1P4 and insert SA F1P4 as follows:

SA F1P4 Rising damp

- (1) Moisture from the ground must be prevented from causing-
 - (a) undue dampness or deterioration of building elements; and
 - (b) unhealthy or dangerous conditions, or loss of amenity for occupants.
- (2) Barriers installed to prevent transfer of moisture from the ground must have-
 - (a) high resistance to moisture penetration; and
 - (b) high resistance to damage during construction; and
 - (c) high resistance to degradation by dissolved salts.

Part F2 Wet areas and overflow protection

Delete F2P1 and insert SA F2P1 as follows:

SA F2P1 Wet area overflows

[2019: SA FP1.6]

Overflow from a bathroom, laundry facility or the like must be prevented from penetrating to adjoining rooms or spaces.

Part G1 Minor structures and components

Delete G1P2 and insert SA G1P2 as follows:

SA G1P2 Swimming pool access and water recirculation systems

[2019: SA GP1.2]

- (1) A barrier must be provided to a *swimming pool* and must—
 - (a) be continuous for the full extent of the hazard; and
 - (b) be of a strength and rigidity to withstand the foreseeable impact of people; and
 - (c) restrict the access of young children to the pool and the immediate pool surrounds; and
 - (d) have any gates and doors fitted with latching devices not readily operated by young children, and constructed to automatically close and latch.
- (2) A *swimming pool* water recirculation system must incorporate safety measures to avoid entrapment of, or injury to, a person.
- (3) A swimming pool must have prominent and visible signage that assists persons to provide first aid and to perform

[2019: SA FP1.5]

cardiopulmonary resuscitation on young children.

Applications

SA G1P2 only applies to a *swimming pool* associated with a Class 2 or 3 building or Class 4 part of a building, with a depth of water more than 300 mm.

Volume TwoPerformance Requirements

Part H1 Structure

Delete H1P2 and insert SA H1P2 as follows:

SA H1P2 Buildings in flood areas

This clause has deliberately been left blank.

Part H1 does not apply in South Australia.

Part H2 Damp and weatherproofing

Delete H2P3 and insert SA H2P3 as follows:

SA H2P3 Rising damp

(1) Moisture from the ground must be prevented from causing-

- (a) undue dampness or deterioration of building elements; and
- (b) unhealthy or dangerous conditions, or loss of amenity for occupants.
- (2) Barriers installed to prevent transfer of moisture from the ground must have-
 - (a) high resistance to moisture penetration; and
 - (b) high resistance to damage during construction; and
 - (c) high resistance to degradation by dissolved salts.

Part H3 Fire safety

H3P1 Spread of fire

Delete H3P1(1) and insert SA H3P1(1) as follows:

(1) A Class 1 building must be protected from the spread of fire from-

- (a) another building other than an associated Class 10 building; and
- (b) the allotment boundary, other than a boundary adjoining a road or public space; and
- (c) a Class 10b *brush fence*.

H4P1

Part H4 Health and amenity

Insert subclause SA H4P1(2) in clause H4P1 as follows:

Wet areas

(2) Floors in bathrooms, or rooms containing a shower or sanitary fixture, must be installed in a manner that will prevent accumulation of water on the surface which could create unhealthy or hazardous conditions.

[2019: SA P2.2.3]

[2019: P2.3.1]

[2019: P2.4.1]

Part H7 Ancillary provisions and additional construction requirements

H7P1 Swimming pool access

[2019: P2.7.1]

Insert subclause SA H7P1(2) in clause H7P1 as follows:

(2) A swimming pool must have prominent and visible signage that assists persons to provide first-aid and to perform cardiopulmonary resuscitation on young children.

Schedule 1 Definitions

Agriculture: Cropping, grazing, animal husbandry, intensive animal keeping, horticulture, aquaculture, wool shearing or dairy, but not viticulture or forestry.

Assembly building

A building where people may assemble for—

- (a) civic, theatrical, social, political or religious purposes including a library, theatre, public hall or place of worship; or
- (b) educational purposes in a school, early childhood centre, preschool, or the like; or
- (c) entertainment, recreational or sporting purposes including-
 - (i) a discotheque or nightclub; or
 - (ii) a cinema; or
 - (iii) a sports stadium, sporting or other club; or
- (d) transit purposes including a bus station, railway station, airport or ferry terminal.

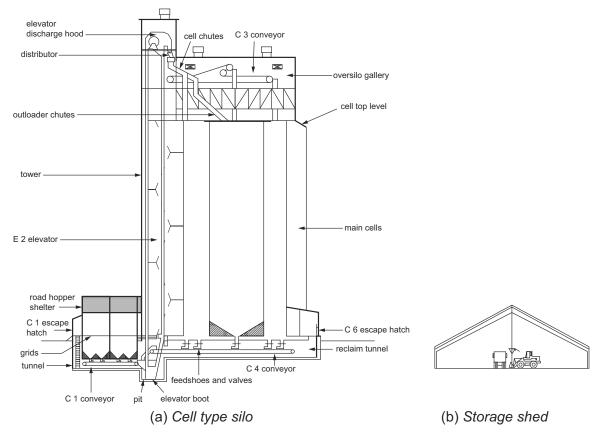
Brush fence: A fence or gate that is primarily constructed of Broombrush (Melalueca Uncinata).

Bulk grain storage facility: A building or structure used for the commercial bulk handling or storage of granular materials such as grain, ore, or the like, where only a small number of occupants are present at one time and includes *cell type silos* and *storage sheds*.

Cell type silo: A type of bulk grain storage facility similar to that illustrated in diagram (a) of Figure SA 1.

Insert SA Figure 1 as follows:

SA Figure 1: Two types of bulk grain storage facilities



Farm building

A single *storey* Class 7 or 8 building that is—

(a) primarily associated with agriculture and located on land used primarily for agriculture; and

- (b) the total number of people accommodated in the building does not exceed one person per 200 m² of total *floor area*, or six people, whichever is greater; and
- (c) the *floor area* of each building does not exceed the maximum *floor area* and volume specified in Table SA 1 for the type of *farm building*; and
- (d) the building does not contain occupancies of excessive fire hazard as listed in E1D5 to E1D13; and
- (e) if the building is used for the storage of hay, an open space complying with C3D5(1) is provided around the perimeter of each building.

Insert SA Table SA 1 as follows:

SA Table SA 1: Farm building categories and maximum floor area

Building group	Type of farm building	Maximum floor area	Maximum volume
Group A	Buildings used for keeping, growing and/or harvesting of animals and/or plants, and includes greenhouses with rigid covering material and large implement/vehicle storage sheds.	5,000 m ²	30,000 m ³
Group B	Buildings used for packing, sorting and/or storage of produce and may include workshops.	2,000 m ²	12,000 m ³
Group C	Greenhouses with non-rigid, plastic or fabric covering material.	5,000 m ²	30,000 m ³

Rainwater tank: A vessel for the storage of surface water collected from the roof catchment area of the building.

Roof catchment area: The area of the roof (expressed in square metres), measured on the horizontal (no allowance for slope or vertical surfaces) and includes the plan area of the gutters.

Small arts venue: The whole or the only part of a building that has a rise in storeys of not more than 2—

- (a) in which cultural activities including live music, visual arts displays, dancing, poetry and spoken word performances are provided to the public; and
- (b) the floor area used as a *small arts venue* does not exceed 300 m²; and
- (c) no pyrotechnics or theatrical smoke (smoke machines, hazers or the like) are used.

Storage shed: A type of *bulk grain storage facility* similar to that illustrated in diagram (b) of Figure SA 1.

Schedule 2 Referenced Documents

Insert SA Table 1 as follows:

SA Table 1:

Schedule of referenced documents

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS/NZS 1260	2017	PVC-U pipes and fittings for drain, waste and vent applications Amdt 1	N/A	N/A	N/A	C1D3
AS 1428 Part 1	2001	Design for access and mobility – General requirements for access – New building work	N/A	SA H10D4	N/A	N/A
AS/NZS 1891 Part 4	2000	Industrial fall- arrest systems and devices: Selection, use and maintenance	SA G8D3	N/A	N/A	N/A
enHealth Council, Department of Health and Ageing	2004	Guidance on the use of rainwater tanks	N/A	SA H9D5	N/A	N/A
	See Note 1	Planning and Design Code	SA G5D5	SA H7D4(3)	N/A	N/A

Table Notes

(1) The Planning and Design Code is the version current at the time of project documentation approval, unless noted otherwise.

Schedule 9	Tasmania	
All Volumes	General Require	ments
	Part A1	Interpreting the NCC
	A1G4	Interpretation
	Part A4	Referenced documents
	A4G1	Referenced documents
	Part A5	Documentation of design and construction
	A5G4	Evidence of suitability — Volume Three (PCA)
Volume One	Performance Re	quirements
	Part F8	Condensation management
	TAS F8P1	Condensation and water vapour management
	Part G1	Minor structures and components
	TAS G1P2	Swimming pool access and water recirculation systems
	TAS G1P6	Swimming pools
Volume Two	Performance Re	quirements
	Part H7	Ancillary provisions and additional construction requirements
	TAS H7P2	Swimming pools
	TAS H7P3	Heating appliances
	TAS H7P5	Buildings in bushfire prone areas
Volume Three	Performance Re	quirements
	Part B1	Cold water services
	TAS B1P5	Pressure
	Part B2	Heated water services
	TAS B2P9	Pressure
	Part C3	On-site wastewater management
	TAS C3P5	General requirements
Schedule 1	Definitions	
Schedule 2	Referenced Doc	uments

NCC 2022 - Consolidated Requirements (1 May 2023)

All Volumes General Requirements

Part A1 Interpreting the NCC

Insert subclause TAS A1G4(7) in clause A1G4 as follows:

Interpretation

(7) The Director of Building Control may issue written advice to deal with arising issues such as interpretation of codes, standards and regulations.

Part A4 Referenced documents

A4G1 Referenced documents

Delete A4G1(3) and insert TAS A4G1(3) as follows:

(3) The following applies:

A1G4

(a) All Tasmanian legislative documents referenced within the PCA are taken to be the latest published versions thereof unless noted otherwise.

Part A5 Documentation of design and construction

A5G4 Evidence of suitability – Volume Three (PCA)

[2019: A5.3]

Insert subclause TAS A5G4(7) in clause A5G4 as follows:

- (7) A product used in roof plumbing, heating ventilation and air-conditioning or on-site liquid trade waste are deemed fit to be for their intended purpose if it has evidence of suitability in the form of—
 - (a) WaterMark Licence issued in accordance with the WaterMark Certification Scheme; or
 - (b) a current certificate issued by a certification body stating that the properties and performance of a product meet the requirements of the NCC Volume Three; or
 - (c) authorisation from the Director of Building Control.

Insert subclause TAS A5G4(8) in clause A5G4 as follows:

- (8) A *product* used in *On-site wastewater management systems* are deemed to be fit for their intended purpose if it has evidence of suitability in the form of—
 - (a) an *On-site wastewater management system* used in a *plumbing* installation must be issued with a Certificate of Accreditation in accordance with the AS 1546 series of Standards; or
 - (b) a current certificate issued by a JAS-ANZ accredited certification body stating that the properties and performance of a product meets the requirement of NCC Volume Three; and
 - (c) accreditation from the Director of Building Control.

Insert subclause TAS A5G4(9) in clause A5G4 as follows:

(9) A holding tank or collection well for use in a *plumbing* or *drainage* installation may be verified as meeting the *Performance Requirements* of the Director of Building Control if complies with AS/NZS 1546.1.

Insert subclause TAS A5G4(10) in clause A5G4 as follows:

(10) Under the Tasmanian Building Act, the Director of Building Control may accredit an On-site wastewater management system. On-site wastewater management systems larger than that covered by the Australian Standards AS/NZS 1546 Series are exempt from accreditation and a Performance Solution is required.

Products accredited by the Director of Building Control are published in a list available at www.cbos.tas.gov.au.

[2019: A1.0]

[2019: A4.0]

NCC 2022 - Consolidated Requirements (1 May 2023)

Volume One Performance Requirements

Part F8 Condensation management

Delete F8P1 and insert TAS F8P1 as follows:

TAS F8P1 Condensation and water vapour management

[2019: TAS FP6.1]

In a *sole-occupancy unit* of a Class 2 building or a Class 4 part of a building, risks associated with water vapour and *condensation* must be managed to minimise their impact on the health of occupants.

Notes

- (1) Refer to the guidance in the "Condensation in Buildings Tasmanian Designers' Guide" current version available at www.cbos.tas.gov.au. This Guide must be read in conjunction with the NCC.
- (2) The strategies listed in the Guide exceed the NCC requirements for condensation management, however are strongly recommended to assist in minimising condensation in cool climates like Tasmania.

Part G1 Minor structures and components

Delete G1P2 and insert TAS G1P2 as follows:

TAS G1P2 Swimming pool access and water recirculation systems

[2019: TAS GP1.2]

- (1) A barrier must be provided to a *swimming pool* and must—
 - (a) be continuous for the full extent of the hazard; and
 - (b) be of a strength and rigidity to withstand the foreseeable impact of people; and
 - (c) restrict the access of young children to the pool and the immediate pool surrounds; and
 - (d) have any gates and doors fitted with latching devices not readily operated by young children, and constructed to automatically close and latch.
- (2) A *swimming pool* water recirculation system must incorporate safety measures to avoid entrapment of, or injury to, a person.

Applications

- (1) TAS G1P2(1) only applies to a *swimming pool* associated with a Class 2 or 3 building or Class 4 part of a building, with a depth of water of more than 300 mm.
- (2) TAS G1P2(2) only applies to a *swimming pool* with a depth of water more than 300 mm.

Insert TAS G1P6 as follows:

TAS G1P6Swimming pools

Swimming pools must be suitable and safe to use and be provided with appropriate facilities.

Limitations

TAS G1P6 does not apply to a *swimming pool* associated with a Class 2 building.

[2019: TAS GP1.6]

Volume Two Performance Requirements

Part H7 Ancillary provisions and additional construction requirements

Delete H7P2 and insert TAS H7P2 as follows:

TAS H7P2Swimming pools

[2019: P2.7.2, TAS 2.1]

- (1) A *swimming pool* water recirculation system must incorporate safety measures to avoid entrapment of, or injury to, a person.
- (2) Swimming pools must be provided with an adequate water recirculation, disinfection and filtration system which is suitable and safe to use.

Applications

TAS H7P2(1) only applies to a *swimming pool* with a depth of water more than 300 mm.

Limitations

TAS H7P2(2) does not apply to a *swimming pool* associated with a Class 1 building if the depth of water is less than 300 mm and the volume of the pool does not exceed 15 m³.

Delete H7P3 and insert TAS H7P3 as follows:

TAS H7P3Heating appliances

[2019: TAS P2.7.3]

A heating appliance and its associated components within a building, including an open fire-place, chimney, or the like, must be installed—

- (a) to withstand the temperatures likely to be generated by the appliance; and
- (b) so that it does not raise the temperature of any building element to a level that would adversely affect the element's physical or mechanical properties or function; and
- (c) so that hot products of combustion will not—
 - (i) escape through the walls of the associated components; and
 - (ii) discharge in a position that will cause fire to spread to nearby *combustible* materials or allow smoke to penetrate through nearby *windows*, ventilation inlets, or the like in the building containing the heating appliance; and
 - (iii) in the case of solid-fuel burning appliances, be discharged above appropriate emission limits.

Delete H7P5 and insert TAS H7P5 as follows:

TAS H7P5Buildings in bushfire prone areas

[2019: TAS P2.7.5]

A Class 1 building or a Class 10a building or deck associated with a Class 1 building that is constructed in a *designated bushfire prone area* must, to the degree necessary, be—

- (a) designed and constructed to reduce the risk of ignition from a bushfire, appropriate to the-
 - (i) potential for ignition caused by burning embers, radiant heat or flame generated by a bushfire; and
 - (ii) intensity of the bushfire attack on the building; and
- (b) provided with vehicular access to the *site* to assist fire fighting and emergency personnel defend the building or evacuate occupants; and

(c) provided with access at all times to a sufficient supply of water for fire fighting purposes on the *site*.

Notes

For additional requirements relating to bushfire prone areas, refer to the Director's Determinations on Bushfire Hazard Areas – current versions available at www.cbos.tas.gov.au

Volume Three Performance Requirements

Part B1 Cold water services

Delete B1P5 and insert TAS B1P5 as follows:

TAS B1P5Pressure

[2019:BP1.2, TAS Exemption 1]

The points of discharge for a cold water service must—

- (a) have---
 - (i) a working pressure of not less than 50 kPa; and
 - (ii) a static pressure within the building of not more than 500 kPa; or
- (b) have water pressures suitable for the correct functioning of the fixture or appliance where water pressures outside of (a)(i) and (a)(ii) are required.

Exemptions

B1P5(a)(i) and B1P5(a)(ii) do not apply to existing low-pressure gravity only water services.

Part B2 Heated water services

Delete B2P9 and insert TAS B2P9 as follows:

TAS B2P9Pressure

[2019:BP2.3, TAS Exemption 1]

The points of discharge for a *heated water* service must—

- (a) have-
 - (i) a working pressure of not less than 50 kPa: and
 - (ii) a static pressure within the building of not more than 500 kPa; or
- (b) have water pressures suitable for the correct functioning of the fixture or appliance where water pressures outside of (a)(i) and (a)(ii) are required.

Exemptions

B2P9(a)(i) and B2P9(a)(ii) do not apply to existing low-pressure gravity only water services.

Part C3 On-site wastewater management

Delete C3P5 and insert TAS C3P5 as follows:

TAS C3P5General requirements

[New for 2022]

On-site wastewater management systems that facilitate on-site storage, treatment, disposal or re-use of wastewater must be designed and constructed—

- (a) with *required* treatment and storage capacity for the volume and make up of waste and frequency of discharge for disposal; and
- (b) with *required* size, strength and rigidity for the nature, flow rates, volume of wastes and/or waste products which must be processed; and

- (c) using materials which are impervious both to the waste for which disposal is required and to water; and
- (d) to avoid the likelihood of *surface water* and stormwater entering the system; and
- (e) so that access or inspection openings provided for desludging and maintenance terminate at or above finished surface level.
- (f) so that the installation throughout its serviceable life will continue to satisfy the requirements of C3P1 to C3P9.

Explanatory Information

For alternative venting arrangements, see clause C2D6 in sanitary drainage.

Schedule 1 Definitions

Centre-based care class 4 facility: A facility as defined in Centre Based Care Class 4 Standards.

Centre-based care class 5 facility: A facility as defined in Centre Based Care Class 5 Standards.

Early childhood centre

- Any premises or part thereof providing or intending to provide a centre-based education and care service within the meaning of the Education and Care Services National Law Act 2010 (Vic), the Education and Care Services National Regulations and centre-based services that are licensed or approved under State and Territory children's services law, but excludes—
 - (a) education and care primarily provided to school aged children in outside school hours settings; and
 - (b) services licensed as *centre-based care class 4* under the Child Care Act 2001.

Expert judgement

For Volume Three, the judgement of a person who has the qualifications and expertise to determine whether a *Plumbing or Drainage Solution* complies with the *Performance Requirements*.

Explanatory Information

The level of qualification and/or experience required to determine whether a *Plumbing or Drainage Solution* complies with the *Performance Requirements* may differ depending on the degree of complexity and the requirements of the Tasmanian Building Act. Practitioners should seek advice from the *Permit Authority*.

Permit Authority: A permit authority as defined in the Building Act 2016.

Public: Includes any person working in an enclosed public place.

School age care facility: Is a facility providing care for children (primarily) 5 years or older in an outside of school hours setting, either approved or licenced under Education and Care Services National Law (Application) Act 2011 or the Child Care Act 2001.

Temporary structure: Includes any-

- (a) booth, tent or other temporary enclosure, whether or not part of the booth, tent or enclosure is permanent; or
- (b) temporary seating structure; or
- (c) other structure prescribed under the Building Act 2016.

Schedule 2 Referenced Documents

Insert TAS Table 1 as follows:

TAS Table 1:

Schedule of referenced documents

No.	Date	Title	Volume One	Volume Two	Housing Provisions
AS 1657	2018	Fixed platforms, walkways, stairways and ladders – Design, construction and installation	TAS I10D3	N/A	N/A
AS/NZS 1668 Part 1	2015	The use of ventilation and air-conditioning in buildings: Fire and smoke control in multi- compartment buildings	TAS I4D7	N/A	N/A
AS 1668 Part 2	2012	The use of ventilation and air-conditioning in buildings: Mechanical ventilation in buildings	TAS I4D7, TAS I16D5	N/A	N/A
AS/NZS 1680 Part 1	2006	Interior lighting: General principles and recommendations	TAS 14D8, TAS 17D2, TAS 17D3, TAS 116D4	N/A	N/A
AS/NZS1680 Part 2.1	2008	Interior lighting: Circulation spaces and other general areas	TAS I7D2, TAS I7D3, TAS I16D4	N/A	N/A
AS/NZS1680 Part 2.2	2008	Interior lighting: Office and screen based tasks	TAS I7D2, TAS I7D3, TAS I16D4	N/A	N/A
AS/NZS1680 Part 2.3	2008	Interior lighting: Education and training facilities	TAS I7D2, TAS I7D3, TAS I16D4	N/A	N/A
AS/NZS1680 Part 2.4	2017	Interior lighting: Industrial tasks and processes	TAS 14D8, TAS 17D2, TAS 17D3	N/A	N/A
AS/NZS1680 Part 2.5	2018	Interior lighting: Hospitals and medical tasks	TAS I7D2, TAS I7D3	N/A	N/A
AS 2658	2008	LP Gas – Portable and mobile appliances	TAS I16D7	N/A	N/A
AS 2746	2008	Working areas for gas fuelled vehicles	TAS I17D2	N/A	N/A

No.	Date	Title	Volume One	Volume Two	Housing Provisions
AS/NZS 3000	2018	Electrical installations (known as the Australian/New Zealand Wiring Rules)	TAS I16D6	N/A	N/A
AS 4464	2007	Hygienic production of game meat for human consumption	TAS I6D2	N/A	N/A
AS 4465	2006	Construction of premises and hygienic production of poultry meat for human consumption	TAS I6D2	N/A	N/A
AS 4466	1998	Hygienic production of rabbit meat for human consumption	TAS I6D2	N/A	N/A
AS 4674	2004	Design, construction and fit-out of food premises (Clauses 4.2 and 4.3)	TAS I4D9, TAS I4D13	N/A	N/A
AS 4696	2007	Hygienic production and transportation of meat and meat products for human consumption	TAS I6D2	N/A	N/A
AS 5008	2007	Hygienic rendering of animal products	TAS I6D2	N/A	N/A
AS 5010	2001	Hygienic production of ratite (emu/ostrich) meat for human consumption	TAS I6D2	N/A	N/A
AS 5011	2001	Hygienic production of natural casings for human consumption	TAS I6D2	N/A	N/A
ABCB	-	Temporary Structures Standard	TAS 116D2	N/A	N/A

No.	Date	Title	Volume One	Volume Two	Housing Provisions
Australasian Health Facility Guidelines	—	N/A	TAS I9D2	N/A	N/A
BCA 2019 Amendment 1	2019	Building Code of Australia	TAS Section J	TAS Part H6	TAS Section 13
Centre Based Care Class 4 Standards	N/A	Tasmanian Licencing Standards for Centre Based Child Care Class 4	TAS Schedule 1	TAS Schedule 1	TAS Schedule 1
Centre Based Care Class 5 Standards	N/A	Tasmanian Licencing Standards for Centre Based Child Care Class 5 (0-12 years)	TAS Schedule 1	TAS Schedule 1	TAS Schedule 1
Child Care Act	2001	N/A	TAS I16P1, TAS I16P2, TAS I16P3, TAS I16D1, TAS Schedule 1	TAS Schedule 1	TAS Schedule 1
Condensation in Buildings Tasmanian Designers Guide		N/A	TAS F8P1	TAS H4D9	N/A
Dairy Industry Act	1994	N/A	TAS I4P1, TAS I4D1, TAS I7D1	N/A	N/A
Disability (Access to Premises – Buildings) Standards	2010	N/A	TAS D4D14	N/A	N/A
Disability Discrimination Act (Cth)	1992	N/A	TAS D1P10	N/A	N/A
Early Childhood Centre and School Age Care Facilities Code	N/A	N/A	TAS I5D2	N/A	N/A
Education and Care Services National Law (Application) Act	2011	N/A	TAS I16P1, TAS I16P2, TAS I16P3,TAS I16D1, TAS Schedule 1	TAS Schedule 1	N/A
Export Control (Milk and Diary) Orders	N/A	N/A	TAS I4D17	N/A	N/A
Health Service Establishments Act	2006	N/A	TAS I9D1	N/A	N/A
Hygienic Production of Pet Meat	N/A	Technical Report 88	TAS I6D2	N/A	N/A

No.	Date	Title	Volume One	Volume Two	Housing Provisions
Liquor Licensing Act	1990	N/A	TAS I4P1, TAS I4D1, TAS I5D1	N/A	N/A
Primary Produce Safety Act	2011	N/A	TAS I4P1, TAS I4D1, TAS I4D16	N/A	N/A
Water and Sewerage Industry Act	2008	N/A	TAS I4D3	N/A	N/A

Table Notes

- (1) All legislation referenced in this Schedule is Tasmanian State Legislation unless noted otherwise.
- (2) All referenced documents including legislation, codes, Australian Standards, guidelines and codes of practice are the version at the time of the project documentation approval, unless noted otherwise.

Victoria

Schedule 10	Victoria		
All Volumes	General Requirements		
	Part A2	Compliance with the NCC	
	A2G2	Performance Solution	
Volume One	Performance Requirements		
	Part F4	Sanitary and other facilities	
	VIC F4P2	Laundry facilities	
	Part F5	Room heights	
	VIC F5P1	Room or space heights	
	Part G1	Minor structures and components	
	VIC G1P2	Swimming pool access and water recirculation systems	
Volume Three	Performance Requirements		
	Part B2	Heated water services	
	B2P3	Velocity	
	B2P4	Access and isolation	
	B2P7	Energy use and source	
	Part B3	Non-drinking water services	
	B3P3	Velocity	
	Part B4	Fire-fighting water services	
	B4P2	Access and isolation	
	Part C3	On-site wastewater management	
	C3P1	Health impacts	
	VIC C3P5	General requirements	
	VIC C3P6	Land application systems	
	VIC C3P7	Access for maintenance	
Schedule 1	Definitions		
Schedule 2	Referenced Doc	uments	

All Volumes General Requirements

Part A2Compliance with the NCCA2G2Performance Solution

[2019: A2.2]

Insert subclause VIC A2G2(5) in clause A2G2 as follows:

- (5) A *Performance Solution* cannot be used to satisfy a relevant *Performance Requirement* for the installation of a *combustible cladding product* in an *external wall* of a—
 - (a) Class 2, 3 or 9 building with a rise in storeys of 2 that does not comply with C2D6; and
 - (b) Class 2, 3, 5, 6, 7, 8 or 9 building with a *rise in storeys* of 3 or more.

Volume One Performance Requirements

Part F4 Sanitary and other facilities

Delete F4P2 and insert VIC F4P2 as follows:

VIC F4P2 Laundry facilities

[2019: VIC FP2.2 Application]

Laundering facilities or space for laundering facilities and the means for the sanitary disposal of waste water must be provided in a convenient location within or associated with a building appropriate to the function or use of the building.

Applications

F4P2 only applies to-

- (a) a Class 2 building or Class 4 part of a building; and
- (b) a Class 9a health-care building; and
- (c) a Class 9c building; and
- (d) an early childhood centre other than a restricted children's service.

Part F5 Room heights

Delete F5P1 and insert VIC F5P1 as follows:

VIC F5P1 Room or space heights

[2019: VIC FP3.1]

A habitable room or space must have sufficient size to enable the room or space to fulfil its intended function.

Part G1 Minor structures and components

Delete G1P2 and insert VIC G1P2 as follows:

VIC G1P2 Swimming pool access and water recirculation systems

[2019: VIC GP1.2]

- (1) A barrier must be provided to a *swimming pool* and must—
 - (a) be continuous for the full extent of the hazard; and
 - (b) be of a strength and rigidity to withstand the foreseeable impact of people; and
 - (c) restrict the access of young children to the pool and the immediate pool surrounds; and
 - (d) have any gates and doors fitted with latching devices not readily operated by young children, and constructed to automatically close and latch.
- (2) A *swimming pool* water recirculation system must incorporate safety measures to avoid entrapment of, or injury to, a person.

Applications

- (1) VIC G1P2(1) only applies to a *swimming pool* with a depth of water more than 300 mm associated with—
 - (a) a Class 2 or 3 building or Class 4 part of a building; or
 - (b) a children's service.
- (2) VIC G1P2(2) only applies to a swimming pool with a depth of water more than 300 mm.

Volume Three Performance Requirements

Part B2 Heated water services

Velocity

B2P3

Delete B2P3(1) and insert VIC B2P3(1) as follows:

(1) The water velocity in *heated water* service pipework up to 65 °C must not exceed—

- (a) 3 m/s for more than 1% of the time that water is required during the peak hour in non-circulatory *heated water* systems; and
- (b) 1.2 m/s for the flow and 1.0 m/s for the return of a copper circulatory *heated water* service for more than 1% of the time that water is required during the peak hour; and
- (c) 1.0 m/s for the flow and return of a circulatory *heated water* service using other materials for more than 1% of the time that the water is required during the peak hour.

B2P4 Access and isolation

Delete B2P4(1) and insert VIC B2P4(1) as follows:

(1) Access must be available to the *heated water* service for maintenance of mechanical components and operational controls.

B2P7 Energy use and source

Insert subclause VIC B2P7(3) in clause B2P7 as follows:

(3) A solar water heater system installed in a new Class 1 building to comply with Part 2.6 and Part 3.12 of NCC 2019 Volume Two must comply with the Plumbing Regulations 2018.

Part B3 Non-drinking water services

B3P3 Velocity

Delete B3P3(1) and insert VIC B3P3(1) as follows:

(1) *Non-drinking water* services must ensure that pipework water velocity does not exceed 3 m/s for more than 1% of the time that the water is required during the annual peak hour.

Part B4 Fire-fighting water services

B4P2 Access and isolation

Delete B4P2(2) and insert VIC B4P2(2) as follows:

(2) A fire-fighting water service must ensure the system can be isolated for testing and maintenance and have adequate provision for required flow testing (*drainage*).

[2019: BP2.3]

[2019: BP2.3]

[2019: BP2.6]

[2019: BP3.3]

[2019: BP4.1]

Part C3 On-site wastewater management

C3P1 Health impacts

Delete C3P1(1) and insert VIC C3P1(1) as follows:

- (1) On-site wastewater management systems must protect public health by ensuring that-
 - (a) risks associated with the discharge of treated wastewater and/or the end product from a composting toilet to the environment are minimised; and
 - (b) foul air and gasses are prevented from accumulating within or entering into buildings; and
 - (c) the likelihood of contamination of the *drinking water* supply is avoided, and
 - (d) it complies with the requirements of the authority having jurisdiction.

Delete C3P5 and insert VIC C3P5 as follows:

VIC C3P5 General requirements

[New for 2022]

On-site wastewater management systems that facilitate on-site storage, treatment, disposal or re-use of wastewater must be designed, constructed, installed, replaced, repaired, altered and maintained—

- (a) with *required* treatment and storage capacity for the volume and make up of waste and frequency of discharge for disposal; and
- (b) with *required* size, strength and rigidity for the nature, flow rates, volume of wastes and/or waste products which must be processed; and
- (c) using materials which are impervious both to the waste for which disposal is required and to water; and
- (d) to avoid the likelihood of surface water and stormwater entering the system; and
- (e) in accordance with the requirements and agreement of the relevant authority having jurisdiction.

Delete C3P6 and insert VIC C3P6 as follows:

VIC C3P6 Land application systems

[New for 2022]

- (1) On-site wastewater management systems and associated land application systems must-
 - (a) complete the treatment, uptake and absorption of the final effluent within the boundaries of the approved area; and
 - (b) protect against internal contamination; and
 - (c) provide ventilation to avoid the likelihood of foul air and gases from accumulating in the system; and
 - (d) transfers wastes safely and hygienically.
- (2) On-site wastewater management systems and associated land application systems must-
 - (a) avoid the likelihood of the creation of unpleasant odours or the accumulation of offensive matter; and
 - (b) avoid the likelihood of stormwater run-off entering the system; and
 - (c) avoid the likelihood of root penetration or ingress of ground water entering the system; and
 - (d) avoid the likelihood of unintended or uncontrolled discharge; and
 - (e) avoid the likelihood of *blockage* and leakage; and
 - (f) avoid the likelihood of damage from superimposed loads or ground movement; and
 - (g) avoid the likelihood off effluent and foul air and gasses entering the building.
- (3) The on-site wastewater management system and associated land application system continue to meet the above requirements throughout its serviceable life.

[New for 2022]

Delete C3P7 and insert VIC C3P7 as follows:

VIC C3P7 Access for maintenance

[New for 2022]

- (1) On-site wastewater management systems that facilitate on-site storage, treatment, disposal or re-use of wastewater must—
 - (a) provide vehicle access for collection, if necessary; and
 - (b) avoid the likelihood of unauthorised access by people; and
 - (c) provide safe access for cleaning, clearing blockages, maintenance, measurement and performance sampling.
- (2) Land application systems must-
 - (a) provide safe access, as required, for clearing blockages and maintenance; and
 - (b) incorporate provisions, as required, for effective cleaning.

Schedule 1 Definitions

Children's service: Has the same meaning as it has under the Children's Services Act 1996, but excludes a service where education and care is primarily provided to school aged children.

Combustible cladding product: Means-

- (a) aluminium composite panels (ACPs) with a core of less than 93 per cent inert mineral filler (inert content) by mass in external cladding as part of a wall system; and
- (b) expanded polystyrene (EPS) products used in an external insulation and finish (rendered) wall system.

Early childhood centre

Includes-

- (a) any premises, or part thereof, providing or intending to provide a centre-based education and care service within the meaning of the Education and Care Services National Law Act 2010, and the Education and Care Services National Regulations, excluding a service where education and care is primarily provided to school aged children; and
- (b) a children's service.

Flashing

- A strip or sleeve of impervious material dressed, fitted or built-in to provide a barrier to water movement, or to divert the travel of water, or to cover a joint where water would otherwise penetrate to the interior of a building, and includes the following:
 - (a) Perimeter flashing: a flashing used at the floor-wall junction.
 - (b) Vertical flashing: a flashing used at wall junctions within *shower areas*.
 - (c) Roof flashing: a rigid or flexible material, usually metal, fixed over, against or built into an abutment to form a weathertight joint.

Flood hazard area

The *site* (whether or not mapped) encompassing land in an area liable to flooding within the meaning of Regulation 153 of the Building Regulations 2018.

Freeboard

- The minimum height of the lowest floor of the building above the *defined flood level*, regulated by the relevant planning scheme, or specified or otherwise determined by the relevant council under Regulation 153 of the Building Regulations 2018 (see Figure 3).
- Hotel offering shared accommodation: A hotel which has any *sole-occupancy units* that can be shared by unrelated persons.

On-site wastewater management system

A system that receives and/or treats wastewater generated and discharges the resulting effluent to-

- (a) an *approved disposal system*; or
- (b) re-use system; or
- (c) land application system.

Plumbing

Any water service plumbing, roof plumbing, sanitary plumbing system or heating, ventilation and air-conditioning plumbing.

- **Residential care building (Vic):** A building which is a place of residence where 10% or more of persons who reside there need physical assistance in conducting their daily activities and to evacuate the building during an emergency (including any residential care service, State funded residential care service or supported residential service as defined in the Supported Residential Services (Private Proprietors) Act 2010 and an *aged care building*) but does not include—
 - (a) a hospital; or
 - (b) a dwelling in which 2 or more members of the same family and not more than 2 other persons would ordinarily be resident; or
 - (c) a place of residence where only one resident needs physical assistance in conducting their daily activities and

to evacuate the building during an emergency.

Restricted children's service: A children's service that is-

- (a) any one of the following as defined in the Children's Services Regulations 2020-
 - (i) a limited hours Type 1 service; or
 - (ii) a limited hours Type 2 service; or
 - (iii) a short term Type 1 service; or
 - (iv) a short term Type 2 service; or
- (b) an associated children's service within the meaning of the Children's Services Act 1996 approved to be operated by an approved provider at the same place as an approved education and care service that is required to meet the conditions of a limited hours Type 1 service, a limited hours Type 2 service, a short term Type 1 service, or a short term Type 2 service.
- **Shared accommodation building:** A Class 3 building that is a boarding-house, chalet, guest house, lodging-house, backpacker accommodation or the like, or a residential part of a *hotel offering shared accommodation* (but is not a *residential care building (Vic)*, a motel or a residential part of *school*, *health-care building* or detention centre) having—
 - (a) more than one *sole-occupancy unit* of which any *sole-occupancy unit* has sleeping facilities capable of accommodating 3 or more unrelated persons; or
 - (b) sleeping facilities capable of accommodating 13 or more unrelated persons.

Schedule 2 Referenced Documents

Insert VIC Table 1 as follows:

VIC Table 1:

Schedule of referenced documents

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS/NZS ISO 817	2016	Refrigerants - Designation and safety classification	N/A	N/A	N/A	VIC E2D2
AS/NZS 1200	2015	Pressure Equipment	N/A	N/A	N/A	VIC E2D2
AS 1271	2003	Safety valves, other valves, liquid level gauges and other fittings for boilers and unfired pressure vessels	N/A	N/A	N/A	VIC E2D2
AS 1324.1	2001	Air filters for use in general ventilation and air conditioning	N/A	N/A	N/A	VIC E2D2
AS 1345	1995	Identification of the contents of pipes, conduits and ducts	N/A	N/A	N/A	VIC E2D2
AS 1358	2004	Bursting discs and bursting disc devices - Application, selection and installation	N/A	N/A	N/A	VIC E2D2
AS 1428.1	2009	Design for access and mobility, Part 1: General requirements for access – New building work (incorporating amendments 1 and 2)	VIC I4D5	N/A	N/A	N/A
AS/NZS 1571	2020	Copper - seamless tubes for air conditioning and refrigeration	N/A	N/A	N/A	VIC E2D2
AS/NZS 1530.3	1999	Methods for fire tests on building materials, components and structures	N/A	N/A	N/A	VIC B4D2
AS/NZS 1668.1	2015	The use of ventilation and air conditioning in buildings: Fire and smoke control in buildings	N/A	N/A	N/A	VIC E2D2

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS 1668.2	2012	The use of ventilation and air conditioning in buildings: Mechanical ventilation in buildings	N/A	N/A	N/A	VIC E2D2
AS 1851	2012	Routine service of fire protection systems and equipment	N/A	N/A	N/A	VIC B4D2
AS 1926.1	2012	Swimming pool safety, Part 1: Safety barriers for swimming pools	VIC G1D2	N/A	N/A	N/A
AS 1926.2	2007	Swimming pool safety, Part 2: Location of safety barriers for swimming pools (incorporating amendments 1 and 2)	VIC G1D2	N/A	N/A	N/A
AS 2118.1	2017	Automatic fire sprinkler systems, Part 1: General systems (incorporating amendment 1)	VIC S17C2, VIC S18C3	N/A	N/A	VIC B1D5, VIC B4D2
AS 2118.2	2021	Automatic fire sprinkler systems: Wall wetting sprinkler systems	N/A	N/A	N/A	VIC B4D2
AS 2118.3	2010	Automatic fire sprinkler systems: Deluge systems	N/A	N/A	N/A	VIC B4D2
AS 2118.4	2012	Automatic fire sprinkler systems, Part 4: Sprinkler protection for accommodation buildings not exceeding four storeys in height	VIC S17C2, VIC S18C3	N/A	N/A	VIC B1D5, VIC B4D2
AS 2118.5	2008	Automatic fire sprinkler systems	N/A	N/A	N/A	VIC B1D5, VIC B4D2
AS 2118.6	2012	Automatic fire sprinkler systems, Part 6: Combined sprinkler and hydrant systems in multistorey buildings	VIC S17C2	N/A	N/A	N/A
AS2118.8	1997	Automatic fire sprinkler systems: Minor modifications	N/A	N/A	N/A	VIC B4D2

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS 2118.10	1995	Automatic fire sprinkler systems: Approval documentation	N/A	N/A	N/A	VIC B4D2
AS 2473.3	2007	Valves for compressed gas cylinders	N/A	N/A	N/A	VIC E2D2
AS 2568	2019	Purity of medical air produced from on- site compressor systems	N/A	N/A	N/A	VIC E2D2
AS 2896	2021	Medical gas systems - Installation and testing of non- flammable medical gas pipeline systems	N/A	N/A	N/A	VIC E2D2
AS 2902	2005	Medical gas systems - Low pressure flexible hose assemblies	N/A	N/A	N/A	VIC E2D2
AS/NZS 2918	2018	Domestic solid fuel burning appliances - Installation	N/A	N/A	N/A	VIC E2D2
AS 2941	2013	Fixed fire protection installations - Pumpset systems	N/A	N/A	N/A	VIC B4D2
AS/NZS 3500.1	2021	Plumbing and drainage: Water services	N/A	N/A	N/A	VIC B1D3, VIC B1D5, VIC B3D3, VIC B4D2, VIC B6D2, VIC B7D3, VIC B7D4, VIC E2D2
AS/NZS 3500.2	2021	Plumbing and drainage: Sanitary plumbing and drainage	N/A	N/A	N/A	VIC C1D3, VIC C2D4, VIC C4P1, VIC E2D2
AS/NZS 3500.3	2021	Plumbing and drainage: Stormwater drainage	N/A	N/A	N/A	VIC C5D2, VIC C6D2
AS/NZS 3500.4	2021	Plumbing and drainage: Heated water services	N/A	N/A	N/A	VIC E2D2, VIC B2D6
AS/NZS 3666.1	2011	Air handling and water systems of buildings - Microbial control: Design, installation and commissioning	N/A	N/A	N/A	VIC E2D2

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS/NZS 3666.2	2011	Air handling and water systems of buildings - Microbial control: Operation and maintenance	N/A	N/A	N/A	VIC E2D2
AS 4032.3	2022	Water supply - Valves for the control of heated water supply temperatures	N/A	N/A	N/A	VIC B2D6
AS 4041	2006	Pressure piping	N/A	N/A	N/A	VIC E2D2
AS 4118.1.1	1996	Fire sprinkler systems: Components - Sprinklers and sprayers	N/A	N/A	N/A	VIC B4D2
AS 4118.1.2	1996	Fire sprinkler systems: Components - Alarm valves (wet)	N/A	N/A	N/A	VIC B4D2
AS 4118.1.3	1995	Fire sprinkler systems: Components - Water motor alarms	N/A	N/A	N/A	VIC B4D2
AS 4118.1.4	1994	Fire sprinkler systems: Components - Valve monitors	N/A	N/A	N/A	VIC B4D2
AS 4118.1.5	1996	Fire sprinkler systems: Components - Deluge and pre- action valves	N/A	N/A	N/A	VIC B4D2
AS 4118.1.6	1995	Fire sprinkler systems: Components - Stop valves and non- return valves	N/A	N/A	N/A	VIC B4D2
AS 4118.1.7	1996	Fire sprinkler systems: Components - Alarm valves (dry)	N/A	N/A	N/A	VIC B4D2
AS 4118.1.8	1999	Fire sprinkler systems: Components - Pressure reducing valves	N/A	N/A	N/A	VIC B4D2
AS 4254.1	2021	Ductwork for air- handling systems in buildings: Flexible duct	N/A	N/A	N/A	VIC E2D2
AS 4254.2	2012	Ductwork for air- handling systems in buildings: Rigid duct	N/A	N/A	N/A	VIC E2D2

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS 4426	1997	Thermal insulation of pipework, ductwork and equipment - Selection, installation and finish	N/A	N/A	N/A	VIC E2D2
AS 4508	1999	Thermal resistance of insulation for ductwork used in building air- conditioning	N/A	N/A	N/A	VIC E2D2
AS/NZS 4859.1	2018	Thermal insulation materials for buildings: General criteria and technical provisions	N/A	N/A	N/A	VIC E2D2
AS/NZS 5141	2018	Residential heating and cooling systems - Minimum applications and requirements for energy efficiency, performance and comfort criteria	N/A	N/A	N/A	VIC E2D2
AS/NZS 5149.1	2016	Refrigerating systems and heat pumps - Safety and environmental requirements: Definitions, classification and selection criteria	N/A	N/A	N/A	VIC E2D2
AS/NZS 5149.2	2016	Refrigerating systems and heat pumps - Safety and environmental requirements: Design, construction, testing, marking and documentation	N/A	N/A	N/A	VIC E2D2
AS/NZS 5149.3	2016	Refrigerating systems and heat pumps - Safety and environmental requirements: Installation site	N/A	N/A	N/A	VIC E2D2
AS/NZS 5149.4	2016	Refrigerating systems and heat pumps - Safety and environmental requirements: Operation, maintenance, repair and recovery	N/A	N/A	N/A	VIC E2D2
AS/NZS 5601.1	2022	Gas installations: General installations	N/A	N/A	N/A	VIC E2D2

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
ABCB Standard for Construction of Buildings in Flood Hazard Areas, Version 2012.3	2012	Standard for Construction of Buildings in Flood Hazard Areas	VIC B1D6	N/A	N/A	
	2022	Motorsport Australia Track Operators Guide For Motorsport Race Venues – version 1	VIC I5D4	N/A	N/A	
FPAA101D	2018	Automatic Fire Sprinkler System Design and Installation— Drinking Water Supply	VIC S17C2, VIC S18C3	N/A	N/A	B1D5
FPAA101H	2018	Automatic Sprinkler System Design— Hydrant Water Supply	VIC S17C2, VIC S18C3	N/A	N/A	B4D3
Building Practice Note FS-01	-	Victorian Building Authority Practice Note FS-01	VIC S20C8	N/A	N/A	
SA HB 39	2015	Metal roof and wall cladding installation	N/A	N/A	N/A	VIC E3D2
HB 276	2004	A guide to good practice for energy efficient installation of residential heating, cooling and air conditioning plant and equipment	N/A	N/A	N/A	VIC E2D2
N/A	2007	Australian and New Zealand refrigerant handling code of practice 2007 Part 1 - Self-contained low charge systems	N/A	N/A	N/A	VIC E2D2
N/A	2007	Australian and New Zealand refrigerant handling code of practice 2007 Part 2 - Systems other than Self-contained low charge systems	N/A	N/A	N/A	VIC E2D2
N/A	1993	The Building Act 1993 (Victoria)	N/A	N/A	N/A	B6D2
N/A	2018	Plumbing Regulations	N/A	VIC H6V1	N/A	B2P7

Schedule 11	Western Australia
Schedule 1	Definitions
Schedule 2	Referenced Documents

Schedule 1 Definitions

Design wind speed

The design gust wind speed for the area where the building is located, calculated in accordance with AS/NZS 1170.2 or AS 4055 (see WA Table 4 for wind classes).

Insert WA Table 4 as follows:

WA Table 4: Wind classes

Non-cyclonic Region A	Cyclonic Region B, C and D
N1, N2, N3	C1
N4, N5, N6 (these wind classes are covered in the ABCB Housing Provisions Part 2.2)	C2, C3, C4 (these wind classes are covered in the ABCB Housing Provisions Part 2.2)

Table Notes

- (1) Wind classification map identifying wind regions is contained in ABCB Housing Provisions Part 2.2 (see Figure 2.2.3).
- (2) Information on wind classes for particular areas may be available from the appropriate authority.
- (3) "N" = non-cyclonic winds and "C" = cyclonic winds.

Licensed premises: Includes-

- (a) premises in respect of which a cabaret licence as defined by the Liquor Control Act 1988 has been granted under that Act; or
- (b) premises in respect of which a tavern licence, a hotel restricted licence or any other kind of hotel licence as defined by the Liquor Control Act 1988 has been granted under that Act; or
- (c) a cabaret, hotel or tavern-
 - (i) in respect of which a special facility licence as defined by the Liquor Control Act 1988 has been granted under that Act; and
 - (ii) in respect of which paragraph (a) or (b) does not apply.

Potable water: Water intended for human consumption supplied by a water services provider.

Public building: A Class 6 licensed premises or 9b building where persons may assemble for-

- (a) civic, theatrical, social, political or religious purposes; or
- (b) educational purposes; or
- (c) entertainment, recreational or sporting purposes; or
- (d) business purposes.

WELS: Has the meaning given in the Water Efficiency Labelling and Standards Act 2005 of the Commonwealth.

Schedule 2 Referenced Documents

Insert WA Table 1 as follows:

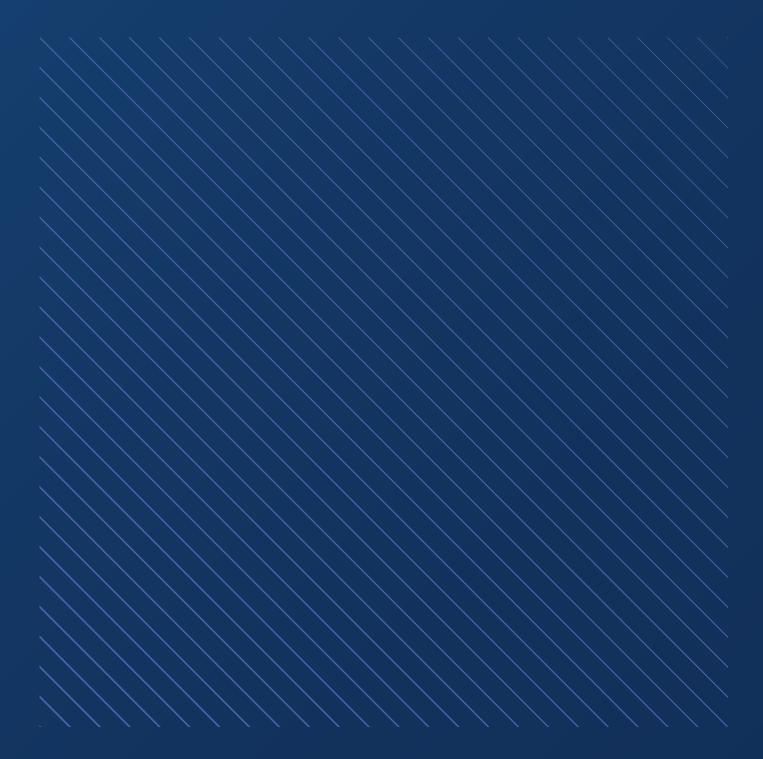
WA Table 1: Schedule of referenced documents

No.	Date	Title	Volume One	Volume Two	Housing Provisions	Volume Three
AS/NZS 1170.2	2021	Structural design actions – Wind actions (See Note 1)	WA B1D3, WA B1D4, Spec 4, WA B2D1, WA B2D2, WA B2D3, F3V1, Schedule 1	H1D7, H2V1, Schedule 1	WA 2.2.3, WA 2.3.1, WA 2.3.2, WA 2.3.3, WA 2.3.4, Schedule 1	Schedule 1
AS/NZS 3500.4	2021	Plumbing and drainage – Heated water services, Amdt 1	N/A	WA H9D4	N/A	N/A
AS 4055	2021	Wind loads for housing (See Note 2)	Schedule 1	H1D6, H1D8, Schedule 1	WA 2.2.3, WA 2.3.1, WA 2.3.5, Schedule 1	Schedule 1

Table Notes

(1) For AS/NZS 1170 Part 2, incorporate the changes as set out in WA Part B2 of Volume One and WA Part 2.3 of the ABCB Housing Provisions.

(2) For AS 4055, incorporate the changes set out in WA Part 2.3 of the ABCB Housing Provisions.



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