





# Volume One

Building Code of Australia **2019** Amendment 1

# **Summary and Instructions**

## NCC 2019 Amendment 1

NCC 2019 Amendment 1 includes:

- an amendment to require (from 1 July 2021) that a process be followed to improve the quality of Performance Solutions and the supporting documentation;
- a new provision in NCC Volume One regarding egress from early childhood centres;
- an update to the Governing Requirements for all Volumes to require labelling of aluminium composite panels in accordance with SA Technical Specification 5344;
- clarification of the concession in NCC Volume One that permits the use of timber framing for low-rise Class 2 and 3 buildings;
- clarification in NCC Volume Two that the anti-ponding board requirements only apply to roofs where sarking is installed; and
- correction of minor errors.

NCC 2019 Amendment 1 is adopted from 1 July 2020.

The 2019 edition of NCC Volume One is amended by Amendment 1 as follows:

Add A2.2(4) of Part A2 and Note (after A2.2(3)) as follows:

#### A2.2 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, using one or more of the *Assessment Methods* listed in (2), as proposed by the *performance-based design brief*.
  - (c) Evaluate results from (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 A2.2(3) or A2.4(3) as applicable; and
    - (ii) identification of all Assessment Methods used; and
    - (iii) details of steps (a) to (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*.

#### Note:

A2.2(4) does not take effect until 1 July 2021.

#### Add to Explanatory information for Part A2 as follows:

A2.4(2)(a) references A2.2. Therefore when using a combination of *Performance Solutions* and *Deemed-to-Satisfy Solutions* it is necessary to comply with A2.2(4) where a *Performance Requirement* is proposed to be satisfied by a *Performance Solution*.

Add A5.7 (after A5.6) of Part A5 as follows:

#### A5.7 Labelling of Aluminium Composite Panels

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

Delete Specification C1.1 Clause 3.10(a) and insert Specification C1.1 Clause 3.10(a) as follows:

#### **Specification C1.1 Fire-resisting construction**

#### 3.10 Class 2 and 3 buildings: Concession

- (a) In a Class 2 or 3 building with a *rise in storeys* of not more than 3—
  - (i) notwithstanding C1.9(a) and (b) and C2.6, timber framing may be used for-
    - (A) external walls; and
    - (B) common walls; and
    - (C) the floor framing of lift pits; and
    - (D) non-loadbearing internal walls which are required to be fire-resisting; and
    - (E) non-loadbearing shafts, except shafts used for the discharge of hot products of

combustion; and

- (F) spandrels or horizontal construction provided for the purposes of C2.6; and
- (ii) notwithstanding Clause 3.1(d) of Specification C1.1, for *loadbearing internal walls* and *loadbearing fire walls*
  - (A) timber framing may be used; and
  - (B) non-combustible materials may be used.

Delete Specification C1.1 Clause 4.3(a) and insert Specification C1.1 Clause 4.3(a) as follows:

#### 4.3 Class 2 and 3 buildings: Concession

(a) In a Class 2 or 3 building with a rise in storeys of not more than 2-

- (i) notwithstanding C1.9(a) and (b), timber framing may be used for—
  - (A) external walls; and
  - (B) common walls; and
  - (C) the floor framing of lift pits; and
  - (D) non-loadbearing internal walls which are required to be fire-resisting; and
  - (E) non-*loadbearing shafts*, except *shafts* used for the discharge of hot products of combustion; and
- (ii) notwithstanding Clause 4.1(e) of Specification C1.1, for *loadbearing internal walls* and *loadbearing fire walls*
  - (A) timber framing may be used; and
  - (B) non-combustible materials may be used.

**Delete** from Verification Method DV3 (d) 'g = the gravitational constant 9.8 m/s; and' and **insert** as follows:

g = the gravitational constant, equal to 9.8 m/s<sup>2</sup>; and

Add D1.18 and Explanatory information (after D1.17) as follows:

#### D1.18 Egress from early childhood centres

- (a) Every part of a Class 9b *early childhood centre* must be wholly within a *storey* that provides direct egress to a road or *open space*.
- (b) The requirements of (a) do not apply in a building with a *rise in storeys* of not more than 2, where the Class 9b *early childhood centre* is the only use in that building.

#### **Explanatory information:**

D1.18(a) recognises the difficulties associated with evacuation of *early childhood centres*. Should an *early childhood centre* be proposed within a *storey* that does not meet the requirements of D1.18(a), a *Performance Solution* is to be used to demonstrate compliance with the relevant *Performance Requirements*.

**Delete** Performance Requirement EP4.1(b), (c), (d) and (e) and **insert** Performance Requirement EP4.1(b) as follows:

#### EP4.1 Visibility in an emergency

(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*.

Delete F2.4(d) and insert F2.4(d) as follows:

#### F2.4 Accessible sanitary facilities

(d) an *accessible* unisex *sanitary compartment* must contain a closet pan, washbasin, shelf or bench top and adequate means of disposal of sanitary products; and

Delete Specification F2.9 Clause 4(c)(v) and insert Specification F2.9 Clause 4(c)(v) as follows:

#### Specification F2.9 Accessible adult change facilities

#### 4. Toilet pan, seat, backrest and grabrails

- (c) The toilet seat must-
  - (v) have a minimum *luminance contrast* of 30% against the pan, wall or floor; and

In Table 2I of Specification JVc, **delete** first table row below header and **insert** first table row below header as follows:

#### Table 2I Internal heat gains for appliances and equipment

Class 9a building <i>ward area</i>	5 W/m <sup>2</sup> averaged for 24 hours per day, 7 days
	per week,
	continuous operation

Delete heading to Table J1.5c and insert heading to Table J1.5c as follows:

#### J1.5 Walls and glazing

Table J1.5c Maximum wall-glazing construction solar admittance - Class 3 or 9c building or Class 9a ward area

Delete J5.4(b)(i) and insert J5.4(b)(i) as follows:

#### J5.4 Fan systems

- (b) Fans-
  - (i) Fans in systems that have a static pressure of not more than 200 Pa must have an efficiency at the full load operating point not less than the efficiency calculated with the following formula:

 $\eta_{min} = 0.13 \text{ x ln}(p) - 0.3 \text{ where}$ 

 $\eta_{min}$  = the minimum *required* system static efficiency for installation type A or C or the minimum *required* system total efficiency for installation type B or D; and

p = the static pressure of the system (Pa); and

In = natural logarithm.

#### Delete NSW H101.11.1 and insert NSW H101.11.1 as follows:

#### NSW H101.11.1 Number of seats

Subject to NSW H101.11.5, where seating is arranged in *rows*, the maximum number of seats in each *row* must not exceed—

- (a) 8 where there is an *aisle* at one end only of the *row*; or
- (b) 16 where there are *aisles* on both ends of the *row*.

In NT Table 1 of NT Schedule 4, **delete** first row below header and **insert** first row below header as follows:

#### **NT Schedule 4 Referenced documents**

#### NT Table 1 Schedule of referenced documents

AS/NZS 1170 Part 2	2011	Structural design actions:	NT Spec B1.2
		Wind actions Amdt 1, 2,	
		3, 4 and 5	

In Tas Table 1 of Tas Schedule 4, delete last row and insert last row as follows:

#### **Tas Schedule 4 Referenced documents**

#### Tas Table 1 Schedule of referenced documents

N/A	Condensation in Buildings Tasmanian	Tas FP6.1
	Designers' Guide - Version 2	

#### Add the following abbreviation and definition to Schedule 2 as follows:

#### Schedule 2 Abbreviations and symbols

Abbreviation	Definition
ACP	Aluminium Composite Panel

Add or amend the following terms and definitions in Schedule 3 as follows:

#### **Schedule 3 Definitions**

Add the term "Aluminium Composite Panel (ACP)" and its definition (after "Alteration") as follows:

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

Delete definition of Farm building and insert definition of Farm building as follows:

Farm building means 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 m<sup>2</sup> 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 m<sup>2</sup>.

Delete definition of Farm shed and insert definition of Farm shed as follows:

Farm shed means 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<sup>2</sup> but not more than 2000 m<sup>2</sup>.

**Delete** definition of Performance-based design brief (PBDB) and **insert** definition of Performance-based design brief (PBDB) as follows:

**Performance-based design brief (PBDB)** means the process and the associated 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.

In Table 1 of Schedule 4, insert new row (after row starting with "N/A" and before "TN 61") as follows:

#### Table 1 Schedule of referenced documents

No.	Date	Title	Volume One	Volume Two	Volume Three
SA TS 5344	2019	Permanent labelling for Aluminium Composite Panel (ACP) products	A5.7	A5.7	A5.7

In History of Adoption, add 15.1 (after Clause 15.0) as follows:

#### 15.1 Amendment No. 1

(a) Amendment 1 to the 2019 edition of NCC Volume One was adopted by the Commonwealth, States and Territories as set out in Table 15.1.

#### Table 15.1 History of adoption of NCC 2019 Volume One Amendment 1

Administration	Adoption Date	
Australian Government	1 July 2020	
Australian Capital Territory	1 July 2020	
New South Wales	1 July 2020	
Northern Territory	1 July 2020	
Queensland	1 July 2020	
South Australia	1 July 2020	
Tasmania	1 July 2020	
Victoria	1 July 2020	
Western Australia	1 July 2020	

- (b) The purpose of NCC Volume One Amendment 1 is to—
  - (i) require that a process be followed to improve the quality of and documentation for Performance Solutions; and
  - (ii) include a new provision regarding egress from early childhood centres; and
  - (iii) require labelling of Aluminium Composite Panels; and
  - (iv) clarify the concession that permits timber framing for low-rise Class 2 and 3 buildings.

**Delete** the List of Amendments for NCC 2019 Volume One and **insert** the List of Amendments for NCC 2019 Volume One Amendment 1 as follows:

### List of Amendments—NCC 2019—Volume One Amendment 1

This list has been prepared by the Australian Building Codes Board to assist National Construction Code (NCC) users in identifying changes incorporated in Amendment 1 to the 2019 edition of NCC Volume One. The notes provide a description of major changes made from the previous edition of Volume One.

While the Australian Building Codes Board has attempted to include all major changes made from the previous edition of Volume One, the Board does not give any warranty nor accept any liability in relation to the contents of this list of amendments.

Reference	Changes and Commentary
A2.2(4)	A new sub-clause has been added to require a process be followed when undertaking a Performance Solution.
A5.7	A new provision has been added to require labelling of Aluminium Composite Panels.
Specification C1.1 Clause 3.10(a)	The concession has been amended to clarify its application.
Specification C1.1 Clause 4.3(a)	The concession has been amended to clarify its application.
D1.18	A new provision has been added for egress from early childhood centres.
Schedule 2	An abbreviation, 'ACP', has been added for Aluminium Composite Panel.
Schedule 3	A defined term, 'Aluminium Composite Panel (ACP)', has been added.
Schedule 3	The defined term 'Performance-based design brief (PBDB)' has been amended on account of the introduction of A2.2(4).
Schedule 4	The 2019 edition of SA TS 5344 'Permanent labelling for Aluminium Composite Panel (ACP) products' has been referenced.

#### List of Amendments