



Changes to the Building Code of Australia from 1 May 2019

An Overview for Builders, Designers, Certifiers and Associated Building Professionals



This overview provides an outline of some of the key changes to the National Construction Codes (NCC), The Building Code of Australia, 2019, Volumes 1, 2 and 3 effective from 1st May 2019.

NCC 2019 is the first (full) edition of the NCC since moving to a 3 year amendment cycle. The 2019 edition contains a number of significant changes that will affect all Classes of buildings, including houses and low-mid rise residential buildings.

The major changes that will affect housing include:

- introduction of separate heating and cooling loads for NatHERS star ratings.
- revision of the existing reference building verification method (V2.6.2.2) including clarification of the software tools that can and cannot be used to undertake modelling for this method.
- more prescriptive building sealing requirements and inclusion of a verification method (optional) for building sealing being the use of the 'blower door' test.
- introduction of condensation management provisions including the use of vapour permeable membranes in certain climate zones and external ducting of exhaust under certain circumstance.

Individually these changes may not seem substantial, the cumulative effect may mean that many house designs will require some change.

On a positive note the NCC re-introduces into the code Deemed-to-Satisfy Provisions for masonry veneer construction and improvements to many other parts of Volume Two resulting from the Australian Building Codes Board (ABCB's) Acceptable Construction Practice Review project. Additionally, the new edition incorporates revised and enhanced BCA product evidentiary requirements for determining a products fitness for purposes, this also includes the publishing of an accompanying ABCB product assurance Handbook.

Quantification

The most significant change to the NCC since the performance-based code was introduced in 1996, is an estimated 40% of the Code's Performance Requirements will be quantified either directly or by a NCC Verification Method (VM).

This work stems from the Board's increased and competent use of performance initiative aimed at assisting the reduction of non-compliance caused by poor application of Performance Solutions.

It is intended that the remaining Performance Requirements will be quantified in the same manner for NCC 2022.

Readability

The NCC has undergone significant structural change to improve access, awareness and understanding. This included introducing consistent governing requirements across all three Volumes and changes to the format and structure of NCC online. NCC Volume Three has been redrafted consistent with a new information architecture that aims to improve access and readability of the document in a digital environment, as well as in preparation for a consistent volume structure in 2022.

Fire Safety

A new non-mandatory Fire Safety VM will be introduced with a delayed adoption date from 1 May 2020. The new VM, which is a voluntary tool under a Performance Solution pathway, provides for a documented process in the design of fire safety Performance Solutions, and is based on the International Fire Engineering Guidelines (IFEG).

Fire Sprinklers in Class 2 & 3 Buildings

A requirement for fire sprinklers to be installed in apartment buildings and other residential buildings 4 storeys and above and up to 25 metres in effective height has been included in the Deemed-to-Satisfy (DTS) Provisions.

This means, anyone using a DTS pathway for compliance for these types of buildings will need to install a fire sprinkler system. As part of these requirements, two new types of fire sprinkler systems have been included, as well as concessions for other fire safety features on account of the additional protection afforded by the fire sprinkler systems.

Bonded Laminate Concession

The ability to use a bonded laminated material, with specified characteristics and controlled fire hazard properties, where a non-combustible material would otherwise be required will remain for NCC 2019.

A similar concession has been included for certain sarking-type materials, and some other minor components have been exempted from the requirement to be non-combustible.

Energy Efficiency

The commercial building energy efficiency provisions have undergone their first major overhaul since 2010, consistent with the COAG National Energy Productivity Plan. A package of measures for Volume One focuses on reducing energy consumption by a potential 35%, representing a step-change for commercial buildings. Additionally, new VMs have been introduced to demonstrate compliance with the relevant Performance Requirement by way of NABERS and Green Star.

New heating and cooling load limits for the NatHERS compliance pathway have been introduced for residential buildings. Energy efficiency provisions for Volume One and Volume Two will have a transition period of 12 months until 1 May 2020 during which either the new NCC 2019 provisions or those from NCC 2016 may be used.

In NSW these changes will be subject to BASIX for Class 1 and 2 buildings.

Volume Two Acceptable Construction Practice

Improvements have been made to the provisions of numerous Acceptable Construction Practices (ACPs), and new ACPs have been introduced for earth retaining structures, masonry, and attachment of decks and balconies.

Condensation Management

Provisions to reduce the likelihood of risks associated with condensation within buildings have been introduced to help deal with potential health risks and amenity issues.

Roof-Top Spaces

New provisions clarifying the application of requirements to occupiable outdoor areas, such as occupiable roof-top spaces, have been introduced in Volume One.

Accessible Adult Change Facilities

Volume One includes new requirements for accessible adult change facilities to be provided in large shopping centres, sporting venues, museums, theatres and airport terminals.

Plumbing

For NCC Volume Three, in addition to the quantification and readability changes described above, heated water temperature control, cross-connection control and rainwater harvesting and use requirements have been included.

Additionally, some sections of Volume Three that were only enacted in a minority of States or Territories, such as on-site wastewater systems, heating, ventilation and air-conditioning (HVAC), and stormwater, have been relocated to the relevant State or Territory appendix.

Further Information

- www.acrocert.com.au/contact-us
- <https://www.abcb.gov.au/ABCB/Contact-Us>



BUILDING APPROVALS & INSPECTION SERVICES

308 High Street | PO Box 216

MAITLAND NSW 2320

P: (02) 4933 5626 | F: (02) 4933 5609

E: maitland@acrocert.com.au

AcroCert

