



# INFORMATION SHEET

## BUILDING SERVICES

Ref: BCA 19-05  
Current at: May2019

### NCC 2019 Changes

The 2019 edition of the NCC contains a number of significant changes affecting all classes of buildings, including: houses, multi-residential buildings, mixed use buildings and commercial buildings.

This information sheet provides an overview of the major changes and is part of a suite of dedicated HIA Information Sheets and other material being developed to support members in understanding and applying the changes.

#### Key changes for houses

The key NCC 2019 major changes affecting housing include:

- introduction of condensation management provisions, including the use of vapour permeable membranes in certain climate zones and external ducting of exhaust under certain circumstances;
- introduction of separate heating and cooling loads for NatHERS energy efficiency 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; and
- more prescriptive building sealing requirements and inclusion of a verification method (optional) for building sealing, that is the use of the 'blower door' test.
- Changes to the evidence of suitability requirements for building products;
- Changes to fire safety provisions including new provisions for cantilevered separating walls
- Amendments resulting from the Volume Two Acceptable Construction Practice Review project, including:
  - Re-introducing masonry veneer and isolated masonry provisions
  - Updated roof and wall cladding requirements including window flashing requirements
  - Additional smoke alarms requirements
  - Updated sound insulation provisions
  - Revised stairs and balustrades provisions
  - Revised waterproofing requirements for laundries and toilets
  - New optional provisions for retaining wall and attachment requirements for decks and balconies,
  - Revised alpine areas requirements
- Changes to Australian Standards called up by the NCC, including a detailed breakdown of the changes to the bushfire standard;
- Clarification amendments and changes relating to Performance Solutions methods;
- And much more...

#### Summary of those changes

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

#### *Energy Efficiency*

In particular, the inclusion of separate heating and cooling loads will mean that buildings, that use this compliance path, will need to meet the six-star standard (or equivalent) as well as the prescribed heating and cooling load limits caps. Many house designs that already meet or exceed the six-star standard will meet the heating and cooling load limits but some designs may require some altering or use of higher performing

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DISCLAIMER - The above is intended to provide general information in summary form. The contents do not constitute specific advice and should not be relied upon as such. Formal specific advice should be sought by members with respect to particular matters before taking action.

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materials. It should be noted that these changes do not apply to all states and territories though.

The changes to the Reference Building Verification Method, which is a method that can be used as part of meeting the energy efficiency provisions will impact house designs, particularly in Western Australia where this method has been a common energy efficiency compliance path used due to the predominant use of cavity masonry construction.

### *Condensation*

The inclusion of the condensation management provisions is in response to growing calls for this issue to be addressed, particularly for houses in Australia's colder climates. The provisions are intended to be the first of a suite of changes to come in future editions of the code. The provisions include the use of vapour permeable membranes in certain climate zones and external ducting of exhaust under certain circumstances.

It should be noted that the provisions include measures to assist in 'managing or minimising' the impact of condensation in buildings, which acknowledges that the issue with condensation is as much about *how* people use the building as it is about designs and materials used in the construction.

HIA is aware of some current confusion around the application of the requirements as it applies to use of different types of wall sarking materials and use of direct fix and drained cavity wall systems. The ABCB is currently revising their condensation management handbook and have been requested that further clarity be provided on these matters.

### *Deemed-to-Satisfy Provisions*

On a positive note, the NCC's reintroduction 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's (ABCB) Acceptable Construction Practice Review project.

HIA welcomes this approach to developing NCC provisions; for many years industry has sought the inclusion of content back into the NCC itself, rather than wholly relying on referenced standards.

Another positive change has been the introduction of Deemed-to-Satisfy Provisions for cantilevered separating walls which are an emerging design trend and making it a Deemed-to-Satisfy Solutions overcomes the need for additional regulatory burden by having to develop a Performance Solution.

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### *Evidence of suitability*

Additionally, the new edition incorporates revised and enhanced BCA product evidentiary requirements for determining a product's fitness for purpose. This also includes the updating of the ABCB evidence of suitability handbook.

Whilst the above provides a general overview of the proposed changes, it is important to review the NCC holistically to ensure you are aware of the changes, as often the more minor in nature the changes are they are the ones that have a bigger impact in changing practices or effect material choices.

## Changes to Australian Standards?

In addition to the NCC changes, an unprecedented amount of standards have been revised and updated.

Some of the affected standards more relevant to the residential building industry include:

- AS 3959 Construction in bushfire prone areas
- AS 1562.1 Metal roof and wall cladding
- AS 2050 Installation of roof tiles
- AS 4200 Parts 1 and 2 – Pliable membranes
- AS 3700 Masonry structures
- AS 4859 Insulation in buildings
- AS 5146 Autoclaved aerated panels
- AS 3500.3 Plumbing and drainage – stormwater.

In addition to being aware of the changes within the NCC itself, it's equally important to ensure you are aware of the changes to the Australian Standards called up by the NCC, since they can significantly impact designs and installations.

HIA is preparing further information sheets on some of the changes to these standards.

## How about the changes to Class 2 buildings

The key NCC 2019 major changes affecting Class 2 buildings include:

- mandatory sprinkler protection for buildings four storeys and above (with offsets);
- the condensation and energy efficiency changes, mentioned above;
- energy efficiency stringency increases for commercial buildings which will affect common areas, shared services of apartments and mixed use buildings (apartments with ground floor cafés and shops).
- Changes to the Governing Requirements
- Significant increase in new Verification Methods in the NCC
- Referenced Documents changes
- Fire safety/cladding changes
- Retained bonded laminates clause
- Permit certain sarking as DTS
- Class 2 Energy Efficiency changes
- New provisions for occupiable roof top spaces
- Removal of requirement for providing janitors facility
- Extending the timber mid-rise provisions to apply to all classes of buildings less than 25 m in effective height.

The energy efficiency stringency increases for commercial buildings will have a significant impact on a number of members working on mixed use apartment buildings and commercial buildings and product suppliers to those buildings.

Other changes include the ABCB agreeing to retain the bonded laminate materials clause from C1.9(e) – (formerly C1.12) – and permitting certain types of sarking materials that meet prescribed criteria to be used in external walls required to be non-combustible.

## When will the new changes take effect?

In most states and territories the changes will take effect from 1 May 2019 subject to the transitional arrangements in each state regarding building/development approval. In Western Australia the provisions will take effect from 1 May 2020 and HIA has just been alerted that the provisions will take effect in the ACT from 1 September 2019.

However, some of the changes will be subject to a 12-month transition period, such as changes to the energy efficiency provisions which will take effect 1 May 2020.

However, the adoption date of the NCC and to what version of the NCC applies to your project differs, so it is recommended that you should also check with your local authority or administration regarding transitional arrangements.

### **State and Territory variations**

It is also important to check with your local authority or administration for any specific State or Territory provisions for these new provisions that may override the NCC provisions. The NCC itself does contain many of state and territory variations and additions itself but some states include variations in other instruments so you also need to be aware of these as they may override the NCC provisions.

### **Find out more**

HIA has ran and is continuing to run a series of seminars across the country providing a 'deep dive' analysis into the major changes affecting houses and low- to mid-rise residential buildings. A video of these presentations will also be available on the HIA website shortly.

HIA has also produced a number of other information sheets that can be accessed from our website. More of these will be developed in the coming weeks.

Additionally HIA has produced a 'summary of NCC changes' document that members can email and request a copy of. For more information visit the [HIA website](#).

The ABCB have also developed a range of resources to assist in understanding and applying the changes.

### **Getting a copy of the NCC**

You can download the new editions of the NCC from the ABCB website [www.abcb.gov.au](http://www.abcb.gov.au) or if you want a hardcopy you can get this from the HIA website [here](#).

**For further information on the changes HIA members can contact HIA's Building Services team on 1300 650 620 or email [hia\\_technical@hia.com.au](mailto:hia_technical@hia.com.au)**