



Australian Building Codes Board

# Annual Business Plan

2019-20



# The ABCB

The Australian Building Codes Board (ABCB) is a joint initiative of all levels of government in Australia, together with the building and plumbing industries. Its key objective is to oversee issues relating to health, safety, amenity and accessibility, and sustainability in buildings. The ABCB promotes efficiency in the design, construction and performance of buildings and plumbing systems through the National Construction Code (NCC), and the development of effective regulatory and non-regulatory approaches. The ABCB aims to establish minimum, performance based, proportional and cost effective codes and standards, as well as promote regulatory systems that are consistent, as far as practicable, between States and Territories.

## Focus of business plan

A new amendment cycle is well underway for NCC 2022 following the enactment of NCC 2019 on 1 May. The focus for the next two years, following the decision of the Building Ministers' Forum (BMF) to expand the remit of the ABCB for a limited period, is to accommodate the development of a National Framework for the consistent implementation of the Building Confidence Report's (BCR) recommendations. This will be in addition to on-going analysis of key BMF policy directions and potential improvements to the technical content of the Code, with a vision towards NCC 2022 of improved building outcomes, increased confidence in the industry and public trust in the safety of buildings.

The ABCB also recognises that a well understood and utilised code is a critical component of the reform agenda. Working towards this outcome is a significant investment in an enhanced education program to improve user understanding of the NCC; and the improved NCC digitisation and readability projects, which are building on the success of free on-line code access through a series of measures to improve practitioner understanding, thereby assisting better building and compliance outcomes. The increased and competent use of performance solutions, which includes quantification to improve the quality of performance solutions being used in the design and construction of buildings, is also pivotal. These measures, which have been in development for several years, will complement work associated with the BCR National Framework.

## BCR National Framework, including enhanced education

Whilst not a regulator in its own right, the ABCB plays a key role in the national infrastructure for building regulation, preparing national model codes for adoption by the states and territories, helping support decisions of the BMF and acting as a COAG reform vehicle. The BMF's direction that the ABCB develop a BCR National Framework for future consideration by the nine governments builds on this position, with the inclusion of developing draft model regulation.

In responding to a level of immediacy in addressing the BCR recommendations featured in the National Framework, parts of two tasks, a definition of complex buildings for which improved rigour in design construction and certification may be necessary, and an approach to the documentation requirements for performance solutions, are being expedited through an out-of-cycle amendment to NCC 2019.

As part of its earlier consideration of the BCR, the BMF requested that the ABCB specifically conduct work in relation to five of the Report's recommendations. Projects involved in this work are identified in the Business Plan, with a critical component relating to enhanced NCC education, whereby a number of new endeavours are underway, including digitally-focused Continuing Professional Development (CPD) resources and other educational materials for training providers. This will assist in delivering consistent NCC training for building practitioners. By partnering with relevant industry bodies to develop and deliver CPD resources on-line, and by providing curriculum input for relevant courses in the higher education and VET sector, the ABCB is supporting industry competency in the use of the NCC.

Other projects relating to the BCR response involve revision of the International Fire Engineering Guidelines, establishing an administrative process for documenting performance solutions and a two stage process to establish a national dictionary of building-related terminology.

## Vulnerable children in high-rise buildings and other fire safety measures

The BMF has previously requested the ABCB prioritise a review of fire safety measures in response to the relatively recent trend of locating early childhood centres in high-rise buildings. A risk analysis undertaken by the ABCB indicates that enhanced fire safety measures would be beneficial in reducing exposure of the community to a potential safety and health risk. These measures will be considered through NCC 2019 Amendment 1. Analysis will continue as to whether or not changes to fire safety measures for primary schools in high-rise buildings is warranted as part of the NCC 2022 process.

Fire safety more generally remains a focus for the ABCB in the coming year with a review of recent smoke alarm research by Fire and Rescue NSW and development of possible amendments to the provisions for public buildings with vulnerable occupants in bushfire-prone areas.

## Accessible Housing

In the context of an ageing population and greater societal cognisance of the needs of people with disability, the BMF, with COAG's support, has directed the ABCB to undertake regulatory impact analysis into the possible inclusion of minimum necessary accessibility requirements for housing in the NCC. This assessment will include housing features that enable use by people either with disability or transitioning through their life stages.

With the scope of this work agreed by the BMF, the ABCB produced an Options Paper and Consultation Report to identify some of the complexities of this project. Possible amendments to the NCC including, at a minimum, an analysis of the gold and silver performance levels (defined in the Liveable Housing Design Guidelines), will now be developed and assessed.

## Lead in Plumbing Products

Macquarie University was commissioned by the ABCB to conduct a literature review to determine to what extent plumbing products and materials contribute to lead levels in excess of those permitted by the NCC. In consultation with key stakeholders such as enHealth, Standards Australia and the plumbing industry, the ABCB will continue examining a range of issues necessary for undertaking a regulatory impact statement on the costs and benefits of moving to low-lead/lead-free plumbing products. This will also include an analysis of how lead levels can be measured, given that plumbing products may only be one potential contributor to the existence of lead in drinking water, as well as any transitional arrangements for industry that may be necessary.

## Energy efficiency

Moving beyond the energy efficiency changes included in NCC 2019, which were primarily in relation to commercial buildings, the ABCB will commence initial scoping of possible further changes for NCC 2022. The primary focus will be on residential buildings, having regard to the COAG Energy Council's 'Trajectory for Low Energy Buildings'.

2018-19 ACHIEVEMENTS
NCC 2019 released for 1 May State and Territory adoption
Completed a detailed investigation into the fire safety of vulnerable children in high-rise buildings
Strengthened education capacity and engagement with industry sector, with significant increase in published support materials
Reviewed smoke alarms research and conducted initial investigation of international standards
Accessible housing Options Paper and subsequent Consultation Report released
Jumping suicides research completed enabling evidence-based decision to be made
Research report on lead in plumbing products and fixtures finalised
Consistent NCC Volume structure (for possible NCC 2022 adoption) determined
Commenced work on residential energy efficiency provisions for NCC 2022

The options for improved residential energy efficiency may include a stringency increase through a minimum level of thermal comfort and a whole-of-house energy-use budget. This work will be undertaken in conjunction with Stage Two of the condensation measures for residential buildings.

The ABCB will develop a suite of educational materials in consultation with industry that support understanding of and compliance with the NCC 2019 energy efficiency changes, which included a 12 month transition period.

## Increased and competent use of performance

This initiative involves providing practitioners with the necessary skills, knowledge and tools to fully utilise the NCC as a performance-based code. This is a long-term project that includes the ABCB quantifying the NCC's Performance Requirements, with the aim of completing the majority for NCC 2022. This will provide practitioners with greater certainty about the level of performance that needs to be achieved by Performance Solutions, which will contribute to addressing some of the findings of the BCR. Practitioner competence in developing Performance Solutions will be enhanced through the provision of supporting materials on the use of performance, as well as through education and improvements to the code's usability. This work recognises that ongoing changes in technology and the increasing complexity of buildings will lead to Performance Solutions becoming more commonplace.

2019-20 KEY PERFORMANCE INDICATORS
Development of out-of-cycle NCC amendment including measures for early childhood centres in high-rise buildings and BCR National Framework and complex building matters
Established BCR implementation Team and support infrastructure
Developed conceptual response to BCR National Framework for Board consideration
International Fire Engineering Guidelines contemporised and considered for inclusion in NCC 2022
Update Consultation Regulation Impact Statement on smoke alarms to reflect research undertaken by Fire & Rescue NSW and development of possible amendments to NCC 2022
Development of possible amendments to the bushfire provisions for public buildings with vulnerable occupants
Commenced implementation of enhanced education program
Scoping undertaken of different options for amending the residential energy efficiency provisions
Consultation on accessible housing regulatory impact statement completed

# Education & awareness

Delivering targeted NCC resources for practitioners and the education sector to improve understanding and competent use of the NCC

## ABCB response to the Building Confidence Report

### Core education

- General awareness raising and supporting resources
- Targeted resources for relevant higher education courses
- Targeted resources for relevant VET courses
- Digitalisation roadmap for resources
- Freely available



### Enhanced education

- Targeted CPD resources for practitioners
- Delivered through partnerships
- Curriculum input for relevant training and courses
- Digitally focused resources
- Available at low cost



### Enhanced NCC product options

Online CPD units about the NCC including:

- Videos
- Podcasts
- Case studies/webcasts



### Enhanced education principles

- Aligns with the Building Confidence Report and BMF's Implementation Plan
- Improves consistency and NCC focus in education and training packages
- Provides industry partnership opportunities and input to better meet practitioners' needs
- Delivers digitally focused and engaging resources



### Practitioner audience groups

- Architects
- Builders
- Building Inspectors
- Building Surveyors
- Designers and Draftspersons
- Engineers
- Fire Safety Practitioners
- Plumbers
- Site and Project Managers



# ABCB Work Program 2019-20

Project Name	Project Output
<b>Building Confidence Report National Framework</b>	
BCR Implementation	Delivery of the Building Confidence Report National Framework
Complex Building Compliance	The inclusion of a definition for complex buildings in the NCC; The development of a package of potential measures to improve the rigour in design, construction and certification of complex buildings
<b>NCC Development</b>	
Amendment Process for NCC 2022	NCC changes developed and considered for implementation under agreed timeframes for release of new NCC editions/amendments
NCC Amendment Process (Out-of-Cycle Amendment)	Amendment 1 to the 2019 NCC produced
Standards Coordination and Committees	Documents, including Australian Standards, which are suitable for regulatory use and referencing in the NCC and the WaterMark Certification Scheme
Impact Analysis Process on Regulatory Change Proposals	Regulatory advice to decision-makers on proposals to amend the NCC; Effective regulation impact analysis processes undertaken in consultation with the Office of Best Practice Regulation (OBPR) and in accordance with COAG's regulatory principles
Extreme Weather Events and other Natural Hazards	Monitor the outcomes of the new NCC provisions for heating and cooling load limits to determine whether additional work is required to mitigate the effects of heat and cold stress in residential buildings; Assessment of the adequacy of the current NCC earthquake and extreme wind provisions; Natural disasters monitored to determine whether current NCC provisions are appropriate
International Fire Engineering Guidelines (IFEG) Revision	Contemporary fire engineering guidance identified for Australian practitioners
Vulnerable Children in High-Rise Buildings	Implement an out-of-cycle amendment to NCC 2019 with enhanced fire safety provisions for early childhood centres in high-rise buildings; Development of possible changes to the fire safety provisions for primary schools in high-rise buildings for initial impact analysis and inclusion in NCC 2022 processes
Smoke Alarms	2012 ABCB smoke alarms RIS updated in consideration of the FRNSW testing program; Verification Method for smoke alarms developed in collaboration with FRNSW for possible inclusion in NCC 2022; Review of appropriate standards carried out, including AS 3786 and UL 217
Bushfire Provisions for Non-Residential Buildings	Nationally consistent bushfire provisions for non-residential buildings containing vulnerable occupants
Commercial Energy Efficiency	Commence investigation of improvements to the commercial building energy efficiency provisions for NCC 2025
Residential Energy Efficiency	Development of possible substantial changes to the residential energy efficiency provisions in NCC 2022; Ongoing monitoring and assessment of changes to the Nationwide House Energy Rating Scheme (NatHERS) software
Condensation Mitigation Measures Stage Two	Development of Stage Two condensation provisions for residential buildings for possible inclusion in NCC 2022
Plumbing Code Development Research - Sanitary Plumbing and Drainage Sizing	Revised sanitary plumbing and drainage sizing provisions, including the fixture unit rating methodology for consideration by PCC
Lead in Plumbing Products	Amendments to the allowable lead content for plumbing products and materials in contact with drinking water
Cross-Connection Control	Revised and contemporary provisions for cross-connection control in NCC Volume Three
NCC Volume Two Acceptable Construction Practice (ACP) Review	Revised and contemporary Acceptable Construction Practice provisions for inclusion in NCC Volume Two
Accessible Housing	Development of accessible housing provisions for possible inclusion in NCC 2022
Grading of Floors to Floor Wastes	Development of possible NCC provisions requiring grading of floors to floor wastes whenever a floor waste is provided, including impact analysis

Project Name	Project Output
<b>Increased and Competent Use of Performance</b>	
Quantification (including Verification Methods)	Measurable NCC Performance achieved through quantified Performance Requirements or Verification Methods
Strategic Review of Performance Requirements	Strategic Review of the BCA Performance Requirements
Process for Developing Performance Solutions	Nationally consistent processes for undertaking NCC Performance Solutions
<b>NCC Awareness, Understanding and Useability</b>	
Improved NCC Readability - Volume Two	To facilitate a well understood and utilised code, implement improved NCC language, structure and format changes
Digitisation - including Consistent NCC Structure and New Information Architecture	Continued re-development of NCC Online to integrate with ABCB website and provide a stable, more navigable, easier to use site underpinned by a consistent NCC structure and information architecture
Education and Awareness	Increased awareness of the ABCB, NCC, WaterMark Scheme and CodeMark Scheme; Education/supporting resources aligned with the current NCC; Education resources aligned with AQF levels available for VET and higher education sectors (Stage 1); Establish a roadmap and implementation plan for digitalisation of resources
Enhanced Education	Partnership/s established for CPD development/delivery with a relevant industry body/ bodies Inaugural, digitally focused CPD course developed; Curriculum input for relevant vocational courses developed; Strong relationships established with key education accreditation bodies including professional industry bodies
National Events	Delivery of 2020 National Seminar Series and other events, in support of a well understood and utilised Code
<b>NCC Consolidation, Harmonisation and Regulatory Review</b>	
PCA Consolidation of State and Territory NCC-related Requirements	Relocation of technical plumbing requirements from State and Territory regulations and other instruments to the PCA
<b>Product Certification</b>	
WaterMark - Administration	Materials and products complying with the requirements of the WaterMark Certification Scheme are certified by a WaterMark Conformity Assessment Body and listed on the WaterMark Product Database
WaterMark - Point of Sale Awareness Initiatives	Development of a WaterMark Awareness Strategy for promoting and raising awareness of the WaterMark Certification Scheme, including a 5 year Masterplan and detailed Implementation Plan for the first 2 years; Commenced delivery of the Implementation Plan in collaboration with key Scheme stakeholders
WaterMark - Product Specification Review	Appropriate technical specifications for the evaluation of products within the scope of the improved WaterMark Certification Scheme
CodeMark Management - including Development of Future Options	Management and facilitation of Australian voluntary third party building product certification scheme; Development of options for the future of CodeMark for consideration by the Board and BMF

Note: there are other smaller projects that assist in the facilitation of the Board's Reform Agenda and the daily management of the ABCB Office.



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