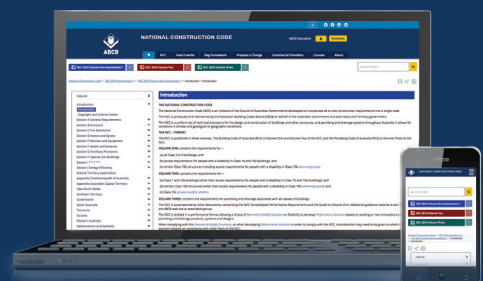


# AUSTRALIAN BUILDING CODES BOARD



# ANNUAL BUSINESS PLAN 2018-19





## 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

Life safety issues continue to be paramount for the ABCB. Building on the expedited work in NCC 2016 Volume One Amendment 1 to help address risks associated with high-rise building fires, the 2018-19 Business Plan outlines a range of activities to mitigate risks associated with fire in high-rise buildings, along with initiatives to support improved compliance in the implementation of the NCC.

Following direction from the Building Ministers' Forum (BMF), prioritisation will be given to the examination of fire safety measures relating to child care facilities in high-rise buildings. The ABCB will also be reviewing contemporary research on smoke alarms and the relevant NCC provisions to ensure their adequacy, and examining evidence to support the possible inclusion of bushfire protection provisions for high risk non-residential buildings.

In regard to accessible housing, an Options Paper will be developed for Board and BMF consideration, with the intention to then release this for the purpose of public consultation. Pending consideration of the outcome of this engagement and analysis, a Regulation Impact Statement (RIS) will be prepared to examine the full implications of any potential changes to the NCC and will itself be the subject of public consultation.

A significant body of work has been undertaken through the NCC 2019 public comment draft process. Submissions received will be considered and changes made as appropriate in the final version of NCC 2019, which will represent the first edition produced under the three year amendment cycle. Pending final Board consideration of proposed amendments, significant focus will shift to raising industry awareness about impending changes to the NCC and developing a range of complementary tools for information and education purposes. The increased and competent use of performance is also a key focus moving forward and involves increasing practitioner skills and knowledge in using a performance-based code.

Energy efficiency is another major project included for NCC 2019, with measures to significantly improve the performance of new commercial buildings, complemented by a number of actions to improve implementation post adoption of the Codes. Initiatives to improve residential energy efficiency, without increasing code stringency levels, are also included in NCC 2019, as well as work commencing on investigating possible new measures for residential buildings for NCC 2022.

Impact analysis of research and analysis completed as part of investigating potential measures to reduce jumping suicides from buildings will be concluded for consideration by the Board and the BMF.

Point of sale regulation for the WaterMark Product Certification Scheme and lead contamination of drinking water by plumbing products and fixtures have both been investigated and will be reported on for consideration of any subsequent work during 2018-19.

## STAGE TWO HOLISTIC REVIEW FIRE SAFETY INCLUDING PART 2 - VULNERABLE CHILDREN IN HIGH-RISE BUILDINGS

Stage one of the review of fire safety in high-rise buildings was finalised in 2016-17 and considered the current levels of fire safety provided in multi-storey residential (Class 2 and 3) buildings. The outcomes of this work will feature in NCC 2019.

At its 6 October 2017 meeting, the BMF communicated the need for a review of fire safety measures relating to child care facilities in high-rise buildings to be prioritised. The Board has commenced this work as a priority, scoping possible amendments to the NCC fire safety requirements for child care and primary school facilities in high-rise buildings, including a possible RIS.

## SMOKE ALARMS

The outcomes of the smoke alarm testing program conducted by Fire and Rescue NSW (FRNSW) published in early 2018, will be the subject of new work in the 2018-19 program. This will involve a combination of revisiting previous analysis undertaken by the ABCB into the number and location of smoke alarms in dwellings, along with considering the emerging issue of fire toxicity generated by modern furnishings.

If necessary, revisions to the 2012 Consultation RIS on Smoke Alarms and proposed amendments to the NCC, will be made for inclusion in NCC 2022. The ABCB will also engage with FRNSW in any follow-up work arising from the research report, including discussion with Standards Australia on any possible revision of AS 3786 Smoke Alarms.

## ACCESSIBLE HOUSING

The BMF, with COAG's support, directed the ABCB to undertake a regulatory impact analysis into the possible inclusion of accessibility requirements for housing, that is, having features to enable use by people either with a disability or through their life stages, in the NCC.

The scope of this work has been agreed by the BMF and the ABCB will now develop an options paper for the purpose of public consultation, which will include exploration of the gold and silver performance levels (defined in the Liveable Housing Design Guidelines), as possible options for a minimum accessibility standard.

## RESIDENTIAL ENERGY EFFICIENCY

Moving beyond finalising the measures to improve interpretation and application of the residential energy efficiency provisions for NCC 2019, the ABCB will commence initial analysis of possible changes to the residential energy provisions for NCC 2022, including a potential increase in stringency. This will be a long-term project that will involve input from the COAG Energy Council, which under the

National Energy Productivity Plan is working on a forward trajectory for building energy efficiency targets. This work will be undertaken in conjunction with Stage 2 of condensation measures for residential development, programmed to commence in 2019-20.

## WATERMARK POINT OF SALE AND LEAD CONTAMINATION

The review of the WaterMark Product Certification Scheme was completed in 2016. Following its implementation and as a result of submissions received during the review, the Board and BMF agreed that point of sale for regulation of WaterMark would be investigated on the basis that it could improve compliance with the Plumbing Code of Australia (PCA). The investigation acknowledges the complexity of any controls needing to be enforced under State and Territory legislation. Consideration of the outcomes of this investigation by the board and BMF will determine the scope of any future work.

At the same time the ABCB has been conducting plumbing research into the potential contamination of drinking water by plumbing products and fixtures, the outcomes of which may warrant further analysis of appropriate measures to address unacceptable risks. The outcomes of this research will be presented to the Board for its consideration and possible further work.

## NCC EDUCATION - AWARENESS AND UNDERSTANDING

The ABCB is committed to supporting the implementation of the NCC through meeting the educational needs of the growing number of registered NCC users. The ongoing development of education and resource material for 2018-19

will involve strengthened engagement with the education sector and accreditation bodies regarding curriculum processes for courses related to the NCC; understanding industry based training to identify CPD requirements of NCC users; and broader engagement with stakeholders to identify requirements in order to lift the competencies of practitioners.

Targeted support material focussing on key influencers in the building and plumbing process will be developed. Improving user understanding of the NCC as a performance-based code will be supplemented by specialist communications focussing on building industry capacity. Opportunities focussing on the NCC and performance-based design will be explored from a curriculum input and course accreditation perspective, in collaboration with the tertiary and VET sectors.

Revamping the NCC into a more user-friendly, accessible and digitised code for a widening audience will continue with Board consideration of a possible consistent Volume structure for 2022 being pivotal.

## INCREASED AND COMPETENT USE OF PERFORMANCE

The increased and competent use of performance involves, over the long-term, increasing practitioners skills and knowledge of the NCC as a performance-based code. The provision of supporting material on the use of performance will be further complemented by assisting industry to effectively use the Performance Requirements and enhance competency through additional investment in education and code useability. Closely linked with quantification, the increased and competent use of performance recognises the reality that with rapid changes in technology, increasing complexity of buildings and a marked shift to multi-storey construction, performance-based solutions will be more commonplace.

2017-18 ACHIEVEMENTS
Ministerial endorsement of 2017-18 Business Plan received
Produced NCC 2019 public comment draft
Expedited comprehensive package of measures to help address fire safety in high-rise buildings, including delivering NCC 2016 Volume One, Amendment 1
Condensation in Buildings Scoping Study (stage one) completed
Scoping / desktop analysis to inform RIS for accessible housing commenced
Research plan into measures to reduce incidences of jumping suicides from newly constructed buildings commenced
NCC quantification content for NCC 2019 progressed
Improved WaterMark and CodeMark Schemes implemented
Program of improved NCC useability including: readability, digitisation and education, progressed
Website information regarding non-conforming building products operational
Draft provisions for sanitary facilities for people with profound disabilities completed and included in NCC 2019 public comment draft.

2018-19 KEY PERFORMANCE INDICATORS
Delivered NCC 2019 on time and within budget
Detailed investigation into the fire safety of vulnerable children in high-rise buildings completed
Feasibility study undertaken into the development of a Verification Method for smoke alarms (in collaboration with FRNSW) and if necessary, revisions made to the 2012 Consultation RIS
Accessible housing options paper for public consultation and subsequent impact analysis released
Stage two prevention of jumping suicides research, further stakeholder consultation and regulation impact analysis undertaken
Plumbing Variation Reduction Conference held
Research report on lead in plumbing products and fixtures finalised
Consistent NCC Volume structure (for possible NCC 2022 adoption) determined
Commence work on residential energy efficiency provisions for NCC 2022
Strengthened education capacity and engagement with key sector participants to enhance embedding and teaching of NCC content.

# Supporting implementation of the NCC through Education

To lift awareness and ensure competent use of the performance-based NCC, the ABCB is working to improve the education of students and increase current practitioner knowledge. The result...better building outcomes.

## PRACTITIONERS, STUDENTS & APPRENTICES

- Provide the right information for our audiences
  - Improved awareness and use of NCC resources
  - Improved digital platforms for NCC access and related material



## COURSE ACCREDITATION BODIES

- Ensure the NCC is reflected in building and plumbing courses
  - Collaborate with professional accreditation bodies in the university sector
  - Collaborate with industry reference committees and skills service organisations in the VET sector

## SUPPORTING MATERIAL

- Produce authentic and specific learning material catering to student learning
  - Align with Australian Qualification Framework levels
- Maintain and expand NCC resources for practitioners
  - Improve understanding and increase competent use of the NCC as a performance-based code

## DIGITISATION & IMPROVED READABILITY

- Continued redevelopment of NCC Online
- New tools and technologies to deliver the NCC on a wider range of devices and for a broader audience
- Improved language, presentation and format for NCC 2019

## EDUCATION PROVIDERS

- Develop material to meet the needs of education providers
  - Engage with the higher education VET and RTO sectors to develop and support authentic learning materials
  - Explore opportunities in the CPD sector
  - Enhanced training tools delivering what educators want

# ABCB WORK PROGRAM 2018-19

PROJECT NAME	PROJECT OUTPUT
<b>NCC Development</b>	
NCC Amendment Process	National Construction Code (NCC) changes developed and considered for implementation under agreed timeframes for release of new NCC editions/amendments
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 regulatory principles
Extreme Weather Events and other Natural Hazards	Consideration of the heating and cooling load project outcomes and whether additional work is required to mitigate the effects of heat stress in 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
Stage 2 Holistic Review Fire Safety including Part 2 - Vulnerable Children in High-rise Buildings	Detailed investigation into the fire safety of child care facilities and primary schools in high-rise buildings; scoping studies into the following: fire safety for vulnerable occupants in high-rise buildings; proportional fire safety requirements in buildings; clear NCC fire safety provisions; regulation reduction of fire safety requirements; common Performance Solutions for fire safety - Stage Two Holistic Review of Fire Safety
Smoke Alarms	Fire & Rescue (FRNSW) smoke alarms testing program report reviewed and NCC provisions considered; 2012 ABCB smoke alarms RIS reviewed and commence update as appropriate; Verification Method for smoke alarms developed in collaboration with FRNSW for possible inclusion in NCC 2022; Updates to AS 3786 Smoke Alarms as appropriate
Implementation of Energy Efficiency Measures for Commercial Buildings	Revised energy efficiency provisions for NCC 2019, which include the following: for commercial buildings (Class 2 common areas, Class 3 buildings and Class 5 to 9 buildings), consideration of an economically feasible stringency increase and other improvements to facilitate greater compliance; a suite of educational materials, developed through industry consultation, that support interpretation and compliance with the updated provisions
Residential Energy Efficiency	Revised energy efficiency provisions in NCC 2019 for residential buildings (Class 1 buildings, Class 2 sole-occupancy units and Class 4 parts of buildings); Improvements to facilitate greater compliance with current requirements as well as proposed new changes in NCC 2019; Energy efficiency stringency increase for residential buildings scoped for possible inclusion in NCC 2022; Maintain the relationship with the Nationwide House Energy Rating Scheme (NatHERS) Administrator in accordance with the Memorandum of Understanding (MoU)
Plumbing Code Development Research (including lead research project)	Changes to the PCA resulting from previous research projects included in NCC 2019; Guidance material on backflow prevention, rainwater capture and use and warm water systems; Progress preliminary recommendations on the current fixture unit rating methodology and its suitability for contemporary plumbing practice; A research report on lead in plumbing products and materials for PCC and Board consideration
NCC Volume Two ACP Review	Revised and contemporary Acceptable Construction Practice (ACP) provisions for inclusion in NCC Volume Two
Bushfire Provisions for Non-Residential Buildings	Research to determine the risk associated with Class 9 buildings with vulnerable occupants in bushfire prone areas
Prevention of Jumping Suicides from Heights in Buildings	Regulation Impact Analysis into possible measures to reduce jumping suicides from buildings
International Fire Engineering Guidelines - Revision	A revision of the 2005 edition of the International Fire Engineering Guidelines
Accessible Housing	Initial consultation on minimum requirements for accessible housing in the NCC; Public release of draft Options Paper; Regulatory Impact Analysis commenced
Gas-fitting Code	Subject to Board and BMF agreement, development of a gas-fitting component of the NCC for consideration for NCC 2022
<b>Increased and Competent Use of Performance</b>	
Quantification (including Verification Methods)	Measurable NCC Performance through quantified Performance Requirements or Verification Methods; Strategic review of NCC Performance Requirements
Capacity Building (linked to Education)	Improved practitioner skills and knowledge to better understand and apply the NCC as a performance-based code (in conjunction with the Education project); Targeted capacity building and communications campaigns based on key audiences; New and updated material to support the adoption of NCC 2019
<b>NCC Awareness, Understanding and Useability</b>	
Improved NCC Readability	To facilitate a well understood and utilised code, implement improved NCC language, structure and format changes
Digitisation	Continued re-development of NCC Online to integrate with ABCB website and provide a stable, more navigable, easier to use site with the potential to provide additional functionality over time
Education	Engagement with all institutions teaching relevant subjects; Improved understanding of the education sector's needs to scope opportunities to improve NCC education; New training and education products scoped with institutional input; CPD opportunities for the NCC 2019 Seminars scoped and implemented as resources permit
Material Development	New, enhanced material and activities based on need, stakeholder feedback and the education strategy to facilitate a well understood code; Supporting material aligned to the current NCC by reviewing and updating them based on need, stakeholder feedback and the education strategy to facilitate a well understood Code
National Events	Delivery of 2019 National Seminar Series and other events, in support of a well understood and utilised Code
<b>NCC Consolidation, Harmonisation and Regulatory Review</b>	
Variation Management	A reduction in existing State/Territory variations to the NCC and scrutiny of proposals for new variations in accordance with IGA principles; Variation management progress report to BMF
BCA/PCA Harmonisation	Inclusion of cross volume links between the BCA and PCA for matters applicable to both building and plumbing sectors; Harmonisation of technical matters currently regulated by both the BCA and PCA; Achieving national consistency
PCA Consolidation of State & 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 fully with the applicable requirements of the WaterMark Certification Scheme are certified by a WaterMark Conformity Assessment Body (WMCAB) and listed on the WaterMark Product Database
CodeMark Management	Management and facilitation of Australian voluntary third party building product certification scheme
WaterMark Point of Sale	Investigation of point of sale regulation for the WaterMark Certification Scheme for Board consideration
Watermark Technical Standards - Review	Appropriate technical specifications for the evaluation of products within the scope of the improved WaterMark Certification Scheme

Note: there are other projects that assist in the facilitation of the Board's Reform Agenda and the daily management of the ABCB Office. Full details of these projects have been provided to Commonwealth, State and Territory officials.





## CONTACT US

[www.abcb.gov.au](http://www.abcb.gov.au)  
[ncc@abcb.gov.au](mailto:ncc@abcb.gov.au)



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