

Building Surveying Review

Summary of Changes Document

Validation Round

May 2020

BACKGROUND INFORMATION

Building surveyors play an integral role in certifying residential and commercial buildings either as private operators or through local government. In undertaking the critical role that building surveyors are responsible for it is appropriate that they have the necessary knowledge, skills and experience to ensure buildings meet relevant codes and standards. Recent publicised threats to public safety, in the form of cladding-related fires or structurally compromised buildings,¹ has raised the need for greater conformity to the National Construction Code (NCC) in terms of compliance and regulatory oversight.² In response to the challenges, whole-of-government initiatives realised in bodies such as the Building Ministers Forum have made recommendations and approved their implementation.³ This document provides background information and summarises the main changes to the currently endorsed Building Surveying Training Package.

PROJECT BRIEF

The [Construction and Property Services Industry Reference Committee \(IRC\)](#) has been tasked by the [Australian Industry Skills Committee \(AISC\)](#) to update the currently endorsed building surveying qualifications to ensure they comply with the [National Construction Code 2019](#) and reflect key developments in industry. The Case for Endorsement for the project is due at the AISC meeting on 12 August 2020.

The IRC works with the Skills Service Organisation (SSO) Artibus Innovation who provide secretariat support in conjunction with subject matter experts to oversee training package development. The building surveying expert panel known as a Technical Advisory Group (TAG) has met on six occasions and three times as working group to develop unit content for the currently endorsed qualifications:

- [CPC60115 Advanced Diploma of Building Surveying](#)
- [CPC80215 Graduate Diploma of Building Surveying.](#)

¹ Recent high-profile threats to public safety such as the Lacrosse building fire in Melbourne (2014) and the structurally compromised Opal Tower in Sydney (2018) have raised the need for better conformity to the NCC in terms of regulation and compliance.

² Building defects was the subject of a Four Corners investigative report in 2019. See: Nicholls S., 2019, "Cracking Up", *Four Corners*, accessed online 4/2/2020: <https://www.abc.net.au/4corners/cracking-up/11431474>

³ In 2018, the Building Ministers Forum (comprised of Australian Government, state and territory government ministers with responsibility for building and construction) commissioned the report *Building Confidence* by Professor Peter Shergold and Bronwyn Weir. They have since endorsed its twenty-four recommendations. Recommendations 1 to 4 focus on the registration and training of practitioners and call for "dedicated training on the NCC and the establishment of supervised training schemes which provide better defined career paths for building surveyors". See, Shergold, P. & Weir, B., 2018, *Building Confidence: Improving the Effectiveness of Compliance and Enforcement Systems for the Building and Compliance Industry Across Australia*, (p. 5), accessed online 4/2/2020: <https://aibs.com.au/Public/News/2018/ShergoldWeir.aspx>

Deletion of the Graduate Diploma

Please note, this is a review of VET qualifications in Building Surveying, and does not encompass university qualifications. One of the first actions the TAG considered was the deletion of the applied [CPC802115 Graduate Diploma of Building Surveying](#) on the basis that there has been no enrolments, completions nor delivery of the course since 2015.⁴ This activity was performed on the basis that it is an Australian Government (COAG) Skills Council Ministers' priority to [remove outdated and unnecessary qualifications](#) from the national register.

New Packaging for the Advanced Diploma

Since the first meeting of the TAG in September 2019, the review has centred on developing [CPC60115 Advanced Diploma of Building Surveying](#). The current qualification consists of 14 core and 3 elective units. The proposed update known as *CPC60120 Advanced Diploma of Building Surveying* consists of 19 core and 7 electives. Revised packaging rules will require the completion of 22 units of competency – consisting of 19 core units and 3 electives.

The qualification has been deemed non-equivalent due to the significant changes undertaken.

Embedded in the units of competency for the advanced diploma is the skill set [CPCSS00004 Provide building surveying services for residential buildings up to three storeys](#), which is typically delivered and attained before commencement of the parallel commercial units. The skill set has been increased by an additional two units on ethics (CPCCBS6103) and performance solutions (CPCCBS6118).

First Round of National Consultation

The first round of national consultation ran for just over six weeks from 18 February – 30 March 2020. There were sixty-three complete submissions through the formal consultation instrument as well as three formal submissions.

Consultation revolved around proposed changes to six consultation items:

- 1) building size delineation for the advanced diploma – up to 500 m²
- 2) building height limitation for the advanced diploma – up to two storeys
- 3) relaxation of the additional requirement for assessors
- 4) the inclusion of four Certificate IV units on building and construction
- 5) the addition of imported units on bushfire attack levels, access, energy efficiency
- 6) deletion of the graduate diploma.

After the first round of consultation, the industry expert TAG considered feedback from public and industry and made their recommendations around the six consultation items. While consultation feedback revealed strong external and internal support for issues 4-6, there was also support for issues 1-3, albeit at closer margins. Issue 4, the “relaxation of the additional requirement for assessors”, was perhaps the most topical item for the TAG and the recommendation was decided by a narrow margin.

⁴ VET qualifications in Australia typically span AQF levels 1 to 6 whereas university programs traditionally cover AQF levels 7 to 10. *CPC802115 Graduate Diploma of Building Surveying* was designed—albeit unsuccessfully—to be the applied equivalent of a higher-level university programme (i.e., AQF Level 8) attainable through the VET system. It was however unsuccessful for a number of reasons: (a) difficulties operationalising courses and recruiting trainers and assessors; (b) the value for money proposition regarding attainment of the equivalent university degree; and, (c) complexities of modern building systems requiring rigorous research and analytic capabilities over vocationally-focused competency-based training.

PURPOSE OF THIS DOCUMENT

The training package components consisting of qualifications and units are now open for their final round of public and industry consultation.

This second round of industry and public consultation for the Building Surveying Training Package will run from Monday, 18 May – Monday, 1 June.

After this final validation round the Case for Endorsement will proceed to the quality assurance, editorial and equity and review by the State Training Authority stages before it reaches the AISC on 12 August.

PROVIDING FEEDBACK

The draft components as developed by the TAG can be viewed [here](#).

We are seeking your feedback on revisions to the qualification and residential skill set as well as seventeen revised units of competency.

Feedback should be actionable recommendations rather than generalised statements or questions about what has been drafted.

Any questions should be directed to the designated Artibus Innovation contact on the project page.

Key Consultation Issues

In Australia, building surveying qualifications are dual sector in nature. That is, a university qualification equal to or higher than Australian Qualification Framework (AQF) Level 7 is required to work as a unrestricted (unlimited/level 1) building surveyor who can certify residential or commercial buildings of any size in terms of storeys and square metres. Otherwise, a vocational advanced diploma qualification (AQF Level 6) is the current requirement to work as a restricted (limited/level 2) building surveyor who can certify residential or commercial buildings up to three storeys and 2000 m².⁵

A smaller number of units of competency drawn from the advanced diploma comprises the skill set *CPCSS00004 Provide building surveying services for residential buildings up to three storeys*. Typically, this residential skill set is delivered and attained before commencement of commercial units and attainment of the advanced diploma.

The building surveying Technical Advisory Group (TAG) has met on six occasions to review *CPC60115 Advanced Diploma of Building Surveying* and the skill set *CPCSS00004 Provide building surveying services for residential buildings up to three storeys*.

A working group was also convened three times to review specific unit content. Since the first round of national consultation they have simplified and clarified the performance evidence of all units. The additional requirement for assessors has also been simplified.

This second validation round of public and industry consultation is therefore an important stage for our research team to collect quantitative and qualitative evidence around the recommendations.

⁵ For more information regarding building surveying and training in Australia see the background research paper prepared by Artibus Innovation [here](#).

Issue	Proposed changes	Impact
<p>1) Building Size Delineation – 500 m²</p>	<p>NCC 2019 relies more heavily on performance assessments than ever before. Using deemed-to-satisfy provisions to demonstrate compliance in buildings larger than 500 m², especially in terms of verification methods and fire engineering, means graduates working as restricted building surveyors will find it increasingly difficult to demonstrate competency and compliance with NCC 2019 in assessing larger buildings.</p> <p>Three storeys for any classification of building requires complex engineering computations and a detailed understanding of structures. For instance, when designing a three-storey building using timber, the <i>Acceptable Construction Manual or AS 1684 Residential Timber Framed Construction</i> no longer applies. Using AS 1684 allows for detailed instructions and descriptors to be followed along with timber tables that have been pre-determined to allow for timber sizes to be selected without the need for detailed engineering computations. When a building surveyor assesses and certifies building work to have met the performance provisions for structural adequacy compliant with the NCC (encompassing the Building Code of Australia, Vol. 1 & 2) the building surveyor should have assessed all engineering computations; not just compliance with deemed-to-satisfy requirements of AS 1684.</p> <p>Engineering computations are detailed and complex. They are taught at a university level (AQF Level 8) over a four-year honours degree or equivalent. Expecting that an AQF Level 6 building surveyor will be able to follow and determine compliance from detailed engineering computations for a three-storey building using the performance provisions of the NCC in terms of reading, interpreting and comprehending detailed engineering assessments, is outside the scope of what is currently being taught at an AQF Level 6. Another reason cited by an industry panellist is that the risk ratings and building complexity in terms of disability access, energy efficiency and waterproofing become much higher over two storeys in the NCC.</p>	<p>Supporting the change will delineate the work of a building surveyor (limited) at 500 m² to ensure greater public and consumer safety, greater NCC 2019 compliance and reflect key developments in industry. The revision will necessitate regulatory changes in all Australian states and territories. A case will need to be made to the Building Regulators Forum that building surveyors already registered at Level 2 will not be affected and will continue to work under previous regulatory requirements of up to three stories and 2000 m².</p>

2)	Building Storey Limitation – two storeys	<p>The volume of work completed by a building surveyor (limited) is captured in buildings of one or two storeys. Three storeys for any classification of building requires complex engineering computations and a detailed understanding of structures and the NCC. For instance, when designing a three-storey building using timber, the Acceptable Construction Manual or <i>AS 1684 Residential Timber Framed Construction</i> no longer applies. Risk ratings and building complexity in terms of disability access, energy efficiency and waterproofing becomes higher over two storeys.</p> <p>Furthermore, locating accessible examples of three storey buildings for assessment purposes, (especially in regional and remote areas) presents challenges for trainers and assessors.</p>	<p>Supporting the TAG recommendation will support trainers and assessors in being able to find more accessible buildings of suitable height for training and assessment. Supporting up to two stories will also ensure greater public and consumer safety, greater NCC 2019 compliance and reflect key developments in industry. The revision will necessitate regulatory changes in all Australian states and territories. A case will need to be made to the Building Regulators Forum that building surveyors already registered at Level 2 will not be affected and will continue to work under previous regulatory requirements of up to three stories and 2000 m².</p>
3)	Assessor Requirements	<p>The currently endorsed units of competency require assessors to have “current membership of a relevant industry association and have current registration on the National Building Professionals Register in the Building Industry Control category (level 1) or be accredited under the Australian Institute of Building Surveyors (AIBS) National Accreditation Scheme at Building Surveyor level”. These requirements are in addition to the expectation that assessors already meet the Standards for Registered Training Organisations. There has been divergent opinion on whether to relax these additional assessor requirements or maintain the status quo</p>	<p>The statement is removed. Removing the statement places the onus that the necessary assessments standards as mandated by policy i.e., that the Standards for Registered Training Organisations RTOs and the Australian Skills Quality Authority (ASQA) audit regime are sufficiently rigorous. RTOs will be able to attract suitably qualified professionals because under the old arrangements assessors had to be university trained building surveyors as determined by the AIBS accreditation scheme and the NBPR registration requirements.</p>
4)	Cert IV Building and Construction Units	<p>Artibus Innovation has received feedback from trainers and assessors who have been experiencing difficulties teaching the advanced diploma given the number of students who enrol, especially in jurisdictions such as Victoria offering so-called “free TAFE” programmes, with little to no building and construction knowledge. The industry panel has therefore suggested the inclusion of four Certificate IV Building and Construction units to help overcome this,</p>	<p>Supporting the TAG recommendation to include four Certificate IV Building and Construction units will overcome issues of there being no pathway to an advanced qualification. Artibus Innovation has received feedback that there have been problems arising from students enrolling in the qualification with no background knowledge in building and</p>

		<p>noting that any enrolees who have already attained these units will be granted recognition of prior learning. The units are:</p> <ul style="list-style-type: none"> • CPCBC4001 Apply building codes and standards to the construction process for Class 1 and 10 buildings • CPCBC4010 Apply structural principles to residential and commercial constructions • CPCBC4012 Read and interpret plans and specifications • CPCBC4053 Apply building codes and standards to the construction process for Class 2 to 9 Type C buildings 	<p>construction. Going forward, any enrolees who have already attained these units will be granted recognition of prior learning.</p>
5)	Addition of imported units	<p>The elective pool has been deepened with the inclusion of five elective units from other training packages around the areas of bushfire attack levels, access and energy efficiency. These units from other training packages have been included to support the objectives of NCC 2019. These units are:</p> <ul style="list-style-type: none"> • CPPACC6002A Apply performance- based codes and risk management principles to assessing buildings for access • CPPACC6003A Apply unjustifiable hardship principles to Alternative Building Solutions for access • CPPHES4007 - Assess thermal performance of existing residential buildings • CPPHES4007 Assess thermal performance of existing residential buildings • PUAFIR518 Conduct and record a Bushfire Attack Level (BAL) assessment 	<p>The proposal to deepen the pool of electives is a good one as these are highly relevant to NCC 2019 and the daily work of a building surveyor limited.</p>
6)	Deletion of the Graduate Diploma	<p>The Technical Advisory Group (TAG) were tasked to consider the deletion of CPC802115 Graduate Diploma of Building Surveying on the basis that there have been no enrolments, completions nor delivery of the qualification since its inception in 2015. The qualification is the applied equivalent of a university-level university programme. It aligns to Australian Qualifications Framework (AQF) Level 8. Its recommended deletion is to meet a skills ministers' priority – to remove obsolete and superfluous training package components from the National Register.</p>	<p>CPC802115 Graduate Diploma of Building Surveying will be deleted from the national register.</p>

Revised Units

Seventeen units of competency for building surveying have been revised to meet current skill needs and compliance with the [standards for training packages](#).

Common changes across the units include:

- recoding in line with training package products policy
- retitling of units to cover building classes
- new prerequisite requirements in relevant units
- revision of performance evidence to simplify and clarify the intent
- other minor edits to remove duplication and improve the clarity of statements.

The summary of changes applied to the units is outlined below.

PRE-REQUISITE UNITS ADDED

Feedback received by Artibus Innovation indicates that the first two units of the Building Surveying Advanced Diploma cover fundamental knowledge requirements for the occupation and are typically delivered before commencement of other units in the qualification.

CPCCBS6101	Research and evaluate construction methods and materials for Class 1 and 10 buildings to two storeys
CPCCBS6102	Research and evaluate construction methods and materials for Class 2 to 9 buildings to two storeys

In this review, it is proposed that all subsequent units relating to residential (Class 1 and 10) buildings will require attainment of CPCCBS6101 and all those relating to commercial (Class 2 to 9) buildings will require attainment of CPCCBS6102 with some exceptions.⁶

SPLITTING AND MERGING OF UNITS

The Building Surveying TAG has split the following unit to provide separate functions for residential and commercial buildings:

Current unit code and name	Draft new unit code and name
CPCCBS6016 Assess and advise on performance-based solutions for buildings up to three storeys	CPCCBS6116 Assess and advise on performance-based solutions for Class 2 to 9 buildings to two storeys
	CPCCBS6118 Assess and advise on performance-based solutions for Class 1 and 10 buildings to two storeys

As part of the review, the Building Surveying TAG merged the following units given the workplace outcome is the same for residential and commercial buildings:

Current unit code and name	Draft new unit code and name
CPCCBS6006 Process planning applications for residential buildings up to three storeys	CPCCBS6007 Process planning applications for commercial buildings up to three storeys
CPCCBS6007 Process planning applications for commercial buildings up to three storeys	

⁶ With the exception of the unit on ethics (CPCCBS6103) and planning (CPCCBS6107).

ADDITIONAL IMPORTED ELECTIVES FOR THE ADVANCED DIPLOMA

The following five imported electives have been added to address industry concerns around bushfire attack levels, access, and energy efficiency:

CPPACC6002A	Apply performance-based codes and risk management principles to assessing buildings for access
CPPACC6003A	Apply unjustifiable hardship principles to Alternative Building Solutions for access
CPPHES4005	Assess household energy use and efficiency improvements
CPPHES4007	Assess thermal performance of existing residential buildings
PUAFIR518	Conduct and record a Bushfire Attack Level (BAL) assessment

RESTRUCTURING OF SKILL SET

Two additional units have been added to the skill set to reflect key developments in industry around ethics and performance solutions. These are:

CPCCBS6103	Identify and apply legal and ethical requirements to building surveying functions
CPCCBS6118	Assess and advise on performance-based solutions for Class 1 and 10 buildings to two storeys

Next Steps

This validation consultation phase will run from 18 May – 1 June 2020. After the conclusion of consultation, the following activities will occur:

- Building Surveying Technical Advisory Group (TAG) will consider validation feedback before signing off on the draft training package components
- The Construction, Plumbing and Services Industry Reference Committee (IRC) will sign off final training products
- Editorial/Equity and Quality Assurance reports and the Case for Endorsement will be prepared and provided to State Training Authorities (STAs) for their review
- Submission of the Case for Endorsement to the AISC is expected to occur on 12 August 2020.