



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **CPPBDN8002A Research compliance requirements for complex building design projects**

Release: 1

## **CPPBDN8002A Research compliance requirements for complex building design projects**

### **Modification History**

New unit

### **Unit Descriptor**

This unit of competency specifies the outcomes required to research compliance requirements that apply to large scale and complex building design projects in a range of locations.

It covers research into local, state and federal government legislation and policies relating to planning and the environment, including zoning and interpretation of these requirements in relation to client preferences and prospective design proposals.

### **Application of the Unit**

This unit of competency supports building designers who analyse and explain compliance requirements for construction Type A buildings as defined within the Building Code of Australia (BCA).

### **Licensing/Regulatory Information**

Work in this area must be completed according to relevant legislative, industry and organisational requirements, including occupational health and safety (OHS) policies and procedures.

Different states and territories may have regulatory mechanisms that apply to this unit. Users are advised to check for regulatory limitations.

### **Pre-Requisites**

Not applicable.

### **Employability Skills Information**

This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

- |   |  |     |  |
|---|--|-----|--|
| 1 | Research requirements of applicable legislation                | 1.1 | <i>Legislation</i> affecting compliance of designs for different types of <i>large and complex building projects</i> is researched and variations in requirements are interpreted and noted. |
|   |  | 1.2 | Legislation affecting compliance of designs for different <i>project locations</i> and <i>conditions</i> is researched and variations in requirements are interpreted and noted.             |
|   |  | 1.3 | Research is recorded, filed and regularly updated according to workplace procedures  |
| 2 | Research requirements of applicable codes and standards        | 2.1 | <i>Codes and standards</i> relating to different types of building design projects are researched and variations in requirements are interpreted and noted.                                  |
|   |  | 2.2 | Codes and standards relating to different project locations and conditions are researched and variations in requirements are interpreted and noted.  |
|   |  | 2.3 | Research is recorded, filed and regularly updated according to workplace procedures.   |
| 3 | Analyse impact of alternative solutions on project development | 3.1 | Deemed-to-satisfy and alternative solutions are compared and evaluated to assess relative strengths and weaknesses.  |
|   |  | 3.2 | <i>Expert opinion</i> regarding the compliance requirements of alternative solutions is sought to inform decision making.  |

- 4 Analyse compliance requirements
  - 4.1 Ambiguous or conflicting compliance requirements are clarified with relevant professionals.
  - 4.2 Compliance requirements that affect client preferences are identified and communicated to client.
  - 4.3 Constraints placed on design options by compliance requirements are identified and innovative solutions proposed.

## Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

### Required skills

- administration and management skills to:
  - manage documents
  - manage time, including planning and prioritising work
  - plan and arrange professional development activities
- analytical and problem-solving skills to:
  - develop innovative design solutions
  - research compliance requirements
- interpersonal skills to interact with clients and relevant professionals
- language, literacy and numeracy skills to:
  - communicate with clients, colleagues and contacts, including writing reports
  - interpret and apply complex information, including legislation, regulations and codes and standards
- technology skills to use information technology and relevant software

### Required knowledge

- compliance requirements relating to construction Type A building design projects, including:
  - Australian standards
  - BCA deemed-to-satisfy requirements
  - BCA alternative solutions requirements, including:
    - Australian standards
    - techniques for carbon dioxide reduction, including specification of materials, glue and paint
    - energy efficiency
    - fire resistance levels
  - Building Acts
  - town planning and other planning body requirements
  - legislation
  - regulatory limitations
- organisational scope of business and client demographics, including:
  - geographic areas of operation
  - trends in client design preferences

- types of building design projects that form the core business of the organisation
- sources of reliable information on interpretation of compliance requirements

## Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

<p>Critical aspects for assessment and evidence required to demonstrate competency in this unit</p>	<p>A person should demonstrate the ability to:</p> <ul style="list-style-type: none"> <li>• develop a body of current research findings suitable for compliance with codes, standards and planning requirements for construction Type A building design projects</li> <li>• provide evidence of construction Type A building compliance requirements being documented and met for at least two specific projects covering different types of buildings</li> <li>• systematically document and store research findings.</li> </ul>
<p>Context of and specific resources for assessment</p>	<p>Assessment of this unit:</p> <ul style="list-style-type: none"> <li>• must be in the context of the work environment</li> <li>• may be conducted in an off-site context, provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills</li> <li>• must meet relevant compliance requirements.</li> </ul> <p>Resource implications for assessment include:</p> <ul style="list-style-type: none"> <li>• access to: <ul style="list-style-type: none"> <li>• suitable assessment venue and equipment</li> <li>• suitable simulated or real opportunities and resources to demonstrate competence</li> </ul> </li> <li>• assessment instruments.</li> </ul>
<p>Method of assessment</p>	<p>Assessment for this unit must verify the practical application of the required skills and knowledge, using one or more of the following methods:</p> <ul style="list-style-type: none"> <li>• written and/or oral assessment of the candidates required knowledge for the unit</li> <li>• observed, documented and/or firsthand testimonial evidence of the candidates</li> <li>• implementation of appropriate procedures and techniques for the safe, effective and efficient achievement of the required outcomes</li> </ul>

	<ul style="list-style-type: none"><li>• identification of the relevant information and scope of the work required to meet the required outcomes</li><li>• identification of viable options and the selection of options that best meet the required outcomes</li><li>• consistently achieving the required outcomes.</li></ul>
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<p>Guidance information for assessment</p>	<p>This unit could be assessed on its own or in combination with other units relevant to the job function.</p> <p>Where applicable, physical resources should include equipment modified for people with disabilities.</p> <p>Access must be provided to appropriate learning and/or assessment support when required.</p> <p>Assessment processes and techniques must be culturally appropriate, and appropriate to the language and literacy capacity of the candidate and the work being performed.</p>
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## Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

<p><b>Legislation</b> may include:</p>	<ul style="list-style-type: none"> <li>• legislation, regulations and local by-laws relating to:             <ul style="list-style-type: none"> <li>• conservation</li> <li>• construction materials and methods</li> <li>• energy</li> <li>• environment</li> <li>• heritage</li> <li>• OHS</li> <li>• planning</li> <li>• water</li> </ul> </li> <li>• local authority planning schemes.</li> </ul>
<p><b>Large and complex building projects</b> include:</p>	<ul style="list-style-type: none"> <li>• <b>construction</b> Type A buildings defined by the BCA, which are projects that are:             <ul style="list-style-type: none"> <li>• of 3 storeys for Class 2, 3 and 9 buildings</li> <li>• of 4 or more storeys for Class 5, 6, 7 and 8 buildings</li> </ul> </li> <li>• construction projects, which may be:             <ul style="list-style-type: none"> <li>• new buildings</li> <li>• renovations</li> <li>• conversions</li> <li>• residential</li> <li>• commercial</li> <li>• industrial</li> <li>• public buildings.</li> </ul> </li> </ul>



	Note: It is essential to refer to current BCA documentation to ensure accuracy of definitions and scopes.
<b><i>Project locations</i></b> may include:	<ul style="list-style-type: none"> <li>• locations within the jurisdictions of different: <ul style="list-style-type: none"> <li>• countries</li> <li>• local authorities</li> <li>• states and territories</li> </ul> </li> <li>• locations with specific conditions, such as: <ul style="list-style-type: none"> <li>• bushfire threat zones</li> <li>• coastal areas</li> <li>• cyclone zones</li> <li>• flood zones</li> <li>• mountainous areas</li> <li>• rural areas</li> <li>• snow zones.</li> </ul> </li> </ul>
<b><i>Conditions</i></b> may include:	<ul style="list-style-type: none"> <li>• environmental, including: <ul style="list-style-type: none"> <li>• natural waterways</li> <li>• protected flora and fauna</li> </ul> </li> <li>• weather, including: <ul style="list-style-type: none"> <li>• bushfires</li> <li>• cyclones</li> <li>• floods</li> <li>• snow.</li> </ul> </li> </ul>
<b><i>Codes and standards</i></b> may include:	<ul style="list-style-type: none"> <li>• Australian standards</li> <li>• BCA</li> <li>• Building Acts</li> <li>• codes and standards applicable: <ul style="list-style-type: none"> <li>• at project locations</li> <li>• in particular conditions.</li> </ul> </li> </ul>
<b><i>Expert opinion</i></b> may be sought from professionals, such as:	<ul style="list-style-type: none"> <li>• access consultants</li> <li>• acoustics engineers and professionals</li> <li>• bushfire management professionals</li> <li>• construction contractors</li> <li>• civil engineers</li> <li>• energy efficiency experts</li> <li>• fire systems designers and engineers</li> <li>• hydraulic engineers</li> <li>• landscape designers</li> <li>• lighting specialists</li> <li>• mechanical services engineers</li> </ul>

	<ul style="list-style-type: none"><li>• OHS experts</li><li>• plumbing and drainage professionals</li><li>• quantity surveyors</li><li>• service contractors</li><li>• soil testing or geo-technical engineers and experts</li><li>• structural engineers</li><li>• surveyors.</li></ul>
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## **Unit Sector(s)**

Building design

## **Custom Content Section**

Not applicable.