



**Australian Government**

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

# **CPPBDN5015A Produce compliant client-approved working drawings for non-residential buildings**

Release: 1

## **CPPBDN5015A Produce compliant client-approved working drawings for non-residential buildings**

### **Modification History**

New unit

### **Unit Descriptor**

This unit of competency specifies the outcomes required to produce detailed working drawings of designs for commercial and industrial buildings covered by the Building Code of Australia (BCA), except construction Type A buildings. The drawings are required for submission to the relevant authority for building approval and for use by construction personnel in the building process.

The unit also covers liaising with the client and relevant authority to finalise the building approval process.

### **Application of the Unit**

This unit of competency supports building designers who prepare sets of working drawings for non-residential building design projects that fall within the definitions of construction types B and C in the 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 | Plan and administer working drawing production   | 1.1 | <b><i>Working drawings</i></b> required by construction contractors and for building approval applications for <b><i>small-scale commercial and industrial building design projects</i></b> are confirmed with <b><i>relevant personnel</i></b> . |
|   |  | 1.2 | <b><i>Compliance requirements</i></b> to be addressed in working drawings are confirmed with relevant personnel.  |
|   |  | 1.3 | Timelines and methodologies for producing working drawings are established and followed.  |
|   |  | 1.4 | Drawings required from <b><i>technical experts</i></b> are specified, commissioned and obtained.  |
| 2 | Prepare working drawings.                        | 2.1 | Project design drawings and documentation are analysed and information relevant to working drawings is extracted.   |
|   |  | 2.2 | Construction details requiring clarification are resolved through research or consultation.   |
|   |  | 2.3 | Draft working drawings are prepared and notations added according to project and workplace requirements.  |
|   |  | 2.4 | <b><i>Working drawings are checked</i></b> and finalised, in consultation with colleagues or relevant personnel as required.  |
| 3 | Submit and support building approval application | 3.1 | <b><i>Documentation requirements for building approval applications</i></b> are obtained from relevant personnel.   |
|   |  | 3.2 | Documentation for building approval application is prepared, checked for compliance with requirements, and confirmed with client.   |

- 3.3 Progress of application through building approval process is monitored and requests for clarification or changes are addressed in consultation with client.
- 3.4 Building approval is obtained and filed with final design project documentation according to workplace procedures.
- 3.5 Client is notified of building approval and copies of relevant documentation are provided.

## 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
- analytical and problem-solving skills to:
  - analyse data
  - clarify construction details
  - resolve issues arising during building approval process
- interpersonal skills to interact with clients and other participants in building approval processes
- language, literacy and numeracy skills to:
  - communicate with clients and other contacts, including:
    - negotiating
    - writing reports
  - interpret and apply complex information, including legislation, regulations, codes and standards, and local authority planning schemes
  - negotiate adjustments and their implications with clients
  - perform measurements and calculations relating to working drawings
- technical skills to:
  - apply compliance requirements, including drawing standards
  - produce accurate drawings and documentation
  - use design tools
- technology skills to use information technology and relevant software

### Required knowledge

- basic principles of structural engineering
- building approval processes
- building designers' duty of care to ensure quality and safety of designs
- construction materials and methods
- implications of changes to designs
- legislation, codes and standards relevant to small-scale building design projects, including drawing standards
- organisational scope of business, service levels and fees

- principles of design, including sustainable design

## 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>• confirm working drawing requirements for building approval application and contractors' use</li> <li>• consult with technical experts to clarify details for working drawings, as required</li> <li>• prepare and organise complete and compliant sets of working drawings in a timely manner for at least three different types of small-scale non-residential projects</li> <li>• finalise building approval for a range of projects, including processing of final drawings and documentation, and notify clients of such.</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</li> </ul>

	<p>the safe, effective and efficient achievement of the required outcomes</p> <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><i>Working drawings</i></b> may include:</p>	<ul style="list-style-type: none"> <li>• area analyses</li> <li>• elevations</li> <li>• in situ concrete detailing</li> <li>• joinery details</li> <li>• location of neighbouring buildings</li> <li>• plans for:             <ul style="list-style-type: none"> <li>• ceilings</li> <li>• floor finishes</li> <li>• floors</li> <li>• footings</li> <li>• lighting</li> <li>• services</li> <li>• sites</li> </ul> </li> <li>• projections</li> <li>• room details</li> <li>• sections</li> <li>• two and three-dimensional drawings and sketches.</li> </ul>
<p><b><i>Small-scale commercial and industrial building design projects:</i></b></p>	<ul style="list-style-type: none"> <li>• include all commercial and industrial building design projects covered by the BCA, except construction Type A buildings</li> <li>• may be:             <ul style="list-style-type: none"> <li>• factories</li> <li>• motels</li> <li>• offices</li> </ul> </li> </ul>



	<ul style="list-style-type: none"> <li>• restaurants</li> <li>• retail and service outlets</li> <li>• warehouses.</li> </ul>
<b><i>Relevant personnel</i></b> may include:	<ul style="list-style-type: none"> <li>• construction contractors and subcontractors</li> <li>• representatives from: <ul style="list-style-type: none"> <li>• local council departments</li> <li>• federal, state or territory government departments</li> <li>• regulatory authorities in country of project location.</li> </ul> </li> </ul>
<b><i>Compliance requirements</i></b> may include:	<ul style="list-style-type: none"> <li>• Australian standards, including standards for drawings</li> <li>• BCA</li> <li>• legislation, regulations and by-laws.</li> </ul>
<b><i>Technical experts</i></b> may include:	<ul style="list-style-type: none"> <li>• construction contractors</li> <li>• landscape designers</li> <li>• service contractors</li> <li>• structural engineers</li> <li>• surveyors.</li> </ul>
<b><i>Working drawings</i></b> may be checked for:	<ul style="list-style-type: none"> <li>• accuracy</li> <li>• completeness</li> <li>• compliance with relevant requirements, including building approval requirements</li> <li>• consistency of presentation</li> <li>• cross-referencing</li> <li>• titles and reference numbers</li> <li>• version control.</li> </ul>
<b><i>Documentation requirements for building approval applications</i></b> may include:	<ul style="list-style-type: none"> <li>• contract administration documentation</li> <li>• reports, such as: <ul style="list-style-type: none"> <li>• access</li> <li>• conservation</li> <li>• energy rating</li> <li>• fire safety</li> <li>• soil analysis</li> </ul> </li> <li>• plans for: <ul style="list-style-type: none"> <li>• demolition</li> <li>• cut and fill</li> <li>• excavation</li> </ul> </li> <li>• risk assessments</li> <li>• working drawings.</li> </ul>

## **Unit Sector(s)**

Building design

## **Custom Content Section**

Not applicable.