



Australian Government

CPPBDN6101 Produce compliant designs for Class 2-9 buildings up to three storeys

Release: 1

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Modification History

Release 1 This version first released with CPP Property Services Training Package Release 11.0.

New unit.

Application

This unit specifies the skills and knowledge required to design Class 2-9 buildings, as defined in the National Construction Code (NCC), having a rise in storeys up to three, including buildings of Type A construction. It includes developing the design brief, integrating client requirements, analysing the site, developing the design concept, refining the design and presenting to the client.

This unit is suitable for experienced drafters and building designers who draw on their broad theoretical knowledge and technical skill to develop designs and provide specialist information.

This unit forms part of the licensing requirements for people engaged in building design in some states and territories. For further information, check with the relevant regulatory authority.

Pre-requisite Unit

Nil.

Unit Sector

Building Design

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe what needs to be done to demonstrate achievement of the element.

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|-------------------------|---|
| 1 Develop design brief. | 1.1 Consult with client to clarify building design vision, preferences and budget to inform design brief. |
| | 1.2 Perform site analysis and research local approving authority requirements applicable to client site. |

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| | 1.3 | Review design requirements, challenges and planning constraints specific to building location. |
| | 1.4 | Research passive design principles and sustainability considerations. |
| | 1.5 | Document design brief in accordance with workplace requirements. |
| | 1.6 | Confirm design brief with client to obtain consent to proceed to design stage. |
| 2 | Analyse project information to clarify design concept. | |
| | 2.1 | Review design brief and site analysis and identify additional required information. |
| | 2.2 | Determine impacts of compliance requirements on design options according to classification and use of building. |
| | 2.3 | Analyse implications of preferred construction materials and methods on design options. |
| | 2.4 | Reconcile site analysis and compliance requirements with design brief and resolve any conflict. |
| 3 | Produce design concept. | |
| | 3.1 | Propose innovative design solutions that utilise sustainability principles to minimise environmental impact. |
| | 3.2 | Prepare draft concept representations that are drawn to scale and test design ideas. |
| | 3.3 | Review draft concept design to ensure it meets requirements of design brief, site and compliance constraints. |
| | 3.4 | Apply rendering techniques to drawing views to enhance readability and depict light, shade and material finishes. |
| | 3.5 | Produce set of concept design drawings for presentation to client. |
| 4 | Consult with client to | |
| | 4.1 | Present and discuss design concepts with client. |

finalise design concept.	4.2	Explain design choices including energy efficient and sustainability considerations.
	4.3	Explain solutions developed to meet project requirements and record client feedback.
	4.4	Resolve issues and associated implications arising from client feedback and revise drawings accordingly.
5 Refine spatial, structural and technical elements of building design to complete drawings.	5.1	Review structural and services systems and incorporate appropriate systems into building design.
	5.2	Incorporate optimum, cost-effective and sustainable construction materials and methods into building design.
	5.3	Assess design drawings against client and compliance requirements and address anomalies.
	5.4	Present final building design drawings to client for approval.
	5.5	Finalise and store design documentation in accordance with workplace requirements.

Foundation Skills

As well as the foundation skills explicit in the performance criteria of this unit, candidates require:

- reading skills to interpret and apply complex technical information in regulations, codes and standards
- numeracy skills to calculate optimum and cost-effective design solutions
- written and oral skills to communicate appropriately for the audience and situation.

Unit Mapping Information

No equivalent unit.

Links

Companion volumes to this training package are available at the VETNet website - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>

Assessment Requirements for CPPBDN6101 Produce compliant designs for Class 2-9 buildings up to three storeys

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Release 1 This version first released with CPP Property Services Training Package Release 11.0.

New unit.

Performance Evidence

To demonstrate competency, a candidate must meet the performance criteria of this unit by producing compliant building design drawings and presenting designs to clients for two different Class 2-9 buildings as defined by the National Construction Code (NCC). Each building must be of a different class and in different project locations and conditions. At least one building must be of Type A construction as defined by the NCC.

Knowledge Evidence

To be competent in this unit, a candidate must demonstrate knowledge of:

- architectural styles and building construction terminology relevant to working with building designs
- NCC building classifications
- legislation, codes and standards requirements for the design of Class 2-9 buildings
- contextual and site constraints that place limits on design options
- bushfire attack level rating
- features and impact of building life cycles
- design development and approval processes and implications of changes to design at each stage
- design brief format
- energy efficient design principles and sustainability considerations
- scientific and social principles of human interaction with the built environment
- construction materials and methods
- principles of design
- sketches, including plans, elevations and three-dimensional (3-D) views
- rendering techniques.

Assessment Conditions

Assessors must meet the requirements for assessors contained in the Standards for Registered Training Organisations. Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting where these skills and knowledge would be performed. This includes access to:

- computer with internet access and building design software currently used in drafting and building design practice
- relevant legislation, regulations, codes and standards
- relevant client and project information.

Links

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