Australian Government

CPPBDN8104 Manage the design of large and complex building design projects

Release: 1

CPPBDN8104 Manage the design of large and complex building design projects

Modification History

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

Supersedes and is equivalent to CPPBDN8007A Manage the design of Type A constructions. Updated to meet the Standards for Training Packages 2012.

Application

This unit specifies the skills and knowledge required to manage the design of large scale and complex building design projects to meet client and compliance requirements. It includes liaising with clients, team members and technical experts, preparing design solutions and drawings, and presenting documentation for approval by planning authorities. It also includes applying creative design skills, knowledge of human lifestyles and cycles, and knowledge of safe and sustainable construction materials and methods. Large scale and complex projects involve any building classification and construction type as defined in the National Construction Code (NCC), including Type A buildings.

This unit is suitable for experienced building designers who apply broad and coherent theoretical and technical knowledge and highly specialised skills to manage building design projects with autonomy and judgement and to deal with sometimes complex and unpredictable contingencies.

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.
1 Analyse the	1.1 Identify NCC requirements for buildings of Type A

		construction.
	requirements for buildings of Type A construction.	1.2 Analyse scope and nature of building project to determine whether proposed design solution meets NCC requirements.
		1.3 Assess whether design meets performance requirement of NCC by using an alternative solution, a deemed-to-satisfy (DTS) solution or a blend of solutions.
		1.4 Review performance characteristics of proposed construction materials and methods to ensure NCC compliance and suitability for application.
		1.5 Determine health and safety issues specific to design and construction teams and users.
2	Produce initial design drawings.	2.1 Confirm design drawings required for planning approval application documentation.
		2.2 Confirm compliance requirements to be addressed in design drawings.
		2.3 Establish and follow methodologies for producing final design drawings according to project timelines.
		2.4 Set up, name and file design drawings according to workplace requirements.
3	Integrate expert input to inform design.	3.1 Source, brief and commission professionals and technical experts to provide input to the design solution.
		3.2 Facilitate consultations between technical experts and the building design team to ensure cross-impacts of the solution are understood and conform to required performance standards.
		3.3 Integrate technical input, specifications and drawings developed by experts into overall documentation.
4	Refine spatial, structural and technical elements of	4.1 Incorporate factors contributing to spatial requirements and relationships into building design.
		4.2 Review structural systems for building in consultation

building design.		with technical experts and incorporate appropriate systems into building design.
	4.3	Review construction and technical elements in consultation with technical experts and incorporate appropriate elements into building design.
	4.4	Visualise, analyse and refine aesthetic fusion of design elements.
	4.5	Ensure relevant standards for the required construction components have been adhered to and documented.
5 Refine sustainable design elements of building design.	5.1	Incorporate optimum sustainable construction materials and methods into building design.
	5.2	Review systems for sustainable water use and incorporate suitable systems.
	5.3	Review energy-efficient design principles and renewable energy sources and incorporate suitable solutions.
6 Review design for conformance with standards and approval processes.	6.1	Review design drawings in preparation for their finalisation.
	6.2	Apply appropriate controls to design drawings based on risk analysis of construction and building use.
	6.3	Conduct tests and analyses to ensure design documentation meets assessment methods used by permit authority and ensure conformity with NCC requirements.
	6.4	Assess design drawings against client and compliance requirements and address anomalies.
7 Obtain client approval of final design drawings and supporting information.	7.1	Compile, check and finalise relevant supporting information for design drawings and specifications.
	7.2	Present design drawings to client and relevant stakeholders.
	7.3	Seek detailed client and stakeholder feedback and negotiate required amendments.

7.4 Amend design drawings and documentation as required.

7.5 Document and process client approval according to 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 legislation, regulations, codes of practice and standards
- written and oral skills to communicate appropriately for the audience and situation.

Unit Mapping Information

Supersedes and is equivalent to CPPBDN8007A Manage the design of Type A constructions.

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