



Australian Government

Department of Education, Employment and Workplace Relations

CPPBDN8003A Scope and initiate large and complex building design projects

Release: 1

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Modification History

New unit

Unit Descriptor

This unit of competency specifies the outcomes required to consult with clients to scope and specify the proposed building design project outcomes; identify the required involvement of related professionals (such as surveyors, structural engineers, fire systems designers and mechanical engineers), and finalise the contract with the client that will underpin the work.

This will require working with the client to identify and clarify project parameters, such as service-level requirements and vision, preferences and budget for the new building design project. The skills and knowledge to identify the team of staff and related professionals to undertake the work are also addressed.

Application of the Unit

This unit of competency supports building designers who scope and manage the initiation and planning of design projects 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	Refine and finalise client instructions	1.1	Client is consulted to determine the business objectives, nature, size and budget for the building project.
		1.2	Role, level of service to be provided, and outcomes required of the building designer by the client are discussed and negotiated.
		1.3	Timelines for completion are discussed and finalised.
		1.4	Constraints and potential risks associated with the progress of the project are communicated to the client.
		1.5	Formal project brief is finalised, documented and agreed with the client.
2	Assemble the project team	2.1	Planning is undertaken to clarify and document the range of skills that will be required to fulfil the project brief within the required timeframe.
		2.2	Role and need for professionals and technical experts to contribute to the project are identified.
		2.3	Processes to integrate the work of external technical professionals into the overall project are identified and communicated with all parties.
		2.4	Internal staff members to participate in the project are identified.
3	Negotiate and finalise costs and contracts	3.1	Costs associated with the completion of the large and complex building design project are researched.
		3.2	Project budget is prepared and documented.

- 3.3 Negotiations are held with the client to finalise the acceptance of the project budget.
 - 3.4 Contracts with related professionals and subcontractors involved in the project are negotiated and finalised.
 - 3.5 Legal and accountancy advice is sought as required.
 - 3.6 Contract between the building designer and client is negotiated and finalised.
- 4 Finalise project requirements
 - 4.1 Resource requirements to undertake the project are identified and obtained.
 - 4.2 Costs associated with the completion of the large and complex building design project are researched.
 - 4.3 Project budget is prepared and documented.
 - 4.4 Scheduling of work is undertaken within the design practice to meet contractual requirements

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:
 - develop effective approaches to support the building design process
 - identify appropriate external expertise and subcontractors
 - research compliance requirements
- budgeting and financial management skills
- interpersonal skills to:
 - interact with clients and relevant professionals
 - network with other professionals to identify and build business relationships
- language, literacy and numeracy skills to:
 - communicate at project management level with clients, colleagues and contacts, including writing reports
 - interpret and apply complex information, including contracts, legislation, regulations, and codes and standards
- negotiation skills to conclude contracts
- 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 and alternative solution requirements
 - environmental and sustainability requirements, including:
 - carbon dioxide reduction techniques, including specification of materials, glues and paints
 - energy efficiency
 - fire resistance, including resistance to bushfire attack
 - legislation
 - regulatory limitations
- contractual requirements and implications for the business

- insurance and indemnity requirements
- key components of and process for business costings when budgeting for large and complex projects
- legal framework relating to contracts and building projects
- planning processes
- organisational resource requirements to undertake large and complex projects
- risk management processes
- sources of reliable information on interpretation of compliance requirements
- technologies to support integration of work and sharing of information, including building information models (BIM)

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.

Critical aspects for assessment and evidence required to demonstrate competency in this unit	A person should demonstrate the ability to: • negotiate and finalise design briefs for at least two construction Type A projects • negotiate and finalise contracts with clients for at least two construction Type A projects • assemble a project team and develop a project schedule and budget for at least two construction Type A projects.
Context of and specific resources for assessment	Assessment of this unit: • must be in the context of the work environment • 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 • must meet relevant compliance requirements. Resource implications for assessment include: • access to: • suitable assessment venue and equipment • suitable simulated or real opportunities and resources to demonstrate competence • assessment instruments.
Method of assessment	Assessment for this unit must verify the practical application of the required skills and knowledge, using one or more of the

	following methods: • written and/or oral assessment of the candidates required knowledge for the unit • observed, documented and/or firsthand testimonial evidence of the candidates • implementation of appropriate procedures and techniques for the safe, effective and efficient achievement of the required outcomes • identification of the relevant information and scope of the work required to meet the required outcomes • identification of viable options and the selection of options that best meet the required outcomes • consistently achieving the required outcomes.
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Guidance information for assessment	This unit could be assessed on its own or in combination with other units relevant to the job function. Where applicable, physical resources should include equipment modified for people with disabilities. Access must be provided to appropriate learning and/or assessment support when required. Assessment processes and techniques must be culturally appropriate, and appropriate to the language and literacy capacity of the candidate and the work being performed.
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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.

<i>Constraints and potential risks</i> may include:	• difficulties inherent to the site • difficulties associated with the nature or complexity of the project itself • OHS • reliance on gaining input from external professionals in a timely manner • requirement to operate within a complex and rigid regulatory and compliance system • time delays due to the planning process.
<i>Range of skills</i> required may include:	• building certification and surveying • civil engineering • financial and budgetary • fire systems design • hydraulic engineering • mechanical services design and engineering • project management • structural engineering • surveying • town planning.
<i>Professionals and technical experts</i> may include:	• access consultants • acoustics engineers and professionals • construction contractors • fire systems designers and engineers • landscape designers

	• lighting specialists • mechanical services engineers • OHS experts • plumbing and drainage professionals • quantity surveyor • service contractors • soil testing or geo-technical engineers and experts • structural engineers • surveyors.
<i>Processes to integrate the work of external technical professionals</i> may include:	• team meetings • sharing of paper-based drawings and specifications • sharing and updating of drawings using BIM technology.
<i>Costs</i> may include:	• bill of quantities • business administration and management costs • business insurances, including professional indemnity insurance • professional fees to lawyers and accountants • staff salaries and associated on-costs • subcontractor costs, including for a range of professionals and technical expert areas, such as: • engineering • quantity surveying • technology costs.
<i>Large and complex</i> projects include:	• construction Type A buildings defined by the BCA, which are projects that are: • of 3 storeys for Class 2, 3 and 9 buildings • of 4 or more storeys for Class 5, 6, 7 and 8 buildings • construction projects, which may be: • new buildings • renovations • conversions • residential • commercial • industrial • public buildings. Note: It is essential to refer to current BCA documentation to ensure accuracy of definitions and scopes.

Unit Sector(s)

Building design

Custom Content Section

Not applicable.