Australian Government

CPPBDN6103 Evaluate construction materials, methods and services 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 evaluate traditional, contemporary and emerging construction materials and methods for the design of Class 2-9 buildings, as defined by the National Construction Code (NCC), having a rise in storeys up to three, including those of Type A construction. It includes researching the application, performance and interaction of construction materials, methods and services.

This unit is suitable for experienced building designers who draw on their broad theoretical and technical knowledge to evaluate construction materials and methods to solve complex problems 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.
1 Evaluate site preparation, foundations and footings.	1.1 Refer to site classification report for information on foundation material and wind classification and implications for structural design of building.
	1.2 Investigate systems for coordination of building set-out.

	1.3	Investigate drainage provisions required to manage surface water and subsoil drainage, during and post construction works.
	1.4	Investigate site stabilisation practices including shoring, underpinning and rock anchors.
	1.5	Research and analyse commonly used structural footing, basement and floor systems, including tanking and retaining systems.
	1.6	Investigate demolition procedures and requirements and the impact of demolition on existing and new structures.
2 Evaluate and report on construction methods and materials for building.	2.1	Research and analyse common, new and emerging structural wall and roof construction systems appropriate for Class 2-9 buildings up to three storeys.
	2.2	Identify and analyse commonly used façade and glazing systems in Class 2-9 buildings up to three storeys.
	2.3	Identify and analyse construction systems to satisfy compartmentation and separation requirements in Class 2-9 buildings up to three storeys.
	2.4	Identify and analyse requirements for construction of required exits, including stairways, ramps and lobbies.
	2.5	Identify and analyse requirements for construction of non-required stairways, ramps, escalators and lifts.
	2.6	Analyse structural implications for provision of services.
	2.7	Research and analyse partitioning systems appropriate for Class 2-9 buildings up to three storeys.
	2.8	Document findings to inform design project.
3 Evaluate and report on the impact of compliance requirements on structural elements for building.	3.1	Identify and analyse fire resisting construction requirements relevant to scope of works, nature and use of building.
	3.2	Identify and analyse NCC requirements for access and egress relevant to scope of works, nature and use of building.

	3.3	Identify and analyse NCC requirements for health and amenity relevant to scope of works, nature and use of building.
	3.4	Identify and analyse NCC requirements for energy efficiency relevant to scope of works, nature and use of building.
	3.5	Document findings to inform design project.
4 Evaluate services for building.	4.1	Determine NCC requirements for services and equipment relevant to scope of works, nature and use of building.
	4.2	Identify and analyse installation methods for different types of services, components and systems relevant to scope of works, nature and use of building.
	4.3	Identify and analyse fire protection requirements and installation methods appropriate for Class 2-9 buildings up to three storeys.
	4.4	Identify and analyse lift installation requirements for Class 2-9 buildings up to three storeys.
	4.5	Identify and analyse emergency lighting and exit sign requirements for Class 2-9 buildings up to three storeys.
	4.6	Document findings to inform design project.
5 Plan construction to facilitate continuing maintenance of buildings.	5.1	Identify and analyse construction systems for plant decks and safe systems for ongoing access and maintenance.
	5.2	Nominate key service areas of building project requiring ongoing maintenance.

Foundation Skills

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

- reading skills to:
  - research construction materials and methods and specifications for their use

- interpret specialised vocabulary, acronyms and technical terminology used in the NCC.

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