Unit of Competency CPCCBC4012
Read and interpret plans and specifications

Application

This unit of competency specifies the skills and knowledge required to read and interpret plans and specifications applicable to residential and commercial projects. It includes identifying site characteristics, features of the proposed building and details of the construction.

It applies to National Construction Code (NCC) classifications:

- Residential – Class 1 and 10 buildings, maximum two storeys
- Commercial – Class 2 to 9, Type C only constructions.

The unit of competency applies to site managers, forepersons, estimators, builders, managers and other building and construction industry personnel who read and interpret plans and specifications for quantity surveying, costing and tendering and construction of building and construction projects.

This unit is suitable for people with specialised knowledge, completing routine and non-routine tasks and using their own judgement to deal with predictable and sometimes unpredictable problems.

Completion of the general construction induction training program specified by the model Code of Practice for Construction Work is required for any person who is to carry out construction work. Achievement of *CPCCWHS1001 Prepare to work safely in the construction industry* meets this requirement.

Licensing, regulatory or registration requirements apply to this unit of competency in some jurisdictions. Relevant state and territory regulatory authorities should be consulted to confirm these requirements.

Prerequisite Unit

Nil

Elements and Performance Criteria

1. Identify types of plans.	1.1	Confirm plans, specifications and amendments are the current version.
	1.2	Identify types of plans and aspects of the drawings specific for the intended purpose.
	1.3	Confirm details on plans comply with the specifications.
2. Read and interpret the plan.	2.1	Distinguish key features on the plans.
	2.2	Identify building location from site plan.
	2.3	Identify building layout, spaces and dimensions from floor plan.
	2.4	Examine detail drawings to determine sizes, thickness and methods of construction.
	2.5	Identify internal linings, external cladding and roof materials from plans and specifications.
3. Identify structural details.	3.1	Identify concrete footing and slab sizes and position and type of reinforcing.
	3.2	Identify load bearing points of the building.
	3.3	Identify wind bracing and tie-down requirements.
4. Identify non-	4.1	Identify provisional sum (PS) and prime cost (PC) items.

structural details.	4.2 4.3	Locate installation and connection points of services to the building. Identify location of fixtures from plans and details of finishes from specifications.

Foundation skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Supersedes and is equivalent to CPCCBC4012B Read and interpret plans and specifications

Links

Companion Volume Implementation Guide:
https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad

Assessment Requirements for CPCCBC4012 Read and interpret plans and specifications

Performance Evidence

To demonstrate competency, a candidate must meet the elements and performance criteria of this unit by identifying and interpreting building and construction information from a set of plans and specifications.

In doing this, the candidate must:

- identify orientation of structures, site contours, datum and reduced levels, and site features to be removed or retained
- identify structural load bearing information of the building and compare information from specification
- check wind bracing materials and tie-down methods for accuracy against the wind bracing table
- interpret essential elements from two-dimensional to three-dimensional format, and apply to estimation, planning and supervisory tasks.

Knowledge Evidence

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

- types of plans:
    - concept drawing/sketches
    - architectural
    - structural
    - civil
    - mechanical
    - electrical
    - plumbing and draining
- parts of a plan:
    - site plan
    - floor plan
    - elevations
    - sections
    - details
- drawing conventions:
    - datum and reduced levels (RL)
    - title block
    - scale
    - dimensions
    - abbreviations
- utilities and services plans and specifications
- isometric drawings, oblique drawings, perspective drawings and orthographic drawings
- computer-aided design (CAD) drawings
- building and construction regulations, standards and codes

- classes of buildings
- the NCC
- building information modelling (BIM)
- building and construction methods and terminology
- workplace processes, workplace safety and environmental requirements.

Assessment Conditions

Assessors must satisfy the requirements for assessors listed in the Standards for Registered Training Organisations.

Assessment can be undertaken in the workplace or in a simulated workplace environment.

A simulated environment is one that realistically replicates workplace conditions, materials and equipment, interactions with others and workplace irregularities, and which meets industry standards for safety and environmental practices.

Candidates must have access to:

- plans and specifications and other quality documentation required to undertake the performance criteria and assessment requirements
- relevant government building and construction and contract legislation
- current building and construction codes and standards
- National Construction Code
- computers, applications and software to access CAD.

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