



Australian Government

Department of Education, Employment and Workplace Relations

CPPCMN4008A Read and extract information from plans, drawings and specifications for residential buildings

Release: 1

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Modification History

Not Applicable

Unit Descriptor

Unit descriptor This unit of competency specifies the outcomes required to read and extract information from different types of plans, building drawings and specifications for residential buildings.
No licensing, legislative, regulatory or certification requirements apply to this unit at the time of publication.

Application of the Unit

Application of the unit This unit of competency supports the needs of a wide range of workers in the property services industry who are required to read and extract routine information from a variety of plans and drawings associated with residential buildings. This includes real estate agents, property managers, home sustainability assessors and facility managers.

Licensing/Regulatory Information

Refer to Unit Descriptor

Pre-Requisites

Prerequisite units Nil

Employability Skills Information

Employability skills 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

ELEMENT	PERFORMANCE CRITERIA
1. Identify types of plans and drawings and their functions.	1.1 Main <i>types of plans and drawings</i> for <i>residential buildings</i> are identified. 1.2 Purpose of different types of plans and drawings are identified. 1.3 <i>Key features of each type of plan and drawing</i> are identified.
2. Recognise amendments to plans and drawings.	2.1 Title panel is checked to verify latest amendment to plans and drawings. 2.2 Amendments to <i>specifications</i> are checked to ensure currency of information.
3. Recognise symbols, terms and abbreviations used in plans and drawings.	3.1 Symbols used in plans and drawings are identified. 3.2 Abbreviations used in plans and drawings are identified. 3.3 Colouring and shading used in plans and drawings are identified. 3.4 Building and construction terms used in plans and drawings are identified.
4. Locate and identify key features on a site plan.	4.1 Site is identified from location drawings. 4.2 True north and building orientation are identified from details provided on site plan. 4.3 <i>Key features of site plan</i> are identified.
5. Extract data from plans, drawings and specifications.	5.1 Key building features are identified in relevant plans and drawings. 5.2 <i>Data on key building features</i> is extracted from relevant plans, drawings and specifications. 5.3 Building codes or standards identified in specifications are identified. 5.4 Key features of products included in specifications are identified.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- data analysis skills to interpret and extract data from plans, drawings and specifications for residential buildings
- literacy skills to read and interpret information contained in plans, drawings and specifications for residential buildings

REQUIRED SKILLS AND KNOWLEDGE

- numeracy skills to read, interpret and convert numerical values and scales shown on plans, drawings and specifications for residential buildings
- research skills to identify and locate relevant plans and drawings for residential buildings
- spatial skills to orientate drawings and translate site and structural features from two-dimensional to three-dimensional formats
- technology skills to use general purpose software

Required knowledge

- building drawings:
 - drawing perspectives
 - features of building drawings
 - scale
 - symbols, terms and abbreviations used in building drawings
 - types of building drawings and their respective purposes
- construction process for residential buildings
- plans relevant to residential buildings:
 - environmental and heritage overlays
 - features
 - scale
 - symbols, terms, colouring, shading and abbreviations used in plans
 - types of plans and their respective purposes
- relevant state or territory building and construction codes, standards and regulations
- residential building materials
- residential building styles

Evidence Guide

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.

Overview of assessment This unit of competency could be assessed by correctly reading, interpreting and extracting data from a variety of plans, drawings and specifications for different types and styles of residential buildings.

Critical aspects for assessment and evidence required to demonstrate competency in this unit A person who demonstrates competency in this unit must be able to provide evidence of the required skills and knowledge specified in this unit. In particular, the person should demonstrate the ability to:

- identify different types of plans and drawings for residential buildings and their functions
- read and interpret plans, drawings and specifications for residential buildings, including identifying key features, levels, contours, sections, service entry points and site features
- recognise amendments to plans and drawings for residential buildings
- recognise symbols, terms and abbreviations used in plans and drawings for residential buildings
- locate and identify key features on a site plan.

Context of and specific resources for assessment Assessment of essential underpinning knowledge may be conducted in an off-site context and is to comply with relevant regulatory and Australian standards' requirements. Resource implications for assessment include:

- plans, drawings and specifications for different styles of residential buildings
- relevant codes, standards and regulations related to the construction of residential buildings.

Method of assessment Assessment methods must:

- satisfy the endorsed Assessment Guidelines of the Property Services Training Package
- include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application
- reinforce the integration of employability skills with

workplace tasks and job roles

- confirm that competency is verified and able to be transferred to other circumstances and environments.

Guidance information for assessment

This unit could be assessed on its own or in combination with other units relevant to the job function. Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support. Assessment processes and techniques should, as far as is practical, take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.

Range Statement

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.

Types of plans and drawings

drawings may include:

- drawings:
 - details
 - elevation
 - ground plan
 - layout drawings
 - services drawings:

drainage

ducts

pipng

waste disposal

wiring

- vertical section
- plans:
 - heritage and conservation overlays
 - landscaping and vegetation
 - locality
 - site
- sketches.

Residential building

- any building categorised as Class 1, 2, 4 and 10a of the

refers to: Building Code of Australia or in accordance with jurisdictional requirements.

Key features of each type of plan and drawing may include:

- certification
- compatibility
- construction
- dimensions
- legend
- location
- orientation
- quantities of materials
- scale
- sizes
- types of products or services.

Specifications may include:

- levels and survey information
- material technical data
- materials lists
- performance data
- schedules of quantities
- stress, load and bearing calculations.

Key features of site plan may include:

- access and egress
- contours and slopes
- drainage lines
- easements
- environmental and heritage overlays
- existing dwellings, buildings or other structures
- location and situation
- major geological and topographical features
- orientation
- paving
- retaining walls
- scale
- service connection points
- set backs
- stormwater disposal
- trees and other vegetation.

Data on key building features may include:

- dimensions
- location
- materials
- ratings
- standards.

Unit Sector(s)

Unit sector Home sustainability assessment

Competency field

Competency field