



Australian Government

Department of Education, Employment and Workplace Relations

CPCBC4015A Prepare specifications for all construction works

Release: 1

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Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit of competency specifies the outcomes required to prepare specifications, using standard forms of specification as a basis. The preparation of a clearly understood specification for construction works requires establishing the level of detail required and identifying all the inherent contractual obligations. The capacity to develop specifications, that may range from outline to detailed specifications and which conform to National Specification System of Australia (NATSPEC) or other industry standards, is required.

The specifications may stipulate materials, quality of work and project timelines. In order to achieve the outcomes for this unit, knowledge of relevant industry legislation and standards, and the ability to research information and communicate well with clients are required.

Application of the Unit

Application of the unit

This unit of competency supports needs of builders, site managers, estimators, forepersons and other construction industry personnel responsible for preparing specifications for residential and commercial construction projects.

Licensing/Regulatory Information

Not Applicable

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. Determine specification requirements.	<p>1.1. Project brief, working drawings, development approval and other relevant documents are examined to identify essential information to be included in the specification.</p> <p>1.2. <i>Standard specifications</i> are examined to determine suitability for adaptation to the current project.</p> <p>1.3. Non-standard requirements are developed and where technical aspects require clarification, advice is sought from specialists.</p>
2. Assess the nature and scope of the work.	<p>2.1. Site inspection is conducted to establish site layout and preliminary site-work requirements, and site details and features are recorded.</p> <p>2.2. Specification includes all relevant details at a level necessary to describe clearly the nature and <i>scope of the work</i>, including <i>prescriptive and performance requirements</i>.</p> <p>2.3. Research is undertaken to establish appropriate schedules, using relevant <i>data sources</i>.</p> <p>2.4. Details are tabulated and cross-referenced to ensure consistency between the design brief, working drawings and specifications.</p> <p>2.5. Details in the specification conform to industry codes of practice, Australian standards and relevant statutory requirements.</p> <p>2.6. Information requested from specialists, colleagues and clients is coordinated and added to the specifications where required.</p>
3. Prepare the specification document.	<p>3.1. Specification clearly identifies the <i>contractual obligations</i> and rights of the parties involved.</p> <p>3.2. Specification document is complete, checked thoroughly for compliance with requirements and edited.</p> <p>3.3. Specification is presented to the client in the required format and timeframe.</p>

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

Required skills for this unit are:

- apply numeracy skills to workplace requirements
- attention to detail in preparing documentation
- client service standards
- commonly used document management
- communication skills to:
 - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
 - enable liaison with specialists to seek advice and request information
 - prepare, read and interpret:
 - codes of practice
 - design briefs
 - plans and drawings
 - regulations
 - use and interpret non-verbal communication
 - use language and concepts appropriate to cultural differences
 - written skills to prepare reports and specifications
- construction work site teamwork
- identifying specification requirements
- identifying documentation requirements for a range of sources
- product and service analysis
- research methods and investigation techniques relevant to construction specification preparation.

Required knowledge

Required knowledge for this unit is:

- client requirements
- document control
- documentation requirements for specifications
- organisational policy relating to specifications
- industry codes of practice
- NATSPEC
- relevant Australian standards
- relevant legislation, including contract law and trade practices legislation
- research sources to determine schedules
- schedule of rates

REQUIRED SKILLS AND KNOWLEDGE

- standard specification documents
- types of specification and their use.

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 the effective preparation of a specification meeting NATSPEC and other relevant standards applicable to a building project.

This unit of competency can be assessed in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.

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 ability to:

- use a range of research methodologies and tools
- correctly identify and use specifications for the range of work
- apply contractual principles to the specification drafting.

Context of and specific resources for assessment

This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints.

Assessment of essential underpinning knowledge will usually be conducted in an off-site context.

Assessment is to comply with relevant regulatory or Australian standards' requirements.

Resource implications for assessment include

EVIDENCE GUIDE

access to documentation such as:

- computer data files
- detailed specifications that address specific components such as mechanical, structural, electrical or other requirements
- documentation requirements arising from BIM
- local, state and commonwealth government documents and registers
- media reports
- NATSPEC or other industry standard specifications
- policy statements
- preliminary, outline or developed specifications
- publications and journals
- statistical summaries
- statutes.

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.

Method of assessment

Assessment methods must:

- satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and 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.

Validity and sufficiency of evidence requires that:

- competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the

EVIDENCE GUIDE

workplace

- where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances assessed at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person's demonstrated ability and applied knowledge
- all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence.

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.

Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.

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.

- Standard specifications*** include:
- detailed specifications that address specific components such as mechanical, structural, electrical or other requirements
 - developed specifications
 - documentation requirements arising from building information modelling (BIM)
 - NATSPEC or other industry standard

RANGE STATEMENT

- Scope of the work** includes:
- specifications
 - preliminary or outline specifications.
 - allowance for the provision of services
 - characteristics
 - compatibility
 - dimensions
 - fitout
 - lining systems
 - location
 - patterns
 - quantities
 - sizes
 - surfaces
 - type of product or service.
- Prescriptive and performance requirements** include:
- performance requirements:
 - standards of work
 - work schedules
 - milestones
 - prescriptive requirements:
 - detail relating to materials and quality of work
 - nominated subcontractors
 - provision and costs of site access and facilities
 - quality assurance.
- Data sources** include:
- computer data files
 - local, state and federal government documents and registers
 - media reports
 - policy statements
 - publications and journals
 - statistical summaries
 - statutes.
- Contractual obligations** include:
- expected performance levels
 - insurance requirements
 - OHS issues
 - prescriptive requirements
 - type of tender.

Unit Sector(s)

Unit sector Construction

Co-requisite units

Co-requisite units Nil

Functional area

Functional area