



Australian Government

Department of Education, Employment and Workplace Relations

CPCCSV5006A Assess construction faults in residential buildings

Release: 1

CPCCSV5006A Assess construction faults in residential buildings

Modification History

Not Applicable

Unit Descriptor

Unit descriptor This unit of competency specifies the outcomes required to identify construction faults in residential buildings.

It includes the identification and evaluation of construction problems and determination of alternative building methods in accordance with legislative requirements.

Application of the Unit

Application of the unit This unit of competency supports the attainment of the understanding and skills to undertake research, analysis, evaluation and reporting for the assessment of construction faults, determination of rectification and alternative building methods, within the context of relevant legislation, the Building Code of Australia (BCA) and Australian standards.

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. Identify and analyse construction faults arising on residential building sites.	1.1. Information to identify and analyse construction faults is collected relating to the specific construction problem. 1.2. Construction problem in construction in residential buildings is identified relative to original specifications and form of construction. 1.3. Construction problem is communicated to appropriate personnel and documented in accordance with standard work practices. 1.4. Problem solving techniques are used and typical construction faults and problems for building categories are identified and action to rectify is deemed to be in accordance with the BCA.
2. Identify construction techniques, methods and materials.	2.1. Building terminology is used accurately in the communication of issues. 2.2. Existing or designed construction problems are identified and evaluated from working drawings and specifications. 2.3. Alternative methods and materials to meet construction aims and objectives are prepared to specification nominated in the BCA and Australian standards. 2.4. Detailed sketches of available alternative methods and materials available to meet the construction aims and objectives are prepared to specification.
3. Resolve construction faults using alternative construction methods.	3.1. Suitable construction methods from available alternative solutions are evaluated and recommended to resolve the problem in accordance with project aims and objectives, the BCA, relevant State and Territory Appendix to the BCA and Australian standard. 3.2. Selected method is integrated into the project in order to resolve the construction problems in accordance with project aims. 3.3. Evaluation of available alternative forms of construction is carried out in accordance with project aims.
4. Resolve common on-site faults with building materials.	4.1. Commonly occurring on-site problems with building materials and their causes are evaluated. 4.2. Corrective and preventative measures are identified and implemented.

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:

- ability to respond to change and contribute to workplace responsibilities, such as current work site environmental and sustainability frameworks or management systems
- communication skills to:
 - communicate construction problems to appropriate personnel
 - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
 - read and interpret:
 - Australian standards
 - BCA
 - legislation
 - reports
 - specifications
 - working drawings
 - use and interpret non-verbal communication
 - use language and concepts appropriate to cultural differences
 - use accurate terminology
 - written skills to document construction problems and solutions and recommendations to resolve problems
- numeracy skills to calculate workplace requirements
- planning and organisational skills to collect, organise and analyse information
- technological skills to:
 - complete documentation and calculations
 - enable information gathering and analysis.

Required knowledge

Required knowledge for this unit is:

- authorities and powers of a building surveyor
- design and construction principles of buildings
- nature of materials and effect on performance

REQUIRED SKILLS AND KNOWLEDGE

- processes for the administration and preparation of documentation
- processes for the interpretation of reports, working drawings and specifications
- relevant federal, state or territory legislation and local government policy and procedures
- research methods.

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 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:

- comply with OHS regulations applicable to workplace operations
- apply organisational management policies and procedures, including quality assurance requirements where appropriate
- assess construction faults in residential buildings, determine rectification strategy and consider alternative construction methods, as well as the associated reporting of data, findings, recommendations and strategies for at least one residential building project or equivalent in compliance with relevant legislation
- provide reports to appropriate body/individual as determined by the project brief.

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:

- an induction procedure and requirement
- realistic tasks or simulated tasks covering the mandatory task requirements

EVIDENCE GUIDE

- relevant specifications and work instructions
- tools and equipment appropriate to applying safe work practices
- support materials appropriate to activity
- workplace instructions relating to safe work practices and addressing hazards and emergencies
- material safety data sheets
- research resources, including industry related systems information.

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 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

EVIDENCE GUIDE

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.

Construction in residential buildings includes:

- evaluation and identification of construction faults and determination of alternative methods, standards and services in compliance with relevant legislation, design specifications, maintenance specifications and adherence to legislative requirements for BCA Class 1 and 10 buildings.

Forms of construction include:

- autoclaved aerated concrete (AAC)
- earth (mud brick and rammed earth)
- pole-framed
- steel-framed
- timber-framed.

Construction faults include:

- installation
- refurbishing

RANGE STATEMENT

- renovation
- restoration.
- Building categories* include:
 - low-rise residential buildings
 - single storey buildings.
- Australian standards* include:
 - AS1288 Installation of glass in buildings
 - AS1684 Residential timber framed construction
 - AS2050 Fixing of roof tiles
 - AS2180 Metal rainwater goods, selection and installation
 - AS2208 Safety glazing materials for use in buildings
 - AS2627.1 Thermal insulation of roof/ceilings and walls in dwellings
 - AS2870.1 Residential slabs and footings
 - AS3500 National plumbing code
 - AS3600 Concrete structures
 - AS3623 Domestic metal framing
 - AS3660 Protection of buildings from subterranean termites
 - AS3700 Masonry
 - AS3740: 2004 Waterproofing of wet areas in residential buildings
 - AS4349 Inspection of buildings.

Unit Sector(s)

Unit sector Construction

Co-requisite units

Co-requisite units Nil

Functional area

Functional area