



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **CPCCCA3003A Install flooring systems**

**Release: 1**

## **CPCCCA3003A Install flooring systems**

### **Modification History**

Not Applicable

### **Unit Descriptor**

**Unit descriptor** This unit of competency specifies the outcomes required to plan, prepare, set out and install timber flooring systems to support imposed loads. It includes application in brick veneer, full masonry and timber frame construction.

### **Application of the Unit**

**Application of the unit** This unit of competency supports achievement of skills to determine the materials and process and then install a variety of flooring systems, which includes working with others and as a member of a team.

### **Licensing/Regulatory Information**

Not Applicable

## Pre-Requisites

**Prerequisite units** CPCCOHS2001A Apply OHS requirements, policies and procedures in the construction industry

## Employability Skills Information

**Employability skills** This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

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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. Plan and prepare.	<p>1.1. Work instructions, including plans, specifications, quality requirements and operational details, are obtained, confirmed and applied from relevant <b>information</b> for <b>planning and preparation</b> purposes.</p> <p>1.2. <b>Safety (OHS)</b> requirements are followed in accordance with safety plans and policies.</p> <p>1.3. Signage and barricade requirements are identified and implemented.</p> <p>1.4. Plant, <b>tools and equipment</b> selected to carry out <b>flooring system</b> tasks are consistent with job requirements, checked for serviceability, and any faults are rectified or reported prior to commencement.</p> <p>1.5. Material quantity requirements are calculated in accordance with plans, specifications and <b>quality requirements</b>.</p> <p>1.6. <b>Materials</b> appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use.</p> <p>1.7. <b>Environmental requirements</b> are identified for the project in accordance with environmental policies and procedures and <b>statutory and regulatory authorities</b> requirements.</p>
2. Set out sub-floor frame.	<p>2.1. Support structure, posts, stumps and piers are positioned and installed to set out lines for building as determined from site drawings in accordance with specifications for <b>floor framing</b>.</p> <p>2.2. Check support structure, posts, stumps and piers for level and square prior to installation of bearers and joists.</p>
3. Install timber bearers.	<p>3.1. Bearer material is marked and cut to lengths for joining over supports.</p> <p>3.2. Damp proof course and termite shield are installed where specified by regulation.</p> <p>3.3. Bearers are located and fixed in accordance with regulations, job drawings and specifications to square, line and level.</p>
4. Install timber floor joists.	<p>4.1. Location for floor joists are set out to spacings from job drawings, specifications and regulations.</p> <p>4.2. Material lengths for floor joists are selected.</p> <p>4.3. Floor joists are selected for straightness, located,</p>

**ELEMENT****PERFORMANCE CRITERIA**


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	fitted and fixed to line and level.
	4.4. Block or herringbone strutting is installed to deep floor joists where specified in accordance with regulations.
	4.5. Blocks and trimmers are fitted and fixed around doorways and openings to provide support in accordance with specifications.
	4.6. Trimmers are cut, fitted and fixed to support sheet flooring joints where specified.
5. Install flooring.	5.1. Flooring materials selected are appropriate for the intended room use and specifications.
	5.2. Floor measurements are confirmed and flooring materials are cut and prepared for installation with a minimum of loss.
	5.3. Flooring is installed and secured in accordance with manufacturer recommendations.
	5.4. Installed flooring is completed in preparation for the next process.
6. Clean up.	6.1. Work area is cleared and materials disposed of, reused or recycled in accordance with legislation, regulations, codes of practice and job specification.
	6.2. Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.

**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:

- communication skills to:
  - determine requirements
  - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
  - follow instructions

## REQUIRED SKILLS AND KNOWLEDGE

- read and interpret:
  - documentation from a variety of sources
  - plans, specifications and drawings
- report faults
- use language and concepts appropriate to cultural differences
- use and interpret non-verbal communication, such as hand signals
- numeracy skills to apply measurements and make calculations
- organisational skills, including the ability to plan and set out work
- teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities
- technological skills to:
  - use a range of mobile technology, such as two-way radio and mobile phones
  - voice and hand signals to access and understand site-specific instructions.

### Required knowledge

Required knowledge for this unit is:

- construction terminology
- damp proof systems
- floor construction techniques
- flooring system installation techniques
- flooring system materials, including fire control and separation materials required by the Building Code of Australia (BCA) and other legislation
- flooring system types, characteristics, materials, uses and limitations
- imposed loads
- insulation products
- job safety analysis (JSA) and safe work method statements
- material safety data sheets (MSDS)
- materials storage and environmentally friendly waste management
- plans, specifications and drawings
- plant, tools and equipment types, characteristics, uses and limitation
- processes for the calculation of material requirements
- quality requirements
- regulations applicable to floor framing and flooring
- setting out and levelling techniques
- termite barriers
- workplace and equipment safety requirements.

# Evidence Guide

## EVIDENCE GUIDE

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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:

- locate, interpret and apply relevant information, standards and specifications
- comply with site safety plan, OHS regulations and state and territory legislation applicable to workplace operations
- comply with organisational policies and procedures, including quality requirements
- safely and effectively use tools, plant and equipment
- communicate and work effectively and safely with others
- complete as a minimum one bearer and joist system constructed on a support system (stumps, posts or piers) applicable to local conditions, to carry external walls and internal walls parallel to joists for a full sized home or equivalent (including a bedroom, lounge, kitchen and bathroom not less than 30 square metres)
- install a tongue and groove fitted strip flooring surface and an approved wet area floor system to a bathroom area
- install a system of similar size as above with either a sheet or strip platform system.

### Context of and specific resources for assessment

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

## EVIDENCE GUIDE

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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
- 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



## EVIDENCE GUIDE

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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 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

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The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. **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.

**Information** includes:

- diagrams or sketches
- instructions issued by authorised organisational or external personnel
- Manufacturer specifications and instructions
- memos
- MSDS

## RANGE STATEMENT

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***Planning and preparation***  
include:

***Safety (OHS)*** is to be in accordance with state or territory legislation, regulations, codes of practice, organisational safety policies and procedures, and project safety plan and may include:

- organisation work specifications and requirements.
- plans and specifications
- regulatory and legislative requirements pertaining to installing flooring systems
- relevant Australian standards
- safe work procedures related to installing flooring systems
- signage
- verbal or written and graphical instructions
- work bulletins
- work schedules.
- work site inspection
- equipment defect identification
- assessment of conditions and hazards
- determination of work requirements.
- emergency procedures, including extinguishing fires, organisational first aid requirements and evacuation
- handling of materials
- hazard control
- hazardous materials and substances
- safe operating procedures, including the conduct of operational risk assessment and treatments associated with:
  - earth leakage boxes
  - lighting
  - power cables, including overhead service trays, cables and conduits
  - restricted access barriers
  - surrounding structures
  - traffic control
  - trip hazards
  - work site visitors and the public
  - working at heights
  - working in confined spaces
  - working in proximity to others
  - working with dangerous materials
- organisational first aid
- personal protective clothing and equipment prescribed under legislation, regulations and

## RANGE STATEMENT

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- workplace policies and practices**
- use of firefighting equipment
  - use of tools and equipment
  - workplace environment and safety.
- Tools and equipment* include:**
- air compressors and hoses
  - floor cramps
  - hammers
  - hand saws
  - marking equipment
  - measuring tapes and rules
  - nail bags
  - nail guns
  - nail punches
  - power drills and power leads
  - power planes and optical levelling equipment
  - power saws
  - power screwdrivers
  - spanners
  - spirit levels
  - squares (combination/tri)
  - string lines.
- Flooring systems* include:**
- decking
  - full or partial in line and deep joist construction.
- Quality requirements* include relevant regulations, including:**
- Australian standards
  - internal company quality policy and standards
  - manufacturer specifications, where specified
  - workplace operations and procedures.
- Materials* include:**
- adhesives and patented metal fasteners
  - connectors
  - metal
  - nails
  - reconstituted timber products and piers
  - screws
  - timber
  - flooring materials, which:
    - include strip, boards and sheet
    - may be either fitted or platform construction.
- Environmental requirements***
- clean-up protection

## RANGE STATEMENT

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include:

- noise and dust
- vibration
- waste management.
- federal, state and local authorities administering applicable Acts, regulations and codes of practice.
- conventional bearers and joists
- drop in (or in-line or deep) joists construction
- sub-floor frame, including timber or metal
- types of sub-floor support construction, including:
  - concrete stumps
  - masonry piers
  - patented adjustable supports
  - steel posts
  - timber or brick walls
  - timber stumps.

*Statutory and regulatory authorities* include:

*Floor framing* includes:

## Unit Sector(s)

Unit sector                      Construction

## Co-requisite units

Co-requisite units              Nil

## Functional area

Functional area