



Australian Government

Department of Education, Employment and Workplace Relations

CPCCPA3002A Lay segmental pavers

Release: 1

CPCCPA3002A Lay segmental pavers

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit of competency specifies the outcomes required to lay segmental pavers on prepared subgrade and base.

It includes assessing segmental paver type and quality, setting up stringlines, setting up squared sections for the laying of segmental pavers where required and shifting pavers.

Application of the Unit

Application of the unit

This unit supports the attainment of skills and knowledge to safely and efficiently lay a range of segmental pavers while working with others 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

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 and operational details are obtained using relevant information, confirmed and applied for planning and preparation purposes.</p> <p>1.2. Safety (OHS) 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. Tools and equipment selected to carry out tasks are consistent with the requirements of the job, 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 and specifications and quality requirements.</p> <p>1.6. Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use.</p> <p>1.7. Environmental requirements are identified for the project in accordance with environmental plans and statutory and regulatory authority requirements and applied.</p>
2. Assess pavers.	<p>2.1. Segmental pavers are assessed for fitness for purpose.</p> <p>2.2. Pavers are bulk sampled for consistency in size, dimensions, colour and imperfections, such as chips.</p> <p>2.3. Rejected pavers are assessed for use as cut pavers and put aside.</p>
3. Lay pavers.	<p>3.1. Pavers are moved to area for paving.</p> <p>3.2. Stringline grid squares are set up to establish the gauge of the paving project and guide levels and lines (where determined).</p> <p>3.3. Pavers are laid to design following efficient laying practices.</p> <p>3.4. Pavers are laid to reduce localised stresses between adjacent pavers.</p> <p>3.5. Laid pavers are checked for tolerances in allowable variations from an intended work size or position.</p> <p>3.6. Correct handling procedures are adhered to.</p> <p>3.7. Pavers are adjusted to ensure integrity of design with allowances for setting materials.</p>

ELEMENT	PERFORMANCE CRITERIA
4. Clean up.	<p>3.8. A header or soldier course is laid where required (which may be at the outset of the paving project).</p> <p>4.1. Work area is cleared and materials disposed of, reused or recycled in accordance with legislation, regulations, codes of practice and job specification.</p> <p>4.2. Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.</p>

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:
 - follow instructions
 - read and interpret:
 - documentation from a variety of sources
 - drawings and specifications
 - recognise procedures
 - report faults
 - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
 - use language and concepts appropriate to cultural differences
 - use and interpret non-verbal communication, such as hand signals
 - written skills to record results of checks and tests and relevant work completion procedures
- evaluate own actions and make judgments about performance and necessary improvements
- identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials
- organisational skills, including the ability to plan and set out work
- respond to change and contribute to workplace responsibilities, such as current work site environmental and sustainability frameworks and management systems
- teamwork skills to work with others to action tasks and relate to people from a

REQUIRED SKILLS AND KNOWLEDGE

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

Require knowledge for this unit is:

- properties of different segmental paving and their 'fit-for-purpose'
- properties of segmental pavers
- relevant Australian standards.

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:

- locate, interpret and apply relevant information, standards and specifications
- comply with site safety plan and OHS legislation, regulations and codes of practice applicable to workplace operations
- comply with organisational policies and procedures including quality requirements
- safely and effectively operate and use tools, plant and equipment
- communicate and work effectively and safely with others.

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
- relevant specifications and work instructions
- tools and equipment appropriate to applying safe work practices

EVIDENCE GUIDE

- 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.

Assessment of this unit of competency may be in conjunction with assessment of other units commonly performed at the same time in normal job roles.

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

EVIDENCE GUIDE

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.

Information includes:

- diagrams or sketches
- instructions issued by authorised organisational or external personnel
- manufacturer specifications and instructions, where specified
- material safety data sheets (MSDS)
- memos
- regulatory and legislative requirements pertaining to handling concreting materials
- relevant Australian standards
- safe work procedures relating to handling concreting materials
- signage

RANGE STATEMENT

Planning and preparation
include:

- verbal, written and graphical instructions
- work bulletins
- work schedules, plans and specifications.
- assessment of conditions and hazards
- determination of work requirements and safety plans and policies
- equipment defect identification
- work site inspection.

Safety (OHS) is to be in accordance with state and territory legislation and regulations and project safety plan and may include:

- emergency procedures, including extinguishing fires, organisational first aid requirements and evacuation
- handling activities that may require the assistance of others or the use of manual or mechanical lifting devices where size, weight or other issues, such as a disability are a factor
- hazard control
- hazardous materials and substances, including cement and curing agents
- organisational first aid
- PPE prescribed under legislation, regulations and workplace policies and practices
- 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
- use of firefighting equipment
- use of tools and equipment
- workplace environmental requirements and safety.

RANGE STATEMENT

- Tools and equipment*** include:
- levelling devices
 - screed
 - stringlines
 - wheelbarrows.
- Quality requirements*** include relevant regulations, including:
- Australian standards
 - internal company quality policy and standards
 - manufacturer specifications
 - workplace operations and procedures.
- Environmental requirements*** include:
- clean-up management
 - dust and noise
 - dust suppression, which includes keeping dust in the air to a minimum and may include spraying with water
 - vibration
 - waste management.
- Segmental pavers*** include:
- materials, including:
 - brick
 - concrete
 - coping products
 - flags (gross plan area >0.08 square metres)
 - manufactured products
 - stone
 - types, including:
 - dentated units that interlock to either:
 - resist the relative movement of joints parallel to both longitudinal and transverse axes of the joint
 - resist the relative movement of joints parallel to one axis
 - units that do not interlock.
- Fitness for purpose*** is determined with reference to the relevant Australian standards for:
- abrasion resistance
 - breaking load
 - resistance to salt attack
 - slip resistance
 - work size.
- Design*** includes:
- at forty-five degrees orientation
 - at ninety-degrees orientation
 - at other orientation
 - basketweave 2 x 1

RANGE STATEMENT

- basketweave 2 x 2
- concentric
- crazy pave
- herringbone
- may be:
 - offset running bond
 - offset stretcher
 - radial
 - stack
 - stack and stretcher
 - stretcher bond
 - tracery
 - winding
 - zigzag running bond.

- Efficient laying practices* include:
- considering direction of fall or slope on the job
 - good access to materials
 - minimising cutting
 - working around existing structures.

Unit Sector(s)

Unit sector Construction

Functional area

Functional area