



Australian Government

Department of Education, Employment and Workplace Relations

CPC CST3001A Dress and mould stone

Release: 1

CPCST3001A Dress and mould stone

Modification History

Not Applicable

Unit Descriptor

Unit descriptor This unit specifies the outcomes required to prepare and finish simple mouldings in hard or soft stone.

Application of the Unit

Application of the unit This unit of competency supports the achievement of skills and knowledge to dress and mould stone products, which may include 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
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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.	1.1. Work instructions and operational details are obtained using relevant information, confirmed and applied for planning and preparation purposes. 1.2. Safety (OHS) requirements are followed in accordance with safety plans and policies. 1.3. Signage and barricade requirements are identified and implemented. 1.4. Tools and equipment selected to carry out tasks are consistent with job requirements, checked for serviceability and any faults are rectified or reported prior to commencement. 1.5. Material quantity requirements are calculated in accordance with plans, specifications and quality requirements. 1.6. Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use. 1.7. Environmental requirements are identified for the project in accordance with environmental plans and statutory and regulatory authority requirements, and are applied.
2. Prepare stone for dressing.	2.1. Stone is checked for defects or natural inclusions and dimensions of stone are checked for accuracy as required by job and specifications. 2.2. Bedding plane is checked where relevant for correct orientation to suit function and location of finished job.
3. Mark details on stone.	3.1. Templates are applied square to stone or appropriate to job requirements and marked on adjacent ends of stone. 3.2. Placed templates are checked for twist/wind to ensure stone is marked out true. 3.3. Required template details are scribed or marked so that lines remain indelible for duration of job.
4. Dress a simple moulding.	4.1. Mouldings are dressed in a staged sequence of fillets and chamfers, or as required by job. 4.2. Each stage of dressing is marked out accurately and as required by job before proceeding with dressing and each stage is checked upon completion for accuracy before proceeding.
5. Finish moulded stone surfaces.	5.1. Stone surfaces are finished using chisels or other hand tools as required by job and specifications. 5.2. Abrasives are used to finish surfaces if required by job and specifications.
6. Clean up.	6.1. Stone is cleaned using water and brush or other appropriate non-corrosive method.

ELEMENT**PERFORMANCE CRITERIA**

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- 6.2. Tools and equipment are cleaned, maintained and stored.
 - 6.3. Work area is cleared and waste materials disposed of in an appropriate manner and in accordance with Environment Protection Authority (EPA) requirements.
 - 6.4. Templates are cleaned, labelled and stored for reuse.

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 recognise procedures, respond to change and contribute to workplace responsibilities, such as current work site environmental or sustainability frameworks or management systems
- communication skills to:
 - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
 - follow instructions
 - read and interpret drawings and specifications
 - use and interpret non-verbal communication
 - use language and concepts appropriate to cultural differences
- innovation skills to select appropriate tools and equipment, respond to workplace challenges and put ideas into action
- numeracy skills to workplace requirements
- planning and organisational skills to identify requirements, apply relevant resources and sequence tasks
- problem solving skills to recognise and take action to rectify minor faults and problems
- teamwork skills to be able to work with others to action tasks and relate to people from a range of cultural, social, ethnic backgrounds and with varying physical and mental abilities.

Required knowledge

Required knowledge for this unit is:

- interpretation of working drawings and specifications
- job safety analysis (JSA) and safe work method statements

REQUIRED SKILLS AND KNOWLEDGE

- material handling techniques associated with stonemasonry work
- measuring and marking techniques relevant to stonemasonry work.
- methods of dressing stone
- regulations related to safe waste disposal and dust suppression
- types of stone and their characteristics
- use of templates for stonemasonry work
- workplace and equipment safety requirements.

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 dress hard and soft stone to at least three separate simple moulding types listed in the range statement, providing evidence of the ability to:

- comply with OHS regulations applicable to workplace operations
- apply organisational quality procedures and processes within the context of dressing stone
- select and use appropriate processes, tools and equipment consistent with task requirements
- sound and accurate techniques used to set out and prepare stone for dressing processes
- demonstrate sound techniques in dressing hard and soft stone
- display sound application processes in sequencing tasks associated with the shaping of stone
- adoption and use of accurate techniques to set out stone and set up templates to mark mould
- adopt and use safe and effective procedures to dress and shape stone
- complete mould to designed shape and surface finish.

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.

EVIDENCE GUIDE

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

Resource implications for assessment include:

- hand tools and equipment appropriate to tasks
- working drawings, specifications and templates relevant to tasks
- workshop and related equipment appropriate for required activity
- stone appropriate to the relevant tasks.

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 a reasonable inference that competency is not only verified under the particular assessment circumstance, but is 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 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.

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 stone
- relevant Australian standards
- safe work procedures relating to handling stone
- signage
- verbal, written and graphical instructions

RANGE STATEMENT

Planning and preparation include:

- 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
- hazard control
- hazardous materials and substances
- 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:
 - concealed services (water, power and gas)
 - control of dust and noise
 - lighting
 - restricted access barriers
 - traffic control
 - 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.

Tools and equipment include:

- bevels
- brushes
- chisels
- clamps
- cocks combs
- dividers and wing compasses
- drags
- hammers
- measuring tapes and rules

RANGE STATEMENT

	• pitching tools • pneumatic chisels • portable cutters and grinders • power grinder • power leads • punches • scribes • squares • straight edges • tooth chisels.
Quality requirements include:	• attention to specifications of work • control of handling procedures • quality of materials • relevant regulations, including: • Australian standards • internal company quality policy and standards • manufacturer specifications where specified • workplace operations and procedures • use and maintenance of equipment.
Materials include:	• igneous rock, including basalt (blue stone) and granite • marble • sandstone.
Environmental requirements include:	• clean-up management • dust and noise • vibration • waste management.
Statutory and regulatory authority includes:	• federal, state and local authorities administering applicable Acts, regulations and codes of practice.
Stone types include:	• igneous rock, including basalt (blue stone) and granite • marble • sandstone.
Templates may be made of:	• aluminium sheet • cardboard • plastic • plywood

RANGE STATEMENT

Moulding types depend on local industry requirements, existing heritage structures or other factors and may include:

- zinalume sheet.
- ashlar stopped with external mitre
- curved segments
- internal mitres
- pediment springers
- ramp and twist
- straight sections.

Unit Sector(s)

Unit sector Construction

Co-requisite units

Co-requisite units

Functional area

Functional area