



Australian Government

Department of Education, Employment and Workplace Relations

CPCCST3005A Carry out profile work

Release: 1

CPCST3005A Carry out profile work

Modification History

Not Applicable

Unit Descriptor

Unit descriptor This unit specifies the outcomes required to profile a range of stone products using hand and power tools.

Application of the Unit

Application of the unit This unit of competency supports the achievement of skills and knowledge to set and anchor stone facades, 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.	<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 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 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 are applied.</p>
2. Transfer dimensions from an engineering drawing to work.	<p>2.1. Specifications and work requirements are determined in accordance with materials and drawings, and marking off of material is carried out to requirements for profile work to specifications.</p> <p>2.2. Datum points are correctly established on stone for application of profile set-out.</p>
3. Develop patterns.	<p>3.1. Consideration of dressing procedures are analysed and most appropriate development method is chosen and applied for type of stone.</p> <p>3.2. Calculations are carried out and accurately used to develop true shape of profile mould.</p> <p>3.3. Patterns are set out accurately for profile mould, reverse mould and bed mould to dimensions and specified shapes.</p> <p>3.4. Allowances for fabrication processes with guide/roller working off template are correctly determined and transferred to bed mould.</p>
4. Use hand or hand-held power cutting tool.	<p>4.1. Tool is adjusted for operation in consideration of application work.</p> <p>4.2. Hand tool or power cutting tool is used safely and</p>

ELEMENT	PERFORMANCE CRITERIA
5. Shape and form stone.	<p>correctly to cut patterns for templates.</p> <p>4.3. Materials are cut to size in accordance with drawing and job requirements, minimising wastage.</p> <p>4.4. Templates are trimmed to set-out, where required, to specifications.</p> <p>5.1. Equipment is set up and adjusted to meet job requirements and standard operating procedures.</p> <p>5.2. Stone is located and fixed into place on table ready for machine operation.</p> <p>5.3. Appropriate cutter is set to machine to carry out initial cutting processes and cutters are changed as required during overall process.</p> <p>5.4. Bed template is located and aligned with stone and machine operation to requirements of job and manufacturer specifications.</p> <p>5.5. Machine is set up and operated with allowances for thickness of template and gauges.</p> <p>5.6. Machine is operated and stone is shaped and formed to specifications, with material checked for accuracy against required dimensions and shape.</p>
6. Clean up.	<p>6.1. Area is cleaned to specification.</p> <p>6.2. Waste material is removed and placed into job waste bins.</p> <p>6.3. Tools and equipment are cleaned, inspected, maintained and stored.</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:

- 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

REQUIRED SKILLS AND KNOWLEDGE

- 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 apply measurements and calculations
- 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 drawings and specifications
- job safety analysis (JSA) and safe work method statements
- measuring and marking techniques related to stonemasonry work
- methods of dressing stone
- types and use of templates for stonemasonry work
- types of stone and their characteristics
- 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 fix a stone facade to a single or multi-storied structure, providing evidence of the ability to:

- comply with OHS regulations applicable to workplace operations
- comply with organisational policies and procedures
- select and use appropriate processes, tools and equipment to carry out tasks
- apply organisational quality procedures and processes within the context of setting and anchoring stone facades
- demonstrate sound techniques in dressing hard and soft stone
- select stone consistent with specification for material and colour
- accurately set out and install fixing brackets
- demonstrate safe handling practices in moving and placing stone
- fix stone to position and structure
- fix stone to line, level and plumb with clamps securing components
- identify typical faults and problems that occur and action required to rectify them
- communicate with others to ensure safe and effective workplace operations
- complete stone facade to specification.

Context of and specific resources This competency is to be assessed using standard and authorised work practices, safety requirements

EVIDENCE GUIDE

for assessment

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:

- work location for installation of stone
- tools, plant and equipment appropriate to installation processes
- construction materials relevant to proposed activity
- appropriate documentation relevant to task.

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

EVIDENCE GUIDE

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.

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

RANGE STATEMENT

<p><i>Planning and preparation</i> include:</p>	<ul style="list-style-type: none"> stone • signage • 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.
<p><i>Safety (OHS)</i> is to be in accordance with state and territory legislation and regulations and project safety plan and may include:</p>	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> • concealed services (water, power and gas) • 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.
<p><i>Tools and equipment</i> include:</p>	<ul style="list-style-type: none"> • carborundum cutters • clamps • cutter/grinder machines • diamond cutters • dividers and wing compasses • jigs • measuring tapes and rules

RANGE STATEMENT

- portable cutters and grinders
 - power grinder
 - power leads
 - scribes
 - squares
 - travelling arm saws.
- Quality requirements* include:
- internal company quality policy and standards
 - manufacturer specifications
 - relevant regulations, including Australian standards
 - workplace operations and procedures.
- 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.
- Type of stone* includes:
- igneous rock, including basalt (blue stone) and granite
 - marble
 - sandstone.
- Template* may be made of:
- aluminium sheet
 - cardboard
 - plastic sheet
 - plywood
 - zinalume sheet.

Unit Sector(s)

Unit sector Construction

Co-requisite units

Co-requisite units Nil

Co-requisite units Nil

Functional area

Functional area