



Australian Government

Department of Education, Employment and Workplace Relations

CPCCSH2003A Apply and install sealant and sealant devices

Release: 1

CPCSSH2003A Apply and install sealant and sealant devices

Modification History

Not Applicable

Unit Descriptor

Unit descriptor This unit specifies the outcomes required to apply sealants and sealant devices to structures.

Application of the Unit

Application of the unit This unit of competency supports the achievement of skills and knowledge to apply and install sealant and sealant devices, 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 <i>information</i>, confirmed and applied for <i>planning and preparation</i> purposes.</p> <p>1.2. <i>Safety (OHS)</i> 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. <i>Tools and equipment</i> 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. Sealant material quantity requirements are calculated in accordance with plans, specifications and <i>quality requirements</i>.</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. <i>Environmental requirements</i> are identified for the project in accordance with environmental plans and <i>statutory and regulatory authority</i> requirements, and are applied.</p>
2. Prepare surface to receive sealants.	<p>2.1. Surface is cleaned free of contaminants such as oil, grease, dust or moisture.</p> <p>2.2. Surface is prepared by sanding and/or cleaning in accordance with preparation specifications.</p>
3. Apply sealant.	<p>3.1. <i>Sealant materials</i> are <i>applied</i> to manufacturer recommendations and specifications.</p> <p>3.2. Care is taken to ensure no air is trapped within applied sealant.</p> <p>3.3. Surfaces are aligned and fixings correctly installed to specifications.</p>
4. Install sealant devices.	<p>4.1. <i>Sealant devices</i> are fitted securely to specified positions.</p> <p>4.2. Assistance is provided to secure installation of fixtures, assuring level and plumb to line.</p>
5. Clean up.	<p>5.1. Excessive sealant is removed from joints and surrounding surfaces, and cartridge nozzle or container is sealed securely.</p> <p>5.2. Sealants are promptly removed from tools and equipment.</p>

ELEMENT**PERFORMANCE CRITERIA**

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- 5.3. Work area is cleared and *waste material and debris* are disposed of, reused or recycled in accordance with legislation, regulations, codes of practice and job specifications.
- 5.4. Tools and equipment are cleaned, routinely maintained and returned to store.

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 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
 - 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 relevant to surface areas
- 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:

- AS1940 The storage and handling of flammable combustible liquids
- behaviour of sealant materials used in structures
- job safety analysis (JSA) and safe work method statements
- measurement and calculation techniques relevant to surface areas

REQUIRED SKILLS AND KNOWLEDGE

- safe materials handling techniques and requirements, including hazardous materials relevant to sealant application work
- safe use of scaffolding and working platforms
- types and performance of sealants used in buildings
- types and use of hand tools and equipment relevant to sealant application and installation 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 handle and use all the sealant materials and application devices listed in the range statement, providing evidence of the ability to:

- comply with OHS regulations and state and territory legislation applicable to workplace operations
- comply with organisational policies and procedures, including quality assurance requirements
- select and use appropriate processes, tools and equipment to carry out tasks
- adopt and carry out correct procedures prior to and during handling and application of materials
- demonstrate safe and effective operational use of tools and equipment
- demonstrate safe application in the process of cleaning up application area and cleaning equipment
- communicate with others to ensure safe and effective operations.

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

EVIDENCE GUIDE

or Australian standards' requirements.

Resource implications for assessment include:

- sealants and sealant devices appropriate to application tasks
- plant and equipment appropriate to application processes
- hand tools appropriate to application processes
- work location appropriate to activity processes
- MSDS 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 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 application of sealants and sealant devices
- relevant Australian standards
- safe work procedures relating to application of sealants and sealant devices
- 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 hazardous materials where applicable in accordance with AS1940 The storage and handling of flammable combustible liquids
- 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)
 - 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:

- brooms
- brushes
- cartridge applicators
- putty knives and paring knives
- rollers
- sanders
- spray equipment.

RANGE STATEMENT

Quality requirements include:

- attention to job specifications
- control of handling procedures
- preparation of surfaces
- 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.

Environmental requirements include:

- clean-up management
- dust and noise
- stormwater protection
- waste management.

Statutory and regulatory authority includes:

- federal, state and local authorities administering applicable Acts, regulations and codes of practice.

Sealant materials include:

- bitumen
- mastic
- putty
- silicone
- waterproof paint.

Sealant materials can be ***applied*** to:

- acrylic sheeting
- bricks and concrete masonry
- concrete
- glass
- metal sheeting
- paints
- plaster sheeting
- plywood and particle board
- structural metallic sections and components
- timber.

Sealant devices include:

- cover plates to aluminium framework
- cover straps or beading to sheet jointing
- flashings to window and door frames
- impregnated material for masonry expansion joints
- strip or sheet membrane.

RANGE STATEMENT

Waste material and debris
include:

- broken or damaged goods
- cardboard
- loose material
- paper
- plastic
- sealants and sealing materials.

Unit Sector(s)

Unit sector Construction

Functional area

Functional area