CPCCSH2001A Prepare surfaces

Modification History
Not Applicable

Unit Descriptor

Unit descriptor
This unit specifies the outcomes required to restore, repair and prepare different material surfaces. It includes planning and preparation for the work, preparation of new or uncoated surfaces, preparation of previously coated surfaces and completion of clean-up activities.

Application of the Unit

Application of the unit
This unit of competency supports the achievement of skills and knowledge to prepare a range of shop and office surfaces for painting, 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
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

<table>
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<tr>
<th>ELEMENT</th>
<th>PERFORMANCE CRITERIA</th>
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| 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.  
1.8. Finishes to be applied to all surfaces are identified in accordance with job requirements and manufacturer specifications. |
| 2. Prepare new or uncoated surfaces. | 2.1. Suitability of *surface* is determined in accordance with manufacturer recommendations and job specifications.  
2.2. *Surface preparation method* is correctly selected in accordance with the environment, finish and substrate requirements.  
2.3. Surface is prepared to manufacturer specifications in compliance with substrate requirements, specifications and relevant standards.  
2.4. Surface imperfections are stopped, filled and sanded to required finish in accordance with manufacturer recommendations and job specifications. |
| 3. Prepare previously coated surfaces. | 3.1. Condition and nature of *existing substrate and surface* material are determined and tested in accordance with relevant standards.  
3.2. Potential hazards are identified and correct procedures are used to reduce risks in accordance |
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<tr>
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<tbody>
<tr>
<td></td>
<td>with manufacturer recommendations and job specifications.</td>
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<tr>
<td>3.3.</td>
<td>Surface preparation method is correctly selected in accordance with the environment, finish and substrate requirements.</td>
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<td>3.4.</td>
<td>Surfaces are prepared by removing unwanted coatings and loose debris.</td>
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<tr>
<td>3.5.</td>
<td>Surface defects are repaired and imperfections stopped, filled and sanded to smooth finish ready for required finish in accordance with manufacturer recommendations and job specifications.</td>
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<td>4.</td>
<td>Clean up.</td>
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<tr>
<td>4.1.</td>
<td>Waste and unwanted materials are removed and placed into job waste bins or rubbish stockpile in accordance with sound work practices and compliance with environmental requirements.</td>
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<td>4.2.</td>
<td>Tools and equipment are cleaned and stored safely and effectively to manufacturer specifications.</td>
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<td>4.3.</td>
<td>Unused materials are sealed and stored/stacked in accordance with standard material handling practices and techniques and company requirements.</td>
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<tr>
<td>4.4.</td>
<td>Work area is cleared and materials disposed of or recycled in a manner to avoid spontaneous combustion in accordance with legislation, regulations, codes of practice and job specifications.</td>
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**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
REQUIRED SKILLS AND KNOWLEDGE

- read and interpret drawings, specifications and documentation from a variety of sources
- use and interpret non-verbal communication
- use language and concepts appropriate to cultural differences
- identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials
- innovation skills to select appropriate tools and equipment, respond to workplace challenges and put ideas into action
- numeracy skills to apply calculations
- organisational skills, including the ability to plan and set-out work
- 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:

- corrosion processes and techniques for the protection of metals
- hazards associated with lead, asbestos, solvents, chemicals and dust
- interpretation of plans, drawings and specifications
- job safety analysis (JSA) and safe work method statements
- material safety data sheets (MSDS)
- materials handling and environmentally friendly waste management processes
- prevention and rectification procedures for surface coating defects
- procedures, products and techniques associated with preparation of surfaces
- processes for the calculation of material requirements
- properties and surface preparation requirements of new substrates
- surface coating technology
- 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 prepare all surfaces listed in the range statement for finishing, providing 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 use tools, plant and equipment
- communicate and work effectively and safely with others
- prepare to specification a minimum of four surfaces:
  - one being a new gyprock surface
  - three being previously coated surfaces with one being an external timber surface, one an internal surface and one a metal or masonry surface.

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.
EVIDENCE GUIDE

Resource implications for assessment include:

- drawings and documentation relevant to activities
- materials relevant to proposed activities
- range of surfaces for painting preparation
- tools and equipment appropriate to required tasks.

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 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,
EVIDENCE GUIDE

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
- MSDS
- memos
- regulatory and legislative requirements pertaining to the preparation of surfaces for painting
- relevant Australian standards
- safe work procedures relating to the preparation of surfaces for painting
- signage
- verbal, written and graphical instructions
- work bulletins
- work schedules, plans and specifications.

Planning and preparation include:
- assessment of conditions and hazards
- determination of work requirements and safety plans and policies
- equipment defect identification
- work site inspection.
RANGE STATEMENT

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:
  - electrical fires and/or explosion from combustible materials
  - falling objects
  - manual handling
  - solvents, lead, asbestos, chemicals, fumes and gases
  - work site visitors and the public
  - 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:

- drop sheets
- duster brushes
- filling knives and blades
- hammers
- hand sanders
- heat removal equipment
- mechanical sanders
- nail punches
- putty knives
- scrapers
- water blasters
- wire brushes.
**RANGE STATEMENT**

**Quality requirements** include relevant regulations, including:
- Australian standards
- internal company quality policy and standards
- manufacturer specifications where specified
- workplace operations and procedures.

**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.

**Surfaces** include:
- horizontal or vertical
- inclined or curved
- internal or external
- timber, metal, masonry, concrete or plaster.

**Surface preparation method** includes:
- chemical stripping
- grinding
- sanding
- scraping (mechanical and hand)
- use of heat guns
- washing down
- water blasting.

**Existing substrate and surface** may be contaminated with:
- dust
- films of grease
- mild chalking
- mild efflorescence
- mould
- paint films, which are:
  - blistering
  - flaking
  - peeling
  - cracking
  - smoke damage.

**Unit Sector(s)**

**Unit sector** Construction