



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **LMFSS2004A Undertake surface preparation**

**Revision Number: 1**

## LMFSS2004A Undertake surface preparation

### Modification History

Not applicable.

### Unit Descriptor

<b>Unit descriptor</b>	This competency covers the preparation of surfaces for protective coatings, under-coatings and finishes using solvents, by hand or machine.
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### Application of the Unit

<b>Application of the unit</b>	This unit supports the attainment of skills and knowledge required for competent workplace performance in furnishing operations of all sizes. Prepare product for Standards testing applies to a factory environment and involves application of skills and knowledge at a production worker level. These skills and knowledge are to be used within the scope of the individual's job and authority.
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### Licensing/Regulatory Information

Not applicable.

### Pre-Requisites

<b>Prerequisite units</b>	Nil	

## Employability Skills Information

<b>Employability skills</b>	This unit contains employability skills.
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## 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.
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## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Check work requirements	<p>1.1. Applicable <i>OHS, legislative</i> and <i>organisational</i> requirements relevant to <i>surface preparation</i> are verified and complied with</p> <p>1.2. <i>Instructions</i>, plans and/or work instructions are read and interpreted to identify processes and materials to complete work tasks</p> <p>1.3. <i>Tools, equipment</i> and <i>materials</i> are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition</p> <p>1.4. Where required, appropriate solvent and solvent application is selected to meet job specification</p>
2. Setup equipment	<p>2.1. Work site is prepared in accordance with surface cleaning activity</p> <p>2.2. Appropriate equipment and any required consumables assembled, set up and prepared in accordance with manufacturers' specifications and organisational procedures</p> <p>2.3. Recognise <i>hazards</i> and adopt steps required to ensure safety</p> <p>2.4. Identify and exclude sources of contamination</p>
3. Prepare surfaces using solvents as required	<p>3.1. Prepare surfaces for procedures</p> <p>3.2. Safe working environment for <i>solvent</i> use is established according to regulatory requirements and organisational procedures</p> <p>3.3. Solvents are applied</p> <p>3.4. The treated surface is neutralised and made safe to handle</p> <p>3.5. The area is made safe in accordance with organisational procedures</p>
4. Prepare surfaces using mechanical means	<p>4.1. Safe working environment for mechanical surface preparation is established according to regulatory requirements and organisational procedures</p> <p>4.2. Prepare surfaces to procedures using mechanical means</p> <p>4.3. Make adjustments as required to meet specifications</p> <p>4.4. Rectify surface preparation faults as required</p> <p>4.5. Equipment used is cleaned and checked for damage and operational faults in accordance with organisational procedures</p>

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
5. Ensure surfaces adequately prepared	5.1. Surface preparation is assessed for cleanliness and conformance with specification 5.2. Identify and take action to remedy faults in accordance with procedures 5.3. Report problems to designated person 5.4. Complete records and documentation in accordance with organisational procedures 5.5. Work area is restored and waste disposed of in accordance with organisational procedures

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

#### Required skills

- collect, organise and understand information related to work orders, basic plans and safety procedures
- communicate ideas and information to enable confirmation of work requirements and specifications, coordination of work with site supervisor, other workers and customers, and the reporting of work outcomes and problems
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise work flow and productivity
- use pre-checking and inspection techniques to avoid re-work and wastage
- identifying problems and equipment faults and demonstrate appropriate response procedures
- recognise and respond to circumstances outside instructions or personal competence
- plan and organise activities including the preparation and layout of own worksite and the obtaining and use of tools and materials to avoid any backtracking, work flow interruptions or wastage
- use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate other material requirements
- complying with legislation, regulations, standards, codes of practice and established safe practices and procedures for manufacturing/installing security screens and grills
- clarify and confirm work instructions
- plan own work within the given task parameters
- apply systematic and effective time management
- accept responsibility for given tasks
- set, monitor and satisfy personal work goals
- satisfy the competency requirements for the job
- maintain current knowledge of tools and materials
- maintain current knowledge of security screens and grills manufacturing and installation techniques
- seek learning opportunities
- use the workplace technology related to the use of solvents and hand and mechanical tools including calculators and measuring devices

#### Required knowledge

- organisational and site standards, requirements, policies and procedures for the preparation of surfaces for coating
- environmental protection requirements relating to the disposal of waste material

**REQUIRED SKILLS AND KNOWLEDGE**

- established communication channels and protocols
- problem identification and resolution
- contaminants
- treatment for different substrates
- types of tools and equipment and procedures for their safe use, operation and maintenance
- safe handling of hazardous materials
- storage systems and labelling
- procedures for the recording, reporting and maintenance of workplace records and information

## 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.

#### Critical aspects for assessment and evidence required to demonstrate competency in this unit

- Comply with legislation, regulations, standards, codes of practice and established safe practices and procedures for undertaking surface preparation
- Consistent safe performance and standards are demonstrated
- Material properties and qualities are understood and provided for
- Appropriate action is taken to resolve faults or report faults to appropriate personnel
- A minimum of two surfaces are prepared for powder coating or other finish without the need for further preparation
- Communicate effectively and work safely with others in the work area
- Work area housekeeping activities, including cleanup, are performed effectively and in accordance with organisational procedures

#### Context of, and specific resources for assessment

- The application of competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment is to comply with relevant regulatory or Australian Standards requirements
- The following resources should be made available:
  - workplace location or simulated workplace
  - materials and equipment relevant to identifying a sample
  - specifications and work instructions

#### Method of assessment

Assessment must satisfy the endorsed assessment guidelines of the Furnishing Industry Training Package

Assessment methods must confirm consistency and accuracy of performance (over time and in a range of workplace relevant contexts) together with application of underpinning knowledge

Assessment methods must be by direct observation of tasks and include questioning on underpinning



**EVIDENCE GUIDE**

knowledge to ensure its correct interpretation and application

Assessment may be applied under project related conditions (real or simulated) and require evidence of process

Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances

Assessment may be in conjunction with assessment of other units of competency

## 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.

<b>OHS requirements</b>	<ul style="list-style-type: none"> <li>are to be in accordance with Commonwealth, State or Territory legislation and regulations, organisational safety policies and procedures. Requirements may include but not be limited to the use of personal protective equipment and clothing, fire fighting equipment, first aid equipment, hazard and risk control and elimination of hazardous materials and substances, manual handling including lifting and carrying.</li> </ul>
<b>Legislative requirements</b>	<ul style="list-style-type: none"> <li>are to be in accordance with applicable legislation from all levels of government that affect organisational operation. Requirements may include but not be limited to award and enterprise agreements, industrial relations, Australian Standards, confidentiality and privacy, OHS, the environment, equal opportunity, anti-discrimination, relevant industry codes of practice, duty of care and heritage.</li> </ul>
<b>Organisational requirements</b>	<ul style="list-style-type: none"> <li>may include but not be limited to legal, organisational and site guidelines, policies and procedures relating to own role and responsibility, quality assurance, procedural manuals, quality and continuous improvement processes and standards, OHS, emergency and evacuation, ethical standards, recording and reporting, access and equity principles and practices, equipment use, maintenance and storage, environmental management (waste disposal, recycling and re-use guidelines)</li> </ul>
<b>Surface preparation</b>	<ul style="list-style-type: none"> <li>refers to the preparation of product material for finish coating, either powder coating or other finish paint type surface, through solvent or mechanical means. Mechanical means may be steel brush, file, etc.</li> </ul>

<b>RANGE STATEMENT</b>	
<b>Instructions</b>	<ul style="list-style-type: none"> <li>• Workplace procedures relating to the use and operation of tools and equipment</li> <li>• Production planning figures</li> <li>• Workplace instructions, including job sheets, plans, specifications, drawings and designs</li> <li>• Workplace procedures relating to reporting and communications</li> <li>• Manufacturer instructions for the use of equipment and materials</li> </ul>
<b>Tools and equipment</b>	<ul style="list-style-type: none"> <li>• are to include files, hand rasps, hand finishing tools, power tools, jigs and power sanders</li> </ul>
<b>Materials</b>	<ul style="list-style-type: none"> <li>• may include metal, aluminium or composite materials</li> </ul>
<b>Hazards</b>	<ul style="list-style-type: none"> <li>• may include acids, hydrocarbons and other solvents as both liquid or vapour, moving equipment and machinery and manual handling hazards.</li> </ul>
<b>Solvents</b>	<ul style="list-style-type: none"> <li>• may include a range of cleaning materials including acids, hydrocarbons etc. The application of solvents may be by brush, spraying, wiping, or dipping in a solvent bath</li> </ul>

### Unit Sector(s)

<b>Unit sector</b>	Security Screens and Grills
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### Competency field

<b>Competency field</b>	
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### Co-requisite units

<b>Co-requisite units</b>		

<b>Co-requisite units</b>		