



**Australian Government**

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

# **LMFSL3001A Apply product and material knowledge to lead light and stained glass operations**

**Release: 1**

## **LMFSL3001A Apply product and material knowledge to lead light and stained glass operations**

### **Modification History**

Not applicable.

### **Unit Descriptor**

|                        |                                                                                                                                                                                                                                                                                         |
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| <b>Unit descriptor</b> | This unit covers the competency required to apply product and material knowledge to stained glass and leadlight operations by identifying types of glass and other materials used in the leadlight and stained glass industry, their characteristics, properties, uses and limitations. |
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### **Application of the Unit**

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
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| <b>Application of the unit</b> | This unit supports the attainment of skills and knowledge required for competent workplace performance in leadlight and stained glass operations. The application of product and material knowledge to leadlight and stained glass operations applies to a workshop environment and involves application of skills and knowledge at a tradesperson 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**

|                           |     |  |
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| <b>Prerequisite units</b> | Nil |  |
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## Employability Skills Information

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

|                                                                   |                                                                                                                                                                                                                                                                                                                  |
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| 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. Identify and respond to glass and material properties | <p>1.1. Applicable <b>OHS, legislative</b> and <b>organisational</b> requirements relevant to lead light and stained glass operations are verified and complied with</p> <p>1.2. The <b>types of glass</b> and inherent characteristics are analysed to select the optimum glass for the product</p> <p>1.3. The characteristics and properties of lead light and stained glass are identified and considered</p> <p>1.4. The properties and impacts of <b>metals</b> are identified and considered</p> |
| 2. Apply visual evaluation techniques to glass products  | <p>2.1. Correct visual procedures using natural and artificial light are followed</p> <p>2.2. Characteristics of the glass styles are explained</p> <p>2.3. Glass is identified according to style</p> <p>2.4. The quality and style of the glass are evaluated ensuring conditions for evaluation are as favourable as possible</p>                                                                                                                                                                    |
| 3. Identify basic faults                                 | <p>3.1. Basic <b>glass faults</b> are recognised</p> <p>3.2. <b>Other faults</b> are recognised</p>                                                                                                                                                                                                                                                                                                                                                                                                     |
| 4. Respond to the impact of the glass properties         | <p>4.1. The cause and effects on the glass of age is considered and responded to</p> <p>4.2. The cause and effects on the glass of structural insecurity is considered and responded to</p> <p>4.3. The cause and effect of weather extremes are considered and responded to</p> <p>4.4. <b>Records</b> are maintained</p>                                                                                                                                                                              |

## 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 materials technology and information related to leadlight and stained glass products
- 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
- maintain quality records related to leadlight and stained glass operations
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise work flow and productivity
- identify, anticipate and respond to faults in leadlight and stained glass components
- 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 volume, estimate glass requirements and estimate other material requirements
- clarify and confirm work instructions
- plan own work within the given task parameters
- 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 leadlight and stained glass techniques
- seek learning opportunities
- use the workplace technology related to the selection and assembly of leadlight and stained glass components, including computers, measuring devices and assembly systems

#### Required knowledge

- State or Territory OHS legislation, regulations, standards and codes of practice relevant to the full range of processes for lead light and stained glass operations
- lead light and stained glass construction terminology and techniques
- lead light and stained glass operations repair terminology and techniques
- lead light and stained glass operations types, characteristics, production methods and faults
- organisational and site standards, requirements, policies and procedures for lead

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| <b>REQUIRED SKILLS AND KNOWLEDGE</b> |
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| <p>light and stained glass operations</p> <ul style="list-style-type: none"><li>• types of glass and other materials used in the lead light and stained glass industry, their characteristics, properties, uses and limitations</li><li>• environmental protection requirements relating to the disposal of waste material</li><li>• established communication channels and protocols</li><li>• problem identification and resolution</li><li>• storage systems and labelling</li><li>• procedures for the recording, reporting and maintenance of workplace records and information</li><li>• appropriate mathematical procedures for estimation and measurement</li></ul> |
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## 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

- Read and interpret a work/job specification
- Identify a range of lead light and stained glass types, and detail their uses and limitations
- Identify and explain the properties of lead light and stained glass
- Explain the likely effects of a range of faults on lead light and stained glass products
- Identify the likely impact of various environmental effects on lead light and stained glass products
- Demonstrate the application of product and material knowledge in two differing leadlight and stained glass operations
- Comply with legislation, regulations, standards, codes of practice and established safe practices and procedures for lead light and stained glass operations
- Communicate effectively and work safely with others in the work area

#### 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 of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory or Australian Standards requirements
- The following resources should be made available:
  - workplace location or simulated workplace
  - examples of lead light and stained glass
  - samples of metals

#### 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

## EVIDENCE GUIDE

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

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| <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>Types of glass</b>              | <ul style="list-style-type: none"> <li>may include clear, coloured, stained</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Metals</b>                      | <ul style="list-style-type: none"> <li>used in lead light and stained glass may include lead and copper</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                           |

| <b>RANGE STATEMENT</b>     |                                                                                                                                                                                     |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Glass faults</b>        | <ul style="list-style-type: none"> <li>may include but are not limited to cracking, fading, slumping</li> </ul>                                                                     |
| <b>Other faults</b>        | <ul style="list-style-type: none"> <li>may include but are not limited to oxidation, breakage, structural insecurity</li> </ul>                                                     |
| <b>Records and reports</b> | <ul style="list-style-type: none"> <li>may include but not be limited to the product type, size, inspection, inspection outcomes, quality outcomes and storage locations</li> </ul> |

## Unit Sector(s)

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| <b>Unit sector</b> | Lead Light and Stained Glass |
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## Competency field

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

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|---------------------------|--|--|
| <b>Co-requisite units</b> |  |  |
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