



Australian Government

MSFGG3014 Construct and repair leadlight panels

Release: 1

MSFGG3014 Construct and repair leadlight panels

Modification History

Release 1 - New unit of competency

Application

This unit of competency covers constructing and repairing leadlight panels and may involve restoration and conservation of historically important stained glass and leadlighting works. It includes measuring, design and selection of materials and tools, and disassembly/assembly, weatherproofing and polishing of leadlight panels.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Competency Field

Unit Sector

Glass and Glazing

Elements and Performance Criteria

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
1	Identify work requirements	1.1	Purpose of the leadlight panel is established, including performance requirements in terms of safety, quality and function
		1.2	Research is conducted, where necessary, to establish if leadlight panels to be repaired are historically important
		1.3	Construction method and materials to be used in the panel to be constructed or repaired are identified
		1.4	Leadlight panel to be repaired is inspected to identify faults and any faults found compared with customer requirements and any previous identified faults
2	Plan leadlight panel construction/repair	2.1	Plan or design of leadlight panel to be constructed/repaired is analysed to identify work requirements, methods and/or specifications

- | | | |
|---|---|--|
| | 2.2 | Work health and safety (WHS) requirements for construction and repair of leadlight panels, including personal protective equipment, are observed throughout the work |
| | 2.3 | Work sequences are identified and a personal work plan is developed, when required, compliant with workplace procedures |
| | 2.4 | Steps or stages in construction/repair are planned, noting check points for (any) measurements and tests |
| | 2.5 | Approval of work construction plan is obtained as required by workplace procedures and a suitable work area identified |
| 3 | Identify suitable materials and equipment | |
| | 3.1 | Tools and equipment are selected and checked prior to use to ensure they are appropriate for the work, serviceable and in a safe condition |
| | 3.2 | Leadlight construction materials are selected according to specification of performance requirements, proposed use, cost and availability of materials, if required, matching the original texture, colour, thickness and opacity of the stained glass |
| | 3.3 | Equipment suitable for working the chosen material is identified |
| 4 | Construct/repair the leadlight panel | |
| | 4.1 | Plan is followed to construct/repair the leadlight panel, including any special requirements for historically important works |
| | 4.2 | Checks are conducted at the identified points |
| | 4.3 | Modifications are identified and recommended within workplace procedures |
| | 4.4 | Modifications to the plan are documented and appropriate approvals are sought in accordance with workplace procedures |
| 5 | Complete work | |
| | 5.1 | Leadlight panel is inspected for quality of work and repaired or reconstructed, as required, in accordance with workplace procedures |
| | 5.2 | Material which can be re-used is collected and stored |
| | 5.3 | Waste and scrap material are removed for disposal or recycling, as required |

- 5.4 Work area is cleaned and rubbish disposed of, as appropriate
- 5.5 Equipment is cleaned and stored according to workplace requirements
- 5.6 Workplace documentation is completed in accordance with workplace procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency. Detail on appropriate performance levels for each furnishing unit of competency in reading, writing, oral communication and numeracy utilising the Australian Core Skills Framework (ACSF) are provided in the Furnishing Training Package Implementation Guide.

Range of Conditions

Specifies different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Range is restricted to essential operating conditions and any other variables essential to the work environment.

Unit context includes:

- WHS requirements, including legislation, building codes, material safety management systems, hazardous and dangerous goods codes, and local safe operating procedures or equivalent
- work is carried out in accordance with legislative obligations, environmental legislation, relevant health regulations, manual handling procedures and organisation insurance requirements
- work requires individuals to demonstrate some discretion, judgement and problem solving

Repair methods include:

- re-leading
- strap repair and lead lifting
- restoration and conservation of historically important stained glass and leadlighting works

Tools and equipment include:

- timber benches
- light boxes
- glass grinders
- lead knives
- lead vice
- lathekins

	• farrier's nails • glass cutters • grozing and small running pliers • soldering irons and bits • suede • cleaning and polishing brushers and pickers
Leadlight construction materials include:	• coloured/plain glass panels • patterns/templates • timber lathes • ornamental fittings • lead came • solder and fluxes
Personal protective equipment includes:	• that prescribed under legislation, regulation and enterprise policies and practices: • gauntlets • gloves • safety glasses • safety footwear
Information and procedures include:	• workplace procedures relating to the use of tools and equipment and personal protective equipment • work instructions, including job sheets, cutting lists, plans, drawings and designs • workplace procedures relating to reporting and communication • manufacturer specifications and operational procedures • quality and Australian Standards and procedures

Unit Mapping Information

Supersedes and is equivalent to LMFGG3013C Construct and repair leadlight panels.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73>

Assessment Requirements for MSFGG3014 Construct and repair leadlight panels

Modification History

Release 1 - New unit of competency

Performance Evidence

- Interpret work order and locate and apply relevant information
- Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- Identify materials used in the work process
- Follow work instructions, operating procedures and inspection processes to:
 - minimise the risk of injury to self or others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- Interpret work order/job instruction to identify requirements and plan the process to construct/repair leadlight panels
- Select and use appropriate materials and processes for the panel being constructed/repared optimising glass sizes for economical cutting and assembling of required materials
- Use mathematical ideas and techniques to correctly complete measurements, calculate area and estimate material requirements
- Communicate ideas and information to enable confirmation of work requirements and specifications and the reporting of work outcomes and problems, interpret basic plans and follow safety procedures
- Avoid backtracking, work flow interruptions or wastage
- Work with others and in a team by recognising dependencies and using cooperative approaches to optimise work flow and productivity

Knowledge Evidence

- End use of leadlight panels and required safety, quality and structural standards
- Characteristics, including hazards and workplace safety system requirements, associated with the materials used in leadlight panel construction
- Operation of tools and equipment used in constructing/repairing leadlight panels
- Research techniques to establish the historical importance of stained glass and leadlighting works
- Processes and procedures involved in the construction/repair process of leadlight panels, including historically important works
- Impact of design features of the leadlight panel on purpose, materials and construction
- Relevant Australian Standards

Assessment Conditions

- Assessors must:
 - hold training and assessment competencies as determined by the National Skills Standards Council (NSSC) or its successors
 - have vocational competency in the furnishing industry at least to the level being assessed with broad industry knowledge and experience, usually combined with a relevant industry qualification
 - be familiar with the current skills and knowledge used and have relevant, current experience in the furnishing industry.
- Assessment methods must confirm consistency of performance over time rather than a single assessment event and in a range of workplace relevant contexts.
- Assessment must be by observation of relevant tasks with questioning on underpinning knowledge and, where applicable, multimedia evidence, supervisor's reports, projects and work samples.
- Assessment is to be conducted on single units of competency or in conjunction with other related units of competency. Foundation skills are integral to competent performance in the unit and should not be assessed separately.
- Assessment must occur on the job or in a workplace simulated facility with relevant process, equipment, materials, work instructions and deadlines.
- Access is required to leadlight panels for repair or plans for new panels, glass, leadlighting materials, personal protective equipment and work instructions.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27b03ed73>