



Australian Government

Department of Education, Employment and Workplace Relations

LMF GG3014B Prepare and install mirrors

Revision Number: 1

LMFGG3014B Prepare and install mirrors

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit addresses the knowledge and skills required to prepare and install mirrors.
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Application of the Unit

Application of the unit	
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Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units	Nil	

Employability Skills Information

Employability skills	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. Identify and plan work requirement	1.1. Work requirements in the form of type, pattern/plan and quantity of mirrors to be prepared and installed are identified from work instructions 1.2. Workplace health and safety requirements for fabrication and installation of mirrors, including personal protection needs, are observed throughout the work 1.3. Work sequence is planned in a logical order to suit the job 1.4. Quantities of materials required are calculated from plans or work instructions or by measuring the installation site 1.5. Fixing and joining devices or materials are selected in line with specifications or type of materials to be joined and the surface on which the mirror is to be installed 1.6. Tools and equipment suitable to the work method are identified
2. Prepare for work	2.1. Compatible materials, fixings, tools and equipment needed to complete the work are selected and checked prior to use to ensure that they are appropriate for the work, serviceable and in a safe condition 2.2. Components of the mirror are checked against specifications or job order for: size, quantity, finish and profile
3. Fabricate and install mirror	3.1. Frame, if required, is fabricated in accordance with workplace procedures or industry practice 3.2. Mirror glass, if required, is cut to size in accordance with workplace procedures or industry practice 3.3. Mirror is edgeworked, if required, in accordance with workplace procedures or industry practice 3.4. Holes, if required, are drilled in frame or mirror in accordance with workplace procedures or industry practice 3.5. Mirror is installed using appropriate fixing method in accordance with workplace procedures or industry practice
4. Complete work	4.1. Installed mirror is inspected for quality of work and repaired, refabricated or reinstalled as required in accordance with workplace procedures

ELEMENT	PERFORMANCE CRITERIA
	4.2. Waste, unused and scrap material is removed for disposal or recycling as required 4.3. Work area is cleaned and rubbish disposed of as appropriate 4.4. Tools, equipment and unused materials are removed and stored appropriately according to workplace requirements 4.5. Workplace documentation is completed in accordance with workplace 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 work supervisor, other workers and customers, and the reporting of work outcomes and problems
- plan and organise activities including the preparation and layout of the work area and the obtaining of equipment and materials to avoid any back tracking, workflow interruptions or wastage
- work with others and in a team by recognising dependencies and using cooperative approaches to optimise workflow and productivity
- use mathematical ideas and techniques to correctly complete measurements, calculate work requirements, optimise glass sizes for economical cutting and assemble required materials
- use pre-checking and inspection techniques to plan work, avoiding re-working and wastage
- use the limited workplace technology related to the fabrication and installation of mirrors

Required knowledge

- workflow in relation to the fabrication and installation of mirrors
- workplace safety system requirements related to the fabrication and installation of mirrors
- characteristics of materials used and uses of products produced
- identification of equipment, processes and procedures related to the fabrication and installation of mirrors
- relevant Australian Standards

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 of evidence

- Interpret work order/job instruction and locate and apply relevant information to fabricate and install mirrors
- Apply safe handling requirements for equipment, products and materials, including use of personal protective equipment
- Follow work instructions, operating procedures and inspection practices to:
 - minimise the risk of injury to self and others
 - prevent damage to goods, equipment and products
 - maintain required production output and product quality
- As a minimum, demonstrate the ability to:
 - measure for mirror installations
 - cut and float mirror up to 6 mm, including vinyl backed
 - carry out edgeworking
 - drill holes in mirrors
 - prepare walls
 - construct and fit mirror frames and J-mould
 - identify and use water, spirit, dumpy and laser levels
 - set plumb and level lines
 - fit framed, wall, safety and security mirrors, including return mirrors with minimal deflection
 - clean and present finished mirrors
 - calculate the cost of mirrors, edgework, materials and labour
- Work effectively with others
- Modify activities to cater for variations in workplace contexts and environment

Resource implications

Mirrors, aluminium framing material, fixing/fasteners, workplace operating procedures, personal protective equipment and an appropriate work area.

Method of assessment

Assessment methods must confirm consistency of

EVIDENCE GUIDE	
	performance over time and in a range of workplace relevant contexts. Assessment should be by direct observation of tasks and questioning on underpinning knowledge. Assessment may be in conjunction with assessment of other relevant units of competency.
Context of assessment	Assessment may occur on the job or in a workplace simulated facility with relevant fabrication and installation equipment, materials, work instructions and deadlines.

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.

Unit context

- OHS requirements may include legislation, standards, building codes, material safety management systems and local safe operating procedures
- Work requires individuals to demonstrate discretion, judgement and problem solving skills in the fabrication and installation process. This may be demonstrated either individually or in a team environment
- Work is carried out in accordance with statutory requirements, environment legislation, manual handling procedures and relevant regulations and organisation insurance requirements
- Work requires individuals to demonstrate discretion, judgement and problem solving skills in the planning, fabrication and installation of mirrors
- Work is generally performed individually, with general supervision and may be part of a production process

Preparing and installing mirrors involves:

- the fabrication and installation of mirrors to satisfy customer/work orders

Mirrors may include:

- framed
- frameless
- wall
- return
- safety and security mirrors

Tools and equipment may include:

- tungsten wheel glass cutters
- speed cutters
- straight edges and squares
- plate and running pliers
- glass lifting and handling equipment
- personal safety equipment

RANGE STATEMENT	
	• glass edging equipment • diamond drills and saws • water • spirit • dumpy and laser levels • plumb bobs • chalk lines • tape measures • portable drills • general hand tools
Materials are to include but are not limited to:	• timber and metal framing materials • J-mould • float and vinyl backed mirrors • fixings and fasteners
Fixings and fasteners include:	• adhesive tapes • screws and rosettes • mirror and spring clips • hollow wall fasteners • rawl plugs • cloth and glues • and non-acidic silicones
Personal protective equipment	Personal protective equipment is to include that prescribed under legislation, regulation and enterprise policies and practices. It may include: • gauntlets • gloves • safety glasses • hard hats • safety footwear • aprons and overalls
Information and procedures	• Workplace procedures relating to the fabrication and installation of mirrors • Equipment or tool manufacturer specifications and operational procedures • Work instructions, including job sheets, plans, cutting lists, drawings and designs • Safety standards include personal protective equipment, OHS regulations and enterprise requirements • AS1288, 4667

Unit Sector(s)

Unit sector	Glass and Glazing
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Competency field

Competency field	
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Co-requisite units

Co-requisite units		