



Australian Government

MSFGG2004 Process thin glass by hand

Release: 1

MSFGG2004 Process thin glass by hand

Modification History

Release 1 - New unit of competency

Application

This unit of competency covers cutting, shaping and applying finishing techniques to annealed glass up to, and including, 10 mm thick, and laminated glass up to, and including, 11.76 mm thick.

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 Work requirements, including materials, types of cuts, shapes, holes and edges, processes and quantities required, are identified from work instructions or job order in accordance with workplace procedures
- 1.2 Work health and safety (WHS) requirements, including personal protective equipment, are observed throughout the work
- 1.3 Tools, equipment and thin glass materials are selected and checked prior to use to ensure they are appropriate for the work, serviceable and in a safe condition
- 1.4 Cutting list and quality standards are determined and procedures identified in accordance with workplace requirements and industry standards
- 1.5 Glass to be cut, and holes drilled or shaped by hand are

- selected using information from the work order, including type of glass, thickness, colour and dimensions
- 1.6 Equipment and settings required to perform the work are identified and prepared
- 2 Prepare for work
- 2.1 Sequence of work is planned to ensure processing is conducted in a logical order
- 2.2 Suitable cutting, shaping and lubrication methods are selected
- 2.3 Glass processing table is selected and work surface is cleared of debris and dust
- 2.4 Work area is cleared of obstructions and potential hazards with cullet bins located close to work area
- 2.5 Glass is checked for imperfections and damage prior to handling
- 2.6 Glass to be processed is located in the work area using correct manual handling procedures
- 2.7 Glass is measured accurately to minimise waste and within specified tolerances according to enterprise standards
- 3 Process glass
- 3.1 Tools and equipment are operated and monitored in accordance with manufacturer instructions and workplace procedures to ensure correct product quality and output
- 3.2 Glass is processed to required standard in accordance with job order, work instructions and procedures, including the performance of routine lubrication and adjustments of tools/equipment
- 3.3 Problems occurring during work operations are identified and reported to appropriate persons
- 3.4 Authorised changes in working procedures are followed
- 3.5 Completed product is inspected for quality of work and repaired, reprocessed or discarded in accordance with workplace procedures
- 4 Complete work
- 4.1 Processed glass is labelled and stored following workplace procedures ensuring there are no projections
- 4.2 Scraps and off-cuts are removed for disposal or recycling,

as required

- 4.3 Work area is cleaned and rubbish disposed of, as appropriate
- 4.4 Workplace documentation is completed, as required
- 4.5 Tools, equipment and unused materials are removed and stored appropriately

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.

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|-------------------------------------|--|
| Unit context includes: | <ul style="list-style-type: none">• 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 |
| Materials include: | <ul style="list-style-type: none">• annealed and laminated glass for residential and commercial glazing• furniture applications and mirrors |
| Tools and equipment include: | <ul style="list-style-type: none">• flat felt covered cutting tables• tungsten wheel glass cutters• speed cutters• circle cutters• L-squares and straight edges |

	• tape measures • marking pens • chinagraph pencils • templates and lubricants • tables appropriate for cutting glass sheets, including mobile air floatation tables • roller castor tables or tilt tables with air flotation and breaker bars
Thin glass includes:	• annealed sheet glass less than or equal to 10 mm thick and can include mirrors • laminated glass less than or equal to 11.76 mm thick
Glass processing by hand includes:	• cutting • shaping
Personal protective equipment includes:	• that prescribed under legislation, regulation and Australian Standard policies and practices: • gloves • safety glasses • gauntlets • footwear • earmuffs • aprons and overalls
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 • AS/NZS 4667:2000 Quality requirements for cut-to-size and processed glass

Unit Mapping Information

Supersedes and is equivalent to LMFGG2004C Process thin glass by hand.

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 MSFGG2004 Process thin glass by hand

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
- Identify and use AS/NZS 4667:2000 Quality requirements for cut-to-size and processed glass
- Complete straight cuts by hand and speed cutter and cut simple shapes, truncated and radius corners, circles, fan holes and freehand pay holes in annealed glass less than or equal to 10 mm and up to 1.0 m²
- Cut simple shapes, truncated corners and ovals in laminated glass less than or equal to 11.76 mm and up to 1.0 m²
- Calculate the cost of glass jobs
- 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

- Qualities and characteristics of glass, including hazards and handling requirements
- Correct identification and use of glass cutting equipment, their functions and procedures for use
- The set-up and operation of glass cutting equipment, including procedures for reporting product defects or equipment faults
- Workplace safety system requirements related to glass cutting
- Work flow requirements in relation to glass cutting

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 glass sheet/product, cutting equipment, such as hand glass cutter, circle cutter and speed cutter and a table.

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