



Australian Government

MSFGG2008 Glaze and re-glaze residential windows and doors

Release: 2

MSFGG2008 Glaze and re-glaze residential windows and doors

Modification History

Release 2 - Update of Australian Standards codes. Statement regarding currency of Australian Standards included in Range of Conditions and Performance Evidence.

Release 1 - New unit of competency

Application

This unit of competency covers fitting glass to residential windows and doors, other openings, or to other frames performed in workplaces involving on-site and off-site fabrication, installation and replacement of glass.

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 for the type of glass to be used and the method of fixing are identified from work instructions 1.2 Work health and safety (WHS) requirements for glazing/re-glazing of windows and doors, including personal protective equipment, are observed throughout the work 1.3 The process for fitting glass to window and doorframes is identified
2 Prepare for work	2.1 Work sequence is planned in a logical order to suit the job and in accordance with workplace procedures 2.2 Tools, equipment and materials (other than glass and frames) are selected and checked prior to use to ensure

- they are appropriate for the work, serviceable and in a safe condition
- 2.3 Type of glass to be fitted and frames are selected to match job requirements and glass checked for type, size and imperfections
 - 2.4 Glass fixing method is selected and frame condition is assessed to ensure suitability for glazing in accordance with customer order and Australian Standards
 - 2.5 Defective frames are reported for repair or replacement in accordance with workplace procedures
 - 2.6 Fixing and sealing materials are prepared by mixing or cutting to length, as appropriate
- 3 Identify site conditions and restraints
- 3.1 On-site difficulties are recognised and corrective action taken in accordance with regulations and workplace requirements
 - 3.2 Covering material is applied, where necessary, to protect existing fixtures and fittings
 - 3.3 Special characteristics of the window or door which may affect the finished job are identified and corrective action taken
 - 3.4 Prefabricated, modular scaffolding system to a maximum of one platform is erected safely and in the correct order of assembly, if required
 - 3.5 Access stairway or ladder and edge protection components are fitted to the modular scaffolding, where used
- 4 Perform glazing
- 4.1 Frame is prepared to receive glass by checking size against specifications, removing remains of glass and any sealants, cleaning and surface preparation, if required
 - 4.2 Glass is fixed to the frame using the selected method and in accordance with recognised industry procedures and Australian Standards
 - 4.3 Solvents and sealants are used in accordance with manufacturer recommendations and Australian Standards
 - 4.4 Excess sealing material is removed and glass and frame cleaned after fixing
- 5 Complete work
- 5.1 Completed installation is checked to ensure compliance

- with customer requirements and specifications
- 5.2 Prefabricated modular scaffolding, where used, is dismantled safely in the correct order and packed for transport
 - 5.3 Tools, equipment and materials are cleaned and stored following workplace procedures
 - 5.4 Work area is cleaned and left in a safe condition and rubbish disposed of, as appropriate
 - 5.5 Waste and scrap materials are removed for disposal or recycling, as required
 - 5.6 Workplace documentation is completed in accordance with workplace requirements including calculating the cost of glass, fittings, materials and labour

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 code, 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

Types of glass include:	• annealed glass • toughened glass • laminated glass • wired glass • tinted and heat reflective glass • coated glass and insulated glass units • patterned glass
Methods of glazing include:	• channel glazing • beaded glazing and double glazing
Glazing and re-glazing includes:	• installation of glass to metal and/or timber doors, windows and other frames, and re-glazing of existing windows and doors • residential glazing/re-glazing that is confined to simple doors and windows: • residential windows, such as fixed, sliding, casement, awning and double hung and louvres • residential doors, such as sliding, hinged, pivot and bi-fold
Tools and equipment include:	• tungsten wheel glass cutters • speed cutters • cutting lubricants • running pliers • straight edges and squares • tape measures • glass handling and lifting equipment • hack-out knives • chisels • putty knives • sprig/diamond guns • vinyl cutters and rollers • pry bars • sealant guns • blade and Phillips head screwdrivers • pop rivet guns • electric and pneumatic drills • rubber mallets • claw hammers • nail punches • personal protective equipment
Materials include:	• flat glass and acrylic glazing products • plastic

	• aluminium • steel • solid timber • gaskets • sealants • adhesives • glazing tapes • setting blocks
Matching job requirements includes:	• customer order • existing glass type
Glass fixing factors include:	• specification • type of glass and frame • security requirements • sealing methods • compliance with relevant Australian Standards
Prefabricated, modular restricted height scaffolding includes:	• completed scaffolding less than 3 m in completed height from the ground • erection as close as practicable to the working face, and where the scaffold is greater than 225 mm from the working face, guardrails and mid-rails to the inner face must be installed • dismantling by accessing the scaffold platform by stairway or ladder and start dismantling from an end bay • dismantling sequence is to dismantle guardrails, mid-rails, ledgers, transoms and standards first
Personal protective equipment includes:	• that prescribed under legislation, regulation and enterprise policies and practices: • gauntlets • gloves • safety glasses • hard hats • safety footwear • 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 • on-site procedures and regulations relating to the handling and movement of glass

- Australian Standards:
 - AS 1288:2006 Glass in buildings - Selection and installation
 - AS/NZS 2208:1996 Safety glazing materials in buildings
 - AS/NZS 4667:2000 Quality requirements for cut-to-size and processed glass
 - AS 2047:2014 Windows in buildings - Selection and installation
 - AS/NZS 4666:2012 Insulating glass units

Note, wherever Australian Standards are listed they apply at the time of publication, but the most current version (including amendments) or replacement versions are to be used.

Unit Mapping Information

Supersedes and is equivalent to LMFGG2008C Glaze/re-glaze residential windows and doors.

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 MSFGG2008 Glaze and re-glaze residential windows and doors

Modification History

Release 2 - Update of Australian Standards codes. Statement regarding currency of Australian Standards included in Range of Conditions and Performance Evidence.

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
- Optimise glass sizes for economical cutting and assembling of required materials and glaze or re-glaze the following:
 - timber putty faced window sashes or door panel
 - timber beaded sidelight, fixed panel, sliding, hinged, pivot and/or bi-fold doors
 - metal framed channel glazed door or window
 - metal framed beaded door or window
- Glazing is to include:
 - calculating glazing clearance and cutting size
 - cutting glass to AS/NZS 4667:2000 Quality requirements for cut-to-size and processed glass
 - *Note, wherever Australian Standards are listed they apply at the time of publication, but the most current version (including amendments) or replacement versions are to be used).*
 - selecting correct glazing tools, equipment, glazing sealants, vinyls and tapes
 - preparing the working area
 - preparing glazing rebates and channels prior to installation
 - cleaning glass, tools, equipment and work area
 - calculating the cost of glass, glazing materials and labour
 - selecting re-glazing tools and equipment
 - hacking out/removing beads and glass safely from timber windows and doors
 - removing and disassembling metal window sashes and doors and removing glass safely

- installing and/or adjusting sash cords, unique, spiral or spring balances on double hung windows
- Erect, use and dismantle modular scaffolding equipment safely
- 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
- Techniques, methods, materials and process of glazing simple/complex window and doorframes
- Workplace safety system requirements related to the glazing simple/complex window and doorframes
- Relevant Australian Standards
- Work flow requirements in relation to fitting glass
- Characteristics, purpose and operation of tools and equipment used in glazing simple/complex window and doorframes
- Safe methods for erecting and dismantling restricted height modular scaffolding systems
- Correct identification of equipment, processes and procedures

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 frames, glass, fixing material, sealants, modular scaffolding, workplace operating procedures and work orders, personal protective equipment and an appropriate work area/site.

Links

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