MSFGG3019 Conduct commercial and structural re-glazing

Release: 1

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Modification History

Release 1 - New unit of competency

Application

This of competency unit covers replacing glass in commercial, structural and/or architectural engineered applications.

Licensing, legislative or certification requirements may apply to this unit and relevant state/territory and local government agencies should be consulted to determine any necessary certification or licensing for undertaking glass and glazing work. Access to construction sites requires certification of general induction training specified by the *National Code of Practice for Induction for Construction Work* (ASCC 2007).

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 in the form of type of glass, frames and the method of fixing are identified from work instructions
	1.2 Work health and safety (WHS) requirements for fabrication and installation of commercial re-glazing, including personal protective equipment, are identified and observed throughout the work
	1.3 The process for fabricating and installing commercial re-glazing is identified

2	Prepare for work	2.1	Work sequence is planned in a logical order to suit the job and workplace requirements
		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 the customer order, existing glass type, requirements for security, noise or light control and relevant Australian Standards
		2.4	Glass fixing method is selected to meet specifications
		2.5	Glass is checked for type, size and imperfections
3	Identify site conditions and constraints	3.1	Site safety hazards are recognised and corrective action taken to reduce injury to self and others including working at heights and on scaffolding
		3.2	Other on-site difficulties are recognised and corrective action taken in accordance with regulations and glazing requirements
		3.3	Covering material is applied, where necessary, to protect existing fixtures and fittings
		3.4	Special characteristics of the window or door which may affect the finished job are identified and corrective action taken
4	Prepare frame and materials	4.1	Frame condition, if applicable, is assessed to ensure suitability for re-glazing in accordance with customer requirements and Australian Standards
		4.2	Defective frames are reported for repair or replacement in accordance with workplace procedures
		4.3	Frame is prepared, if required, to receive glass
		4.4	Fixing and sealing materials are prepared by mixing or cutting to length, as appropriate
5	Fit glass	5.1	Glass is fixed to the frame using the selected method and in accordance with recognised industry procedures and Australian Standards
		5.2	Solvents and sealants are used in accordance with

			manufacturer recommendations and Australian Standards
		5.3	Excess sealing material is removed and glass and frame cleaned after fixing
6	Inspect final product and clean up work area	6.1	Completed installation is checked to ensure compliance with customer requirements, specifications and Australian Standards
		6.2	Work area is cleaned and left in a safe condition and rubbish removed from work area and disposed of in accordance with relevant statutory requirements and enterprise requirements
		6.3	Tools, equipment and materials are cleaned and stored following workplace procedures
		6.4	Waste and scrap material are removed for disposal or recycling, as required
		6.5	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 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
Types of glass include:	• annealed glass
	• toughened glass
	• laminated glass
	• wired glass
	• bandit-resistant glass
	• bullet-resistant glass
	• heat-reflective glass
	• sputter coated
	• spandral glass
Methods of fixing include:	• considering the specification
	• type of glass and frame
	• security requirements
	• sealing methods
	• relevant Australian Standards
	• glazing methods:
	• pocket
	• flush
	• channel glazing
	• structural and double glazing
Fabrication and installation of commercial re-glazing includes:	• work involving the on-site installation or replacement of framed and unframed glass for commercial, structural and other architectural engineered applications. This covers:
	• commercial windows and doors:
	• casement
	• sash
	• awning and double hung windows

	- shopfronts and returns
	- louvres
	- hinged, pivot and sliding doors and windows
	- automatic doors
	- mirrors
	- facetted glazing
	- fin-supported glazing
	- furniture applications
	- showcases
	- sliding tracks and food cabinets
	- curtain walls
	- balustrading
	- structural and suspended glazing
	- overhead glazing
	- toughened glass assemblies
	- aluminium glazing systems, including planar assemblies, curtain wall systems, spider assemblies, panel wall systems (hung and stacked)
	- Armour-view balustrading
	- watertight glazing techniques
Tools and equipment include:	- glass cutters
	- pliers
	- hack-out knives
	- drills
	- putty knives
	- tape measures
	- scaffolding
	- ladders
Materials include:	- all forms of flat glass and acrylic glazing products
	- plastic
	- aluminium
	- steel
	- solid timber
	- gaskets
	- sealants
	- structural silicone
	- adhesives
Preparation includes:	- removing any remains of glass and sealants
	- cleaning
	- surface preparation, if required
	- checking size against specification

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
	• Australian Standards:
	• AS 1288:2006 Glass in buildings - Selection and installation, Section 9 – Framed, unframed and partly framed glass assemblies
	• AS/NZS 2208:1996 Safety glazing materials in buildings
	• AS/NZS 4667:2000 Quality requirements for cut-to-size and processed glass

Unit Mapping Information

Supersedes and is equivalent to LMFGG3019C Conduct commercial and structural re-glazing.

Links

Companion Volume implementation guides are found in VETNet - https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=0601ab95-583a-4e93-b2d4-cfb27 b03ed73