



Australian Government

MSFGG3028 Select, cut and process materials for glazing products

Release: 1

MSFGG3028 Select, cut and process materials for glazing products

Modification History

Release 1. Supersedes and is not equivalent to MSFGG2009 Fabricate and assemble frames, and, MSFGG3020 Use static machines for aluminium and unplasticised polyvinyl chloride (uPVC) fabrication.

Application

This unit describes the skills and knowledge required to identify work requirements, prepare tools and materials, and cut and process materials for glazing products. Materials may be aluminium, steel, timber or unplasticised polyvinyl chloride (uPVC).

This unit applies to individuals cutting and processing materials in accordance with pre-determined work orders and plans.

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

N/A

Unit Sector

Glass and Glazing

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify work requirements	1.1 Read work documentation and identify cutting and processing requirements 1.2 Identify and follow work health and safety requirements 1.3 Plan a logical work sequence suited to the job and workplace procedures
2. Prepare for work	2.1 Select and check tools and equipment for suitability, serviceability

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	and safety prior to use 2.2 Identify and match samples signed off by the customer 2.3 Check required components against specifications and select from available products 2.4 Set and test cutting equipment settings and safety controls in accordance with workplace procedures and manufacturer instructions 2.5 Accurately measure materials, and mark to cutting list requirements with most economical use of materials
3. Cut materials	3.1 Reconfirm machine settings through trial cutting on test materials prior to commencement of full cutting process 3.2 Cut materials to list requirements in accordance with workplace procedures 3.2 Identify problems with the cutting process and make required adjustments to process or equipment 3.3 Check and confirm that materials have been correctly and accurately cut to size based on job specifications and repair, reprocess or discard in accordance with workplace procedures
4. Fabricate parts	4.1 Set and test equipment settings and safety controls in accordance with workplace procedures and manufacturer instructions 4.2 Position and secure materials in jig to prevent movement 4.3 Process materials in accordance with specification 4.4 Identify processing problems and make required adjustments to process or equipment 4.5 Inspect completed product for compliance with quality and work order requirements and repair, reprocess or discard in accordance with workplace procedures
5. Complete work	5.1 Process and store completed product in accordance with workplace procedures 5.2 Remove excess materials for disposal or recycling in accordance with workplace procedures 5.3 Clean work area and safely dispose of rubbish 5.4 Remove and store tools, equipment and unused materials in accordance with workplace procedures 5.5 Accurately complete required workplace documentation

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

No equivalent unit.

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 MSFGG3028 Select, cut and process materials for glazing products

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- completed all of the following in accordance with work, safety and Australian Standards requirements:
 - produced a cutting list by hand and through use of software
 - identified, selected and checked 3 different extrusion profiles against customer requirements
 - cut:
 - 3 different profiles
 - 3 different lengths to allow 3 different set up and checks of the saw
 - processed materials for 2 different product types by hand:
 - using a jig
 - using hand tools including punches and files
 - processed materials for 2 different product types by machine (must be different to those products processed by hand)
 - demonstrated skills in:
 - identifying the correct processing type
 - identifying the correct die
 - changing the die in the press
 - drilling or crimping
 - precision measurement
 - safe use of a die punch press.
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Knowledge Evidence

There must be evidence the candidate has knowledge of:

- Australian Standards/New Zealand Standards AS/NZS 4667 and AS1288: their key purpose and how they impact fabrication work
- mathematical procedures for estimation, optimisation and precision measurement
- glazing product cutting and processing:

- workplace safety system requirements
- work flow requirements
- qualities and characteristics of materials used in different glazing products
- how to interpret cutting and processing requirements from different types of work documentation
- cutting and processing techniques, the types of problems that may occur and how to avoid and respond:
 - identifying the correct processing type
 - identifying the correct die
 - changing the die in the press
 - drilling or crimping
 - precision measurement
 - safe use of a die punch press
- installation considerations for different products and how this impacts cutting and processing
- types, characteristics, safe use, maintenance and limitations of cutting tools and equipment:
 - hack saw
 - drop saw
 - rip saw
 - up cut saw
- techniques and requirements for calibrating and adjusting cutting equipment
- types, characteristics, safe use, maintenance and limitations of different jigs and fixtures and die punch presses
- quality indicators for cut and processed components
- documentation requirements for fabrication work.
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Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of suitable facilities, equipment and resources, including:
 - equipment, tools and materials to complete tasks in the Performance Evidence
 - work orders
 - workplace procedures.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

Links

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