

Title	Machine aluminium extrusions for the manufacture of aluminium joinery products		
Level	3	Credits	8

Purpose	<p>This entry-level unit standard is for people employed in the aluminium joinery industry.</p> <p>A person credited with this unit standard is able to:</p> <ul style="list-style-type: none"> • demonstrate knowledge of tools, machinery, and equipment used for machining aluminium extrusions; • prepare machinery and work area for safe operation; • machine aluminium extrusions; • and care for tools, machinery, and equipment to maintain production unit integrity.
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Classification	Joinery > Architectural Aluminium Joinery
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Available grade	Achieved
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Guidance Information

- 1 Legislation relevant to this unit standard includes – Building Act 2004, Health and Safety at Work Act 2015, and Resource Management Act 1991.
- 2 Definition
Company procedures – the documents and procedures that include company rules, codes and practices; machine and equipment operating instructions; quality and conformance checks; and health and safety requirements.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of tools, machinery, and equipment used for machining aluminium extrusions.

Performance criteria

- 1.1 Tools, machinery, and equipment used for machining are identified in terms of the types and products produced.

Range machines may include – milling machines, profile routers, punching machine, drill presses; evidence is required of two different machines; tools and equipment may include – cutting sheets, marker pens, steel ruler, steel scribe, dot punch, engineers' square, profile blocks, bench stops; evidence is required of four different tools and equipment.

Outcome 2

Prepare machinery and work area for safe operation.

Performance criteria

- 2.1 Work area is cleared of debris and abrasive material in accordance with company procedures.
- 2.2 Job specifications and quality requirements are verified in accordance with company procedures.
- 2.3 Tools, machinery, and equipment are selected and checked to meet the requirements of the job in accordance with company procedures.
- 2.4 Any defective and damaged tools, machinery, and equipment are reported to a supervisor in accordance with company procedures.
- 2.5 Sequence of operations is planned and verified with a supervisor in accordance with company procedures.
- 2.6 Machines are set up to accept work safely and without damage to workpiece or machines in accordance with company procedures.
- Range machines include – milling machines, profile routers, punching machines, drill presses, profile blocks, bench stops, stop systems, drilling systems, tape calibration.
- 2.7 Accessories and workholding fixtures are selected and installed on machines in accordance with manufacturer's instructions and/or company procedures.

Outcome 3

Machine aluminium extrusions.

Performance criteria

- 3.1 Tools, machinery, and equipment are set up and used in accordance with manufacturer's recommendations in order to prevent damage to machinery, and materials, and injury to personnel.
- 3.2 Holes in extrusions are drilled in accordance with the job specifications.
- 3.3 Rebates in extrusions are milled in accordance with the job specifications.
- 3.4 Holes and slots in extrusions are routed or punched in accordance with the job specifications.
- 3.5 Prepared extrusions are checked for compliance with the job specifications and quality requirements in accordance with company procedures.
- 3.6 Prepared extrusions are allocated for assembly, or stored, in accordance with company procedures.

Outcome 4

Care for tools, machinery, and equipment to maintain production unit integrity.

Performance criteria

- 4.1 Tools, machinery, and equipment are cleaned, lubricated, and maintained in accordance with manufacturer's specifications and company procedures.
- 4.2 Work area is cleaned after each operation and waste is removed and placed in specified containers in accordance with company procedures.

Planned review date	31 December 2026
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	24 August 2006	31 December 2012
Rollover and Revision	2	20 May 2011	31 December 2017
Review	3	21 May 2015	31 December 2025
Review	4	26 May 2022	N/A

Consent and Moderation Requirements (CMR) reference	0048
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council qualifications@hangaarorau.nz if you wish to suggest changes to the content of this unit standard.