

Title	Demonstrate knowledge of assembly processes and assemble basic aluminium joinery products		
Level	2	Credits	8

Purpose	<p>This pre-entry unit standard is for people training to work 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 the processes for the assembly of basic aluminium joinery products; • prepare materials and work area for the safe and productive assembly of basic aluminium joinery; • assemble basic aluminium joinery to ensure required performance for completed unit; and • check the assembled product for compliance with job specifications, and complete company procedures.
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Classification	Joinery > Architectural Aluminium Joinery
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Available grade	Achieved
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Guidance Information

- 1 Legislation and standards relevant to this unit standard include – Building Act 2004, Health and Safety at Work Act 2015, Resource Management Act 1991, New Zealand Standard (NZS) 4211:2008 *Specification for performance of windows*, NZS 3504:1979 *Specification for aluminium windows*, 4223.1:2008 *Glazing in buildings – Part 1: Glass selection and glazing*, and NZS 4223.2:2016 *Glazing in buildings- Part 2: Insulating glass units*, available at <http://www.standards.co.nz>.
- 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.
- 3 Range
Basic aluminium joinery products include – windows (awning window frame with one mullion, one transom and one sash; bi-fold window frame), doors (sliding door frame with one mullion; hinged door frame; bi-fold door frame).
- 4 This unit standard can be assessed against in a simulated situation. This refers to a situation that reflects some elements of commercial realism, but the candidate must be under time pressure.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of the processes for the assembly of basic aluminium joinery products.

Performance criteria

- 1.1 Sources of product specifications and quality requirements for each job are described.
- Range sources include – computerised drawings, job sheets.
- 1.2 Product descriptions and process instructions are identified for each job.
- 1.3 The material requirements for the job are described.
- Range the materials required for each job including aluminium extrusion, screws, sealant, glass.
- 1.4 The tools required for the jobs are selected, and their use and safety procedures are described.
- Range tools include – soft hammer, screwdrivers, pop riveters, blade knife, sealant gun, snips, scissors, measuring tools, drills.
- 1.5 Each part in the assembly process is described in terms of company procedures.
- 1.6 Sequence of assembly operation is described in terms of company procedures.
- 1.7 Quality checks for finished aluminium joinery products are described in terms of company procedures.

Outcome 2

Prepare materials and work area for the safe and productive assembly of basic aluminium joinery.

Performance criteria

- 2.1 Work area is cleared of debris and abrasive materials in accordance with company procedures.
- 2.2 Extrusions are cleaned in accordance with company procedures.

2.3 Tools and equipment required are selected, checked for serviceability, and set up in accordance with company procedures.

Range tools and equipment include – soft hammer, screw drivers, pop riveters, blade knife, sealant gun, snips, scissors, measuring tools, drills.

2.4 Materials are selected, profiles are verified for accuracy, and materials are laid out in accordance with company procedures.

Range materials include – sealant, glazing seals, mohair seals, wool pile seal, fasteners.

Outcome 3

Assemble basic aluminium joinery to ensure required performance for completed unit.

Performance criteria

3.1 Sealant is applied in accordance with manufacturer's specifications.

Range application includes – small joint sealant, silicone sealant, secondary seals.

3.2 Fasteners for joint requirements are selected in accordance with job specifications.

Range fasteners may include – self-tapping screws, rivets, nutserts, machine screws, tek screws.

3.3 Joinery products are assembled and fastened in accordance with job specifications.

Range assembled and fastened may include – staked mitre, spigot gusset and screwed mitre, butt joint.

3.4 Assembled product is cleaned and all excess sealant residue removed in accordance with company procedures.

Outcome 4

Check the assembled product for compliance with job specifications, and complete company procedures.

Performance criteria

4.1 Angles and dimensions of the product are checked and confirmed to be in accordance with the job specifications.

4.2 Product is cleaned and checked to be free of defects in accordance with the job specifications and company procedures.

- 4.3 Tools and equipment are cleaned and surplus materials are stored in accordance with company procedures.
- 4.4 Work area is cleaned and waste materials are disposed of 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.