

Title	Assemble aluminium joinery products		
Level	3	Credits	15

Purpose	<p>A person credited with this standard is able to:</p> <ul style="list-style-type: none"> • prepare to assemble aluminium joinery products; • prepare the work area for the assembly of aluminium joinery; • prepare aluminium extrusions for assembly; • assemble aluminium joinery; • select and fit hardware to assembled aluminium joinery unit; • check the assembled product for compliance with the job specifications, and clear and clean the work area.
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Classification	Joinery > Architectural Aluminium Joinery
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Available grade	Achieved
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Guidance Information

- 1 Scope of practice**

Working under supervision means the ability to work to construction workplace standards under the supervision of a commercially competent practitioner whose role is to ensure the completed construction meets industry and regulatory requirements. This standard does not recognise commercial competence.
- 2 Assessment**

This unit standard must be assessed under the supervision of a commercially competent practitioner in workplace conditions that reflect:

 - current health, safety, industry, and workplace requirements; and
 - industry requirements for commercially acceptable timeframes.

Evidence generated for assessment against this standard must be verified by a person who has current expertise in the building and construction trades and has had the opportunity to regularly observe the candidate in the workplace.
- 3 Assembly of joinery products must be completed without injury to personnel or damage to products and equipment. Personal protective equipment must be used to meet regulatory and worksite requirements.**
- 4 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.

5 Range

Aluminium joinery products include – windows (awning, casement, fixed, hinged, sliding bi-fold, coupled frames), doors (hinged, sliding, bi-fold, coupled frames).

Evidence generated for assessment against this standard must reflect workplace and industry requirements specified in:

- documented company and worksite specifications, procedures, and practices;
- manufacturer recommendations, specifications, and technical data sheets;
- applicable specifications from other sources such as an architect, designer, engineer, or supervisor;
- applicable material safety data sheets;
- the New Zealand Building Code.

Evidence generated for assessment against this standard must reflect the best practice guidelines and principles specified in:

- NZS 4211:2008. *Specification for performance of windows.*
- NZS 3504:1979. *Specification for aluminium windows.*
- NZS 4223.1:2008 *Glazing in buildings – Part 1: Glass selection and glazing.*
- NZS 4223.2:2016 *Glazing in buildings – Part 2: Insulating glass units.*

NZS and SNZ standards can be retrieved from <http://www.standards.co.nz/>.

Outcomes and performance criteria

Outcome 1

Prepare to assemble aluminium joinery products.

Performance criteria

1.1 Product specifications and quality requirements are verified.

Range specifications include – computerised drawings, job sheets.

1.2 Sequence of operations is planned and verified with a supervisor.

Outcome 2

Prepare the work area for the assembly of aluminium joinery.

Performance criteria

2.1 Work area is cleared of debris and abrasive materials.

2.2 Tools and equipment required are selected, checked for serviceability, and set up.

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

- 2.3 Materials are selected, profiles are verified for accuracy, and materials are laid out.

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

Outcome 3

Prepare aluminium extrusions for assembly.

Performance criteria

- 3.1 Extrusions are cleaned.

- 3.2 Seals are fitted to the product.

Range seals may include – PVC backing rubber, wood pile seals, mohair seals, co-extruded PVC/Santoprene, self-adhesive tape.

Outcome 4

Assemble aluminium joinery.

Performance criteria

- 4.1 Sealant is applied in accordance with manufacturer's specifications.

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

- 4.2 Fasteners for joint requirements are selected in accordance with the job specifications.

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

- 4.3 Joinery products are assembled and fastened in accordance with the job specifications.

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

Outcome 5

Select and fit hardware to assembled aluminium joinery unit.

Performance criteria

- 5.1 Hardware of material compatible with the product is selected, fitted, and its operational is confirmed in accordance with manufacturer specifications and the job specifications.

- 5.2 Select and fit hardware compatible with the product. Confirm the hardware operates in accordance with manufacturer specifications.

Outcome 6

Check the assembled product for compliance with the job specifications, and clear and clean the work area.

Performance criteria

- 6.1 Angles and dimensions are checked and confirmed to be in accordance with the job specifications.
- 6.2 Unit is cleaned and checked to be free of defects in accordance with the job specifications.
- 6.3 Tools and equipment are cleaned and surplus materials are stored.
- 6.4 Waste materials are removed from assembly site and disposed of.

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	11 August 1993	31 December 2012
Review	2	26 July 2000	31 December 2012
Review	3	24 August 2006	31 December 2012
Rollover and Revision	4	20 May 2011	31 December 2017
Review	5	21 May 2015	31 December 2025
Review	6	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.