

Title	Assemble non-standard aluminium joinery products		
Level	4	Credits	10

Purpose	<p>This unit standard is for experienced 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"> • prepare to assemble non-standard aluminium joinery products; • prepare the work area for the safe and productive assembly of the aluminium joinery; • prepare the aluminium extrusions for assembly; • assemble the aluminium joinery for the completed product; • select and fit hardware to assembled aluminium joinery product; • check the assembled product for compliance with the job specifications and complete company procedures; and • care for tools and equipment.
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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 Building Code Compliance Documents and Handbooks. Wellington: Department of Building and Housing, 2008, available at <http://www.dbh.govt.nz/building-code-compliance-documents>;
New Zealand Standard (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*, and NZS 4223.3:2016 *Glazing in buildings - Part 3: Human impact safety requirements*, available from <http://www.standards.co.nz>.
- 2 Definitions
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.
Non-standard aluminium joinery products – unique designs or ‘one-off’ products characterised by unusual or non-standard angles and dimensions. They include – windows (arch, bay, bow, faceted, raked, internal and external corners, double hung, greenhouse), doors (arch, raked, internal/external in plan corners).

Unusual angles – any angles that are not 45 or 90 degrees, or not common to the company's products.

3 Range

Evidence is required for three non-standard items, one of which must include one or more non standard corners, produced in the candidate's workplace.

Outcomes and performance criteria

Outcome 1

Prepare to assemble non-standard aluminium joinery products.

Performance criteria

1.1 Product or job specifications and quality requirements are verified in accordance with company procedures.

Range specifications include – computerised drawings, job sheets, site measurements, templates.

1.2 Sequence of operation is planned in accordance with company procedures.

1.3 Personal protective equipment is selected and worn in accordance with company procedures.

Range personal protective equipment may include – safety glasses, dust masks, protective footwear, ear protection.

Outcome 2

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

Performance criteria

2.1 Work area is cleared of debris and abrasive materials in accordance with company procedures.

2.2 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.

2.3 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

Prepare the aluminium extrusions for assembly.

Performance criteria

3.1 Extrusions are cleaned in accordance with company procedures.

3.2 Seals are fitted to the product in accordance with the job specifications.

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

Outcome 4

Assemble the aluminium joinery for the completed product.

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 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 and company procedures.

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

Outcome 5

Select and fit hardware to assembled aluminium joinery product.

Performance criteria

5.1 Hardware of material compatible with the unit is selected, fitted, and is operational in accordance with the job specifications.

Outcome 6

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

Performance criteria

- 6.1 Angles and dimensions of the product are checked and confirmed to be in accordance with the job specifications.
- 6.2 Product is cleaned and checked to be free of defects in accordance with the job specifications and company procedures.

Outcome 7

Care for tools and equipment.

Performance criteria

- 7.1 Tools and equipment are cleaned and maintained, and surplus materials are stored in accordance with company procedures.
- 7.2 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
Review	2	20 June 2008	31 December 2012
Rollover and Revision	3	20 May 2011	31 December 2017
Review	4	21 May 2015	31 December 2025
Review	5	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.