

<b>Title</b>	<b>Manufacture doors and windows</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>40</b>

<b>Purpose</b>	People credited with this unit standard are able to: <ul style="list-style-type: none"> <li>– prepare to manufacture doors and windows;</li> <li>– machine and assemble window and door frames;</li> <li>– machine and assemble window sashes and doors; and</li> <li>– fit and hang sashes and doors.</li> </ul>
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<b>Classification</b>	Joinery > Joinery Operational Skills
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<b>Available grade</b>	Achieved
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### Guidance Information

- 1 Legislation and standards relevant to this unit standard include:
  - Health and Safety at Work Act 2015; available from [www.legislation.govt.nz](http://www.legislation.govt.nz);
  - SNZ TS 4211:2022 *Specification for performance of windows*;
  - NZS 3610:1979. *Specification for profiles of mouldings and joinery*, available from <http://www.standards.co.nz/>, and any subsequent amendments and replacements.
- 2 Assessment
 

This unit standard does not cover use of a mortisers or tenoners to manufacture doors and windows. Those skills are recognised by unit standard 28217, *Set up, operate, and undertake routine maintenance on a mortiser and a tenoner for joinery work*.

Evidence for this unit standard must reflect commercial competence; the ability to demonstrate knowledge and skills in the context of the currently accepted requirements of a business operating in a commercial environment.

Evidence must also reflect commercial standards; the verbal and written information covering company policy, standard operating procedures and processes and job-specific instructions.

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

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

### 3 Definitions

*Doors and windows* refer to shaped window, fixed glazed, louvre, pivot, sliding/folding and double-hung window and shutters, exterior and interior door frames, flush door, doors (ledged and braced, framed and ledged, glazed, panelled, louvered), gates and casement window.

*Workplace requirements* refer to the documented procedures specific to a workplace which set out the standard and the required practices of that workplace. This may include job specifications, procedures, practices, manufacturer recommendations, technical data sheets and material safety data sheets.

### 4 Range

One straight and one shaped door and one straight and shaped window.

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## Outcomes and performance criteria

### Outcome 1

Prepare to manufacture doors and windows.

Range size profile, and quantity, hardware.

#### Performance criteria

- 1.1 Requirements are confirmed from the window and door schedule and the work area is prepared.
- 1.2 Window and door frames are set out in accordance with the working drawings.
- 1.3 Material requirements are determined, and the order list is prepared.
- 1.4 Cutting list is prepared.

### Outcome 2

Machine and assemble window and door frames.

#### Performance criteria

- 2.1 Personal protective equipment is selected and used.
- 2.2 Components are machined in accordance with profiles specified in the working drawings.
- 2.3 Joints are manufactured according to working drawings.
- 2.4 Surfaces are finished.
- 2.5 Window and door frame joints are sealed before assembly.
- 2.6 Windows and door frames are assembled and finished.

**Outcome 3**

Machine and assemble window sashes and doors.

**Performance criteria**

- 3.1 Door and sash components are machined in accordance with profiles specified in the working drawings.
- 3.2 Joints are manufactured in accordance with the working drawings.
- 3.3 Cramp is set up to match the size of the sash or door.
- 3.4 Adhesive is applied, and the sash or door is assembled in accordance with the job specifications.
- 3.5 Faces are sanded and finished.
- 3.6 Post-operational procedures are completed in accordance with workplace requirements.

**Outcome 4**

Fit and hang sashes and doors.

Range side hung, awning, sliding, folding.

**Performance criteria**

- 4.1 Hardware is determined from the job specifications.
- 4.2 Door or sash is fitted to the frame in terms of correct clearances, square, without twist or wind.
- 4.3 The sash or door are hung in accordance with workplace requirements.
- 4.4 Sashes and doors are finished and prepared for storage or freight.

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<b>Replacement information</b>	This unit standard replaced unit standard 2518, unit standard 2519, unit standard 2520, unit standard 2523, unit standard 2524, unit standard 2525, and unit standard 2542
<b>Planned review date</b>	31 December 2027

**Status information and last date for assessment for superseded versions**

Process	Version	Date	Last Date for Assessment
Registration	1	24 October 2014	31 December 2025
Review	2	30 March 2023	N/A

**Consent and Moderation Requirements (CMR) reference**

0073

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

**Comments on this unit standard**

Please contact Waihangā Ara Rau Construction and Infrastructure Workforce Development Council at [qualifications@WaihangāAraRau.nz](mailto:qualifications@WaihangāAraRau.nz) if you wish to suggest changes to the content of this unit standard.