

Title	Retrofit window joinery		
Level	4	Credits	15

Purpose	<p>This unit standard is for experienced people working in the glazing industry who are involved in retrofitting timber or aluminium joinery windows.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> • demonstrate knowledge of retrofitting window joinery; • prepare to retrofit window joinery; and • retrofit window joinery.
----------------	--

Classification	Glass and Glazing > Flat Glass
-----------------------	--------------------------------

Available grade	Achieved
------------------------	----------

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 3604:2011 *Timber-framed buildings*, AS/NZS 1170.0:2002 *Structural design actions – Part 0: General principles*, NZS 4223.3:2016 *Glazing in buildings – Part 3: Human impact safety requirements*, available at <http://www.standards.co.nz>; and AS/NZS 4666:2012 *Insulating glass units*, E2 AS/1 – Acceptable Solution E2/AS1: External Moisture, available at <https://codehub.building.govt.nz/resources/e2as1-amd-9/>.
- 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.

Retrofit – replacing existing glass in timber or aluminium joinery frames with different glass which may entail modifications to the frame.

Worksite requirements – refer to instructions to staff on policy and procedures which are documented in memo or manual format and are available in the workplace. These requirements include – company specifications and procedures, work instructions, manufacturer’s specifications, product quality specifications, legislative requirements.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of retrofitting window joinery.

Performance criteria

- 1.1 Different types of joinery frames are explained in terms of their advantages and disadvantages.
- Range evidence is required of two types of joinery that can be modified to accept single glass or insulating glass units (IGUs).
- 1.2 Specific requirements related to retrofitting window joinery are explained in terms of their design and impact on the quality of the finished product.
- 1.3 Issues related to the performance of retrofitted window joinery are identified and described in terms of remedial actions required.
- Range issues may include – glass type, IGU type, thickness, orientation, frame material, bead design, glazing gaskets and materials, sealants, friction stays; evidence of three is required.

Outcome 2

Prepare to retrofit window joinery.

Performance criteria

- 2.1 Customer's design requirements are confirmed before work begins in accordance with worksite requirements.
- Range requirements include – design details, dimensions, drawings and specifications, product information, site operational procedures.
- 2.2 Selection of glazing materials and sealants reflects their suitability for the glazing method and the job specifications for the work.
- 2.3 All equipment, tools, and installation materials are checked and assembled before work begins in accordance with worksite requirements.
- 2.4 Site check is completed in accordance with worksite requirements.
- Range site check includes – measurements, site floor levels and allowance for floor finishes, suitability and location of fixing provisions, if surrounds are plumb and/or level, any installation hazards or problems.

2.5 Construction process is planned in accordance with worksite requirements.

Range planning includes – cost, time, working drawings, engineering requirements, availability of materials, safety.

2.6 Frame to be glazed is checked for suitability in accordance with worksite requirements.

Range checks include – obstruction free, clean, dry, primed and/or sealed, compatibility with glazing material and glazing system, weight loading.

Outcome 3

Retrofit window joinery.

Performance criteria

3.1 Glass is checked to ensure it meets the design, the job specifications, and worksite requirements.

3.2 Frame and beads are checked to ensure they meet the job specifications and worksite requirements.

3.3 Glazing is completed without injury to personnel or damage to product and equipment in accordance with the job specifications and worksite requirements.

3.4 Where required, reassembly of disassembled frames is completed in accordance with worksite requirements.

3.5 Glass and frame are cleaned and work area is cleared and cleaned in accordance with worksite requirements.

3.6 Customer is advised of any relevant maintenance requirements in accordance with worksite requirements.

Planned review date	31 December 2026
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 June 2015	31 December 2025
Review	2	26 May 2022	N/A

Consent and Moderation Requirements (CMR) reference	0048
--	------

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.