

40790 Install exterior door and window joinery units

Kaupae Level	4
Whiwhinga Credit	8
Whāinga Purpose	<p>This skill standard is for people intending to complete qualifications and credentials in the carpentry trades.</p> <p>People with this skill standard have the skills to install exterior door and window joinery units.</p> <p>This skill standard may contribute to New Zealand qualifications designed for construction trades.</p>

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Determine the planning requirements of exterior door and window joinery units.	a. Installation planning requirements of exterior joinery units are determined from plans and specifications.
	b. Weather proofing requirements of exterior joinery units are determined from plans, specifications and industry standards.
2. Install exterior door and window joinery units.	a. Preparation of substrates and structure is carried out and reflects plan and specification requirements.
	b. Joinery units are installed and integrated with cladding to reflect plan and specification requirements.
3. Install flashings, seals, and trim to exterior door and window joinery units.	a. Preparation of flashings is carried out to reflect plans and job specifications.
	b. Flashings are installed to reflect plans and job specifications.
	c. Installation of seals and finishing external trims around doors and windows is carried out to reflect plans and specifications.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria

Assessment specifications:

To achieve this standard the candidate must be capable of installing exterior door and window joinery units to industry standards.

Industry standards must reflect industry best practice, workplace procedures, and be within acceptable tolerances as defined in New Zealand codes, standards and regulations.

Plans and specifications can include working drawings, plan specifications, manufacturer specifications, installation instructions and work, demolition and project plans.

This standard must be assessed in the workplace.

Evidence for this standard must be demonstrated:

- to current and relevant Legislation, Standards, and Codes (including safety),
- in an environmentally sustainable manner,
- within an acceptable timeframe,
- in different and unfamiliar contexts,
- with acceptable behaviours.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

Types of windows:

- Awning, stacker, hopper, fixed, casement, bay, sliding, fanlight, bi-fold.

Types of doors:

- Flush, French/patio, panelled, glazed, entrance, garage.

Materials and properties:

- Material types: aluminium, timber, uPVC, composite, steel.
- Key properties: finish, grade, treatment, weight, finishes/coatings, strength, colours, profiles, energy efficiency, durability, and maintenance requirements.

Types of glass:

- Safety glass, tempered glass, double/triple glazing, low-e glass, laminated glass, tinted glass, and frosted glass.

Heat transfer management:

- Materials and designs that contribute to thermal performance, including glazing options, thermal breaks, and insulated frames.

Parts of windows and doors:

- Jamb, rail, head, sash, sill, glazing bars, mullion, weather/drip grooves, transom, throatings, stile.

Preparing openings:

- Cutting and fixing underlay or building wrap to internal faces of framing.
- Applying flashing tape to ensure weathertightness.
- Installing flashings, cavity battens, sill supports, and cavity closers as required.
- Allowances for cavity and direct fixing.

Weathertightness and water penetration:

- Methods to manage water ingress, such as proper installation of flashings, wraps, and sealants.
- Design of systems to mitigate risk of water penetration.

Installation process for windows and doors:

- Pre-installation checks, including ensuring the opening is level, square, and correctly sized.
- Determining the sequence of cladding installation relative to joinery placement.
- Positioning and securing joinery using packers.
- Installing required flashings (e.g., sill and head flashings).
- Using backing rods and silicone sealant to seal gaps.
- Installing finishing trim, including facings, scribes, plugs, and undersill trims.

Sealants and silicone types:

- Specifications for silicone or sealants compatible with various materials and weathertightness requirements.

Finishing trim details:

- Facings, scribes, and undersill trims to complete the installation.

Regulatory requirements:

- Compliance with building code regulations for cavities and claddings.
- Ensuring installation meets local standards and guidelines for weathertightness and structural integrity.

Flashings:

- Correct installation of sill and head flashings to prevent water ingress.

Reference materials:

- Interpreting manufacturers' specifications, detailed plans, and drawings to ensure correct installation.

Rauemi | Resources

Programme Guidance information available from qualifications@waihangaararau.nz.

Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Waihanga Ara Rau Construction and Infrastructure Workforce Development Council
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Planning and Construction > Construction Trades > Carpentry
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0120

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	28 August 2025	N/A
Kōrero whakakapinga Replacement information	This skill standard replaced unit standard 30844.		
Rā arotake Planned review date	31 December 2030		

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council at qualifications@waihangaararau.nz to suggest changes to the content of this skill standard.