

40785 Set out and stand light steel wall frames

Kaupae Level	4
Whiwhinga Credit	10
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 set out and stand light steel wall frames.</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. Set out and stand light steel wall frames.	a. Light steel wall frames, including openings, are set out and constructed to meet plans and specifications.
	b. Light steel wall frames are stood and placed in the correct position.
2. Brace and fix light steel wall framing	a. Light steel wall frames are plumbed, straightened, and temporarily braced using correct equipment and fixings.
	b. Light steel wall frames are permanently fixed and connected.

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

Assessment specifications:

To achieve this standard the candidate must be capable of setting out and standing prefabricated light steel wall frames 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

Wall structures and composition

- Overview of light gauge steel wall systems.
- Framing for residential, commercial, and industrial buildings.
- Integration with solid walls (e.g. concrete panels or block systems).
- Panelised systems for modular or prefabricated construction.
- Fire-rated steel wall systems and assemblies.

Components in light steel wall frames

- Identification and function of steel framing components.
- Top and bottom plates.
- Vertical studs (single and double).
- Header sections for openings.
- Jack studs and king studs for window and door framing.
- Steel connectors: cleats, brackets, and screws.
- Bracing elements: diagonal bracing, straps, and reinforced corners.
- Load-bearing and non-load-bearing wall distinctions.
- Shear wall elements for stability.

Light steel frame materials

- Types of light gauge steel used in framing.
- Coated or treated steel for enhanced durability and corrosion resistance.
- Sizes, thicknesses (gauge), and profiles (lipped and stiffened) of steel framing members.
- Identification of defects in steel.
- Bending, twisting, corrosion, and surface damage.

Prefabricated light steel components

- Pre-assembled wall panels, trusses, and modular systems.
- Delivery, confirmation, handling, and storage of prefabricated steel components.
- On-site assembly techniques and alignment requirements.

Engineering and design requirements

- Interpreting engineering drawings and specifications for light steel framing.
- Understanding load paths, bracing requirements, and connection details.
- Design considerations for fire safety and thermal performance.

Setting out and erection of light steel frames

- Establishing and marking layout lines on the site.
- Using laser levels, string lines, and digital tools for precision.
- Assembling and fixing light steel frames.
- Fasteners specific to steel framing (e.g. self-tapping screws, rivets).
- Ensuring alignment, plumb, and square during assembly.
- Installing bracing and reinforcement for structural stability.
- Techniques for anchoring light steel frames to foundations or base plates.

Tilt slab and hybrid wall systems

- Integration of light steel framing with tilt slab walls or other solid structures.
- Connection methods and alignment strategies for mixed-material systems.

Calculating quantities

- Calculating the number of fasteners, brackets, and additional components.

Tools and equipment for light steel framing

- Tools specific to steel framing: snips, steel saws, and drilling equipment.
- Rivet guns, impact drivers, and specialty fasteners.
- Digital tools for site layout and quality assurance.

Health and safety considerations

- Safe handling of steel framing materials to prevent injury.
- Personal protective equipment for steel framing tasks.
- Site-specific safety measures.
- Use of site-specific safety plan and job safety analysis.
- Preventing slips, trips, and sharp-edge injuries.

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 20889.		
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.