

Title	Plan and install a range of complex signs		
Level	4	Credits	40

Purpose	<p>This unit standard is designed for people working in the signmaking industry who want to develop their knowledge and skills in complex sign installation.</p> <p>People credited with this unit standard are able to: identify compliance requirements to ensure structural integrity and public safety are maintained in relation to sign installation; plan for sign installation; assess sign installation site; install complex signs safely and securely; and clean installation site.</p>
----------------	--

Classification	Sign Making > Sign Making - Specialisation
-----------------------	--

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

Guidance Information

- 1 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:
Health and Safety at Work Act 2015;
Building Act 2004;
Resource Management Act 1991;
New Zealand Building Code Clause F8 Signs;
Available from: <https://www.building.govt.nz/building-code-compliance/f-safety-of-users/f8-signs/>;
New Zealand Building Code Clause E2 External Moisture;
Available from <https://www.building.govt.nz/building-code-compliance/e-moisture/e2-external-moisture/>.

Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

- 2 Definitions
Acceptable solution E2/AS1 for Clause E2 External Moisture – describes design solutions for maintaining the external building envelope to prevent leaks (specific to New Zealand’s climate and conditions).
Acceptable solution F8/AS1 for Clause F8 Signs – describes one solution for meeting the legal requirements of design and provision of signage in and around buildings.
Complex sign – refers to a sign which contains three or more key features which results in a more complex installation job. Examples include over size signs, heavy signs, illumination, odd shape of sign, positive and negative details and/or specific positioning in accordance with council or client specifications.

Job requirements – refer to specific requirements for the signmaking job at hand. These requirements may or may not be covered in the workplace job documentation and may include special instructions or quality requirements expected by the customer and/or the production standards of the signmaking workplace and/or organisation.

Product specifications – refers to technical data such as dimensions, maximum weight load capacity, ratings, performance and industry standards.

Workplace procedures – refer to organisation policies and procedures that are documented in memo, electronic, or manual format and available in the workplace, and are consistent with manufacturer's requirements. They may include but are not limited to – standard operating procedures, site specific procedures, site safety procedures, equipment operating procedures, quality assurance procedures, product quality specifications, references, approved codes of practice, housekeeping standards, environmental considerations, on-site briefings, supervisor's instructions, and procedures to comply with legislative and local body requirements relevant to the signmaking sector.

3 Range

Candidates must provide evidence of a minimum of five installation jobs involving different types of complex signs. Signs may include but are not limited to – pylon, hanging, blade, illuminated, awning, monument, digital signage, channel letters, pole signs or hoardings.

4 It is recommended that people hold credits for Unit 33065, *Demonstrate knowledge of sign installation equipment, fastenings and techniques* and Unit 33066, *Install signs using safe work practices*, before being assessed against this unit standard.

5 Assessment information

Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with job requirements, workplace procedures and legislative requirements.

Outcomes and performance criteria

Outcome 1

Identify compliance requirements to ensure structural integrity and public safety are maintained in relation to sign installation.

Range includes but is not limited to – Acceptable solution F8/AS1, Acceptable solution E2/AS1.

Performance criteria

1.1 Identify compliance requirements when installing a sign onto a structural support.

1.2 Identify compliance requirements when installing a sign onto cladding to maintain weathertightness.

- 1.3 Identify compliance requirements when installing a sign to maintain the integrity of a passive fire protection system.

Range may include – fire resistance walls, ceilings and doors, annular gap, fire sealant system, correct installation methods.

Outcome 2

Plan for sign installation.

Performance criteria

- 2.1 Determine the dimensions and characteristics of the sign to calculate weight and/or wind tolerances, and apply to planning.
- 2.2 Identify product specifications to select appropriate materials and fastenings to maintain building structural integrity and weathertightness, and apply to planning.
- 2.3 Determine if local authority permits and/or engineering legal requirements are needed and obtain relevant permissions before starting work.

Range approval may be required for but is not limited to – resource consent for heritage places, display on roof, street furniture, infrastructure or in public places.

- 2.4 Obtain and confirm installation drawings.

- 2.5 Identify health and safety requirements and apply to planning.

Range health and safety requirements may include but are not limited to – Site-Specific Safety Plan (SSSP), Job Safety Analysis and/or Task Analysis, Emergency Response Plan.

Outcome 3

Assess sign installation site.

Performance criteria

- 3.1 Assess installation site and understand the structural integrity of the substrate before starting work. Where relevant, confirm the need for an engineering risk assessment with a supervisor and obtain a risk assessment.
- 3.2 Source site plans and identify the location of the infrastructure beneath and around the installation site. If required, contact relevant authorities to trace power, gas, telecommunications and/or fibre and/or water utilities.

- 3.3 Identify other potential hazards relating to the environment or placement of sign.
- Range hazards may include but are not limited to – overhead hazards, obstruction to traffic line of sight, access to work area, working in confined spaces or at heights, asbestos.
- 3.4 Assess the condition of the substrate surface and identify if any remedial work is required.
- 3.5 Undertake any remedial work or report to supervisor if further action is required from other personnel.

Outcome 4

Install complex signs safely and securely.

Performance criteria

- 4.1 Clean and prepare working area according to job requirements.
- 4.2 Confirm sign location and mark out position for installation.
- 4.3 Install sign in correct position according to product specifications, job requirements and safety procedures.
- 4.4 Apply appropriate finishings in accordance with job requirements.
- 4.5 Perform quality check of sign and review of installation processes.

Outcome 5

Clean installation site.

Performance criteria

- 5.1 Clean surroundings, and remove waste.
- 5.2 Clean, maintain, and store tools and equipment.

Planned review date	31 December 2027
----------------------------	------------------

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	29 September 2022	N/A

Consent and Moderation Requirements (CMR) reference	0013
--	------

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

Comments on this unit standard

Please contact the 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.