

Title	Commission fire detection and alarm systems		
Level	4	Credits	25

Purpose	<p>This unit standard is for the training of fire alarm technicians and covers commissioning of fire detection and alarm systems in accordance with standard NZS 4512:2021, Part 5.</p> <p>People credited with this unit standard are able to: prepare for commissioning of fire detection and alarm systems; commission fire detection and alarm systems; and complete documentation and handover of fire detection and alarm systems.</p>
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Classification	Mechanical Engineering > Fire Detection and Alarm Systems
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Available grade	Achieved
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Prerequisites	<p>Unit 23258, <i>Demonstrate knowledge of fire detection and alarm systems and installation practices</i>; Unit 23259, <i>Demonstrate knowledge of checking and testing of fire detection and alarm systems</i>; and Unit 23262, <i>Check, test, and inspect fire detection and alarm systems</i>; or demonstrate equivalent knowledge and skills.</p>
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Guidance Information

- Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:

Electricity (Safety) Regulations 2010,
NZS 4512:2021, *Fire Detection and Alarm Systems in Buildings*,
AS/NZS 3000:2018, *Electrical Installations* (known as the Australian/New Zealand Wiring Rules).

Available at <https://www.standards.govt.nz/>

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.
- Definitions**

Commissioning is the process by which the newly installed components and systems are tested to verify if it functions according to its design objectives and/or specifications and brought into operation.

Equipment specifications refer to manufacturer's specifications for installation, operation, and performance of their equipment.

Fire detection and alarm system refers to an installation of apparatus, which performs specified fire related functions in response to the operation of a detector, manual call point, or other input. It includes manual call points, detectors, control and indication equipment, alerting devices, interconnections, fittings, labels, energy sources, and remote signalling devices and may include emergency warning and intercommunication systems (EWIS) where applicable.

Installation documentation refers to the specifications for all details of a particular installation. Typically, this includes installation drawings, installation procedures, parts and cabling schedules, test and commissioning procedures, and verbal instructions.

Standards refer to NZS 4512:2021 and AS/NZS 3000:2018.

Workplace procedures refer to the documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating procedures, codes of practice, quality assurance procedures, housekeeping standards, charging of time and materials, management of drawings, and documentation, procedures to comply with legislative and local body requirements.

3 Assessment information

- a All activities must comply with relevant legislative and/or regulatory requirements and recognised codes of practice.
- b All activities must demonstrate safe working practices.
- c All activities must be completed and reported within agreed timeframes.
- d All activities must be done in accordance with applicable aspects of NZS 4512:2021, and applicable equipment specifications, systems documentation and workplace procedures.

4 Range

- a Competence must be demonstrated on systems defined by NZS 4512:2021.
- b For assessment purposes, competence must be demonstrated on at least five different systems is required, including three different system types with at least two addressable systems.

Outcomes and performance criteria

Outcome 1

Prepare for commissioning of fire detection and alarm systems.

Performance criteria

- 1.1 Site access and timing of the commissioning works are agreed with site managers or customers.
- 1.2 Site occupational safety and health implications for self and others are identified and control measures are put in place.
- 1.3 Installation documentation is reviewed to determine scope and detail of the commissioning works required, and to identify key personnel.

- 1.4 All equipment required for commissioning is identified and collected.

Outcome 2

Commission fire detection and alarm systems.

Performance criteria

- 2.1 Visual examinations are conducted.
- 2.2 Tests are conducted.
- 2.3 Operational tests are conducted.
- 2.4 Compliance with the Electricity (Safety) Regulations 2010 is confirmed with authorised personnel.

Outcome 3

Complete documentation and handover of fire detection and alarm systems.

Performance criteria

- 3.1 Documentation is completed and assembled to comply with NZS 4512:2021.
- 3.2 Site manager is advised of completion of commissioning.
- 3.3 Documentation is distributed to appropriate personnel.

Replacement information	This unit standard replaced unit standard 9386, unit standard 9387, unit standard 9388, and unit standard 9389.
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Planned review date	31 December 2029
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	27 October 2006	31 December 2017
Review	2	15 October 2015	31 December 2026
Review	3	27 June 2024	N/A

Consent and Moderation Requirements (CMR) reference	0013
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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.