

Title	Service fire detection and alarm systems		
Level	4	Credits	30

Purpose	<p>This unit standard is for the training of fire alarm technicians and covers servicing of fire detection and alarm systems and special hazards fire detection and alarm systems.</p> <p>People credited with this unit standard are able to: prepare to service fire detection and alarm systems; service fire detection and alarm systems; document results of servicing of fire detection and alarm systems.</p>
----------------	--

Classification	Mechanical Engineering > Fire Detection and Alarm Systems
-----------------------	---

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

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>
----------------------	---

Guidance Information

- 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,
NZS 4512:2021, *Fire Detection and Alarm Systems in Buildings*.
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**

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.

Servicing refers to fault finding and repair of fire detection and alarm systems and special hazards fire detection and alarm systems.

Special hazards fire detection and alarm system refers to fire detection and alarm systems which apply electrical actuation to operate mechanical extinguishing systems. It includes water based, chemical, and clean agent gas flood installations.

Standards refer to NZS 4512:2021, and to standards relevant to special hazards systems where used.

Systems documentation refers to the documentation required to be maintained by NZS 4512:2021, including log book, test reports, equipment details and drawings, specifications, contract agreement, software configurations and versions, additions and alterations, fire reports, building consents standards, codes of practice, installation instructions, test and commissioning procedures, test and maintenance records.

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 systems documentation and workplace procedures.

4 Range

- a. Competence must be demonstrated on systems defined by NZS 4512:2021 and may include special hazards systems, and emergency warning and intercommunication systems (EWIS).
- b. For assessment purposes, competence must be demonstrated on at least five different systems from several manufacturers and including addressable systems.

Outcomes and performance criteria

Outcome 1

Prepare to service fire detection and alarm systems.

Performance criteria

- 1.1 System logs are examined to establish previous fault history.
- 1.2 Fault symptoms are identified.
- 1.3 System operation and interfaces with other systems are identified.
- 1.4 Site occupational safety and health implications for self and others are identified and control measures are put in place.

1.5 Service information is obtained for the commencement of servicing.

Outcome 2

Service fire detection and alarm systems.

Performance criteria

2.1 System isolations are completed.

2.2 Cause of faults and faulty components are identified using efficient diagnostic techniques, tools, and test instruments.

2.3 Faults are rectified.

2.4 Systems are tested and operational integrity is confirmed.

2.5 Systems are restored to normal operating conditions.

Outcome 3

Document results of servicing of fire detection and alarm systems.

Performance criteria

3.1 Systems documentation is completed.

3.2 Site manager is advised of completion of servicing.

3.3 Documentation is distributed to appropriate personnel.

Replacement information	This unit standard replaced unit standard 9390, unit standard 9391, unit standard 9392, and unit standard 9393.
--------------------------------	---

Planned review date	31 December 2029
----------------------------	------------------

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
Revision	2	25 October 2007	31 December 2017
Review	3	15 October 2015	31 December 2026
Review	4	27 June 2024	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.