

Title	Demonstrate knowledge of checking and testing of fire detection and alarm systems		
Level	3	Credits	9

Purpose	<p>This unit standard is for the training of fire alarm technicians, and covers the underpinning knowledge needed for the performance of monthly and annual checks and tests in accordance with standard NZS 4512:2021, Part 6. Both conventional and addressable devices are included.</p> <p>People credited with this unit standard are able to demonstrate knowledge of:</p> <ul style="list-style-type: none"> • general requirements for maintaining fire detection and alarm systems in compliance and good working order; • monthly checks and tests for fire detection and alarm systems; • annual checks and tests for fire detection and alarm systems.
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Classification	Mechanical Engineering > Fire Detection and Alarm Systems
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Available grade	Achieved
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Guidance Information

- 1 This standard is for underpinning knowledge of monthly and annual checks and tests as defined in NZS 4512:2021, Fire detection and alarm systems in buildings, Part 6. *Maintaining systems in compliance and good working order.*
Unit standard 23262 covers the practical performance of checks and tests.
- 2 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:
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.

3 Definitions

Annual checks and tests are also referred to as annual surveys.

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.

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

Tests refer to the carrying out of operations, measurements, or functions to confirm correct function or performance of components and systems in accordance with NZS 4512:2021.

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.

4 Assessment information

- a. Use of standard listed in the reference by candidates during assessment is encouraged.
- b. All activities must be done in accordance with standard, contract documents, systems documentation, and workplace procedures.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of general requirements for maintaining fire detection and alarm systems in compliance and good working order.

Performance criteria

- 1.1 General requirements for maintaining systems in compliance and good working order are identified.
- 1.2 Relationships between building owners and contractors are outlined.
- 1.3 Procedures to be followed in the event of defects discovered during testing are outlined.

Outcome 2

Demonstrate knowledge of monthly checks and tests for fire detection and alarm systems.

Performance criteria

- 2.1 Monthly checks and tests are identified.

- 2.2 Monthly checks and tests are explained with reference to both conventional and addressable systems.
- 2.3 Documentation required by the standard and by typical testing companies is described.

Outcome 3

Demonstrate knowledge of annual checks and tests for fire detection and alarm systems.

Performance criteria

- 3.1 Annual checks and tests are identified.
- 3.2 Annual checks and tests are explained with reference to both conventional and addressable systems.
- 3.3 The number of detectors to be tested is calculated for different scenarios.
- 3.4 Documentation required by the standard and by typical testing companies is identified, including what is logged there.

Replacement information	This unit standard replaced unit standard 17721 and unit standard 17722.
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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.