

Title	Check, test, and inspect fire detection and alarm systems		
Level	4	Credits	20

Purpose	<p>This unit standard is for the training of fire alarm technicians, and covers monthly checking and testing and annual checking, testing, and inspection (surveys) of fire detection and alarm systems in accordance with standard NZS 4512:2010, Part 6.</p> <p>People credited with this unit standard are able to prepare for and conduct checks, tests, and inspections 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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Entry information	
Critical health and safety prerequisites	Unit 23258, <i>Demonstrate knowledge of fire detection and alarm systems and installation practices</i> ; and Unit 23259, <i>Demonstrate knowledge of checking and testing of fire detection and alarm systems</i> , or demonstrate equivalent knowledge and skills.

Explanatory notes

- Reference
Ministry of Business, Innovation and Employment (MBIE) *Acceptable Solutions (AS) and Verification Methods (VM)*. Available at <http://www.dbh.govt.nz/AS/VM-documents>
NZS 4512:2010, *Fire Detection and Alarm Systems in Buildings*.
- Definitions
Annual checks, tests, and inspections are also referred to as annual surveys.
Enterprise 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.
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.

Inspection refers to an organised examination of characteristics of fire protection systems against established standards.

Standards refer to NZS 4512:2010.

Systems documentation refers to the documentation required to be maintained by NZS 4512:2010, including log book, test reports, equipment details and drawings, specifications, contract agreement, software configurations and versions, additions and alterations, contract agreement, fire reports, building consents standards, codes of practice, installation instructions, test and commissioning procedures, test and maintenance records.

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

3 Range

- 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.

4 Assessment

- a Competence may be demonstrated on conventional or addressable systems or both.
- b For assessment purposes, competence in monthly checks and tests must be demonstrated on at least five systems with at least one system using addressable devices; and competence in annual checks, tests, and inspection of two different systems, with at least one system using addressable devices is required.

Outcomes and evidence requirements

Outcome 1

Prepare for checks, tests, and inspections.

Evidence requirements

- 1.1 Site access and timing of the checks, tests, and inspections are agreed with site managers or customers in accordance with enterprise procedures.
- 1.2 Site occupational safety and health implications for self and others are identified and control measures put in place.
- 1.3 Details of systems and scope of checks, tests, and inspections are identified from company records and systems documentation.

Outcome 2

Conduct checks, tests, and inspections of fire detection and alarm systems.

Evidence requirements

- 2.1 Checks, tests, and inspections are conducted in accordance with standards.
- 2.2 Reports are prepared, entered in the system log, and copies sent to the customer in accordance with standards and enterprise procedures.
- 2.3 Malfunctions or defects are reported and arrangements made for their rectification in accordance with standards and enterprise procedures.
- 2.4 Systems are restored to operational status in accordance with systems documentation.
- 2.5 Site personnel are advised of system status and test completion.

Replacement information	This unit standard replaced unit standard 9394, unit standard 9396, unit standard 17717, and unit standard 17725.
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Planned review date	31 December 2020
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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	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>.

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMRs). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact Competenz at qualifications@competenz.org.nz if you wish to suggest changes to the content of this unit standard.