

<b>Title</b>	<b>Inspect fire detection and alarm systems for compliance</b>		
<b>Level</b>	<b>5</b>	<b>Credits</b>	<b>20</b>

<b>Purpose</b>	<p>This unit standard is for the training of fire alarm technicians who wish to become accredited inspection personnel required to inspect fire detection and alarm systems for compliance with standard NZS 4512:2010. Systems may use conventional or addressable devices, and include special hazards fire detection and alarm systems.</p> <p>People credited with this unit standard are able to: prepare for inspections; inspect fire detection and alarm systems; and complete inspection documentation.</p>
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<b>Classification</b>	Mechanical Engineering > Fire Detection and Alarm Systems
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<b>Available grade</b>	Achieved
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<b>Entry information</b>	
<b>Recommended skills and knowledge</b>	Unit 23258, <i>Demonstrate knowledge of fire detection and alarm systems and installation practices</i> , or demonstrate equivalent knowledge and skills.

### Explanatory notes

- 1 Certification for compliance with NZS 4512:2010 may only be issued by accredited inspection bodies that have been independently accredited by an internationally recognised accreditation body to AS/NZS ISO/IEC 17020:2013, *Conformity assessment - Requirements for the operation of various types of bodies performing inspection*, as competent to inspect to NZS 4512:2010.
- 2 Reference  
NZS 4512:2010, *Fire Detection and Alarm Systems in Buildings*.
- 3 Definitions  
*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.

*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 4512:2010, and to standards relevant to special hazards systems where used.

*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.

- 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 must be demonstrated on systems defined by NZS 4512:2010.
  - b For assessment purposes, competence must be demonstrated on at least five different systems including at least one special hazards system and one addressable system.

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## Outcomes and evidence requirements

### Outcome 1

Prepare for inspections.

#### Evidence requirements

- 1.1 Scope and context for the inspections are established from systems documentation.
- 1.2 Site access and timing of the inspections are agreed with site managers or customers in accordance with enterprise procedures.
- 1.3 Site occupational safety and health implications for self and others are identified and control measures put in place.
- 1.4 Systems documentation is assembled in accordance with enterprise procedures.

- 1.5 Inspection plans are prepared in accordance with systems documentation and enterprise procedures.

## Outcome 2

Inspect fire detection and alarm systems.

### Evidence requirements

- 2.1 Systems are inspected to establish compliance with standards in accordance with recognised inspection procedures and enterprise procedures.
- 2.2 Customers are advised of non-complying items and arrangements made for their rectification in accordance with enterprise procedures.
- 2.3 Systems are restored to operational status in accordance with systems documentation.
- 2.4 Site personnel are advised of system status and completion of inspection.

## Outcome 3

Complete inspection documentation.

### Evidence requirements

- 3.1 Inspection reports are prepared, sent to customers, and filed in accordance with systems documentation and enterprise procedures.
- 3.2 Details of inspections are entered in the system log in accordance with system documentation and enterprise procedures.
- 3.3 Software versions and site specific configuration data are included in the report in accordance with enterprise procedures.

<b>Replacement information</b>	This unit standard replaced unit standard 17716, unit standard 17720, and unit standard 17726.
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<b>Planned review date</b>	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

<b>Consent and Moderation Requirements (CMR) reference</b>	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.

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**Comments on this unit standard**

Please contact Competenz at [qualifications@competenz.org.nz](mailto:qualifications@competenz.org.nz) if you wish to suggest changes to the content of this unit standard.