

<b>Title</b>	<b>Service fire detection and alarm systems</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>30</b>

<b>Purpose</b>	<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, for fire detection and alarm systems: prepare to service, service and document results of servicing.</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>Critical health and safety prerequisites</b>	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 and test fire detection and alarm systems</i> , or demonstrate equivalent knowledge and skills.

**Explanatory notes**

- 1 Reference  
NZS 4512:2010, *Fire Detection and Alarm Systems in Buildings*.
- 2 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.  
*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 4512:2010, 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 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.

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## Outcomes and evidence requirements

### Outcome 1

Prepare to service fire detection and alarm systems.

#### Evidence requirements

- 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 put in place.
- 1.5 Service information is obtained for the commencement of servicing.

**Outcome 2**

Service fire detection and alarm systems.

**Evidence requirements**

- 2.1 System isolations are completed in accordance with standards, systems documentation and enterprise procedures.
- 2.2 Cause of faults and faulty components are identified using efficient diagnostic techniques, tools, and test instruments.
- 2.3 Faults are rectified in accordance with systems documentation and enterprise procedures.
- 2.4 Systems are tested and operational integrity is confirmed in accordance with systems documentation and enterprise procedures.
- 2.5 Systems are restored to normal operating conditions in accordance with systems documentation and enterprise procedures.

**Outcome 3**

Document results of servicing of fire detection and alarm systems.

**Evidence requirements**

- 3.1 Systems documentation is completed in accordance with standards and enterprise procedures.
- 3.2 Site manager is advised of completion of servicing.
- 3.3 Documentation is distributed to appropriate personnel in accordance with standards and enterprise procedures.

<b>Replacement information</b>	This unit standard replaced unit standard 9390, unit standard 9391, unit standard 9392, and unit standard 9393.
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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
Revision	2	25 October 2007	31 December 2017
Review	3	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.

**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.