

<b>Title</b>	<b>Commission fire detection and alarm systems</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>25</b>

<b>Purpose</b>	<p>This unit standard is for the training of fire alarm technicians, and covers commissioning of fire detection and alarm systems in accordance with standard NZS 4512:2010, Part 5.</p> <p>People credited with this unit standard are, for fire detection and alarm systems, able to: prepare for commissioning; commission fire detection and alarm systems; and complete documentation and handover.</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 References  
 AS/NZS 3000:2007, *Electrical Installations* (known as the Australian/New Zealand Wiring Rules)  
 Electricity Regulations 1997  
 NZS 4512:2010, *Fire Detection and Alarm Systems in Buildings*.
  
- 2 Definitions  
*Commissioning* is the process by which the newly installed components and systems are tested to verify if it functions according to its design objectives and/or specifications and brought into operation.  
*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.  
*Equipment specifications* refer to manufacturer’s specifications for installation, operation, and performance of their equipment.

*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.

*Installation documentation* refers to the specifications for all details of a particular installation. Typically this includes installation drawings, installation procedures, parts and cabling schedules, test and commissioning procedures, and verbal instructions.

*Standards* refer to NZS 4512:2010, AS/NZS 3000:2007.

### 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 is required, including three different system types with at least two addressable systems.

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## Outcomes and evidence requirements

### Outcome 1

Prepare for commissioning of fire detection and alarm systems.

#### Evidence requirements

- 1.1 Site access and timing of the commissioning works 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 Installation documentation is reviewed to determine scope and detail of the commissioning works required, and to identify key personnel.
- 1.4 All equipment required for commissioning is identified and available in accordance with the standards and enterprise procedures.

### Outcome 2

Commission fire detection and alarm systems.

#### Evidence requirements

- 2.1 Visual examinations are conducted in accordance with NZS 4512:2010 and enterprise procedures.

- 2.2 Tests are conducted in accordance with NZS 4512:2010 and equipment specifications.
- 2.3 Operational tests are conducted in accordance with NZS 4512:2010 and equipment specifications.
- 2.4 Compliance with the Electricity Regulations 1997 is confirmed with authorised personnel in accordance with enterprise procedures.

### Outcome 3

Complete documentation and handover.

### Evidence requirements

- 3.1 Documentation is completed and assembled to comply with NZS 4512:2010 in accordance with enterprise procedures.
- 3.2 Site manager is advised of completion of commissioning.
- 3.3 Documentation is distributed to appropriate personnel in accordance with NZS 4512:2010 and enterprise procedures.

<b>Replacement information</b>	This unit standard replaced unit standard 9386, unit standard 9387, unit standard 9388, and unit standard 9389.
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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.