

Title	Commission deluge and pre-action fire sprinkler systems		
Level	4	Credits	20

Purpose	<p>This unit standard is for personnel employed in the fire protection industry and covers the commissioning of deluge and pre-action fire sprinkler systems.</p> <p>People credited with this unit standard are, for deluge and pre-action fire sprinkler systems, able to: prepare for commissioning; commission; and complete documentation and inform relevant stakeholders.</p>
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Classification	Mechanical Engineering > Fixed Fire Protection Systems
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Available grade	Achieved
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Explanatory notes

1 References

Building Act 2004

Ministry of Business, Innovation and Employment (MBIE) *Acceptable Solutions (AS) and Verification Methods (VM)*. Available at <http://www.dbh.govt.nz/AS/VM-documents>

New Zealand Building Code

NZS 4541:2013, *Automatic fire sprinkler systems*.

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.

Plan in this unit standard means the procedures developed to enable the work to be carried out in a logical and safe manner.

Systems documentation refers to the documentation required to be maintained by NZS 4541:2013, including log book, test reports, equipment details and drawings, specifications, contract agreement, additions and alterations, fire reports, building consents standards, codes of practice, installation instructions, test and commissioning procedures, and 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

For assessment purposes, competence must be demonstrated on commissioning of one deluge and one pre-action system.

Outcomes and evidence requirements**Outcome 1**

Prepare for commissioning of deluge and pre-action fire sprinkler systems.

Evidence requirements

- 1.1 Commissioning test requirements are identified in accordance with systems documentation and enterprise procedures.
- 1.2 Safety requirements for the systems are identified and related to systems documentation in accordance with enterprise procedures.
- 1.3 Installation records are analysed to establish conformance of systems with systems documentation.
- 1.4 Procedures for commissioning are prepared in accordance with enterprise procedures.

Outcome 2

Commission deluge and pre-action fire sprinkler systems.

Evidence requirements

- 2.1 Systems are verified as conforming to the systems documentation and enterprise procedures.
- 2.2 Functional tests are completed in accordance with systems documentation and enterprise procedures.
- 2.3 Systems are verified as being in normal operating conditions in accordance with systems documentation and enterprise procedures.
- 2.4 Safety requirements are complied with during commissioning in accordance with systems documentation and enterprise procedures.
- 2.5 Premises are cleared of all surplus introduced materials and equipment, and left in a clean and tidy condition, in accordance with enterprise procedures.

Outcome 3

Complete documentation and inform relevant stakeholders.

Evidence requirements

- 3.1 Commissioning records are completed and assembled in accordance with systems documentation and enterprise procedures.
- 3.2 Relevant stakeholders are informed of the systems' status, location, operational procedures, and maintenance requirements in accordance with the systems documentation and enterprise procedures.
- 3.3 Commissioning records are distributed to the relevant stakeholders in accordance with the systems documentation and company enterprise procedures.

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	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.