

Title	Service 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 servicing 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 to service; service, and thereafter reinstate the systems to operational status; and complete documentation after servicing.</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

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.

Servicing refers to fault finding and repair of deluge and pre-action fire sprinkler systems.

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 servicing of one deluge and one pre-action system.

Outcomes and evidence requirements

Outcome 1

Prepare to service deluge and pre-action fire sprinkler systems.

Evidence requirements

- 1.1 The systems to be serviced are described in accordance with systems documentation and enterprise procedures.
- 1.2 Servicing requirements and procedures for the systems are identified in accordance with NZS 4541:2013, systems documentation, and enterprise procedures.
- 1.3 Safety requirements for the systems to be serviced are identified and referenced to the systems documentation in accordance with enterprise procedures.
- 1.4 Plans for servicing the systems are prepared in accordance with systems documentation and enterprise procedures.

Outcome 2

Service deluge and pre-action fire sprinkler systems, and thereafter reinstate the systems to operational status.

Evidence requirements

- 2.1 System isolations are completed in accordance with plans, systems documentation, and enterprise procedures.
- 2.2 System faults are diagnosed in accordance with systems documentation and company procedures.
- 2.3 Systems are serviced in accordance with systems documentation and enterprise procedures.
- 2.4 Systems are tested and operational integrity is confirmed in accordance with systems documentation.
- 2.5 Systems are restored to normal operating condition in accordance with systems documentation, plans, and enterprise procedures.

- 2.6 Safety requirements are complied with during inspections in accordance with system documentation and enterprise procedures.
- 2.7 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 after servicing deluge and pre-action fire sprinkler systems.

Evidence requirements

- 3.1 Systems faults and improvements are identified, and recorded in accordance with systems documentation and enterprise procedures.
- 3.2 Documentation for servicing is completed, and distributed in accordance with systems documentation, plans, and enterprise procedures.
- 3.3 Personnel at site are notified of completion of tests in accordance with plans and 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.