

Title	Inspect and test non-standard fixed fire protection systems		
Level	4	Credits	20

Purpose	<p>This unit standard is for personnel employed in the fire protection industry, and covers the inspection and testing of non-standard fire sprinkler systems.</p> <p>People credited with this unit standard are, for non-standard fire sprinkler systems, able to: prepare for inspection and tests; conduct inspections and tests, and complete documentation for reporting after inspections and tests.</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

AS 1851:2012, *Routine service of fire protection systems equipment*

NFPA 25:2014, *Standard for the inspection, testing, and maintenance of water-based fire protection systems*

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.

Inspection refers to an organised examination of characteristics of fire protection systems against established standards

Non-standard fixed fire protection systems are those systems that have features that do not meet all the requirements of NZS 4541:2013, but that do however meet the specific fire problems for which they are designed.

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

Standards refer to AS 1851:2012, NFPA 25:2014, and NZS 4541:2013.

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 tests records.

Tests refer to the carrying out of operations, measurements, or functions to confirm correct function or performance of components and systems in accordance with NZS 4541:2013, and where applicable other accepted standards such as and AS 1851, NFPA 25.

3 Range

- a All activities must comply with relevant legislative and/or regulatory requirements and codes of practice.
- b All activities demonstrate safe working practices.
- c All activities must be completed and reported within agreed timeframes.
- d Non-standard fixed fire protection systems include but are not limited to – dry pipe systems, preaction systems, mist systems.

4 Assessment

For assessment purposes, competence must be demonstrated on at least five systems.

Outcomes and evidence requirements

Outcome 1

Prepare for inspections and tests of non -standard fixed fire protection systems.

Evidence requirements

- 1.1 Inspections and tests procedures for the systems are identified in accordance with systems documentation, company procedures, and relevant sections of the appropriate standards.
- 1.2 Safety requirements for inspections and tests of the systems are identified and referenced to the systems documentation in accordance with enterprise procedures.
- 1.3 Plans for inspections and tests of the systems are prepared in accordance with systems documentation and enterprise procedures.

Outcome 2

Conduct routine tests of non -standard fixed fire protection systems.

Evidence requirements

- 2.1 Inspections and tests are conducted in accordance with plans and relevant sections of the appropriate standards.

- 2.2 All gauge and instrument readings recorded during routine testing are compared to the reference information supplied in accordance with relevant sections of the appropriate standards.
- 2.3 Safety requirements are complied with during the inspections and testing process in accordance with systems documentation and enterprise procedures.
- 2.4 Systems are restored to normal operating condition in accordance with systems documentation, plans, and enterprise procedures.

Outcome 3

Complete documentation for reporting after inspections and tests of non -standard fixed fire protection systems.

Evidence requirements

- 3.1 Documentation for inspections and tests is completed, and distributed in accordance with plans, enterprise procedures, and relevant sections of the appropriate standards.

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.