

Title	Install valves, switches, and gauges for fire sprinkler systems		
Level	3	Credits	10

Purpose	<p>This unit standard is for the personnel employed in the fire protection industry and covers the installation of valves, switches and gauges for fire sprinkler systems.</p> <p>People credited with this unit standard are able to prepare for installation of valves and switches, and install valves, switches and gauges for fire sprinkler systems.</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 4515:2009, *Fire sprinkler systems for life safety in sleeping occupancies (up to 2000 square metres)*
 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.

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.
- d Valves may include but not are limited to – drain, sectional, alarm, stop, check, pressure reducing, pressure release, pressure sustaining, back flow.
- e Switches may include but not are limited to – flow, pressure, tank level.

4 Assessment

For assessment purposes, competence must be demonstrated on installation of valves, switches and gauges for four fire sprinkler systems. Note that not all types of valves or switches described above would be used in every installation.

Outcomes and evidence requirements

Outcome 1

Prepare for installation of valves, gauges, and switches for fire sprinkler systems.

Evidence requirements

- 1.1 Valves, switches and gauges installation requirements are identified in accordance with the systems documentation and enterprise procedures.
- 1.2 Installation requirements are checked against the physical site requirements in accordance with systems documentation and enterprise procedures.

Range may include but is not limited to – site measurement, structural details, other services.
- 1.3 Plans for installation of valves, switches and gauges are prepared in accordance with customer requirements, systems documentation, and enterprise procedures.
- 1.4 Tools and equipment are prepared and set up in accordance with enterprise procedures.
- 1.5 Valves, switches and gauges and other required materials are purchased or drawn from stock and delivery to the sites is confirmed in accordance with enterprise procedures.

Outcome 2

Install valves, switches and gauges for fire sprinkler systems.

Evidence requirements

- 2.1 Safety requirements are complied with during the installation of valves, switches and gauges in accordance with enterprise procedures.
- 2.2 Valves, gauges, and switches are installed in accordance with the plan, systems documentation, and enterprise procedures.
- 2.3 Premises are cleared of all surplus introduced materials and equipment and left in a clean and tidy condition in accordance with enterprise procedures.

- 2.4 Work documentation is completed in accordance with systems documentation and enterprise procedures.

Replacement information	This unit standard and unit standard 29927, unit standard 28828, and unit standard 28829 replaced unit standard 18434.
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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.