

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, gauges, and switches for fire sprinkler systems; install valves, gauges and switches 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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Guidance Information

- Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:

Building Act 2004,
 NZS 4515:2009, *Fire sprinkler systems for life safety in sleeping occupancies (up to 2000 square metres)*
 NZS 4541:2020, *Automatic fire sprinkler systems*.

Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.
- Definitions**

Systems documentation refers to the documentation required to be maintained by NZS 4541:2020, including logbook, 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.

Workplace 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.

3 Assessment information

- 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 relief, pressure sustaining, back flow.
- e Switches may include but not are limited to – flow, pressure, tank level.
- f All activities must in accordance with applicable systems documentation, plan, and workplace procedures.

4 Range

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

Outcomes and performance criteria**Outcome 1**

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

Performance criteria

- 1.1 Valves, gauges, and switches installation requirements are identified.
- 1.2 Installation requirements are checked against the physical site requirements.

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

Outcome 2

Install valves, gauges and switches for fire sprinkler systems.

Performance criteria

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

2.4 Work documentation is completed.

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 2029
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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	31 December 2026
Review	2	27 June 2024	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>.

Comments on this unit standard

Please contact the Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council qualifications@hangaarorau.nz if you wish to suggest changes to the content of this unit standard.