

Title	Fabricate and install pipe supports, hangers, braces, and brackets for fire sprinkler systems on site		
Level	3	Credits	10

Purpose	<p>This unit standard is for the personnel employed in the fire protection industry and covers the fabrication and installation of pipe supports, hangers, braces, and brackets for fire sprinkler systems on site.</p> <p>People credited with this unit standard are, for fire sprinkler systems, able to prepare for fabrication and installation of pipe supports, hangers, braces, and brackets, and fabricate and install pipe supports, hangers, braces, and brackets on site.</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

- 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*.

- 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.

- 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 at least four systems and may include steel and plastic pipes.

Outcomes and evidence requirements

Outcome 1

Prepare for fabrication and installation of pipe supports, hangers, braces, and brackets for fire sprinkler systems on site.

Evidence requirements

- 1.1 Pipe supports, braces, and brackets fabrication and installation requirements are identified in accordance with the systems documentation and enterprise procedures.
- 1.2 Fabrication and 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 fabrication and installation are prepared in accordance with customer requirements, systems documentation, and enterprise procedures.
- 1.4 Fabrication equipment is prepared and set up in accordance with enterprise procedures.

Range may include but is not limited to – pipe threading machine, roll groove machine, pipe cutting equipment, hole saw.
- 1.5 Fasteners and other required materials are purchased or drawn from stock and delivery to the sites is confirmed in accordance with enterprise procedures.

Outcome 2

Fabricate and install pipe supports, hangers, braces, and brackets for fire sprinkler systems on site.

Evidence requirements

- 2.1 Safety requirements are complied with during fabrication of pipe supports, hangers, braces, and brackets in accordance with enterprise procedures.

- 2.2 Pipe supports, hangers, braces, and brackets are cut, shaped, and prepared in accordance with the plan, systems documentation, and enterprise procedures.
- 2.3 Pipe supports, hangers, braces, and brackets are installed in accordance with the plan, systems documentation, and enterprise procedures.
- 2.4 Premises are cleared of all surplus introduced materials and equipment and left in a clean and tidy condition in accordance with enterprise procedures.
- 2.5 Work documentation is completed in accordance with systems documentation and enterprise procedures.

Replacement information	This unit standard and unit standard 29928, unit standard 28829, and unit standard 28830 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.