

Unit of Competency CPCPWT3030

Install home fire sprinkler systems

Application

This unit specifies the skills and knowledge required to install a home fire sprinkler system in a Class 1a building as defined in the National Construction Code (NCC).

In some jurisdictions, this unit of competency may form part of accreditation, licensing, legislative, regulatory or certification requirements.

Prerequisite Unit

CPCPCM2043 Carry out WHS requirements

CPCPCM3023 Fabricate and install non-ferrous pressure piping

Elements and Performance Criteria

1. Identify installation requirements.	1.1	Access, read and determine requirements for installing home fire sprinkler systems in a Class 1a building from job specifications, relevant Australian Standards, codes, manufacturers' specifications and jurisdictional requirements
	1.2	Identify and apply workplace, work health and safety (WHS) and environmental requirements.
2. Prepare for work.	2.1	Create a materials list and collect materials.
	2.2	Select appropriate tools and equipment including personal protective equipment (PPE).
3. Install, test and commission system.	3.1	Set out and install a home sprinkler system in a single-story Class 1a building, according to job specifications and in compliance with relevant Australian Standards, codes, manufacturers' instructions and jurisdictional requirements.
	3.2	Test and commission home sprinkler system in a single-story Class 1a building, according to job specifications, relevant Australian Standards, codes, manufacturers' instructions and jurisdictional requirements.
4. Clean up.	4.1	Clear the work area and dispose of, reuse or recycle materials in accordance with state or territory legislation and workplace requirements.
	4.2	Clean tools and equipment, check for serviceability and report any damage, and store and secure.

Foundation skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Supersedes and is equivalent to CPCPWT3030A Install home fire sprinkler systems.

Links

Companion Volume Implementation Guide:

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>

Assessment Requirements for CPCPWT3030 Install home fire sprinkler systems

Performance Evidence

To demonstrate competency, a candidate must meet the performance criteria for this unit by:

- installing a home fire sprinkler system in a single-storey Class 1a building using a length of piping a minimum of four metres and including:
 - a water service using a minimum of two materials
 - a control valve
 - an actuating device
 - an alarm
 - two sprinkler heads
 - one sprinkler head using cross-linked polyethylene (PEX) pipe.

Knowledge Evidence

To be competent in this unit, a person must demonstrate knowledge of:

- installation, testing and commissioning requirements of home fire sprinkler systems
 - operation and function of purging drain valves
 - processes, procedures and techniques of:
 - installing a home fire sprinkler system in a Class 1a building
 - testing and commissioning
 - actuating device
 - control valve assembly
 - alarm systems
 - approved piping and fittings
 - sprinkler heads
 - pressure and flow requirements
 - building classification
 - push-fit and crimp-fit PEX pipe and fitting systems
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- domestic sprinkler systems as required by the Deemed-to Satisfy NCC provisions
 - how to access relevant information, including codes and standards manufacturers' instructions, codes, relevant Australian Standards and jurisdictional requirements
 - tools, materials and equipment used to install home fire sprinkler systems, including testing and commissioning
 - work health and safety (WHS) requirements for installing, testing and commissioning home fire sprinkler systems.

Assessment Conditions

Assessors must satisfy the requirements for assessors listed in the Standards for Registered Training Organisations.

This unit must be assessed in the workplace or a close simulation using realistic workplace conditions, materials, activities, responsibilities, procedures, safety requirements and environmental considerations.

Links

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