

Unit of Competency CPCPFS3045

Fit off sprinkler heads, controls and ancillary equipment

Application

This unit of competency specifies the skills and knowledge required to install sprinkler heads, system controls and ancillary equipment for sprinkler fire protection systems. The installation involves work on a new and existing structure.

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

Elements and Performance Criteria

1. Identify installation requirements.	<ul style="list-style-type: none">1.1 Obtain, read and apply sprinkler head and control requirements from relevant job plans and specifications, codes, Australian Standards, manufacturer's specifications and jurisdictional requirements.1.2 Identify and apply workplace policies and procedures, work health and safety (WHS) and environmental requirements.1.3 Identify class of sprinkler system and associated design data from system design specifications.
2. Prepare for work.	<ul style="list-style-type: none">2.1 Create a materials list and collect materials.2.2 Select and check the serviceability of appropriate tools, equipment and personal protective equipment (PPE).2.3 Select components and prepare work area to support efficient installation of sprinkler heads, system controls and ancillary equipment.
3. Install sprinkler heads and ancillary equipment.	<ul style="list-style-type: none">3.1 Set out system following plans, specifications and job instructions.3.2 Attach fixings and pipe supports.3.3 Install sprinkler heads, system components and ancillary equipment.3.4 Isolate system and drain it down to allow connection without causing water damage, then recharge when altering existing systems.3.5 Complete documentation following quality and work requirements.
4. Clean up.	<ul style="list-style-type: none">4.1 Clear the work area, and dispose of, reuse or recycle materials in accordance with state and territory legislation and workplace policies and procedures.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 CPCPFS3045A Fit off sprinkler heads, controls and ancillary equipment.

Links

Companion Volume Implementation Guide:

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

Assessment Requirements for CPCPFS3045

Fit off sprinkler heads, controls and ancillary equipment

Performance Evidence

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

- installing two different automated fire sprinkler systems in both a new and an existing system:
 - three different sprinkler heads with three different escutcheon assemblies: two hard piped drop; one flexible tube assembly, installed and branched according to manufacturer's specifications
 - a mechanical flow switch, incorporating a test arrangement
 - two pressure switch, one pressure switch used for rising pressure alarm and one used for a fall in pressure loop
- producing a plan containing four sprinkler heads spaced according to Ordinary Hazard III
- rectifying a tenancy floor plan that includes:
 - two new sprinkler heads
 - two relocated sprinkler heads
 - two deleted sprinkler heads.

Knowledge Evidence

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

- legislation, regulations, standards and codes relating to fitting off sprinkler heads, controls and ancillary equipment:
- processes, procedures and techniques of:
 - fitting off sprinkler heads, controls and ancillary equipment
 - levelling and alignment for installing underground pipework
- general fire protection systems terminology
- characteristics, application and limitations of different approved materials and components
- design requirements, functions and limitations of the following components:
 - sprinkler heads of at least 6 different types
 - escutcheon plates
 - flexible tube assemblies and their mounting brackets
 - pressure switches
 - flow switches
 - pipe supports and anchors
 - pipe jointing techniques including threading and roll grooving
- functional and operational features of tools and equipment used to fit off sprinkler heads, controls and ancillary equipment

- materials storage and environmentally responsible waste disposal relating to distribution and range pipe installation activities
- how to access relevant information including, job plans and specifications, codes, Australian Standards, manufacturer's specifications and jurisdictional requirements.
- tools, materials and equipment used for installing sprinkler heads, system controls and ancillary equipment for sprinkler fire protection systems
- work health and safety (WHS) requirements for installing sprinkler heads, system controls and ancillary equipment for sprinkler fire protection systems
- installation requirements for installing sprinkler heads, system controls and ancillary equipment for sprinkler fire protection 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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