

Unit of Competency CPCPFS4025

Commission fire alarm and detection system interface devices

Application

This unit specifies the skills and knowledge required to commission fire alarm and detection interface systems.

It covers preparation for the work, identification and confirmation of system specifications and requirements, physical testing and commissioning of the system interface devices, and work finalisation processes, including records and documentation.

The role may involve interaction with architects, builders, suppliers and relevant planning authorities and requires a sound understanding of applicable legislation including work health and safety (WHS).

This unit's requirements may be carried out by experienced tradespeople such as hydraulic design consultants, plumbers or plumbing contractors who employ a team of plumbers.

Site location for work application may be a new work site or an existing structure.

The skills and knowledge described in this unit require a licence to practice in a workplace where plant and equipment interface devices operate at voltages above extra low voltage (above 50 V AC or 120 V DC).

Other regulations related to electrical and plumbing work may apply in some jurisdictions.

Practice in the workplace and during training is also subject to work health and safety regulations and contractual training obligations, such as those required under apprenticeship agreements.

Prerequisite Unit

Nil.

Elements and Performance Criteria

1. Prepare for work.	<ul style="list-style-type: none">1.1 Obtain current approved plans and specifications.1.2 Identify and apply workplace policies and procedures, work health and safety (WHS) and sustainability principles.1.3 Apply quality assurance requirements to comply with internal and external policies, procedures, standards and authorities.1.4 Consult with all associated persons to plan and sequence tasks.1.5 Select and check the serviceability of appropriate tools, equipment and personal protective equipment (PPE).1.6 Prepare work area to support effective commissioning process.
2. Identify system requirements.	<ul style="list-style-type: none">2.1 Identify and confirm system design requirements from job specifications according to standards.2.2 Identify and determine system commissioning requirements using relevant Australian standards, statutory and regulatory authorities' requirements and job specifications.

3. Test and commission system.	<p>3.1 Check fire alarm and detection system interface devices to ensure type and installation conform to relevant Australian standard, job specifications, manufacturer recommendations and authorities' requirements.</p> <p>3.2 Test operation of system interface devices and adjust as required according to Australian standard, job specifications, manufacturer recommendations and authorities' requirements.</p> <p>3.3 Commission and maintain system interface devices to ensure correct operation according to relevant standards, and manufacturer and job specifications.</p>
4. Clean up work area.	<p>4.1 Clear the work area of materials and dispose of, reuse or recycle materials according to legislation, regulations, environmental codes of practice and job specifications.</p> <p>4.2 Clean tools and equipment, check for damage and malfunction and store according to manufacturer recommendations and workplace procedures.</p> <p>4.3 Access information to complete documentation according to workplace requirements and submit within specified timeframes.</p>

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 CPCPFS4025A Commission fire alarm and detection system interface devices.

Links

Companion Volume Implementation Guide:

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

Assessment Requirements for CPCPFS4025 Commission fire alarm and detection system interface devices

Performance Evidence

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

commissioning a fire alarm and detection system interface device, including a pressure switch and a flow switch, plus an actuator and a control and indicating panel and in doing so:

- correctly interpret plans and specifications to complete work to the specified standard within accepted timeframes
- comply with appropriate legislation, organisational processes and regulatory requirements.

Knowledge Evidence

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

- components and materials of fire alarm and detection system interface devices including:
 - pressure switches
 - flow switches
 - actuators
 - solenoids
 - valve monitoring devices
- verifying interface device operations, including:
 - alarm volume
 - annunciators
 - audible, visible and combination alarms
 - controls
 - coordination of alarm signals with other services
 - dispatching systems
 - public reporting systems
 - signal transmission
 - tactile alarm appliances for people with disabilities
 - zone alarms
- correct location and setting of interface devices to meet system design standards
- difference between extra low voltage and low voltage system interface wiring connection
- job safety analysis (JSA) and safe work method statements (SWMS)
- process of installing, testing and commissioning fire alarm and detection system interface devices

- systems operations and procedures
- properties of water including pressure and flow rates
- relevant statutory requirements related to commissioning fire alarm and detection system interface devices including:
 - automatic smoke and heat venting systems
 - air handling systems
 - emergency warning and intercommunication systems
- statutory and regulatory authorities including:
 - Commonwealth government
 - state or territory governments
 - local authorities
- sources of information and processes for calculating suitable replacement of interface devices
- SI system of units
- standards applicable to the service including:
 - AS 1670.1 Fire detection, warning, control and intercom systems – System design, installation and commissioning – Part 1 Fire
 - AS2118.1 Automatic fire sprinkler systems Part 1: General systems
 - AS1851 Routine service of fire protection systems and equipment
- safe work practices associated with commissioning fire alarm and detection interface systems including:
 - working with electricity
 - handling of materials
 - hazard control
 - PPE
 - use of first aid equipment
- environmental requirements and sustainability principles including:
 - clean-up protection
 - stormwater protection
 - waste management
 - efficient energy use
 - efficient use and recycling of material
 - selecting appropriate components to ensure minimal environmental impact
- quality assurance requirements including:
 - Australian standards
 - Environment Protection Authority (EPA)
 - internal company quality assurance policy and risk management strategy
 - International Standards Organisation
 - site safety plan
 - workplace operations and procedures

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

Companion Volume Implementation Guide:

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