

Unit of Competency

CPPFES3042 Install and commission pre-engineered fire-suppression systems

Modification history

Release	Comments
1	Supersedes and is equivalent to CPPFES3042A Install and commission pre-engineered fire-suppression systems. Unit updated to meet the Standards for Training Packages 2012. This version first released with CPP Property Services Training Package Release 13.0.

Application

This unit of competency specifies the skills and knowledge required to install and commission pre-engineered fire-suppression systems. It includes verifying that systems are installed and operate as intended according to the requirements of system manufacturers and relevant Australian Standards.

The unit does not cover any installation, maintenance, replacement or repair functions that are restricted to licensed trades or occupations.

A person who has achieved this unit of competency would be expected to take responsibility for organising and completing these tasks with a high degree of self-direction.

Licensing, legislative, regulatory or certification requirements apply to this unit of competency in some states and territories. For further information, check with the relevant regulatory authority.

Unit Sector

Fire Protection Inspection and Testing

Elements and Performance Criteria

1. Interpret and comply with manufacturer and regulatory requirements for installation.	1.1 Interpret work instructions and manufacturer's specifications to determine installation timeframes, location and requirements for type of pre-engineered fire-suppression system. 1.2 Discuss planned installation procedures with relevant persons to clarify client needs and expectations. 1.3 Plan work activities to comply with manufacturers' specifications, relevant Australian Standards and work health and safety (WHS) requirements.
2. Conduct pre-installation inspections and checks.	2.1 Arrange access to worksite and communicate with responsible entity and affected persons to advise duration and impact of planned installation procedures. 2.2 Select and use required tools and equipment, including personal protective equipment (PPE). 2.3 Identify and control hazards in the work area according to workplace requirements. 2.4 Interpret risk assessment for equipment and consult with relevant persons to formulate and document additional risk reduction measures for type of extinguishing agent. 2.5 Interpret drawings to confirm installation design as suitable to client and manufacturer requirements. 2.6 Determine scope of protection, operational parameters and

	<p>system and equipment location and interfaces according to Australian Standards, client, manufacturer and workplace requirements.</p> <p>2.7 Confirm location for installation and assemble materials, tools and equipment ready for installation.</p>
3. Install pre-engineered fire-suppression system.	<p>3.1 Install system components according to manufacturer and Australian Standards requirements.</p> <p>3.2 Install auxiliary shutdown fire system and equipment interface and alarm device connections according to manufacturer and Australian Standards requirements.</p> <p>3.3 Charge system according to manufacturer and regulatory requirements.</p>
4. Commission pre-engineered fire-suppression system.	<p>4.1 Commission and test installed system componentry according to manufacturer and Australian Standards requirements.</p> <p>4.2 Reinstate system as fully operational according to manufacturer requirements.</p> <p>4.3 Record commissioning results according to the relevant commissioning schedule, Australian Standards and manufacturer requirements.</p>
5. Finalise installation operation.	<p>5.1 Complete documentation on system installation and commissioning according to Australian Standards, manufacturer, regulatory and workplace requirements.</p> <p>5.2 Check tools and equipment for faults, wear or damage and rectify or report problems according to workplace requirements.</p> <p>5.3 Leave client premises in a clean and tidy condition.</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 CPPFES3042A Install and commission pre-engineered fire-suppression systems.

Links

Companion Volume Implementation Guide:

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>

Assessment Requirements for CPPFES3042 Install and commission pre-engineered fire-suppression systems

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Performance Evidence

To demonstrate competency, a candidate must meet the elements and performance criteria of this unit by installing and commissioning two proprietary pre-engineered fire-suppression systems.

Knowledge Evidence

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

- importance of adhering to regulatory requirements, safety procedures and workplace procedures, including implications for plant warranty or safety issues of:
 - not applying regulatory requirements to job functions
 - not adhering to safety procedures and actions to take when a breach of regulation, work health and safety (WHS) or other policy occurs
 - not involving clients or not referencing plant manufacturers' documentation before working on fixings, access holes or component locations
- key features of legislation, regulations, codes and Australian Standards relevant to installing and commissioning pre-engineered fire-suppression systems:
 - environmental protection
 - fire protection of mobile and transportable equipment
 - fire protection of cooking equipment
 - fire protection of marine engine compartments
 - records and documentation
- limitations of maintenance and repair activities that may be conducted by the service technician
- types and purpose of major components used in pre-engineered fire-suppression systems for different manufacturers' proprietary systems:
 - actuators: mechanical, pyrotechnic and solenoid
 - aerosol generators
 - agent discharge nozzles
 - agent distribution pipework and hoses
 - container valves
 - control equipment
 - detection devices
 - extinguishing agent containers, such as tanks and cylinders
 - support brackets
- types and purpose of pre-engineered fire-suppression systems:

- o design, installation and commissioning requirements and limitations of the manufacturers' proprietary systems
- o identification and purpose of the major components in the fire-suppression system for different manufacturers' proprietary systems
- o key installation design requirements for pre-engineered systems
- o manufacturer requirements and standards applicable to design, installation, commissioning, inspecting, testing and maintaining pre-engineered fire-suppression systems
- o procedures for inspecting, testing and maintaining systems to verify operation to manufacturer requirements
- o purpose of fire-suppression systems
- o reasons for commissioning after installation
- o types of fire-extinguishing agents used in pre-engineered systems and their uses
- types and purpose of tools and equipment used when installing and commissioning pre-engineered fire-suppression systems:
 - o hand and power tools
 - o personal protective equipment (PPE)
- workplace requirements for installing and commissioning pre-engineered fire-suppression systems:
 - o maintenance of tools and equipment
 - o WHS, including hazard and risk identification and control.

Assessment Conditions

Assessors must meet the requirements for assessors contained in the Standards for Registered Training Organisations.

Assessment must be conducted in the workplace or a simulated workplace using realistic conditions, materials, activities, responsibilities, procedures, safety requirements and environmental considerations.

Candidates must have access to installation drawings and documentation, manufacturers' specifications, materials, tools, equipment, pre-engineered fire-suppression systems and installation locations required to achieve the performance evidence.

Links

Companion Volume Implementation Guide:

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>