

Unit of Competency

CPPFES3044 Interpret installation requirements for gaseous fire-suppression systems

Modification history

| Release | Comments |
|---------|--|
| 1 | Supersedes and is equivalent to CPPFES3044A Interpret installation requirements for gaseous 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 read and interpret plans, drawings and specifications relevant to the installation of gaseous fire-suppression systems. It includes identifying plans and drawings and their functions, recognising commonly used symbols and abbreviations, identifying key features and specifications from design documentation and installation drawings, recognising document status and amendment details and interpreting job specifications.

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.

Ozone depleting substances (ODS) and synthetic greenhouse gases (SGG) are gaseous fire-extinguishing agents listed in Schedule 1 of the Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 and by law, can only be handled by people who hold an appropriate extinguishing agent handling licence (EAHL). This unit supports one or more EAHLs prescribed under the Act. For further information, check with the relevant regulatory authority.

Unit Sector

Fire Protection Inspection and Testing

Elements and Performance Criteria

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| 1. Interpret installation drawings and check compliance. | 1.1 Interpret installation drawings for gaseous fire-suppression system to clarify system design and Australian Standards requirements. 1.2 Identify potential and actual breaches of system design requirements and Australian Standards and take required action to ensure compliance according to regulatory and workplace requirements. |
| 2. Identify types of drawings and their functions. | 2.1 Identify main types of drawings used in the fire protection industry. 2.2 Identify key functions and users of each drawing type. 2.3 Identify and follow workplace quality requirements associated with installation drawings for gaseous fire-suppression systems. |
| 3. Recognise commonly used symbols, abbreviations and amendments. | 3.1 Identify commonly used fire protection symbols and abbreviations. 3.2 Locate drawing legend and interpret symbols and abbreviations. 3.3 Check and verify amendments to drawings. 3.4 Check amendments to specifications and information currency. |

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| | 3.5 Check and verify drawing as the latest amendment. |
| 4. Locate and identify key features on site installation drawing. | 4.1 Orientate installation drawing with site. 4.2 Identify and locate key features of installation site. 4.3 Access installation site and identify main installation features and services. 4.4 Identify site measurements on installation drawing and check against actual site values. |
| 5. Read and interpret job specifications for installation of gaseous fire-suppression system. | 5.1 Identify job specifications from design documentation, installation drawings, notes and descriptions. 5.2 Identify purpose of job specifications for gaseous fire-suppression system installation. 5.3 Identify standards of work, finishes and tolerances from design documentation, installation drawings and specifications. 5.4 Identify material attributes from job specifications and drawings. |

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 CPPFES3044A Interpret installation requirements for gaseous 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 CPPFES3044 Interpret installation requirements for gaseous 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 interpreting installation requirements for two different gaseous fire-suppression systems, including for each:

- confirming the amendment status and currency of drawings
- correctly orientating drawings to the ground
- identifying six key features on a drawing and the actual features at the worksite
- confirming six items of information from the title block of the installation drawings
- identifying six construction dimensions, levels and locations from installation drawings
- identifying six ancillary works dimensions, levels and locations from installation drawings
- identifying dimensions, material requirements and processes to be followed from formal job specifications.

Knowledge Evidence

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

- basic construction terminology used in installation drawings for gaseous fire-suppression systems
- compliance requirements of relevant regulations and Australian Standards associated with the installation of gaseous fire-suppression systems:
 - gaseous fire extinguishing systems
 - licensing related to the installation of ozone depleting substances (ODS) and synthetic greenhouse gases (SGG)
- drawing conventions
- features of drawings, plans and elevations:
 - abbreviations
 - contours
 - direction
 - key
 - scale
 - symbols
- key features of installation sites to be noted in relation to installation drawings:
 - clearance distances
 - dimensions
 - existing buildings and structures

- o locations of plant and equipment
 - o locations of services
 - o roads and railways
 - o service layouts and requirements
 - o shapes of structures or buildings
 - o site shape and orientation
 - o vertical and horizontal measurements
- key functions of drawing types:
 - o details of hazard:
 - dimensions
 - number of exits
 - volumes
 - o equipment details:
 - container fill and size
 - manufacturers' type
 - nozzle size and orifice
 - actuator type
 - o general layout of equipment
 - o location of key equipment:
 - containers
 - local control station
 - nozzles
 - pipework
- main users of different types of installation drawings:
 - o 'for approval' drawings
 - o 'for construction' drawings
 - o 'as-built' or 'as-installed' drawings
- mathematical techniques for calculating scale, height, area, volume and grade on drawings and plans
- purpose and typical contents of installation specifications for gaseous fire-suppression systems
- techniques for orientating drawings and plans to the worksite and finding true north
- workplace quality requirements to be applied when interpreting installation requirements for gaseous fire-suppression systems.

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 design documentation, drawings, measuring tools and equipment and installation sites 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>