

Unit of Competency CPCSFS5014

Conduct annual fire systems inspections

Application

This unit of competency specifies the outcomes required to assess all types of fire systems in all types of buildings to ensure that the systems comply with applicable legislation and will perform in the event of a fire.

This unit of competency supports the role of annual inspectors of fire systems with responsibility for inspecting existing fire systems; assessing compliance with the relevant applicable legislation, codes and standards; and advising whether they continue to perform to current fire safety standards.

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

Prerequisite Unit

Nil

Elements and Performance Criteria

1. Prepare for annual fire systems inspections.	<ul style="list-style-type: none">1.1 Schedule annual fire systems inspections in a timely manner and in consultation with relevant stakeholders, as required.1.2 Obtain and review current building plans and identify and note modifications made to the building since the last inspection.1.3 Review and use information regarding the current and historical legislation, codes and standards and fire engineered solutions applicable to fire systems to inform inspection planning.1.4 Review and use information regarding the validity of fire systems' compliance documentation to inform inspection planning.1.5 Plan fire systems certification inspections to ensure efficient and comprehensive implementation.
2. Conduct annual fire systems inspections.	<ul style="list-style-type: none">2.1 Inspect and assess each aspect of each fire system for compliance with the applicable current and historical legislation, codes, standards, regulatory requirements and document findings.2.2 Assess and record the current performance level of each fire system.
3. Produce annual fire systems inspection reports and communicate findings.	<ul style="list-style-type: none">3.1 Analyse the findings of inspections and identify and record works required to address shortfalls in fire systems' compliance or performance according to regulatory requirements.3.2 Produce and process reports according to regulatory requirements.3.3 Communicate the findings of the report to relevant stakeholders according to regulatory requirements, and carefully explain works required to rectify fire systems.

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 CPCSF55014A Conduct annual fire systems certification inspections.

Links

Companion Volume Implementation Guide:

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

Assessment Requirements for CPCSFS5014

Conduct annual fire systems inspections

Performance Evidence

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

- preparing for, conducting and reporting on annual fire systems inspections for four types of fire systems in buildings with different construction and modification histories, including:
 - o commercial building
 - o factory
 - o residential nursing home
 - o high-rise building.

Knowledge Evidence

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

- auditing processes and protocols:
 - o compliance documentation:
 - fire safety schedules
 - inspection and testing logbooks
 - maintenance, repair and replacement documentation
 - o roles and responsibilities of relevant professional personnel:
 - fire engineer
 - fire brigade personnel
 - building surveyor or certifier
 - persons with regulatory authority
 - architect
 - structural engineer
 - fire systems' designer
- computer software functions and operation:
 - o word processing
 - o spreadsheet
 - o email
 - o internet
- drawings, plans, reports and specifications
- types of buildings, including:
 - o low-rise buildings
 - o processing building applications
 - o warehouse buildings under 13.7 m high
 - o warehouse buildings over 13.7 m high

- o medium-rise buildings
 - o high-rise buildings (over 25 metres)
 - o buildings over 50 metres in height
- relevant current and historical legislation, codes and standards:
 - o building Acts
 - o building regulations
 - o infrastructure supply regulations
 - o the Building Code of Australia (BCA)
 - o National Construction Code (NCC)
 - o Australian standards for fire systems
 - o international standards for fire systems
 - o other fire system standards commonly required by building insurers
 - o jurisdictional authorities in addition to the BCA and NCC
- protection requirements for different buildings
- fire systems' technology and components:
 - o water-based systems, including:
 - wet pipe sprinkler systems
 - deluge and drencher systems
 - dry pipe sprinkler systems
 - pre-action sprinkler systems
 - early suppression fast response (ESFR)
 - hydrants, hose reels and monitors
 - water supply tanks
 - fire pump sets
 - o hydrants, hose reels and monitors
 - o water supply tanks
 - o fire pump sets
 - o detection and warning systems:
 - occupant warning systems
 - emergency warning and intercommunications systems (EWIS)
 - fire detection and alarm systems
 - smoke control systems
 - emergency lighting systems
 - o special hazard fire systems:
 - foam systems (low expansion, medium expansion and high expansion)
 - gaseous agent systems (carbon dioxide, inert gas and halocarbon gases)
 - water spray systems (deluge, medium/high velocity water spray and high-speed deluge)
 - chemical powder systems
 - wet chemical systems
- characteristics and limitations of products and materials used in fire systems and issues relating to material compatibility
- interconnection of fire systems:
 - o cause and effect matrix
 - o interface with other services
- passive fire safety elements:
 - o identification of passive elements

- o requirements for safeguarding the integrity of passive fire element performance where penetrations have been made
- basic principles of structural engineering
- characteristics of building materials
- construction industry terminology
- contractual processes.

Assessment Conditions

Assessors must meet the requirements for assessors contained 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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