



Australian Government

Assessment Requirements for CPCSF5003

Develop plans and methodology for fire systems design projects

Release: 1

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Modification History

Release 1 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.0.

Supersedes and is equivalent to CPCSF5003A Develop plans and methodology for fire systems design projects. Updated to meet the Standards for Training Packages 2012.

Performance Evidence

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

- developing a project plan and methodology for a minimum of four types of fire systems design projects, including:
 - commercial building
 - factory
 - residential nursing home
 - high-rise building.

Knowledge Evidence

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

- workplace design tools and processes
- project documentation:
 - drawings
 - architectural
 - structural
 - mechanical
 - hydraulic
 - electrical
 - layout
 - section
 - detail
 - final drawings:
 - ‘as installed’ drawings
 - block plans

- tactical fire plans
 - commissioning benchmarks
 - operations and maintenance manuals
- project schedule or construction program
- design brief
- design specifications
- compliance and quality requirements for fire systems design projects, including:
 - low-rise buildings
 - processing building applications
 - warehouse buildings under 13.7 m high
 - warehouse buildings over 13.7 m high
 - medium-rise buildings
 - high-rise buildings (over 25 metres)
 - buildings over 50 metres in height
- communication and negotiation processes
- level of accuracy required in detailed design drawings, plans and reports
- fire systems design activities, including installation support and finalisation
- naming conventions for design drawings and drawing register
- computer software functions and operation:
 - word processing
 - spreadsheet
 - email
 - internet
- fire systems technology and components:
 - water-based systems:
 - wet pipe sprinkler systems
 - deluge and drencher systems
 - dry pipe sprinkler systems
 - pre-action sprinkler systems
 - early suppression fast response (ESFR)
 - water spray systems
 - water mist systems
 - wet chemical suppression systems
 - foam suppression systems
 - hydrants, hose reels and monitors
 - water supply tanks
 - fire pump sets
 - detection and warning systems:
 - occupant warning systems
 - emergency warning and intercommunications systems (EWIS)

- fire detection and alarm systems
 - smoke control systems
 - emergency lighting systems
- purpose and operation of fire systems:
 - special products and hazards
 - system operation
 - performance requirements
 - maintenance standards
 - system activation and operation
- passive fire safety elements
- identification of passive element:
 - impact of fire systems design on passive elements
- construction industry terminology
- roles and responsibilities of relevant building project team and personnel, including:
 - architect
 - lead contractor
 - mechanical engineer or contractor
 - hydraulic engineer or contractor
 - electrical engineer or contractor
 - client
 - consulting engineer
 - civil engineers
 - fire engineers
 - building (private) certifier or surveyor
- project management processes, including scheduling, communications and file sharing
- on-site issues that can arise during the construction phase and impose changes to the designs of fire systems and other services
- regulatory or other approval:
 - building certifier or surveyor
 - fire brigade
 - fire engineer.

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

Companion volumes to this training package are available at the VETNet website -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>