



Australian Government

Assessment Requirements for CPCPFS4027 Commission fire sprinkler systems

Release: 2

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Modification History

Release 2 This version first released with CPC Construction, Plumbing and Services Training Package Release 5.1.

Knowledge Evidence formatted for clarity.

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

Supersedes and is equivalent to CPCPFS4027A Commission fire sprinkler systems. Updated to meet the Standards for Training Packages 2012.

Performance Evidence

To determine competency in this unit, a person must demonstrate they can commission one wet system connected to fixed pumpsets, one wet system connected to town main supply and one pre-action fire sprinkler system, 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.

In doing this, the person must meet the performance criteria for this unit.

Knowledge Evidence

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

- design and installation performance requirements of relevant installation standards including:
 - National Fire Protection Association (NFPA)
 - Factory Mutual performance-based codes of practice
 - AS 2118.1 Automatic fire sprinkler systems - General systems
- industry and regulatory requirements for commissioning fire sprinkler systems including:
 - codes and standards
 - environmental and sustainability
 - licensing
 - quality assurance
 - work health and safety (WHS)

- job safety analyses (JSA), safety data sheets (SDS) and safe work method statements (SWMS)
- performance measures for fire sprinkler systems as referenced in design drawings and specifications
- properties of water, including pressure, flow rates and atmospheric pressure
- SI system of measurements
- workplace and equipment safety requirements, including personal protective equipment (PPE) requirements relevant to the job
- fire sprinkler systems including:
 - deluge
 - dry pipe
 - pre-action
 - storage sprinklers
 - wall wetting
 - water mist
 - wet pipe
- approving authorities including:
 - client representative
 - council representative
 - fire brigade official
 - fire protection consultant engineer
 - insurance company representative
 - system designer
- documentation including:
 - as-installed drawings
 - design calculations
 - logbooks
 - operator manuals
- tools and equipment including:
 - digital tachometers
 - flow testing equipment
 - hand tools
 - laser levels
 - measuring devices
 - PPE
 - pressure gauges
- fire sprinkler system components including:
 - air compressors
 - alarm valves
 - ball valves

- brackets
- discharge nozzles
- flow switches
- pipework
- pressure gauges
- pressure reducing valves
- pressure relief valves
- pressure switches
- pumpsets
- solenoids
- sprinkler heads
- water supply valves
- functional tests to check effective operation of:
 - brigade booster connections
 - control and actuator mechanisms including:
 - pressure switches
 - flow switches
 - control valves, including:
 - pressure reducing
 - pressure relief
 - tank inflow
 - interfaces to other systems, including:
 - booster pumps
 - building services
 - control indicating equipment (CIE)
 - control of booster pumpsets
 - fire detection
 - heating, ventilation and air conditioning (HVAC)
 - occupant warning systems
 - valve monitoring controls
 - remote water proving points
 - water supply components, such as tank inflow and suction lines.

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