

# Unit of Competency CPCPFS2021

## Connect static storage tanks for fixed fire protection systems

### Application

This unit specifies the skills and knowledge required to connect storage tanks to fixed fire protection systems.

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

### Prerequisite Unit

CPCPCM2043 Carry out WHS requirements

### Elements and Performance Criteria

1. Identify installation requirements.	<p>1.1 Determine storage tank for fixed fire protection systems requirements from relevant job plans and specifications, codes, Australian Standards, manufacturer's specifications and jurisdictional requirements.</p> <p>1.2 Identify and apply workplace policies and procedures, work health and safety (WHS) and environmental requirements.</p>
2. Prepare for work.	<p>2.1 Create a materials list and collect materials.</p> <p>2.2 Select and check the serviceability of appropriate tools and equipment including personal protective equipment (PPE).</p>
3. Install and test storage tank.	<p>3.1 Connect storage tank and associated pipework.</p> <p>3.2 Apply pipe supports and fixings.</p> <p>3.3 Connect tank piping, associated valves and materials to the suction side of the fire pumpset.</p> <p>3.4 Connect make up and quick fill pipework, associated valving and supports according to job specifications, relevant job plans and specifications, codes, Australian Standards, manufacturer's specifications and jurisdictional requirements.</p> <p>3.5 Check jointing systems to ensure compliance with relevant job plans and specifications, codes, Australian Standards, manufacturer's specifications and jurisdictional requirements.</p> <p>3.6 Conduct pressure testing on installed system.</p> <p>3.7 Test and confirm correct operation of quick fill and make up lines and valving.</p> <p>3.8 Record test data in required format.</p> <p>3.9 Complete documentation according to relevant job plans and specifications, codes, Australian Standards, manufacturer's specifications and jurisdictional requirements.</p>
4. Clean up.	<p>4.1 Clear the work area, and dispose of, reuse or recycle materials in accordance with state and territory legislation and workplace policies and procedures.</p> <p>4.2 Clean tools and equipment, check for serviceability and report any damage, and store and secure.</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 CPCPFS2021A Connect static storage tanks for fixed fire protection systems.

## Links

Companion Volume Implementation Guide:

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

# Assessment Requirements for CPCPFS2021

## Connect static storage tanks for fixed fire protection systems

### Performance Evidence

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

- connecting and testing an approved static storage tank to a fire protection pumpset in accordance with the relevant job plans and specifications, codes, Australian Standards, manufacturer's specifications and jurisdictional requirements of a fire protection system
- connecting static storage tank downstream from backflow protection
- applying safety requirements throughout the work sequence, including electrical safety requirements
- communicating and working effectively and safely with others
- installing, setting and confirming operation of quick fill and make up lines and associated valving.

### Knowledge Evidence

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

- characteristics, application and limitations of different pipe fittings and fixture supports:
  - sectional tanks
  - steel or polymer storage tanks
  - tank linings
- processes, procedures and techniques of:
  - construction of fire protection tanks
  - fixing and joining
  - levelling and alignment
  - using measurements and formulas for calculating materials
  - pressure test systems
  - connecting static storage tanks
- function and operation of a range of valves, including backflow, associated with quick fill and make up lines and pump installations
- functional and operational factors of tools and equipment:
  - cutting
  - hand and power tools
  - lifting and load shifting equipment
  - testing equipment
- operation and components of fire sprinkler system pumpsets
- access relevant information, including job plans and specifications, codes, Australian Standards, manufacturer's specifications and jurisdictional requirements.
- work health and safety (WHS) requirements for connecting static storage tanks for fixed fire protection systems

- installation requirements for connecting static storage tanks for fixed fire protection systems, above and below ground pipework.

## 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

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