

Unit of Competency CPCPFS3031

Fabricate and install fire hydrant and hose reel systems

Application

This unit specifies the skills and knowledge required to fabricate and install fire hydrant and hose reel systems on new or existing structures.

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

CPCPCM3023 Fabricate and install non-ferrous pressure piping

Elements and Performance Criteria

1. Identify installation requirements.	<p>1.1 Access, read and apply fire hydrant and hose reel 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. Fabricate, install and test system.	<p>3.1 Set out system to relevant job plans and specifications, codes, Australian Standards, manufacturer's specifications and jurisdictional requirements.</p> <p>3.2 Connect fire brigade suction and booster arrangement.</p> <p>3.3 Fit all pipework and pipe supports.</p> <p>3.4 Connect fire hydrant valves, hose reels and ancillary equipment.</p> <p>3.5 Perform hydrostatic test on installation.</p> <p>3.6 Complete documentation according to relevant regulatory requirements.</p>
4. Clean up.	<p>4.1 Clear the work area and dispose of any materials in accordance with state and territory legislation and workplace procedures.</p> <p>4.2 Clean, check for serviceability and store and secure plant, equipment and tools reporting any damage to designated personnel.</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 CPCPFS3031A Fabricate and install fire hydrant and hose reel systems.

Links

Companion Volume Implementation Guide:

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

Assessment Requirements for CPCPFS3031

Fabricate and install fire hydrant and hose reel systems

Performance Evidence

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

- installing and performing hydrostatic testing of a fire hydrant and a hose reel system to the relevant codes, Australian Standards, manufacturer's specifications and jurisdictional requirements from an existing branch in a water supply using approved materials that contains:
 - a fire brigade booster and suction arrangement
 - a fire hydrant landing valve
 - a fire hose reel in copper
 - a fire hose reel in galvanised mild steel.

Knowledge Evidence

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

- processes, procedures and techniques of:
 - fabricating and installing fire hydrant and hose reel systems
 - pressure testing systems
 - pipe thread sealing methods
 - pipe jointing, involving:
 - threading
 - roll grooving
 - silver soldering
 - compression unions
 - press fit and flanges
- characteristics, application and limitations of approved materials and components used in fire hydrant and hose reel systems, above and below ground
- functional and operational features of tools and equipment used to install fire hydrant and hose reel systems
- fire brigade suction and booster arrangements
- feed and attack hydrants
- backflow prevention associated with fire hydrant and hose reels
- statutory and regulatory authorities:
 - Commonwealth, state or territory governments, local authorities
 - Codes and Australian Standards for location and installation of fire hydrants and hose reels
- how to access relevant information, including job plans and specifications, codes, Australian Standards, manufacturer's specifications and jurisdictional requirements

- tools, materials and equipment used for the installation and testing fire hydrants and hose reel systems
- work health and safety (WHS) requirements for installing and testing fire hydrants and hose reel systems
- installation requirements for fire hydrants and hose reel systems, above and below ground.

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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