

# Unit of Competency CPCPWT3021

## Set out and install water services

### Application

This unit specifies the skills and knowledge required to install heated, tempered, cold, drinking and non-drinking water services from water supply to fixture or points of discharge.

In some jurisdictions, this unit of competency may form part of accreditation, licensing, legislative, and 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.	1.1	Access, read and determine water service installation requirements from job specifications, relevant Australian Standards, codes, manufacturers' instructions and jurisdictional requirements.
	1.2	Obtain, interpret and follow workplace, work health and safety (WHS) and environmental requirements.
2. Prepare for work.	2.1	Create a materials list and collect materials.
	2.2	Select and check serviceability of appropriate tools and equipment including personal protective equipment (PPE).
3. Install and test pipe system.	3.1	Set out and install pipework and connection points according to drawings, relevant specifications, Australian Standards, codes and jurisdictional requirements.
	3.2	Test installed pipework according to relevant Australian Standards, codes, manufacturers' instructions and jurisdictional requirements.
4. Clean up.	4.1	Clear the work area and dispose of, reuse or recycle materials in accordance with state or territory legislation and workplace requirements.
	4.2	Clean tools and equipment, check for serviceability and report any damage, and store and secure.

### 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 CPCPWT3021A Set out and install water services.

## Links

Companion Volume Implementation Guide:

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

# Assessment Requirements for CPCPWT3021 Set out and install water services

## Performance Evidence

To demonstrate competency, a candidate must meet the performance criteria of this unit by setting out, installing and testing:

- water services from a cold drinking water supply line to a shower, basin, bath, laundry trough and kitchen sink, and include a provision for a water heater
- a heated water supply line to a kitchen sink and laundry trough
- a tempered water supply line to a basin, shower and bath
- a non-drinking water supply to a water closet and hose tap.

## Knowledge Evidence

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

- processes and requirements of installing water piping systems:
  - proximity to other services
  - location of piping
  - depth of cover, bedding and backfill
  - insulation
  - protection
  - pipe support
  - identification of piping
  - sizing
- properties of water including density, viscosity, compressibility, boiling point and freezing point
- pressure and flow rates
- water supply backflow and cross-connection
- how to access relevant information, including codes and standards
- tools, materials and equipment used to set out and install water services
- work health and safety (WHS) requirements for setting out and installing water services.

## 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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