

# Unit of Competency CPCPMS2021

## Assemble mechanical services components

### Application

This unit specifies the skills and knowledge required to assemble mechanical services components for heating and cooling systems prior to their installation.

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 Access, read and determine assemble mechanical services components installation 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 appropriate tools and equipment including personal protective equipment (PPE).</p>
3. Assemble components.	<p>3.1 Determine and transfer dimensions for fabrication and assembly.</p> <p>3.2 Interpret relevant standards, codes and symbols.</p> <p>3.3 Perform calculations to determine job requirements.</p> <p>3.4 Mark out material in conformance with determined measurements.</p> <p>3.5 Check dimensions for accuracy and compliance with plans and specifications.</p> <p>3.6 Identify and apply selected development method to task according to workplace procedures and sustainability principles and concepts.</p>
4. Clean up.	<p>4.1 Clear the work area and dispose of, reuse or recycle materials in accordance with state or territory legislation and workplace requirements.</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 CPCPMS2021A Assemble mechanical services components.

## Links

Companion Volume Implementation Guide:

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

# Assessment Requirements for CPCPMS2021

## Assemble mechanical services components

### Performance Evidence

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

- assembling and connecting a heating coil to a boiler and a fan and duct work for a warm air heating system given the plans and specifications.

### Knowledge Evidence

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

- characteristics of materials used in the required assembly
- classification of assembly types and identification of assembly components
- levelling and alignment processes
- mechanical and hydraulic principles
- operation requirements of equipment used for fabricating and assembling components
- types of fasteners, fixings and sealants
- work health and safety (WHS) regulations relevant to assembly of mechanical services components
- workplace operating procedures, including required standards for assembly
- how to access relevant information, including codes and standards
- tools, materials and equipment used to assemble mechanical services components
- WHS requirements to assemble mechanical services components.

### 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.

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