

Unit of Competency CPCPMS3033

Install small bore heating systems

Application

This unit specifies the skills and knowledge required to install small bore hydronic heated water heating systems.

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

Prerequisite Unit

CPCPCM2043A Carry out WHS requirements

Elements and Performance Criteria

1. Identify system requirements.	<p>1.1 Access, read and determine small bore heating installation requirements from job specifications, relevant Australian Standards, codes, 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> <p>2.3 Prepare work area to support the efficient installation of small bore heating systems.</p>
3. Install small bore heating systems.	<p>3.1 Set out system to comply with plans and specifications.</p> <p>3.2 Perform installation of fixings and support components.</p> <p>3.3 Perform installation of joint pipe and heating system.</p> <p>3.4 Test heating system and record details in the required format.</p> <p>3.5 Adjust heating system for correct operation and balance, including the setting of nominated temperature and adding appropriate inhibitor.</p> <p>3.6 Complete documentation according to relevant regulatory requirements and or workplace 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 CPCPMS3033A Install small bore heating systems.

Links

Companion Volume Implementation Guide:

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

Assessment Requirements for CPCPMS3033 Install small bore heating systems

Performance Evidence

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

- installing a two-pipe heating system to two panel radiators, skirting convector or a unit heater, including:
 - o using a combination of copper tube and non-metallic piping
 - o a minimum of DN20 flow and return with DN15 branches connected to a heating source.

Knowledge Evidence

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

- characteristics, application and limitations of approved materials and components
- processes, procedures and techniques of:
 - o effective isolation heating electrical systems
 - o installing and commissioning small bore heating systems:
 - panel radiators
 - skirting convectors
 - boilers and heat exchanges
- under floor heating systems
- functional and operational features of hand and power tools and equipment including:
 - o hand and power tools
 - o heating and bending equipment
 - o lifting and load shifting equipment
 - o measuring equipment
 - o silver brazing equipment
 - o welding equipment
- how to access relevant information, including codes and standards
- tools, materials and equipment used to install small bore heating systems
- work health and safety (WHS) requirements to install small bore heating systems.

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.

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