

Unit of Competency CPCPGS3054

Calculate and install natural ventilation for Type A gas appliances

Application

This unit specifies the skills and knowledge required to calculate and install natural ventilation for certified Type A gas appliances.

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 natural ventilation requirements.	<p>1.1 Access, read and determine ventilation 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> <p>1.3 Identify potential hazards and determine and implement control measures.</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> <p>2.3 Determine gas load and determine path of air supply.</p> <p>2.4 Calculate free ventilation area and ventilation openings.</p>
3. Install ventilation and test appliance.	<p>3.1 Install ventilation without damage to the building structure, surrounding environment or other services.</p> <p>3.2 Test ventilation operations according to job specifications, relevant Australian Standards, codes, 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 CPCPGS3054A Calculate and install natural ventilation for Type A gas appliances.

Links

Companion Volume Implementation Guide:

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

Assessment Requirements for CPCPGS3054

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Performance Evidence

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

- calculating natural ventilation for a minimum of three different installations including one pre-standard adoption and one post-standard adoption
- calculating natural ventilation for one flue-less installation where jurisdictional requirements allow
- installing one natural ventilation system for a Type A appliance.

Knowledge Evidence

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

- terminology relating to natural ventilation for gas appliances
- processes, procedures and techniques for:
 - calculating and installing natural ventilation to a variety of gas appliances
 - using measurements and formulas to calculate free ventilation and ventilation openings
- organisational policies and procedures on how to access relevant information, including codes and standards
- tools, materials and equipment used to install natural ventilation for Type A gas appliances
- work health and safety (WHS) requirements to install natural ventilation for Type A gas appliances
- properties of gas, gas safety, combustion principles, pressure and flow rates
- consumer safety requirements.

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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