



Australian Government

Assessment Requirements for CPCPMS5013 Design hydronic heating and cooling systems

Release: 2

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Modification History

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| Release 2 | This version first released with CPC Construction, Plumbing and Services Training Package Release 5.1.

Performance Evidence formatted for clarity. |
| Release 1 | This version first released with CPC Construction, Plumbing and Services Training Package Release 5.0.

Supersedes and is equivalent to CPCPMS5013A Design hydronic heating and cooling systems. Updated to meet the Standards for Training Packages 2012. |

Performance Evidence

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

- designing, sizing and documenting the layout details for a hydronic heating and cooling system for a residential or commercial building with a three split level home incorporating a roof top plant room and undercroft level.

Knowledge Evidence

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

- application of the National Construction Code (NCC) and relevant Australian standards and codes, manufacturer specifications and operating procedures relevant to the sector
- common terminology and definitions used in design of hydronic heating and cooling systems for all classes of building
- drafting principles
- nature of materials used in hydronic heating and cooling systems and effects of performance under various conditions
- principles of technology in the design of hydronic heating and cooling systems
- work health and safety (WHS) requirements, relevant statutory regulations, codes and standards
- hydronic applications for buildings:
 - fire rating of pipework and penetrations
- sustainability principles and concepts
- statutory and regulatory requirements and relevant Australian Standards and codes
- types and system components of boilers

- health risks associated with heated water supply
- health risks associated with cooling towers
- types of insulation and sheathing
- pipe supports
- testing and commissioning schedules
- operation and maintenance manuals.

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.

Links

Companion volumes to this training package are available at the VETNet website - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>