

Australian Government

## Assessment Requirements for MEM10013 Install split air conditioning systems and associated pipework

Release: 1

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#### **Modification History**

Release 1. Supersedes and is equivalent to MEM10013A Install split air conditioning systems and associated pipework

#### **Performance Evidence**

Evidence required to demonstrate competence in this unit must be relevant to and satisfy the requirements of the elements and performance criteria on at least two (2) occasions and include:

- following work instructions, standard operating procedures (SOPs) and safe work practices
- identifying and interpreting specifications, drawings, customer requirements, regulatory and legislative requirements for installing plug in split air conditioning systems and associated pipework up to 18 kW cooling capacity
- preparing the installation site for installing unit components to manufacturer requirements, standards, codes and regulations
- using tools and equipment to prepare and join pipework to specifications
- ensuring pipes are run separately and insulated to specifications and relevant standards, codes and regulations
- checking the installed system for compliance and integrity using appropriate testing methods and test equipment.

### Knowledge Evidence

Evidence required to demonstrate the required knowledge for this unit must be relevant to and satisfy the requirements of the elements and performance criteria and include knowledge of:

- safe work practices and procedures and use of personal protective equipment (PPE)
- · basic vapour compression cycle operating principles
- basic reverse cycle operating principles
- layouts, siting and set-ups of split air conditioning systems
- typical work environment, demands and considerations
- effective communication with appropriate persons and typical problems, contingencies and solutions
- components, accessories and fixtures for split air conditioning systems
- considerations for siting units and components and techniques and processes for site preparation
- fixing methods, tools and equipment for system components and pipework
- applicable legislative requirements, standards, codes and licensing requirements for installing system components, interconnecting wiring and connection to power supply

- applicable procedures for storage, handling and treatment of ozone depleting and synthetic greenhouse gas refrigerant
- sustainable energy practices for the efficient use of materials and for minimising damage/contamination to environment
- tools and equipment used for fabricating pipework
- pipe preparation and joining techniques including cutting, flaring, swaging and bending
- brazing/silver soldering techniques, equipment and consumables
- dry nitrogen being used during all brazing/silver soldering work
- procedures and equipment for checking pipework integrity and compliance to specification
- procedures for reporting non-conformances
- required documentation and procedures to complete and process.

#### **Assessment Conditions**

- Assessors must:
  - have vocational competency in installing split air conditioning systems and associated pipework at least to the level being assessed with relevant industry knowledge and experience
  - satisfy the assessor requirements in the *Standards for Registered Training Organisations 2015* or its replacement and comply with the *National Vocational Education and Training Regulator Act 2011*, its replacement or equivalent legislation covering VET regulation in a non-referring state/territory as the case requires
- Where possible assessment must occur in operational workplace situations. Where this is not possible or where personal safety or environmental damage are limiting factors, assessment must occur in a sufficiently rigorous simulated environment that reflects realistic operational workplace conditions. This must cover all aspects of workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills
- Conditions for assessment must include access to all tools, equipment, materials and documentation required, including relevant workplace procedures, product and manufacturing specifications
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

#### Links

Companion Volume implementation guides are found in VETNet https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b7050d37-5fd0-4740-8f7d-3b7a49c10bb2