

Australian Government

# Assessment Requirements for UEERA0030 Develop specifications and prepare drawings for HVAC/R projects

Release: 1

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#### **Modification History**

Release 1. This is the first release of this unit of competency in the UEE Electrotechnology Training Package.

### **Performance Evidence**

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions on at least one occasion and include:

- determining the project requirements accurately
- establishing source and availability of components appropriately, including the performance requirements of components and the system and risk management strategies in the specifications
- negotiating alterations to the project specifications and drawings successfully
- documenting project specifications and drawings in accordance with organisation policies and procedures
- obtaining approval for the completed project specifications and drawings
- dealing with unplanned events
- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements workplace procedures and practices, including using risk control measures
- · applying sustainable energy principles and practices
- developing specifications and preparing drawings for heating, ventilation and air conditioning/refrigeration (HVAC/R) system projects, including:
- using appropriate information technology in accordance with workplace procedures.

## **Knowledge Evidence**

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all of the requirements of the elements, performance criteria and range of conditions and include knowledge of:

- specification development specification writing; safe working practices and relevant standards, codes and regulations, including:
  - purpose and nature of specification
  - performance based specifications
  - prescriptive specifications
  - acceptable evidence of compliance
  - additional service required with the supply of equipment

- dealing with suppliers and manufacturer's
- documenting specification
- computer-aided drafting (CAD):
  - specific procedures:
    - creating symbols for library files
    - program specific commands
    - speed enhancement
    - configuring the digitising tablet
  - methodology for creating layers:
    - name
    - colour
    - line type
  - methodology for drawing variables:
    - limits
    - grid
    - snap
    - dimensions
    - text
    - units
  - ISO drawing sheets
  - advanced drawings
  - multiple three-dimensional views:
    - setting up environment on screen
    - top view
    - front and side views
    - three-dimensional views
  - movement through space:
    - draw on any created views
    - relocate coordinate system as necessary
  - creation of views:
    - · creation of three-dimensional geometric shapes
    - creation of three-dimensional complex view by:
      - manipulation of drawing planes
      - location of geometric shapes
  - editing:
    - use of function to facilitate modification of geometric shapes in completion of a three-dimensional view
  - display of three-dimensional view:
    - wire line
    - solid face

- isometric
- perspective
- orthographic:
- saving:
  - use of assembly drawing file for plotting
- design brief requirements
- information technology
- relevant manufacturer specifications
- relevant safe work method statements (SWMS)/job safety assessments or risk mitigation processes
- · relevant WHS/OHS legislated requirements
- relevant workplace policies and procedures.

#### **Assessment Conditions**

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

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.

Resources for assessment must include access to:

- a range of relevant exercises, case studies and/or other simulations
- relevant and appropriate materials, tools, equipment and information technology currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.

#### Links

Companion Volume implementation guides are found in VETNet -https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6