



Australian Government

Assessment Requirements for UEERA0094

Verify functionality and compliance of refrigeration and air conditioning installations

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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 two separate occasions and include:

- applying relevant work health and safety (WHS)/occupational health and safety (OHS) requirements and workplace procedures and practices, including:
 - using risk control measures
 - using personal protective equipment (PPE)
- acting within regulatory limits, implementing legislation, industry standards, codes of practice and regulations
- applying sustainable energy principles and practices
- completing reporting in accordance with workplace procedures
- conducting all refrigeration tests safely and correctly, including:
 - pressure testing, leak testing, evacuation testing, controls tests, refrigerant charge, operating pressures and system operation
- conducting electrical tests safely and correctly, including:
 - isolation, testing of insulation resistance of equipment, resistance of the internal circuits of equipment, polarity of supply and equipment, continuity of earthing, and correct electrical connections and load current
- dealing with unplanned events/situations in accordance with workplace procedures in a manner that minimises risk to personnel and equipment
- identifying non-compliant defects from test results
- identifying visual defects
- planning refrigeration and air conditioning installation compliance inspections and testing
- reading and interpreting drawings and requirements related to the installation
- recommending appropriate corrective actions
- selecting, obtaining and checking relevant equipment, materials, tools and testing devices required to carry out the work
- using manufacturer specifications and manuals.

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:

- refrigeration and air conditioning installation functionality tests and verification methods
- refrigeration and air conditioning installation tests and verification methods, including visual inspections, mandatory tests and verification requirements
- refrigeration testing requirements and procedures, including:
 - controls
 - leak test
 - operating pressures and temperatures
 - pressure test
 - refrigerant charge
- vacuum electrical testing requirements and procedures, including:
 - isolation and tagging off
 - continuity of earthing: correct electrical connections
 - isolation testing: insulation resistance of equipment
 - load current
 - polarity of supply and equipment
 - resistance of the internal circuits of equipment
 - insulation resistance of the equipment
- relevant environmental and sustainable principles and practices, including:
 - environment protection
 - sustainable energy
 - sustainable resources
- relevant equipment, materials, tools and testing devices, including:
 - air pressure and flow measurement and testing devices
 - electrical measuring and testing devices, including multimeters, megohm meters (insulation resistance tester) and ammeters
 - pressure testing and leak testing equipment and tools, including oxygen-free dry nitrogen cylinder and regulator
 - refrigerant pressure and temperature measuring and testing devices
 - refrigerant PPE
 - refrigeration and electrical hand and power tools
 - vacuum pump and electronic vacuum measuring device
- relevant industry standards, codes of practice and regulations
- relevant installation specifications and drawings
- relevant job safety assessments or risk mitigation processes, including electrical safe working practices
- relevant refrigeration and air conditioning manufacturer specifications and instructions

- relevant WHS/OHS legislated requirements
- relevant workplace documentation
- relevant workplace policies and procedures
- verifying compliance and functionality of refrigeration and air conditioning installations.

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 PPE currently used in industry
- applicable documentation, including workplace procedures, equipment specifications, regulations, codes of practice and operation manuals.
- As well as meeting these Assessment Conditions, to achieve competency in this unit, the assessment must include an assessment of the Performance Evidence and Knowledge Evidence under the direct supervision of the Registered Training Organisation's Assessor who meets the requirements specified above.

Links

Companion Volume implementation guides are found in VETNet - -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b8a8f136-5421-4ce1-92e0-2b50341431b6>