



Australian Government

UEERA0098 Inspect, test and repair fire and smoke control features of mechanical services systems

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. It replaces and is not equivalent to UEERA0096 Inspect, test and repair fire and smoke control features of mechanical services systems.

Modifications made in this release include:

- Performance criteria 1.8, 3.9, 4.4 and 4.5 added
- Compliance with legislation, regulation, and industry standards added to Performance Evidence
- Minor amendments made to Knowledge Evidence
- Content added to Companion Volume Implementation Guide (CVIG) to support implementation of Knowledge Evidence requirements.

Application

This unit involves the skills and knowledge required to inspect, test and repair all safety measures relating to fire and smoke control features of mechanical services systems.

Mechanical services refers to equipment required to operate or switch off as an active part of a building's fire and smoke hazard management system, not limited to the following: vents and dampers including fire, smoke and air dampers, smoke and heat vents, motorised relief openings, windows and shutters, and outdoor intakes; fire and smoke curtains; exhaust systems, including kitchen exhaust systems; fire fan control panel and fire indicator panel; fire isolated exit pressurisation systems; smoke exhaust systems; system shutdown; and smoke reservoirs.

It includes relevant Australian Standards and Building Code responsibilities and statutory requirements of building owners, contractors and service technicians related to fire and smoke control features of mechanical services systems.

This unit is suitable for trade and post trade training in the refrigeration and air conditioning sectors.

Although this unit does not include designing systems, it includes understanding the different types of systems and their installation, relevant parts of the associated Australian Standards, the Building Code of Australia and Building Regulations. Refer to the UEE Electrotechnology Companion Volume Implementation Guide for a list of Standards relevant to this unit.

The skills and knowledge described in this unit require a licence or permit to practice in the workplace where work is carried out on electrical installations which are designed to operate at voltages greater than 50 V alternating current (a.c.) or 120 V direct current (d.c.).

Competency development activities in this unit are subject to regulations directly related to licensing. Where a licence or permit to practice is not held, skills and knowledge described in this unit require a relevant contract of training, such as an Australian Apprenticeship.

Additional licences, permits and/or other conditions may apply in some jurisdictions subject to regulations related to fire and smoke control features of mechanical services systems work. Practice in the workplace and during training is also subject to work health and safety (WHS)/occupational health and safety (OHS) regulations.

Permits may also be required for some work environments, such as confined spaces, working aloft, near live electrical apparatus and site rehabilitation.

Pre-requisite Unit

UEECD0007 Apply work health and safety regulations, codes and practices in the workplace

UEERA0051 Install, commission, service and maintain air conditioning systems

Competency Field

Refrigeration and air-conditioning

Unit Sector

Electrotechnology

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1 Prepare to conduct safety checks and routine service activities	1.1 WHS/OHS risk control measures and procedures for carrying out the work are obtained and implemented in accordance with workplace procedures 1.2 Relevant legislation, codes and standards are identified and obtained 1.3 Facility specific approved design, drawings, baseline data and other relevant information as required are identified and obtained 1.4 Routine service or inspection cycle or schedule and responsibilities are determined in compliance with statutory requirements and standards 1.5 Log-sheet of safety and/or operational checks, inspections, tests and routine service action

- requirements are obtained or created
- 1.6** Details of any reported defects are obtained
 - 1.7** Required tools, instruments, equipment and resources are determined
 - 1.8** Personnel required to complete system testing are organised and scheduled allowing sufficient time to meet work instructions
- 2 Perform safety measures inspections and tests**
- 2.1** Inspection and test tools, instruments or equipment are obtained
 - 2.2** Tools, instruments and equipment for correct operation and calibration if required are checked
 - 2.3** Safety measures inspections and tests on individual components or sections and systems are performed
 - 2.4** Inspections and tests in compliance with legislation, codes, standards and OHS/WHs requirements and responsibilities are carried out
- 3 Carry out safety measures routine service**
- 3.1** Routine service work in compliance with legislation, codes, standards and OHS/WHs requirements and responsibilities are carried out
 - 3.2** Equipment, machines and plant are isolated and checked where necessary in strict accordance with WHS/OHS requirements
 - 3.3** Routine service tasks are carried out according to regulatory requirements without compromising the integrity of the building or environmental requirements
 - 3.4** Routine service personnel required to perform the tasks are coordinated in an efficient and effective manner
 - 3.5** Responsibility boundaries with other routine service participants are observed
 - 3.6** Unexpected situations are addressed by reference to job specifications, building management procedures and discussion with appropriate personnel
 - 3.7** Defects and faults are identified and reported, and rectification recommended
 - 3.8** Plant, systems and equipment are checked for correct

		operation on completion of routine service tasks
	3.9	System devices/components are reset and reinstated as fully operational
4 Develop and maintain records	4.1	Notes and/or complete checklists of the inspections, tests and routine service carried out are prepared in accordance with regulatory requirements and timeframes
	4.2	Notes, checklists and updated log sheets are collated and readily accessible on site
	4.3	Safety checks, routine service and yearly condition reports are signed off and reports submitted to building manager and/or owner
	4.4	Tools and equipment are checked for faults, wear or damage and rectified or problems reported according to workplace requirements
	4.5	Client site is left in clean and tidy condition

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the UEE Electrotechnology Training Package Companion Volume Implementation Guide.

Essential operating conditions include:

- planning, implementing and applying a building's routine service program of fire and smoke control features of mechanical services systems on more than one occasion and in two different facilities

Unit Mapping Information

This unit replaces and is not equivalent to UEERA0096 Inspect, test and repair fire and smoke control features of mechanical services systems.

Links

Companion Volume Implementation Guides are found in VETNet -

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