



Australian Government

Assessment Requirements for PUA FIR607 Apply electrical/electronic knowledge to fire investigations

Release: 2

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Modification History

Release 2. This is the second release of this unit of competency in the PUA Public Safety Training Package.

Release 1. This is the first release of this unit of competency in the PUA Public Safety Training Package.

Performance Evidence

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

- applying Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) organisational requirements
- arranging for tests on electrical evidence collected
- checking and assessing scene safety including isolating power
- coordinating fire investigations including other organisations and support personnel
- demonstrating knowledge of basic electrical circuitry
- documenting findings and identifying components of electrical equipment and relationships to electrical causes of ignition
- identifying potential ignition sources and processes of elimination
- identifying, assessing and collecting circuitry components and appliances
- implementing legislation, codes of practice and industry standards
- interpreting and recording findings
- operating visual and electric recording equipment
- protecting electrical circuitry components, equipment and appliances of evidential value
- undertaking an external and internal assessment of scene
- using information technology and databases
- utilising organisationally approved scientific methods
- working with methods, techniques and equipment for handling, collecting, preserving, packaging, labelling, storing and transporting evidence

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria and includes knowledge of

- basic circuit diagrams and electrical plans relating to electric components and equipment
- electrical circuitry components, equipment and appliances of evidential value

- electrical circuitry including design, installations, overload protection, power supply, resistance, short circuit or fault currents and voltage, current or kilowatts in different appliances
- fire scene observations including cable insulation, circuit and component failure, circuit mapping, components, evidence electrical tracking, flame propagation in hazardous, locations, operation of protective devices, wire overheating, starting, arcing and burn patterns
- laboratory or specialist testing sequence of electrical items
- organisational documentation, policies and procedures
- organisational protocols and procedures including legal and regulatory requirements for the investigation of fire incidents
- other organisations and agencies including support personnel
- product recall processes
- protection of evidential value
- requirements for reporting and recording
- safety data sheet databases
- sources of industry standards relating to electrical installations and appliances
- types of operation and potential faults in electrical and electronic equipment and appliances
- Work, Health and Safety (WHS)/Occupational Health and Safety (OHS) organisational requirements including risk mitigation

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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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.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in industry approved simulated workplace operational situations that reflect workplace conditions.

Resources for assessment must include access to

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, equipment, tools and personal protective clothing and equipment currently used in industry including
 - examples of electrical circuitry, electrical equipment and appliances damaged by electrical faults which resulted in fire
 - various electrical circuitry, electrical equipment and appliances
- applicable documentation including organisational procedures, industry standards, 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=3eca5672-6d5a-410b-8942-810d0ba05bbf>