



**Australian Government**

# **Assessment Requirements for MEM10002 Terminate and connect electrical wiring**

**Release: 1**

# Assessment Requirements for MEM10002 Terminate and connect electrical wiring

## Modification History

Release 1. Supersedes and is equivalent to MEM10002B Terminate and connect electrical wiring

## 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, regulatory and legislative requirements for terminating and connecting electrical wiring
- connecting and terminating electrical wiring utilising a range of methods and sealing entry points, where required, and marking/tagging and labelling wiring to specifications
- using test equipment to locate various faults
- inspecting and testing terminated cables to ensure they comply with continuity and insulation resistance and are safely intended for use
- completing all reports and documentation in accordance with SOPs.

## 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)
- statutory and regulatory requirements associated with the termination and connection of electrical wiring including AS/NZS 3000:2000, Electrical Installations (known as the Australian/New Zealand Wiring Rules), other Australian/International Standards and codes of practice
- different types of electrical cables and cords and their applications
- structural components of cables and their purpose (conductor material, stranding, insulation type, voltage rating, screening, sheathing, armour and serving)
- identifying the Australian and international colour standards for cables and cords
- factors affecting cable current-carrying capacity including current requirements for the circuit, cable installation method to be used and environmental conditions in the vicinity of cable installation
- wiring support and/or protection requirements and specifications
- relevant manufacturer requirements
- specifications and methods for terminating different materials

- wiring support techniques and alternatives
- marking, tagging and labelling requirements for cables, wires, conductors and connections
- test requirements to ensure compliant continuity and insulation resistance
- data to be recorded/reported and the frequency of recording/reporting
- requirements for approval to work.

## Assessment Conditions

- Assessors must:
  - have vocational competency in terminating and connecting electrical wiring 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>