



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **CPPSEC3037A Test installed security equipment and system**

**Release: 1**

## **CPPSEC3037A Test installed security equipment and system**

### **Modification History**

Not Applicable

### **Unit Descriptor**

**Unit descriptor** This unit of competency specifies the outcomes required to test a range of security equipment and systems including cable systems, equipment components and programming. It requires the ability to select and carry out tests suitable to confirm the integrity, security and safety of the security equipment and system. This work applies in extra low voltage as defined through the Australian Standards AS 2201 (1986) environments.

This unit may form part of the licensing requirements for persons responsible for testing security systems and equipment in those states and territories where these are regulated activities.

### **Application of the Unit**

**Application of the unit** This unit of competency has application in those work roles involving the testing of security equipment and systems. Competency requires legal and operational knowledge applicable to relevant sectors of the security industry. The knowledge and skills described in this unit are to be applied within relevant legislative and organisational guidelines.

### **Licensing/Regulatory Information**

Refer to Unit Descriptor

### **Pre-Requisites**

Not Applicable

## Employability Skills Information

**Employability skills**      This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

|                                                                   |                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Elements describe the essential outcomes of a unit of competency. | Performance criteria describe the required performance needed to demonstrate achievement of the element. Where <b><i>bold italicised</i></b> text is used, further information is detailed in the required skills and knowledge section and/or the range statement. Assessment of performance is to be consistent with the evidence guide. |
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## Elements and Performance Criteria

| ELEMENT                               | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 Prepare for testing.                | <p>1.1 Applicable provisions of <b>legislative</b> and <b>organisational requirements</b> relevant to <b>assignment instructions</b> are identified and complied with.</p> <p>1.2 Assignment instructions are obtained, reviewed and confirmed as required with <b>relevant persons</b>.</p> <p>1.3 <b>Security equipment and system</b> to be <b>tested</b> is identified and confirmed.</p> <p>1.4 Testing parameters appropriate to the security equipment and system are confirmed in accordance with manufacturer's instructions.</p> <p>1.5 <b>Tools, equipment and materials</b> needed to carry out the work are selected and checked for correct operation and safety.</p> <p>1.6 Potential and existing <b>risks and hazards</b> in the work area are identified and controlled in accordance with <b>Occupational Health and Safety (OHS)</b> requirements and own role, competence and authority.</p>                                                 |
| 2 Test security equipment and system. | <p>2.1 <b>Personal protection equipment</b> is selected and used in accordance with OHS requirements.</p> <p>2.2 Parts or connections of security equipment and system are removed in accordance with approved procedures and safely stored to protect against loss or damage.</p> <p>2.3 Tests are conducted in accordance with approved procedures and manufacturer's instructions.</p> <p>2.4 Tests provide reliable and accurate test data on the operation and functioning of security equipment and system.</p> <p>2.5 Security equipment and system is reassembled and returned to pre-test condition in accordance with manufacturer's instructions.</p> <p>2.6 Safe workplace practices are applied throughout programming process in accordance with OHS requirements.</p> <p>2.7 Personal limitations in conducting testing procedures are identified and assistance is sought from relevant persons in accordance with organisational procedures.</p> |
| 3 Complete testing.                   | <p>3.1 Security equipment and system is checked to confirm operational effectiveness.</p> <p>3.2 Operational errors or deficiencies in security equipment and system is documented and reported in accordance with organisational procedures.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

**ELEMENT****PERFORMANCE CRITERIA**

- 3.3 Test results are accurately recorded and processed in accordance with organisational procedures.
- 3.4 Work area is restored to original condition, waste disposed of and tools and equipment cleaned and stored in accordance with organisational requirements.
- 3.5 Malfunctions, faults, wear or damage to tools or equipment is documented and reported for repair or replacement in accordance with organisational procedures.
- 3.6 Notification of work completion is made to relevant persons in accordance with organisational procedures.
- 3.7 Relevant **documentation** is completed and securely maintained in accordance with organisational procedures.

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge and their level required for this unit.

#### Required skills

- accurately identify and handle cables
- apply safe and environmentally aware work practices
- communicate in a clear and concise manner
- complete documentation
- download and upload digital information
- estimate and organise materials, tools and equipment requirements
- evaluate test results
- identify and comply with applicable legislative requirements including licensing
- identify and control workplace hazards
- identify and follow routine workplace safety procedures
- identify and report faulty equipment
- identify, isolate, test and tag cables
- operate security equipment and systems
- organise and prioritise work tasks
- power security systems
- read a multimeter
- read and interpret plans and specifications
- solve routine problems
- test security equipment and systems
- use keypads and control panels

## REQUIRED SKILLS AND KNOWLEDGE

- use suitable tools and equipment, including hand and power tools and testing devices
- work in confined spaces.

### Required knowledge

- applicable legislative requirements including licensing and client confidentiality
- building construction methods and types
- cable identification methods and techniques
- circuit protection requirements
- earthing systems arrangements and requirements
- electrical concepts
- electrical connections and types of electrical circuits
- emergency procedures
- isolating and testing procedures
- keypad and control panel types and functions
- procedures for accessing and storing tools, equipment and materials
- procedures for reporting malfunctioning or faulty tools and equipment
- procedures to power systems
- reporting and documentation requirements
- requirements for compliance with Australian building codes and regulations and Australian Communications Authority cabling standards
- requirements for working at height and in a confined space
- risks and hazards associated with programming procedures
- safe workplace procedures
- technical terminology
- types and functions of computer software
- types of security equipment and system configurations
- types, functions and features of security equipment and systems
- types, functions and features of tools and equipment including testing devices
- waste disposal procedures.

## Evidence Guide

### EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

**Critical aspects for** A person who demonstrates competency in this unit must be able to

**assessment and evidence required to demonstrate competency in this unit**

provide evidence of:

- determining testing parameters appropriate to type of security equipment and system and accurately interpreting test results
- following safe and efficient work practices in the use of tools and equipment and managing risks and hazards in the work area
- interpreting and complying with applicable legislative and licensing requirements for testing work
- organising own work tasks within specified testing timeframes and completing documentation related to testing services
- using appropriate methods and approved procedures to disassemble and reassemble components of security equipment and system
- cleaning and storing tools and equipment and reinstating work site to a clean and safe condition
- using appropriate procedures to carrying out tests to check and confirm security equipment and system performance and operational effectiveness.

**Context of and specific resources for assessment**

Context of assessment includes:

- a setting in the workplace or environment that simulates the conditions of performance described in the elements, performance criteria and range statement.

Resource implications for assessment include:

- access to plain English version of relevant statutes and procedures
- access to a registered provider of assessment services
- access to a suitable venue and equipment
- assessment instruments including personal planner and assessment record book
- work schedules, organisational policies and duty statements.

Reasonable adjustments must be made to assessment processes where required for people with disabilities. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.

**Method of assessment**

This unit of competency could be assessed using the following methods of assessment:

- observation of processes and procedures
- questioning of underpinning knowledge and skills.

**Guidance information for assessment**

Assessment processes and techniques must be culturally appropriate and suitable to the language, literacy and numeracy capacity of the candidate and the competency being assessed. In all cases where practical assessment is used, it should be combined with targeted questioning to assess the underpinning knowledge.

Oral questioning or written assessment may be used to assess underpinning knowledge. In assessment situations where the candidate is offered a choice between oral questioning and written assessment, questions are to be identical.

Supplementary evidence may be obtained from relevant authenticated correspondence from existing supervisors, team leaders or specialist training staff.

## Range Statement

### RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

***Legislative requirements may relate to:***

- applicable commonwealth, state and territory legislation which affects work such as:
  - workplace safety
  - environmental issues
  - equal employment opportunity
  - industrial relations
  - anti-discrimination and diversity
- Australian building codes and regulations
- Australian Communications Authority cabling standards
- Australian standards and quality assurance requirements
- award and enterprise agreements
- evidence collection
- freedom of information
- licensing arrangements and certification requirements
- privacy requirements
- relevant industry codes of practice
- telecommunications
- trade practices.

***Organisational requirements may relate to:***

- access and equity policies, principles and practices
- business and performance plans
- client service standards
- code of conduct, code of ethics

- communication and reporting procedures
- complaint and dispute resolution procedures
- emergency and evacuation procedures
- employer and employee rights and responsibilities
- OHS policies, procedures and programs
- own role, responsibility and authority
- personal and professional development
- privacy and confidentiality of information
- quality assurance and continuous improvement processes and standards
- resource parameters and procedures
- roles, functions and responsibilities of security personnel
- storage and disposal of information.
- access to site and specific site requirements
- equipment and system location information
- equipment, tools and material requirements
- personal protection clothing and equipment requirements
- reporting requirements
- security equipment and system information:
  - features, functions and capabilities
  - installation procedures
  - manufacturer's instructions
  - service and maintenance requirements
  - type
  - warranties and guarantees
- specific client requirements
- timeframes
- work schedules
- work tasks and procedures.

***Assignment instructions may include:***

***Relevant persons may include:***

***Security equipment and systems may include:***

- clients
- colleagues
- engineers and technicians
- equipment and systems manufacturers
- security consultants
- security personnel
- site managers or project managers
- supervisor.
- access control systems
- audible and visual warning devices
- cameras and monitors
- commercial and residential alarm systems

- detection devices
  - electric and mechanical fire safety and fire locking systems
  - electronic locks and locking systems
  - electronic readers
  - electronic screen equipment
  - intercoms and control panels
  - security doors and door controls
  - specialised access control systems eg biometrics.
- Security systems may be:***
- computerised
  - electronic
  - mechanical
  - procedural.
- Tests may involve:***
- alarm tests
  - calibration tests
  - correct relaying of information and data
  - coverage tests
  - detection tests
  - functional tests
  - safety tests
  - testing of cables
  - testing of wiring and connections:
    - continuity
    - resistance
    - earth leakage
    - voltage
  - testing to specifications
  - walk tests.
- Tools, equipment and materials may include:***
- cable testing equipment
  - communications equipment
  - computers and computer software
  - crimp tools
  - hand tools
  - ladder
  - multimeter
  - personal protection equipment
  - power tools
  - templates
  - test board
  - test tape.
- Risks and hazards***
- chemical hazards eg battery corrosion

**may relate to:**

- exposed electrical wiring
- exposure to:
  - asbestos
  - building debris
  - dust
  - glass fibre
  - live power
  - natural and other gas build-up
  - noise
  - vermin
  - water
- manual handling
- non-compliance with building codes and regulations.

***Occupational Health and Safety (OHS) requirements may relate to:***

- emergency procedures
- following confined spaces procedures
- implementation of safety policies and procedures:
  - chemicals, gas and vapour
  - isolation procedures
  - monitoring and testing procedures
  - use of personal protection equipment and clothing
  - work clearance procedures
- risk and hazard recognition
- safety training
- working with electrical wiring and cables
- working with tools and equipment.

***Personal protection equipment may include:***

- breathing apparatus
- fire extinguisher
- first aid kit
- gloves
- head protection
- hearing protection
- knee pads
- masks
- safety boots
- safety glasses.
- warning signs and tapes
- witches hats.

***Documentation may include:***

- adjustments to original cable plan
- cable identification records
- faulty or malfunctioning tools and equipment
- location of security equipment and system

- materials used
- testing and inspection results
- work activity report
- written and electronic reports.

## **Unit Sector(s)**

**Unit sector**                      Security

## **Competency field**

**Competency field**              Technical security