

Australian Government

Department of Education, Employment and Workplace Relations

# CPPFES2026A Inspect and test emergency and exit lighting systems

Release: 1



#### **CPPFES2026A** Inspect and test emergency and exit lighting systems

## **Modification History**

Revised unit

Element structure and performance criteria changed to reflect workplace requirements Skills and knowledge requirements and the range statement updated Unit based on PRMPFES26B Inspect, test and maintain emergency/exit lighting systems

# **Unit Descriptor**

This unit of competency specifies the outcomes required to inspect and test installed emergency and exit lighting systems at customers' premises.

# **Application of the Unit**

This unit of competency supports fire protection technicians responsible for regularly inspecting and testing the functional operation of emergency and exit lighting. It does not apply to any installation, replacement, maintenance and repair functions that are restricted to licensed trades or occupations (subject to relevant state or territory regulations).

# **Licensing/Regulatory Information**

Work in this area must be completed according to relevant legislative, industry, customer and organisational requirements, including occupational health and safety (OHS) policies and procedures.

The fire protection technician is not permitted to undertake any functions restricted to licensed trades or occupations.

Different states and territories may have regulatory mechanisms that apply to this unit. Candidates are advised to check for regulatory limitations.

# **Pre-Requisites**

Not applicable.

# **Employability Skills Information**

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 performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

#### **Elements and Performance Criteria**

1	Apply rules and regulations to service operations.	1.1	Requirements of relevant <i>rules and regulations</i> are <i>confirmed</i> and applied to <i>work procedures</i> .
		1.2	<i>Compliance requirements are checked</i> and <i>action</i> is taken according to <i>organisational policies and procedures</i> .
2	Inspect and test single point systems.	2.1	Work permits are obtained prior to entering customer premises.
		2.2	<i>Single point systems</i> are inspected and tested according to requirements and procedures contained in relevant Australian standards and regulatory requirements.
		2.3	<i>Components</i> are replaced, as required and <i>permitted</i> , according to relevant Australian standards.
		2.4	Defects are reported and those within technician's level of competency and scope of responsibility are repaired.
		2.5	<i>Documentation</i> is completed according to relevant Australian standards, and organisational and <i>customer requirements</i> .

# **Required Skills and Knowledge**

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

#### **Required skills**

- customer service skills
- language, literacy and numeracy skills to:
  - communicate with others clearly and concisely, verbally and in writing
  - read and comply with work instructions and specifications
  - read and record measurements
  - record and report information neatly and legibly
- planning and organising skills to:
  - estimate time to complete activities
  - prioritise tasks
- interpersonal skills to relate to people from a range of social and cultural backgrounds
- technical skills to:
  - conduct electrical circuitry testing procedures
  - isolate circuit breakers
- skills to work safely when:
  - applying workplace housekeeping procedures
  - removing and replacing globes, tubes and starters, especially minimising exposure to electrical connections and avoiding damage to components
  - using hand and power tools

#### **Required knowledge**

- action to take when a breach of health, safety or other policy occurs
- basic operation of a central system
- basic operation of single point emergency and exit lights
- basic operation of computer monitored single point systems
- basic theory of AC and DC current
- battery types used in emergency and exit lighting and basic theory of battery operation, including charge time and ampere hour ratings
- circuit breakers to be isolated for system inspection
- common control and indicators required on any single point emergency light
- commonly used emergency and exit light fittings
- deemed to comply requirements for exit sign locations, given required egress routes and exit door locations
- definition of extra low voltage according to AS 3000 Electrical installations (known as the wiring rules)
- electrical terms associated with emergency and exit lighting
- factors affecting lifetime of batteries
- how to determine:

- minimum and maximum viewing distance of pictorial element on an exit sign
- whether tubes and globes are:
  - maintained
  - non-maintained
  - sustained
- identification of circuit breakers to be isolated for system inspection
- inspection, testing and reporting requirements according to relevant standard, such as AS/NZS 2293 Emergency escape lighting and exit signs for buildings
- key features of legislation, regulations and codes applicable to testing and maintaining an emergency and exit lighting system, including:
  - implications of not applying legislative requirements to job functions
  - permissible work on emergency and exit lighting that may be undertaken without an electrical licence
  - purpose of the Building Code of Australia (BCA) and deemed to comply requirements relevant to installation of emergency and exit lighting
- minimum and maximum mounting height for exit signs
- purpose of an emergency and exit lighting system and examples of where it may be required or installed
- purpose of wiring diagrams
- relevant cleaning solutions and their application for cleaning lighting lenses and reflectors
- safety issues, including:
  - concerns with voltages in excess of extra low voltage
  - requirements for replacing globes, tubes and starters on electrical circuits that power lighting
  - requirements for testing electrical circuits

# **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.

This unit of competency could be assessed by observation of practical demonstration of inspecting and testing emergency and exit lighting systems. Assessment of this unit must be conducted by, or in association with, a person holding a current electrician's licence.
A person who demonstrates competency in this unit must be able to provide evidence of the required skills and knowledge specified in this unit. In particular the person should demonstrate the ability to:
<ul> <li>comply with relevant rules and regulations, including those relating to the scope and limit of the technicians' responsibilities</li> <li>inspect and test single point systems</li> <li>replace globes and tubes on fittings</li> <li>clean and fit components, such as lenses</li> <li>complete required documentation.</li> </ul>
Assessment of essential underpinning knowledge may be conducted in an off-site context. It is to comply with relevant regulatory or Australian standards' requirements.
Resource implications for assessment include:
<ul> <li>access to customer premises or a simulated workplace environment</li> <li>assessment documentation</li> </ul>
<ul> <li>necessary tools, specialist equipment, manuals and relevant documentation</li> <li>training and assessment record book.</li> </ul>
Assessment methods must:
<ul> <li>satisfy the endorsed Assessment Guidelines of the Property Services Training Package</li> <li>include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application</li> <li>reinforce the integration of employability skills with workplace tasks and job roles</li> <li>confirm that competency is verified and able to be transferred to</li> </ul>

	other circumstances and environments.
Guidance information for assessment	Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.
	Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.
	This unit could be assessed on its own or in combination with other units relevant to the job function.

## **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.

<i>Rules and regulations</i> may include:	<ul> <li>dangerous goods regulations</li> <li>environmental regulations</li> <li>licensing arrangements</li> <li>OHS legislation, regulations and codes</li> <li>relevant commonwealth and state or territory building Acts, regulations and codes, such as BCA</li> <li>relevant Australian standards, such as: <ul> <li>AS/NZS 2293 Emergency escape lighting and exit signs for buildings</li> <li>note: Australian standards are frequently revised and users</li> </ul> </li> </ul>
Requirements may be <i>confirmed</i> with:	<ul> <li>must always check for currency and amendments.</li> <li>colleagues</li> <li>managers</li> <li>supervisors</li> <li>team leaders.</li> </ul>
<i>Work procedures</i> may include:	<ul> <li>assignment instructions</li> <li>equipment manufacturers' requirements</li> <li>instructions from colleagues, supervisor or manager</li> <li>personal protective equipment requirements</li> <li>reporting and documentation requirements</li> <li>specific customer requirements.</li> </ul>

Checking system compliance requirements	• applying inspection, test and survey requirements according to Australian standards		
may include:	• reviewing documentation to verify that installed systems comply with relevant rules and regulations.		
Action may include:	advising customer		
Action may menude.	documenting non-compliance		
	making equipment safe		
	• reporting, as required.		
Organisational policies	• job scheduling systems and communication devices		
and procedures may	• personnel practices and guidelines outlining work roles,		
include:	responsibilities and delegations		
	<ul> <li>recording and reporting documentation and systems</li> </ul>		
	<ul> <li>relevant OHS policies, procedures and programs</li> </ul>		
	relevant rules and regulations		
	• standard operating procedures, work instructions and manuals.		
Single point system is:	• a system of emergency lighting employing self-contained emergency luminaires and exit signs that will vary from building to building.		
	Note: The service technician will need to become familiar with the system layout before inspection and testing procedures can be carried out.		
<i>Components</i> may include:	• batteries		
	• lenses		
	light fitting globes and tubes		
	• starters		
	other replaceable components.		
	Note: Replacement of these components is not restricted to any licensed trade or occupation.		
Permitted means:	• not restricted to licensed trades or occupations.		
Documentation may	application for credit forms		
include:	certificates of inspection		
	corrective action reports		
	customer recommendation forms		
	equipment recommendation forms		
	expense claims		
	• job cards		
	maintenance record system		
	motor vehicle fleet cards		
	petty cash vouchers		
	product documentation		

	•	service agreements.
Customer requirements may include:		
	•	providing non-routine or urgent services providing routine services providing written or verbal confirmation of services provided or future maintenance schedule
	•	sighting work permits.

# **Unit Sector(s)**

Fire protection equipment

# **Custom Content Section**

Not applicable.