



**Australian Government**

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

# **PRMPFES04B Identify fire protection equipment**

**Release: 1**

## **PRMPFES04B Identify fire protection equipment**

### **Modification History**

Not Applicable

### **Unit Descriptor**

#### **Unit descriptor**

The unit prepares the individual for servicing and installation procedures by being able to accurately identify fire protection products and their purpose of use. All work in the area of identification must be completed in accordance with relevant legislative, industry, customer and organisational requirements, including occupational health and safety (OHS) policies and procedures.

### **Application of the Unit**

Not Applicable

### **Licensing/Regulatory Information**

Not Applicable

### **Pre-Requisites**

Not Applicable

### **Employability Skills Information**

Not Applicable

### **Elements and Performance Criteria Pre-Content**

Not Applicable

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Identify a range of portable and wheeled fire extinguishers	<p>1.1 Identify a range of <i>portable fire extinguishers</i> according to types, <i>extinguishants</i>, <i>expellants</i>, colour-coding requirements, extinguisher labelling and location signs</p> <p>1.2 Identify a range of <i>wheeled fire extinguishers</i> according to types, <i>extinguishants</i>, <i>expellants</i>, colour-coding requirements and extinguisher labelling</p>
2 Identify different types of hose reels	2.1 Identify the different types of <i>hose reels</i> according to purpose of use and location signs
3 Identify different types of delivery lay flat fire hoses	<p>3.1 Identify the different types of <i>delivery lay flat fire hoses</i> according to class, size and construction</p> <p>3.2 Identify the different types of <i>delivery lay flat fire hose couplings</i> according to design and construction</p>
4 Identify fire hydrant system components	4.1 Identify <i>fire hydrant system components</i> according to purpose of use and location signs
5 Identify fire blankets and containers	5.1 Identify fire blankets and <i>fire blanket containers</i> according to purpose of use and location signs
6 Identify battery-operated smoke alarms	6.1 Identify <i>battery-operated smoke alarms</i> according to purpose of use and location
7 Identify fire and smoke doors	7.1 Identify <i>fire and smoke doors</i> according to purpose of use
8 Identify fire pump sets	8.1 Identify <i>fire pump sets</i> according to purpose of use
9 Identify automatic fire suppression, detection and alarm system equipment	9.1 Identify <i>automatic fire suppression, detection and alarm system equipment</i> according to purpose of use

## Required Skills and Knowledge

Refer to Evidence Guide

## Evidence Guide

### EVIDENCE GUIDE

#### Knowledge needed to achieve the performance criteria

Knowledge and understanding are essential to apply this unit of competency in the workplace, to transfer the skills to other contexts, and to deal with unplanned events. The knowledge requirements for this unit are listed below.

- Definition and purpose of portable and wheeled fire extinguishers.
- Purpose of pictographs.
- Purpose and range of the Australian colour-coding system for wheeled and portable fire extinguishers.
- Purpose of hose reels, delivery lay flat fire hoses, fire blankets and smoke alarms (battery-operated).
- Purpose and types of fire hydrant system components.
- Purpose and type of fire pump sets.
- Purpose and types of automatic fire suppression systems
- Purpose and type of detection and alarm systems.
- Purpose and types of hinged and non-hinged smoke and fire doors.
- Awareness of other types of non-battery powered smoke alarms.

#### Specific skills needed to achieve the performance criteria

To achieve the performance criteria, some complementary skills are required. These relate to the ability to:

- use effective and appropriate questioning/listening techniques
- recognise, analyse and identify portable fire equipment products and fixed automatic fire systems equipment
- apply language, literacy and numeracy skills to:
  - communicate with others in a clear and concise manner in both written and verbal modes
  - read, understand and comply with work instructions/specifications
  - read, understand and record measurements.

#### Other units of competency that could be assessed with this unit

Competency in this unit underpins competency in other aspects of servicing fire protection equipment. This unit of competency is a prerequisite for the following technical fire protection units in the PRM04 Asset Maintenance Training Package:

- PRMPFES09B Service portable fire extinguishers and fire blankets in the field
- PRMPFES10B Inspect, test and replace fire hose reels in the field
- PRMPFES11B Install portable fire extinguishers, fire blankets and battery powered smoke alarms
- PRMPFES14C Service portable fire extinguishers in the workshop
- PRMPFES15B Service delivery lay flat fire hoses in the workshop
- PRMPFES16B Inspect and service delivery lay flat fire hoses and nozzles in the field
- PRMPFES19B Install and service portable foam liquid proportioning equipment
- PRMPFES20B Service wheeled fire extinguishers in the field
- PRMPFES21C Service wheeled fire extinguishers in the workshop
- PRMPFES37A Inspect and maintain fire hydrants
- PRMPFES38A Inspect and maintain portable fire monitors.

This unit could be assessed on its own or in combination with other competencies relevant to the job function, for example:

- PRMPFES05B Use portable fire fighting equipment
- PRMPFES06C Prepare for installation and servicing operations.

### **Resources required to assess this unit**

The candidate and the assessor should have access to the appropriate documentation and resources normally utilised in the workplace. This includes access to:

- an actual or simulated work environment
- product examples or clear photographs/drawings of relevant products
- assessment documentation
- training and assessment record book.

### **Gaining evidence to assess this unit**

For valid and reliable assessment of this unit, the competency should be demonstrated over a period of time and be observed by the assessor (or assessment team working together to conduct the assessment). The competency is to be demonstrated in a range of situations, which may include customer/workplace interruptions and involvement in related activities normally experienced in the workplace.

Assessment of underpinning knowledge is best obtained by either oral questioning or a written assessment. (In both assessment methods the questions should be identical in context.) Evidence of competency is based on the candidate's ability to identify and explain the purpose of each item described in the range statement.

Assessment may be conducted in any environment that conforms to the basic principles of assessment (flexible, fair, etc).

Performance and assessment of this unit must be carried out within the relevant requirements of the following legislative and industry framework:

- building Acts/regulations/codes
- Australian Standards identified as relevant
- environmental regulations
- manufacturers' specifications
- organisational requirements, including OHS policies and procedures
- OHS legislation, codes and regulations.

### **Key competency levels**

There are a number of processes learnt throughout work and daily life that are required in all jobs. They are fundamental processes and generally transferable to other work environments. Some of these work processes are covered by the key competencies listed below. Information provided to each question highlights how these processes are applied in this unit of competency.

The number in brackets indicates the level to which the key competency should be demonstrated.

- |                              |   |   |
|------------------------------|---|---|
| <b>1</b> Perform the process | <b>2</b> Perform and administer the process | <b>3</b> Perform, administer and design the process |
|------------------------------|---|---|

How can <b>information be collected, analysed and organised (2)</b> ?	Gather information from a number of sources in the process of identifying fire protection equipment
How can <b>communication of ideas and information (1)</b> be applied?	Discuss identification processes and confirm with colleagues or supervisors compliance with relevant procedures.
How are <b>activities planned and organised (2)</b> ?	Monitor work activities while identifying portable and fixed fire fighting, suppression, detection and alarm equipment and observing safety procedures.
How can <b>teamwork (1)</b> be applied?	Provide support and assistance within work groups.
How can the use of <b>mathematical ideas and techniques (1)</b> be applied?	Use basic mathematical techniques, including reading technical instructions, work schedules and building plans to locate and identify portable and fixed fire equipment.
How can <b>problem-solving skills (1)</b> be applied?	Discuss with colleagues/supervisor, straightforward problems which may arise throughout the identification process.
How can the <b>use of technology (2)</b> be applied?	Discuss technological principles as appropriate for the identification/product analysis process.

## Range Statement

### RANGE STATEMENT

The range statement links the required knowledge and organisational and technical requirements to the workplace context. It describes any contextual variables that will be used or encountered when applying the competency in work situations. It allows for different work practices and work and knowledge requirements as well as for differences between organisations and workplaces. The following variables may be present for this particular unit.

**Portable fire extinguisher** types include:

- stored pressure
- rechargeable/non-rechargeable
- reversible
- cartridge operated.

**Wheeled fire extinguisher** types include:

- stored pressure
- cartridge
- reversible.

**Extinguishants** may include:

- water
- foam
- wet chemical
- powder
- CO<sub>2</sub>
- vaporising liquid.

**Expellants** may include:

- CO<sub>2</sub>
- nitrogen
- dry air.

**Hose reel types** may include:

- wall-mounted
- swing-hinged
- vehicle-mounted.

**Delivery lay flat fire hoses** may include:

- percolating/non-percolating
- low, medium and high classes
- a range of different hose diameters.

**Delivery lay flat fire hose couplings** may include:

- BIC
- STORZ
- threaded.

**Fire hydrant system components** may include:

- internal hydrant valve (points, landing valves, outlets)
- external hydrant valve
- hydrant valves that are incorporated in a fire cabinet
- pressure reducing valve (ratio valve)
- water supply system (tanks, pump sets)
- fire brigade booster connections
- reticulating pipe work.

**Fire blanket containers** may include:

- plastic/vinyl covers
- metal tubes.

**Battery-operated smoke alarms** may include:

- ionisation
- photoelectric.

**Fire doors** may include:

- 1 hour or 2 hour fire rated assemblies
- self-closing or sliding
- automatic closing.

**Smoke doors** may include:

- solid core or fire resistance rated
- self-closing or sliding
- automatic closing.

**Fire pump sets** may include dedicated pump set driven by electric or diesel or a combination of both motors that supply fire systems such as hydrants and sprinklers.

**Automatic fire suppression systems** may include:

- automatic sprinkler systems
- pre-engineered fire suppression systems
- gaseous fire suppression systems.

**Automatic detection and alarm systems** may include:

- automatic detection systems
- automatic evacuation and warning intercommunication systems.
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## **Unit Sector(s)**

Not Applicable