



**Australian Government**

# **PUAFIR506B Conduct an assessment of a building's performance based design**

**Release 3**

## **PUAFIR506B Conduct an assessment of a building's performance based design**

### **Modification History**

<b>Release</b>	<b>TP Version</b>	<b>Comments</b>
2	PUA12 V2	Application of the Unit added Unit revised to reflect current work requirements Method of assessment added
1	PUA00 V8.1	Primary release on TGA

### **Unit Descriptor**

This unit covers the competency required to assess a building's fire safety systems as determined against performance based design in accordance with organisational requirements. Legislative, regulatory and certification requirements are applicable to this unit.

### **Application of the Unit**

This unit applies to personnel authorised by their agency to undertake assessments of buildings to determine whether their fire safety systems comply with performance based regulatory requirements for the class of building and occupancy. These personnel will be required to provide reports on non-compliance to the organisation or owner of the business and to the fire service.

### **Licensing/Regulatory Information**

Not applicable.

## Pre-Requisites

PUAFIR403B Assess building plans

PUAFIR507B Inspect building fire safety systems

## 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 required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
<b>1. Undertake an assessment of fire safety systems and check for compliance</b>	<p>1.1 All components of the building's <i>fire safety systems</i> are identified in accordance with the fire engineering design brief, <i>performance based design</i>, building plans and associated documentation.</p> <p>1.2 All components of the fire safety systems and their elements are compared with appropriate standards, regulations and codes in accordance with organisational requirements.</p> <p>1.3 Fire safety system <i>performance and maintenance requirements</i> are compared with appropriate standards, regulations and codes in accordance with organisational requirements.</p> <p>1.4 Fire agency intervention model is applied.</p>
<b>2. Report on the assessment of the fire safety systems to the appropriate authorities</b>	<p>2.1 Results of the assessment of the fire safety systems' performance are reported in accordance with organisational requirements.</p> <p>2.2 Fire safety problems and issues relating to fire safety systems are identified and reported in accordance with organisational requirements</p> <p>2.3 Report is distributed in accordance with organisational requirements.</p>

## **Required Skills and Knowledge**

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

### **Required Skills**

- compile and prepare reports
- interpret building plans
- locate and identify components of a building's fire safety system
- present information
- use information technology systems

### **Required Knowledge**

- design documentation and reporting
- equipment manufacturer specifications
- fire agency intervention
- fire detection and suppression
- fire engineering design brief
- fire initiation and development
- fire spread and management
- levels of analysis (as described in the Fire Engineering Guidelines)
- maintenance procedures
- occupant avoidance
- organisational procedures
- performance based building and fire codes
- principles of modelling
- relevant legislation
- smoke development and management
- special risk factors found in hospitals and public buildings, high rise structures, airports, petrochemical plants, electrical installations

## Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for this Training Package.

### **Critical aspects for assessment and evidence required to demonstrate competency in this unit**

Assessment must confirm the ability to:

- identify components of the building's fire safety systems
- identify proposed fire engineering design brief and performance specifications for fire safety systems
- identify proposed performance based design impacts
- conduct an assessment of a performance based design
- compile reports
- use appropriate intervention model

### **Consistency in performance**

Competency should be demonstrated over time and in a range of contexts.

### **Context of and specific resources for assessment**

#### **Context of assessment**

Competency should be assessed on-the-job or in a simulated workplace environment.

#### **Specific resources for assessment**

Access is required to:

- building plans and associated documentation

### **Method of assessment**

In a public safety environment assessment is usually conducted via direct observation in a training environment or in the workplace via subject matter supervision and/or mentoring, which is typically recorded in a competency workbook.

Assessment is completed using appropriately qualified assessors who select the most appropriate method of assessment.

Assessment may occur in an operational environment or in an agency-approved simulated work environment.

Forms of assessment that are typically used include:

- direct observation
- interviewing the candidate
- journals and workplace documentation
- third party reports from supervisors
- written or oral questions

## 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 in the Performance Criteria is detailed below.

<b><i>Fire safety systems</i></b> must include:	<ul style="list-style-type: none"> <li>• fire hydrants</li> <li>• fire sprinkler</li> </ul>
and may also include:	<ul style="list-style-type: none"> <li>• building design requirements</li> <li>• emergency vehicle access–egress system</li> <li>• emergency warning intercommunication system (EWIS)</li> <li>• communications</li> <li>• fire detection and alarm</li> <li>• fire/emergency control centres/rooms</li> <li>• fire resisting structures/compartimentation</li> <li>• fire suppression</li> <li>• smoke hazard management</li> </ul>
<b><i>Performance based design</i></b> may include :	<ul style="list-style-type: none"> <li>• compartmentation</li> <li>• distance of travel for egress</li> <li>• evacuation arrangements</li> <li>• fire agency capabilities</li> <li>• fire agency intervention</li> <li>• fire suppression systems</li> <li>• organisational procedures</li> <li>• smoke hazard management arrangements</li> </ul>
<b><i>Performance and maintenance requirements</i></b> must include:	<ul style="list-style-type: none"> <li>• Australian Standards</li> <li>• Building Code of Australia</li> <li>• building regulations</li> <li>• manufacturer specifications</li> <li>• organisational procedures</li> </ul>

## Unit Sector(s)

Not applicable.