



Australian Government

PUAFIR517 Conduct an inspection of a performance based design building

Release: 1

PUAFIR517 Conduct an inspection of a performance based design building

Modification History

Release 1. This is the first release of this unit of competency in the PUA Public Safety Training Package.

Application

This unit of competency involves the skills and knowledge required to inspect fire safety systems in buildings containing performance based design solutions.

The unit applies to personnel authorised by their organisation to undertake inspections of buildings to determine whether their fire safety systems comply with the requirements of performance based design. Personnel may be required to provide reports to various stakeholders including building surveyors or certifiers, business owners and/or fire services.

The fire sector is those sections of government departments, statutory authorities or organisations that have responsibility under jurisdictional arrangements for the delivery of firefighting and fire management services.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

It is essential that the prerequisite units listed below are obtained prior to the issuance of this unit to individuals within the fire sector or the units contributing to the attainment of a fire qualification.

PUAFIR403 Assess building plans

PUAFIR507 Inspect building fire safety systems

Competency Field

Fire

Unit Sector

Fire

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Undertake an inspection of fire safety systems and check for compliance

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

1.1 All components of a building's fire safety systems are identified, in accordance with approved performance based design reports, building plans, fire safety systems drawings and associated documentation

1.2 All components of the fire safety systems and their elements are compared with design requirements, industry standards, building regulations and codes of practice, in accordance with organisational procedures

1.3 Fire safety system performance and maintenance requirements are compared with design requirements industry standards, building regulations and codes of practice, in accordance with organisational procedures

2 Report on inspection of fire safety systems to appropriate authorities

2.1 Results of the inspection of fire safety systems' performance are reported, in accordance with organisational procedures

2.2 Fire safety problems and issues relating to fire safety systems are identified and reported, in accordance with organisational procedures

2.3 The report is distributed, in accordance with organisational procedures

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the Companion Volume Implementation Guide.

fire safety systems must include

- alternative fire suppression systems
- building control systems
- building design requirements

performance based design must include

- emergency egress systems
- emergency vehicle access systems
- fire and emergency control centres and rooms
- fire detection and alarm systems
- fire hydrant and hydrant booster systems
- fire resisting elements and compartmentation
- fire sprinkler and sprinkler booster systems
- smoke hazard management and ancillary systems
- compartmentation
- fire engineering report requirements
- fire service capabilities
- fire service intervention
- fire suppression systems
- industry standards including international fire engineering guidelines and the National Construction Code (Building Code of Australia)
- occupant egress
- smoke hazard management arrangements
- type of construction and reduction in fire resistant levels

Unit Mapping Information

This unit replaces and is not equivalent to PUAFIR506B Conduct an assessment of a building's performance based design.

Links

PUA Training Package Companion Volume Implementation Guide is found in VETNet - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=3eca5672-6d5a-410b-8942-810d0ba05bbf>

Assessment Requirements for PUAFIR517 Conduct an inspection of a performance based design building

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions on at least one occasion and includes

- compiling and preparing reports
- determining performance based design impacts
- identifying fire engineering reports and performance specifications for fire safety systems
- interpreting building plans
- locating and identifying components of a building's fire safety system
- reporting on inspection of fire safety systems to appropriate authorities
- undertaking an inspection of fire safety systems and checking for compliance
- using fire intervention models
- working with organisational policies, procedures and documentation

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements, performance criteria and range of conditions and includes knowledge of

- building regulations and codes
- design documentation and reporting requirements
- design fires
- fire brigade intervention model and its application
- fire engineering and certifiers reports
- fire safety system performance and maintenance requirements
- hazards and risks in different building occupancy types
- industry standards including international fire engineering guidelines related to
 - fire detection, warning and suppression
 - fire initiation, development and control
 - fire services intervention
 - fire spread, impact and control
 - occupant evacuation and control

- smoke development, spread and control
- manufacturers' equipment specifications
- organisational documentation, policies and procedures including maintenance procedures
- performance based building and fire codes
- performance based design
- principles of fire modelling including fire modelling and computational fluid dynamics and evacuation modelling
- types of fire safety systems

Assessment Conditions

As a minimum, assessors must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

As a minimum, assessment must satisfy applicable regulatory requirements, which include requirements in the Standards for Registered Training Organisations current at the time of assessment.

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.

Assessment must occur in workplace operational situations. Where this is not appropriate, assessment must occur in industry approved simulated workplace operational situations that reflect workplace conditions.

Resources for assessment must include access to

- a range of relevant exercises, case studies and/or simulations
- relevant and appropriate materials, equipment, tools and personal protective clothing and equipment currently used in industry including
 - building plans and associated documentation
 - fire brigade reports
 - fire engineering and certifiers reports
- applicable documentation including organisational procedures, industry standards, equipment specifications, regulations, codes of practice and operation manuals.

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