



Australian Government

Department of Education, Employment and Workplace Relations

CPPFES2039A Identify, inspect and test passive fire and smoke containment products and systems

Release: 1

CPPFES2039A Identify, inspect and test passive fire and smoke containment products and systems

Modification History

Revised unit

Element structure and performance criteria changed to incorporate outcomes of deleted unit PRMPFES36A Identify passive fire and smoke containment products and systems

Unit based on PRMPFES39A Inspect and test passive fire and smoke containment products and systems

Unit Descriptor

This unit of competency specifies the outcomes required to inspect and test passive fire and smoke containment installations and systems in a variety of settings. This unit covers the skills and knowledge required to be able to access, interpret and comply with relevant information contained in standards and legislation in order to carry out inspection and testing procedures relating to passive fire and smoke containment.

Application of the Unit

This unit of competency supports individuals responsible for inspecting and testing passive fire and smoke containment products and systems.

Individuals operate within the scope of their defined roles and responsibilities and perform the identification, inspection and testing as part of their work duties to verify that equipment functions as intended, according to work procedures and Australian standards.

The unit must be applied strictly according to relevant state or territory legislative and industry requirements.

Licensing/Regulatory Information

Adequate knowledge and appropriate use of industry terminology is expected, and all preparatory work must be completed according to relevant legislative, industry and organisational requirements, including occupational health and safety (OHS) policies and procedures.

The passive fire service technician is not permitted to undertake any installation, replacement, maintenance and repair functions that are restricted to licensed trades or occupations (subject to relevant state and territory regulations).

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

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| 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 | Identify passive fire and smoke containment installations and systems. | 2.1 | Types of <i>passive fire and smoke containment systems</i> are identified according to function, operation and location. |
| | | 2.2 | Installed product components of passive fire and smoke containment installations and systems are identified and located according to design, operation and function. |
| 3 | Inspect and test passive fire and smoke containment. | 3.1 | Work permits are obtained prior to entering customer premises and <i>customer requirements</i> are discussed prior to inspection. |
| | | 3.2 | Passive fire and smoke containment system products are inspected and tested according to maintenance schedule of relevant Australian standard and industry requirements. |

- 3.3 Passive fire and smoke containment system products are checked for marking and labelling set out in relevant Australian standard, according to provisions of relevant rules and regulations.
 - 3.4 Potential and actual impediments to performance of passive fire and smoke containment system are identified and reported.
- 4 Complete inspection.
 - 4.1 Customer premises are left in a clean and tidy condition on completion of inspection functions.
 - 4.2 **Defects** are reported according to organisational, legislative and customer requirements.
 - 4.3 **Documentation** is completed and distributed according to organisational and customer requirements.

Required Skills and Knowledge

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

Required skills

- language and literacy skills to:
 - use technical terminology relating to inspecting and testing passive fire and smoke containment products and systems
 - access information from manuals
 - communicate technical information to customers and colleagues
 - identify, select and comply with Australian standards and related legislation
 - report defects, and complete and distribute relevant documentation
- interpersonal skills to develop positive relationships with a diverse range of customers
- planning skills to organise work according to organisational requirements
- skills to work safely when:
 - applying workplace housekeeping procedures
 - following work procedures
 - identifying potential and existing hazards and risks
- technical skills to:
 - inspect and test a range of passive fire and smoke containment system components that are fixed into or onto building materials to protect services, structural elements or openings in or through fire compartments
 - recognise components of passive fire and smoke containment

Required knowledge

- key features of legislation, Australian standards, manufacturers' and building code requirements relating to inspection of passive fire and smoke containment products and systems, including implications of not applying legislative requirements to job functions
- dangers of incorrect installation of passive fire and smoke containment
- definition, purpose and key physical features of passive fire and smoke containment
- operational requirements for inspecting and testing passive fire and smoke containment
- passive fire and smoke containment variables, including types, products and solutions
- principles of passive fire protection related to overall fire safety systems
- procedures for determining fire resistance levels
- technical terms relating to inspecting and testing passive fire and smoke containment

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.

Overview of assessment	This unit of competency could be assessed by observation of practical demonstration of inspecting and testing a range of passive fire and smoke containment products and systems in customers' premises or simulated environments.
Critical aspects for assessment and evidence required to demonstrate competency in this unit	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: • locate, interpret and apply relevant information, standards and specifications for the protection of a service penetration or opening within a fire-resisting construction of a building element • comply with organisational policies and procedures • identify, inspect and test at least five different types of fire and smoke containment system product components from the range of passive fire and smoke containment products that as a system provide protection of a service penetration or opening within a fire-resisting construction of a building element • complete a maintenance record and report using correct documentation.
Context of and specific resources for assessment	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: • actual or simulated work environment • access to relevant standards and legislation • access to a variety of passive fire and smoke containment products, installations and solutions • assessment documentation • training and assessment record book.
Method of assessment	Assessment methods must: • satisfy the endorsed Assessment Guidelines of the Property Services Training Package • 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 • reinforce the integration of employability skills with workplace

	tasks and job roles • confirm that competency is verified and able to be transferred to other circumstances and environments.
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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.
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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:	• building surveyor requirements • dangerous goods regulations • environmental regulations • licensing arrangements • manufacturers' documentation • OHS legislation, regulations and codes • relevant Australian standards • relevant commonwealth and state or territory building Acts, regulations and codes, such as Building Code of Australia (BCA) • other relevant legislation relating to fire protection equipment, including: • international shipping codes • marine codes for different Australian States • requirements of Australian petroleum industry.
Requirements may be <i>confirmed</i> with:	• building supervisor or manager • building surveyor • colleague • fire safety engineer • manager • regulatory authority representative • supervisor • team leader.

Work procedures may include:	• assignment instructions • equipment manufacturers' requirements • instructions from colleagues, supervisor or manager • personal protective equipment requirements • reporting and documentation requirements • specific customer requirements.
Checking compliance requirements may include:	• applying inspection, test and survey requirements according to Australian standards • reviewing documentation to verify that installed systems comply with relevant rules and regulations.
Action may include:	• advising customer • documenting non-compliance • making equipment safe • reporting, as required.
Organisational policies and procedures may include:	• job scheduling systems and communication devices • legal and organisational policies and guidelines, including personnel practices and guidelines outlining work roles, responsibilities and delegations • recording and reporting documentation and systems • relevant OHS policies, procedures and programs • relevant rules and regulations • standard operating procedures, work instructions and manuals.
Passive fire and smoke containment systems include:	• passive fire and smoke containment products, including: • fabric and timber protection, such as impregnated or sprayed • fire-rated air transfer grilles • fire-rated sealants, caulks and putties, such as acrylic, polyurethane and silicone • fire-resistant boards, such as calcium silicate and vermiculite • fire resistant mortars and grouts, such as load bearing and non-load bearing • fire resistant pillows, such as intumescent and non-intumescent • fire stop collars, such as cast in, retrofit and wall • intumescent paints and coatings, other than those used for fireproofing structural steel • linear gaps seals, such as impregnated foams, tapes, intumescent gaskets and sealants • mechanical and intumescent fire dampers • smoke dampers • materials into or onto which passive fire and smoke containment products are installed, including: • concrete

	• fire resistant board • masonry • plasterboard • steel • timber • UPVC • passive fire and smoke containment solutions, including: • access panels and hatches • ceiling and partition systems • control and expansion joints • duct fireproofing and protection • duct and damper penetration protection • fire-rated sealants • industrial fire protection • intumescent dampers and seals • openings in structural elements • penetration solutions • protection against spread of flame • structural steel fireproofing/protection • UPVC and plumbing penetrations.
Customer requirements may include:	• confirming or varying service instructions • following sign-in and sign-out procedures for entry to or exit from premises • marking and labelling requirements as set out in the relevant legislation or Australian standard • providing non-routine or urgent services • providing routine services • providing written or verbal confirmation of services provided and future maintenance schedule • sighting work permits.
Defects may include:	• items that do not comply with the requirements of: • Australian standards • manufacturers' instructions • necessary legislation.
Documentation may include:	• certificates of inspection • corrective action reports • customer recommendation forms • equipment recommendation forms • installation instructions • job cards

	• maintenance record system • product documentation • service agreements.
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Unit Sector(s)

Fire protection equipment

Custom Content Section

Not applicable.