



Australian Government

CPPBPA5004 Advise on landscaping design measures for bushfire resilience

Release: 1

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Modification History

Release 1	This version first released with CPP Property Services Training Package Release 17.0. New unit of competency.
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Application

This unit specifies the skills and knowledge required to conduct a site visit and undertake observations of defensible space, plant species selection, features and layout and assess the landscape design to compile recommendations for improved bushfire resilience for existing landscapes or planned designs.

The unit applies to individuals who are paraprofessional workers and have technical and theoretical knowledge of bushfire impact on property developments. They demonstrate autonomy, judgement and responsibility in a range of contexts within broad but established parameters. They possess communication and analytical skills to determine and transmit solutions to complex problems.

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

Pre-requisite Unit

Nil.

Unit Sector

Fire Technology

Elements and Performance Criteria

Elements describe the essential outcomes.

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

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| 1 | Collect site information and plan site visit. | 1.1 | Access and interpret maps, site plans and landscape design for site to be assessed. |
| | | 1.2 | Identify regulations, standards and codes of practice relevant to landscape design in bushfire prone areas. |

- 1.3 Contact stakeholders and seek approval for site visit.
 - 1.4 Identify health and safety hazards, assess risk and implement controls for site visit according to workplace procedures.
- 2 Conduct site assessment of landscape components.
 - 2.1 Access site and assess and record potential fire risk.
 - 2.2 Assess and record landscape layout for zones of defensible space.
 - 2.3 Identify, assess and record plant species in landscape.
 - 2.4 Assess and record structures, materials and condition of landscape features for potential fire risk.
- 3 Consider options for landscape improvement.
 - 3.1 Collate assessments and records and determine bushfire risk of landscape elements according to industry standards.
 - 3.2 Investigate alternative landscape design elements to improve bushfire mitigation outcomes.
 - 3.3 Evaluate options to improve landscape design to help mitigate fire risk.
 - 3.4 Compile options and document recommended changes to landscape design to improve bushfire resilience.
- 4 Provide guidance on landscaping design measures to improve resilience.
 - 4.1 Present report and recommendations to stakeholders for feedback.
 - 4.2 Review and respond to feedback and modify recommendations and report.
 - 4.3 Distribute final report and recommendations to stakeholders.
 - 4.4 Maintain records and file reports and recommendations according to workplace procedures.

Foundation Skills

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

Unit Mapping Information

No equivalent unit.

Links

Companion volumes to this training package are available at the VETNet website - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>

Assessment Requirements for CPPBPA5004 Advise on landscaping design measures for bushfire resilience

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Performance Evidence

To demonstrate competency, a candidate must meet the elements and performance criteria of this unit by:

Providing advice on key elements of a landscape design for bushfire resilience for at least one (1) planned design and one (1) established landscape, and must include:

- identifying and interpreting landscape plans, specifications and legislative requirements
- communicating effectively with stakeholders
- conducting site assessment and determining areas in need of improvement
- compiling site assessment data and options for landscape improvements
- preparing draft recommendations for stakeholders
- responding to feedback, completing reports and recommendations.

Knowledge Evidence

To be competent in this unit, a candidate must demonstrate knowledge of:

- relevant legislation, regulations, standards and codes of practice applicable to bushfire prone areas
- landscape designs, plans and specifications for potential bushfire risk
- fire behaviour in properties and surrounding landscapes, including:
 - fire movement and combustion in bushfire prone areas
 - fuel pathways
 - protection from radiant heat
 - principles of ladder fuel
 - dropping and accumulation of leaf litter and potential embers
 - zoning the landscape for defendable space
 - planting fire potential hazard near buildings
- landscape features and potential fire hazard, including:
 - pergolas and vines
 - timber and other flammable features

- ember traps
- landscape plants and leaf litter accumulation on roof and in building space
- plants prone to increase fuel loading
- size and proximity of vegetation and their risk to buildings
- garden bed mulches
- plants in containers
- landscape plants to help mitigate fire, including:
 - basic biological features for flammability and fire resistance of plants
 - plants suitable as wind breaks and to reduce wind speed
 - plants suitable to absorb or reduce radiant heat
 - plants to filter embers
 - bark of trees and fire risk
 - xerophytic landscapes and plant moisture content
 - lawns and green space
- landscape design principles for fire safety, including:
 - landscape plans and their interpretation
 - landscape design for safe access and exit from buildings
 - minimising fuel continuity
 - water in the landscape to supplement fire protection
 - driveways, paths and hard surfaces as fire breaks
 - features that may support firefighting activities and agencies
- landscape seasonal maintenance to reduce fire risk, including:
 - slashing and mowing heights
 - soil and mulch moisture content and impact on flammability of plants
 - control of weeds
- communication skills when dealing with clients and stakeholders
- procedures for documenting recommendations and report writing.

Assessment Conditions

Assessors must satisfy the requirements for assessors contained in the Standards for Registered Training Organisations.

Competency is to be assessed in the workplace or a simulated environment that accurately reflects performance in a real workplace setting where these skills and knowledge would be performed.

Candidates must have access to:

- landscape plans and specifications
- property for assessing landscape
- resources for estimating fuel loadings and fire risk on properties
- legislation, regulations, standards and codes of practice relevant to landscape design and bushfire risk

- references and resources for plants suitable for landscapes in bushfire prone areas
- client or stakeholders.

Links

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