

→ RESIDENTIAL GARAGES, SHEDS AND CARPORTS FIRE SEPARATION REQUIREMENTS

OBJECTIVE



The objective of fire separation under the performance provisions of the Building Code of Australia – Housing Provisions (BCA) is to:

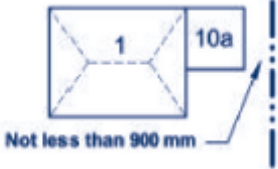
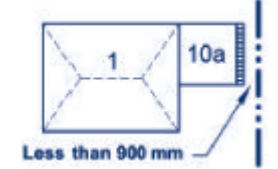
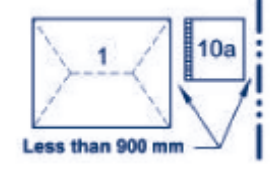
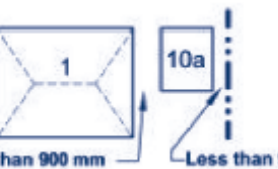
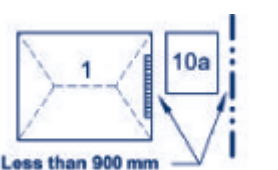
- a safeguard occupants from illness or injury by:
 - i alerting them of a fire in the building so that they may safely evacuate; and
 - ii caused by fire from heating appliances installed within the building; and
- b avoid the spread of fire; and
- c protect a building from effects of a bushfire.

In residential development the area requiring protection is measured at a 90o to the external wall of a building to an allotment boundary of another building on the site.

GARAGES AND SHEDS

When a garage or shed is proposed to be located between a residential dwelling and the boundary, compliance with the following options satisfied the above performance requirements.

Legend  Wall with an FRL of 60/60/60  Allotment boundary

a	<p>900 mm from allotment boundary</p> <p>The Class 10a building is not less than 900 mm from the allotment boundary, other than the boundary adjoining a road alignment or other public space.</p>	 <p>Not less than 900 mm</p>
b	<p>External wall to Class 10a building with FRL</p> <p>An external wall of the Class 10a building which is less than 900 mm from an allotment boundary, other than the boundary adjoining a road alignment or other public space.</p>	 <p>Less than 900 mm</p>
c	<p>External wall to Class 10a building with FRL</p> <p>An external wall of the Class 10a building which is less than 900 mm from the Class 1.</p>	 <p>Less than 900 mm</p>
d	<p>900 mm separation between buildings</p> <p>The Class 1 building is not less than 900 mm from the Class 10a building.</p>	 <p>Not less than 900 mm</p> <p>Less than 900 mm</p>
e	<p>Class 1 building with FRL to external wall</p> <p>An external wall of the Class 1 building which is less than 900 mm from the Class 10a.</p>	 <p>Less than 900 mm</p>

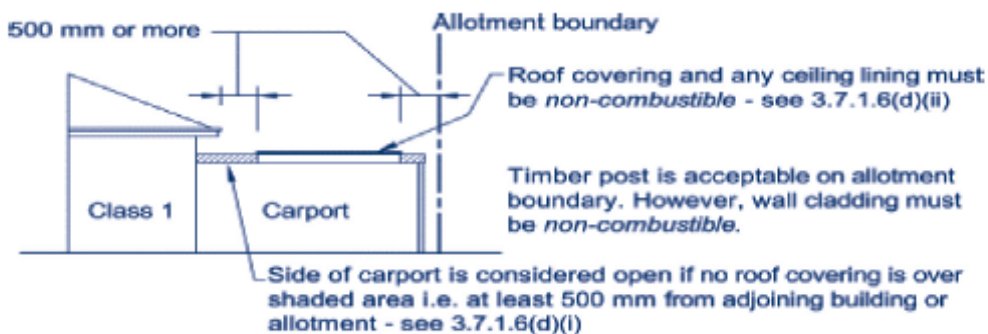
CARPORTS

When a carport is proposed to be located between a residential dwelling and the boundary, compliance with the following options satisfies the above performance requirements.

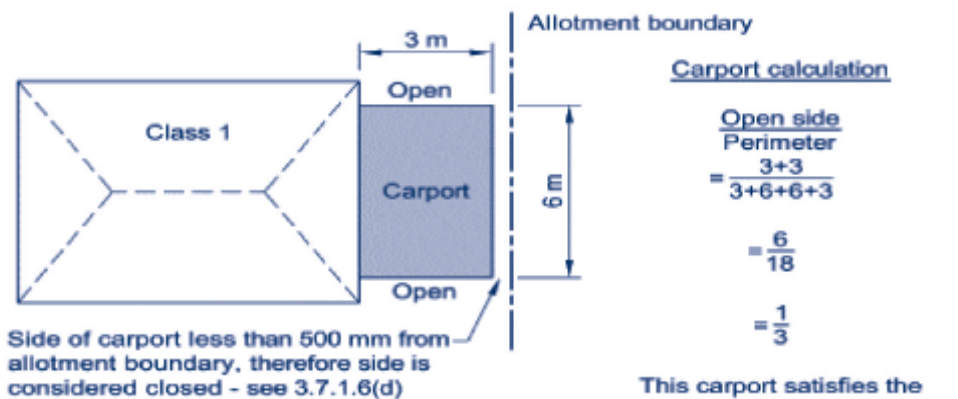
A carport is exempt from the requirements of the objectives (a), (b) and (c) above if **it meets** the requirements of 1-4 below:

- 1 it has two or more sides open and not less than one third of the perimeter open. Under the requirements of the BCA Housing Provisions a side is considered to be open if the roof covering adjacent to that side is a minimum of 500 mm from another building or the boundary of the allotment; and
- 2 it has a non-combustible roof covering and any ceiling lining, wall cladding including gables is also non-combustible; *(non-combustible is defined as materials that are deemed not combustible when tested in accordance with AS 1530.1 – Combustibility Test for Materials)*
- 3 it does not provide direct vertical support to any part of a dwelling house; and
- 4 in the case where the carport has a common-roof structure with a dwelling house and the carport does not have a ceiling, the opening between the top of the wall of the dwelling and the underside of the roof covering is required to be infilled with either of the following:
 - i a non-combustible material; or
 - ii non-combustible clad/material on the carport side of the connection.

The following diagrams are examples of how to identify an open carport:



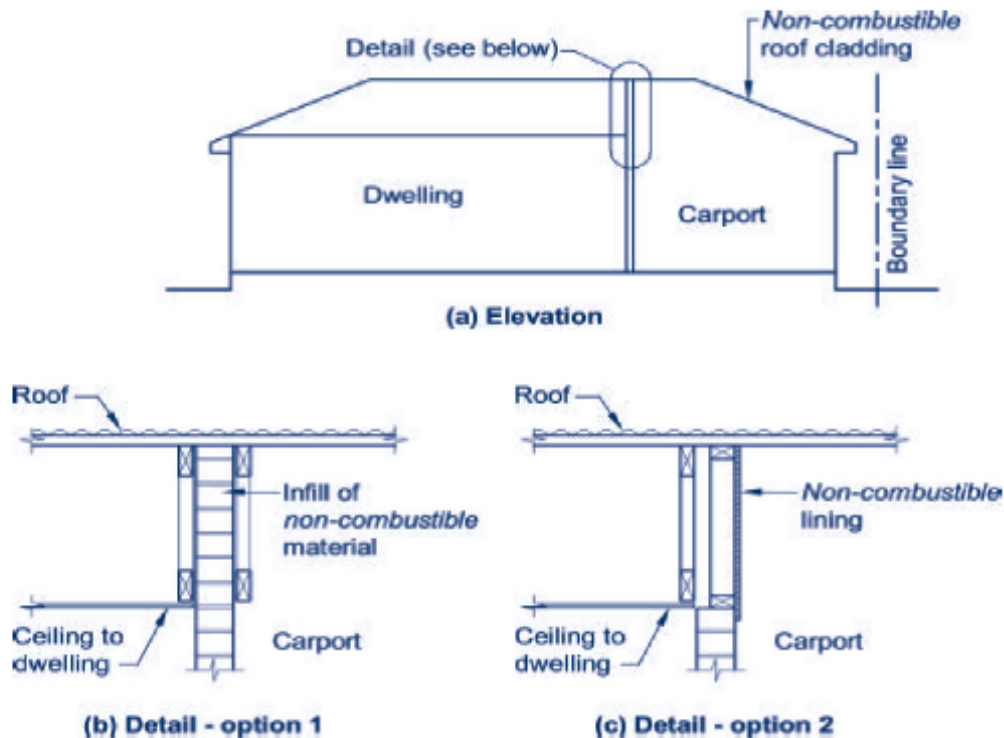
(a) Example A



(b) Example B

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The following diagrams have been included to assist with the interpretation of the previous requirements:



FIRE RESISTANCE LEVEL

Fire Resistance Level (FRL) means the grading periods in minutes (eg 60/60/60) determined in accordance with the following criteria:

- Structural adequacy – the ability to maintain stability and adequate load-bearing capacity
- Integrity – the ability to resist the passage of flames and hot gasses
- Insulation – the ability to maintain a temperature on the surface not exposed to the surface below the limits specified in AS 1530

Construction of External Walls – External walls including gables that are required to be ‘Fire Resisting’ must extend to the underside of a non-combustible roof covering of non-combustible eave lining, and must:

- Have a minimum Fire Resistance Level (FRL) of 60/60/60 when tested from the outside OR
- Be of masonry or masonry-veneer construction a minimum of 90 mm thick.

Opening in External Walls – Openings in external walls that are required to be ‘Fire Resisting’ must be protected by:

Windows – non-openable fire windows or other construction with an FRL of -/60/- or more.

Doors – must be self-closing solid-core doors a minimum of 35 mm thick.

For further reference see BCA – Housing Provisions Part 2.3 and 3.7 Volume 2.

Disclaimers

This information was believed to be correct at the date of its publication.

This information is for general information purposes only and should not be relied upon for legal advice.