



# CONSTRUCTION STANDARDS

## (Bushfire Management Overlay)

### Why is the construction standard of the building important?

Building construction and design can be used to minimise the impact of ember attack and radiant heat on a building. Construction requirements for buildings are expressed as a Bushfire Attack Level (BAL) as prescribed in AS3959.

### What is a Bushfire Attack Level?

A Bushfire Attack Level (BAL) is a way of measuring the ability of a building to withstand attack from bushfire. The form of bushfire attack and the severity will vary according to the conditions on the site. There are different BAL ratings. The following diagram illustrates the predicted bushfire attack and levels of exposure for each of the BAL ratings that may be applied in the Bushfire Management Overlay<sup>1</sup>.

### Relationship with the building system

The BAL requirements are linked to the building system. The Building Code of Australia contains the overarching objectives and performance requirement in relation to achieving an appropriate construction standard to improve the ability of the building to withstand bushfire attack. The BCA allows an applicant to meet the requirements in AS 3959-2009 (otherwise known as deemed to satisfy response). Alternatively an applicant may prepare an alternative solution to achieve the same performance requirement (i.e. not a deemed to satisfy response).

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<sup>1</sup> Note that, whilst under AS3959 a BAL-LOW rating does exist this will not apply in any areas with the Bushfire Management Overlay or Bushfire Prone Areas.

## Can the design of the building also increase resilience to bushfire?

In addition to the materials and construction standard of the building, the layout and design of a building can reduce the potential for accumulation of debris and entry of embers. Design should avoid creating spaces where debris can accumulate e.g. complex roof designs. The location of outbuildings should also be considered as they can act as a fuel source to the main building. Outbuildings should be located at least 10m<sup>2</sup> from the main building.

### Minimise vulnerability to ember attack

Building design should minimise ember hazards.

#### Ember Hazards

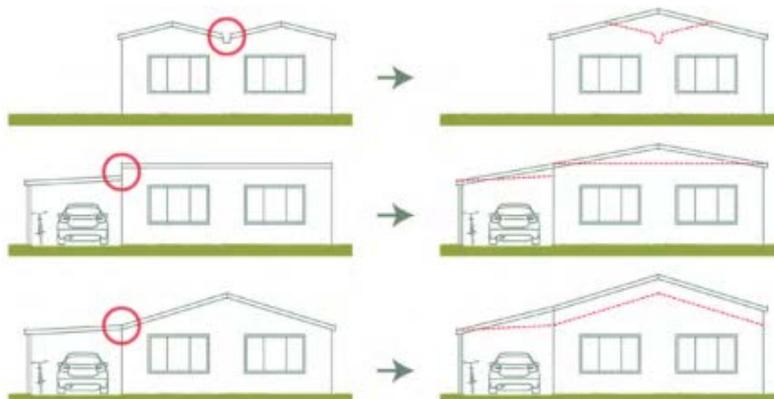
- Re-entrant corners
- Complex roof lines
- Gaps between building materials (walls & roof)
- Unenclosed underfloor space



### Complex house design where embers can lodge.

Existing Complex Roof Design

Improved Roof Design



Complex roof designs can be improved to reduce accumulation of debris and entry of embers.

<sup>2</sup> Note that in a Bushfire Prone Area (under the building system) a 6m separation is recommended, a greater separation is recommended in the BMO given the increase risk of bushfire.

## **What construction standard do I need to meet?**

To establish the appropriate construction standard you will need to conduct an assessment in accordance with Clause 52.47 of the planning scheme.

You can refer to Practice Note 65 published by the Department of Transport, Planning and Local Infrastructure for further information on the assessment process.