

# Bushfire Attack Level (BAL) Assessment

*Factsheet – May 2016*



## When would I need a BAL assessment?

If you are building a new structure, on a property that is more than 1,100m<sup>2</sup> in an area that has been declared as Bushfire Prone.

The entire Shire of Chittering has been declared as Bushfire Prone.

Once the assessment has been completed you will know your BAL and be able to construct your structure to the correct standard.

## What is a BAL assessment?

A BAL assessment (and the resulting certification) is a legislative requirement if you are carrying out development on bushfire prone land.

Many factors influence the assessment of a BAL, including proximity to classified vegetation and topography (fire travels significantly faster uphill).

A BAL assessment will determine the level of fire intensity which may be experienced in a major fire and how it may affect the subject property. This will determine the level of construction necessary for the proposed development in order to improve its resistance to bushfire attack from burning embers, radiant heat, flame contact and a combination of these forms of attack.

## What BAL rating levels are there?

There are six (6) levels of BAL ratings

- Low: insufficient risk to warrant specific construction requirements.
- 12.5: ember attack (some construction requirements).
- 19: increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux (specific construction requirements).
- 29: increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux (specific construction requirements).
- 40: increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux and with the increased likelihood of exposure to flames. (specific construction requirements).
- FZ: direct exposure to flames from fire, in addition to heat flux and ember attack (specific construction requirements).

Note: the guidelines recommend against siting any residential development in a BAL 40 or BAL FZ (flame zone) area.

## Building in Accordance with AS3959

Standards Australia has published Australian Standard 3959 for the construction of buildings in bushfire prone areas (this is a licenced document and your builder should have a copy).

New developments in a bushfire prone area will be required to be built in accordance with the relevant provisions of AS3959. This Standard details building measures that improve the likelihood of the house surviving a bushfire, including:

- External wall of non-combustible materials such as brick, stone, rammed earth;
- Roof tiles, roof sheets and roof covering accessories of non-combustible material;

- Vents in external walls screened with corrosion resistant metal mesh; and
- External doors, windows and frames of non-combustible or low risk materials, or fitted with ember screens or bushfire shutters.

AS3959 does provide for some exemptions, for example, a detached roofed structure (such as an outbuilding, shed, garage or carport) that is more than 6 metres away from the residence.

## Building Protection Zones

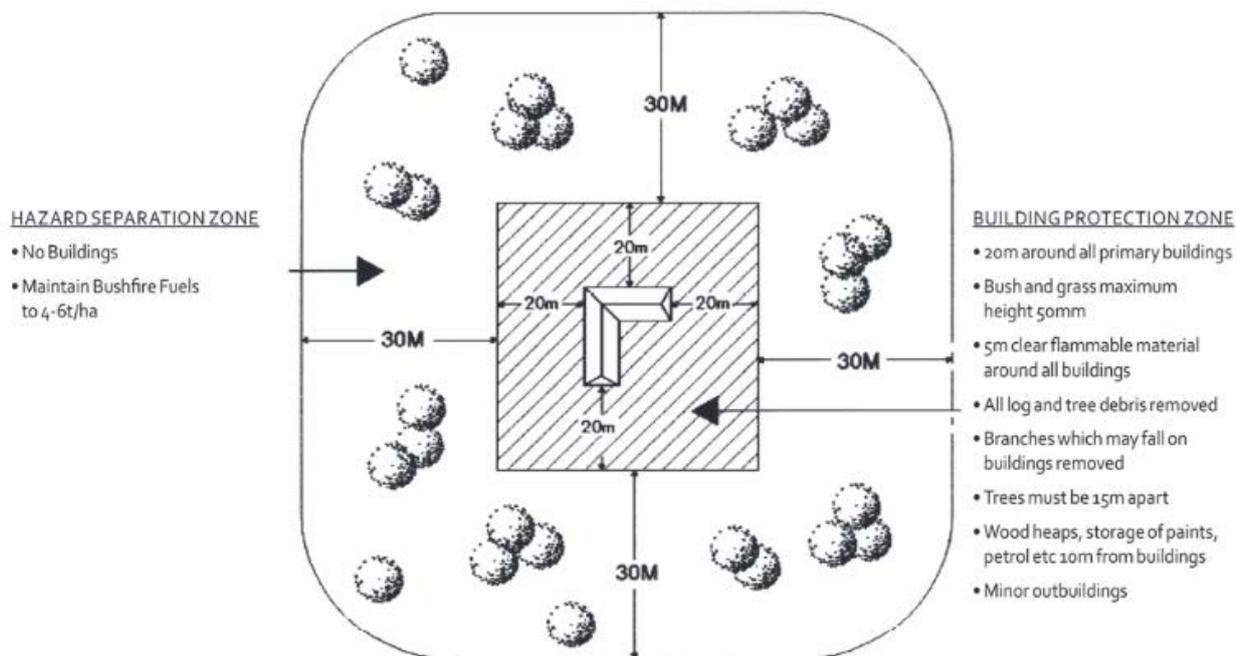
When deciding where to site your dwelling due consideration must be given to the construction of a building protection zone. This is a 20 metre around all buildings as follows:

- Bushfire fuels to be maintained at / or below 2 tonnes per hectare, with dry grass maintained below a height of 50mm;
- The first 5 metres around all buildings to be cleared of all flammable material. Reticulated gardens may be located in this zone;
- The spacing of trees should be 15 to 20 metres apart to provide for a separation of 10 metres between crowns;
- Trees are to be under/low pruned at least to a height of 2 metres; and
- No tall shrub or tree is to be planted within 2 metres of a building that has windows.

## Hazard Separation Zones

A hazard separation zone is a low bush fuel area that must be provided to create a minimum separation distance of 100 metres between buildings and other hazards. This is to assist with the prevention of bushfires impacting homes and other buildings.

### *Building Protection & Hazard Separation Zone Diagram*



## For Enquiries

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All Shire information is available in alternative formats upon request