

## Bushfire Safety

### Background

Ellenbrook is recognised for its environmental and ecological attributes. Large areas of bushland were preserved in their native state to create the ecologically important Lexia Conservation Wetlands and dedicated Bush Forever zones.

The preservation of these native bushlands conserves our precious environment and adds to our quality of life. However, with dry weather conditions each summer, it is important to recognise the fire risks associated with the native bushland.

LWP and the City of Swan take fire safety seriously. This Fact Sheet is intended to provide homeowners some essential information when building a new home in Ellenbrook and living in a community close to native bushland.

### General Requirements

When building a new home in close proximity to native bushland, there are certain additional measures that need to be taken to improve the fire safety of the home. This Fact Sheet will help to provide you with some general information and assist your builder or building designer to comply with the fire safety rules.

### Bushfire Attack Levels (BALs) – What Are They?

LWP has commissioned a fire safety expert to identify which lots in Ellenbrook have an increased fire safety risk due to their proximity to native bushland. The fire safety expert has assigned a BAL rating to each lot in accordance with the protocols set out in the Australian Standard (AS3959-2009), and the guidelines developed by the Fire and Emergency Services Agency, the City of Swan, and the West Australian Planning Commission.

The BAL rating indicates the construction requirements that should be applied to the dwelling so as to reduce the likelihood of fire spreading from the adjoining bushland into the home. The BAL rating accounts for the fact that fires can *attack* a dwelling by direct heat, flames, or floating embers.

LWP's fire safety expert has already determined the BAL ratings for the affected lots in Ellenbrook. To see if your lot has a BAL rating, please refer to the Detailed Area Plan which covers your lot. LWP staff will readily provide this plan if you do not have a copy.

### My Lot Has A BAL Rating – What Does That Mean?

The Australian Standard (AS3959-2009), identifies 6 BAL ratings which range from a low rating to an extreme rating.

BAL Rating	Description
BAL-LOW	No special fire precautions are required in the construction of the home
BAL-12.5	There is risk of ember attack and some fire precautions are required to minimise embers entering the home.
BAL-19	The risk of ember attack and airborne burning debris is elevated and a higher standard of fire precautions are required to protect the home
BAL-29	There is a higher risk of ember attack and airborne burning debris, plus there is a risk of house ignition due to radiant heat. A higher level of fire safety precautions is needed for the home.
BAL-40	An incoming bushfire will generate ember attack, burning debris, radiant heat, and flame exposure requiring a higher level of fire safety measures built into the home.
BAL-FZ (Flame Zone)	There is direct exposure to flames from the fire front.

The two most common BAL ratings in Ellenbrook are BAL-12.5 and BAL-19; both of which are at the lower scale of fire safety risk.

## BAL-12.5

If your lot is classified as BAL-12.5 and you are building a masonry home with a concrete floor, then your home is likely to comply with most of the requirements of the Australian Standard. However, an example of some additional measures that may be required could include:

- > *Metal gauze or mesh should be fitted to weep holes and air-conditioning intakes*
- > *Eaves should be enclosed.*
- > *Flyscreens on windows and doors should be metal mesh rather than the usual plastic or nylon mesh.*

These are just some examples of additional measures that may be required. It is important to note that there may be other requirements not described in this Fact Sheet as the exact fire safety measures will vary from home to home depending on the particular circumstances. Your builder or designer will be able to advise you on how to best comply with the Australian Standards.

## BAL-19

As with BAL-12.5 lots, if your home will have masonry walls and a concrete floor, then your home is likely to comply with many of the requirements of the Australian Standards. However, similarly with BAL-12.5 lots, there will be additional measures that are required in the construction of a home to meet the fire safety requirements.

Your builder or designer will be best placed to advise you on the ways in which to ensure your home complies with the Australian Standards.

## No BAL Rating

If your lot does not have a BAL rating then there are no special measures that are mandatory for you to comply with. However, fire safety is a serious issue and under some circumstances, the behaviour of fires can be unpredictable. Therefore, even if your lot does not have a BAL rating, LWP strongly encourages you to adopt additional safety measures such as:

- > *Construct your home with enclosed eaves to minimise embers entering the roof space.*
- > *If you have a rotary roof ventilator, it should be fitted with a metal spark screen with 1.8mm aperture size*
- > *If you have a roof mounted evaporative air-conditioner then the cooling unit openings should also be fitted with a metal spark screen with apertures no greater than 1.8mm*

## What you Can Do?

The best way to reduce fire hazards is to be alert. Residents are encouraged to be aware of, and minimise, fire safety hazards and to participate in Bushfire Ready Action Groups, or Resident's Associations that work with the City of Swan and local FESA branch to raise the awareness of fire safety and risk mitigation.

Residents are encouraged to download a copy of the Bushfire Survival Manual published by FESA and available on their website for free (see below).

A copy of the Bushfire Management Plan for Ellenbrook is also available for download from LWP's website.

## Summary of Requirements

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1. Check to see if your lot has a BAL rating
2. If your lot does not have a BAL rating, you are still encouraged to adopt suitable fire safety measures to minimise the chances of airborne embers entering your roof space.
3. If your lot is classified BAL-12.5 or BAL-19, then you should consult your builder or designer as soon as possible to understand what additional measures may be required for your home. You should provide this Fact Sheet to your builder or designer and you should read the information described below.

Document	Source	Availability
Homeowners Bushfire Survival Manual	<a href="http://www.fesa.wa.gov.au">www.fesa.wa.gov.au</a>	Free to download
Bushfire Management Plan	<a href="http://www.lwproperty.com.au">www.lwproperty.com.au</a>	Free to download
Planning for Bushfire Protection Guidelines	<a href="http://www.planning.wa.gov.au">www.planning.wa.gov.au</a>	Free to download
AS3959-2009 Construction of buildings in bushfire-prone areas	<a href="http://www.saiglobal.com.au">www.saiglobal.com.au</a>	For Purchase

**Disclaimer:** This Fact Sheet is provided as general advice and is not intended to be a comprehensive description of your fire safety requirements. You should consult with your builder or designer and the City of Swan Building Surveyor for further information and to ensure compliance with the fire safety requirements.