# FACT SHEET Bushfire Attack Levels



31 MARCH 2016

#### **Bushfire Recovery- Bushfire Risk**

The Victorian Government and Colac Otway Shire have been working towards streamlining the planning process for bushfire affected properties in Wye River and Separation Creek. These planning controls are designed to prioritise community safety, liveability and environmental protection. The government and Council have partnered to map the bushfire risk — known as 'Bushfire Attack Levels' — in the impacted areas of Wye River and Separation Creek.

A Bushfire Attack Level (BAL) assessment establishes the requirements for the **construction of buildings in a bushfire prone area** under the Australian Standard (AS 3959-2009). The BAL is an assessment of bushfire risk which measures the severity of a building's potential exposure to ember attack, radiant heat and direct flame contact. The BAL is expressed in increments of radiant heat exposure and provides the basis for establishing the requirements for construction to improve the protection of building elements from bushfire attack.

There are six different 'risk' levels in the BALs system ranging from 'low' to 'flame zone.' The level of risk depends on:

- Vegetation, which is the primary source of fuel for a bushfire; and
- Topography (or slope) which influences the rate of spread and intensity of a fire.

Bushfire Attack Levels		
Bushfire Attack Level	Predicted levels of exposure to radiant heat	Possible construction requirements include;
BAL - LOW	Residential construction in Bushfire Prone Areas must be built to a minimum of BAL 12.5 as ember attacks may occur	See BAL 12.5 below
BAL - 12.5	<ul><li>Risk of exposure to radiant heat is <b>low</b></li><li>Ember attack</li></ul>	<ul><li>Use of fire resistant framing timbers/products</li><li>Enclosed non-combustible covering</li></ul>
BAL -19	<ul> <li>Risk of exposure to radiant heat is moderate</li> <li>Ember attack and burning debris ignited by wind borne embers</li> </ul>	<ul><li>As above</li><li>Enclosed non-combustible covering</li><li>5mm Grade A Toughened glass</li></ul>
BAL – 29	<ul> <li>Risk of exposure to radiant heat is high</li> <li>Ember attack and increased risk of burning debris ignited by wind borne embers</li> </ul>	<ul><li>As above</li><li>External doors, bushfire screening or meshing</li></ul>
BAL – 40	<ul> <li>Risk of exposure to radiant heat is very high</li> <li>Increasing levels of ember attack and burning debris ignited by wind borne embers</li> <li>Some direct exposure to flames possible</li> </ul>	<ul> <li>As above</li> <li>Non-combustible decking and timber supports</li> <li>Non-combustible brick &amp; concrete sheeting</li> <li>Fire retardant heat barriers (fire shutters)</li> </ul>
BAL – FZ Flame Zone	<ul> <li>Risk of exposure to radiant heat is extreme</li> <li>Direct exposure to flame contact from fire front is likely</li> </ul>	<ul><li>As above</li><li>Bushfire resistant roofing</li><li>Special barrier housing for gas cylinders</li></ul>

**Note**: Specific building requirements will need to be discussed with an architect or qualified professional. For more information visit: <a href="http://www.vba.vic.gov.au/consumer-resources/other/standard-pages/bushfire-information">http://www.vba.vic.gov.au/consumer-resources/other/standard-pages/bushfire-information</a>







### Consideration for building in Wye River and Separation Creek

An applicant for a planning permit to build a house in Wye River or Separation Creek would normally be required under the Bushfire Management Overlay (BMO) to prepare and lodge a Bushfire Management Statement which reviews the site conditions and vegetation within the broader landscape, and provides a BAL to be applied to the development. This is often work that is prepared by consultants and can be costly to the land owner.

The State Government has sought to reduce the cost and burden to land owners in building their houses by engaging specialist firm Terramatrix to establish a BAL for each property within the bushfire affected area. This will negate the need for permit applicants to prepare their own Bushfire Management Statement, saving significant time and money. The BAL assessment study, based on a comprehensive settlement wide risk-analysis model, has considered topography, vegetation classifications and the impact of fuel management scenarios.

The streamlined planning controls introduced in response to the fires refer to the BALs determined by the Terramatrix project, and require only that an applicant demonstrate through their plans and supporting information how they will site and design their dwelling to meet the defendable space requirements, i.e. the management of vegetation around the dwelling. More information on defendable space requirements is available at: <a href="http://www.cfa.vic.gov.au/fm\_files/attachments/plan\_and\_prepare/BMO/CFA-BMO-Defendable-space-Aug-14.pdf">http://www.cfa.vic.gov.au/fm\_files/attachments/plan\_and\_prepare/BMO/CFA-BMO-Defendable-space-Aug-14.pdf</a>

If a land owner has had a BAL determined through a separate planning or building permit application since March 2009, this BAL can be applied to the replacement dwelling even if it is lower than the BAL identified through the recent study. While Council will continue to honour previously approved BAL ratings post March 2009, it is strongly recommended that residents consider the new BAL assessment rating established as part of the settlement wide study.

# Why has the State Government conducted this settlement wide Bushfire Attack Level assessment?

The State Government has conducted a detailed assessment of bushfire risk for the Wye River and Settlement Creek region. This study has considered topography, vegetation classifications and the impact of fuel management scenarios on the severity of a building's potential exposure to ember attack, radiant heat and direct flame contact. The assessments have been completed in accordance with the finding of the 2009 Victorian Bushfires Royal Commission. The settlement wide assessment reflects the shared responsibility that the Government, fire agencies, the community and individuals have for minimising the prospect of another tragic bushfire event.

The protection of human life is at the forefront of all Planning and Building policy and should always be the overriding objective of all agencies and private landholders. Although it is not possible to guarantee that any building will survive a bushfire, the settlement wide study ensures that each resident as well as Council, CFA and the State, are collectively responsible for minimising hazards and building future resilience. This study is based on a comprehensive settlement wide risk-analysis model that aims to minimise bushfire risk. This assessment is designed to prioritise community safety, liveability and drive community resilience to bushfires.







#### What Information needs to be submitted with the application?

An application will be required to demonstrate how it responds to the appropriate bushfire design requirements, on a site plan and with accompanying information.

The application will need to show how vegetation on individual properties will be managed to meet the defendable space requirements up to the property boundary or setback distances specified in Clause 52-47.3 of the Planning Scheme based on the established BAL.

The location of a static water supply for firefighting and property protection purposes must be shown to accord with Table 4 to Clause 52.47-3 of the Planning Scheme (may be in the same tank as other water supplies provided that a separate outlet is reserved for firefighting water supplied).

## How is bushfire risk assessed in the streamlined planning process?

A Bushfire Management Statement submitted with a planning application is normally required to be referred to the CFA for their response. In normal circumstances, the CFA would have 28 days to respond, and Council would need to consider CFA's advice in terms of approving or refusing the proposal, or applying conditions.

Under the streamlined controls, applications will not be referred to the CFA given that the BAL has already been established for the property through the Terramatrix study. This will mean that the assessing Council planner will simply need to determine that the information submitted meets the above requirements, and responds appropriately to the defendable space requirements of the relevant BAL, saving significant time from the process.

Once issued, the planning permit will contain conditions requiring a dwelling to be constructed to the relevant BAL, and for vegetation on the site to be managed on an on-going basis in accordance with the defendable space shown on the approved plans.

After approval of a planning permit, the Building Surveyor issuing the building permit will ensure that the building design incorporates design features required by the Australian Standard for the relevant BAL.

#### Can I build a Private Bushfire Shelter?

A private bushfire shelter can be included by landowners as part of their bushfire protection measures. Landowners will be able to build a dwelling at a lower Bushfire Attack Level if the property has an appropriate private bushfire shelter.

If a bushfire shelter is used the landowner must enter into a section 173 *Planning and Environment Act 1987* agreement, which will be recorded in the Register of Land. The shelter must be available for use at all times by the occupant or landowner.

There is a national performance standard under the Building Code of Australia for the design and construction of private bushfire shelters. The standard includes criteria such as a minimum distance of six metres between the shelter and other structures and a minimum occupation time of 60 minutes.

It is important to note that while constructing a Private Bushfire Shelter can lower the BAL on a property, it may not be a feasible option given the considerable landscape constraints in the Wye River and Separation Creek region.







For more information please visit:

http://www.vba.vic.gov.au/\_\_data/assets/pdf\_file/0016/21319/Private-bushfire-shelters-bushfire-bunkers.pdf.

#### **Next steps**

Land owners should provide their BAL to an architect/designer to begin the process of designing a replacement dwelling, should they choose to build. This also applies to owners of vacant land or persons redeveloping a house that survived the fire. Residents are encourage to make an appointment with a Council planners and building surveying staff in the One Stop Shop team to discuss the initial design responses, and to seek clarification on any of the design standards.

For land owners with undamaged properties wishing to retrofit their homes to make them more bushfire resistant, a guide has been prepared by the Victorian Building Authority. This guide will be available at <a href="http://www.vba.vic.gov.au/">http://www.vba.vic.gov.au/</a> <a href="http://www.vba.vic.gov.au/">data/assets/pdf</a> <a href="file/0003/21459/A-guide-to-Retrofit-Your-Home-for-Better-Protection-from-a-Bushfire.pdf">http://www.vba.vic.gov.au/</a> <a href="http://www.vba.vic.gov.au/">data/assets/pdf</a> <a href="file/0003/21459/A-guide-to-Retrofit-Your-Home-for-Better-Protection-from-a-Bushfire.pdf">http://www.vba.vic.gov.au/</a> <a href="http://www.vba.vic.gov.au/">data/assets/pdf</a> <a href="file/0003/21459/A-guide-to-Retrofit-Your-Home-for-Better-Protection-from-a-Bushfire.pdf">http://www.vba.vic.gov.au/</a> <a href="http://www.vba.vic.gov.au/">data/assets/pdf</a> <a href="file/0003/21459/A-guide-to-Retrofit-Your-Home-for-Better-Protection-from-a-Bushfire.pdf">http://www.vba.vic.gov.au/</a> <a href="http://www.vba.vic.gov.au/">http://www.vba.vic.gov.au/</a> <a href

#### For further information:

To make an appointment at the One Stop Shop, contact Colac Otway Shire Bushfire Recovery Information Centre on (03) 5232 9400 or visit the Victorian Building Authority website.



