

Building in a Bushfire Prone Area



August 2018

The Fire and Emergency Commissioner has declared parts of the Augusta Margaret River Shire as being ‘bushfire prone’ in accordance with the *Fire and Emergency Services Act 1998*. Those areas are as shown on the Bushfire Prone Areas map which can be found at the official Department of Fire and Emergency Services (DFES) website. The Commissioners’ declaration results in all habitable buildings, including residential and tourist accommodation buildings, being required to comply with Australian Standard AS3959-2009. This includes class 1, 2 and 3 buildings and associated Class 10a buildings and decks.

The intent of the bushfire prone declaration is to improve the level of protection of life and property from bushfire by ensuring that all new buildings are sited and/or constructed to a standard that will reduce the risk of ignition from any bushfire that may occur in the area. The standard of construction is dependent on the assessed level of a buildings’ potential exposure to ember attack, radiant heat and direct flame contact which is expressed as a Building Attack Level or ‘BAL’ – see below.

BAL	DESCRIPTION (Source: AS 3959-2009, Appendix G)
BAL-LOW	The risk is considered to be VERY LOW. There is insufficient risk to warrant any specific construction requirements but there is still some risk.
BAL-12.5	The risk is considered to be LOW. There is a risk of ember attack. The construction elements are expected to be exposed to a heat flux not greater than 12.5kW/m ² .
BAL-19	The risk is considered to be MODERATE. There is a risk of ember attack and burning debris ignited by wind-borne embers and a likelihood of exposure to radiant heat. The construction elements are expected to be exposed to a heat flux not greater than 19kW/m ² .
BAL-29	The risk is considered to be HIGH. There is an increased risk of ember attack and burning debris ignited by wind-borne embers and a likelihood of exposure to an increased level of radiant heat. The construction elements are expected to be exposed to a heat flux not greater than 29kW/m ² .
BAL-40	The risk is considered to be VERY HIGH. There is a much increased risk of ember attack and burning debris ignited by wind-borne embers, a likelihood of exposure to a high level of radiant heat and some likelihood of direct exposure to flames from the fire front. The construction elements are expected to be exposed to a heat flux not greater than 40kW/m ² .
BAL-Flame Zone (FZ)	The risk is considered to be EXTREME. There is an extremely high risk of ember attack and burning debris ignited by wind-borne embers, and a likelihood of exposure to an extreme level of radiant heat and direct exposure to flames from the fire front. The construction elements are expected to be exposed to a heat flux greater than 40kW/m ² .

To achieve this all new habitable buildings located within a bushfire prone area are required to be assessed by a qualified fire consultant (BAL assessment). In limited circumstances where there is no apparent bushfire hazard such as where the proposed development is 100m or further from bushfire prone vegetation, a BAL assessment (basic) can be prepared by the proponent (link provided below). The fact sheet produced by the Department of Planning should be used to guide the preparation of such an assessment. A registered building surveyor will need to be satisfied that the BAL assessment (basic) is correct prior to signing the relevant certificate of compliance for the building.

Where buildings are assessed as BAL ‘Low’ there are no specific construction requirements under the standard. Where a building is assessed as having a BAL above ‘Low’, the building will need to meet the construction requirements of AS3959. These construction requirements

BUILDING IN A BUSHFIRE PRONE AREA

range from prevention of ember attack through to withstanding a high heat flux and burning debris. A summary of construction elements is attached. The application of AS3959 is not retrospective and while it will have no effect on existing dwellings, all owners are encouraged to review options available to them to provide the best possible protection during a bush fire event. Dwelling extensions and renovations may be subject to the standard. Such proposals should be discussed with a Shire building surveyor to determine requirements.

The Commissioners declaration coincides with the release of a related amendment to the *Planning and Development (Local Planning Schemes) Amendment Regulations 2015*. This Amendment introduces into the Shire's Local Planning Scheme No.1, a requirement for any development classified as having a BAL of 40 or FZ, to obtain planning approval in addition to a building permit with the exception of single dwellings and ancillary dwellings on lots smaller than 1100m². In this regard, information can be obtained from the Department of Planning website at: www.planning.wa.gov.au/bushfire.

The Shire also has requirements for management of fuel loads around dwellings under its annual Firebreak and Fuel Hazard Reduction Notice and some lots will also be subject to individual bushfire management plans. Compliance with these requirements, which include a Building Separation Zone of minimum 20m around all dwellings, is mandatory and may also reduce the BAL of proposed buildings. Further information on the fire notice is available at www.amrshire.wa.gov.au or by contacting the Shire Fire Control Officer.

Further information on the planning and building requirements associated with new development and the building permit process can be obtained from the Shire on 9780 5228, or via the web site contact form.

Useful Information and References

BAL Assessment (Basic):

http://www.planning.wa.gov.au/dop_pub_pdf/BAL_Assessment_Report.pdf

List of Bushfire Assessors:

<http://www.fpaa.com.au/bpad.aspx>

Department of Planning Bushfire Reform Website:

<http://www.planning.wa.gov.au/7958.asp>

For further information please contact Building Services on 9780 5228.