



## Building Information Sheet

# BS19 – AS3959 – 2009 Building in Bush Fire Prone Areas

November 2010

SOME areas within the Shire of Augusta-Margaret River are required to comply with AS3959-2009.

Any lot in an area declared as bush fire prone, with closed or open forest, or woodland, within 100m of the proposed dwelling, is required to comply with the Australian Standard AS3959 – Building in Bush Fire Prone Areas. The Shire Fire Management Plan (FMP) also requires a bush fire protection zone of 20m, and a hazard protection zone of between 20m to 100m. By complying with the FMP, the level of bushfire attack may be reduced to a lower level. A professional consultant with bush fire expertise will be required to verify the level of bush fire attack on the subject lot.

## SIMPLIFIED PROCEDURE

1. Determine the relevant FDI (Fire Danger Index). For Western Australia the FDI is 80.
2. Determine the classified vegetation type (Table 2.3 and figure 2.3).
3. Determine the distance of the site from the classified vegetation.
4. Determine the effective slope of the classified vegetation.
5. Determine the BAL (Bushfire Attack Level) from the appropriate table (FDI 80).
6. Determine the appropriate construction requirements

## Fire Management Plan

The Shire also has a Fire Management Plan (FMP) in place, part of which requires a Hazard Separation Zone, and a Building Separation Zone, around all buildings.

Contact the Shire Fire Control Officer for further information about the Fire Management Plan.

A **Building Separation Zone** is defined as a low fuel area immediately surrounding buildings, with a minimum width 20m, increasing in width with increase in slope.

A **Hazard Separation Zone** is defined as a fuel reduced area between an area of extreme bush fire hazard and the buildings and associated building protection zones of a development. When combined with a building protection zone, a hazard separation zone is required to be of sufficient width to ensure that all habitable buildings are located a minimum distance of 100m from an extreme bush fire hazard.

For further information about Bush Fire Protection, go to the Department of Planning and Infrastructure, publications, at [www.planning.wa.gov.au](http://www.planning.wa.gov.au).

Complying with the Fire Management Plan in the first instance, may negate the need to build to a higher standard, in line with AS3959. However, owners are advised to construct to provide the best possible protection during a bush fire event.

## AS3959 - 2009 Building in Bush Fire Prone Areas

**SUMMARY ONLY** – all of the detail of the standard is too complex to be included here. This is a guide only and proponents will need to refer to the full version of the current edition of *AS 3959 – 2009 Building in Bush Fire Prone Areas*. Section 3 of the standard is applicable to all construction

Bushfire Attack Level (BAL)	BAL 12.5	BAL 19	BAL 29	BAL 40	BAL FZ
Construction level	Section 3 & 5	Section 3 & 6	Section 3 & 7	Section 3 & 8	Section 3 & 9
<b>SUB FLOOR SUPPORTS</b>	NA	NA	Enclosed by walls or mesh with a 2mm aperture made of steel or bronze OR non combustible	Enclosed by walls or mesh with a 2mm aperture made of steel or bronze OR non combustible	Enclosed by walls, or unenclosed to have an FRL 30/-/-
<b>FLOORS</b>			As above, or unenclosed floors < 400 above ground shall be non combustible, or protected. Ply or particle sheet flooring to be sarked	Unenclosed floors to be non combustible, or protected with non combustible sheeting.	Unenclosed floors to have FRL 30/30/30 or meet AS1530 or
<b>EXTERNAL WALLS</b>	Walls within 400mm of the ground, and decks or verandahs, require protection; ie non combustible	Walls within 400mm of the ground, and decks or verandahs, require protection ie non combustible	All walls to be non combustible (masonry), or framed, sarked and clad with non combustible material.	All walls to be non combustible (masonry), or framed, sarked and clad with non combustible material.	Non combustible or FRL 30/30/30
<b>EXTERNAL GLAZING ASSEMBLIES and DOORS</b>	Windows & doors (including vehicle access doors) within 400mm of the ground, deck or verandah, require protection. - Openable part to be screened. All screens to be corrosion resistant steel, bronze, or aluminum < 2.0mm.	Windows & doors (including vehicle access doors) within 400mm of the ground, deck or verandah, require protection. Glazing within 400mm of deck or verandah to be toughened 5mm. Unprotected doors to be toughened 5mm glass. Openable part to be screened. All screens to be corrosion resistant steel, bronze, or aluminum < 2.0mm.	Protected with non combustible shutters; or, Metal frame or bush fire resisting timber with toughened Glass min 5mm Glass sliding doors to be 6mm toughened. Hinged glass doors to have lower 400mm with compliant screens Openable part to be screened. All screens to be corrosion resistant steel, bronze, or aluminum < 2.0mm.	Protected with non combustible shutters; or, Metal frame with toughened Glass min 5mm  Openable AND fixed parts to be screened. All screens to be corrosion resistant steel, or bronze < 2.0mm. Vehicle access doors to be non combustible	Non combustible shutters or openable part to be screened. All screens to be corrosion resistant steel, or bronze < 2.0mm; AND, window system to have FRL -/30/-, or pass AS1530.8.2 when tested from the outside.
<b>ROOFS</b>	Fully sarked and sealed Verandahs and carports to be non - combustible Vent pipes can be PVC	Fully sarked and sealed Verandahs and carports to be non-combustible.	Fully sarked and sealed Verandahs and carports to be non-combustible. Eaves linings, fascias and gables to be non combustible	Fully sarked and sealed Verandahs and carports to be non-combustible. Eaves linings, fascias and gables to be non combustible	Roofs to have FRL 30/30/30 Verandahs - non combustible. Eaves linings, fascias and gables to be non combustible. Metal pipes and conduits
<b>VERANDAHS and DECKS</b>	NA Decking within 300 of glazed elements to be non combustible or hardwood (table E1) or protected	NA Decking within 300 of glazed elements to be non combustible or hardwood (table E1) or protected	Deck to be non combustible. Unenclosed sub floors to be non combustible.	Deck to be non combustible. Unenclosed sub floors to be non combustible.	Deck to be non combustible. Unenclosed sub floors to be non combustible.
<b>SERVICE PIPES</b>	All above ground water and gas pipes to be metal				