

**PLANTATION SHUTTERS • SCREENS • LOUVRES • SUN HOODS • RAILINGS**

## **Australian Standard: 3959 RURAL FIRE SERVICES LEGISLATION**

This is an abridged version of *Australian Standard 3959: Construction of Buildings in Bush Fire Prone Areas* and provides some detail for developments proposed in high risk zones.

Please do not use the abridged version alone. The full version can be purchased from Standards Australia at [www.standards.org.au](http://www.standards.org.au).

### **Flooring**

#### **Level 1**

Concrete slab on ground. Suspended floor- concrete floorframed floor, underside of bearer to be greater than 600mm above finished ground level. Under space where unenclosed all timber flooring, bearers and joists to be fire retardant treated timber.

#### **Level 2**

As per Level 1.

#### **Level 3**

As per Level 1 except where framed floors have a greater clearance than 600mm above finished ground level and are not fully enclosed – all flooring components are to be fire retardant treated timber.

### **External Walls**

#### **Level 1**

Masonry, concrete, pise, rammed earth, stabilised earth or; Framed walls have no restriction to cladding materials but must incorporated breather-type sarking having appropriate flammability index or an insulating material confirming to the appropriate Australian Standard.

Where combustible sheeting is less than 400mm from ground, cladding shall be protected with a non-combustible material for no less than 400mm.

#### **Level 2**

As per Level 1 except PVC claddings not permitted and all external timber wall cladding shall be fire retardant treated timber.

#### **Level 3**

As per Level 2.

### **Windows**

#### **Level 1**

All openable windows shall be fitted with screens.

#### **Level 2**

As per Level 1 and in addition – timber windows shall be fire retardant treated timber except where protected by non-combustible shutters. Leadlight windows shall be protected by a shutter constructed of non-combustible material or toughened glass.

## PLANTATION SHUTTERS • SCREENS • LOUVRES • SUN HOODS • RAILINGS

### Level 3

As per Level 2 except windows are to be protected by non-combustible shutters or toughened glass.

### External Doors

#### Level 1

Weather strips or draft excluders to be fitted. Tight fitting door screens to be fitted.

#### Level 2

As per Level 1 except aluminium mesh shall not be used. Leadlight glassing shall be protected by shutters constructed of non-combustible material or toughened glass.

#### Level 3

As per Level 2 except that timber doors shall be fire retardant treated or covered with non-combustible material on the exterior or doors shall be protected by shutters of non-combustible material or Doors shall be solid core having a thickness of not less than 35mm.

### Roofs

#### Level 1

Timber shakes or shingles are not permitted. Tiled roofs shall be fully sarked. Sarking shall have a flammability index of no more than 5.

Sheeted roofs shall be fibre cement or metal and all gaps under corrugations or ribs where it meets the fascia/wall shall be sealed or protected by either (a) fully sarking roof or (b) corrosion resistant steel, bronze mess, profiled metal sheet, neoprene seal, compressed mineral wool or similar material.

The use of (b) cannot be used on roofs with valleys. Rib caps and ridge capping shall be sealed using either rib caps, ridge capping or as per prior clause.

Roof wall junctions shall be sealed by the use of fascias and eaves linings or with non-combustible materials.

#### Level 2

As per Level 1 except that all roofing shall be non-combustible and sarked.

#### Level 3

As per Level 2 except that no fibre-reinforced cement or aluminium sheet shall be used.

## PLANTATION SHUTTERS • SCREENS • LOUVRES • SUN HOODS • RAILINGS

### Rooflights

#### Level 1

All rooflights and associated shafts shall be sealed with a non-combustible sleeve or lining.

A rooflight can be constructed from thermoplastic sheet in a metal frame, but diffuser installed at ceiling level shall be wired or toughened glass in a metal frame.

Vented rooflights shall have corrosion resistant steel or bronze mesh.

#### Level 2

As per Level 1 except rooflight glazing shall be wired glass.

#### Level 3

As per Level 2.

### Eaves

#### Level 1

Eaves shall be enclosed with all fascia or gaps between rafters being sealed.

#### Level 2

As per Level 1 except all timber eaves lining and joining strips shall be fire retardant-treated timber.

#### Level 3

As per Level 2 except that aluminium shall not be used.

### Fascias

#### Level 1

No special requirement.

#### Level 2

All material must be either non-combustible or fire-retardant treated timber.

#### Level 3

As per Level 2 except that no fibre-reinforced cement or aluminium sheet shall be used.

### Gutters and Downpipes

#### Level 1

All leaf guards must have a flammability index no greater than 5 (AS1503.2).

#### Level 2

As per Level 1.

#### Level 3

As per Level 1.

## PLANTATION SHUTTERS • SCREENS • LOUVRES • SUN HOODS • RAILINGS

### Verandas and Decks

#### Level 1

Slab-reinforced concrete suspended slab floor, supported by posts or columns. Slab on ground.

Sheeted or tongued and grooved solid flooring having:

- where clearance between under side of flooring to ground level is not greater than 400mm, all joints in the flooring shall be covered or sealed
- decking timbers shall have no less than 5m clearance
- posts and columns shall be non-combustible, fire retardant for a minimum of 400mm above finished ground level or mounted on galvanised metal shoes with a clearance of not less than 75mm
- the external perimeter beneath the decking shall not be enclosed nor have access restricted
- decking timbers shall not connect with the remainder of the building unless measures are used to prevent the spread of fire into the building.

#### Level 2

As per Level 1 except spaced timber decking shall be fire retardant treated.

#### Level 3

As per Level 2 except all materials shall be non-combustible or where timber is used it all will be fire retardant treated including balustrades.

You can purchase Australian Standard 3959 Construction of Buildings in Bushfire Prone Areas (AS:3959) from Standards Australia. Visit their website:

- [www.standards.org.au](http://www.standards.org.au)

### The RFS has several publications available on building in bush fire prone areas:

- *Planning for Bush Fire Protection 2006*
- *Applicants Kit: Single Dwelling*
- *Applicants Kit: Subdivision*
- *Frequently asked questions*
- [Available in PDF format from our Publications Area](#)

### More about Building in a Bush Fire Prone Area:

- [Introduction](#)
- [Planning for Bush Fire Protection](#)
- [Legal Obligations](#)
- [How to use Planning for Bush Fire Protection](#)