

## BAL-29 CONSTRUCTION REQUIREMENTS

This is a condensed version of AS3959 BAL requirements for residential construction and should only be used as a guide. Detailed requirements must be confirmed and implemented during design and construction.

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| <b>SUBFLOOR SUPPORTS</b>                    | Enclosure by external wall or by steel, bronze or aluminium mesh, non-combustible supports. Where the sub-floor is unenclosed, naturally fire-resistant timber or non-combustible bearers and joists if 400mm or closer to the ground. If over 400mm from the ground - no construction requirements.   |
| <b>FLOORS</b>                               | Concrete slab on ground, enclosure by external wall, metal mesh as above or flooring less than 400mm above ground level to be non-combustible, naturally fire-resistant timber or protected on the underside with sarking or mineral wool insulation. Metal mesh to subfloor vents.  |
| <b>EXTERNAL WALLS</b>                       | Non-combustible material (masonry, brick veneer, mud brick, aerated concrete, concrete), timber framed, steel framed walls sarked on the outside and clad with 6mm fibre cement sheeting, steel sheeting or bushfire resisting timber.   |
| <b>EXTERNAL WINDOWS*</b>                    | Protected by bushfire shutter, or completely screened with steel, bronze or aluminium mesh or 5mm toughened glass or glass with openable portion metal screened.<br>Frame of metal or metal reinforced PVC-U or bushfire resisting timber and portion within 400mm of ground level screened.   |
| <b>EXTERNAL SLIDING DOORS</b>               | Frames of metal, metal reinforced PVC-U or bushfire resisting timber<br>No special construction requirements for openable portion. 6mm toughened safety glass.   |
| <b>EXTERNAL DOORS</b>                       | Protected by bushfire shutter or completely screened with steel bronze or aluminium mesh or non-combustible or 35mm solid timber for 400mm above threshold.<br>Metal or bushfire resisting timber framed tight fitting with weather strips at base.<br>Glazed doors - solid, non-combustible timber with 6mm toughened safety glass  |
| <b>SLIDING DOORS</b>                        | Frame and door to be made of Bushfire resisting timber, metal, metal reinforced PVC-U with 6mm toughened glass, doors to be tight in frames.<br>Screening is not required for the openable portion of the door.  |
| <b>GARAGE DOORS</b>                         | The lower 400 mm above ground to be of non-combustible material or bushfire resisting timber (AS3959 paragraph E2 Appendix E), or metal, or 6 mm fibre cement cladding.<br>Panel lift, tilt doors or side hung to have weather strips, draught excluders, draught seals or guide tracks. No gaps greater than 3mm are allowed. Roller doors to have guide tracks not allowing any gaps greater than 3mm and must be fitted with nylon brushes that are in contact with the door. Vent slots are not allowed. |
| <b>ROOFS</b>                                | Non-combustible covering. Roof/wall junction sealed. Openings/Penetrations fitted with non-combustible ember guards. Roof to be fully sarked.  |
| <b>EAVES FASCIA/BARGE</b>                   | Eaves completely lined in 4.5mm fibre cement sheeting. Fascia/Barge - metal - fixed at 450mm centres. Bushfire resistant timbers.  |
| <b>VERANDAHS DECKS ETC</b>                  | Enclosed sub -floor space or non-combustible or bushfire resistant timber supports.<br>Decking to be non-combustible or bushfire resistant within 300mm horizontally and 400mm vertically from a glazed element.   |
| <b>EXTERNAL HANDRAILS &amp; BALUSTRADES</b> | Less than 125mm from glazing or combustible materials to be non-combustible or bushfire resistant.   |
| <b>EXTERNAL SERVICE PIPES</b>               | Exposed water or gas pipes are to be metal.  |

\*Screening for openable portions of windows is essential for all BALs to prevent ember entry when the window is open. Additionally, some BALs require screening of the fixed portions (and openable) to reduce the effects of radiant heat on certain types of glass and to prevent ember accumulation on windowsills. If the screening is needed to reduce radiant heat effects, it must be external to protect the glass in the openable section when closed. However, if the screening's sole purpose is to prevent ember entry into the home from the openable section, it can be fitted either externally or internally.

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