

## Potential Upgrading Measures for Existing Dwellings

The following are just some examples of building improvements that may be retrofitted to a dwelling home in accordance with AS 3959. These apply up to and including BAL 29.

### Flooring

To prevent burning embers entering under the floor space, any raised floors should have the perimeter enclosed with non-combustible material. For example, a timber framed house on stumps should have the area between the floor and the ground covered with material such as masonry, concrete or non-combustible sheeting or timbers that are naturally fire resistant or treated with a fire retardant.

### External doors and windows

Burning embers and smoke can enter a house through external doors and windows. The following methods will help prevent this from occurring:

- External side hung doors should be:
  - non-combustible or made of solid timber with a minimum thickness of 35mm;
  - sealed with weather strips or draught seals;
  - protected with metal screens, either mesh or perforated sheet, made of corrosion-resistant steel, bronze or aluminium; and
  - tight fitting with any gaps between the frames and walls sealed.
- Sliding doors should be protected with metal screens, either mesh or perforated sheet, made of corrosion-resistant steel, bronze or aluminium, or fitted with bushfire shutters.
- Windows should be protected with metal screens or bushfire shutters.
- If metal screens or bushfire shutters are not fitted to windows and external doors, glass should be toughened safety glass.
- Frames supporting the mesh screens for both doors and windows should be made of metal or bushfire resisting timber.
- All external hardware for windows and external doors should be made of metal.

### External walls

It is recommended that all external walls be constructed of non-combustible material such as masonry or concrete. To improve the resistance of timber or steel framed construction against bushfire attack, it may be possible to retrofit existing framed homes with fire resistant wall cladding or timber that is naturally fire resistant or treated with a fire retardant.

### Gutters and downpipes

To help prevent burning embers igniting leaf litter in your gutters, consider installing non-combustible gutter and valley leaf guards. Gutters should be made of non-combustible material and box gutters flashed at the junction with the roof. The standard does not provide for specific construction material requirements for downpipes.

### Roofs

Roofs, roofing systems and accessories should be non-combustible and the roof/wall junction should be sealed to prevent gaps. Ember guards made of mesh or perforated sheet, constructed of corrosion resistant steel, bronze or aluminium, should be fitted over roof ventilation points such as gable and roof vents.

### Evaporative air conditioners

Install a protective non-combustible ember screen over the air intake to prevent burning embers entering the house.