



CONSTRUCTION GUIDE FOR BUSHFIRE AREAS

Houses, garages and sheds in bushfire areas are required to be protected from ignition from a bushfire while its front passes. The Building Code of Australia references AS 3959 as an acceptable construction manual for these areas, and the systems presented here are designed to meet the Standard for each of the defined attack levels. State variations to the BCA may also apply.

The Bushfire Attack Levels (BALs) refer to heat flux exposure thresholds, summarised in the table below:

BUSHFIRE ATTACK LEVELS*	
Bushfire Attack Level (BAL)	Description of predicted bushfire attack and levels of exposure
BAL - LOW	There is insufficient risk to warrant specific construction requirements
BAL - 12.5	Ember attack
BAL - 19	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux between 12.5 and 19 kW m ²
BAL - 29	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux between 19 and 29 kW m ²
BAL - 40	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux with the likelihood of exposure to flames
BAL - FZ	Direct exposure to flames from fire front in addition to heat flux and ember attack

* **Source:** Building in Victoria after the bushfires

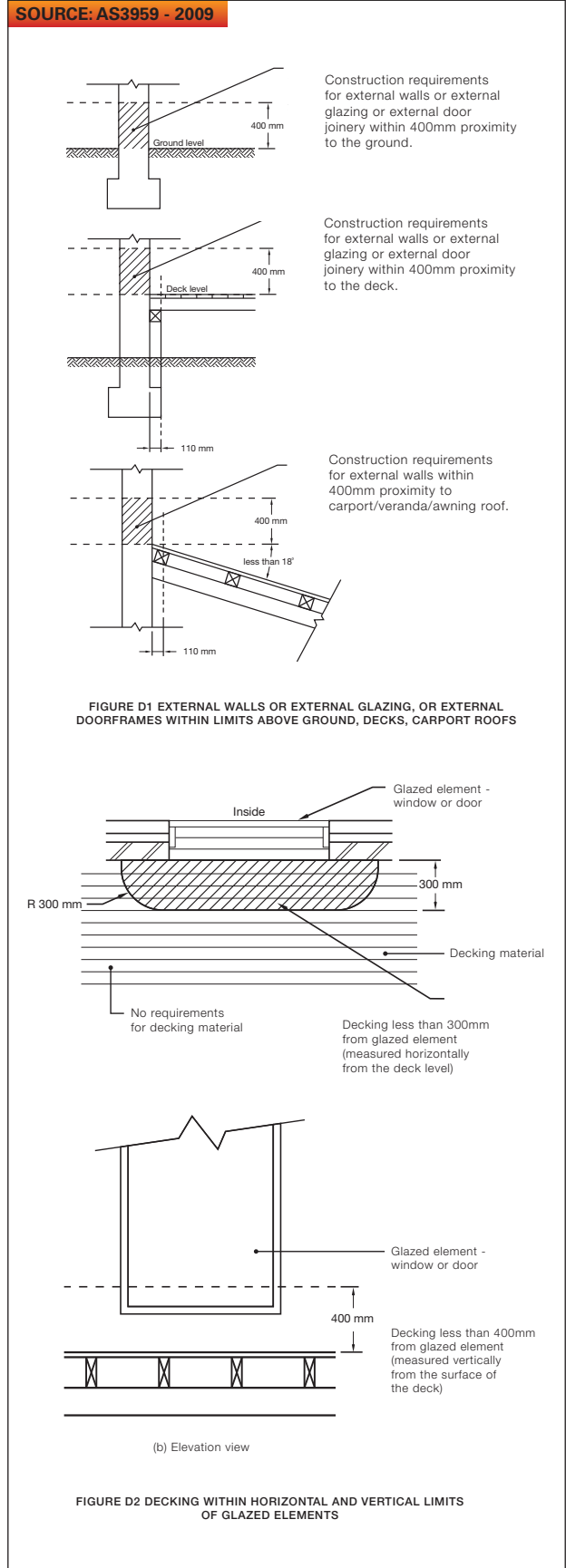
The following products and systems may be used to meet or exceed the requirements of each BAL:

BAL-12.5

FLOORS
<ul style="list-style-type: none"> No special construction requirements
EXTERNAL WALLS
<ul style="list-style-type: none"> Cemintel Designer Series panels. Cladding Sheet 6mm Texture Base Sheet 7.5mm Cladding Plank 7.5mm RendaLine 8mm Residential ExpressWall 8mm with sarking Scarborough Weatherboards 12mm SEE FIG D1
EAVES
<ul style="list-style-type: none"> Eaves Lining 4.5mm
VERANDAS, DECKS
<ul style="list-style-type: none"> Compressed Sheet 15mm or 18mm SEE FIG D2

BAL-19

FLOORS
<ul style="list-style-type: none"> No special construction requirements
EXTERNAL WALLS
<ul style="list-style-type: none"> Cemintel Designer Series panels. Cladding Sheet 6mm Texture Base Sheet 7.5mm Cladding Plank 7.5mm RendaLine 8mm Residential ExpressWall 8mm with sarking Scarborough Weatherboards 12mm SEE FIG D1
EAVES
<ul style="list-style-type: none"> Eaves Lining 4.5mm
VERANDAS, DECKS
<ul style="list-style-type: none"> Compressed Sheet 15mm or 18mm SEE FIG D2



BAL-29

FLOORS (UNENCLOSED)

- Underside lined with 6mm Cladding Sheet where any element is less than 400mm above ground level.

EXTERNAL WALLS

All external walls must have sarking.

- Cladding Sheet 6mm
- Cemintel Designer Series panels.
- Texture Base Sheet 7.5mm
- Cladding Plank 7.5mm
- RendaLine 8mm
- Residential ExpressWall 8mm
- Scarborough Weatherboards 12mm

EAVES

- Eaves Lining 4.5mm

VERANDAS, DECKS

- Compressed sheet 15mm or 18mm



BAL-40

FLOORS (UNENCLOSED)

- Underside lined with Cladding Sheet 6mm

EXTERNAL WALLS

All external walls must have sarking.

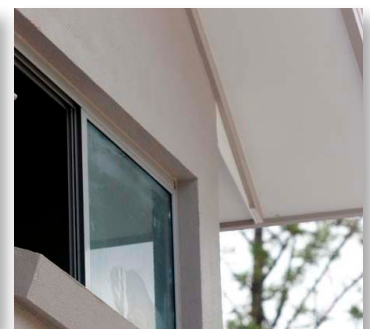
- Commercial ExpressWall 9mm
- Scarborough Weatherboards 12mm
- Cemintel Designer Series panels.

EAVES

- Cladding Sheet 6mm

VERANDAS, DECKS

- Compressed sheet 15mm or 18mm

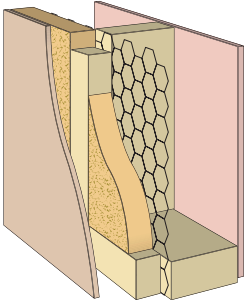
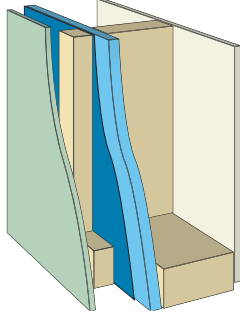
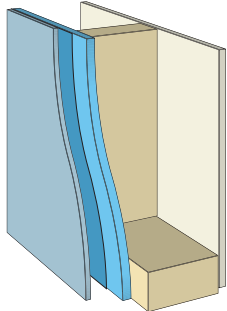


BAL- FZ FLAMEZONE

FLOORS (UNENCLOSED)

- 16mm FyrcheckMR™ plasterboard for underside of flooring system with Cladding Sheet 6mm **or**
- 13mm FyrcheckMR™ plasterboard with steel sheet protection

S (REQUIRED TO BE -/30/30 FRL)

<p>CSR System 697</p> <ul style="list-style-type: none"> • RendaLine 8mm • 25mm Bradford Fibretex 450 sarking • Wire Mesh • 10mm Gyprock™ plasterboard 	
<p>CSR System 900</p> <ul style="list-style-type: none"> • Any Cemintel™ Cladding (eg. Scarborough, Cemintel Designer Series panels, Headland or Endeavour) • Sarking • 16mm FyrcheckMR • 10mm Gyprock™ plasterboard 	
<p>CSR System 902</p> <ul style="list-style-type: none"> • Texture Base Sheet 7.5mm • Sarking • 13mm FyrcheckMR • 10mm Gyprock™ plasterboard 	

EAVES (REQUIRED TO BE -/30/30 FRL)

- 13mm Gyprock FyrcheckMR™ plasterboard and protection from weather

VERANDAS, DECKS

- Compressed sheet 15mm or 18mm

CONTACT DETAILS

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