



BUILDING WITH TIMBER IN BUSHFIRE PRONE AREAS

Bushfire Compliant Construction—Standards

Building construction in bush fire prone areas in Victoria, is now governed by Australian Standard AS.3959 - 2009 “Construction of Buildings in Bushfire Prone Areas” NSW and South Australia have additional requirements and reference should be made to the Building Code of Australia.

This Standard aims to minimize the risk of ember attack by introducing a range of building solutions to reduce the direct exposure of timber rafters, wall frames and trusses.

Bushfire Compliant Construction Summary

- The Construction of Buildings in Bushfire Prone Areas standard was produced to save lives, not homes!
- The Standard aims for the structure to be able to provide a safe refuge while the fire front passes.
- After the front has passed, any burning building elements could then be extinguished by residents themselves with appropriate equipment or with assistance from fire services.
- There are other options other than building with concrete, brick or steel if you are living in a BAL Zone (Bushfire Attack Level)
- Design and installation information is available through industry groups and several product manufacturers. (see the links listed below)

AS.3959— 2009 has six (6) levels of bushfire attack. These are:

- BAL- Low 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/m²
- BAL- 29 Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux between 19 and 29 kW/m²
- BAL- 40 Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux between 29 and 40 kW/m² and increased exposure to flames.
- BAL- FZ Direct exposure to flames from the fire front in addition to heat flux over 40 kW/m² and ember attack.

Bushfire Resisting Timbers: Naturally Durable Hardwoods

Backbutt, Merbau (Kwila), Spotted Gum, Brush Box, Grey Box, Grey Gum, Mountain Ash, Southern Blue Gum, Grey Ironbark, Messmate, Alpine Ash, Sydney Blue Gum, River Red Gum, Turpentine, Sugar Gum, Red Ironbark, Mountain Grey Gum, Mountain Ash (Victorian Ash), Stringybark/s, Slash Pine, Cypress, Shining Gum.

links: www.woodsolutions.com.au for Technical Guide No.4 ‘Building With Timber in Bushfire Prone Areas’
www.sai-global.com for copy of Australian Standard AS.3959-2009
www.chhwoodproducts.com.au for CarterHoltWoodProducts Specific Construction Guide

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