

Steel



The inside word on bushfire protection

STEELframe
SOLUTIONS

'The Smart Way To Build'

Bushfire protection from the inside out.

Simply, steel will not ignite and does not burn

Your choice of building materials when building in bushfire-prone areas is extremely important and can dramatically affect how your house performs in a bushfire event. By building with non-combustible materials you are reducing the risk of your house igniting.

Bushfire protection starts with good design

Homes in bushfire-prone areas which resist ignition, limit fire spread, add no fuel to the fire, and remain strong and secure, represent better value for their owners and the community.

Bushfire attack

The mechanisms of bushfire attack on houses and the way various types of houses respond are well understood and documented.

There are three modes of attack by a bushfire on houses: burning embers, heat radiation and flame contact.

Ember attack is the most prolonged and persistent mode of attack, commencing before the fire front and persisting for several hours afterwards. Radiant heat is at dangerous levels for perhaps 5-10 minutes before and after the flame front passes. Flame contact may impinge on the building for just a few minutes.

It is well documented that the majority of house fires are started by ember attack. Houses are not consumed by bushfires but by house-fires started by the bushfire.

Roof structure, eaves, verandahs and sub-floor spaces are the most vulnerable and will benefit most from good design and materials.

Design principles

All building components should be fit to resist the conditions of service to which they will be exposed. If the house does not ignite, inside or out, it will not be destroyed by fire. It follows that we should do everything possible and economically justifiable to prevent ignition of any part of the house or its contents from which a fire could spread. It all comes down to good design and material selection.

Building regulations

Regulations have changed to ensure all new houses have a greater chance of survival when under bushfire attack. All of Victoria is now considered a bushfire zone and comes under the new regulations. The use of non-combustible materials forms a major part of the regulations. This is where steel fits in.

Steel advantages in bushfire design

Steel is an excellent choice when designing and building a bushfire resistant home.

Its bushfire credentials include:

- Excellent early fire hazard properties. You just can't ignite it
- Non-combustibility. You can't burn it, so it does not add fuel to the fire
- Quality and durability. Its qualities are unaffected by time and maintenance

Steel can't burn under bushfire conditions, and while you are trying to burn it, it doesn't give off heat or smoke.

With maximum use of strong, durable and non-combustible steel materials on the building envelope, combined with better glazing, durable door and window screens, effective sub-floor ember screening, and a properly sited and well-prepared building, the probability of ignition, fire spread and house loss is almost eliminated.

Protect your home from bushfires from the inside out by building with steel. Help us help you, call Steel Frame Solutions today to find out more about steel-framed residential buildings for added peace of mind.



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