

Understanding bush fires

Key Points

- ⇒ Prevent sparks from entering buildings by closing all gaps.
- ⇒ A destructive fire does not need extreme weather conditions.
- ⇒ A building can catch alight through embers, direct flame contact or radiant heat.

Definitions

- ⇒ Ember attack is where the bark and fine vegetation material is set alight and carried forward of the fire.

Bush fires are a natural part of the Australian environment, however, given the right conditions they can be extremely dangerous.

During a bush fire, firefighters will be working to stop the fire from spreading and a fire appliance may not be available to defend every home. It is vital that property owners prepare their homes even if you are planning to leave early before the fire approaches.

Fuel

Bush fires are fuelled by vegetation. The type of fuel determines how hot the fire will be and how fast it will travel. For example, long dry grass, twigs and leaves will burn very quickly while heavy forest and scrub will burn slowly but at a much higher temperature and at a greater intensity.

Embers

Embers are carried by winds ahead of the actual fire. The embers can be carried several hundred metres in front of the fire. These can land on flammable material and cause small fires to start on your property.

Most homes that burn during a bush fire are lost due to ember attack. These burning embers can enter through gaps and openings in roofs, walls, evaporative air-conditioners, windows and doors. It can take a number of hours before the fire can be observed and by that time the building may not be able to be saved.

It is recommended that all homes that may be affected by embers be made ember proof. If a bush fire occurs in the general area then the roof cavity and other crevices should be inspected to ensure that no embers have caused a fire. Before putting water on embers be aware that there are electricity cables in the roof area and using water will be a safety issue.

Embers are the main reason houses ignite and they can remain a risk even after the fire front has passed.

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Radiant Heat

Bush fires generate extreme heat. While radiant heat may not set a building on fire, it can crack and break windows which will allow embers to enter your home.

Direct Flame Contact

This can occur when materials are left too close to the house and they catch alight, resulting in flames touching the building.

Wind

Strong winds normally occur during bush fires making it harder for firefighters to bring the fire under control. The wind pushes flames closer to unburnt fuel causing the fire to travel quicker. Also don't forget embers are carried by the wind which cause spot fires.