



CFS FACT SHEET

How buildings burn

There are several ways a building can catch fire during a bushfire.

Ember Attack

The main cause of building damage during bushfires is when embers and sparks enter the building through unprotected openings.

Flying embers or sparks can start small fires well before the main fire front arrives, or many hours after.

These small fires can quickly develop and engulf a whole building if not put out.

Direct Flame Contact

Direct flame contact occurs when vegetation or other flammable materials close to a building ignite, causing flames to come in direct contact with the outside of the building.



Radiant Heat

Radiant heat is the main cause of people dying in a bushfire, but it rarely causes buildings to catch fire.

In extreme cases radiant heat may ignite timber directly, but this only happens when a large quantity of fuel burns close to a building.

Radiant heat can shatter glass and allow sparks, embers and flames to get into a building.

Radiant heat may also heat up a building making ignition by embers easier.

What happens to a building during a bushfire?

Embers and debris can start small fires around your home even when the main fire is kilometres away.

It only takes one ember to land in the right place for a small fire, called a 'spot fire', to start.

Spot fires grow to large fires and can form new fire fronts that sweep through areas.



As the fire front passes your home, embers, radiant heat, smoke and flames will be at their peak.

The front may only take a few minutes to pass.

Once the main fire front has passed, smoke will be thick and embers can continue to fall and be blown around.

Vegetation in the area may continue to burn and smoulder for several hours.

Your building is fuel.

If your building is not protected, it may burn in the same way as all other fuels on the fire ground.