



HOME HARDENING FOR WILDFIRE

Wind-driven burning embers and firebrands overwhelmingly cause the most house fires during a wildfire. Direct flames and heat also contribute. Most structural losses from wildfires can be minimized with proper materials and maintenance. In addition, home hardening and defensible space can buy you and your family precious time to evacuate to safety in an emergency.



MAKING YOUR HOME MORE WILDFIRE RESISTANT

The following steps can help your home better resist a wildfire, or at the least buy more time to allow an evacuation. Protection from embers, heat and flames should be every home owner's top priority!

ZONE 0 DEFENSIBLE SPACE

Zone 0 (0 - 5' around your house) is the most critical area to ensure that there are no combustible materials present.

Remove/reduce all fire hazards in this space!

- ❖ No easily combustible materials within 5' of a structure, refer to: **Guide #13 - Defensible Space & Landscaping for Fire Safety**
- ❖ Replace jute or natural fiber doormats with heavy rubber or metal grates.
- ❖ Apply non-combustible mulch such as crushed stones or gravel next to the house.
- ❖ Remove flammable materials on and underneath decks, patios or porches.



DURING A WILDFIRE

- ❖ Remove and safely store ignitable materials such as door mats, propane tanks, patio furniture cushions, wicker furniture, etc.
- ❖ Remove combustible items such as curtains away from windows, which may crack or break from the heat of a wildfire.

EMBER PROTECTION

Prevent blowing and burning embers from entering your house and from igniting objects on or near your house.



- ❖ Prevent embers from entering your home by installing ember-resistant vents designed for fire and ember safety. A less expensive but nearly as effective alternative is to cover vents with 1/8 or 1/16-inch corrosion resistant metal mesh screen.
- ❖ Keep rain gutters clean and free of leaves and needles. Metal rain gutters with flashing and a metal cover provides the best protection. Be sure to clean under any gutter covers regularly.
- ❖ Remove all combustible items away from the vents located in your attic and crawl space.
- ❖ A roof/eave foam or water sprinkler system may help douse embers and protect a house during a wildfire. However, these are significantly less effective during a major, wind driven wildfire with extreme heat. And firefighters need all the water they can get.

ROOF/SIDING

With its large, flat surface, the roof is the most vulnerable part of a house.

- ❖ Regularly clean the roof to keep it free of leaves, needles and debris, including the corners between the roof and any siding such as dormers or a split-level.
- ❖ Ensure that the roof covering has a Class A fire rating, such as with steel, tile or asphalt composition shingles.
- ❖ Siding, including fiber cement, stucco and masonry, are much more fire-resistant compared with wood or vinyl.
- ❖ Have at least 6" vertical of non-combustible material/concrete along foundation (between the ground and lower course of siding)



ATTACHMENTS

Attachments to the house, such as a fence or deck, can become a fuel bridge into the structure.

- ❖ Wood fences should not be attached directly to the house; separate the fence from the house with a brick, masonry or metal gate barrier.
- ❖ Remove all flammable vegetation and other combustibles within 5' of all attachments.
- ❖ With connected decks, have non-combustible/ignition-resistant materials like metal flashing in-between the house and deck (minimum 6" vertical between deck and lower course of siding)



WINDOWS/SKYLIGHTS

Windows and skylights can become entry points to embers and flame.

- ❖ Multi-pane or tempered glass provides the best protection and is less likely to break when exposed to heat.
- ❖ Vinyl windows and plastic skylights can fail when exposed to extreme heat.
- ❖ Ensure leaves and needles don't build up on top of or around skylights.



GARAGE

Garages typically contain flammables including gasoline in vehicles and stored for small engines.

- ❖ Install weatherproof stripping around and under the garage door. Ensure door is regularly adjusted for a tight seal.
- ❖ Keep combustibles elevated off the floor in case an ember gets in.
- ❖ Store gasoline and other flammable liquids in approved containers and away from sources of heat or flame.



RESOURCES

There are many resources to further help you harden your home against a wildfire, including:

- ❖ National Fire Protection Association: www.nfpa.org
- ❖ CAL FIRE: www.fire.ca.gov
- ❖ Firesafe Marin: www.firesafemarin.org
- ❖ Ready.gov: www.ready.gov