



Avoiding Wildfire Damage: A Checklist for Homeowners

FEDERAL EMERGENCY MANAGEMENT AGENCY

If you live in a forest or wildland area, you face the real danger of wildfire. Wildfires destroy thousands of homes and devastate hundreds of thousands of acres of woodland every year.

Protecting your home from wildfire is your responsibility. To reduce the risk, you'll need to consider the fire resistance of your home, the topography of your property and the nature of the vegetation close by.

This homeowner's checklist will help learn what you can do. You should also contact your local fire department, forestry office, emergency management office or building department for information about local fire laws, building codes and protection measures.

Always be ready for an emergency evacuation. Evacuation may be the only way to protect your family in a wildfire. Know where to go and what to bring with you. You should plan several escape routes in case roads are blocked by a wildfire.

- **Do you know your wildfire risk?** Learn about the history of wildfire in your area. Be aware of recent weather. A long period without rain increases the risk of wildfire. Consider having a professional inspect your property and offer recommendations for reducing the wildfire risk. Determine your community's ability to respond to wildfire. Are roads leading to your property clearly marked? Are the roads wide enough to allow firefighting equipment to get through? Is your house number visible from the roadside?

- **Have you thinned out and maintained the vegetation around the house?** All vegetation is fuel for a wildfire, though some trees and shrubs are more flammable than others. To reduce the risk, you will need to modify or eliminate brush, trees and other vegetation near your home. The greater the distance between your home and the vegetation, the greater protection.

Create a 30-foot safety zone around the house. Keep the volume of vegetation in this zone to a minimum. If you live on a hill, extend the zone on the downhill side. Fire spreads rapidly uphill. The steeper the slope, the more open space you will need to protect your home. In this zone, do the following:

- Remove vines from the walls of the house.
- Move shrubs and other landscaping away from the sides of the house.

- Prune branches and shrubs within 15 feet of chimneys and stove pipes.
- Remove tree limbs within 15 feet of the ground. Thin a 15-foot space between tree crowns.
- Replace highly flammable vegetation such as pine, evergreen, eucalyptus, junipers and fir trees with lower growing, less flammable species. Check with your local fire department or garden store for suggestions.
- Replace vegetation that has living or dead branches from the ground level up (these act as ladder fuels for the approaching fire).
- Cut the lawn often.
- Clear the area of leaves, brush, dead limbs and fallen trees

Create a second zone at least 100 feet around the house. This zone should begin about 30 feet from the house and extend to at least 100 feet. In this zone, reduce or replace as much of the most flammable vegetation as possible. If you live on a hill, you may need to extend the zone for several hundred feet to provide the desired level of safety.

- **Are combustible materials away from the house?** Identify all combustible materials outside the house. Stack firewood 100 feet away and uphill from the house. Keep the gas grill and propane tank at least 15 feet from house. Clear an area 15 feet around the grill. Place a 1/4 inch mesh screen over the grill.
- **Are sun decks and porches enclosed underneath?** Any porch, balcony or overhang with exposed space underneath is fuel for an approaching fire. Overhangs ignite easily by flying embers and by the heat and fire that gets trapped underneath. If vegetation is allowed to grow underneath or if the space is used for storage, the hazard is increased significantly. Clear leaves, trash and other combustible materials away from underneath sun decks and porches. Extend 1/2-inch mesh screen from all overhangs down to the ground. Enclose wooden stilts with noncombustible material such as concrete, brick, rock, stucco or metal. Use non-combustible patio furniture and covers. If you're planning a porch or sun deck, use non-combustible or fire-resistant materials. If possible, build the structure to the ground so that there is no space underneath.
- **Are eaves and overhangs enclosed?** Like porches and balconies, eaves trap the heat rising along the exterior siding. Enclose all eaves to reduce the hazard.
- **Are house vents covered with wire mesh?** Any attic vent, soffit vent, louver or other opening can allow embers and flaming debris to enter a home and ignite it. Cover all openings with 1/4 inch or smaller corrosion-resistant wire mesh. If you're designing louvers, place them in the vertical wall rather than the soffit of the overhang.

- **Is the roof made of noncombustible materials?** The roof is especially vulnerable in a wildfire. Embers and flaming debris can travel great distances, land on your roof and start a new fire. Avoid flammable roofing materials such as wood, shake and shingle. Materials that are more fire resistant include single ply membranes, fiberglass shingles, slate, metal, clay and concrete tile. Clear gutters of leaves and debris.
- **Are chimneys and stovepipes covered with spark arrestors?** Chimneys create a hazard when embers escape through the top. To prevent this, install spark arrestors on all chimneys, stovepipes and vents for fuel-burning heaters. Use spark arrestors made of 12-gauge welded or woven wire mesh screen with openings 1/2 inch across. Ask your fire department for exact specifications. If you're building a chimney, use non-combustible materials and make sure the top of the chimney is at least two feet higher than any obstruction within 10 feet of the chimney.
- **Is the house siding fire resistant?** Use fire resistant materials in the siding of your home, such as stucco, metal, brick, cement shingles, concrete and rock. You can treat wood siding with UL-approved fire retardant chemicals, but the treatment and protection are not permanent.
- **Have windows been treated to reduce the risk?** Windows allow radiated heat to pass through and ignite combustible materials inside. The larger the pane of glass, the more vulnerable it is to fire. Dual- or triple-pane thermal glass, and fire resistant shutters or drapes, help reduce the wildfire risk. You can also install noncombustible awnings to shield windows and use shatter-resistant glazing such as tempered or wire glass.