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PROTECTING YOUR HOME FROM WILDFIRE

PROACTIVE PREPARATION CAN SPARE YOUR HOME FROM DESTRUCTION.

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Fireman's Fund® Insurance Company

PROTECTING YOUR HOME
FROM WILDFIRE

Wildfire losses have greatly increased in the last decade, driven by warmer average temperatures, lower snow levels and drought conditions. The National Interagency Fire Center reports that more than 67,000 wildfires burned over 9.2 million acres throughout the country in 2012 — the third largest number of acres burned in 13 years.

According to the U.S. National Oceanic and Atmospheric Administration (NOAA), 2012 was the driest year on record in the contiguous United States since 1988. All the recent data suggests that the Western United States is likely to see more frequent wildfires in the next 30 years. In fact, "fire season" is no longer a seasonal issue but a year-round concern.

This year, warm temperatures and drought conditions will further increase the risk of wildfire. It is critical that individuals and communities vulnerable to wildfire take steps to protect themselves and reduce their risks.

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WILDFIRE
READINESS

Recent statistics show one-third of homes in the Unites States are located in Wildland Urban Interface (WUI) areas. Even homes near WUI areas risk damage or loss from airborne embers, so it is essential that homeowners protect their homes and property from wildfire. "Of homes lost to wildfires, the vast majority could have been saved if their owners had only followed a few fire-safe practices," notes John Hunt, Wildfire Specialist at Fireman's Fund Insurance Company. Accordingly, the fire service recommends a wildfire strategy focused on compliance with current fire codes, fire resistant construction and creating defensible space around structures.

Based upon the National Fire Protection Association's (NFPA®) Standard 1144, there are several key areas you should focus on to prepare your home for a possible wildfire.

"Ember exposure is considered the most important threat to properties in a wildfire."

STEPHEN L. QUARLES, PHD
SENIOR RESEARCH SCIENTIST AT IBHS

Embers

Wildfires generate high winds that can carry small burning embers for many miles beyond the fire lines. These embers can penetrate attic vents, soffits and other openings. Embers can even collect on complex roof surfaces, such as shingles or tiles where they can smolder, undetected, and can eventually cause buildings to burn from the inside out. This is why it is vital to seal roofing materials and block attic vents and eaves.

"Ember exposure is considered the most important threat to properties in a wildfire, primarily because they can occur well outside of the fire line and away from where firefighting attentions may be focused," said Stephen L. Quarles, PhD, senior research scientist at the Insurance Institute for Business & Home Safety. "Embers can ignite combustible building components and contents directly, or vegetation and other combustible items located adjacent to or near a building. Once ignited, this material can expose a home or business to radiant heat and direct contact with flames."

Radiant Heat

It shouldn't be a surprise that a raging wildfire can reach incredibly high temperatures. An average surface fire on the forest floor might produce flames reaching 3 feet high with temperatures of 1,472°F or more. Under extreme firestorm conditions, a fire can produce flame heights of 164 feet or more with temperatures exceeding 2,192°F. When you consider that the flash point of wood, or the temperature at which it will burst into flame, is 572°F, even a minor grass fire can ignite a wooden shed, wood pile or other untreated structures on your property.

Defensible Space

Establish a clear line of defense to protect against radiant heat and direct contact with flames. Many jurisdictions have written the responsibility of defensible space into code, because it is widely recognized that cleared defensible space is critical to saving homes and lives from wildfire. Your insurance carrier may require you to follow a set of mitigation standards in order to write your policy — or offer reduced premiums.

ASSESS YOUR HOME'S VULNERABILITY

IBHS offers region-specific wildfire retrofit guides, a Wildfire Home Assessment & Checklist, and wildfire preparedness brochures focusing on commercial, residential, and farms and ranches. Below are some highlights to consider as you assess your home or property.

Slope

Wildfires burn up a slope much faster and flame length can also be very long. Homes located midway or at the top of a slope are at a higher risk from increased flame length, so it is wise to increase the defensible space around the home.

Home Protection Zones

Dr. Quarles says a critical way to reduce wildfire risk to a home or business is by creating defensible space around your property that consists of three zones. "Effective defensible space is essential for a building's survivability during a wildfire. It creates a sufficient buffer to slow or stop the spread of a wildfire to a building, and can protect the building from igniting," Dr. Quarles explained.

Zone 1. 0 ft. – 5 ft. around the home perimeter
Clearing Zone 1 of combustible debris or materials, shrubs and especially firewood can reduce the chance of windborne embers collecting near the home. "By creating a non-combustible zone in the 5 feet immediately next to your home or business you will remove most things that could be ignited by wind-blown embers during a wildfire," Dr. Quarles said. "Consider using rock or stone mulch instead of bark, pine needles or other combustible mulch products." Also be sure to move combustible materials, such as firewood and lumber, away from the home including anything combustible that is stored underneath your deck.

Zone 2. 5 ft. – 30 ft. around the home perimeter (or to the property line)
Choose landscape materials and vegetation that, if ignited, will not easily transmit fire to the home. "Firewise" trees and shrubs in this zone should be in well-spaced groupings and properly maintained. Avoid shorter trees and shrubs that allow flames to climb into the upper portions of trees. If this landscaping is ignited by wind-blown embers, the resulting fire should not be able to threaten the home by radiant heat exposure or by flames touching the exterior surfaces of the home.

Zone 3. 30 ft. – 100 ft. (or to the property line)
Good vegetation management in this zone can reduce the energy and speed of the wildfire. This is the most effective way to keep wildfire from approaching your home and limit the amount of combustible materials for embers to land on and potentially ignite. Even if trees, brush or shrub crowns catch fire, the debris will fall to the ground and decrease overall flame length.

Structure Assessment

Roof — If a homeowner has a wood shake roof, the highest priority is to replace it with a Class A fire-rated roof. Some examples of a Class A roof are asphalt composition ("asphalt comp") shingles, metal roofing, concrete and clay tiles. Other roof coverings may carry a Class B or C fire rating. Class A fire-rated roofing products offer the best protection.

Skylights — Remove accumulated debris from edges of skylights and replace dome-type skylights with tempered glass versions. Keep operable skylights closed when a wildfire threatens.

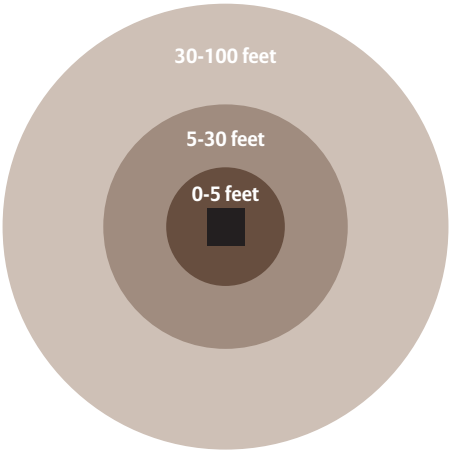
Insurance Companies and Privatized Firefighting

Some insurance companies have established their own private crews to deploy during wildfires. Using trucks equipped to spray fire-retardant foam or gel on landscape and structures, these private teams attempt to protect their policyholders.

Spraying a home with fire-retardant foam is no guarantee that the home will be saved. The logistics of getting the privatized crews to the fire site is difficult. Because these private companies are not part of the fire service, incident command does not often allow access to a restricted fire scene — especially if a mandatory evacuation is in effect.

Even if private crews can access a wildfire scene, the unpredictable behavior of fire creates chaos, making it difficult or even impossible for private fire crews to apply fire-retardant foam correctly and to the right property.

For these reasons, homeowners should not rely on reactive techniques but instead focus on preventative measures that enable their home to survive a wildfire.



Create a zone of defensible space around your home.

Roof Vents — Cover vents with 1/8-inch metal mesh screening where possible. Replace dormer-style vents with low profile versions. Consult with your local fire or building department for any approved ember/flame resistant vents.

Gutters — Clean out gutters and install a drip edge to protect any exposed roof sheathing or fascia. Remove debris that has accumulated at roof-to-wall intersections such as a dormer or a chimney. For added protection, consider replacing combustible siding at "intersection" locations with a non-combustible or ignition-resistant siding product. Install metal step flashing, extending up from the roof a minimum of 6 inches. A roofing professional can help you achieve the best results.

Eaves — Convert open-eave framing to a boxed-in or soffited-eave design. Venting in the soffit material (and between the soffit and attic space) must be maintained.

Siding — Remove debris and examine your siding for locations where embers could accumulate. Apply caulk at trim-to-siding locations where it is missing or has failed. If you plan to re-side your house, use non-combustible or ignition-resistant material.

Side Vents — Use closeable foundation vents to prevent airborne embers from entering. Install 1/8-inch metal mesh for outer vents or use louver-type for dryer exhaust. Be sure to physically close the vent if you are forced to evacuate during a wildfire.

Windows — Replace single-pane windows with dual or multi-pane windows, preferably ones with tempered glass, and install screening to reduce radiant heat exposure to glass.

Foundation — 'Skirt' post- and beam-style foundations with non-combustible material.

Garage — Weather seal garage doors to prevent airborne embers from entering. Be sure to close the garage door if you are forced to evacuate during a wildfire.

Decks — Ensure a well-maintained defensible space around decks, gazebos and other exterior wood structures. Never store combustible material on or beneath the deck. Most decking material is combustible; so no matter where you live, use a product that complies with the requirements of the California Building Code, as provided in the Office of the State Fire Marshal Wildland Urban Interface (WUI) Handbook.

Fences — Replace combustible fencing that attaches directly to your home with a non-combustible section that is at least 5 feet long such as a chain-link gate.

Farm and Ranch Structures — Create defensible space around barns and other structures the same way as your home. Also store bulk livestock feed and other combustible items under tarps to provide some protection from embers.

PREPARE AN EVACUATION PLAN

Homeowners in wildfire-prone areas are encouraged to plan for evacuation should the need arise. Pre-planning saves property and lives. Develop and practice your plan, and prepare a disaster kit. Include planning and provisions for your pets and livestock too.

Be prepared to go and do not wait for an official evacuation as you might be ordered to leave your pets behind. Many homes in WUI areas are connected by narrow roads that can create dangerous situations as evacuees try to escape while fire trucks attempt to reach the fire area. Visit FEMA's "Are You Ready?" website for further details.

PREPARATION IS THE BEST PROTECTION

Now you have the background on wildfires and understand how you can ready your home and family in the event of one. The bottom line is: preparation is the best protection against wildfires. It's the little things that make the difference. Most of the preventative measures in this article are affordable and can be implemented by the average homeowner or general contractor.

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Top 5 Preventative Measures to Protect Your Home from Wildfire

1. Create defensible space around your home and property using fire resistant landscaping materials.

2. Remove debris that accumulates in gutters and at roof-to-wall intersections such as dormers and chimneys.

3. Use fire-resistant building materials for your home and near-by structures.

4. Install ember/flame resistant vents and close all windows and doors in the event of a wildfire.

5. Request a risk management consultation from your insurance company or ask your independent insurance agent for qualified fire mitigation vendors.

For more information on ways you can adapt your home and property to survive a wildfire, check out the Ready, Set, Go! (RSG!) Program. Managed by the International Association of Fire Chiefs, the program teaches individuals who live in WUI areas how to best prepare themselves and their properties against wildfire. The RSG! Program helps residents be Ready with preparedness understanding, be Set with situational awareness when fire threatens, and to Go, acting early when a fire starts.

It is also wise to ask your insurance company about their risk management services. Many insurance companies provide a Wildfire Susceptibility Assessment to help policyholders address their vulnerability to wildfire. Homeowners are encouraged to request a personal, onsite consultation from a risk advisor who is an expert in wildfire mitigation. Many onsite visits lead to immediate results.

Though technology is always evolving, including new firefighting tools and procedures, there simply is no substitute for good old-fashioned pre-planning. Working with your insurance carrier to identify what preventative methods are right for you is a great first step.

ABOUT FIREMAN'S FUND

Since 1863, Fireman's Fund has partnered with independent agents and brokers to protect the future for individuals, families and businesses. We've helped rebuild cities, insured major construction projects and managed risk for the world's most popular films.

Today, we are industry leaders in high net worth, entertainment and green insurance. Backed by superior claims and risk services, we're there for our customers before, during and after they incur a loss. We are a member of the Allianz Group — one of the world's largest insurance providers — and have a strong financial foundation.

Fireman's Fund began with a promise to support firefighters in their mission to make communities safer. We continue this tradition through our Heritage Program® and contribute a portion of our profits to fire service organizations across the United States.

For more information, visit www.firemansfund.com

Resource Center

- CAL FIRE – Fire Prevention
- California Wildland Hazard and Building Codes
- FEMA Are You Ready? Guide
- IBHS – Insurance Institute for Business & Home Safety
- Wildfire Home Assessment and Checklist

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