

From the outside in: protecting your home against wildfires

BY KURT KRUEGER, ARCHITECT



The threat of wildfires can be scary. Your mind turns to concerns for your family, friends, neighbors, pets, and wildlife. The thought of losing your home and material possessions along with irreplaceable items can be overwhelming.

After the devastating Getty Fire and the recent Sepulveda Fire, Brentwood homeowners may be wondering if there is a way to fire-proof their home. While it is easier to carefully plan the design of a new home to be fire-resistant, there are steps anyone can take to better protect their current home, whether you are rebuilding after the fires, remodeling or trying to find simple ways to mitigate wildfire damage.

The following steps may not spare your home if it is in the path of a wildfire, but there have been instances where preventative measures have made a difference.

Where to Start: Protecting your Home from the Outside

Wildfires attack your home from the exterior, driven by strong winds that can reach peak temperature in seconds. Fire may pass over your site and be gone within minutes, which then presents the danger of secondary spot fires started by wind-driven flames and embers. If your home is designed to withstand this brief, but devastating, exterior attack, your home has a good chance of surviving a wildfire.

The California Building Code requires materials and construction methods to protect our home from wildfires, but some additional measures to consider are:

- **Site Design:** Create a 'defensible space' of 100 feet distance between your home, combustible materials, and the wildlands. Wildfires can come in any direction, but up-hill fires are by far the most dangerous.
- **Landscaping:** Create what Cal Fire calls a "Lean, Clean, Green Zone," by removing all flammable vegetation within 30 feet of the immediate perimeter of your home. Then create a "Reduced Fuel Zone" in the remaining 70 feet, which can be achieved with horizontal or vertical spacing between plants or removing all plants below the trees.
- Last year, Brentwood fire station personnel related the story of a home that was barely saved from the fire, in no small part due to

the "natural firebreak" of ice plant surrounding it. We saw this several years back in wine country, where vineyards provided that natural green break.

- **Visibility & Access:** When designing your site, consider driveways and turnarounds that are wide enough for a fire truck, equipment, and emergency vehicles.
- **Roofs:** Install a fire-resistant roof and remove dead leaves and needles from your roof and gutters.
- **Exterior Walls:** There are plenty of beautiful and regionally appropriate materials for the exterior of your home, including stucco, brick, concrete, stone, or metal siding. Materials like wood can still be used, but a layer of fire-resistant material, such as exterior grade drywall, must be installed to increase the wall's fire rating.
- **Overhangs:** Roof soffits, cantilevered balconies, decks, and underfloor areas should be given particular attention because this is where flames will be trapped and temperatures reach their highest.
- **Windows:** Windows are often the weakest point of defense against a fire. Single glazing is particularly vulnerable. Consider double-glazed windows with tempered glass on the exterior side. Roll-down metal fire doors or fold-down panels or shutters are perhaps the safest solution.



- **Vents & Louvers:** Consider fire dampers with fusible links on attic and under-floor vents. A minimum of 1/4" metal wire mesh or tighter can also be used.
- **Sprinkler Heads:** Sprinkler heads can be placed on the roof or decks and can turn themselves on automatically with a valve that is opened with a fusible link. Some homes in the community have benefited from sprinklers installed under the eaves. This is expensive but very effective.

Protecting your Home from the Inside

Although wildfires attack from the outside, there are things you can do from the inside to protect your home.

- **Garage:** Mount a working fire extinguisher and have tools such as a shovel, hoe, rake and bucket available in case of a wildfire emergency. Consider installing a solid door with self-closing hinges between living areas and the garage.

- **Fire Sprinklers:** While fire sprinklers are required in all new homes in California, this should be considered during any remodeling.
- **Kitchen:** Keep a working fire extinguisher in the kitchen. Maintain electric and gas stoves in good operating condition.
- **Living Room:** Install a screen in front of a wood-burning fireplace or wood stove. Windows are often the first area that a wildfire penetrates, setting the draperies off like a Roman candle. You can choose fire-resistant draperies or roller shades.
- **Hallway:** Install smoke detectors between living and sleeping areas, test monthly, and replace batteries twice a year.
- **Bedrooms:** Install a smoke detector in the bedroom and if you have security bars on your windows and doors, be sure they have a quick-release mechanism so your family can escape.
- **Bathroom:** Disconnect appliances and keep items like towels away from wall and floor heaters.

In addition to this, a Disaster Preparedness Kit is also essential for every home, in case of an emergency.

Wildfires are becoming much more frequent. As we rebuild, yet again, after the most recent fires, these basic design decisions will greatly improve the chances that your home will survive the next onslaught.

Kurt Krueger is a local award-winning architect.



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kurt krueger
ARCHITECTS

12207 Wilshire Blvd #203
Los Angeles, CA 90025
310.979.9945

kurtkruegerarchitects.com