

Fire Protection for the Wildland-Urban Interface

Is Your Property at Increased Risk for Fire?

Recent research on Wildland-Urban Interface (WUI) home losses by the [Insurance Institute for Business & Home Safety \(IBHS\)](#) showed that homes with the highest risk of burning are those adjacent to wildlands situated on the perimeter of housing developments. Properties positioned along the edge of a housing development, which were located on the windward side or along a side that ran parallel to the prevailing wind direction, were exposed to a substantially higher risk of being destroyed.

While the increased risk varies from community to community, it was generally



PHOTO COURTESY OF LARRY KERHNAK, USDA FOREST SERVICE



Fire-retardant roof materials. Approximate cost over traditional materials: **\$3,500**

Cut back dead tree limbs, especially over roof and within 10 feet of chimney.

Keep areas around the home clear so emergency vehicles have easy access.

Create a defensible space around structures—30 to 100 feet.

Mow grass, cut back low-to-ground vegetation.

Fire-resistant materials for exterior walls, siding. Approximate cost: **\$10,000–\$15,000**

Tempered or multiple pane windows reduce heat, protect against wind and debris. Approximate cost: **25% more** than non-tempered or single pane windows.

WILDFIRE SAFETY TIPS

Cut it BACK!

Source: International Code Council | www.iccsafe.org

(All costs based on a two-story, 2,000 sq. ft. home.)

found that properties along these edges were nearly twice as likely to burn as properties on the first row back from the edge, and three to eight times more likely to burn than homes farther back in a housing development.

Multiple homes right next to each other tend to burn more readily. Interior homes situated less than 15 feet apart are at high risk from wildfire. While homes adjacent to wildlands are the most vulnerable to wildfires, homes in the interior areas of housing develop-

ments that were located less than 15 feet apart were much more likely to burn in clusters. This finding elevates the importance of a community-wide approach to protecting properties against wildfire where the density of homes is high, and it also emphasizes the potential threat posed by neighboring properties. Cluster burning was not found in homes located more than 45 feet apart from each other.

All homes, regardless of their value, can be protected best from wildfire by implementing appropriate loss reduction measures. The value of a home was not found to be a major factor in the risk that it would burn. In the study communities, there was a relatively even distribution of the percentage of homes that burned across a wide range of home values. This suggests that taking the proper mitigation steps can protect any home.

The requirements established in the new Codes can effectively reduce loss and damage from wildfires. San Diego County, which adopted progressive codes in 2001 and strengthened those codes in 2004, experienced lower burn rates in homes built to these wildfire property protection standards in unincorporated areas, according to an analysis conducted by the county after the 2007 fires.

WUI officials suggest policymakers need to take



a more proactive, community-based approach to property protection. Government leaders should critically review the costs associated with the firefighting resources and manpower needed to battle the growing wildfire threat, and implement effective mitigation efforts before wildfires strike.

Homeowners need to protect their homes. Homeowners must become familiar with the affordable options available to protect their existing homes and increase their resistance against wildfire. Local and state government leaders should encourage this education.

Financial and real estate markets must acknowledge the value of wildfire-resistant construction and retrofitting. The financial services industry, along with the real estate industry, must recognize the value of making these improvements to existing homes, and new homes should be marketed for the ability to survive in wildfire-prone areas.

For additional information, please visit www.diasastersafety.org. **bsj**

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