

Protect Your Home from Wildfires with Fire Resistant Construction

By _____, President

(Home Builders Association)

With summer approaching, wildfires already have begun to tear across parts of the country, endangering any homes in their paths. While no technology or building practice can guarantee survivability for a home, there are some considerations, including location, construction details, landscaping and maintenance, that can help make your home more fire resistant.

Location, Location, Location

Homes should be built on the most level portion of available land. Fires move up a slope faster than on level ground because hot gases rise in front of them, preheating their path. Use care when locating a home near any property features that might channel the flow of wind; for example, single-story homes should be built at least 30 feet from any ridge or cliff, and homes with more than one story should be even further back.

It's All in the Details — Construction Details, That Is

Since a major cause of home loss in a wildfire is the roof catching fire, home owners should ask builders about the use of non-combustible or fire-resistant roofing materials, such as Class A shingles, metal, slate or clay tile, cement and concrete products or terra cotta tiles. Fire-resistant sub-roofing can also increase a home's survivability.

Since vinyl can soften and melt during a fire, consumers should consider using a fire-resistive exterior wall cladding, such as masonry or stucco. To prevent sparks from entering the home via vents, home owners should cover the exterior attic and underfloor vents with wire mesh that is no larger than 1/8 of an inch, and ensure that the undereave and soffit vents are closer to the roof line than the wall. Eaves should be boxed in, but allow enough ventilation to prevent condensation.

Maintenance and Add-Ons

Gutters, eaves and the roof should be kept clear of leaves and other debris that might catch fire. Regularly inspect your home for deterioration, including breaks and spaces within roof tiles, warping wood or cracks and crevices in the structure. Walk your property and make sure that any dead wood or dense vegetation is at least 30 feet from your home. Move firewood 100 feet away from the house or attachments, such as fences or decks; combustible materials and debris should not accumulate less than 50 feet from your home.

Don't attach an all-wood fence to your home, unless masonry or metal is used as a protective barrier between the fence and the structure. Use screens with wire mesh no larger than 1/8 inch under porches or other areas below the ground line to keep sparks and flames out. Elevated wooden decks should not be located at the top of a hill where they would be in the direct line of a fire moving up the slope — consider a terrace instead.

Landscaping

Research the local area fire history so that you can plan your landscaping design accordingly. In your plan, consider the site location, overall terrain, prevailing winds, seasonal weather conditions and property contours and boundaries. In order to create a safety zone around the home to reduce the risk of fire losses, consider the following:

- Remove dead or low-hanging branches within 15 feet of a stovepipe or chimney outlet, as well as accumulated leaves that could provide fuel for a fire.
- Mow tall, dry grasses that would otherwise provide a fire with a path leading directly to the house.
- Prune shrubbery and remove dead leaves and branches to decrease their flammability.
- Ask the power company to clear branches from power lines.

- Ensure that the irrigation system is well-maintained.
- Incorporate “fuel breaks” in your design, such as driveways, gravel walkways, plants with a high moisture content and lawns.

While no strategy is foolproof when it comes to wildfires, these basic precautions can increase your home’s chance of surviving an outbreak. For more information, contact **[INSERT LOCAL INFORMATION]** or e-mail the NAHB Research Center’s ToolBase Services Program at toolbase@nahbrc.org or call 800-898-2842.