

Steps You Can Take to Make Your Home Firewise

Although this guide focuses on how to protect your house and surrounding structures from wildfire, it is equally important to enable firefighters to reach your house and safely defend it against an approaching fire. **Firefighters are certain to concentrate their efforts on structures where the residents have made a significant effort to make it more fire safe.**

Quick Fixes

The following measures are relatively inexpensive and easily carried out by the homeowner. These tasks should be completed before wildfire season is upon us.

Grab Your Rake!

Remove pine needles, pine cones, and other woody debris from your roof, gutters, decks (on top and underneath), beneath wooden stairways, and yard. This can be quite a job if there are a lot of pine trees on your property and the pine needles have been allowed to build up for a number of years. When it comes to routine maintenance, remember to sweep your roof, gutters, eaves, and decks on a regular basis, especially during the hot, dry weather of the fire season. Tinder-dry needles and leaves are a fire waiting to happen.

Maintain Vegetation Near Your House

- Vigorous and smaller is better; remove any large dead or dying plants that are growing within 6 feet of your house.
- Get rid of dead branches and dead material under the plants (especially junipers), and make sure the plants are watered regularly, preferably with a drip system.
- Remove vegetation that contain resins, oils, and waxes that burn easily.
- Make sure any plants growing under windows, near decks, or at inside corners of the house are green and kept well watered.

Other Plants and Trees on Your Lot

- Prune tree limbs so the lowest limb is 6' to 10' from the ground (the greater the slope, the higher you need to prune).
- Remove any branches that hanging over decks, within 6 feet of your roof, or within 15 feet of a chimney or stovepipe.
- Create islands of vegetation interspersed with nonflammable materials, such as rocks, gravel, or concrete (this is called a “fuel mosaic”) so fire does not have a path to your house. Be sure there are no large bushes under trees—these serve as ladder fuels that could carry fire into the trees and cause a crown fire.
- Don't use landscaping bark and mulch; in a wildfire situation they could become smoldering embers.
- Annual grasses are a major hazard in the fall when they cure, especially if you have grasses on a slope leading up to your house. Cut these grasses before they die.

Other Combustibles

- The area within 6 feet of your house is especially hazardous. Do not store firewood or other burnable items within this area. **Never store firewood on or under a wooden deck during wildfire season.**
- Keep that barbecue propane tank as far away from the house as possible.
- Clear plants from around propane tank and surround with non-flammable fencing material.
- Clean your gutters regularly, especially when the rainy season is over and you're more likely to not think about gutter debris. Better still, cover your gutters with metal screening.

Presently there is one designated site on the Ranch where you can safely dispose of woody debris such as pine needles, brush, and tree limbs. It is located is next to the water tank near the intersection of Meadow Lane and Wilderness Way. We are looking for a second site on the other side of the Ranch for depositing woody debris. **The deposition site is for woody debris only. If it didn't come off a tree or shrub, don't put it there!**

Spark Arresters

If you have a chimney, be sure that it has an approved spark arrester. Early fall is the critical time for wildfires from fireplaces. Sparks from your chimney can cause ignition to your neighbor's (or your) house—it doesn't always take a wildfire to cause damage! Also, have your chimney inspected and cleaned at least once a year and keep a supply of chimney fire extinguisher on hand.

Screens

Replace plastic screens on windows with metallic ones. Metal screens protect windows from radiant energy from fires and some protection against wind-blown debris. If you have a deck or elevated porch (with or without latticework beneath it), consider stapling metal screening to the underside of the deck or porch and stretching it all the way to the ground. The screening will be practically invisible, and it will keep woody debris from collecting under the deck and prevent sparks and embers from getting under the deck during a fire.

Burn safely

Please adhere to all published restrictions on burning, which are usually put in place during the peak of wildland fire season. If you are in doubt as to whether there is a ban on burning, contact the fire chief.

- Contact someone on the fire department and let them know you are planning to burn.
- Pay close attention to the weather forecast. Don't burn on dry, windy days.
- Clear the ground of all flammable materials for at least 10 feet .
- Have adequate water and fire tools available in case the fire escapes. In most cases, the fire department will bring a vehicle to your burn site and stand by while the fire

burns. (The fire department will not babysit the fire without the property owner present.)

- Have an adult attend the fire until it is completely out.

Install smoke detectors in your home.

Install as many smoke detectors as local regulations require, and contact a member of WRFPD if you need help in planning and rehearsing a home fire escape drill. Regular home fire drills can save your family in an emergency.

Have ample safety exits in case of fire.

Your home should have at least two ground level doors to use as safety exits in case of fire, and each room should have at least two means of escape, including a door and a window leading to the outside. This is especially true in bedrooms.

LONG-TERM ACTIONS TO CONSIDER

Roof and Roofing Materials

Perhaps the greatest threat to your house is a combustible roof covering, or openings in the coverings resulting from age and snow/ice damage. If you have an untreated shake roof, the odds are poor that your house will survive a major wildfire. Check to see what your roofing type is (roofs are rated A, B, or C, depending on the roofing material and overall construction). Qualified roofers should be able to provide this information and, if you are considering changing your roof, they can advise you about fire-resistant roofing materials that are appropriate for this area.

Landscaping

If you've done a bit of trimming, replaced some plants, and cut some branches, what next? Think long term.

If you have a down slope from your house with annual grasses/weeds, think about a low-form, fire-resistant, drought-resistant plant. This may take a few years to fully develop (with watering in the first year or so), but it can serve as a significant barrier to fire spread. Flashy fuels, such as grasses, are a major hazard in the wildland/urban interface. Trees don't have to be a problem as long as there is adequate distance between the trees and your house, garage, shed, etc. The nearest branches should not be closer than 6 feet from the side of any building, and no branches should hang over a roof or deck, so trim back what you can, and start a removal/replacement program. A good choice for a tree in Wilderness Ranch is a deciduous one, especially on the south side of your house. It will provide shade in the summer and lose its leaves before the fire weather.

Also, as pointed out earlier, remove large bushes that are growing under trees, and minimize plants under windows, near decks, or at inside corners of the house. Creating space between shrubbery with materials like grass or gravel will provide a fire break. Create a mosaic of green islands instead of large clumps of vegetation. The gaps should be greater as you approach the house

Windows

Fire can enter the house if windows break. Tempered, double glazed windows are unlikely to fracture. However, some of the larger “view” windows in your home may be made of untempered glass, which can fracture when exposed to high radiant heat (the glass will expand much more than the frames they are, which will cause them to break), the impact of flaming large brands blown by winds, or flames impinging on the glass. There are also reports of ignition of the materials inside of the house (such as drapes) from radiation through windows. Here are some steps to ensure that your windows are not a fire hazard:

- The first step is to remove any combustibles (including large plants) from beneath first-floor windows. The safest approach is to have low-form plants under windows.
- Next, where there are combustibles such as decks, the only reasonable solution is to protect the windows or modify them. An old solution that seems to have been forgotten is to use shutters to act as a barrier. A relatively modern approach is to use tempered glass in such windows (or sliding doors)—this has been required in new construction for several years.
- Not all windows in a house need to be double glazed—the highest priority is for the first floor, especially on the side of the house from which a fire would most likely approach

Vents

Vents in houses serve several purposes, especially removal of excess moisture and reduction of roof and attic temperatures. There are many types of vents that are located in soffits, roofs (“eyebrow” vents), tops of roofs (ridge vents), top ends of walls (gable vents), and crawl spaces. Of these, the soffit vents (including the frieze block vents, which are the round or notched vents for cathedral ceilings), are most vulnerable to fire. We recommend the following for soffit vents:

- First, do not block these vents without having additional adequate vents added. Reducing the venting can lead to serious decay damage from accumulation of condensation in the attic area.
- Consider advice from a contractor about your options. If you are considering replacing your roofing material, then the roof-type vents should be seriously considered. Gable vents are also a good retrofit option for some walls.
- Above all, be sure that you do not have large plants at the ground line directly below soffit vents. A poorly maintained bush about 3 feet high can burn with flames more than high enough to reach your soffits and go through the vents. Your soffits should be either a noncombustible material (such as a fiber cement product) or 3/4-inch plywood without joints over the surface area. Joints are a very vulnerable entry point for fire.

Siding

Your siding (cladding) of the house can be a problem depending on the likelihood of ignition and penetration, and what is above the siding. If the siding is combustible (and

almost all siding is combustible, except stucco), it can act as a “fire ladder” and move the fire vertically into the eaves and potentially through the soffit material or vents. Below is some information to think about.

A lot of homes at the Ranch are sided with combustible materials; and it’s not likely that many of us are going to re-side our houses, so keep in mind that combustible siding may not be a problem if:

- Combustible materials are not stacked, stored, attached to, or growing near the base of the siding.
- The siding material does not have openings through which brands can enter. This is particularly important for lapped siding (both horizontal and vertical), and for inside corners of buildings.
- The combustible material is thick enough (about 3/4 inch) so that it is unlikely to burn through into the wall cavity.

Access/Egress

A lot of time has been spent discussing protecting your home from fire, but what about your driveway and property bordering a road? If the trees on either side of your driveway are burning, preventing your safe escape, or if your neighbors are unable to evacuate the Ranch because fire is blocking the road, then all the work we’ve done to protect our homes may be for naught.

The same rules apply for thinning and pruning trees bordering your driveway: prune branches a minimum of 6 feet from the ground and remove ladder fuels.