

HOMEOWNER CHECKLIST

Wildfires don't have to destroy everything in their path. Science and research have proven that using Firewise principles in your landscaping can minimize damage and prevent losses. The work you do today can make a difference. Follow these simple action steps now and throughout the year to prepare and help reduce the risk of your home and property becoming fuel for a wildfire:

- » Clear needles, leaves and other debris from the roof, gutters, eaves, porches and decks. This reduces the chances of embers igniting your home.
- » To reduce ember penetration, replace or repair loose or missing roof shingles or tiles, and caulk any gaps or openings on roof edges.
- » Cover exterior attic vents, and enclose under-eave and soffit vents with metal wire mesh no larger than 1/8 inch to prevent embers from entering the home.
- » Remove items stored under decks or porches; replace vegetation in these areas with rock or gravel.
- » Replace mulch with hardscaping, including rock, gravel or stone. If it can catch fire, don't let it touch your house, deck or porch.

Learn more about how to keep your family safe and reduce your home's risk for wildfire damage at firewise.org.

- » Remove flammable items within 30 feet of all structures including firewood piles, portable propane tanks and dry and dead vegetation.
- Dry grass and shrubs are fuel for wildfire so keep your lawn hydrated and maintained. If it is brown, trim it to reduce fire intensity, and don't let debris and lawn cuttings linger. Dispose of these items quickly to reduce fuel for fire.
- » Fire can spread to tree tops. If you have tall trees on your property, prune low hanging branches 6 to 10 feet from the ground and for smaller trees, prune low hanging branches no more than a third of the tree's height. Remove tall grasses, vines and shrubs from under trees.
- Talk to your neighbors and create a plan for how to address your wildfire safety challenges together.





Guide to Landscaping

The primary goal for Firewise landscaping is fuel reduction — limiting the level of flammable vegetation and materials surrounding the home and increasing the moisture content of remaining vegetation. This includes the entire 'home ignition zone' which extends up to 200 feet in high hazard areas.

Use the Zone Concept

Zone 1 is the 30 feet adjacent to the home and its attachments; Zone 2 is 30 to 100 feet from the home; Zone 3 is 100 to 200 feet from the home.

Zone 1 (All Hazard Areas) This well-irrigated area encircles the structure and all its attachments (wooden decks, fences, and boardwalks) for at least 30 feet on all sides.

- 1) Plants should be carefully spaced, low-growing and free of resins, oils and waxes that burn easily.
- 2) Mow the lawn regularly. Prune trees up six to ten feet from the ground.
- 3) Space conifer trees 30 feet between crowns. Trim back trees that overhang the house.
- 4) Create a 'fire-free' area within five feet of the home, using non-flammable landscaping materials and/or high-moisture-content annuals and perennials.
- 5) Remove dead vegetation from under deck and within 10 feet of house.
- 6) Consider fire-resistant material for patio furniture, swing sets, etc.
- 7) Firewood stacks and propane tanks should not be located in this zone.
- 8) Water plants, trees and mulch regularly.
- 9) Consider xeriscaping if you are affected by water-use restrictions.

Zone 2 (Moderate and High Hazard Areas) Plants in this zone should be low-growing, well-irrigated, and less flammable.

- 1) Leave 30 feet between clusters of two to three trees, or 20 feet between individual trees.
- 2) Encourage a mixture of deciduous and coniferous trees.
- 3) Create 'fuel breaks', like driveways, gravel walkways and lawns.
- 4) Prune trees up six to ten feet from the ground.

Zone 3 (High Hazard Areas) Thin this area, although less space is required than in **Zone 2**. Remove smaller conifers that are growing between taller trees. Remove heavy accumulation of woody debris. Reduce the density of tall trees so canopies are not touching.

Maintaining the Firewise Landscape

- ✓ Keep trees and shrubs pruned six to ten feet from the ground.
- ✓ Remove leaf clutter and dead and overhanging branches.
- √ Mow the lawn regularly and dispose of cutting and debris promptly.
- ✓ Store firewood away from the house.
- ✓ Maintain the irrigation system regularly.
- √ Familiarize yourself with local regulations regarding vegetative clearance, debris disposal, and fire safety requirements for equipment.



Create a cinder block wall around the perimeter of your yard and use grass and slate to break up the landscape.



The use of pavers and rock make for a pleasing effect and creates a fuel break.



Use grass and driveways as fuel breaks from the house.



Use faux brick and stone finishes and highmoisture-content annuals and perennials.



Use groupings of potted plants that include succulents and other drought resistant vegetation.



Guide to Construction

The roof is the most important element of the home. Use rated roofing material.



Cover openings with 1/8" metal screen to block firebrands and embers from collecting under the home or deck.



Use non-flammable fencing if attached to the house such as metal.



Use glass skylights; plastic will melt and allow embers into the home.

"When considering improvements to reduce wildfire vulnerability, the key is to consider the home in relation to its immediate surroundings. The home's vulnerability is determined by the exposure of its external materials and design to flames and firebrands during extreme wildfires. The higher the fire intensities near the home, the greater the need for nonflammable construction materials and a resistant building design." – Jack Cohen, **USDA-Forest Service**

Use Rated Roofing Material. Roofing material with a Class A, B or C rating is fire resistant and will help keep the flame from spreading. Examples:

- √ Composition shingle
- √ Metal
- √ Clav
- ✓ Cement tile

Use Fire-Resistant Building Materials on Exterior Walls. Examples include:

- √ Cement
- √ Plaster
- ✓ Stucco
- √ Masonry (concrete, stone, brick or block)

While vinyl is difficult to ignite, it can fall away or melt when exposed to extreme heat.

Use Double-Paned or Tempered Glass. Double-pane glass can help reduce the risk of fracture or collapse during an extreme wildfire. Tempered glass is the most effective. For skylights, glass is a better choice than plastic or fiberglass.

Enclose Eaves, Fascias, Soffits and Vents. 'Box' eaves, fascias, soffits and vents, or enclose them with metal screens. Vent openings should be covered with 1/8" metal screen.

Protect Overhangs and Other Attachments. Remove all vegetation and other fuels from around overhangs and other attachments (room additions, bay windows, decks, porches, carports and fences). Box in the undersides of overhangs, decks and balconies with noncombustible or fireresistant materials. Fences constructed of flammable materials like wood should not be attached directly to the house.

Anything attached to the house (decks, porches, fences and outbuildings) should be considered part of the house. These act as fuel bridges, particularly if constructed from flammable materials.

- 1) If a wood fence is attached to the house, separate the fence from the house with a masonry or metal barrier.
- 2) Decks and elevated porches should be kept free of combustible materials and debris.
- 3) Elevated wooden decks should not be located at the top of a hill. Consider a terrace.



Enclose eaves and soffits.



Enclose under decks so firebrands do not fly under and collect.



FIREWISE LANDSCAPING

1. Home Ignition Zone

Keep leaves and needles off your roof and deck. Create a fuelfree area within 3-5 feet of your home's perimeter. From 5 feet to a minimum of 30 feet out, thin and space vegetation, remove dead leaves and needles, prune shrubs and tree limbs. Keep areas around decks, sheds, fences and swing sets clear of debris and vegetation.

2. Landscaping and Firewise Plants

To prevent fire spread, trim back branches that overhang structures and prune branches of large trees up to 6 to 10 feet from the ground. Remove plants containing resins, oils, and waxes; make sure organic mulch is at least 5 feet from structures. Choose Firewise plants — find lists at www.firewise.org or from your local Cooperative Extension service.

BE PREPARED

3. Disaster Plan

Develop, discuss and practice an emergency action plan with everyone in your home. Include details for pets, large animals and livestock. Program cell phones with emergency numbers. Know two ways out of your neighborhood and have a predesignated meeting place. Have tools such as a shovel, rake, axe, handsaw, or chainsaw available, and maintain an emergency water source. Always leave if you feel unsafe — don't wait to be notified.

4. Emergency Responder Access

Identify your home and neighborhood with legible, clearly marked street names and numbers. Make your driveway at least 12 feet wide with a vertical clearance of 15 feet and a slope of less than 5 percent to provide access to emergency vehicles.

FIREWISE CONSTRUCTION

5. Fire-Resistant Roof Construction

Use fire-rated shingles such as asphalt, metal, slate, clay tile or concrete products. A fire-resistant sub-roof adds protection. Box in eaves, but provide adequate ventilation to prevent condensation and mildew. Roof and attic vents should be screened to prevent ember entry.

6. Fire-Resistant Attachments

Any attachments to your home such as decks, porches, and fences must be fire-resistant. If not, your entire home is vulnerable to ignition.

7. Fire-Resistant Walls and Windows

Embers can collect in small nooks and crannies and ignite combustible materials; radiant heat from flames can crack windows. Use fire-resistant siding such as brick, fiber-cement, plaster or stucco and tempered or double-paned glass windows to protect your home.













Home Safety Checklist

Simple fixes from roof to foundation to make your home safer from embers and radiant heat.

HOME SAFETY CHECKLIST

- Clean roofs and gutters of dead leaves, debris and pine needles that could catch embers.
- Replace or repair any loose or missing shingles or roof tiles to prevent ember penetration.
- Enclose under-eave and soffit vents or screen with metal mesh to prevent ember entry.
- Cover exterior attic vents with metal wire mesh no larger than 1/8 inch to prevent sparks from entering the home.
- Repair or replace damaged or loose window screens and any broken windows.
- Screen or box-in areas below patios and decks with wire mesh to prevent debris and combustible materials from accumulating.
- Move any flammable material away from wall exteriors – mulch, flammable plants, leaves and needles, firewood piles – anything that can burn.
- Remove anything stored underneath decks or porches.



For More Information

For more information about how to protect your home and property, as well as Firewise plant lists and other resources, visit the Firewise website at www.firewise.org, and see the "homeowners" section.

For more tips on what to do when wildfire is approaching and how to safely evacuate, visit the Ready, Set, Go! website sponsored by the International Association of Fire Chiefs at www.wildlandfirersg.org. Talk to your local fire department to learn more about specific wildfire risks in your area.

Saving Lives and Property from Wildfire!



Firewise' is a program of the National Fire Protection Association.

This publication was produced in cooperation with the USOA Forest Service,
US Department of the Interior and the National Association of State Foresters.

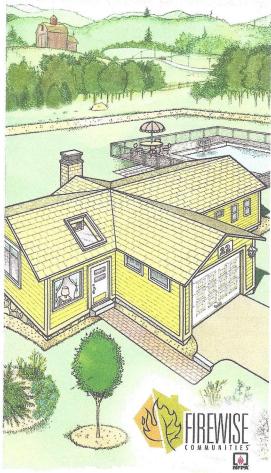
NFPA is an equal apportunity provider. Firewise' and Firewise Communitics/USA' are registered trademarks of the National Fire Protection Association, Quincy, MA 02169.

© Copyright 2012, NFPA.

FWC22612

How to Have a Firewise Home

You can make your home safer from wildfire. Learn how with these helpful tips!





Action steps for around your home:

- CLEAR leaves and other vegetative debris from roofs, gutters, porches and decks. This helps prevent embers from igniting your home.
- **REMOVE** dead vegetation and other items from under your deck or porch, and within 10 feet of the house.
- SCREEN in areas below patios and decks with wire mesh to prevent debris and combustible materials from accumulating.
- REMOVE flammable materials (wood piles, propane tanks) within 30 feet of your home's foundation and outbuildings, including garages and sheds. If it can catch fire, don't let it touch your house, deck or porch.
- Wildfire can spread to tree tops. PRUNE trees so the lowest branches are 6 to 10 feet from the ground.
- KEEP your lawn hydrated and maintained. If it is brown, cut it down to reduce fire intensity. Dry grass and shrubs are fuel for wildfire.
- Don't let debris and lawn cuttings linger. DISPOSE of these items quickly to reduce fuel for fire.
- INSPECT shingles or roof tiles. Replace or repair the shingles that are loose or missing to prevent ember penetration.
- COVER exterior attic vents with metal wire mesh no larger than 1/8 inch to prevent sparks from entering the home.
- **ENCLOSE** eaves and screen soffit vents using 1/8 mesh metal screening to prevent ember entry.

DON'T FORGET...

The more actions a community takes, the more fire adapted it becomes. Learn how you can make a difference in your community. Visit www.fireadapted.org and www.firewise.org for more information.





FACT

- There are more than 45 million homes near or in the wildland.
- ① More than **72,000** U.S. communities are now at risk from wildfire.

