





A GUIDE TO **FIREWISE PRINCIPLES**

During a wildfire, firefighting resources are limited and firefighters must often make quick decisions on which homes they can work on defending.

Implementing Firewise actions at your home will increase the chances that firefighters will be able to try and protect your property.





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Homeowners can and must take primary responsibility for wildfire safety actions around the home. According to fire science research, individual efforts do make a difference even in the face of a wildfire. The Firewise Communities Program provides homeowners with simple and easy steps to help reduce a home's wildfire risk by preparing ahead of a wildfire. These steps are rooted in principles based on solid fire science research into how homes ignite. The research comes from the world's leading fire experts and research organizations whose experiments, models, and data collection are based on some of the country's worst wildland fire disasters. ***The following are Firewise principles and tips that serve as a guide for residents:***

When it comes to wildfire risk, it is not a geographical location, but a set of conditions that determine the home's ignition potential in any community.

Wildfire behavior is influenced by three main factors: topography (lie of the land), weather (wind speed, relative humidity and ambient temperature)

and fuel (vegetation and man-made structures). In the event of extreme wildfire behavior, extreme weather conditions are normally present, like extended drought, high winds, low humidity and high temperatures, coupled with excess fuel build up including the accumulation of live and dead vegetation material. Additionally, the area's topography influences the fire's intensity and rate of spread.

**OF THESE THREE FACTORS,
FUEL IS THE ONLY ONE WE CAN INFLUENCE.**

Debris like dead leaves and pine needles left on decks, in gutters and strewn across lawns can ignite from embers. Fire moving along the ground's surface can "ladder" into shrubs and low hanging tree limbs to create longer flames and more heat. If your home has flammable features or vulnerable openings, it can also serve as fuel for the fire, and become part of a disastrous chain of ignitions to other surrounding homes and structures. ►





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A home's ignition risk is determined by its immediate surroundings or its "home ignition zone" and the home's construction materials.

According to fire science research and case studies, it's not where a home is located that necessarily determines ignition risk, but the landscape around it, often referred to as the "home ignition zone." The home ignition zone is defined as the home and its immediate surroundings up to 100 feet (30 m).

The Firewise Communities Program provides tips for reducing wildfire risk based on the home ignition zone concept:

Home Zone – the home itself and within 5 feet of the foundation:

Harden your home against wildfire. This includes fences, decks, porches and other attachments. From a fire behavior point of view, if it's attached to the house it is a part of the house. Non-flammable or low flammability construction materials — especially for roofs, siding and windows — are recommended for new homes or retrofits. Keep any flammables, including plantings, debris and mulch, out of the area within 5 feet of your home's foundation as well as off your roof,

eave lines, gutters and deck or porch surfaces. Ensure vents and other openings are screened or otherwise protected from ember penetration during a wildfire.

5 – 30 feet: This well-irrigated area around the home includes decks and fences, and provides space for fire suppression equipment in the event of an emergency. Lawns should be well maintained and mowed. Plantings should be limited to carefully-spaced low flammability species, and consider hardscaping using rocks, gravel or stone instead of mulch. Keep any large fuel packages, such as firewood piles, out of this area.

30 – 100 feet: Low flammability plant materials should be used here. Plants should be low-growing and the irrigation system should extend into this section. Create separation between grasses, shrubs and trees to avoid a "fuel ladder" effect where fire can climb into taller vegetation. Trees should be spaced to prevent crowns from touching.

100+ feet: Place low-growing plants and well-spaced trees in this area, remembering to keep the volume of vegetation (fuel) low. ►





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Residents play a major role in protecting their lives and property.

Your home ignition zone extends up to 100 feet – and it's quite common to have neighbors whose home ignition zone overlaps yours. Once a structure is engulfed in flames, it could ignite other structures located less than 100 feet away. In addition, many communities have commonly owned property, including natural or wooded areas that can pose fire risks to all. This means that to be most effective, neighbors need to work together and with their local fire service to achieve greater wildfire safety. Together, community residents can work with agencies and elected officials to accomplish the following:

- » Ensure that homes and neighborhoods have legible/clearly marked street names and numbers
- » Know “two ways out” of the neighborhood for safe evacuation during a wildfire
- » Create phone and text trees to alert residents about local fires
- » Sign up for emergency notifications
- » Talk to your Homeowner Association (HOA) to make sure you are in compliance with existing community rules or regulations on vegetation management and construction materials and if they are “Firewise-friendly”
- » Engage with your local fire department on how they can work with you and your neighbors, and participate in the “Ready, Set, Go!” program
- » Participation in the Firewise Communities/USA Recognition Program provides the community with a risk assessment and action plan that will help residents work together annually to make where they live a safer place

Learn more about how to keep families safe and reduce homeowners' risk for wildfire damage at firewise.org. Free printed and audiovisual materials can be found on the Firewise website and ordered online through the Firewise catalog.





FIREWISE COMMUNITIES/USA® RECOGNITION PROGRAM

The Firewise program empowers residents with a wildfire risk to work collaboratively with neighbors to take important proactive steps to protect their homes against the threat of wildfire.

READY TO BEGIN?
Follow these steps on your way to becoming
an official Firewise community. ►





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FIREWISE COMMUNITIES/USA® RECOGNITION PROGRAM

1. Talk to your neighbors. You may be surprised to learn that other residents are just as concerned as you are about wildfire, so make a pledge to get started ... now.

2. Recruit interested community members.

These people will form a diverse Firewise® board or committee. The group should include homeowners and fire professionals, but may also include planners, land managers, urban foresters and members of other interest groups in your community.

» Choose a group leader/representative.

(This person, often known as the “sparkplug,” will serve as the spokesperson and take the lead on Firewise initiatives.)

3. Contact Firewise. To learn how to become a Firewise community, visit firewise.org or send an email to firewise@nfpa.org. Get a complete list of the Firewise State Liaisons who can provide program information for their specific state at firewise.org/stateliaisons.

4. Schedule a site assessment visit. Call your state liaison to see if site assessment visits are available where you live. If not, contact your local fire protection district to see if they provide site assessments. Or, get information on how to complete an assessment at firewise.org/riskassessment.

» Plan a minimum of one day for this activity.

» If a state forestry representative is unable to participate in the assessment, ask if your fire department has the capacity to assist.

» Typically, a site assessment is not a Community Wildfire Protection Plan (CWPP); it is a risk evaluation of the community applying to participate in the national recognition program. However, some CWPPs may have the information that is needed for the assessment and that can be used. ►





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FIREWISE COMMUNITIES/USA[®] RECOGNITION PROGRAM

5. Review the site assessment and evaluation document. The assessment does not have a specific format, but the program endorses an assessment style that:

- » Includes a simple document for homeowners/residents of the potential community site.
- » Familiarizes the homeowner/resident with the way ignitions are likely to occur and how homes are likely to be lost in the event of a wildfire.
- » Ensure it outlines the community's wildfire vulnerabilities and highlights the fuel reduction projects that have been completed.

Upon the completion of the evaluation, the state liaison or designee will schedule a meeting with your local Firewise committee to review the findings of your community assessment. At this time, your committee will determine whether they accept the findings or reject them. If you accept the evaluation, the process continues; if you don't, the process is terminated.

6. Create a plan. Based on the evaluation and assessment, your Firewise committee develops a plan to tackle problem areas. In your plan, remember to include deadlines and a schedule to keep you on track. Record your action plan, and have all members of your committee sign it. Your plan should include:

- » Complete a Firewise Day/Firewise event(s). It can be an event that rallies the community to implement mitigation actions or a series of efforts. Examples include: an educational event, a slash chipping service, community clean-up day, neighbors helping elderly residents with mitigation work, and others that make the whole community safer.
- » Firewise mitigation activities that amount to a community investment of more than \$2/capita/year of 'in-kind' volunteer contribution or grants.
- » The plan will be part of the packet submitted to the state liaison at the time of application. ►





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FIREWISE COMMUNITIES/USA® RECOGNITION PROGRAM

7. Implement your plan. Tackle the items in your plan. Designate the party responsible for each action, including who will take the lead on Firewise Day. Remember, everything you do should be documented, so you can send the paperwork in with your application form.

8. Apply for recognition in the Firewise Communities/USA Recognition Program.

You've completed your plan; now it's time to receive the recognition you deserve. Now, you are ready to submit your application package to the state liaison. Include the following:

- » Completed application form
- » Completed Firewise community plan

- » Completed Firewise Day document that lists names of volunteers, the hours involved and activities you've accomplished.
- » Photos that illustrate your great work

Send your completed application and attached documents to your state liaison for review. Your state liaison will forward the application to the NFPA Firewise program headquarters. Once your application is processed at the national office, the recognition materials and packet will be shipped to you. ►





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FIREWISE COMMUNITIES/USA[®] RECOGNITION PROGRAM

9. Submit a renewal application annually.

The work of a Firewise community is never done. To maintain an annual active status, a set of criteria must be completed every year following your first year in the program. That includes the annual Firewise Day/Event(s) and the per capita investment. The renewal application is easy to complete and is available on the Firewise website.

10. Celebrate your successes! Tell your story and mentor neighboring communities to become Firewise, too. Share your successes with local media and let them know Firewise is making a difference where you live. Capture your accomplishments and send them to your local elected officials.

Questions?

Contact the Firewise Communities Program at firewise@nfpa.org.
Additional information can be found at firewise.org.





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.
- » 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.

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





HIGH FIRE DANGER

The National Weather Service issues fire weather watches or warnings (**also known as Red Flag Days**) when weather conditions will support increased wildfire activity and rapid fire growth.

Be ready for
A RED FLAG DAY!



Take steps ahead of time and
PREPARE TO PUT YOUR PLAN INTO ACTION

A FIRE WEATHER WATCH is issued when conditions will be present within 12-72 hours.

A FIRE WEATHER WARNING (Red Flag) is issued when the conditions will be present within 24 hours.

PREPARATION WELL IN ADVANCE OF A FIRE:

- » Complete a home inventory – this will assist in talking with your insurance provider should you suffer a loss due to a wildfire. Consider making a video walk-through of your possessions and keep that in a safe off-site location.
- » Sign up for local Emergency Notifications/Alerts
- » Have an Evacuation Plan and a designated meeting place where family members will reconnect after the evacuation. Ensure everyone in the household knows the plan and meeting place location.
- » Know where evacuation centers will be located in your community
- » Have an off-site phone number, (relative, etc.) where family members can check in and provide status information
- » Have a plan and supplies for your pets ►





HIGH FIRE DANGER

WHAT TO DO DURING WATCHES OR WARNINGS:

- » Make sure there's at least a 72-hour supply of important medications in your go-bag
- » Know which personal items, (pictures, documents, etc.) have been prioritized to take if time permits, when evacuation is necessary
- » Remove deck/ patio furniture, cushions and door mats to prevent ember ignitions
- » Remove portable propane tanks from the deck/patio
- » Know how to turn off the gas to the home
- » Place a ladder against the house (for Fire Department use)
- » Have your garden hoses connected (for Fire Department use)
- » Make sure windows, doors and garage doors are closed
- » Make sure windows are closed on vehicles that will remain at the residence while you're evacuated

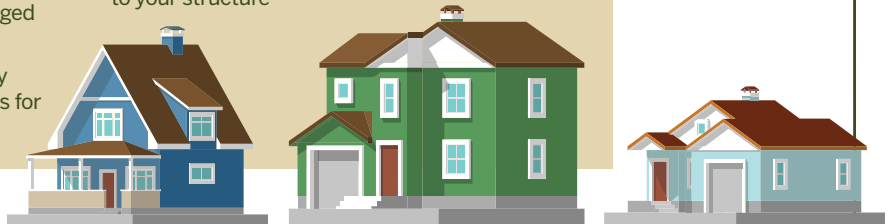
When returning home after evacuation:

Even if your home survived the fire, there may be the need to clean-up and restoration of your home and property from retardant, damaged trees or smoke damage

Check with your local Office of Emergency Management for information on resources for down/damaged trees and powerlines

Notify your local Health Department if retardant is in ponds, streams or near wells

Contact your Insurance Agent for assistance with restoration from retardant or smoke/fire damage to your structure





GUIDELINES FOR SPELLING/USAGE OF FIREWISE

Please refer to the following guide for the correct spelling and usage of the name, Firewise, for signs, banners, posters and other materials.



1. The word “Firewise”

The word “Firewise,” when referring to the national Firewise Communities Program, is one word, with a capital “F” and not a capital “W.” The correct spelling is: Firewise.

2. Firewise Communities Program

The formal name of the program is: Firewise Communities Program (with a capital “P”). A lowercase “t” is always used (the Firewise Communities Program).

» In all instances, write out Firewise Communities Program, but when shortening it, please use a lower case “p” as in: the Firewise program.

3. Firewise Communities/USA® Recognition Program

The Firewise Communities/USA® Recognition Program is the formal name of the recognition program, and is used only when referring to a community that has fulfilled all of its obligations as required toward becoming an officially recognized site.

4. Firewise Communities

Please use an upper case “C” when writing out the name – Firewise Communities Program. However, when referring to a recognized community, please use a lower case “c” as in: A recognized Firewise community.

5. The national Firewise Communities Program

The word “National” refers to the fact that our outreach touches all corners of the U.S. Therefore, “national” is not capitalized.

TRADEMARKS:

As a general rule, the ® is used as follows:

1. Firewise ®
2. Firewise Communities/USA ®
3. Firewise Communities/USA ® Recognition Program

Questions? Please contact NFPA's Firewise Communities Program at firewise@nfpa.org.





GUIDELINES TO USING THE FIREWISE/NFPA LOGO

Using the Firewise logo when demonstrating your affiliation with the national recognition program can be simple when these guidelines are followed:



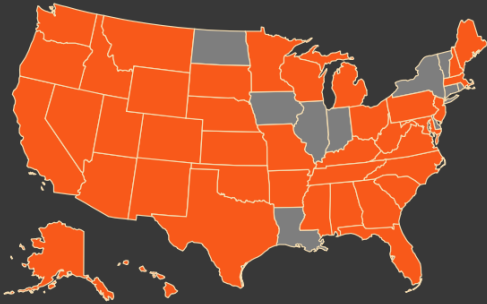
- 1.** The logo may not be revised or altered in any way. The logo must be displayed in the same form as produced by NFPA and cannot be reproduced unless such reproduction is identical to the logo provided by NFPA.
- 2.** The logo may be used only on stationery, letterhead, inspection tags, signs, banners and similar documents, materials or websites on which the name and address of the organization or association is prominently displayed.
- 3.** The logo may not be used in any manner that detracts from the high ideals of Firewise/NFPA or from the values, particularly fire safety values, espoused by NFPA.
- 4.** The Firewise/NFPA logo may not be used in any manner which would tend to imply a connection between NFPA and the organization which, in fact, may not exist. This includes any use of the logo that the public might construe as an endorsement, approval, or sponsorship by Firewise/NFPA of an individual or an organization's business, or which might be taken to support or encourage a sale of product, process, or installation. An individual or organization is allowed to print the logo on an advertisement or product literature.
- 5.** No person gains any rights whatsoever in the logo(s) or their use; it remains the property of NFPA. NFPA reserves the right in its sole discretion to require the removal of the logo from any location or thing NFPA feels does not comply with these guidelines, or which could or does discredit the Association.
- 6.** The Firewise/NFPA logo may be printed in all one color or with its colors. The NFPA logo is black and PMS 199 (Red), and the Firewise logo is PMS 151C (Orange) and PMS 391C (Green).

For more information about using the Firewise/NFPA logo, please send an email to firewise@NFPA.org or call 617-984-7486.





Number of **people/residents** living in Firewise communities: **1,450,621**



The number of **states** that have recognized Firewise communities:

40

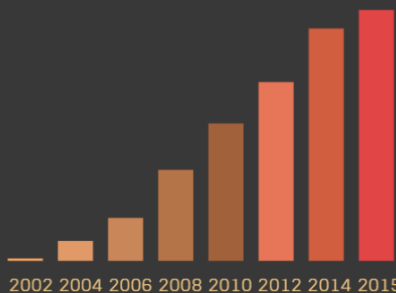
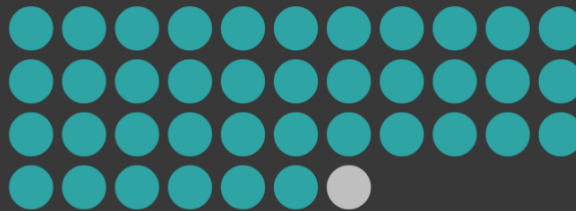
Firewise

FIREWISE COMMUNITIES/USA® PROGRAM



15
years old
(piloted in 2002)

Number of states that have been in the program for 5 years or more: 39 of 40



Number of communities:

The program has grown from communities in 2002, to

12

1,232 communities,
as of February 1, 2016.



Wildfires destroyed an average of 3,875 structures annually from 2011-2013. (Source: NIFC)



Firewise communities range from small rural clusters to large developments.

In 2015, 10,124,149 acres burned from wildfire. (Source: NIFC)



2003: \$1,577,478



Community Investment

2015: \$34,719,133



In 2015, there were 68,151 wildfires. (Source: NIFC) Firewise principles help reduce the wildfire risk to your property.

\$1 billion is spent on suppression each year. (Source: Headwaters Economics/IAWF 2013)

