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Living With Fire

A Guide for Protecting Homes from Wildfire

**SOUTH CAROLINA
FORESTRY COMMISSION**



Suppression



No Defensible Space !



Green space is defensible



The results of not enough Defensible Space...



Don't let this happen to you!

Living With Fire

A Guide for Protecting a Home

Fire Prevention

This publication is provided to help homeowners, firefighters and the general public identify numerous activities that will help you co-exist more safely with wildfire. For additional information or assistance, contact the South Carolina Forestry Commission or your local fire department.

“When” Not “If”

Dangerous fires do not only occur in the Western U.S., high fire activity is also common in the South. Within this hazardous environment, there are homes, subdivisions and entire communities. However, many who live near woodlands or vegetated areas are ill prepared to survive an intense wildfire.



The pre-fire activities implemented by this homeowner included a green and well maintained landscape, reduction of wild vegetation around the perimeter of the property, a fire-resistant roof, and a good access road with a turnaround area. As seen in the photo, these pre-fire activities were effective.

Act, Not React

Our ability to live more safely in this environment depends on “pre-fire” activities. Research shows that by being proactive before a wildfire occurs, we have a better chance of saving lives and property from wildfire.

What To Do:

We cannot “fire proof” the forest, but we can:

- Manage the vegetation around homes to create defensible space for protection
- Use fire resistant building materials when building new or improving homes
- Help design new subdivisions using fire-safe measures
- Ensure coordination among all emergency response agencies to wildland fires

THE “WHY WE’RE WORRIED ABOUT WILDFIRE” EQUATION

Fire is a natural part of our environment. Our forests were burning long before we came along.



People are living in this fire environment. Many homes are built and maintained without regard to wildfire.



There is a greater chance of fire starts. With more people using our wildlands, more fire ignitions are likely.



Today’s wildfires can burn intensely and be difficult to control.



Greater loss of life
Increased property losses
Damage to natural resources
Greater Expense



THE FIRE ENVIRONMENT

There are three components of the fire environment that determine fire behavior:

1. Weather

2. Topography

3. Fuel

Although weather and topography cannot be changed, the fuels (or vegetation) can be modified.

Together, these environmental factors determine:

1. The likelihood a wildfire will start
2. How fast a wildfire will burn
3. The direction a wildfire will burn
4. The intensity of a wildfire
5. The ability to control and extinguish a wildfire

Consequently, many of our opportunities to reduce the wildfire threat lie in the proper management and manipulation of wildland vegetation.



We cannot stop the wind from blowing a wildfire.



You cannot change the slope or direction of the wind blowing up a hill, but you can remove the fuel from in front of your home.



PRESCRIBED FIRE:



A "hazard reduction burn" is a form of prescribed fire. This type of fire is used to remove built up dead fuel from the forest floor. Burning like this on a regular basis prevents the fuels from building up, which would prevent a much hotter fire that could burn up into the crowns of the trees, destroying the trees and everything in the path of the fire.



The Limitations of Wildland Firefighting



A lot of people assume that when a wildfire starts, it will quickly be controlled and extinguished. This is an accurate assumption 97% of the time. For most wildfires, firefighters have the ability, equipment and technology for effective fire suppression. But 3% of the time wildfires burn so intensely that there is little firefighters can do. Presented at the right are firefighter tactics as they relate to wildfire flame length. Compare this to the flame lengths shown in "Examples of Fire Behavior".

FLAME LENGTH	EFFECTIVE FIRE SUPPRESSION TACTICS
Less than 4 ft.	Firelines constructed with hand tools such as shovels and axes can be effective at the front of the fire.
4 to 8 ft.	Bulldozers and other heavy equipment will be needed to construct an effective fireline. Where bulldozers are not available, fire engines with hoses and water will be required to "knock down" the flames before the fire crews with hand tools can be effective. Or fire crews must construct a fireline at a considerable distance from the fire.
8 to 11 ft.	Airtankers with fire suppressing retardant or helicopters with water are required to reduce the fire's rate of spread before fireline construction by crews or bulldozers can be effective.
More than 11 ft.	Direct fire suppression efforts will be ineffective. Retreat to existing roads, streams and other barriers. Burn out fuels between the fireline and the advancing fire front.



EXAMPLES OF FIRE BEHAVIOR

PINE FOREST	HARDWOOD FOREST	COASTAL S.C. VEGETATION
FLAME LENGTH 12 FEET 340 Acres can burn within one hour	FLAME LENGTH 7 FEET 75 Acres can burn within one hour	FLAME LENGTH 45 FEET 3000 Acres can burn within one hour
TRAVELS AT 2 MPH	TRAVELS AT 1 MPH	TRAVELS AT 5.5 MPH

Above are three types of vegetation common to the South. These are computer generated estimates of how they would burn under certain conditions. These predictions assume a wind speed of 20 mph, flat terrain and typical moisture contents of living and dead vegetation in the spring.

WHAT IS DEFENSIBLE SPACE?

Defensible space is the area between a house and an oncoming wildfire where the vegetation has been modified to reduce the wildfire threat and to provide an opportunity for firefighters to effectively defend the house. Sometimes, a defensible space is simply a homeowner's properly maintained backyard.

WHAT IS THE RELATIONSHIP BETWEEN VEGETATION AND WILDFIRE THREAT?

Many people do not view the plants growing on their property as a threat. But in terms of wildfire, the vegetation adjacent to their homes can have considerable influence upon the survivability of their houses. All vegetation, including plants native to the area as well as ornamental plants, is potential wildfire fuel. If vegetation is properly modified and maintained, a wildfire can be slowed, the length of flames shortened, and the amount of heat reduced, all of which assist firefighters in defending the home against an oncoming wildfire.



More and more homes are being built in high fire hazard environments.

THE FIRE DEPARTMENT IS SUPPOSED TO PROTECT MY HOUSE, SO WHY BOTHER WITH DEFENSIBLE SPACE?

During a major wildfire, it is unlikely there will be enough firefighting resources available to defend every home. Firefighters may have to select homes they can most safely and effectively protect. Even with adequate resources, some wildfires may be so intense that there is little firefighters can do to prevent a house from burning. The key is to reduce fire intensity as wildfire nears the house. This can be accomplished by reducing the amount of flammable vegetation surrounding a home. The most important person in protecting a house from wildfire is the owner.

DOES DEFENSIBLE SPACE REQUIRE A LOT OF BARE GROUND IN MY LANDSCAPE?

No. Unfortunately, many people have this misconception. While bare ground is certainly effective in reducing the wildfire threat, it is unnecessary and unacceptable due to appearance, soil erosion, and other reasons. Many homes have attractive, well vegetated landscapes that also serve as effective defensible space.

DOES CREATING A DEFENSIBLE SPACE REQUIRE ANY SPECIAL SKILLS OR EQUIPMENT?

No. For the most part, creating a defensible space employs routine gardening and landscape maintenance practices such as pruning, mowing, weeding, plant removal, appropriate plant selection, and irrigation.

HOW BIG IS AN EFFECTIVE DEFENSIBLE SPACE?

The necessary distance for an effective defensible space is not the same for everyone. Slope and type of wildland vegetation growing near the house will determine how much space will be needed. See the section on the next page titled "Creating An Effective Defensible Space" for specific information.

DOES DEFENSIBLE SPACE MAKE A DIFFERENCE?

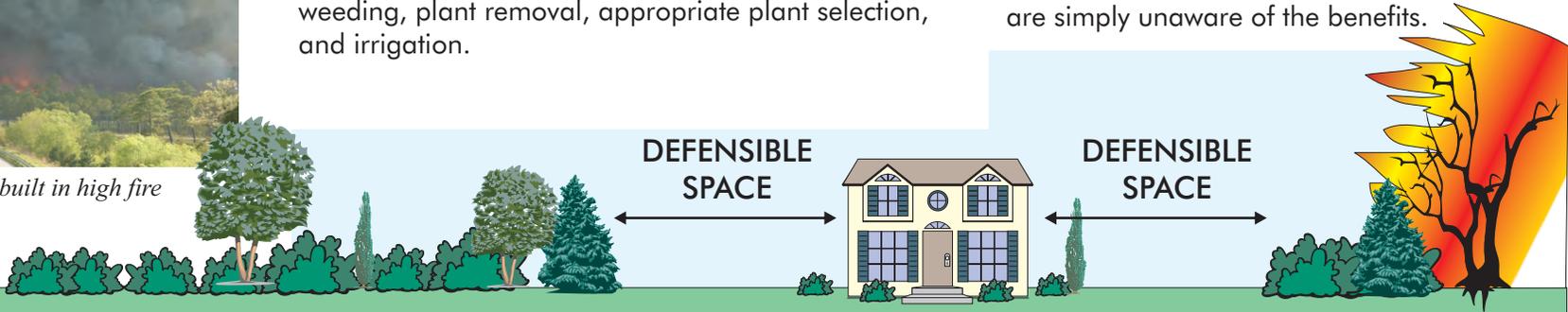
Yes. Experience shows houses with an effective defensible space are much more likely to survive a wildfire. Defensible space gives firefighters a greater opportunity to effectively and safely defend the home.

DOES HAVING A DEFENSIBLE SPACE GUARANTEE MY HOUSE WILL SURVIVE A WILDFIRE?

No. Under extreme conditions, almost any house can burn. But, having defensible space will significantly improve the odds of your home surviving a wildfire.

WHY DOESN'T EVERYONE LIVING IN A HIGH WILDFIRE HAZARD AREA CREATE A DEFENSIBLE SPACE?

Some individuals believe "it won't happen to me", while others think it's costly and others are simply unaware of the benefits.



HOW DO I CHANGE THE VEGETATION ON MY PROPERTY TO REDUCE THE WILDFIRE THREAT?	THE THREE R's OF DEFENSIBLE SPACE	
<p>The objective of defensible space is to reduce the wildfire threat to a home by changing the characteristics of the adjacent vegetation.</p>	<h3>Removal</h3>	<p>This technique involves the elimination of entire plants, particularly trees and shrubs, from the site.</p>
<p>Defensible space practices:</p> <ul style="list-style-type: none"> • Decrease the amount of flammable vegetation. • Shorten landscape plant height. • Alter the arrangement of plants. • Increase the moisture content of vegetation. 	<h3>Reduction</h3>	<p>Examples of reduction are pruning dead wood from a shrub, removing low tree branches, and mowing dried grass.</p>
<p>This is accomplished through the "Three R's of Defensible Space".</p>	<h3>Replacement</h3>	<p>Replacement is the substitution of less flammable plants for more hazardous vegetation. For example, removal of a dense stand of flammable shrubs and planting an irrigated, well maintained flower bed.</p>

CREATING AN EFFECTIVE DEFENSIBLE SPACE

A 6-STEP GUIDE

Are you worried about the wildfire threat to your home, but aren't sure how to get started in making your home defensible? Then follow these six steps to an effective defensible space...

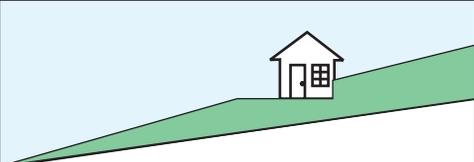
STEP 1: DETERMINE THE SIZE OF YOUR DEFENSIBLE SPACE.

The size of the defensible space area is usually expressed as a distance extending outward from the boundaries of the house. This distance varies by the type of wildland vegetation growing near the house and steepness of the terrain.

If the recommended distance goes beyond your property boundaries, contact the adjacent property owner and work cooperatively on creating a defensible space.

The effectiveness of defensible space increases when multiple property owners work together.

DEFENSIBLE SPACE RECOMMENDED DISTANCES

		STEEPNESS OF SLOPE		
		 Flat to Gently Sloping 0 to 20%	 Moderately Steep 21-40%	 Very Steep +40%
VEGETATION TYPE NEAR PROPERTY	GRASSES <i>Wildland grasses, weeds, and widely scattered shrubs with grass understory.</i> 	30 feet	40 feet	50 feet
	SHRUBS <i>Shrubs: includes mostly small or tall shrubs with scattered trees with grass or weed understory.</i> 	30 feet	30-60 feet	60-100 feet
	TREES <i>Trees: includes forested areas consisting of mostly trees, with shrub or grass understory.</i> 	30 feet	30-100 feet	100-200 feet

Determine the percent slope which best describes your property.

Find the type of vegetation which best describes the wildland plants growing on or near your property.

Locate the number in feet corresponding to your slope and vegetation. This is your recommended defensible space distance.

Please note: the recommendations presented in this article are suggestions made by local firefighters experienced in protecting homes from wildfire. They are not requirements nor do they take precedence over local ordinances.

STEP 2: REDUCE DEAD VEGETATION

TYPES OF DEAD VEGETATION AND RECOMMENDED PRACTICE	
DEAD FUEL TYPE	RECOMMENDED PRACTICE
STANDING DEAD TREE	Remove all standing dead trees within the defensible space area.
DOWN DEAD TREE	Remove down dead trees within defensible space area if they have recently fallen and are not yet embedded into the ground. Downed trees that are embedded into soil and which cannot be removed without soil disturbance should be left in place. Remove all exposed branches from an embedded downed dead tree.
DEAD SHRUBS	Remove all dead shrubs from within the defensible space area.
DRY GRASSES	Once grasses and wild flowers have dried out or "cured", cut down and remove them from the defensible space area.
DEAD NEEDLES, LEAVES, BRANCHES CONES (ON THE GROUND)	Reduce thick layers of pine needles to a depth of two inches. Do not remove all needles. Take care not to disturb the "duff" layer (dark area at the ground surface where needles are decomposing) if present. Remove dead leaves, twigs, cones, and branches.
DEAD NEEDLES, LEAVES, BRANCHES AND TWIGS (NOT ON THE GROUND)	Remove all dead leaves, branches, twigs, and needles still attached to living trees and shrubs to height of 15 feet above ground. Remove all debris which accumulates on the roof, rain gutters and awnings on a routine basis (at least once a year).
FIREWOOD AND OTHER COMBUSTIBLE DEBRIS	Locate firewood and other combustible debris (wood scraps, grass clippings, leaf piles, etc.) at least 30 feet uphill from the house.



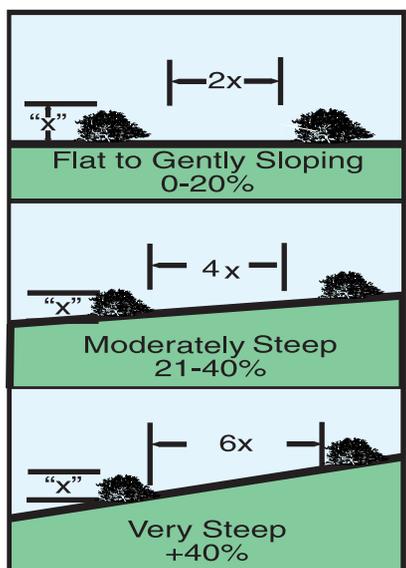
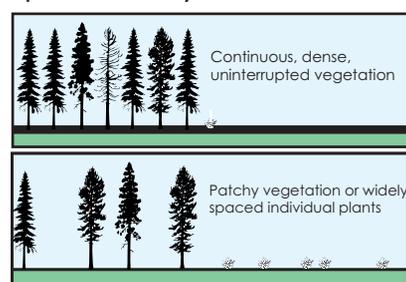
Recommended Separation Distance for Shrubs.

For areas with dense brush the recommended separation distance is dependant upon shrub height and steepness of slope. Specific recommendations are presented below.

Note: Separation distances are measured between canopies (outermost branches) and not between trunks. Plants can be pruned to reduce the diameter or height (shorter height means less separation) of shrubs. For shrubs which readily resprout, pruning to reduce height may be the best approach.

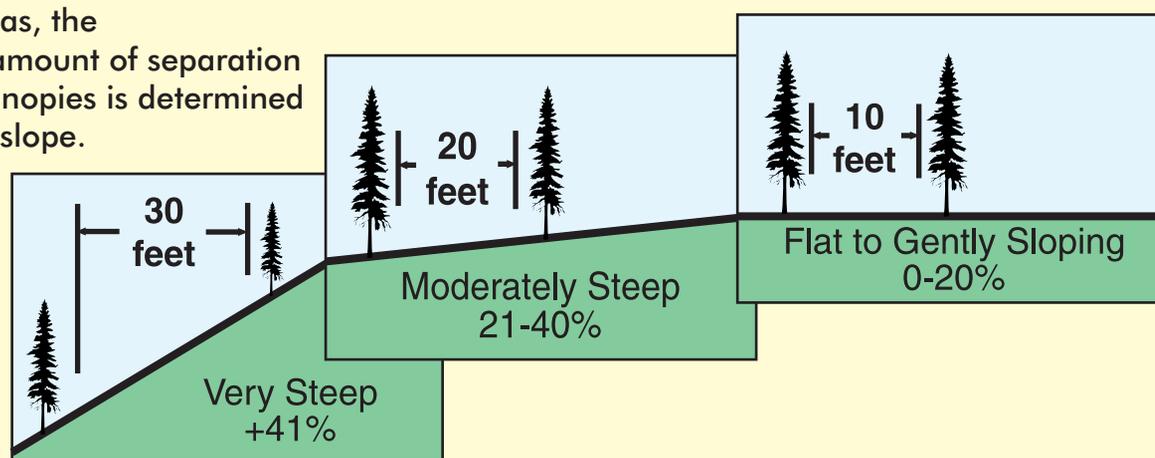
STEP 3: PROVIDE SEPARATIONS BETWEEN PLANTS.

The more continuous and dense the vegetation, the greater the wildfire threat. If this situation is present within your recommended defensible space area, you should "break-it-up" by providing for a separation between plants or small groups of plants.



Recommended Separation Distance Between Tree Canopies

For forested areas, the recommended amount of separation between tree canopies is determined by steepness of slope.



Note: Separation distances are measured between canopies (outermost branches) and not between trunks.

For example, if your house is situated on a 30% slope, the separation of tree canopies within your defensible space should be 20 feet. Creating separation between tree canopies can be accomplished through tree removal.

Not only are steep slopes often considered high wildfire areas, they are also highly erodible. When removing shrubs and trees from steep slopes, keep soil disturbance to a minimum. Also, it may be necessary to replace flammable vegetation with other plant materials to prevent excessive soil erosion.

STEP 4: REMOVE LADDER FUELS

Vegetation is often present at varying heights, similar to the rungs of a ladder. Under these conditions, flames from fuels burning at ground level, such as a thick layer of pine needles, can be carried to shrubs which can ignite still higher fuels like tree branches. Vegetation that allows a fire to move from lower growing plants to taller ones is referred to as "ladder fuel". The ladder fuel problem can be corrected by providing a separation between the vegetation layers.

Within the defensible space area, a vertical separation of three times the height of the lower fuel layer is recommended.

For example, if a shrub growing adjacent to a large pine tree is three feet tall, the recommended separation distance would be 9 feet (3 ft shrub height x 3 = 9 feet). This could be accomplished by removing the lower tree branches, reducing the height of the shrub, or both. The shrub could also be removed.

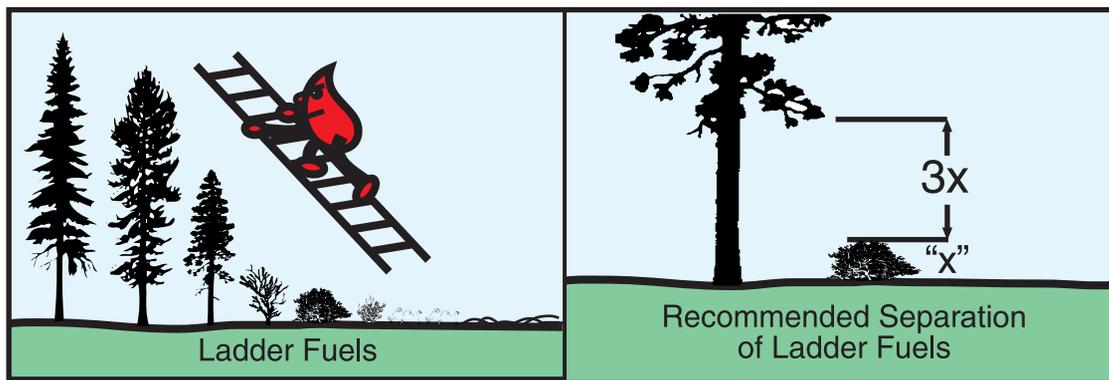
STEP 5: MAKE YOUR DEFENSIBLE SPACE "LEAN, CLEAN, AND GREEN"!

The area immediately adjacent to your house is particularly important in terms of an effective defensible space. It is also the area that is usually landscaped. Within an area extending at least 30 feet from the house, the vegetation should be kept:

- Lean – small amounts of flammable vegetation.
- Clean – no accumulations of dead vegetation or other flammable debris, and
- Green – plants are healthy and green during the fire season.

STEP 6: MAINTAIN DEFENSIBLE SPACE.

Keeping your defensible space effective is a continual process. At least annually, review these defensible space steps and take action accordingly. An effective defensible space can be quickly diminished through neglect.



Is Your Home At Risk?

Use the following scale to determine whether your house is at risk from wildfire.

YOUR LAND IS:

Flat	1 point ____
Gentle slope	3 points ____
Steep slope	5 points ____

VEGETATION WITHIN 30 FEET OF YOUR HOUSE

Grass/open area	1 point ____
Mature oak/pine	2 points ____
Medium undergrowth	3 points ____
Heavy undergrowth	5 points ____

ROOFING:

Tile or metal	1 point ____
Fiberglass composition	2 points ____
Wood shake	5 points ____

SUBTOTAL: _____

ADD 1 POINT EACH FOR ANY OF THE FOLLOWING CONDITIONS AT YOUR HOME:

Wood deck or porch open underneath	1 point ____
House on stilts	1 point ____
Wood siding	1 point ____
Vinyl siding	1 point ____
Combustible materials next to house	1 point ____

TOTAL: _____

How does your house add up? If you tallied 3 points, consider your home a low risk from wildfire. Four to six points, a medium risk. Seven to 10 points, a high risk. Eleven or more, an extreme risk. If your house is at risk, do something about it! Use the guidelines in this booklet, or call your county supervisor and your fire department for suggestions.



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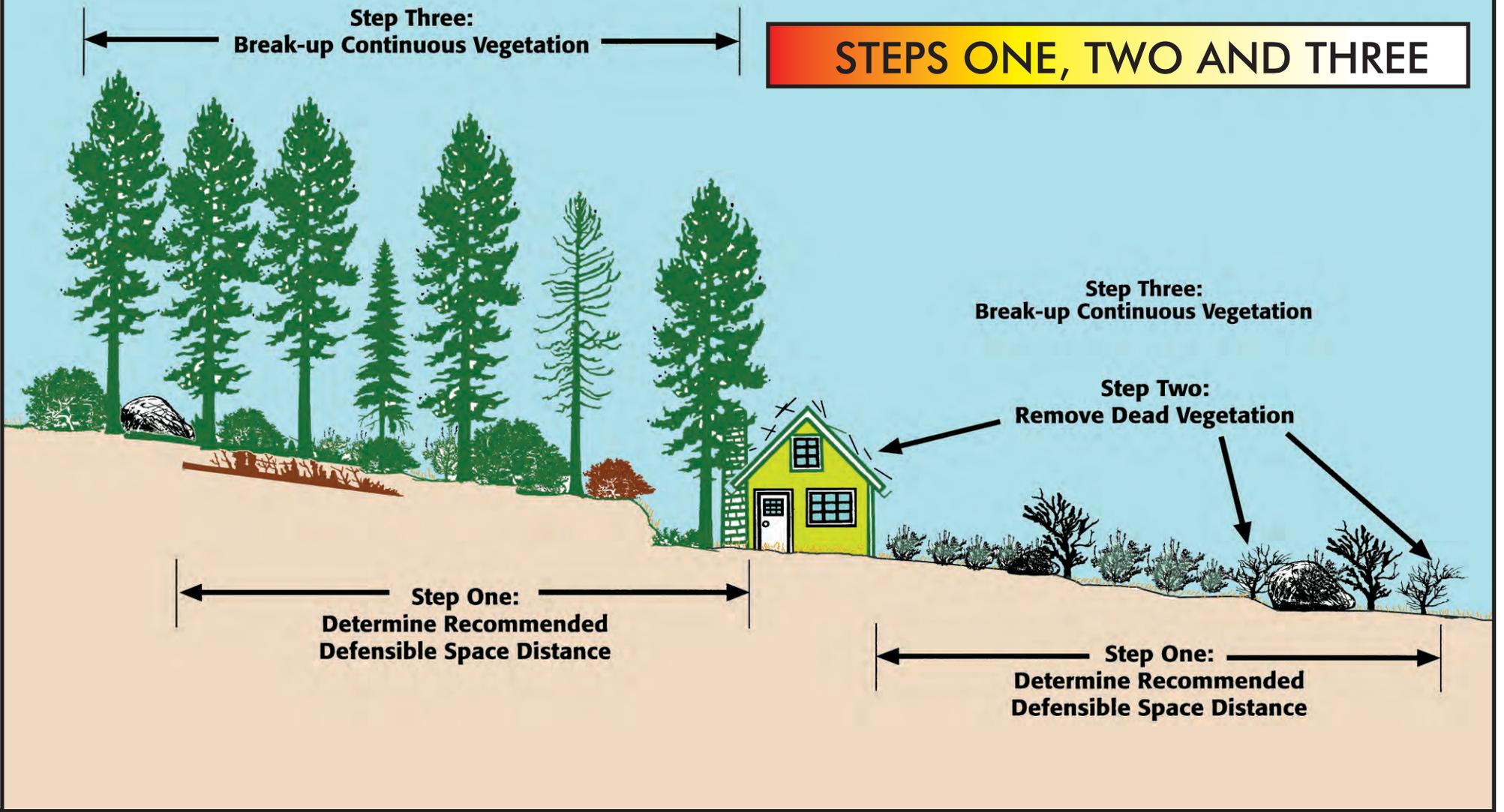
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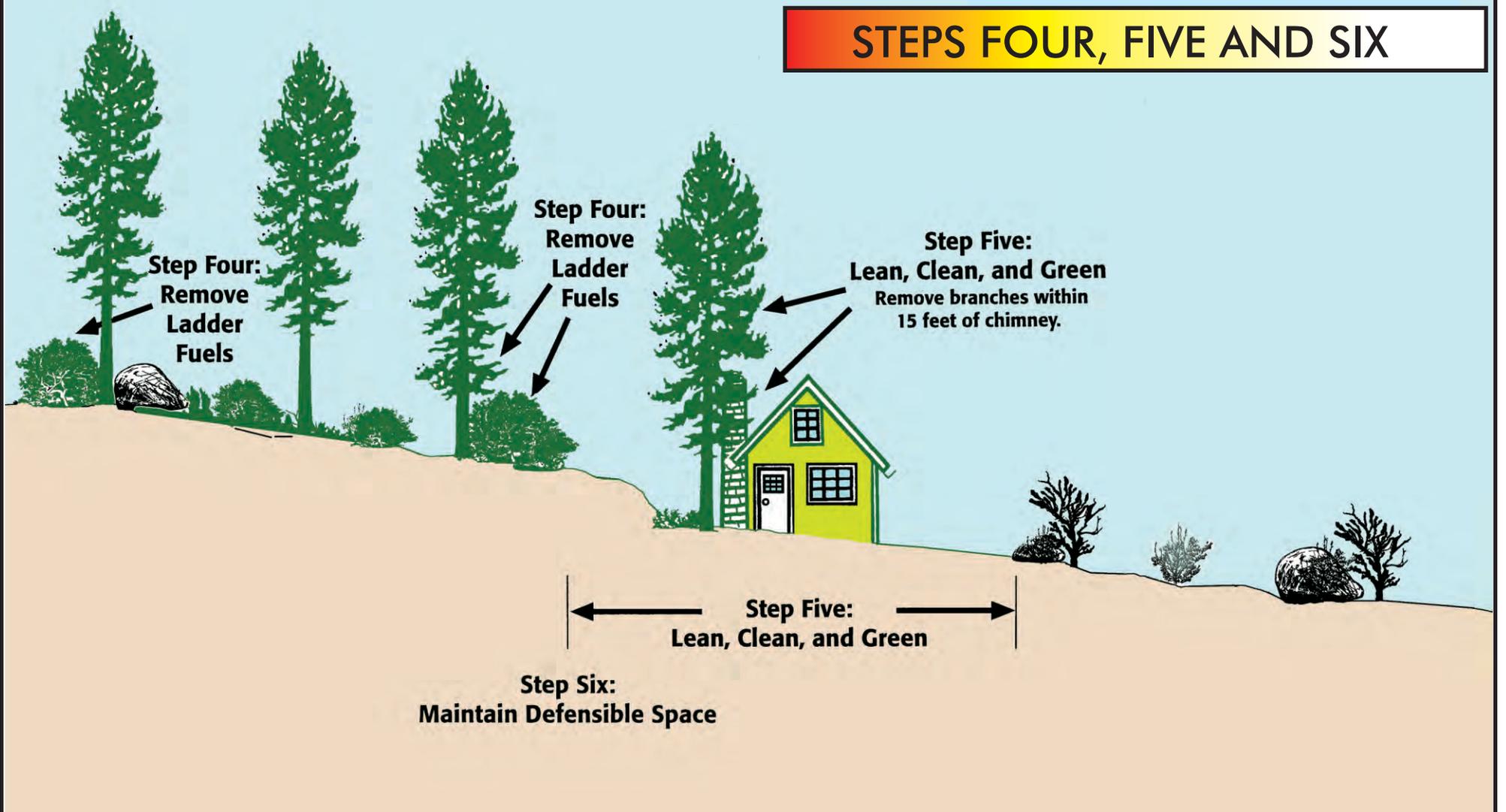


CREATING DEFENSIBLE SPACE: SUMMARY

STEPS ONE, TWO AND THREE



STEPS FOUR, FIVE AND SIX



FIRESCAPING--

"FIRE SMART" LANDSCAPE DESIGN

Firescaping is landscape design that reduces a home's vulnerability to wildfire. The goal is to develop a landscape that offers the best fire protection and enhances the beauty of the property.

The ideal is to surround the house with things that are less likely to burn, creating a defensible space around a home.

Planning this type of landscape is best done when a home is built, but appropriate manipulation of existing landscapes can make a significant contribution towards wildfire survival.

- ✓ Choose "fire smart" species.
- ✓ Choose safe places to plant.
- ✓ Keep plants and trees well pruned, thinned, and maintained.
- ✓ Keep highly flammable mulch such as pine straw a minimum of 5 feet from house.
- ✓ Use hardwood mulch, stone, or crushed brick nearer to home (stone or brick is best).

CREATING FUEL BREAKS

In Firescaping, the open spaces are more important than the plants.

Landscaping features used to reduce the amount of flammable fuels near a home and create a fire break include:

- Open lawns
- Driveways, walkways, parking areas
- Patios with masonry or rock planters
- Fences constructed of nonflammable materials such as rock, stone, metal, or cement
- Water features, pools, ponds, or streams
- Areas with rock mulches. Be creative with boulders and riprap.

"FIRE SMART" PLANTS

There are no fire proof plants, but some are more fire resistant than others.

These "fire smart" plants:

- Are less likely to ignite from a wildfire.
- Burn less intensely when they do ignite, and spread the fire slower.
- Are lower growing or smaller.
- Have stems and leaves that are **not** resinous, oily or waxy.
- Have a high moisture content.
- Easy to maintain and prune.
- Have less accumulated debris and fewer dead branches.
- Have an open branching habit.
- Are drought resistant, requiring less irrigation.

PLACEMENT AND MAINTENANCE

"The location of plants in your yard should always be carefully planned."

- The arrangement, spacing and density of plants, shrubs and trees that grow around the house can be more crucial than what species are planted.
- When planning tree placement, remember their size at maturity.
- Keep tree limbs 15 feet from chimneys, power lines and structures.
- A single bush or tree can be dangerous if it catches fire from flying embers, especially if it's within 10 feet of a window.
- Proper maintenance is vital to remove excess debris. Lack of maintenance can make plants more flammable.



No Defensible Space...

SOME COMMON FIRE RESISTANT PLANTS

LESS IS BETTER... When designing a landscape for fire safety, remember that less is better. You can do this by simplifying visual lines and reducing the number of plant groupings. A fire smart landscape lets plants and garden elements reveal their innate beauty by leaving space between plants and groups of plants. In firescaping, the open spaces are more important than the plants.

	Scientific Name	Common Name	Comments
TREES	Liriodendron tulipifera	Tuliptree; Tulip poplar	Does not tolerate poor growing conditions.
	Quercus talcata	Southern red oak	Prefers drier soils.
	Robinia pseudoacacia	Black locust	Tolerates dry, saline soils. Suckering problem. Spines on young growth.
SHRUBS	Rhus copallina	Shining sumac	Useful for dry, rocky sites.
	Viburnum acerifolium	Mapleleaf viburnum	Tolerates shade and poor soils.
	Hydrangea aborescens	Smooth hydrangea	Suckers freely from roots. Will cover up large areas if not maintained.
GROUND COVER	Pachysandra terminalis	Pachysandra	Not tolerant to foot traffic or full sun conditions.
	Ophiopogon japonicum	Monkey grass	Good for erosion control. Prefers a shaded location.
	Parthenocissus quinquefolia	Boston Ivy	Tolerates urban conditions.

FOR A MORE COMPLETE LIST OF PLANTS OF THE SOUTH,
VISIT https://pubs.ext.vt.edu/content/dam/pubs_ext_vt_edu/430/430-300/430-300_pdf.pdf

OTHER CONSIDERATIONS IN MAKING YOUR HOME DEFENSIBLE

1. ROOF

- Remove dead branches overhanging your roof.
- Remove any branches within 15 feet of your chimney.
- Clean all dead leaves and needles from your roof and gutters.
- Cover your chimney outlet and stovepipe with a nonflammable spark arrester screen of ½ inch or smaller mesh.
- When building a home, install a roof and subroof that meets a fire resistant classification. Metal, tile and asphalt roofing materials are more fire resistant than wooden shingles.

2. CONSTRUCTION

- Build your home set back at least 30 feet and away from ridge tops, steep ravines and areas between high points on a ridge.
- Build your home at least 30 feet from your property line where lot lines permit.
- Use fire resistant building materials.
- Enclose the underside of balconies and above-ground decks with fire resistant materials including metal mesh screens of 1/8 inch or less openings.
- Limit the size and number of windows in your home that face large areas of vegetation.
- Use tempered glass for large, vulnerable windows.
- Consider sprinkler systems within the house. They may protect your home while you're away or prevent a house fire from spreading into the wildlands.

3. LANDSCAPE

- See "Creating An Effective Defensible Space" (page 6) and "Firescaping-Fire Smart Landscape Design"(page 10).

4. YARD

- Stack woodpiles at least 30 feet from all structures and clear away flammable vegetation within 10 feet of woodpiles.
- Locate gas tanks (butane and propane) at least 30 feet from any structure and surround them with 10 feet of clearance.
- Remove all stacks of construction materials from your yard.
- Obey local burning laws.
- Compost or mulch pine needles,

THE WOOD SHAKE AND SHINGLE ROOF HAZARD

A house can be threatened by a wildfire in three ways: direct exposure to flames, radiated heat, and airborne embers. Of these, embers account for the majority of homes burned by wildfire. The most vulnerable part of a house to flying embers is the roof.

Because of its angle, the roof can catch and trap these embers. If the roof is constructed of combustible materials such as untreated wood shakes and shingles, the house is in jeopardy of igniting and burning.

Not only are combustible roofing materials a hazard to the structure on which they are installed, but also to other houses in the vicinity. Embers from burning wood shakes, can be carried blocks away and land on other flammable materials and combustible roofs.

Unfortunately for homeowners with existing combustible roofs, there are no reliable long-term measures available to reduce roof vulnerability to wildfire other than re-roofing with fire resistant materials.



One spark on this roof could be a disaster. Wooden shingles and leaf litter is a hazardous combination.

leaves and grass clippings and store them at least 30 feet from the home.

5. EMERGENCY WATER SUPPLY

- Maintain an emergency water supply for responders that meets fire department standards through one of the following:
 - a community water/hydrant system
 - a cooperative emergency storage tank, pools or ponds that may be accessed.
 - a minimum storage supply of 2,500 gallons in your community.
 - install dry hydrants in selected ponds/lakes for easier access to water.
- Clearly mark all emergency water sources and notify your local fire department of their existence.
- Create easy firefighter access to your closest emergency water source.
- If your water comes from a well, consider an emergency generator to operate the pump during a power failure.



6. ACCESS

- Identify at least two exit routes from your neighborhood.
- Construct driveways to allow large emergency equipment to reach your house.
- Clear flammable vegetation at least 10 feet from roads and five feet from driveways.
- Post your house address at the beginning of your driveway, or on your house if it is easily visible from the road.

7. OUTSIDE

- Designate an emergency meeting place outside your home.
- Practice emergency exit drills regularly.
- Make sure that electric service lines, fuse boxes and circuit breaker panels are installed and maintained as prescribed by code.
- Ensure electrical repairs are performed by qualified individuals.

8. ACCESS STANDARDS FOR DEVELOPMENT

- Construct roads that allow two-way traffic.
- Design road width, grade and curves to allow access for large emergency vehicles.
- Design bridges to carry heavy emergency vehicles, including bulldozers carried on large trucks.
- Post clearly stated road signs to show traffic restrictions such as dead-end roads and weight and height limitations.
- Make sure dead-end roads and long driveways have turnaround areas wide enough for emergency vehicles. Construct turnouts along one-way roads.
- Cut back overhanging tree branches above roads.
- Make sure your street is named or numbered, and a sign is visibly posted at each intersection.
- Make sure that your street name and house number are not duplicated elsewhere in the county.

WHEN WILDFIRE APPROACHES

Should a house be threatened by wildfire, the occupants may be advised to evacuate by a fire or law enforcement official. The purpose of evacuation is to protect people from life-threatening situations.

SITUATIONAL AWARENESS WHEN A FIRE STARTS

- Evacuate as soon as you are set.
- Alert family and neighbors!
- Dress in appropriate clothing (i.e., clothing made from natural fibers, such as cotton, and work boots).
- Have goggles and a dry bandana or particle mask handy. Ensure that you have your emergency supply kit on hand that includes all necessary items, such as a battery powered radio, spare batteries, emergency contact numbers, and ample drinking water.
- Stay tuned to your TV or local radio stations for updates, or check web sites.
- Remain close to your house, drink plenty of water and keep an eye on your family and pets until you are ready to leave.

INSIDE CHECKLIST

- Shut all windows and doors, leaving them unlocked.
- Remove flammable window shades and curtains and close metal shutters. Remove lightweight curtains.
- Move flammable furniture to the center of the room, away from windows and doors.
- Shut off gas at the meter. Turn off pilot lights.
- Leave your lights on so firefighters can see your house under smoky conditions.
- Shut off the air conditioning.

OUTSIDE CHECKLIST

- Gather up flammable items from the exterior of the house and bring them inside (e.g., patio furniture, children's toys, door mats, etc.) or place them in your pool.
- Turn off propane tanks.
- Don't leave sprinklers on or water running - they can waste critical water pressure.
- Leave exterior lights on.
- Back your car into the driveway. Shut doors and roll up windows.
- Have a ladder available.
- Patrol your property and extinguish all small fires until you leave.
- Seal attic and ground vents with pre-cut plywood or commercial seals if time permits.

IF YOU ARE TRAPPED: SURVIVAL TIPS

- Shelter away from outside walls.
 - Bring garden hoses inside house so embers don't destroy them.
 - Patrol inside your home for spot fires and extinguish them.
 - Wear long sleeves and long pants made of natural fibers such as cotton.
 - Stay hydrated.
 - Ensure you can exit the home if it catches fire (remember if it's hot inside the house, it is four to five times hotter outside).
 - Fill sinks and tubs for an emergency water supply. Place wet towels under doors to keep smoke and embers out.
 - After the fire has passed, check your roof and extinguish any fires, sparks or embers.
 - Check inside the attic for hidden embers.
 - Patrol your property and extinguish small fires.
- If there are fires that you can not extinguish with a small amount of water or in a short period of time, call 9-1-1.

HOW TO REACH US...



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Phone: 803-896-8800
www.trees.sc.gov



US Fish and Wildlife Service
1000 Business Center Drive, Suite 10
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Phone: 843-784-6351



US Forest Service
4931 Broad River Road
Columbia, SC 29212
Phone: 803-561-4054



National Park Service
Atlanta Federal Center 1924 Building
100 Alabama Street, SW
Atlanta, GA 30303
Phone: 404-507-5624

Most Importantly, STAY CALM
and THINK CLEARLY!

Pre-fire preparation can help
save your home and YOUR LIFE.