LIVING WITH
FIRE
IN THE ROSS VALLEY
SURVIVING WILDFIRE: A GUIDE TO LIVING IN A FIRE PRONE COMMUNITY
Destructive wildfires affect virtually every part of the U.S., threatening communities, disrupting residents through evacuations and home losses, causing billions of dollars of damage to homes, businesses and natural resources.

In the past 10 years, annual home losses from wildfire have tripled. In 2012, more than 2,200 primary structures were lost due to wildfire and as the result of home-to-home ignitions. While firefighters work diligently to protect our property, the truth is, they can’t save every home, and their efforts and safety are increasingly compromised by today’s severe wildfires.

The good news is, unlike floods, hurricanes or earthquakes, there are simple and often inexpensive ways to make homes safer from wildfire. With a good understanding of wildfire hazards and mitigation strategies, community residents can effectively lower the wildfire risk and losses to their homes, neighborhoods and natural resources.

Ross Valley Fire Department recognizes that the change needed to reverse this loss trend begins with a rock-solid understanding of the basics of how wildfires ignite structures combined with scientifically proven mitigation actions.

Read on in this guidebook to learn effective strategies to protect your family, your home, and our community, from the inevitable wildfire.
Ross Valley Fire Department is a consolidated fire department with the mission of protecting lives, property and the environments of Ross, San Anselmo, Sleepy Hollow and Fairfax through education, prevention and community service while working together in a professional and caring manner that is fair, honest respectful and ethical. Our Fire Department continues a tradition of fire protection in the Ross Valley dating back more than 100 years.

Ross Valley Fire Department provides fire and EMS response through a Joint Powers Authority with the Towns of San Anselmo, Fairfax, Ross, and the Sleepy Hollow Fire Protection District.

The communities of Fairfax, San Anselmo, Ross, and Sleepy Hollow exist in a wildland-urban interface (WUI) zone, defined as the “area where structures and other human development meet or intermingle with undeveloped wildland.” The WUI zone creates an environment in which fire can move readily between manmade and natural vegetation fuels. Development in the WUI has increased the likelihood that wildfires will threaten structures and people.

A long history of fast moving wildfires exists in our valley, including many that have damaged or destroyed homes and killed firefighters.

Ross Valley Fire Department and FIRESafe MARIN ask that all Marin residents follow the simple guidelines in this book, and online at www.firesafemarin.org, to create “Defensible Space” and “Harden Your Home” to give firefighters a fighting chance. A small investment in property maintenance can mean the difference between survival and destruction.

California law (PRC 4290 & 24291) and local ordinances require Defensible Space for all homes in the wildland-urban interface. Our goal is to ensure that all properties comply with the law, which will help our community by creating a fire resistant environment and reducing the risk of conflagration.
WILDFIRES TODAY

According to the National Interagency Fire Center (NIFC), 2013 saw more than 47,000 wildfires burn over 4.3 million acres.

In 2012, more than 2,200 homes and structures were lost due to wildfire.

From 2004 – 2012, more than 13,000 homes were lost to wildfires in the US. California leads the nation in both homes lost and dollars lost to wildfire.

The 1991 “Tunnel Fire” in the Oakland and Berkeley hills rained ash and smoke on Marin County as it burned 3,354 homes and caused $1.5 billion in damage, the highest dollar loss ever recorded in a wildfire. 25 people died.

According to the U.S. Fire Administration, in 2012, 67,774 wildfires burned 9,326,238 acres (an area bigger than New Jersey, Connecticut and Delaware combined). This makes 2012 the third highest year for acres burned since national wildfire statistics have been kept. 2006 with 9.9 million, and 2007 with 9.3 million acres, hold the number one and two spots.

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The number of wildfires threatening homes has increased 75% in the past ten years, and is expected to continue to increase with climate change and a growing population.

More than 45 million homes are built in wildland/urban interface areas in the United States.

72,000 communities in the United States have been identified at risk of wildfire.

On average, 2,000 homes are lost to wildfire each year in the United States.
DEFENSIBLE SPACE

Wildland/Urban Interface

A FIGHTING CHANCE

Creating and maintaining defensible space is essential for increasing your home’s chance of surviving a wildfire. It’s the buffer that homeowners are required to create on their property between a structure and combustible vegetation. Defensible space helps slow an approaching fire, and allows firefighters to operate more safely.

It’s the Law!

100 FEET

California Government Code 51182, and Public Resources Code sections 4290 and 4291 require that any person that owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining any land covered with flammable vegetation shall at all times maintain 100 feet of defensible space.

Home Ignition

ZONE CONCEPT

Two important zones make up the required 100 feet of defensible space.

ZONE 1

Zone 1 extends 30 feet out from buildings, decks, and other structures:

1. Remove all dead plants, grass and weeds.
2. Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
3. Trim trees regularly to keep branches a minimum of 10 feet from other trees.
4. Remove dead branches that hang over your roof. And keep branches 10 feet away from your chimney.
5. Relocate exposed woodpiles outside of Zone 1 unless they are completely covered.
6. Remove or prune all combustible plants and shrubs near windows.
7. Remove vegetation and items that could catch fire around and under decks and awnings.
8. Create separation between trees, shrubs and small branches. Up to 4 inches of leaf litter may be permitted where erosion control is an issue.

ZONE 2

Zone 2 extends 30 to 100 feet from buildings and other structures:

1. Cut or mow annual grass down to a maximum height of 4 inches at all times during fire season.
2. Create horizontal spacing between shrubs and trees.
3. Create vertical spacing between grass, shrubs and trees.
4. Remove all fallen leaves, needles, twigs, bark, cones, and small branches. Up to 4 inches of leaf litter may be permitted where erosion control is an issue.

ALL ZONES

Both Zones, 0 to 100 feet from buildings and other structures:

1. Mow before 10 a.m., but never when it’s windy or excessively dry.
2. Maintain driveways and roadways for fire engine access and clearance.
3. Ensure your address number is clearly visible day and night.
4. Protect water quality. Do not clear vegetation near waterways to bare soil. Vegetation removal can cause soil erosion, especially on steep slopes.

Defensible space gives firefighters a fighting chance.
Hundreds of fires are started each year by power tools. If you live in a wildland area, use extreme caution during fire season. Lawn mowers, string trimmers, chain saws, grinders, welders, and tractors can all start fires if not used properly.

Spark Arresters: In wildland areas, spark arresters are required on all portable, gasoline-powered equipment. This includes tractors, harvesters, chainsaws, weed-trimmers and mowers.

Keep the exhaust system, spark arresters and mowers in proper working order and free of carbon buildup. Use the recommended grade of fuel, and don’t top it off.

DEFENSIBLE SPACE

ZONE 1 0’ - 30’
Extends 30’ from structures and buildings. Keep it “Lean, clean, and green!”
1. Remove all dead plants, grass and weeds.
2. Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
3. Trim trees regularly to keep branches a minimum of 10 feet from other trees.
4. Remove dead branches that hang over your roof. And keep branches 10 feet away from your chimney.
5. Relocate exposed woodpiles outside of Zone 1 unless they are completely covered
6. Remove or prune combustible plants and shrubs near windows.
7. Remove vegetation and items that could catch fire around and under decks and awnings.
8. Create a separation between trees, shrubs, patio furniture, swing sets, etc.

ZONE 2 30’ - 100’
Extends to at least 100’ from structures and buildings.
1. Cut or mow annual grass down to a maximum height of 4 inches.
2. Create horizontal spacing between shrubs and trees.

THE HOME
Includes the structure and attachments such as fences, decks, and awnings.
1. Use fire resistant materials such as tile roofs and stucco siding.
2. Keep the roof, gutters, and deck surfaces clean of leaves, needles, and combustible materials at all times during fire season.

DRIVEWAYS
Ensure adequate clearance for fire apparatus by clearing vegetation overhead to 13’ 6”, and clearing vegetation 5-10 feet from sides of driveways and roadways.
A turnaround for fire apparatus may be required, and allows fire engines to quickly assess and access your home during a wildfire.
Address numbers must be visible to firefighters, day and night. The law requires 4” minimum numbers on a contrasting background. Use reflective numbers if possible.

POWER EQUIPMENT
Hundreds of fires are started each year by power tools. If you live in a wildland area, use extreme caution during fire season. Lawn mowers, string trimmers, chain saws, grinders, welders, and tractors can all start fires if not used properly.

Mowing: Striking rocks can create sparks and start fires in dry grass. Use caution, mow only early in the day (before 10AM, when the weather is calm, cool, and moist).
**TREES AND SHRUBS**

Add Space Between Shrubs and Bushes

Choosing the right plants and spacing them properly can slow the spread of fire when it approaches, reducing the chances that your home will burn. Certain fire prone shrubs and trees, like juniper and cypress, are so flammable that they should be replaced with fire resistant plants (see facing page).

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### Limb and Maintain Trees

Remove lower limbs of conifers (pine, fir, cedar, etc) so that no leaves or needles are within 10’ of the ground, or 1/3 the height of the tree if it’s less than 30 feet tall. Space trees so that the canopies do not touch, with added space between fire prone species like conifers. Remove limbs within 10’ of structures.

Remove all shrubs and grasses (which act as “ladder fuels”) beneath trees, annually.

Trees like oaks, bays, and ornamentals with broad leaves should be limbed so that no branches are within 6’ of the ground, or 1/3 of the height of the tree if it’s less than 18’ tall. A licensed arborist can help select the safest species and maintain your trees in good health for optimum fire resistance.

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### Choose Fire Resistant Plants

Select from this list of fire resistant plants, or consult a professional for additional species. Remember: even fire resistant plants can be hazardous when not maintained.

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#### Shade Tolerant

- Agapanthus
- Liriope
- Vinca minor
- Galium odoratum
- Lavandula angustifolia
- Rosmarinus officinalis
- Salvia chamaedryoides
- Teucrium chamaedrys
- Thymus serpyllum
- Thymus vulgaris

#### Drought Tolerant

- Achillea millefolium
- Ceanothus ‘canica’
- Ceanothus maritimus
- Crista purpurea
- Dietes forforita
- Lavandula dentata
- Limonium perezii statice
- Ribes viburnifolium
- Solanum jasmoides
- Tecoma capensis

#### California Natives

- Carpenteria californica
- Eschscholzia californica
- Fremontodendron cal.
- Mahonia repens
- Mimulus longiflorus
- Polystichum munitum
- Ribes sanguineum current
- Salvia clevelandii
- Salvia sonomensis
- Thymus vulgaris

#### Perennials

- Ajuga reptans
- Chrysanthemum maximum
- Echinacea purpurea
- Prunus florabunda
- Rhododendron
- Rosa floribunda
- Rudbeckia fulgida
- Tecomaria capensis

#### Shrubs and Groundcovers

- Erigeron karvinskianus
- Festuca glauca
- Iris douglasiana
- Kniphofia uvaria ‘DWF’
- Lantana camara

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*(these species are only firesafe when irrigated and maintained free of dead material). Learn more online at www.firesafemarin.org.*

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**Hedges and Screens**

- Acer griseum
- Afocarpus gracilior
- Arbutus unedo
- Camellia japonica
- Carissa grandiflora
- Centanica silalis
- Citrus species
- Cocculus laurusfolius
- Cornus mas
- Cornus stolonifera
- Craetaegus phaeocephala
- Elaeagnus angustifolia
- Elaeagnus pungens
- Eriobotrya japonica
- Encelia farinosa
- Eugenia species
- Envoximus species
- Feijoa sellowiana
- Hibiscus rosasinensis
- Hiasbus syriacus
- Ligustrum lucidum
- Ligustrum species
- Magnolia species
- Malus species
- Myoporum laetum
- Myrica californica
- Nerium oleander
- Olea europaea
- Osmanthus fragrans
- Phlox paniculata
- Pittosporum crassifolium
- Pittosporum tobira
- Prunus caroliniana
- Prunus laurocerasus
- Prunus ilicifolia
- Prunus caroliniana
- Plumbago auriculata
- Podocarpus macrophyllus “Yew” Tree
- Prunus caroliniana
- Prunus ilicifolia
- Prunus laurocerasus
- Pyrus banksianni
- Rhamnus species
- Rhododendron species
- Vaccinium species
- Viburnum tinus
- Xyloma congestum

- English lavender
- Coffeeberry
- Salal
- Amur Maple
- Oakleaf Cherry
- English Laurel
- Evergreen Pear
- Buckthorn
- Azalea, Rhododendrons
- Blueberry
- Viburnum
- Xyloma

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Limb and Maintain Trees

Shrubs should be spaced at least 2X the height of the plant.
Firescaping is landscape design that reduces a property’s vulnerability to wildfire. The goal is to develop a landscape design and choice of plants that offers the best possible fire protection. Select plants that are less likely to burn and use “hardscape” features such as paths and retaining walls that will not burn, while blocking radiant heat and catching wind blown embers.

Appropriate manipulation of the landscape can make a significant contribution towards wildfire survival. Firescaping integrates traditional landscape functions and needs into a design that reduces the threat from wildfire.

In addition to meeting a homeowner’s aesthetic desires and functional needs, firescaping includes vegetation modification techniques, planting for fire safety, defensible space principles, thoughtful use of hardscape features, and the use of fire safety “zones.”

Three factors determine wildfire intensity: topography, weather, and vegetation fuels. Property owners can only control the “fuel” component, through proper selection, placement, and maintenance of vegetation. Careful planning and firescape design will diminish the possibility of ignition, lower fire intensity, and reduce the speed at which fire spreads – all factors which will increase a home’s survivability during a wildfire.

In firescaping, plant selection is primarily determined by a plant’s ability to reduce the wildfire threat. Other considerations may be important such as appearance, ability to hold the soil in place, and wildlife habitat value.

“When designing a firesafe landscape, remember that less is better.”

Minimize use of evergreen shrubs and trees within 30 feet of a structure. Junipers and other conifers and broadleaf evergreens contain oils, resins, and waxes that make these plants burn with great intensity.

Choose “fire smart” plants - typically plants with a high moisture content, larger leaves, low growing, with stems and leaves that are not resinous, oily or waxy. Deciduous trees are generally more fire resistant than evergreens because they have a higher moisture content when in leaf, and a lower fuel volume when dormant.

Place and maintenance of trees and shrubs is as important as actual plant selection. When planning tree placement consider their size at maturity. Keep tree limbs at least 10 feet from chimneys, power lines and structures, and separate canopies so no trees touch. Do not plant shrubs beneath trees.

Firescape design uses driveways, lawns, walkways, patios, parking areas, areas with inorganic mulches, and fences constructed of nonflammable materials such as rock, brick, or concrete to reduce fuel loads and create fuel breaks. Fuel breaks are a vital component in firescape design. While bare soil can not burn, it is not promoted as a firescape element due to aesthetic and soil erosion concerns.

When designing a firesafe landscape, remember that less is better. Simplify visual lines and groupings.

A firesafe landscape lets plants and garden elements reveal their innate beauty by leaving space between plants and groups of plants. In firescaping, open spaces are as important as the plants.
When designing a landscape for fire safety remember: less is better. Simplify visual lines and groupings. A fire safe 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.

In firescaping, plant selection is primarily determined by a plant’s ability to reduce the wildfire threat. Other considerations may be important, such as appearance, ability to hold the soil in place, and wildlife habitat value.

Fire safe landscapes should also include “hardscape” materials, like granite paths of stone walls. These can act as a fuel break and help to slow down or change the path of an approaching fire. Hardscaping reduces water usage, provides visual and aesthetic details, and requires little maintenance. Carefully placed hardscape features like stone walls and basins can act as “ember catchers,” reducing the likelihood that wind blown embers will reach more vulnerable parts of your home.
A fire resistant home requires recognition of the structure’s unique site characteristics, the use of fire-resistant building materials and architectural features, good landscaping practices, and proper upkeep and maintenance during the fire season.

When planning improvements to reduce wildfire vulnerability, consider your home’s immediate surroundings. A structure’s vulnerability is determined by the exposure of its external materials and design to flames and embers during wildfires.

The higher the expected fire intensity near your home, the greater the need for fire resistant construction materials and building design. Since embers may travel great distances, ember resistance must be considered even when direct flame contact is unlikely.

In California, the WUI Building Standard, Chapter 7A of the California Building Code, affects how new homes are built in wildfire-prone areas. The ideal time to address home ignition risk is when the structure is in the design phase. However, you can still take steps to reduce ignitability to an existing home.

Existing homeowners should utilize the code to help decide what fire resistant features and materials are required when remodeling. Check with your local fire and building departments to find out about additional local requirements.

Simple design and material decisions can make a big difference when a wildfire approaches. Choosing composition tile for a roof (versus wood shingles); siding materials like stucco and tile; double pane windows; and the use of 1/8” wire mesh screens over attic, basement, and soffit vents can potentially save your home, family, and belongings.
**Architecture**

**ROOF AND GUTTERS**

**ATTACHMENTS**

Anything attached to the house, such as room additions, bay windows, decks, porches, and carports, should be considered part of the house. These can act as fuel bridges and ember catchers, and are particularly dangerous if constructed from combustible materials.

Protect all overhangs and “attachments” by removing vegetation and other fuels within 5 feet. Follow the steps shown in “defensible space” within 30’ of these features.

**DECKS, BALCONIES**

Enclose the undersides of decks, overhangs, and balconies with noncombustible or fire resistant materials. Use 1/8” wire screen to keep embers out.

Decks and elevated porches should be kept free of combustible materials and debris.

Deck surfaces within 10 feet of the building should be built with ignition-resistant, noncombustible, or other approved materials.

Elevated wooden decks should not be located at the top of a hill. Consider a terrace with a concrete, stone or brick surface.

Never store combustible items such as lumber or firewood beneath your deck.

**FENCES**

Wood fences should not be attached directly to the house, as they catch wind blown embers and readily ignite. Positioned properly, fences can catch embers before they reach the house. Consider using ignition resistant or noncombustible fence materials. If a wood fence must be attached to the house, separate the fence from the house with a masonry or metal barrier.

**PATIOS**

Use ignition resistant materials such as tile, stone, or concrete.

**DRIVEWAYS**

Driveways should be built and maintained in accordance with state and local codes to allow fire and emergency vehicles to reach your home. Maintain access roads with a minimum of 10 feet of clearance on either side, allowing for two way traffic. Fire Engine turnarounds may be required on new driveways.

Ensure that gates open inward and are wide enough for emergency vehicles.

Trim trees overhanging roads and driveways to 14' to allow emergency vehicle clearance.

**ADDRESS NUMBER**

Make sure your address is clearly visible from the road. 4” numbers on a contrasting background are required.

**WATER SUPPLY**

Keep multiple garden hoses attached that are long enough to reach all areas of your home and other structures on your property. If you have a pool or well, install a fire pump.

The roof is one of the most vulnerable areas of a home, with a large surface likely to catch embers during a wildfire.

Roofs tend to collect dead vegetation such as pine needles and leaf litter, which will readily ignite from even tiny embers. Even a small handful of leaf litter is too much. Regular cleaning and maintenance of a roof is as important as the materials used to construct it.

“Regular cleaning and maintenance of a roof is just as important as the materials used to construct it.”

Homeowners can reduce this threat by keeping leaves, needles, and debris cleared from the roof and using ignition-resistant roofing materials.

Roofing materials are “rated” for fire resistance. Class A is the highest rating, offering the highest resistance to fire, and is required for new roofs.

Recommended roof materials:
- Metal
- Tile (with bird stops)
- Asphalt shingles

**RAIN GUTTERS**

During a wildfire, material in gutters is likely to ignite, allowing fire to spread to the eave. Metal angle flashing should be placed between gutters and fascia to provide some protection. Vinyl gutters can melt and detach, leaving this area exposed.

Recommended gutter materials:
- Metal (aluminum, copper)
- Metal gutter guards
- Metal flashing

Install gutter guards to keep debris from accumulating. Maintain the roof where the gutter connects to make sure debris does not accumulate between the guard and roof.

**Fire Resistant Structures**

**EXTERIOR FEATURES**

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**The roof is most likely to ignite along the surface and the edge where gutters are connected, usually from embers landing and igniting debris.**

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Recommended gutter materials:
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- Metal gutter guards
- Metal flashing

Install gutter guards to keep debris from accumulating. Maintain the roof where the gutter connects to make sure debris does not accumulate between the guard and roof.
EMBERS

Embers are the most significant cause of home ignition in wildfires. Research indicates that most homes are ignited by wind-dispersed embers, and not from the actual flames of the fire.

The Ember Problem
Wildfires can shower entire neighborhoods with millions of tiny, burning embers or firebrands, often well in advance of the main fire, and before firefighters have time to respond. Embers can travel up to a mile ahead of a fire, carried by wind and convection.

Vent Screens
Research conducted by the Insurance Institute for Business and Home Safety shows that simple, inexpensive measures such as placing 1/8” wire mesh screens over attic and basement vents can prevent ember intrusion, potentially saving your home.

Roofing Materials
A fire resistant roof is among the most important features a homeowner can install to protect from embers. Class “A” fire resistant roof structures, such as metal, tile, and asphalt shingles are less likely to ignite from an ember than wood shakes and shingles.

Rain Gutters
Even homes with a fire resistant roof can burn if rain gutters are not kept clean. Just one handful of leaves or needles is enough to ignite from an ember and spread fire to the home. Metal rain gutters are safer than vinyl in fire prone areas. Clean regularly!

Embers are the most significant cause of home ignition in wildfires. Recent research indicates that two out of every three homes destroyed during the 2007 Witch Creek fire in San Diego County were ignited either directly or indirectly by wind-dispersed, wildfire-generated, burning or glowing embers (Maranghides and Mell, 2009) and not from the actual flames of the fire.

Embers are capable of igniting and burning your home in several ways. In order to have a wildfire-safe home, two equally important factors must be implemented: 1) select building materials and designs that help the home resist the wildfire and the intrusion of embers; and 2) create adequate defensible space and firescaping based on the wise selection, placement, and maintenance of vegetation and hardscape features. Protection from embers should be every homeowner’s top priority when creating a fire safe home.

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THE FIRE SAFE HOME

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Ross Valley Fire Department provides fire and EMS response through a Joint Powers Authority with the Towns of San Anselmo, Fairfax, Ross, and the Sleepy Hollow Fire Protection District.

FIRESafe MARIN is a non-profit organization dedicated to reducing Wildland Fire hazards and improving Fire-safety awareness in Marin. We foster community involvement by building partnerships and providing resources for mitigating fire danger.

In the aftermath of the Oakland Hills Fire in 1991, several public agencies and private interests wanted to reduce the likelihood that a similar tragedy would be repeated in Marin County. FIRESafe MARIN was formed to promote fire safety and stimulate communities to collaborate when solving problems related to wildland fire protection.

FIRESafe MARIN promotes effective fire safety by:
- Informing groups interested in fuels management
- Sponsoring educational programs for professionals
- Coordinating vegetation reduction projects
- Developing technical tips for managing vegetation
- Providing a list of fire-resistant plants
- Senior Citizen Assistance Projects

FIRESafe MARIN members include:
- Homeowners, neighborhood groups
- Community service organizations
- Emergency management agencies
- Fire departments
- Insurance companies
- Public land managers
- Utility companies

Any person that owns, leases, controls, operates, or maintains an occupied dwelling (in or near the wildland) shall maintain defensible space of 100 feet from each side and from the front and rear of the structure, but not beyond the property line (Government Code 51182 & PRC 4291).

Class A Fire Resistant roofing.

Ignition-resistant building materials and standards give structures an increased ability to resist intrusion of flame or burning embers projected by a vegetation fire. Certain jurisdictions may have requirements regarding installation of roofs, eave and roof vents, exterior wall materials, exterior windows and doors as well as decks. (CRC R327)

All new construction must utilize Class A Fire Resistant roofing.

Spark arrestors are required on all chimneys and outdoor fireplaces. Spark arrestor shall be constructed with heavy wire mesh with openings not to exceed 1/2 inch to prohibit the release of firebrands and embers. (CCR Title 19, 3.07)

Access and Roads, including private driveways, must be maintained for fire apparatus clearance, with a road width of at least 20 feet and vertical clearance of 13 feet 6 inches. (CFC 503.2.1). Fire apparatus access shall not be obstructed in any manner including vehicle parking or vegetation intrusion. (CFC 503.4)

Address numbers must be plainly legible and visible from the street. Numbers must be at least 4 inches high on contrasting background. Streets and roads must be identified with approved signs. (CFC 505.1 & 505.2)

Bridges must be constructed and maintained to carry the load of fire apparatus. Load limits shall be posted at both entrances to the bridge. (CFC 503.2.6)

Water Supply and Storage: Minimum water supply for new dwellings (less than 3,600 square feet) shall be capable of supplying a flow of 1000 gallons of water per minute for duration of 2 hours. (CFC Appendix B-105.1) In areas without a water service provider, contact the local fire agency for specific storage and hydrant requirements.

Fire Hydrants: A fire hydrant shall be accessible at all times and shall have a perimeter clearance of 3 feet. (CFC 507.5.5)
Plant the “Right Tree in the Right Place”

Tree Planting Safety
Your safety is PG&E's top priority. Planting trees under power lines can pose electrical shock hazards and fire safety risks. To stay safe, keep the lights on and get the long-term benefit, beauty and satisfaction from the trees you plant, refer to the planting zone guidelines below.

When landscaping be sure to consider overhead power lines and underground utilities in addition to fire hazard, sun exposure and soil conditions when selecting shrubs and trees.

The best way to protect yourself and your home is by planting the “right tree in the right place.” Though some large trees grow under power lines naturally, many are planted without the realization of how large they would eventually become. So, select a tree with the proper height at maturity for its location.

Plant for personal and fire safety. Use the “Small, Medium and Tall Zone” guidelines near distribution lines and the “Wire Zone, Border Zone, Outer Zone” guidelines near transmission lines. If you’re not sure whether a line is distribution or transmission call us at 1-800-743-5000.

For more information about trees and power lines:
• Visit www.pge.com/trees
• Request a “Guide to Planting Small Trees Near Distribution Lines” by calling 1-800-743-5000 or email: RightTreeRightPlace@pge.com. Specify: Northern California, Central California or the Bay Area/Inland area.

Wildfire Preparedness

CHECKLIST

The work you do today will make a difference. Follow these simple action steps now, and repeat annually to prepare and help reduce the risk of your home and property becoming fuel for wildfire:

1. Clean leaves and other debris from gutters, eaves, porches and decks to help prevent embers from igniting your home. Repeat often during fire season.
2. Remove all dead leaves and vegetation from decks and within 10 feet of the house. Repeat often during fire season.
3. Remove any combustibles stored underneath decks or porches.
4. Screen or box in areas below patios and decks with 1/4 inch wire mesh to prevent debris and combustible materials from accumulating.
5. Remove all combustible materials such as firewood, propane tanks, and dry vegetation 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.
6. Wildfire can spread to treetops via “ladder fuels.” Prune trees annually so the lowest branches are 6 to 10 feet from the ground. Remove shrubs beneath trees.
7. Keep your lawn cut and maintained. If it’s brown, cut it to less than 4 inches. Cut grass early in the day, when fire danger is lower. Repeat as needed.
8. Rake and remove debris and lawn cuttings. Dispose of cut material in green cans to reduce fuel on your property.
9. Inspect shingles, roof tiles, and flashing. Replace or repair as needed to prevent ember penetration. Consider installing a fire resistant roof if you don’t have one already.
10. Cover exterior vents with 1/8 inch metal wire mesh to prevent embers from entering the home.
11. Ensure that your address number is visible. 4” numbers on a contrasting background are required.
12. Learn more about how to keep your family safe and reduce your home’s risk of wildfire damage online at www.firesafemarin.org.