



# CAL FIRE GUIDE to MAINTAINING DEFENSIBLE SPACE

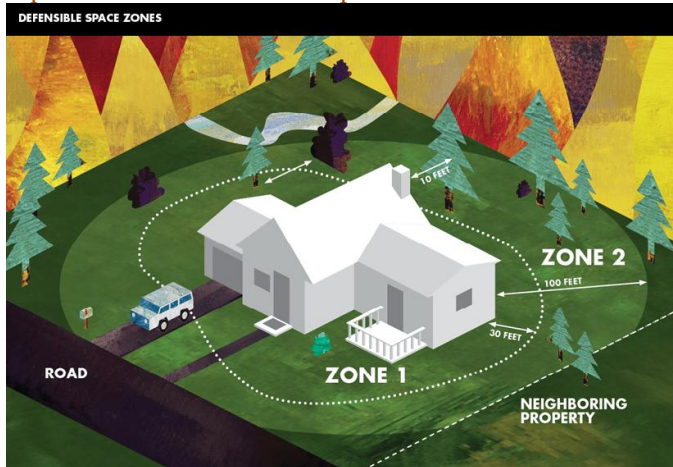


Our neighborhood bushes and trees, especially large trees, are not of themselves fire hazards but rather they need proper spacing, pruning, removal or reduction of underlying ladder fuels, removal of dead materials, and spacing from potential fuel sources to minimize their chances of burning. The guidelines below should allow a better understanding of clearing and pruning distances recommended by Cal Fire.

Defensible space is a harsh reality of living in forest land, but it is the law. It is a hard concept to swallow since many of us inherited our landscapes when we originally bought. As neighbors that typically live within each other's defensible space, it becomes important to do our part in meeting the guidelines within our property and to talk to our neighbors about how to treat the overlap zones. A joint effort to clean up such areas together (in person or financially) might be the best approach. You might find out your neighbor dislikes that "privacy wall" just as much as you do.  
Barbara MacArthur, Firewise Chairperson (v. FireNews16\_5 Website)

Creating defensible space is essential to improve your home's chance of surviving a wildfire. It's the buffer you create between a building on your property and the grass, trees, shrubs, or any wildland area that surround it. This space is needed to slow or stop the spread of wildfire and it protects your home from catching fire—either from direct flame contact or radiant heat. Defensible space is also important for the protection of the firefighters defending your home.

**Defensible Space Zones:** Two zones make up the required 100 feet of defensible space.



**Zone 1** extends 30 feet out from buildings, structures, decks, etc.

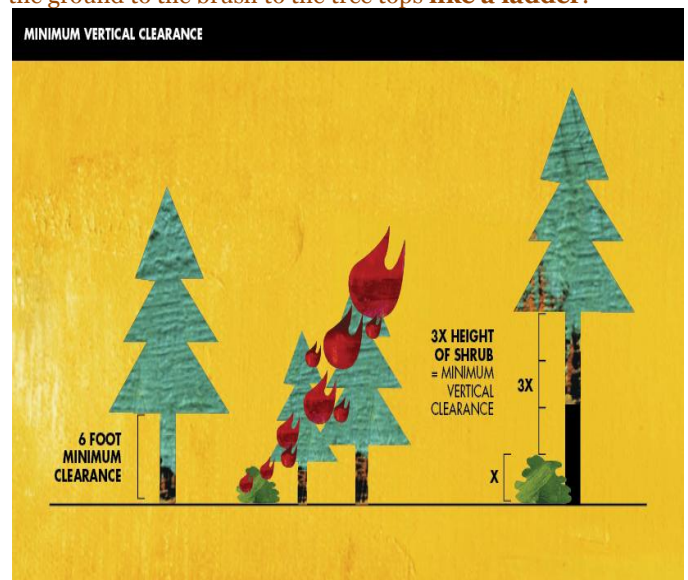
- Remove all dead plants, grass and weeds (dead vegetation).
- Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
- Trim trees regularly to keep branches a minimum of 10 feet from other trees.
- Remove branches that hang over your roof and keep dead branches 10 feet away from your chimney.
- Relocate wood piles into Zone 2.
- Remove or prune flammable plants and shrubs near windows.
- Remove vegetation and items that could catch fire from around and under decks.
- Create a separation between trees, shrubs and items that could catch fire, such as patio furniture, wood piles, swing sets, etc.

**Zone 2** extends from 30 to 100 feet out from buildings, structures, decks, etc.

- Cut or mow annual grass down to a maximum height of 4 inches.
- Create horizontal spacing between shrubs and trees. (See diagram)
- Create vertical spacing between grass, shrubs and trees. (See diagram)
- Remove fallen leaves, needles, twigs, bark, cones, and small branches. However, they may be permitted to a depth of 3 inches.

**Plant and Tree Spacing** The spacing between grass, shrubs, and trees is crucial to reduce the spread of wildfires. The spacing needed is determined by the type and size of brush and trees, as well as the slope of the land. For example, a property on a steep slope with larger vegetation requires greater spacing between trees and shrubs than a level property that has small, sparse vegetation.

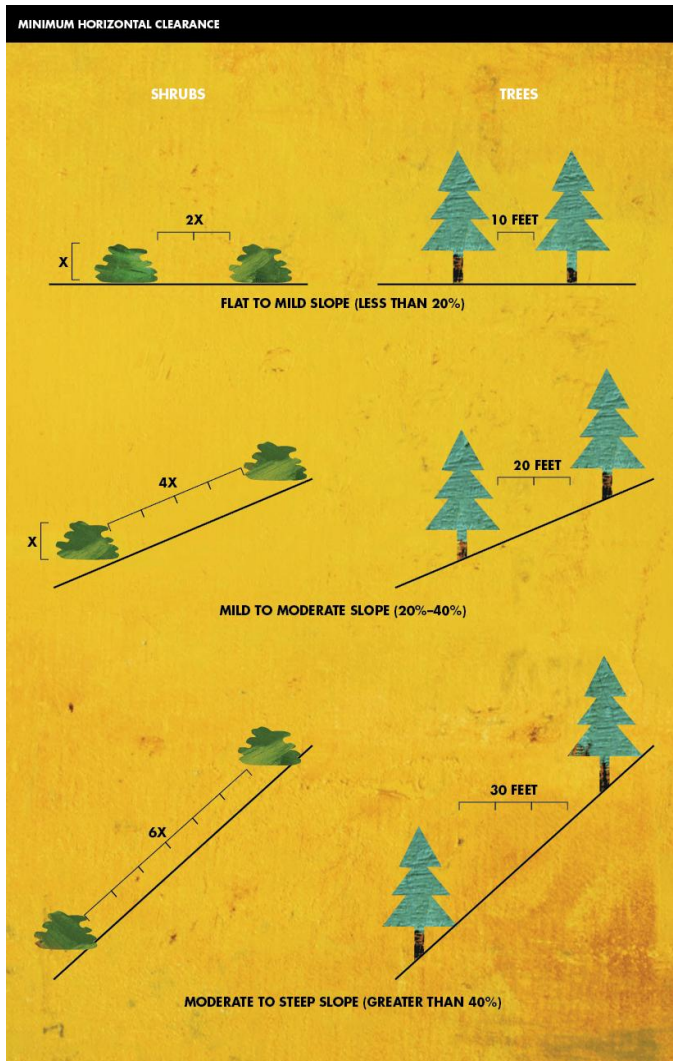
**Vertical Spacing:** Remove all tree branches at least 6 feet from the ground. Allow extra vertical space between shrubs and trees. Lack of vertical space can allow a fire to move from the ground to the tree tops **like a ladder**.



*Example: A five foot shrub is growing near a tree. 3x5 = 15 feet of clearance is needed between the top of the shrub and the lowest tree branch.*

To determine the proper vertical spacing between shrubs and the lowest branches of trees, use the formula in the second diagram. This will help to preclude the potential for fire climbing along adjacent laddered fuels.

**Horizontal Spacing:** Horizontal spacing depends on the slope of the land and the height of the shrubs or trees. Check the chart below to determine spacing distance.



The concept of “slope effect” is similar to holding a lighted match horizontally; without wind it typically burns at the end and slowly moves horizontally. But hold the match at an angle with flame at bottom, then the flame heats and dries the stick in an upward direction and the fire moves quicker towards your finger as the angle of the match stick is held more steeply.

### Fire Safe Landscaping and Plants to Avoid

Fire-safe landscaping isn’t necessarily the same thing as a well-maintained yard. Fire-safe landscaping uses fire-resistant plants that are strategically planted to resist the spread of fire to your home (refer to short video below).

The good news is that you don’t need to spend a lot of money to make your landscape fire-safe. And fire-safe landscaping can increase your property value and conserve water while beautifying your home.

On the other hand, firefighters often refer to highly flammable vegetation as “gasoline plants.” These plants are easily ignited and can burn very intensely. Make it a priority to minimize, isolate, and/or remove gasoline plants from within your defensible space:

Latin Name	Common Name
Artemisia species	Sage or Wormwood
Calamagrostis acutiflora	Feather Reed Grass
Calocedrus decurrens	Incense Cedar
Cedrus atlantica 'Glauca'	Blue Atlas Cedar
Chrysothamnus nauseosus	Rubber Rabbitbrush
Cupressus glabra	Arizona Cypress
Cytisus species	Broom
Genista species	Dwarf Broom
Juniperus species	Juniper
Picea glauca 'Conica'	Dwarf Alberta Spruce
Picea pungens	Spruce
Pinus species	Pine
Sequoiadendron giganteum	Giant Redwood
Thuja occidentalis	Arborvitae

### Sources:

1. Cal Fire <http://www.readyforwildfire.org/get-ready/creating-defensible-space/>

2. Planting Guide (page 51 and following pages) <http://www.lassenfiresafecouncil.org/lassen-county-and-northeastern-california-landscape-plant-guide/>

Short overview video: [https://youtu.be/yxFEJN2B\\_6s](https://youtu.be/yxFEJN2B_6s)

**NEXT MONTH: Guide to Hardening Your Home;**

**Also see the FIREWISE section of the LACC website for more information:**

<http://lakealmanorcountryclub.org/home.asp>  
Login, go to ACTIVITIES, then select FIREWISE.