

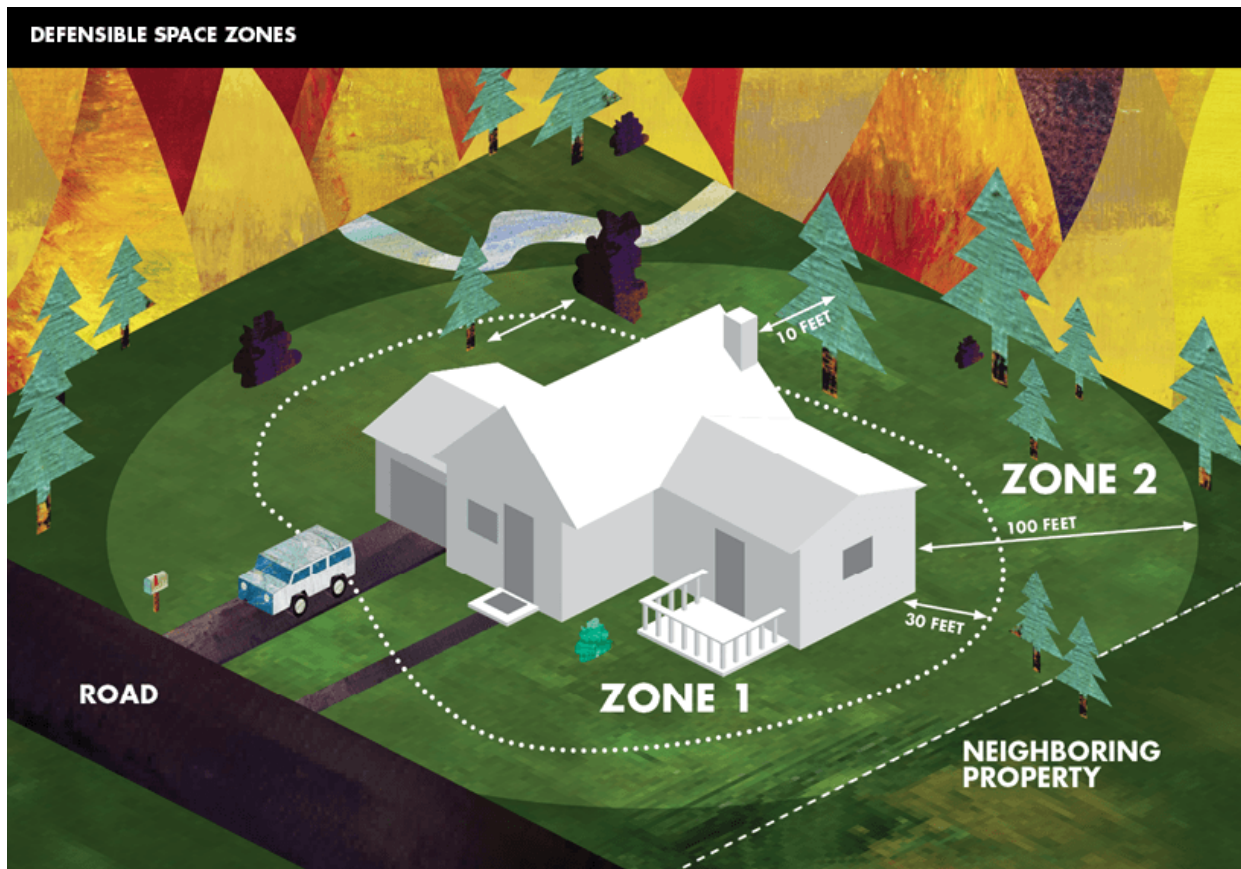
## MAINTAIN DEFENSIBLE SPACE – CalFire Prepare for Wildfire

Keep your property lean and green to help protect your family and home.

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 helps protect 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

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

- Remove all dead plants, grass and weeds (vegetation).
- Remove dead or dry leaves and pine needles from your yard, roof and rain gutters.
- Remove branches that hang over your roof and keep dead branches 10 feet away from your chimney.
- Trim trees regularly to keep branches a minimum of 10 feet from other trees.
- Relocate wood piles to 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

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

- Cut or mow annual grass down to a maximum height of 4 inches.
- Create horizontal space between shrubs and trees. (See diagram)
- Create vertical space 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.

\* San Diego County requires 50 feet of clearance in Zone 1. Check with your local fire department for any additional defensible space or weed abatement ordinances.

## 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 brush to the treetops like a ladder.

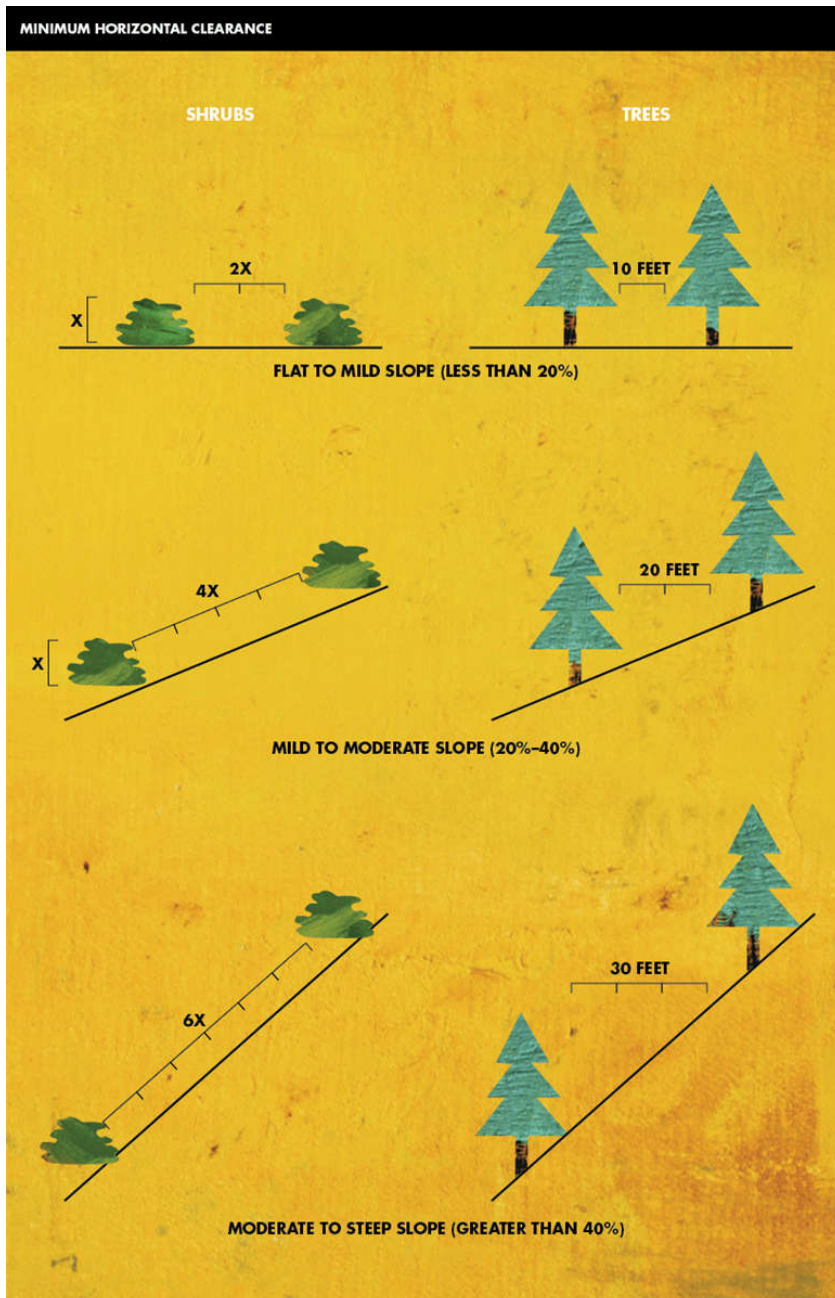
To determine the proper vertical spacing between shrubs and the lowest branches of trees, use the formula below.



Example: A five foot shrub is growing near a tree.  $3 \times 5 = 15$  feet of clearance needed between the top of the shrub and the lowest tree branch.

## 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.



## Fire-Resistant Landscaping

Fire-resistant landscaping isn't necessarily the same thing as a well-maintained yard. This type of landscaping uses [fire-resistant plants](#) that are strategically planted to resist the spread of fire to your home.

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

## **HARDENING YOUR HOME – CalFire Prepare for Wildfire**

Flying embers from a wildfire can destroy homes up to a mile away. Taking the necessary measures to harden (prepare) your home can help increase its chance of survival when wildfire strikes.

### **Here are ways you can harden your home and make it more fire resistant.**

#### **Roof**

The roof is the most vulnerable part of your home. Homes with wood or shingle roofs are at high risk of being destroyed during a wildfire. Build your roof or re-roof with materials such as composition, metal or tile. Block any spaces between roof decking and covering to prevent embers from catching.

#### **Vents**

Vents on homes create openings for flying embers.

- Cover all vent openings with 1/16-inch to 1/8-inch metal mesh. Do not use fiberglass or plastic mesh because they can melt and burn.
- Use Ember and flame resistant vents (WUI vents).

#### **Eaves and Soffits**

Eaves and soffits should be protected with ignition-resistant\* or non-combustible materials.

#### **Windows**

Heat from a wildfire can cause windows to break even before the home is on fire. This allows burning embers to enter and start fires inside. Single-paned and large windows are particularly vulnerable.

- Install dual-paned windows with one pane of tempered glass to reduce the chance of breakage in a fire.
- Consider limiting the size and number of windows that face large areas of vegetation.

#### **Walls**

Wood products, such as boards, panels or shingles, are common siding materials. However, they are flammable and not good choices for fire-prone areas.

- Build or remodel your walls with ignition resistant\* building materials, such as stucco, fiber cement wall siding, fire retardant, treated wood, or other approved materials.
- Be sure to extend materials from the foundation to the roof.

#### **Decks**

Surfaces within 10 feet of the building should be built with ignition-resistant\*, non-combustible, or other approved materials.

- Ensure that all combustible items are removed from underneath your deck.

## Rain Gutters

Keep rain gutters clear or enclose rain gutters to prevent accumulation of plant debris.

## Patio Cover

Use the same ignition-resistant\* materials for patio coverings as a roof.

## Chimney

Cover your chimney and stovepipe outlets with a non-flammable screen. Use metal screen material with openings no smaller than 3/8-inch and no larger than 1/2-inch to prevent embers from escaping and igniting a fire.

## Garage

Have a fire extinguisher and tools such as a shovel, rake, bucket, and hose available for fire emergencies.

- Install weather stripping around and under the garage door to prevent embers from blowing in.
- Store all combustible and flammable liquids away from ignition sources.

## Fences

Consider using ignition-resistant\* or non-combustible fence materials to protect your home during a wildfire.

## Driveways and Access Roads

Driveways should be built and maintained in accordance with state and local codes to allow fire and emergency vehicles to reach your home. Consider maintaining access roads with a minimum of 10 feet of clearance on either side, allowing for two-way traffic.

- Ensure that all gates open inward and are wide enough to accommodate emergency equipment.
- Trim trees and shrubs overhanging the road to allow emergency vehicles to pass.

## Address

Make sure your address is clearly visible from the road.

## Water Supply

Consider having multiple garden hoses that are long enough to reach all areas of your home and other structures on your property. If you have a pool or well, consider getting a pump.

## Useful Links

[Fire Information Engine—Preparing Your Home](#) 

[University of California—Fire Resources and Information](#) 

\*Ignition-resistant building materials are those that resist ignition or sustained burning when exposed to embers and small flames from wildfires. Examples of ignition-resistant materials include “non-combustible materials” that don’t burn, exterior grade fire-retardant-treated wood lumber, fire-retardant-treated wood shakes and shingles listed by the State Fire Marshal (SFM) and any material that has been tested in accordance with SFM Standard 12-7A-5.