



# How Topography Influences Wildfire Risk

**WILDFIRES BURN UP A SLOPE MUCH FASTER AND FLAME LENGTHS CAN ALSO BE VERY LONG. HOMES LOCATED MIDWAY OR AT THE TOP OF A SLOPE ARE AT A HIGHER RISK FROM INCREASED FLAME LENGTH, SO IT IS WISE TO INCREASE THE DEFENSIBLE SPACE AROUND THE HOME.**

The topography around your home or business, which includes the slope of the land and the direction the structure faces, is a major consideration in assessing the risk exposure to wildfire. Wildfires burn up a slope faster and more intensely than along flat ground and a steeper slope will result in a faster moving fire, with longer flame lengths. While moderate or steep slopes greater than 20%, are very dangerous, any slope can potentially increase the amount of heat a structure will be subject to during a wildfire.

## PROTECTING MID-SLOPE OR STEEP SLOPE PROPERTIES

If your structure is set back less than 15 feet for a single-story and 30 feet for a two-story building take additional precautions:

- Be more aggressive with your vegetation modification and maintenance plan and more aware of the materials used to build the building, deck or any outbuildings.
- Push fuel modification area beyond the 100-foot distance, if at all possible. A target for the extended fuel modification area would be between 150 feet and 200 feet.
- Consider increasing the protection of your building by constructing a noncombustible retaining wall to help increase the set-back. When making future improvements, incorporate ignition-resistant features and materials into the building and surrounding landscape.

## PLANT SPACING IS AFFECTED BY SLOPE

Uncleared ground fuels provide an open freeway for the rapid spread and increased intensity of fire. Clearance between shrubs should be 4 to 40 feet depending on the slope of the land and size and type of vegetation.

Check the chart below for an estimation of clearance distance. Any questions regarding requirements for a specific property should be addressed to your local fire official.

## DEFENSIBLE SPACE

[Defensible Space](#)

[Choosing Plants](#)

[Firescaping](#)

[Topography & Wildfire Risk](#)

[Mulches](#)

[Fire Smart Landscaping Tips](#)

# Minimum Horizontal Clearance

## SHRUBS

From edge of one shrub to the edge of the next

Flat to mild slope  
(0% to 20% slope)  
Two times (2x) the height of the shrub  
(Two shrubs 2' high should be spaced 4' apart)



Mild to moderate slope  
(20% to 40% slope)  
Four times (4x) the height of the shrub  
(Two shrubs 2' high should be spaced 8' apart)



Moderate to steep slope  
(greater than 40% slope)  
Six times (6x) the height of the shrub  
(Two shrubs 2' high should be spaced 12' apart)



## TREES

From edge of one tree canopy to the edge of the next

Flat to mild slope  
(0% to 20% slope)

10 feet



Mild to moderate slope  
(20% to 40% slope)

20 feet



Moderate to steep slope  
(greater than 40% slope)

30 feet



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