



## Defensible Space Checklist

There are many actions residents can take to prepare for wildfire and mitigate wildfire-related risks to their homes and property. This science-based checklist aims to assist residents and property owners who are implementing critical defensible space measures. It references information and recommendations from California Public Resources Code 4291 (PRC 4291), CAL FIRE's Defensible Space Assessment Sheet, and best practice based on peer-reviewed research.

**Defensible space** describes the area surrounding a structure where vegetation and combustible materials are thoughtfully maintained or removed to eliminate structure ignition pathways and provide a safe evacuation and structure defense zone. California has a three-zone system: Zone 0, Zone 1, and Zone 2. The following list includes required and recommended actions by zone.

**Zone 0 is the 0-5 ft perimeter of the building and attached structural components (decks, stairs, etc).** Zone 0 can reduce the likelihood of structure ignition by reducing the potential for ignition of the structure from flame contact, embers that accumulate at the base of a wall, and/or burning vegetation or combustible materials located close to the structure.

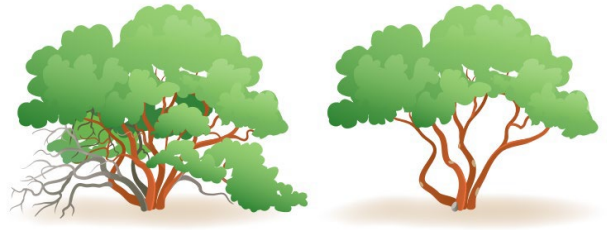
- Remove and dispose of vegetation, leaf litter, and combustible mulches.
- Relocate wood piles, planters made of combustible materials, and other flammable material.
- Consider concrete, gravel, or rock mulch around buildings.
- For fences attached to buildings, upgrade the attachment point with a 5' noncombustible panel or gate.
- Remove tree limbs that overhang structures.
- Replace natural-fiber doormats or move them inside pre-evacuation order.
- Relocate garbage and recycling cans pre-evacuation order or store in a non-combustible enclosure.
- Remove and dispose of vegetation and combustible materials immediately outside windows.



Before (top) and after (bottom) implementation of the three-zone defensible space strategy. While this figure shows a forested setting, the same concepts apply to other vegetation types and more residential settings. Diagram credit: Valachovic et al. (2021).

**Zone 1 is the 5-30 ft perimeter of the building and attached structural components.** Zone 1 can reduce the likelihood of fire burning directly to the structure through strategic plantings and maintenance.

- Remove and dispose of all dead and dying plant material.<sup>1</sup>
- Remove combustible materials from around and under detached decks and overhead structures (avoid climbing vines).
- Space shrubs two times the height of mature plants, increasing spacing on steeper slopes.
- Thin plants to reduce vertical and horizontal fuel continuity.<sup>2</sup> Prune plants to natural form and remove dead plant material from inside hedges or remove hedges completely. Consider planting in islands separated by noncombustible walkways/borders.<sup>2</sup>
- When selecting landscaping plants, try and avoid plants with fine needles/leaves, dense/thick architecture, high oil or resin content, or that retain dead material and shed bark.
- Remove limbs of tall trees from 6-10 ft off the ground.<sup>2</sup> For younger/smaller trees, prune over time, but only remove branches in the lower one-third of the tree.
- Remove branches of trees that are within 10 ft of your roof, chimney, or stovepipe.<sup>1</sup>
- Limit the depth of mulches to < 3 inches across your landscape. Composted mulches consisting of smaller particle sizes are preferred. Do not apply fresh mulch during fire season (end of spring until fall rains start). Applying mulch after fall rain will allow time to settle and reduce flammability.
- Additionally, consider the function of your irrigation system. Are you applying the proper amount of water? How frequent and for how long does irrigation run? Repair broken sprinkler heads, drip lines, and leaks.

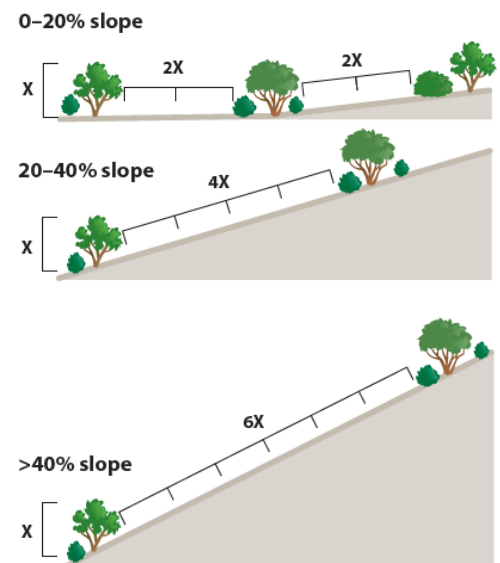


Prune shrubs to remove dead and dying material. Diagram credit: Valachovic et al. (2021).

**Zone 2 is the 30-100 ft perimeter of the building and attached structural components or to the edge of the property line.**

Zone 2 can modify the behavior of an approaching fire to help personnel defend a structure safely.

- Remove and dispose of all dead and dying vegetation.
- Mow or graze annual grasses/forbs to a maximum height of 4 inches.<sup>2</sup>
- Thin trees so that all canopies or groupings of trees are separated by at least 10 feet.
- Limb lower branches of taller trees up to a height of at least 10 feet.
- Aboveground fuel tanks should have 10 feet of bare mineral soil and no flammable vegetation within 20 feet in all directions.<sup>2</sup>
- Wood piles should be 30 feet or more from the home and have at least 10 feet of bare mineral soil in all directions.<sup>2</sup>
- Logs or stumps embedded in the soil must be removed or isolated from other vegetation.<sup>2</sup>



Double or triple distances between vegetation as compared with flat ground depending on steepness. Diagram credit: Valachovic et al. (2021).

<sup>1</sup> Regulation under California Public Resources Code 4291

<sup>2</sup> Recommendations based on CAL FIRE's Defensible Space Assessment Sheet

## Additional Resources

- **Know how to implement a successful defensible space strategy.**  
*Valachovic et al. 2021. Reducing the vulnerability of buildings to wildfire: vegetation and landscaping guidance. UC ANR Publication #8695: <https://escholarship.org/uc/item/5z80w412>.*
  - **Understand how apply key principles of defensible space and crucial elements of plant maintenance for fire resilience for common Sierra Foothill landscaping plants.**  
*Satomi et al. 2025. Fire-smart landscaping in the Sierra Foothills. <https://ucanr.edu/county/placer/nevada-counties/fire-smart-landscaping>.*
  - **Learn about the combustion characteristics of mulch and how to integrate mulch into defensible space landscaping.**  
*Zahra et al. 2026. Defensible space landscaping: mulches. <https://ucanr.edu/program/uc-anr-firenetwork/mulch>.*
  - **Familiarize yourself with CAL FIRE's requirements:** <https://www.fire.ca.gov/dspace>.
- 

Authored by **Bruno Pitton**, UC Cooperative Extension Environmental Horticulture Advisor  
**Katie Low**, UC ANR Fire Network Coordinator

Updated 5/29/2026

<sup>1</sup> Regulation under California Public Resources Code 4291

<sup>2</sup> Recommendations based on CAL FIRE's Defensible Space Assessment Sheet