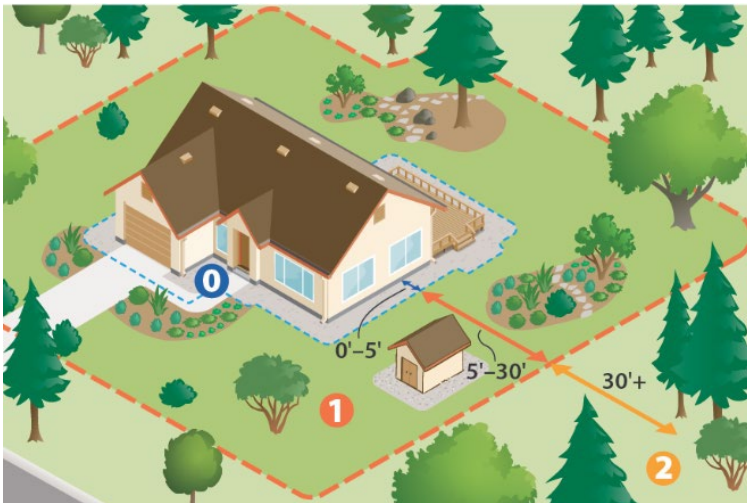


Defensible Space and Home Hardening Checklist

Bruno Pitton, UCCE Environmental Horticulture Advisor, Placer and Nevada counties

This is a science-based defensible space and home hardening checklist to help property owners better prepare for wildfire. Recommendations marked “PRC 4291” are regulation under California Public Resources Code 4291 (PRC 4291). Those recommendations marked “Cal Fire” are based on Cal Fire’s Defensible Space Assessment Sheet. All other recommendations are best practices based on research.

Landscape Defensible Space Checklist (Scan QR code for more information)



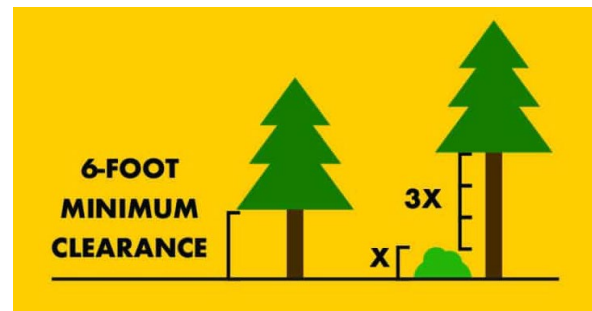
Graphic from: Satomi et al. 2025

ZONE ZERO (0-5') (non-combustion zone, not regulation)

- No flammable mulch
- No leaf litter or other flammable debris
- No plants
- No combustible materials (wooden furniture, cushions, etc.)
- Leaves, needles, etc. removed from roofs, gutters, decks, porches, stairways
- Remove flammable vegetation and items that are adjacent to or below combustible decks, stairs, balconies.

ZONE ONE (5-30') (lean, clean, green zone)

- TREES
 - No fire ladders (6-10 ft or 3x the height of the shrub or clearance) (Cal Fire)
 - Trees pruned 10 feet away from roof, chimney/stovepipe (PRC 4291)
 - Trees are healthy and do not have dead or dying wood (PRC 4291)



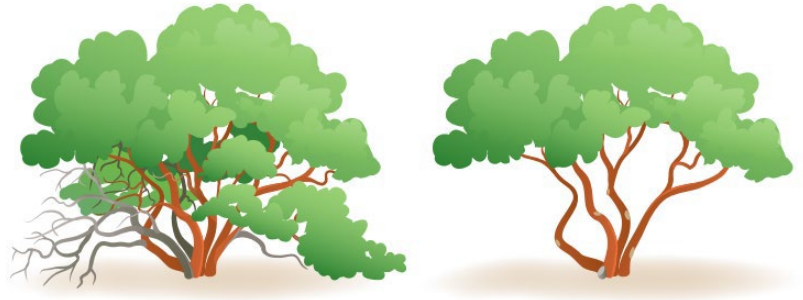
Graphic from <https://www.readyforwildfire.org/prepare-for-wildfire/defensible-space/>

- PLANT MAINTENANCE

- Clean up dead plant material (PRC 4291)
 - Remove dead branches
 - Remove dead leaves
 - Remove dead weeds

- THIN PLANTS TO REDUCE TOTAL FUEL IN LANDSCAPE

- Beware of hedges
- Prune to natural form



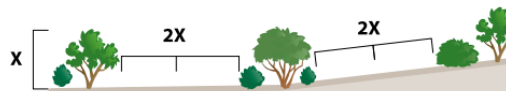
Graphic from: Valachovic et al. 2021

- PLANT SPACING

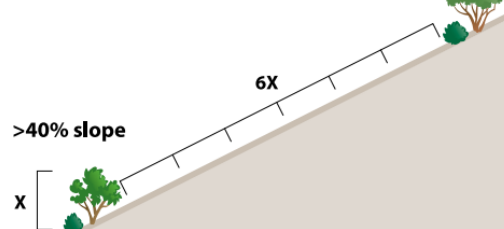
- Space plants to reduce vertical and horizontal fuel continuity (Cal Fire)
- Islands of plants separated by non-combustible walkways/borders (Cal Fire)

(A)

0–20% slope



(C)



(B)

20–40% slope



Graphic from:
Valachovic et al.
2021

- IRRIGATION SYSTEM FUNCTION

- Repair broken sprinkler heads, drip lines and leaks
- Is the proper amount of irrigation water being applied?
 - How long does does irrigation run?
 - How frequently does irrigation run?

- PLANT SELECTION CONSIDERATIONS

- Avoid plants with fine needles/leaves
- Avoid plants with dense/thick architecture
- Avoid plants that retain dead leaves/twigs
- Avoid plants with high oil or resin content
- Avoid plants that shed bark

- MULCH (Scan QR code on right for more info about mulch)

- Mulch should be equal to or less than 3” thick
- Composted mulch is best
- Small particle-sized mulch with less air is better
- Do not apply fresh mulch during fire season (end of spring until fall rains start)



- Address is clearly marked with 4” reflective numbers and readable from across the street (Cal Fire)

ZONE TWO (30-100’) (Fuel reduction zone)

- Annual grasses/forbs cut to maximum of 4” high (Cal Fire)
- Proper horizontal and vertical spacing to reduce fuel continuity (PRC 4291)
- Wood piles are 30’ or more from home and have 10’ of bare mineral soil in all directions (Cal Fire)
- Propane tanks have 10’ of bare mineral soil and no flammable vegetation within 20’ in all directions (Cal Fire)
- Logs or stumps embedded in the soil must be removed/isolated from other vegetation (Cal Fire)

Home Hardening Checklist (Scan QR code on the right for more info)



- VENTS are screened with 1/8” or smaller mesh or specialty ember resistant vent
- RAIN GUTTERS
 - Metal rain gutters
 - Screened with non-combustible screen
 - Cleaned frequently
- EAVES are enclosed (i.e. soffitted)
- WALLS AND SIDING
 - Is siding non-combustible material?
 - Concrete fiber board
 - Stucco
 - Cinder block
 - Siding does not have gaps that will let flames in
 - Non-combustible siding from ground level to 6” high if whole wall cannot be retrofitted
- ROOF
 - Class A roof
 - asphalt fiberglass composition shingles
 - concrete or clay tiles with plugged openings
 - metal roof
 - slate roof
 - Roof is clean and free of plant debris (PRC 4291)
 - Skylights should be flat dual pane and tempered glass
- CHIMNEY is screened with <1/2” mesh (PRC 4291)
- WINDOWS

- Dual pane or tempered
- Aluminum framed windows are better than vinyl
- FENCE within 5 feet of home is non-combustible
- DECKS
 - Free of combustible material (i.e. plants/weeds, stored wood, etc.) underneath
 - Deck gaps are clean of debris
 - Deck gap should be ¼”
 - Foil-facing bitumen on top of joists
 - Deck board at wall is replaced with metal screen
 - Area below the deck is screened against embers
 - Underside of deck is enclosed with non-combustible material

Additional information and resources:



Satomi, R., K. Low., B. Pitton, I. Zahra. 2025. Fire-Smart Landscaping in the Sierra Foothills. <https://ucanr.edu/sites/default/files/2025-07/Fire-Smart%20Landscaping%20in%20the%20Sierra%20Foothills.pdf>

CAL FIRE Defensible Space Information (<https://www.fire.ca.gov/dspace>)



Valachovic, Y.S., S.L. Quarles, S.V. Swain. 2021. Reducing vulnerability of buildings to wildfire: vegetation and landscaping guidance. UC ANR Publication #8695: <https://doi.org/10.3733/ucanr.8695>.

Please scan the QR code below to provide feedback on your experience using this checklist.

