



GUIDELINE 418 DEFENSIBLE SPACE

Purpose:

Defensible space and fuel modification zone provisions are intended to mitigate the risk to life and structures from intrusion of fire from wildland fire exposures, fires from adjacent structures, and to mitigate fires from spreading to wildland fuels that may threaten to destroy life, overwhelm fire suppression capabilities, or result in large property loss. Home and building loss during wildfires occur from one or more of the three basic wildfire exposures: 1) Embers, 2) Radiant heat, and 3) Direct flame contact.

Proper installation, spacing and maintenance of plants and landscaping is one of the key elements in the survivability of a structure during a wildfire. This guideline is intended to supplement VCFD Ordinance, VCFD Standard 515 – Defensible Space and Fuel Modification Zone requirements and State Law. For information regarding prohibited plants, VCFD Plant Reference Guide, use of mulch and wood chips, or questions about defensible space in Ventura County, please visit VCFD.org or email us at fhrp@ventura.org.

Where Defensible Space Is Required:

All properties located within a State mapped Fire Hazard Severity Zone (FHSZ), or a local Hazardous Fire Area (HFA) as determined by the fire department, are required to provide defensible space in accordance with California Public Resource Code (PRC) 4291; California Government Code (GC) 51182; California Code of Regulations (CCR) Title 14, Section 1299.03; CCR Title 19, Section 3.07; and the current adopted edition of the Ventura County Fire Protection District's (VCFD) Ordinance. Maps of the FHSZs can be viewed at the CalFire web site at <https://egis.fire.ca.gov/FHSZ>.

Local Ordinance:

Ventura County Fire Protection District Ordinance is more restrictive than State laws. Property owners are required to provide a 100-foot defensible space on their property around any buildings, including buildings on neighboring properties. You are only responsible for the portion of the 100-foot zone that is on your property.

Properties without buildings are also subject to the 100-foot defensible space requirements if the property is less than 100-feet from any building on neighboring properties.

Defensible Space Zones:

Zones 0, 1 and 2 currently makeup the 100-feet of defensible space required by law (See Figure 1). Assembly Bill 3074, passed into law in 2020, requires the State's Board of Forestry and Fire Protection to develop the regulations for a new ember-resistant zone (Zone 0) within 0 to 5-feet of the building by January 1, 2023. The new Zone 0 requirements are currently under development and will have a delay in implementation, which is now expected late 2023 for new buildings and one-year thereafter for existing buildings. This may require property owners to adjust their existing landscaping, which may include reduction and/or removal of non-compliant vegetation and other items.

The intensity of wildfire fuel management varies within the 100-foot perimeter of the building, with more intense fuel reduction occurring closer to the building. Start at the building and work your way out to 100-feet or to your property line, whichever is closer.



Figure 1

Note: All fuels and vegetation within the 0 to 100-foot zone is subject to defensible space laws and regulations. This includes combustible materials, ornamental plants, cultivated landscape plants, native plants, trees, shrubs, grasses, weeds, and wildland vegetation.

Zone 0 – Ember-Resistant Zone:

Zone 0 extends 5-feet from buildings, structures, decks, etc.

The ember-resistant zone is currently not required by State law, but science has proven it to be the most important of all the defensible space zones.

However, VCFD has developed local Zone 0 requirements for all new landscaping installed after April 19, 2019 and recommends conversion of existing landscape until the new State regulations take effect.

Zone 0 includes the area under and around all attached decks and requires the most stringent wildfire fuel reduction. The ember-resistant zone is designed to keep fire or embers from igniting materials that can spread the fire to the building. The following provides guidance for this zone, which may change based on the regulations developed by the Board of Forestry and Fire Protection. See VCFD Ordinance 32 and Standard 515 for VCFD Zone 0 regulations.

- Use hardscape like gravel, pavers, concrete, and other non-combustible mulch materials.
Note: Combustible bark or mulch is prohibited in Zone 0 in accordance with VCFD Ordinance.

- Limit plants in this area to low growing, non-woody, properly maintained and watered plants. See VCFD Standard 515 for requirements. Maintain minimum 12-inch set back from buildings.
- Maintain a 6-inch vertical non-combustible zone at the bottom of exterior walls of buildings.
- Keep a minimum 3-foot clear space below any tree overhanging the roof. (VCFD Ordinance)
- Provide a minimum 6-foot clearance above any plants to eave and roof overhangs. (VCFD Ordinance)
- Remove plants underneath and adjacent to windows, doors, vents, and other building openings.
- Trim trees 5 to 10-feet away from sides of buildings. (VCFD Ordinance requires minimum 3-foot clearance to side and above any roof or eave overhang.)
- Limit combustible items (outdoor furniture, planters, etc.) on top of decks. Remove all combustible materials underneath decks.
- Relocate storage sheds and similar buildings to Zone 2. See Accessory Building section below.
- Replace combustible fencing, gates, and arbors, attached to, or located within 5-feet of the building, with non-combustible alternatives. See VCFD Ordinance regarding limitations on new combustible fencing and when retrofit is required by the VCFC.
- Consider relocating pet structures, garbage, and recycling containers outside this zone.
- Consider relocating boats, RVs, vehicles, and other combustible items outside this zone.
- Artificial and synthetic grass is prohibited in Zone 0 by VCFD Ordinance.
- Provide an approved spark arrestor or screen on all chimney outlets.

Zone 1 – Lean, Clean and Green Zone:

Zone 1 extends 30-feet from buildings, structures, decks, etc. or to your property line, whichever is closer. Zone 1 can extend to 50-feet for slopes exceeding 20% grade.

- Remove all dead plants, grass, and weeds (vegetation)
- Remove dead or dry leaves and pine needles from your yard, deck, porches, roof, and rain gutters.
- Remove all branches within 10-feet of any chimney or stovepipe outlet.
- Trim trees regularly to keep branches a minimum of 10-feet from other trees.

- Do not allow a continuous tree canopy to reach the building.
- Create vertical space between grass, shrubs, and trees.
- Relocate firewood and lumber 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, balconies, and stairs.
- Create a separation between trees, shrubs, and items that could catch fire, such as patio furniture, wood piles, swing sets, etc.
- Relocate storage sheds and similar buildings to Zone 2. See Accessory Building section below.

Zone 2 – Reduce Fuel Zone:

Zone 2 extends 30 to 100-feet out from buildings, structures, decks, etc. or to your property line, whichever is closer.

- Create vertical space between grass, shrubs, and trees. (See Figure 2)
- Create horizontal space between shrubs and trees. (See Figure 3)
- Remove fallen leaves, needles, twigs, bark, cones, and small branches. However, they may be permitted to a maximum depth of 2-inches.
- All exposed firewood and lumber piles must have a minimum of 10-feet of clearance, down to bare mineral soil in all directions.
- In continuous tree canopies, remove understory and smaller trees.

Zone 0, 1 and 2:

- Cut or mow annual grass down to a maximum height of 3-inches and remove clippings.
- All cut vegetation and debris shall be properly disposed of in accordance with local laws and regulations. Do not relocate to or dump outside the 100-foot zone.
- Use of mulch and wood chips shall comply with VCFD Standard 517.
- **Accessory Storage Buildings.** New accessory buildings install after January 1, 2023 and located within 50-feet of an applicable building on the same parcel shall be constructed of non-combustible materials or of ignition-resistant materials as required in California Building Code (CBC) Section 704A.2.

Zone 3.

Zone 3 is considered a thinning zone and is any FMZ greater than 100-feet from structures. When provided, either by conditions of development, voluntary by the property owner, or required by the Fire Department, this zone is more of a progressive thinning zone to lessen spread of fire as it approaches the primary FMZ adjacent to structures. The amount of fuel reduction and removal should take into consideration the type and density of fuels, aspect, topography, weather patterns, and fire history. Property owners are advised to check local zoning and city regulations for requirements or permits needed for expanding defensible space / fuel modification beyond Zone 2.

General Requirements for entire Parcel:

- Provide a minimum 13-foot 6-inch vertical clearance above all roads, driveways, turnouts, and turnarounds providing fire department access to buildings.
- Provide a minimum 3-foot clearance around all fire hydrants and fire water supply outlets.
- “Outbuildings” and Liquid Propane Gas (LPG) storage tanks shall have a minimum 10-feet of clearance to bare mineral soil and no flammable vegetation for an additional 10-feet around their exterior. (Reference: CCR Title 14)
- **Electrical Line Clearance.** The vertical clearance from vegetation and trees underneath overhead electrical facilities shall in accordance with the Ventura County Fire Code. No new vegetation shall be planted under or adjacent to energized power lines that, at maturity, will grow within 10-feet (3 048 mm) of the energized conductors.
- **Special Requirements.** See Ventura County Fire Code for special clearance requirements regarding detached accessory buildings, prefabricated sea cargo/metal storage containers, LPG tanks, hazardous material storage, fire protection equipment and utilities.
- **Erosion Control.** Erosion control must be considered when conducting fuel modification / clearance work and when designing / installing new landscape. Contact the local jurisdiction, typically the public works agency, to determine if any specific erosion control is required. Plants and trees selected for erosion control are still required to comply with the VCFC and Standard 515.

Plant and Tree Spacing:

The spacing between grass, shrubs, and trees is crucial to reduce the spread of wildfires. Spacing is required by State Law. The spacing needed is determined by the type and size of shrubs 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. Spacing is measure from canopy to canopy and not on-center of the truck.

See VCFD Standard 515 – Defensible Space and Fuel Modification Zones for specific requirements by Zone for plants, trees, allowable height, width, and spacing requirements.

Landscape Plans:

Installation of new landscaping and modifications to existing landscape is the starting point to make sure correct plants and trees are selected and proper spacing is provided and maintained. Please see

VCFD Guideline 416 for additional information on when landscape plans are required to be reviewed and approved by the Fire Department.

Fire Wise Landscaping:

Proper landscaping for wildfire isn't necessarily the same thing as a well-maintained yard. This type of landscaping focuses on plant characteristics, properties, and maintenance to resist the spread of fire to your buildings. The good news is that you don't need to spend a lot of money to make your landscape wildfire resilient and reduce the risk to your home. Through proper planning and routine maintenance, you can conserve water and create a beautiful landscape.

Fire-resistant does not mean fireproof! Even fire-resistant plants will burn if not well maintained. Keep your plants healthy with appropriate water, proper pruning, and removal of dead material.



Home Hardening:

An important part of defensible space is to limit the intrusion of embers and flame into the home and buildings. Property owners can take further advantage of proper defensible space by hardening their home and buildings. Areas to review and upgrade include roofs, gutters, eaves, vents, walls, siding, trim boards, windows, door openings, decks, and patio covers.

Home Ignition Zone (HIZ) Assessments: A HIZ assessment can assist the homeowner in determining what actions and items can be taken to reduce the risk from wildfires. Please contact your local Fire Safe Council regarding availability of free HIZ assessments.

Other Resources:

Ventura Regional FSC: <https://venturafiresafe.org/>

Ventura County Wildfire Collaborative: <https://vcrcd.org/vcwc/>

Cal Fire: <https://www.readyforwildfire.org/>

Sustainable Defensible Space: <https://defensiblespace.org/>

IBHS: <https://wildfireprepared.org/>

<https://ibhs.org/ibhs-news-releases/wildfire-prepared-home-launches/>

Firewise: <https://www.readyforwildfire.org/prepare-for-wildfire/firewise-communities/>