



STANDARD 515

DEFENSIBLE SPACE AND FUEL MODIFICATION ZONES

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Please note that the Fire Department assumes no liability for any damages incurred directly or indirectly as a result of any errors, omissions, or discrepancies between this standard and any applicable law. It is the sole responsibility of the person or persons conducting any work pursuant to this standard to ensure the work complies with any applicable codes, ordinances, and regulations.

CHAPTER 1 – ADMINISTRATION

1.1 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 and fire exposures from adjacent structures. Furthermore, the intent is to prevent fires from spreading to wildland fuels that may threaten to destroy life, overwhelm fire suppression capabilities, or result in large property loss. Proper installation, spacing, and maintenance of plants and landscape is one of the key elements in the survivability of a structure during a wildfire. For information regarding Prohibited Plants, Plant Reference Guide, and the Fire Hazard Reduction Program (FHRP), please visit VCFHRP.org. For questions regarding this standard, please contact the Fire Department's Fire Hazard Reduction Program Unit at 805-389-9759 or FHRP@ventura.org.

1.2 Scope. This standard provides the general requirements for the installation, maintenance, and spacing for plants, trees, and other vegetation within a defensible space and fuel modification zone (FMZ) required by Ventura County Fire Code and state law.

1.3 Applicability. Defensible Space and Fuel Modification Zones located within a State Responsibility Area (SRA), Very High Fire Severity Zone (VHFSZ) in the Local Responsibility Area (LRA), Hazardous Fire Area (HFA), or any property as determined by Fire Department. Maps of SRA and LRA VHFSZ can be viewed at CAL FIRE website.

1.4 Responsibility. Any person owning, leasing, controlling, operating, or maintaining any building in, upon, or adjoining any Hazardous Fire Area, and any person owning, leasing, or controlling any land adjacent to such buildings shall provide around and adjacent to such building an effective defensible space on the property for a distance not less than 100 feet from all portions of the building. Distances may be increased by the Fire Department because of a site-specific analysis, based on

local conditions and, when required, based on a Fire Protection Plan. Reference: Public Resource Code (PRC) 4291, Government Code (GC) 51182, and current Ventura County Fire Code.

1.4.1 Clearance Area. Property owners are required to maintain only the portion of the defensible space that falls upon their property.

1.4.2 Required Clearance. Cutting brush, plants, and trees all the way down to dirt is not required. All plants, trees, landscape, and vegetation located within the Defensible Space or (FMZ) shall comply with this standard. Ornamental landscape is not exempt from these requirements.

CHAPTER 2 – DEFINITIONS

Combustible Material. Includes seasonal and recurrent weeds, stubble, brush, dry leaves, mulch, tumbleweeds, rubbish, recyclable material, litter, or flammable materials of any kind.

Defensible Space. An area, either natural or man-made, where material capable of allowing a fire to spread unchecked has been treated, cleared, or modified to slow the rate and intensity of an advancing wildfire and to create an area for fire suppression operations to occur.

Fire Hazard Severity Zones (FHSZ). Geographical areas designated pursuant to California Public Resources Code, Sections 4201 through 4204, and classified as Very High, High, or Moderate in State Responsibility Areas (SRA) or as Local Responsibility Agency Very High Fire Hazard Severity Zones (LRA VHFHSZ) designated pursuant to California Government Code, Sections 51175 through 51189.

Fuel Modification. A method of modifying fuel load by reducing the amount of flammable vegetation or altering the type of vegetation to reduce the fuel load.

Fuel Mosaic. A Fuel Modification system that provides for the creation of islands and irregular boundaries to reduce the visual and ecological impact of Fuel Modification.

Hazardous Fire Area (HFA). Land which is covered with grass, grain, brush, or forest, whether privately or publicly owned, which is so situated or is of such inaccessible location that a fire originating upon such land would present an abnormally difficult job of suppression or would result in great and unusual damage through fire or resulting erosion and includes any location within 500 feet of a forest or brush, grass, or grain covered land, exclusive of small individual lots or parcels of land located outside of a brush, forest grass, or grain covered area. Such areas are designated by the Fire Code Official. The Fire Code Official is authorized to utilize, as references, the definition of Wildland-Urban Interface Fire Area, State SRA maps, and Local Agency Fire Hazard Severity Zone Maps designated pursuant to California Government Code, Sections 51175 through 51189, and the International Wildland-Urban Interface Code.

Ornamental Landscape. All grasses, plants, trees, and other vegetation installed by a property owner. This is usually for aesthetic purposes or privacy screening.

Wildland-Urban Interface (WUI) Area. That geographical area where structures and other human development meet or intermingle with wildland or vegetative fuels.

VCFD Defensible Space/FMZ zones defined:

Zone A: This is a limited-planting area within 30 feet of structures and slopes, not greater than 20 percent; 50 feet when slopes are greater than 20 percent.

Zone B: This is the area from outer edge of Zone A to 100 feet from structures.

Zone C: This is considered a thinning zone and is any FMZ greater than 100 feet from structures.

CHAPTER 3 – REQUIREMENTS BY ZONE

3.1 Zone A.

3.1.1 0-5 Feet from structure. Very low-growing (3-inch high), high-water-content ground cover and few small shrubs (2 feet high). No landscape mulch or wood chips. Use clear soil, rocks, gravel, or concrete. No Trees. This is a recommended no-planting zone.

3.1.2 5-30/50 feet from structure. Minimal plantings including ground cover and shrubs. Limited trees of a very fire resistive-type and additional spacing. Trees should be spaced to allow minimum 10 feet of clearance next to a structure. Also see **Fire Department FMZ Spacing Table 3.**

3.1.3 Limitations. Plants and trees identified as “Target” (undesirable plants) by the Fire Department shall not be planted within Zone A. See Fire Department Plant Reference Guide.

3.2 Zone B. Follow **Table 3 – Fire Department FMZ Spacing.**

3.3 Zone C. 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.

Table 3 on next page.

Table 3 – Fire Department FMZ Spacing

Type of Vegetation	Height	Max Area /diameter	% of Slope / Min Spacing*
Ground Cover	6 inches Max	NA	NA
Mosaic Grouping of Ground Cover (GC)	>6 - 18 inches	Groupings shall not exceed 500 sq. ft. without minimum spacing to next grouping	<20%: 2 x GC height 20%-40%: 4 x GC height >40%: 6 x GC height
Single Shrub	6 feet Max	4-foot diameter	<20%: 2 x shrub height 20%-40%: 4 x shrub height >40%: 6 x shrub height
Grouping of shrubs	4 feet Max	Groupings shall not exceed 50 sq. ft. without minimum spacing to next grouping	<20%: 20 feet 20%-40%: 40 feet >40%: Not Allowed
Single Tree	NA	NA	<20%: 10 feet 20%-40%: 20 feet >40%: 30 feet

*** Spacing Notes:**

- a. Spacing is measured canopy to canopy at maturity.
- b. Ground cover up to 3 inches high, when approved, may be installed within the required spacing between groups. If natural or annual grasses are used, they shall be mowed to a maximum height of 3-inch stubble with clippings removed.
- c. Ground cover under tree canopies: When approved, the vertical clearance to the lowest branch of the tree canopy shall not be less than three times the height of ground cover. The horizontal clearance shall be 3 feet from the trunk of the tree.

3.4 Additional Requirements.

3.4.1 Highly Flammable Trees. Highly flammable trees are not allowed, unless approved by the Fire Prevention Bureau.

3.4.2 Tree Spacing. The horizontal distance between crowns of trees and crowns of adjacent trees, overhead electrical facilities, or unmodified fuel shall not be less than 15 feet.

3.4.3 Roof Clearance. The vertical clearance distance above any roof shall not be less than 3 feet.

3.4.4 Chimney Clearance. The horizontal and vertical clearance to any chimney or heat-producing device shall not be less than 10 feet.

3.4.5 Limbing of Trees. Trees exceeding 6 feet in height shall be limbed up from the ground 5 feet or 1/3 the height of the tree, whichever is less.

3.4.6 Maintenance. All plants and trees, including dried palm fronds, shall be maintained free of deadwood, leaves, and limbs that can increase ability to ignite and/or carry fire.

3.4.7 Tree Litter. Tree litter shall not exceed 2 inches in depth underneath tree canopies.

3.4.8 Tree Canopy Clearance. Where tree canopies touch or extend past the 100-foot defensible space zone, there shall be a clear area from the edge of the tree canopy to the brush of not less than 15 feet, which may require clearance outside the 100-foot zone.

3.4.9 Roofs and Gutters. Roofs and gutters on buildings shall be maintained free of any leaves, needles, or other vegetative materials.

3.4.10 Mulch and Wood Chips. Mulch and wood chips shall comply with Fire Department Standard 517 and are not allowed within 5 feet of structures.

3.4.11 Irrigation. Irrigation is not required for any defensible space or FMZ.

3.5 Modifications. Modifications to this standard may be allowed on a case-by-case basis after review and approval of a planting and maintenance plan. Requests shall be submitted to the Fire Prevention Bureau – FHRP Unit.

CHAPTER 4 – EXISTING INSTALLATIONS

4.1 Compliance. When required by the Fire Department, existing defensible space/FMZs installed prior to the date of this standard shall require retrofitting, including thinning and or removal of plants, trees, and vegetation, to meet this standard.

4.1.1 Timing. Upon notification by the Fire Department, work to bring an existing defensible space and FMZ into compliance with this standard may be done over a four-year period. First year, an initial 30 feet from structure(s), then an additional 25 feet for each subsequent year.