

PROPERTY INSPECTION GUIDE



CAL FIRE

Office of the State Fire Marshal
Community Wildfire Preparedness & Mitigation Division
Wildfire Preparedness Program

2023 EDITION

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FOREWORD

This 2023 edition of the *Property Inspection Guide* contains standards, practices, statutes, and regulations for the mitigation of loss of life and property from wildfire in the State of California. This Guide is designed for use by fire prevention inspectors and those persons with the responsibility to conduct inspections of structures and improvements in wildfire-prone areas of the state. It was developed to provide the necessary information and procedures required to establish and maintain a uniform system to ensure fire-safe compliance by homeowners in the state's wildlands and the Wildland Urban Interface (WUI). This version contains major changes from prior editions due to revisions of the laws and regulations pertaining to the defensible space clearance requirements around all structures in and adjacent to California's wildlands. It also references changes made to the minimum wildfire fire safety building standards related to perimeters and access of all residential, commercial, and industrial building construction in the State's fire-prone areas.

Except for sample copies retained for historical or reference purposes, all copies of prior editions should be withdrawn from circulation and destroyed. Moreover, regardless of the inferences that any reader may draw from any statement in this Guide, the law must be obeyed. Thus, if there is any conflict between any statement in this Guide and any applicable statute, regulation, or order, the statute, regulation, or order shall take precedence. Applicable statutes and regulations are set forth in the STATUTES AND REGULATIONS section of this Guide.

It is expected that all personnel who conduct or supervise property inspections will be thoroughly familiar with the contents of this Guide. They should use it, refer to it regularly, and observe the principles, practices, and guidance included herein. The Guide is not to be used as a substitute for proper training but as a reference for personnel already familiar with the subject.

SECTION I

1. INTRODUCTION

State law requires that all structures within or adjacent to hazardous vegetative fuel conditions will have certain minimum defensible space clearances surrounding their exterior. The law referenced is Public Resource Code (PRC) 4291. This law was originally enacted in the 1960s to prevent fires that originated in structures or on their premises from spreading into forested areas. It included among other requirements, a minimum of 30 feet clearance of flammable vegetation surrounding the exterior of a structure, which could be increased to 100 feet if certain hazardous conditions were present. As California's population dramatically increased post WWII, more people moved from population centers into the state's wildlands creating the Wildland Urban Interface (WUI). This increased development in fire-prone areas; increased the hazards to life and property from wildfires. The history of damaging fires has shown the most devastating danger is the risk of fire originating in the wildland and transmitting itself into improved areas. As more and more large and damaging fires occurred across the state in the latter third of the century, it became clear that new regulations and additions to existing statutes needed to be enacted to mitigate the loss of life and property from wildfire.

Major changes to PRC 4291 were enacted in 2005, accompanied by additions in 2008 and 2009. These changes expanded the defensible space clearance requirement around structures from 30 feet to 100 feet and created the formation of two zones around a structure. The first zone, 30 feet immediately surrounding the structure, is considered a firebreak with all readily flammable vegetation removed. The second zone extending 30 feet from the structure to 100 feet is a reduced fuel zone. Part of the PRC 4291 law changes requires that the California Department of Forestry and Fire Protection (CAL FIRE) develop and post on the web a guidance document for use by homeowners in obtaining proper defensible space in compliance with the law. That guidance document is found in its entirety in the Appendix section of this manual. PRC 4291 does not apply to a specific agency jurisdiction but does apply to the specific fuel conditions identified in the opening section of the law.

In addition to the changes made to PRC 4291, the State enacted PRC 4290 in 1965 which set fire-safe standards for all building permits issued in the State Responsibility Area (SRA) after January 1, 1991. Known as the SRA Fire Safe Regulations, these standards included emergency fire equipment access, street identification and building numbering, emergency firefighting water supply, and fuel modification. These regulations were updated in 2021 and are further discussed in this Guide. Recent changes to the California Building Code (CBC) and the California Fire Code (CFC) have also set new standards for Firewise building in the state's SRA including building components that resist ignition on the roof, siding, eaves, decks, balconies, and windows.

The primary focus of property inspections should be on the education and compliance of the homeowner with PRC 4291, however, it is incumbent upon the inspector to point out and address other hazardous conditions observed during the inspection. These include the identification and mitigation of potential ignition sources, the Fire Safe Regulations contained in PRC 4290, and the Firewise Building Standards found in the CBC Chapter 7A and CFC Chapter 49 among others. Inspectors should also be familiar with fire-resistive landscape techniques and homeowner wildfire disaster preparedness such as Ready-Set-Go (See Appendix A).

2. PROPERTY FIRE PREVENTION INSPECTIONS

2.1 Fire Prevention Inspections

A key goal of the Department's fire prevention program is to educate the public of the state in measures they can take to prevent the ignition and spread of unwanted human-caused fires. Emphasis should be placed on life safety, loss reduction, the prevention of large and damaging fires, and to provide firefighter safety. One of the necessary tools utilized to accomplish this goal is the structural fire prevention inspection, which is a fire prevention engineering activity. They are also the first step in the law enforcement process, should that become a necessity. Coordinated with other ignition management activities, the inspections are aimed at eliminating or reducing fire hazards and risks by changing the environment surrounding the structure into a defensible space.

2.2 General Guidelines

The success of the program depends on the participation of all personnel, including fire prevention, fire control, and resource management staff. All contacts should be handled so the public will understand and participate in the fire prevention efforts. Public participation leads to reductions in total wildfire costs and losses. To the extent resources are available, local inspection programs should concentrate on areas that have the greatest potential for large and damaging fires with the accompanying loss of life and property.

All personnel involved in inspection activities should have a department identification card, nameplate, uniform, and badge if issued to facilitate proper identification. Unit fire prevention plans should contain local inspection policies and procedures, including minimum training requirements for property inspectors.

All inspections conducted for the purpose of ascertaining compliance with the State Forest and Fire Laws should be recorded on the Notice of Defensible Space Inspection (LE-100a -Appendix B). This provides uniform law enforcement a record for timely follow-up, public education, standardized written notice, and documentation of inspection activity for program effectiveness and direction.

2.3 Inspection Programs

Units should develop yearly inspection programs that concentrate on areas that have the greatest potential for large and damaging fires with the accompanying loss of life and property. These programs should be outlined and coordinated under the Unit's Fire Prevention Plan. The use of Department Inspectors, Volunteers in Prevention, as well as permanent and seasonal firefighting personnel is a key component in accomplishing the goal of each Unit's inspection program. Provisions must be made to ensure all inspectors involved in the program receive minimum training and are thoroughly familiar with applicable laws and regulations, and the contents of this Guide. Programs should include advance notice to the homeowner, the scheduling of pre- and early-season field inspections, the carrying out of timely follow-up inspections, and provisions for law enforcement follow-up activities when necessary.

2.4 Pre-Inspection Program

A pre-inspection program can improve compliance, foster good public relations with homeowners, reduce law enforcement action, and reduce overall staffing and cost requirements. Pre-inspection activities include media notification of potential inspection areas, mail-out information, and homeowner self-inspection mail-outs with a return of compliance confirmation. A pre-inspection program should include the following considerations to be effective:

- Time of year (emphasize the spring months).
- Areas with large numbers of absentee ownership, i.e., summer homes.
- Limited availability of personnel, including fire crews.

- Emphasis placed on very high and critical fire hazard severity areas where there is a large potential for property loss.

Advance notice mailers and self-inspection forms used in combination with Departmental inspections produce the most effective results for the amount of time and work invested. The advance notice should include the following:

- The necessity of fire hazard reduction.
- Notice that the Department will be contacting the homeowner to make a fire prevention inspection and the approximate date.
- What the inspection will consist of?
- The measures necessary for the owner to complete to adequately reduce the fire hazards. This can be keyed to an enclosed Fire Law Excerpts pamphlet or other attachment.
- Agency contact, address, and phone number for more information.
- Self-inspection form with a return address.

2.5 Authority to Inspect

Authority for Departmental personnel to enforce the State Forest and Fire Laws is contained in PRC 4119. Agency personnel may inspect all properties, except the interior of structures, subject to the States Forest and Fire Laws, for the purpose of ascertaining compliance with such laws. United States Forest Service (USFS) personnel that can do routine inspections for the reduction of fire hazards around buildings as described under PRC 4291 must be designated, in writing, by the Director of CAL FIRE or his designee. This designation allows certain USFS employees to act as authorized agents for CAL FIRE to do routine fire inspections as specified in the California Master Cooperative Wildland Fire Management and Stafford Act Response Agreement (CFMA). These inspections would be conducted on private lands (SRA) contained within the USFS Direct Protection Area (DPA). If a violation of state law is found, USFS personnel should follow the procedure outlined in their local operating agreement with the CAL FIRE Unit that administers their forest.

2.6 Legal Considerations

Though PRC 4119 authorizes Department inspectors to conduct property inspections, there are certain restrictions that apply. These are based on the property owner's expectation of privacy and protection from unreasonable searches as stated in the 4th Amendment of the Constitution of the United States. Inspectors may enter private property and attempt to contact the homeowner at the property's front entrance. Once permission has been requested and granted the inspector may enter the side and backyard to freely conduct the inspection. Without the homeowner's permission, the inspector may only observe and note violations of PRC 4291 from the front entranceway, the front sidewalk, and the adjoining street. If the inspector has consented to inspect an adjoining property and can freely observe the neighboring property, those observations are also permissible.

2.7 Interior Structure Inspections

PRC 4291 does not authorize CAL FIRE and USFS personnel to inspect the interior of a structure. Local fire agencies or CAL FIRE under a local government contractual agreement may have the authority and should be encouraged to inspect single-family structures and business interiors upon request of the owner.

2.8 Liability

If fire law violations are observed, or significant hazards or risks are evident, the violations and hazards should be recorded on an appropriate inspection form. Corrective information, such as handout material, should be provided to the homeowner to facilitate correction and compliance. The homeowner should

understand that they are responsible for any fire that escapes their control or property. Explain that if a fire should start on their property, because of certain hazards, and spread to a neighbor's property, the neighbor may have civil recourse for damages through the courts. In addition, the wildland fire agency has the authority to recover suppression costs and the occupant may face criminal charges for negligence in the cause of the fire.

3. PROPERTY FIRE PREVENTION INSPECTION SCOPE

3.1 General Scope

The primary focus of property inspections is the defensible space clearance requirements set forth in PRC 4291. All structures in fire-prone areas of the state are covered under the statute including all structures in the SRA. The definition of a building/structure is further defined in Section 3.3.1. These requirements are key elements; in providing a defensible space for a structure from an encroaching wildfire, minimizing the possibility that a fire in a structure or its surroundings will spread to the wildland, and for a safe working environment for firefighters. Property inspections should also be used to identify and mitigate potentially hazardous conditions or practices, which could lead to a fire ignition on the homeowner's property. Examples are unsafe burning practices, cutting, welding, or grinding without proper clearance, the use of gasoline-powered equipment without a spark arrester, etc.

In addition, property inspections may be used to advise property owners of additional steps they should take to further fire-safe their home and property including bringing their home up to the fire-safe standards required for new homes built under PRC 4290 regulations and the ignition-resistant building standards included in the CBC and CFC. Both PRC 4290 and Firewise building standards are discussed in further detail in Section III.

3.2 Defensible Space Concept

The term "Defensible Space" was first coined in the 1980 publication *Fire Safe Guide for Residential Development in California*. It now provides the cornerstone of the Board of Forestry and Fire Protection's (BOF) Fire Safe Regulations, and CAL FIRE's wildland fire prevention planning program. Defensible space as defined by the BOF; *the area within the perimeter of a parcel, development, neighborhood, or community where basic wildfire protection practices are implemented, providing the key point of defense from an approaching wildfire or defense against encroaching wildfires or escaping structure fire. The area is characterized by the establishment and maintenance of emergency vehicle access, emergency water reserves, street names and building identification, and fuel modification measures.*

Good defensible space around a structure provides firefighters a safe working environment to protect the structure from an encroaching wildfire as well as minimizing the chance that if the structure were on fire, the fire would not escape into the surrounding wildland. A defensible structure is a building that, besides having adequate clearances to hazardous fuels, incorporates Firewise construction components such as ignition-resistant roofing, siding, and decking, enclosed eaves, metal screened vents, and multi-paned windows. Defensible space is addressed in various areas of the state statutes and regulations including PRC 4290, PRC 4291, Title 14 California Code of Regulations (CCR) 1270.00 – 1276.03, 1299.01 – 1299.05, the CBC, the CFC, and the Health and Safety Code (HSC).

3.3 Fuel Breaks and Fuel Modification Around Structures

3.3.1 The Law

The law, which requires 100ft of defensible space clearance around a structure, is PRC 4291. It is further defined by the BOF's 'General Guidelines for Creating Defensible Space' (BOF General Guidelines) and Title 14 CCR 1299.01 – 1299.05. The clearance requirement is divided into two zones; a fuel break of 30ft immediately surrounding the structure (Zone 1), and a reduced fuel zone starting at 30ft and extending to 100ft (Zone 2). The law does not require a homeowner to extend the clearance beyond the property line, so the requirement is to 100ft or the property line, whichever comes first. In addition, the law requires all limbs be removed

within 10ft of chimney or stove outlets, all trees and shrubs adjacent to and overhanging the roof be maintained free of dead or dying wood, and the roof and all structural surfaces susceptible to ignition by flying embers be kept free of any leaves, needles, or vegetative material.

The law applies to all buildings or structures which are defined in the 14 CCR 1299.02 as “Anything constructed that is designed or intended for support, enclosure, shelter, or protection of persons, animals, or property, having a permanent roof that is supported by walls or posts that connect to or rest on the ground.” Buildings less than 120 square feet in size and not used for human habitation within Zones 1 and 2 are considered outbuildings. The clearance requirements for outbuildings are discussed in Section 3.3.14 of this Guide.

PRC 4291 is required year-round whenever flammable vegetative conditions exist and applies to any building or structure on or adjacent to land covered with flammable material including grass, brush, and forest. This includes all the SRA in the State as well as select Local Responsibility Areas (LRA) as just described.

PRC 4291 States in part (the entire text of the law can be found in Appendix C):

- (a) *A person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, brush-covered lands, grass-covered lands, or land that is covered with flammable material, shall at all times do all of the following:*
 - (4) *Maintain defensible space of 100 feet from each side and from the front and rear of the structure, but not beyond the property line, except as provided in subparagraph (B). The amount of fuel modification necessary shall consider the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels shall be maintained and spaced in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. This subparagraph does not apply to single specimens of trees or other vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation or to interrupt the advance of embers toward a structure. The intensity of fuels management may vary within the 100-foot perimeter of the structure, with more intense fuel reductions being utilized between 5 and 30 feet around the structure, and an ember-resistant zone being required within 5 feet of the structure, based on regulations promulgated by the board, in consultation with the department, to consider the elimination of materials in the ember-resistant zone that would likely be ignited by embers. Consistent with fuels management objectives, steps should be taken to minimize erosion, soil disturbance, and the spread of flammable nonnative grasses and weeds. For purposes of this subparagraph, “fuel” means any combustible material, including petroleum-based products, cultivated landscape plants, grasses, and weeds, and wildland vegetation. Remove that portion of a tree that extends within 10 feet of the outlet of a chimney or stovepipe.*
 - (5) *Maintain a tree, shrub, or other plant adjacent to or overhanging a building free of dead or dying wood.*
 - (6) *Maintain the roof of a structure free of leaves, needles, or other vegetative materials.*
- (b) *A person is not required under this section to manage fuels on land if that person does not have the legal right to manage fuels, nor is a person required to enter upon or to alter property that is owned by any other person without the consent of the owner of the property.*
- (e) *The board, in consultation with the State Fire Marshal, shall develop, periodically update, and post on its internet website a guidance document on fuels management pursuant to this chapter. The guidance document shall include, but not be limited to, regionally appropriate vegetation*

management suggestions that preserve and restore native species that are fire resistant or drought tolerant, or both, minimize erosion, minimize water consumption, and permit trees near homes for shade, aesthetics, and habitat; and suggestions to minimize or eliminate the risk of flammability of nonvegetative sources of combustion, such as woodpiles, propane tanks, decks, outdoor furniture, barbecue equipment, and outdoor fire pits. As used in this section, "person" means a private individual, organization, partnership, limited liability company, or corporation.

3.3.2 Regulations

The regulations established for the implementation of PRC 4291 in the SRA are found in the California Code of Regulations, Title 14, Sections 1299.01 – 1299.05 (14 CCR 1299). The entire text of the 1299 Regulations is included in the Appendix Section C of this manual.

3.3.3 Enforcement

A violation of PRC 4291 is an infraction, punishable by a fine. Repeated violations increase the fine, and under certain conditions increase the crime to a misdemeanor. Property inspectors provide the first steps in the enforcement of PRC 4291. They do this through notification to the homeowner of violations, and through documentation of observed violations which will be used later by the Department's Law Enforcement Section for further enforcement actions. Though most property inspectors generally are not involved or authorized in the issuance of citations for noncompliance with the PRC, they should be aware of the legal consequences to a homeowner who fails to abide by the statute. Encouragement to the homeowner to abide with the statute should be from the aspect that it is for their life safety and the protection of their home and property from fire.

PRC 4291.1 States:

- (a) Notwithstanding Section 4021, a violation of Section 4291 is an infraction punishable by a fine of not less than one hundred dollars (\$100), nor more than five hundred dollars (\$500). If a person is convicted of a second violation of Section 4291 within five years, that person shall be punished by a fine of not less than two hundred fifty dollars (\$250), nor more than five hundred dollars (\$500). If a person is convicted of a third violation of Section 4291 within five years, that person is guilty of a misdemeanor and shall be punished by a fine of not less than five hundred dollars (\$500). If a person is convicted of a third violation of Section 4291 within five years, the department may perform or contract for the performance of work necessary to comply with Section 4291 and may bill the person convicted for the costs incurred, in which case the person convicted, upon payment of those costs, shall not be required to pay the fine. If a person convicted of a violation of Section 4291 is granted probation, the court shall impose as a term or condition of probation, in addition to any other term or condition of probation, that the person pay at least the minimum fine prescribed in this section.*
- (b) If a person convicted of a violation of Section 4291 produces in court verification prior to imposition of a fine by the court, that the condition resulting in the citation no longer exists, the court may reduce the fine imposed for the violation of Section 4291 to fifty dollars (\$50).*

3.3.4 Board of Forestry and Fire Protection General Guidelines for Creating Defensible Space

Section (e) of PRC 4291 requires the BOF to develop and post on the Internet, a guidance document for homeowners on the proper fuel management methods to obtain compliance with the statute. Inspectors shall use these Guidelines along with the regulations found in 14 CCR

1299.01 – 1299.05 (Appendix C) as a standard when inspecting a property for compliance with the PRC.

3.3.5 Defensible Space Fuel Break

Important Note:

Zones 1 and 2 currently make up the 100 feet of defensible space required by law. Assembly Bill 3074, passed into law in 2020, requires a third zone for defensible space. This law requires the Board of Forestry and Fire Protection to develop the regulation for a new ember-resistant zone (Zone 0) within 0 to 5 feet of the home.

The intensity of fuels management may vary within the 100-foot perimeter of the structure, with more intense fuel reductions being utilized between 5 and 30 feet around the structure, and an ember-resistant zone being required within 5 feet of the structure, based on regulations promulgated by the board, in consultation with the department, to consider the elimination of materials in the ember-resistant zone that would likely be ignited by embers.

As required by PRC 4291, a defensible space around a structure consists of 100ft of flammable fuel reduction and removal. This 100ft is divided into two zones called Zone 1 and Zone 2. Zone 1 extends out in all directions from the structure 30ft or to the property line whichever comes first. It consists of a fuel break where all the hazardous flammable vegetation and fuel have been removed. It is also referred to and characterized as the ‘Lean and Clean’ zone or the ‘Home Defense Zone’. Zone 2 extends out from 30ft to 100ft or the property line, whichever comes first. It is commonly referred to as the ‘Reduced Fuel Zone’. This area is characterized by the removal of dead fuel, the elimination of ladder fuels, and the breaking up of the continuity of the living fuel. The overall concept of the 100ft is that a fire entering the space will decrease its intensity through the Reduced Fuel Zone and die out upon reaching the 30ft fuel break. This reduces the chance of direct flame contact on the building and reduces the intensity of radiated heat from the approaching wildfire. It also slows the rate of spread, reduces flame lengths, reduces the duration of heat, and decreases the overall heat which makes a much safer environment for firefighters to work in.

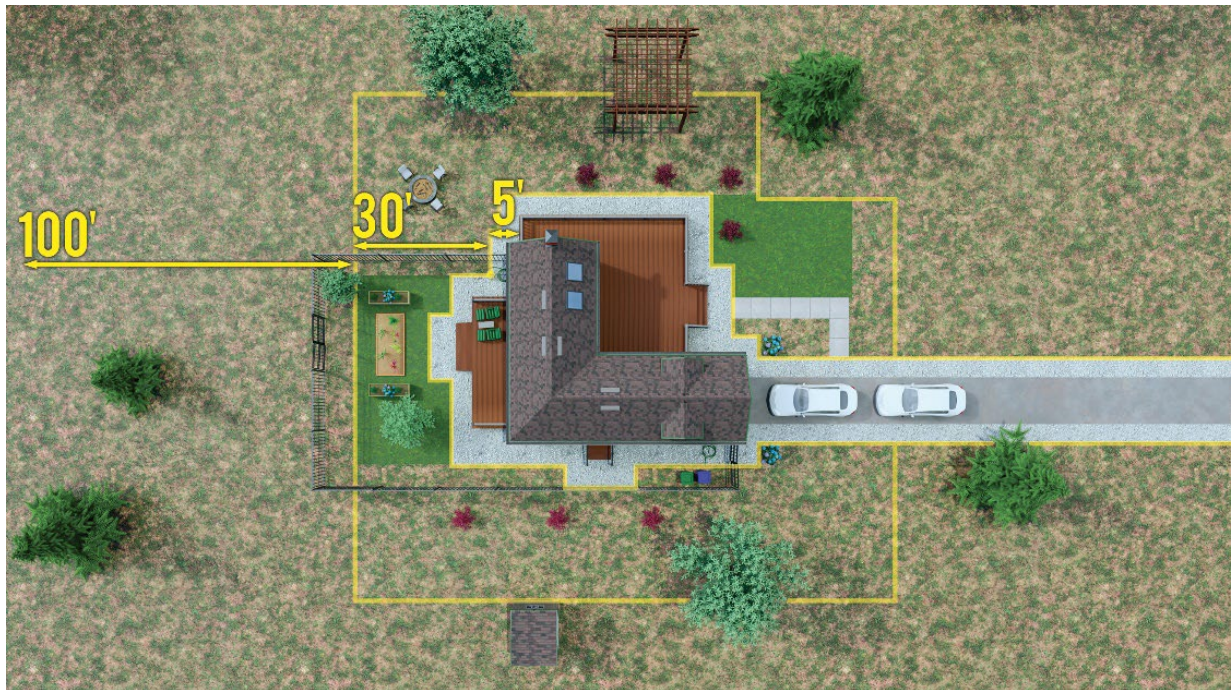
There are three basic techniques a homeowner should use to achieve a defensible space fuel break around their property. These are fuel removal, fuel reduction, and type conversion. These also are referred to as the 3 R’s of defensible space; Removal, Reduction, and Replacement.

Fuel removal is most commonly used in Zone 1 to eliminate all hazardous fuels near the structure. Though it is recommended that all flammable native vegetation and highly flammable ornamental vegetation be removed in this area, individual specimen trees or shrubs may be kept as long as this vegetation has had all dead material removed and it cannot readily transmit fire to the structure or other adjacent vegetation. Periodic maintenance of these trees and shrubs is required to provide adequate fire safety.

Type conversion is another technique for achieving a fire-resistive fuel break in Zone 1. This includes the removal of highly flammable vegetation and replacement with green lawns, well-irrigated low-volume herbaceous plants, or nonflammable landscaping such as gravel, brick, or rock.

Fuel reduction is most commonly used in Zone 2. It is characterized by the removal of all dead and downed brush and trees, the thinning of all species to break up the fuel continuity, the elimination of ladder fuels, and the trimming up of all living fuels. Fuel reduction means the

arranging of trees, shrubs, and other fuel in such a way that it is difficult for the fire to transfer from one fuel source to another. The requirement for reduction will be greater for those properties with steeper terrain, larger and denser fuels, highly volatile fuels, and areas subject to frequent fires.



3.3.6 Zone 1 Clearance Requirements

In general, PRC 4291 requires the removal of all dead or dying standing and lying vegetation within 30ft of any building or structure and on its roof and deck surfaces. It also requires the removal of all flammable and other combustible growth (BOF General Guidelines). Exceptions include single specimens of living flammable vegetation, logs, and stumps, ground cover for prevention of soil erosion, and woodpiles as outlined in Sections 3.3.8, 3.3.11, 3.3.13, & 3.3.17. Specific fuel removal provisions apply to vegetation overhanging and adjacent to the structure, fuel accumulations on structural surfaces, and special hazardous fuels as specified in Sections 3.3.9, 3.3.10, 3.3.12 & 3.3.16.

3.3.7 Zone 2 Clearance Requirements

The fuel treatment requirements for the **Reduced Fuel Zone**, 30ft to 100ft, depending on the slope, vegetation type (trees, brush, grass), and the fuel characteristics (fuel compaction, chemical content, etc.) present. Two methods of fuel treatment, or a combination of both apply. **Fuel Separation** method should be used where there is an intermixing of fuel types. Where there is a stand of trees the **Continuous Tree Canopy** method should be used. In all cases, the removal of all dead and dying surface and aerial fuels is required, however, surface litter may be retained to a maximum depth of 3 inches, and grass and forb stubble to a maximum height of 4 inches. An exception for standing dead trees referred to as ‘snags’ is permitted provided they are spaced no more than one per acre, are well spaced from other vegetation, and cannot fall on the structure or across the roadway/driveway.

The **Fuel Separation** method requires a minimum spacing of fuels from 4ft to 40ft in all directions, both horizontally and vertically. The spacing is based on the slope, fuel type, and

fuel size. For purposes of establishing size, fuels of similar type growing in groups no larger than 10ft in total foliage width are treated as a single plant. Standing grass and forbs should not exceed 4 inches in height.

Plant and Tree Spacing

The spacing between grass, shrubs, and trees is crucial to reduce the spread of wildfires. The spacing needed is determined by the type and size of the brush 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.

Vertical Spacing

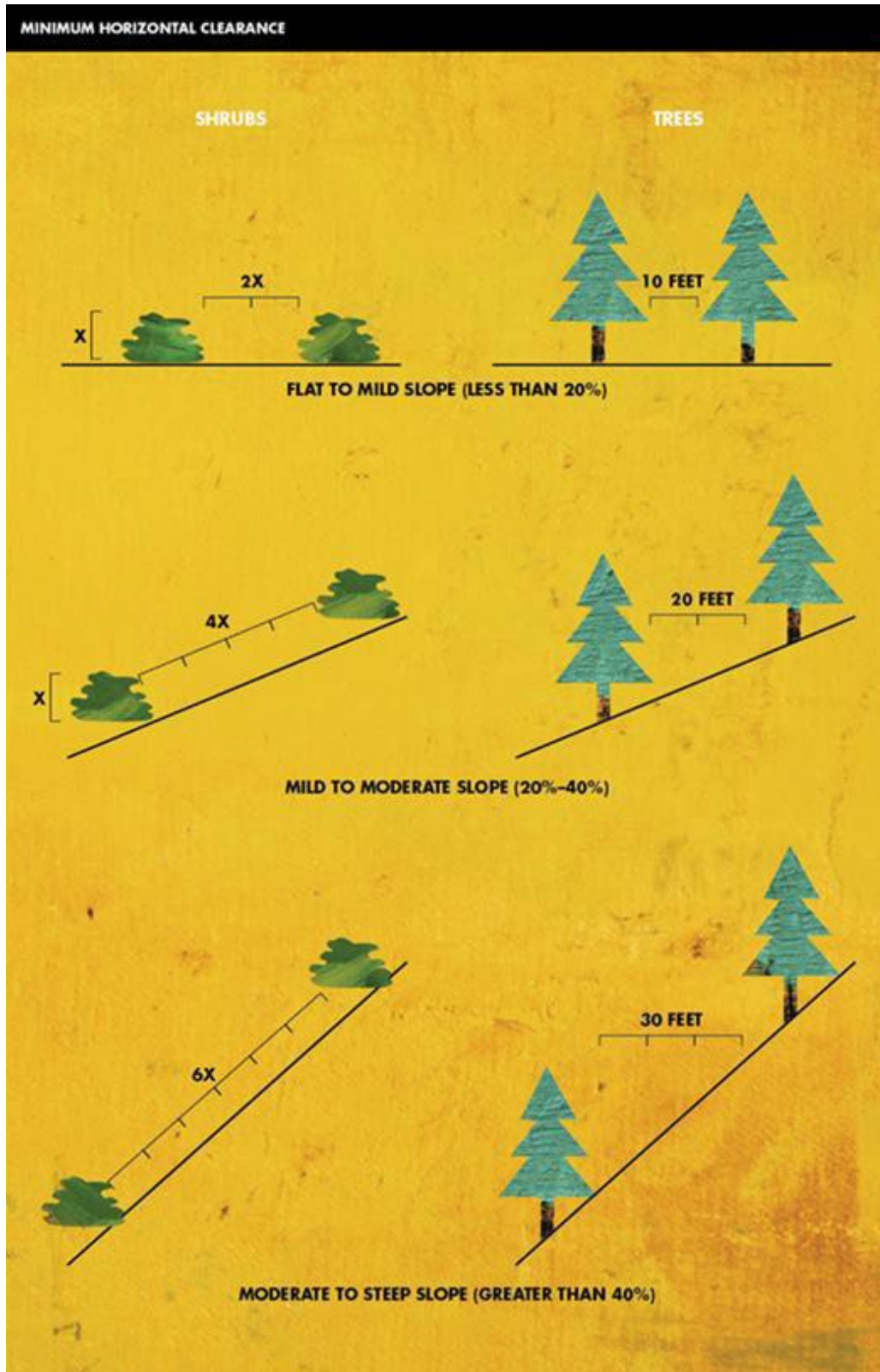
- Remove all tree branches at least 6 feet from the ground.
- Allow extra vertical space between shrubs and trees. Lack of vertical space can allow a fire to move from the ground to the brush to the treetops like a ladder. This leads to more intense fire closer to your home.
- To determine the proper vertical spacing between shrubs and the lowest branches of trees, use the formula below.



Example: A five-foot shrub is growing near a tree. $3 \times 5 = 15$ feet of clearance needed between the top of the shrub and the lowest tree branch.

Horizontal Spacing

Horizontal spacing depends on the slope of the land and the height of the shrubs or trees. Check the chart below to determine spacing distance.



The **Continuous Tree Canopy** method requires the removal of surface fuels greater than 3 inches in height and the removal of lower tree limbs a minimum of 6ft and up to 15ft. For trees smaller than 18ft, the lower 1/3 of the limbs should be removed. Slope and fire danger are the determining factors in limb removal at the upper end of the scale. Single specimens of trees or other vegetation may be retained provided they are well-spaced, well-pruned, and do not create a condition that allows fire to spread to other vegetation or to the structure.



3.3.8 Single Specimens of Flammable Vegetation

PRC 4291 allows an exception for single specimens of flammable vegetation within Zone 1 provided they are well spaced, well pruned, and do not provide a condition that allows fire to spread to other vegetation or to the structure itself.



3.3.9 Overhanging and Adjacent Vegetation

PRC 4291 requires that all trees, shrubs, and vegetation overhanging the roof, and adjacent to its siding and windows be maintained free of any dead or dying limbs, branches, or other vegetative material. Additionally, flammable vegetation and material that could catch on fire shall be removed below and adjacent to any combustible deck, balcony, and stair (14 CCR 1299.03).



3.3.10 Roof and Structural Surfaces

PRC 4291 requires that all roofs and gutters be maintained free of flammable debris. Additionally, flammable debris and materials must be removed from on and below structural surfaces vulnerable to ignition from flying embers including combustible decks, balconies, and stairs. Leaves and needles fall throughout the year and homeowners need to schedule periodic maintenance of their roofs, decks, stairs, and balconies to prevent any flammable debris accumulation. Special attention should be taken during the fall and after wind events. Leaf and needle accumulation provide ideal fuel receptors for flying embers during a wildfire.



3.3.11 Logs and Stumps

The Board of Forestry (BOF) General Guideline allows logs and stumps embedded in the soil within both Zone 1 and Zone 2 to remain provided they are of sound wood and isolated from other vegetation and the structural surfaces of a building. Logs and stumps that are decaying and display punky surface materials should be removed.



3.3.12 Chimney and Stovepipe Outlets

PRC 4291 requires the removal of the portion of any branch that extends within 10ft of the outlet of any chimney or stovepipe.



3.3.13 Woodpiles

PRC 4291 identifies exposed woodpiles as a fuel for the purpose of fuel reduction around a structure. 14 CCR 1299.03 requires that woodpiles be located outside of Zone 1. Woodpiles within Zone 2 must have a minimum of 10ft of clearance around their exterior to bare mineral soil. Should woodpiles need to be located within Zone 1, such as properties that do not extend past 30ft to the property line, woodpiles should be totally covered with a fire resistive material to prevent flying brands from entering and igniting the pile (14 CCR 1299.03). On properties that are located on hillsides, it is recommended that the woodpile be located on the uphill side of the structure. This is due to fire's natural tendency to travel uphill.



3.3.14 Outbuildings

14 CCR 1299.02 defines an outbuilding as any structure less than 120 square feet in size and not being used for human habitation. The minimum clearance requirements around an outbuilding are 10ft clearance to bare mineral soil and the elimination of all flammable vegetation 10ft from the structure's exterior surfaces (14 CCR 1299.03). Additionally, roof surfaces and gutters should be maintained free of all flammable materials.



3.3.15 LPG Tanks

14 CCR 1299.03 requires that all LPG storage tanks have 10ft minimum clearance to bare mineral soil and the elimination of all flammable vegetation 10ft in all directions from their exterior surface. The 2019 CFC 6104.3 requires that all stationary LPG tanks (propane and butane), 125 to 500 gallons of storage, should be located at least 10 feet from any structure, lot line, or public way.



3.3.16 Other Flammable Debris and Material

PRC 4291 identifies all combustible material as fuel including petroleum-based products. All fuel hazards should be removed or properly covered/enclosed in Zone 1. This includes, but is not limited to wood scrap piles, leaf piles, lawn clippings, cardboard boxes, uncovered garbage containers, etc. Items such as flammable furniture, swing sets, gazebos, unattached decks, etc. should have an effective separation from flammable vegetation.



3.3.17 Special Concerns

Homeowners who do fuel reduction activities should be made aware of Local, State, and Federal environmental laws. They should also be aware of permits they may need to obtain. Environmental protection laws include and are not limited to; threatened or endangered species, water quality, air quality, and cultural/archeological resources. Tree removal permits may be required in certain local jurisdictions, and CAL FIRE requires compliance with Public Resources Code Chapter 8 to remove trees that will be used for commercial purposes.

The requirement of fuel removal must be balanced with the need to prevent soil erosion, soil disturbance, and the introduction of non-native invasive plants. Homeowners should keep soil disturbance to a minimum on steep or erosive soils. They should use soil erosion control techniques such as covering exposed disturbed soil areas, minimizing the use of heavy equipment, keeping clear of streams, drainages, and riparian areas, and only using mobile equipment during dry conditions. PRC 4291 allows the use of ground covers for soil erosion prevention in both Zone 1 and 2 provided they are kept free of dead or dying materials.

3.4 Fire Hazards and Ignition Sources

One of the goals of the property inspection is the mitigation of fire ignitions on the homeowner's dooryard premises. During the inspection, it is important that the inspector look for and note unsafe practices, hazardous conditions, and violations of the States Forest and Fire Laws that could lead to the ignition of a fire on the homeowner's property. The following are common homeowner practices and conditions that should be closely observed and noted by the inspector.

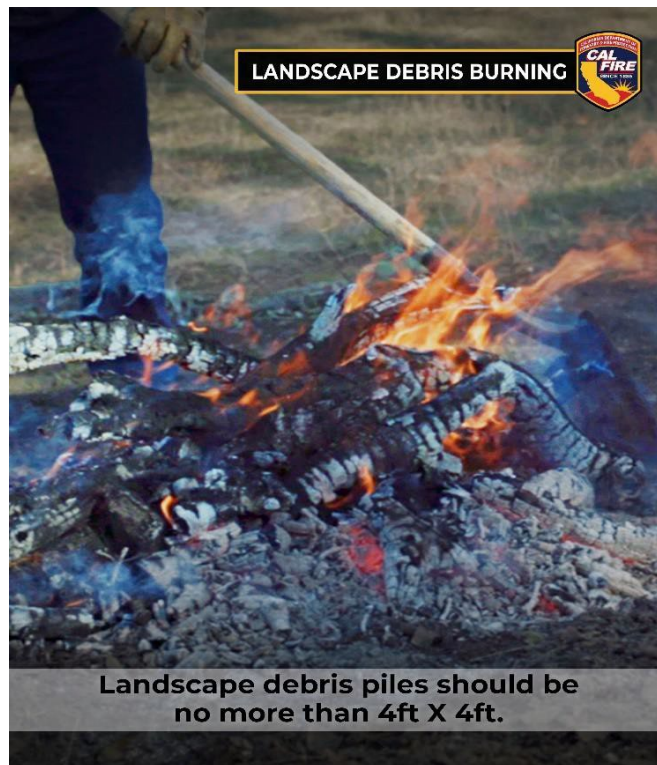
3.4.1 Debris Burning

Homeowners must obtain the required burn permit prior to any burning on their property and only burn according to the terms of the burning permit (PRC 4423). CAL FIRE Residential Burn Permits (LE-62A) are available online at <https://burnpermit.fire.ca.gov/>. They must also abide by Local Air District regulations and burn only on Declared Permissive Burn Days and during the

permitted specified hours. Most local regulations only permit the burning of natural vegetation and untreated lumber. In no case should burning take place during hot, dry, or windy conditions. Most areas of the State suspend burning permits during the peak of the fire season. The regulations concerning safe dooryard burning require:

- Piles be constructed no larger than 4ft in diameter.
- Piles should not be located under overhanging tree limbs.
- Piles must have 10ft of clearance to bare mineral soil around their exterior.
- An adult must be in attendance at all times.
- There must be a water source and shovel available at the burn site.

Many of the Air Pollution Control Districts in the state prohibit the use of incinerators. Some give exceptions for certain conditions such as lack of rural trash pickup and higher elevation burn locations. **The inspector should be familiar with all the local conditions and restrictions in their area.** Incinerator burning requires a burn permit and the same terms of burning as open piles, with the additional requirement of a screen constructed of a nonflammable material, with a no greater than 1/4-inch mesh, over the top of the incinerator to prevent the escape of sparks and embers (PRC 4446).



3.4.2 Campfires and Cooking Fires

Permits are not required for homeowners using a campfire on their own property. Homeowners must practice fire safety, however, as they are liable if a fire escapes their control.

- Always clear a minimum of 5 feet to bare soil in all directions around the fire pit.
- Always completely extinguish the fire before departing (PRC 4432).
- To properly extinguish, drown the fire with water while mixing the ashes with soil.
- Feel the ashes to make sure they are out.



3.4.3 Proper Disposal of Ashes

Homeowners should be especially careful when cooking outdoors. Charcoal briquettes and fireplace ashes should be extinguished by dumping them into a metal bucket and soaking them in water. Charcoal briquettes can hold heat for 24 hours and longer if left unextinguished.

3.4.4 Spark Arresting Screen on Chimney and Stovepipe

Chimney and stovepipe outlets should be equipped with a spark-arresting screen of a minimum ½' wire mesh screen to prevent sparks and embers from exiting and falling onto the roof surface (2022 CBC 2113.9.2).



3.4.5 Mechanical Equipment Use

When internal combustion engine equipment is operated off-road or near dry vegetation, legal spark arresters are required on their exhaust system to prevent the expulsion of sparks. Examples of internal combustion engines requiring spark arresters are lawnmowers, chainsaws, weed trimmers, generators, motorcycles, off-highway vehicles, agricultural equipment, and many types of construction equipment (PRC 4442).



To ascertain if a spark arrester is legal, the inspector should look the model up in the United States Department of Agriculture (USDA) Spark Arrester Guide. Consult the manufacturer's guide for proper maintenance procedures and intervals. Do not assume that if a piece of equipment is new it has a spark arrester attached as it is not a requirement in the State to sell them with one installed. It is required that the equipment have a written notice that to operate the equipment under certain conditions one must be attached (PRC 4442.5). Spark arresters with screens should be visually inspected to ensure they have no holes larger than 0.232" in diameter or are otherwise burned out. Retention-type arresters have clean-out plugs or bands that allow the operator to periodically clean them out

of any built-up carbon. The inspector should direct the operator to remove the plug or band to ensure carbon has not built up to the point that the arrester is full and thus nonfunctioning. For additional information on spark arresters, the inspector should consult the Industrial Operations Fire Prevention Field Guide and the USDA Spark Arrester Guide.

In addition to the requirement for spark arresters, portable gas-powered tools such as chainsaws require that a serviceable fire extinguisher and a serviceable round point shovel with a minimum overall length of 46in be within 25ft of the operating area (PRC 4431). This requirement is specific to the time of year burn permits are required in that area.

Inspectors should advise homeowners on the dangers of metal cutting blades and exhaust systems on their lawnmowers and weed trimmers. Metal cutting blades on lawnmowers are a fire hazard. On hot, low-humidity, summer days, metal blades striking rocks or other metal while mowing can produce sparks which can readily ignite dry vegetation. Grass-cutting activities utilizing mowers with metal cutting blades should be conducted in the morning hours prior to 10:00 AM.

Inspectors should encourage homeowners to use nylon-string trimmers rather than lawnmowers to cut dry weeds and grass due to their inherent fire causing problems.

An additional hazard of mowers and push trimmers with cutting decks is the build-up of chaff around the pulley system. If the chaff is not cleaned out regularly, the compaction around the pulley and belt can be ignited by frictional heating causing the equipment to catch fire.

3.4.6 Metal Cutting, Welding, and Grinding

Metal cutting, welding, and grinding in and around dry vegetation is very hazardous due to thrown sparks and molten metal. For this reason, most local Units require burn permits for this type of activity in the SRA. CAL FIRE General Burn Permits (LE-5) are available online at burnpermit.fire.ca.gov. The area of operation must have a minimum 10ft clearance of all flammable material in all directions, and there must be a serviceable round point shovel with a minimum overall length of 46in and a backpack pump water-type extinguisher within the immediate area (PRC 4427). This requirement is specific to the time of year burn permits are required for that area. Additionally, the 2019 CFC Section 105.6.23 requires a Hot Work Permit in a wildland fire risk area. Hot Work is defined as any cutting, welding, and grinding.



3.4.7 Use of Wood Preservatives, Oils, and Stains

Homeowners should be made aware of the hazards of using wood preservatives, oils, and stains that contain natural oils as they have the ability to spontaneously ignite when left on rags. Rags used to apply or cleanup these products should be either stored in an Underwriter Laboratories approved airtight metal container or thoroughly rinsed in water and left flat to air dry. Similar care should also be used with other product applicators such as brushes and mops.



3.4.8 Gas Stoves, Lanterns, and Heaters

Gas lanterns, stoves, and heaters that have been in operation should be allowed to cool off prior to filling or storage. When filling, they should be allowed to cool and placed in a cleared area prior to being fueled. Propane heaters should have a minimum 5ft clearance of flammable material while in use (CFC 0603.4.2.1.3).



3.4.9 Flammable Liquid Storage

All flammable liquids should be stored in approved metal safety containers and away from any ignition sources such as pilot lights. It is also recommended that all flammable liquids be stored a minimum of 30ft from the structure.



SECTION II

1. **INSPECTOR QUALIFICATIONS**

1.1 **General Qualifications**

Below are some qualities of a good fire prevention inspector. Of primary importance is personal appearance and professional demeanor. The inspector should:

- Be neat and clean.
- Be in proper uniform and possess departmental identification.
- Be well-mannered and respectful.
- Possess self-confidence - be firm, fair, and friendly.
- Be aware of people's demeanor.
- Know when a situation may be escalating into a confrontation and politely back off.
- Have a keen interest in the job and a sense of responsibility toward the public.
- Have the fortitude and perseverance to see the job through.
- Have personal initiative, be able to plan assignments, and carry out work without direct supervision.
- Have the ability to spot unusual or dangerous conditions, and foresee the potential creation of a dangerous situation. Maintain situational awareness.
- Be tactful in pointing out hazards and criticizing situations to the property owner/tenant.
- Know not to answer questions he/she is unsure of, but instead ask their supervisor and then get back to the property owner/tenant with the correct answer.
- Be dependable.

Additionally, the property inspector should possess the following knowledge:

- Familiarity with agency policies pertaining to property inspections.
- Knowledge of the State's Forest and Fire Laws pertaining to property inspections.
- Have a familiarity with hazardous activities that could lead to a fire ignition.
- Have a familiarity with the Defensible Space Concept.
- Have a familiarity with the State's Fire Safe Regulations
- Have a familiarity with WUI construction standards.
- Have a familiarity with a homeowner Wildfire Preparedness Plan.
- Have a familiarity with the Wildfire Action Plan brochure
- Have a familiarity with fire-resistant landscaping.
- Have a good working knowledge of fire behavior.
- Be familiar with the inspection area and its fire history and fire behavior.

1.2 **Training**

Unit Fire Prevention Plans should list the minimum training required for new property inspectors. The minimums for inspectors conducting property inspections in the SRA should include at least:

1. Orientation
 - a. Property Inspection Guide
 - b. Local/regional/agency policy
2. Minimum Qualifications
 - a. Local requirements
3. Forest and Fire Laws
 - a. Excerpts from State Laws & Regulations (Appendix C)
 - b. Detailed instruction in the BOF General Guidelines and Title 14 CCR 1299.

4. Local Regulations
 - a. Local Air Districts
 - b. Unit burn permit policies and requirements
 - c. Local weed abatement ordinances when applicable
5. Fuel Management Techniques for Homeowners
 - a. Available educational handouts for distribution
6. Property Inspections
 - a. Defensible space concept
 - b. Fuel management for homeowners
 - c. Access for emergency equipment
 - e. WUI construction standards
 - f. Potential ignition sources
 - g. Homeowner wildfire preparedness plans
 - h. Fire resistive landscaping
 - i. Wildfire Action Plan brochure
7. Conducting the Inspection
 - a. Local policies
 - b. Obtaining permission to inspect
8. Documenting the Inspection
 - a. Legal requirement
 - b. State, regional, and local requirements
 - c. Notice of Defensible Space Inspection (LE-100a)
 - d. Use of local forms
9. Follow-Up Inspections
 - a. Local policy
 - b. Enforcement procedures
10. Training Courses
 - a. FEMA IS-100 (online): Introduction to ICS
 - b. ICS-200 (classroom): Basic NIMS/ICS for Operational First Responder
 - c. FEMA IS-700 (online): National Response Framework, An Introduction
 - d. NWCG S-190 (online): Introduction to Wildland Fire Behavior
 - e. IBHS California Guide
 - f. Home Ignition Zone/Defensible Space Inspector (DSI) Course
 - g. Damage Inspection Specialist (DINS) AH-221 Course

1.3 Tools of the Inspector

Below are tools and materials that will help the inspector carry out a thorough inspection;

- A map of the area to be inspected.
- Smart Device (Tablet or phone).
- Inspection forms and notebook. Notes should be taken of observed hazards and risks during inspections. Sketches, photos, or maps may also be an aid to future inspections as well as firefighting operations.
- Call log to keep a record of calls from the public.
- Radio, Handheld Transceiver (HT), or Cell Phone communications.

- Smart device with camera – Digital images of violations where compliance is not expected are desirable both for potential future legal action and for information and education purposes
- Binoculars to inspect chimney screens.
- 30ft & 100ft measuring tapes or range finder to determine adequate clearances, etc.
- A Clinometer or other measuring device to determine the properties percent of slope.
- Flashlight – which may assist in checking for certain hazards such as below decks and stairs.
- Red Tags, spark arrester stickers, and other notification systems.
- USDA Spark Arrester Guide.
- Copy of applicable laws and ordinances.
- Records of prior inspections of the inspection area.
- Defensible Space and Wildfire Preparedness Handout material for the homeowner.

2. CONDUCTING THE INSPECTION

2.1 Inspection Procedure

The inspection for clearance around structures differs from other statutory fire prevention inspections since the inspector is essentially critiquing the public's personal property. Great care must be taken to assure the property owner/tenant you are there to protect and enhance their personal safety as well as prevent the loss or damage of their property from a fire. Emphasis should be directed to their key role in achieving the desired effect of a fire-safe environment for themselves, their family, and their neighbors. Additionally, it is important to point out that their efforts will provide a critical safety zone for the fire department to protect their home and attack the fire should one occur.

2.2 Real Estate Inspections

Beginning July 1, 2021, Civil Code section 1102.19 (Appendix C) requires the seller of a property that's located in a high or a very high fire hazard severity zone to provide buyers with documentation that the property is in compliance with PRC 4291 defensible space requirements, or local vegetation management ordinances. This law also allows that if documentation of compliance cannot be obtained by the close of escrow, the seller and buyer can enter into a written agreement that the buyer agrees to obtain documentation of compliance within one year of the close of escrow.

The Fire Hardening and Defensible Space Disclosure and Addendum referred to as the FHDS will be required if the property meets the following conditions: it's considered a residential property that contains one to 4 units, the sellers are required to complete a real estate transfer disclosure statement, and the property is in a high or very high fire hazard severity zone.

2.3 Time of Day and Day of the Week

The time of day that premise inspections are conducted will vary with the type of premises. Any time after 8:00 a.m. may be fine for inspections of business establishments or recreational camps. Inspection of permanent and seasonal dwellings usually requires the inspection be made after 10:00 a.m. If inspections are conducted before this time, the inspector may encounter some resistance or ill feeling, especially by weekend homeowners who usually like to sleep late. The same will apply to rural-dwelling occupants on weekends. Inspections on Sundays and Holidays are not advised and should be avoided.

2.4 Time of the Year

There is a small optimum window of the year for conducting inspections. Unit inspection programs should be responsive to address the time of the year the inspections take place. Inspections conducted prior to the arrival of the seasonal flammable conditions may have an effect on the large woody fuel accumulations but will not be able to address the flashy fuels which will not have yet cured into a flammable condition. Similarly, Units with elevation changes that include snow zones will have flammable conditions at lower elevations normally much earlier than the higher elevations. Another consideration is conducting inspections once normal summer conditions have arrived. Homeowners using mechanical means to clear vegetation should use great caution with their equipment as they can start a fire from exhaust sparks or rock strikes by metal blades.

2.5 Approaching the Property

When driving onto the property to be inspected, give attention to the general vegetative and topographical surroundings of the buildings and their exposures to other structures. Also, observe the general construction, the construction type, occupancy, and overall condition of the buildings. These observations will be of assistance during the inspection and will be of value should a fire occur or threaten the property.

Approach:

- Drive up slowly.
- Avoid raising dust.
- Leave gates as found.
- If a gate is locked, leave a locked gate notice advising the occupant to call and schedule an inspection. Drop an Uninspected point on the data collection app.

Observe:

- The grade/condition of the road and accessibility of approach for ease and safety of responding emergency equipment.
- The general surroundings of buildings and exposures to other structures and vegetation.
- The structures, mechanical equipment, human activities, etc., in relation to their use and exposure to hazardous fuels.

2.6 Personal Safety

Property inspections in rural areas can present inspectors with special concerns for their personal safety. Among those concerns are coming across illegal marijuana grows and drug labs and contacting aggressive animals such as dogs and livestock. Additionally, signs or postings indicating threatening warnings can be an indication of individuals conducting illegal activities or not wanting any intrusion onto their property by the public or government agencies. These warnings should not be ignored, and rather than attempting to contact the property occupant, the address should be turned over to a supervisor for further action. When contact with the property occupant becomes confrontational, leave the area immediately and contact your supervisor at your earliest convenience.

When conducting inspections in unfamiliar or remote areas, or areas identified as elevated life risk, the inspector should consider working in pairs or following safe practices as outlined in the *Firescope Firefighter Incident Safety and Accountability Guidelines ICS 910*;

- Develop a plan or general strategy for the day's work.
- Inform your supervisor of your destination, travel route, and expected return time.
- Assure that communication equipment Mobile radio, Handheld Transceiver (HT), and or cell phone is available and in good working condition.
- Consider the need to travel in pairs, and if warranted a Peace Officer escort.
- If a situation becomes confrontational leave immediately and request backup.

2.7 Contacting the Homeowner

The inspector's first duty is to contact the property owner, or whoever is in charge of the premises. The inspector should:

- Be in an official vehicle and uniform.
- Introduce him/herself and show identification.
- Establish communications, avoiding technical or slang language.
- Explain the purpose of the contact and present the idea that the inspection will help protect the residents and their property from wildfire.
- Create the idea you are there to help.
- Rather than immediately jumping into a discussion of fire prevention, try a few "icebreakers." This will put the contact on a friendlier basis.
- Obtain permission to inspect and ask if the inspector may walk around and behind the structures on the property. If permission to inspect is refused, withdraw as cordially as possible and notify your supervisor.

- Request that someone accompany the inspector during the inspection. This will allow the inspector to point out potentially hazardous conditions as they are observed and provide the resident with a more detailed remedy to mitigate them.
- If the resident states it is not an appropriate time or it causes inconvenience, offer to return at a more convenient time. Establish a return time and date if possible.
- If a resident is uncooperative, leave the property and notify your supervisor.

2.8 Conducting the Inspection

Once permission has been granted to inspect the property, the inspector should walk completely around the structure. The inspector should make handwritten or mental notes of all hazardous conditions observed and note additional structures that should be inspected. Measurements should be taken from the building and any attached structures or decks to establish boundaries of the two defensible space zones. The inspector should ascertain from the homeowner the boundaries of the property to determine how far the homeowner must carry out the clearances from the structure. Inspection of the roof and the chimney/stovepipe should be done from the ground. If the homeowner is present during the inspection, stop as hazards are noted to point them out and provide remedies.

2.9 Explaining Fire Behavior to the Homeowner

During the inspection, it is helpful to provide the homeowner with a brief understanding of fire behavior. There are three factors that influence the way fire behaves:

Fuel

- Vegetation dead or alive is **fuel**, as is the structure.
- ”**Fuel**” means any combustible material, including petroleum-based products, cultivated landscape plants, grasses, and weeds, and wildland vegetation. (PRC 4291)
- Point out the **volume** of fuel surrounding the structure and in the adjacent area.
- Explain the **fuel types**- grass, brush, trees, and structures.
- Trees and structures – point out that **heavy** fuels will burn longer and with greater sustained heat.
- Grass and shrubs – are considered **light and flashy** and are easily ignitable.
- Woodpiles, accumulation of leaves, needles, and trash all provide **fuel beds** for **flying brands**.
- **Ladder fuels** allow fire to travel vertically into the crowns of the trees.
- **Continuous fuels** allow the fire to spread horizontally unimpeded.
- Fuels that have had their **continuity** broken up are less likely to allow a fire to continue its forward travel.

Topography

- Fire travels faster **uphill** than on flat ground.
- **South-facing slopes** cure earlier in the year and sustain more heat exposure from the sun during the daylight hours. They also tend to have faster-moving fires up their slopes.
- **Saddles** and **drainages** on a ridge act like a chimney. Structures built in these locations will take an approaching wildfire full force.

Weather

- **Wind** provides fire with more oxygen making flames more intense. It will also push them into the adjoining fuels causing them to travel faster.
- In a **firestorm**, flames can be so intense the fire can make its own wind.
- **Burning embers** will be carried in the convection column of the fire and can easily land on the homeowner’s property and roof. The embers can travel in the smoke column distances up to a mile.

- Periods of **low humidity** and **high temperatures** increase fire danger due to the drying out of the fuels allowing them to ignite more easily.
- During drought periods, wildland fuels have less **fuel moisture** making them more susceptible to ignition and ease of spread.

3. CLOSING OUT THE INSPECTION

3.1 Reviewing Inspection Findings

Clearly explain all observed fire law violations during the property inspection in a professional but friendly manner. Include any observed potential ignition sources. Also, point out additional hazardous conditions that make the property vulnerable to wildfire including WUI building standards and Fire Safe Regulations. Try to get the homeowner involved in the solution for corrective action of the fire law violations. If the homeowner has an unreasonable solution or is at a loss for a solution, assume the role of an advisor and offer suggestions. In this manner, the inspector can work out a satisfactory and practical solution to the problem. This has definite advantages: the homeowner who is allowed to work out the problem is not only going to feel more satisfied but also is quite likely to be proud of the work. Be constantly on guard to make sure that suggestions are both reasonable and practical. The inspector has not completed the inspection responsibility until all known fire hazards and risks observed on the premises have been pointed out to the homeowner.

3.2 Documenting the Inspection on the LE-100a

Note all fire law violations and observed hazards and risks on the Notice of Defensible Space Inspection (LE-100a) or approved local form, and set a reasonable, but definite time limit for compliance. The later in the fire season and the more critical the fire weather situation, the more urgent compliance becomes. Also, record other observed hazards and risks including potential ignition sources and non-compliant mechanical equipment.

3.3 Documenting the Inspection Electronically

The Department has developed an automated process to document defensible space inspections electronically with mobile devices utilizing the approved electronic data collection application. The application allows CAL FIRE to customize the data collection fields to meet the needs of the Department and provides the Department with a consistent and centralized electronic database.

Document the inspection information in the approved electronic data collection application on the provided tablet or other smart device. It is recommended that inspectors download an offline map of their work area and sync the data as frequently as possible.

Information on electronic data collection and training materials can be found on the Intranet, [Wildfire Preparedness | Cal Fire Intranet](#).

3.4 Explaining Follow-up and Reinspection

Reinspection is the next major step to gaining compliance. If the inspector makes a commitment to return on a particular date and time, make every effort to keep the appointment. A follow-up system is necessary to make the system effective.

3.5 Closeout with Homeowner

When you and the homeowner have concluded the inspection, it is important to cover the following points;

- Thank the homeowner for his/her time.
- Be sure to leave the homeowner a copy of the Notice of Defensible Space Inspection (LE-100a).
- Point out the inspector's contact number on the form.

- Explain follow-up procedures and re-inspection times and dates.
- Provide fire prevention educational handouts as appropriate.
- Ask if there are any questions concerning the inspection that you can answer.
- Don't leave inspection notices on the door when no one is home. It may signal to burglars that the homeowner is away. Put the notice under the mat or mail the notice. Never leave an inspection notice on the door or jamb with tape or tacks as this can cause damage.
- Leave the property slowly.
- Leave the property exactly the way you found it.

SECTION III

4. Public Resources Code 4290 – SRA Fire Safe Regulations

1.1 Law

PRC 4290 became law in 1991 and established minimum fire-safe regulations for all building permits issued after January 1, 1991. The regulations apply to perimeters and access to all residential, commercial, and industrial buildings constructed in the SRA. They do not apply to existing buildings and developments built or approved prior to 1991. The regulations include emergency access, signing and building numbering, emergency water standards, and vegetation modification. Though property inspectors do not have the authority to enforce these regulations, they should be familiar with them so as to provide homeowners with additional measures they may take to make their home and property fire-safe and defensible.

PRC 4290 states:

(a) The board shall adopt regulations implementing minimum fire safety standards related to defensible space that are applicable to state responsibility area lands under the authority of the department, and to lands classified and designated as very high fire hazard severity zones, as defined in subdivision (i) of Section 51177 of the Government Code. These regulations apply to the perimeters and access to all residential, commercial, and industrial building construction within state responsibility areas approved after January 1, 1991, and within lands classified and designated as very high fire hazard severity zones, as defined in subdivision (i) of Section 51177 of the Government Code after July 1, 2021. The board may not adopt building standards, as defined in Section 18909 of the Health and Safety Code, under the authority of this section. As an integral part of fire safety standards, the State Fire Marshal has the authority to adopt regulations for roof coverings and openings into the attic areas of buildings specified in Section 13108.5 of the Health and Safety Code. The regulations apply to the placement of mobile homes as defined by National Fire Protection Association standards. These regulations do not apply where an application for a building permit was filed prior to January 1, 1991, or to parcel or tentative maps or other developments approved prior to January 1, 1991, if the final map for the tentative map is approved within the time prescribed by the local ordinance. The regulations shall include all of the following:

- (1) Road standards for fire equipment access.
- (2) Standards for signs identifying streets, roads, and buildings.
- (3) Minimum private water supply reserves for emergency fire use.
- (4) Fuel breaks and greenbelts.

(b) The board shall, on and after July 1, 2021, periodically update regulations for fuel breaks and greenbelts near communities to provide greater fire safety for the perimeters of all residential, commercial, and industrial building construction within state responsibility areas and lands classified and designated as very high fire hazard severity zones, as defined in subdivision (i) of Section 51177 of the Government Code, after July 1, 2021. These regulations shall include measures to preserve undeveloped ridgelines to reduce fire risk and improve fire protection. The board shall, by regulation, define

“ridgeline” for purposes of this subdivision.

(c) These regulations do not supersede local regulations which equal or exceed minimum regulations adopted by the state.

(d) The board may enter into contracts with technical experts to meet the requirements of this section.

1.2 Regulations

The regulations established by PRC 4290 are found in Title 14, California Code of Regulations, Sections 1270 through 1276. They are referred to as the Board of Forestry’s SRA Fire Safe Regulations and are a key component of the State’s Defensible Space Regulations. Significant changes were adopted to the

regulations in 2019. Local jurisdictions often enforce the regulations, and in many cases make them more stringent through local code. Inspectors should be familiar with these local codes. A summarization of the regulations is as follows in subsections 1.3, 1.4, 1.5, and 1.6 and do not include details or exceptions.

1.3 Emergency Vehicle Access

Roadways shall have a minimum of two ten-foot traffic lanes providing two-way traffic (14 CCR 1273.01). Roadway surfaces shall provide access to fire apparatus with a minimum of 75,000-pound load (14 CCR 1273.02). Roadway grades shall not exceed 16 percent (14 CCR 1273.03). Roadway radius turns shall have a minimum specified curvature of fifty feet. (14 CCR 1273.04).

Dead-end roads shall have either a terminus bulb or hammerhead “T” of a specified size at their end and at specified intervals (14 CCR 1273.05). Dead-end roads shall be limited in length based on the parcel size they access (14 CCR 1273.08).

One-way roads are allowed provided they serve no more than 10 dwelling units and are no longer than 2640ft in length. They shall have a minimum 12’ traffic lane, a turnout at approximately its midpoint, and connect on both ends to a two-lane roadway. (14 CCR 1273.01)

Bridges and culverts on all roadways including driveways shall be constructed to support emergency response vehicles (14 CCR 1273.07). Load limits shall be posted on either side of a bridge (14 CCR 1273.07).

Driveways shall have a minimum 10ft traffic lane and an unobstructed vertical clearance of 13’ 6” along its entire length (14 CCR 1273.02). Driveways shall have a turnaround at their end and turnouts at specified intervals depending on their length. (14 CCR 1273.05). Driveways shall be no greater than 16 percent grade and must support a minimum 40,000-pound vehicle (14 CCR 1273.02, 1273.03).

Gates shall be a minimum of 2’ wider than the traffic lane they serve, a minimum of 14’ width, and 13’ 6” vertical clearance. All driveway gates shall be located at least 30ft from the roadway, and the gate swing shall be such that a vehicle may stop in the driveway without obstructing traffic on the roadway. Security gates must have prior approval from the local authority (14 CCR 1273.09).

1.4 Signing and Building Numbering

All **street and road signs** will have a minimum 4” letter height of 1/2” stroke and reflectorized with contrasting background color. Signs will be placed at all intersections, be of standard height, and be visible for 100ft from both directions of vehicle traffic. (14 CCR 1274.01, 1274.02)

All homes and businesses shall permanently post their **address** plainly visible from the road facing the property. Address numbers and letters shall conform to the standards in the CFC and be reflectorized (14 CCR 1274.03, 1274.04).

1.5 Emergency Water Standards

Emergency **water supplies** shall be available for each address. These specified supplies shall be either in the form of fire agency mobile water tenders, man-made containment structures, or naturally occurring (14 CCR 1275.02). On-site sources shall have a **hydrant/water valve** at specified locations with a 2 ½” National Hose male threaded outlet or a 4 ½” head for draft systems (14 CCR 1275.03).

All water sources will be properly identified by specified reflectorized blue signage a minimum 3” in size (14 CCR 1275.04).

1.6 Vegetation Modification

All structures on parcels will have a minimum **30ft setback** from all property lines (14 CCR 1276.01).

All developments proposing **greenbelts** shall strategically locate them to separate structures from wildland fuels (14 CCR 1276.04).

2. Ignition Resistant Construction

2.1 Regulations

Firesafe building regulations can be found in various State statutes and regulations, including the Health and Safety Code, the California Building Code and the California Fire Code. These regulations apply to all homes built or substantially remodeled from the date the Code became effective. They include the use of ignition-resistant building materials and construction design. A partial listing of the statutes and regulations can be found in Appendix C. Property inspectors should be familiar with these standards to give homeowners additional steps they can take to fire-safe their homes and property. Inspectors should advise the homeowner to contact their local building department for further details and advice. Currently, approved building materials by the Office of the State Fire Marshal can be found at the following website:

<https://osfm.fire.ca.gov/divisions/fire-engineering-and-investigations/building-materials-listing/>

2.2 Roofs

One of the single most vulnerable locations for flying brands and embers from a wildfire to lodge on a structure is the roof surface. Flammable roof coverings such as untreated wooden shingles and shakes stand little chance of surviving a wildfire. Additionally, unscreened vents allow blowing embers to enter the attic space. Open gutters and open-ended tiles also provide entry points.

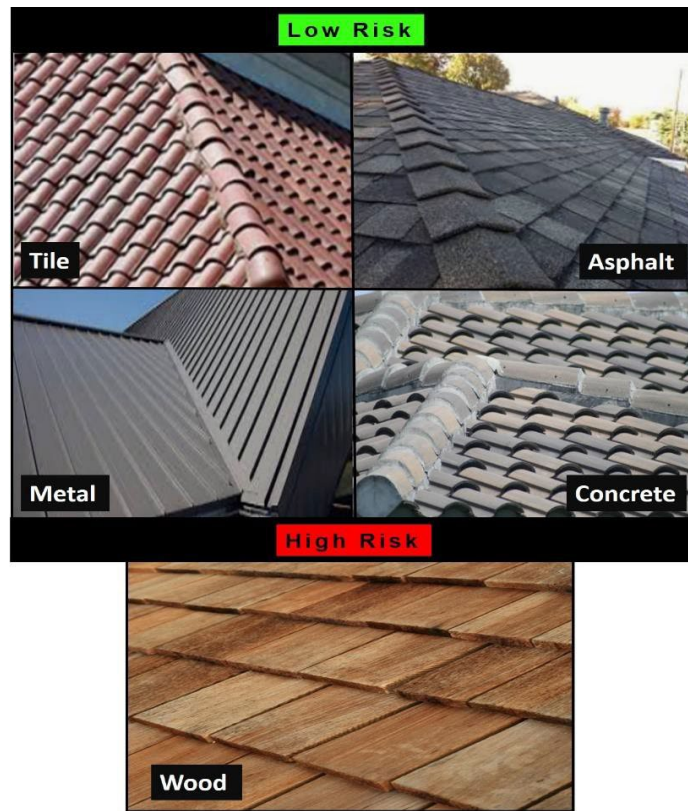
Pursuant to **HSC 13132.7**, fire retardant roofing is required in all SRA and Wildland-Urban Interface Fire Areas of the State for all new structures and all existing structures for any repair or replacement. Additionally, if 50% or more of a roof covering is replaced within an anyone-year period, the entire roof covering shall be replaced with fire retardant roofing as required by state and/or local regulations. The type of roof covering required is based on the fire hazard severity zone that the building is located in. A minimum Class C covering is required in all areas of the SRA with Class B and A required in accordance with the greater hazard zoning.

Test methods have been developed to evaluate the fire hazards of roof coverings. NFPA 256, *Methods of Fire Tests of Roof Coverings*, describes the appropriate procedures. The test evaluates the flammability of the roof covering, the protection it provides to a combustible roof deck, and the potential for producing flaming brands. Roof materials are classified as Class A, Class B, and Class C. To receive one of the classifications, the roof covering is given a series of fire tests of varying degrees of severity. After all roof-covering tests have been conducted, roof coverings are classified based on test results:

- Class A roof covering is one that is effective against severe fire exposure, affords a high degree of fire protection to the roof deck, does not slip from position, and does not present a flying brand hazard. This type of roof covering is required in all SRA and LRA areas classified as Very High Fire Hazard Severity Zones (VHFHSZ).
- Class B roof covering is one that is effective against moderate fire exposure, affords a moderate degree of fire protection to the roof deck, does not slip from position, and does not present a flying brand hazard. This type of roof covering is required in all SRA areas rated as High Fire Hazard Severity Zones.
- Class C roof covering is effective against light test exposure, provides a light degree of fire protection to the roof deck, does not slip from position, and does not present a flying brand hazard. This type of roof covering contains the lowest degree of fire resistance allowed in the State of California.

The specific definition of each roofing classification is dependent upon the roofing material, roofing support construction and sheathing. With a given surface material, the classification may change, depending on whether the sheathing is solid (plywood) or lath, and whether the underlay material is foil,

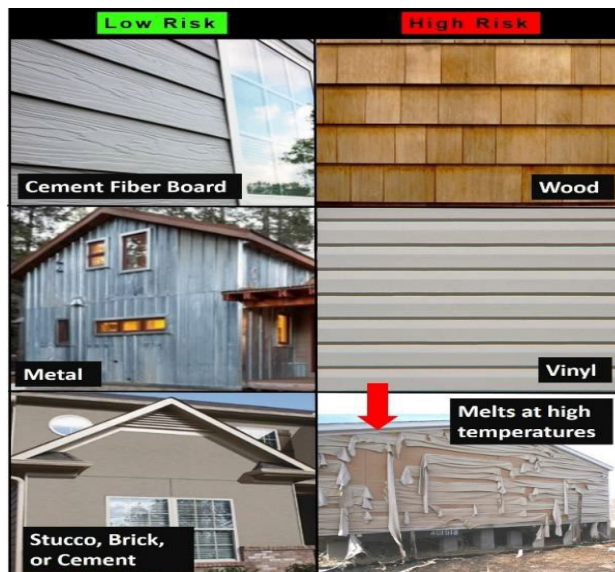
tar paper, or felt (different weights available). The Class A rating provides the most fire-resistive characteristics.



2.3 Siding

Exterior wall coverings should be ignition-resistant materials (CBC 707A). Homeowners should be educated on the hazards of wood siding due to its vulnerability to radiant heat and direct flame contact during a wildfire. They should also know that some sidings such as vinyl will soften and melt even under mild, radiant heat conditions. Materials such as stucco and masonry stand up better to heat and fire exposure.

Log and heavy timbered exteriors are rated ignition resistant. Siding with untreated wooden shingles is extremely flammable.



2.4 Vents

All vents should be covered with a minimum 1/16" to 1/8" noncombustible mesh screen to prevent embers from being drawn into the structure by air currents (CBC 706A). This includes roof vents, eave vents, and subfloor vents.



2.5 Eaves

All eaves should be enclosed to prevent flame entry and fire spread (CBC 707A).



2.6 Windows

Regular single-pane plate glass windows can thermally fracture due to radiant heat from a nearby fire even though the heat may not be enough to ignite the home's exterior wood. Homeowners should replace them with multipaned glass with a minimum of one tempered pane or other approved glazing (CBC 708A). Additionally, homeowners should be aware of the potential for plastic skylights to melt under intense heat.

2.7 Doors

Exterior doors should be either approved solid core or clad in a noncombustible or ignition-resistant material (CBC 708A.3.1). Door glazing should comply with approved window glazing standards (CBC 708A.3.1)

2.8 Decks and Balconies

Decks and balconies should be built using ignition-resistant surface materials. Their undersides should be enclosed using ignition-resistant materials to prevent flame and flying ember entry (CBC 709A.3).



2.9 Accessory Structures

All structures within 50ft of a building shall comply with the ignition-resistant building standards of the regulations. This includes trellises, arbors, patio covers, gazebos, and similar structures (CBC 710A).



3. Homeowner Wildfire Preparedness

3.1 Homeowner Questions

While conducting property inspections, inspectors should be prepared to answer homeowners' questions on what to do if a wildfire is threatening and they must evacuate. They may ask what they should gather to take with them, what they should do with their pets and livestock, where they should go, what condition they should leave the home and property in, how will they know when they can return, and what should they do if they get trapped by the wildfire. Inspectors should have available handout material that can help them prepare for a wildfire in advance.

3.2 Wildfire Action Plan

Homeowners should prepare a written Family Disaster Plan that includes a predetermined emergency meeting location in a low-risk area outside the fire hazard area the home is located in. If possible, it should identify multiple evacuation routes. It should also include a communications plan with a family/friend phone tree, emergency number list, and locations of important family documents and valuables to take when evacuating. If homeowners have pets and large animals such as horses, they need to include considerations for them in their evacuation plan. All family members need to be part of this plan and know where it is kept in the home.

Family preparedness should also include:

- Knowledge of all fire extinguishers on hand and how to use them.
- Knowledge of the location and operation of all utility shutoffs including gas, electricity, and water.
- Assembling an emergency supply kit as recommended by the American Red Cross.
- Having a portable radio or scanner and batteries to keep updated on the fire and evacuation orders.
- Having available at least a three-day supply of drinking water and nonperishable food.
- Having available flashlights, lanterns, portable cookstoves, fuel, and batteries.

3.3 Preparing for Evacuation

3.3.1 Inside

- Shut all windows and doors including the garage, leaving them unlocked.
- Shut off the air conditioning and fan.
- Shut off the gas at the meter and shut off the pilot lights.
- Remove lightweight curtains and flammable window shades from all windows.
- Close all venetian blinds and nonflammable window coverings.
- Move flammable furniture away from windows.
- Leave lights on so firefighters can see the home during smoky conditions.

3.3.2 Outside

- Turn off propane tanks.
- Put a ladder up to the roof on the side facing away from the oncoming fire.
- Attach garden hoses with a nozzle to all exterior hose bibs.
- Do not leave sprinklers running as this may drain critical water supplies and pressures.
- Leave exterior lights on so firefighters can see the home during smoky conditions.
- Gather flammable items (lawn chairs, tables, boxes, brooms, etc.) from decks and near the sides of the building and put them in the house or garage or a minimum of 30ft away from the structure.

- Assemble firefighting tools such as shovels, hoes, and rakes and keep them available near the home.
- Fill buckets with water and have them available near other firefighting tools.
- Vehicles should be backed into the garage with the keys in the ignition, the doors shut, and the windows rolled up.
- Detach the electric garage door opener.
- Load the evacuation vehicle with the emergency supply kit, important family papers, and medications.

3.4 Evacuation

Keep updated on current fire conditions on the TV and local radio stations. Observe the fire and its speed and direction of travel. Remember that fires burning under windy conditions will travel at rapid speeds. Immediately prepare to evacuate upon knowledge of a nearby out of control wildfire. Evacuate as soon as you are set rather than waiting for an evacuation order. Plan your evacuation route away from the oncoming fire. Notify family members you are evacuating, your evacuation route, and your predetermined meeting location. Wear long sleeve tops and long pants made of natural fibers such as cotton. Stay hydrated.

3.5 Trapped by a Wildfire

- Call 911.
- Make sure you are wearing long sleeve tops and long pants made of natural fibers such as cotton.
- Stay hydrated.
- Shelter inside the home away from exterior walls and away from the oncoming fire.
- If unable to call 911, notify an emergency contact of your location, and notify them of your safety after the fire has passed.
- Be sure all windows and doors are closed including the garage door.
- Be sure the air conditioner and fan are shut off.
- Be sure you can exit the home if it catches on fire.
- Fill sinks and tubs with water for emergency water supply.
- As the fire passes, patrol the house for any spot fires.
- Have fire extinguishers and buckets of water available to extinguish any spot fires inside the home as the fire passes.
- After fire has passed check exterior of the building for spot fires. Pay close attention to the roof and gutters. Check inside the attic.
- Patrol the property and extinguish all small fires found.

3.6 Informational Resources

The following Websites offer additional information and suggestions to the homeowner on disaster preparedness:

- www.redcross.org
 - www.fema.gov
 - www.fire.ca.gov
 - www.readyforwildfire.org
-

4. Fire Resistive Landscaping

4.1 Lean and Clean Planning

Property inspectors are often asked by homeowners for advice on how to plan a fire-resistant landscape around their homes. Often, they are afraid that the requirements of PRC 4291 demand that they maintain bare earth around all their structures. This is not at all the case. The area within 30ft of a fire-safe home or building should be limited in the amount of flammable vegetation, free of all dead and dying vegetation and other flammable debris, and irrigated to keep plants green and healthy during the fire season.

Keep in mind that cultural practices and landscape management have more of an impact on whether a plant ignites than the species. A well-planned fire resistive landscape should include:

- The liberal use of open space and mosaic plant spacing.
- An emphasis on the use of low-growing herbaceous (non-woody) plants that are kept green during the fire season through irrigation. These include lawn, clover, groundcovers, bedding plants, bulbs, perennial flowers, and perennial grasses.
- An emphasis on the use of rock, and non-combustible hard surfaces such as sidewalks, patios, and driveways.
- No combustible mulch or bark within 5ft of structures or attached decks.
- The use of fences and barriers constructed of nonflammable material such as rock, brick, or stucco to provide fuel breaks.
- Short deciduous shrubs, and deciduous ornamental trees provided they are kept green, free of dead plant material, and do not provide a means of conveying a fire from the adjacent wildland fuels to the structure.
- Minimization of the placement of evergreen coniferous shrubs and trees and tall exotic grasses. When used they should be well separated from other vegetation as well as the structure.
- Keeping the area closest to buildings, structures, and decks clear of vegetation will prevent embers from igniting materials that can spread the fire to a home.



4.2 Characteristics of Fire-Resistive Vegetation

All plants will burn under extreme fire weather conditions, especially during a drought. However, all plants have differing ease of ignition, rate of consumption, and generation of heat while burning. Fire-resistive plants burn with relatively low intensity, slow rates of spread, and short flame lengths. This makes them a more desirable choice in the defensible space around a home. The following are characteristics of fire resistive vegetation:

- Plants that have high moisture content (lawns, ground covers, herbaceous species).
- Low-growing plants (less than 18”) with a low sap or resin content.
- Non-resinous deciduous shrubs and trees (willow, poplar, or tulip trees).
- Plants with open branching habits and fewer total branches and leaves.
- Plants with little or no accumulation of dead vegetation.
- Drought tolerant plants (deeply rooted plants with thick heavy leaves).
- Plants requiring little maintenance (slow-growing plants which, when maintained require little care).

4.3 Informational Resources

- <https://www.fire.ca.gov/>
- <https://marinmg.ucanr.edu/BASICS/FIRESMARTLANDSCAPING/>
- <https://forests.berkeley.edu/the-center-for-fire-research-and-outreach>
- <https://cafiresafecouncil.org/>
- <https://www.nfpa.org/Public-Education/Fire-causes-and-risks/Wildfire/Firewise-USA>

Appendices

Appendix A

Resources

American Red Cross: <https://www.redcross.org/>.

Board of Forestry Memorandums and Guidance Documents:
<https://bof.fire.ca.gov/regulations/board-memorandums-and-guidance-documents/>.

CAL FIRE: <https://www.fire.ca.gov/>.

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

CAL FIRE Wildfire Action Plan: <https://www.paperturn-view.com/cal-fire-communications/cal-fire-ready-set-go-brochure-final-files-v4-print?pid=MjU252417&v=2>

California FireSafe Council: <https://cafiresafecouncil.org/>.

California Legislative Information: <https://leginfo.legislature.ca.gov/>.

Federal Emergency Management Agency: <https://www.fema.gov/>.

Firewise USA: <https://www.nfpa.org/Public-Education/Fire-causes-and-risks/Wildfire/Firewise-USA>.

Office of the State Fire Marshal Building Materials List: <https://osfm.fire.ca.gov/divisions/fire-engineering-and-investigations/building-materials-listing/>

The Center for Fire Research and Outreach at Berkeley Forests:
<https://forests.berkeley.edu/the-center-for-fire-research-and-outreach>.

Ready for Wildfire: <https://www.readyforwildfire.org/>.

Sample Spanish LE-100a: https://inside.fire.ca.gov/media/wbgddzke/2-22_le100a_spanish.pdf

USDA Spark Arrester Guide: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb5319644.pdf

Wildfire Prevention Field Guides: <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildfire-preparedness/prevention-field-guides/>

Appendix B

LE-100a



State of California, Natural Resources Agency
 Department of Forestry and Fire Protection
 Notice of Defensible Space Inspection
 LE-100a (2/22)

Date: _____

NOTICE OF DEFENSIBLE SPACE INSPECTION

A fire department representative has inspected your property for fire hazards. You are hereby notified to correct the violation(s) indicated below. Failure to correct these violations may result in a citation and fine.

OWNER/TENANT:		INSPECTION ADDRESS:	
INSPECTOR NAME:	CONTACT NUMBER:	Inspection No. <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3	No Violations Observed <input type="checkbox"/>

CHECKED BOXES INDICATE VIOLATIONS

Zone 1 / Within 30 feet of all structures or to the property line (Refer to illustration below):

- A. Remove all branches within 10 feet of any chimney or stovepipe outlet, pursuant to PRC § 4291(a)(2) and 14 CCR § 1299.03(a)(2).
- B. Remove leaves, needles or other vegetation on roofs, gutters, decks, porches, stairways, etc. pursuant to PRC § 4291 (a)(4) and 14 CCR § 1299.03(a)(1).
- C. Remove all dead and dying trees, branches and shrubs, or other plants adjacent to or overhanging buildings, pursuant to PRC § 4291 (a)(3) and 14 CCR § 1299.03(a)(2).
- D. Remove all dead and dying grass, plants, shrubs, trees, branches, leaves, weeds and needles, pursuant to 14 CCR § 1299.03(a)(2).
- E. Remove or separate live flammable ground cover and shrubs, pursuant to PRC § 4291(a)(1) and BOF General Guidelines item 1.
- F. Remove flammable vegetation and items that could catch fire which are adjacent to, or below, combustible decks, balconies, and stairs, pursuant to 14 CCR § 1299.03(a)(4).
- G. Relocate exposed wood piles outside of Zone 1 unless completely covered in a fire-resistant material, pursuant to 14 CCR § 1299.03(a)(3).

Zone 2 / Within 30–100 feet of all structures or to the property line (Refer to illustration below):

- H. Cut annual grasses and forbs down to a maximum height of 4 inches, pursuant to 14 CCR § 1299.03(b)(2)(B).
- I. Remove fuels in accordance with the Fuel Separation or Continuous Tree Canopy guidelines (see back), pursuant to BOF General Guidelines item 4.
- J. All exposed woodpiles must have a minimum of 10 feet clearance, down to bare mineral soil, in all directions, pursuant to 14 CCR § 1299.03(b)(2) (C).
- K. Dead and dying woody surface fuels and aerial fuels shall be removed. Loose surface litter, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a maximum depth of 3 inches, pursuant to 14 CCR § 1299.03(b)(2)(A).

Defensible and Reduced Fuel Zone / Within 100 feet of all structures or to the property line (Refer to illustration below):

- L. Logs or stumps embedded in the soil must be removed or isolated from other vegetation, pursuant to BOF General Guidelines item 3.

Other Requirements:

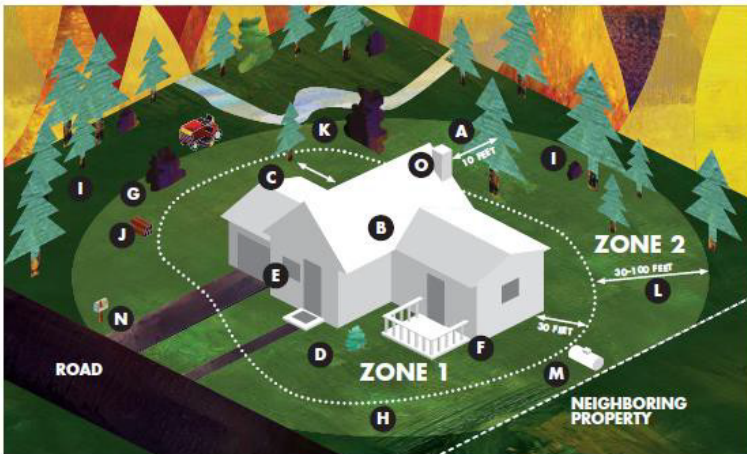
- M. Outbuildings and Liquid Propane Gas (LPG) storage tanks shall have 10 feet of clearance to bare mineral soil and no flammable vegetation for an additional 10 feet around their exterior, pursuant to 14 CCR § 1299.03(c)(1).
- N. Address numbers shall be displayed in contrasting colors (4" min. size) and readable from the street or access road, pursuant to 2016 CFC § 505.1.
- O. Equip chimney or stovepipe openings with a metal screen having openings between 3/8 inch and 1/2 inch, pursuant to 2016 CBC § 2113.9.2.

COMMENTS: _____

LEARN MORE:



IMPORTANT All violations marked must be addressed by the owner/tenant. A re-inspection of the property will occur on or after _____



KNOW THE LAW BE FIRE SMART

100 feet of Defensible Space is required under the Public Resources Code (PRC) 4291. California Building Code Chapter 7A requires certain construction materials and methods for homes in wildland areas. Be sure to contact your local fire department for additional requirements to ensure your home is compliant with the law.

READYFORWILDFIRE.ORG/THELAW

PRC § 4119. The department, or its duly authorized agent, shall enforce the state forest and fire laws. The department may inspect all properties, except the interior of dwellings, subject to the state forest and fire laws, for the purpose of ascertaining compliance with such laws.

WILDFIRE IS COMING. ARE YOU READY?

HARDENING YOUR HOME

Flying embers can destroy homes up to a mile ahead of a wildfire. Prepare (harden) your home now before a fire starts.

Priority list for building or remodeling with ignition-resistant* materials:

- **Roof** (Above all else your roofing is the most important hardening feature)
- **Eaves and Soffits**
- **Walls**
- **Decks**
- **Patio Cover**
- **Fencing**

Other priority activities:

- **Vents:** Cover and protect all openings.
- **Windows:** Protect against blow-outs and install dual-paned windows.
- **Rain Gutters:** Screen or enclose.
- **Chimney:** Cover outlets with non-combustible screens.
- **Garage:** Have an accessible fire extinguisher.
- **Driveways:** Ensure access to your home complies with local fire codes.
- **Water Supply:** Have multiple garden hoses that are long enough to reach all areas of your home.

*Visit ReadyforWildfire.org/hardening-your-home for detailed information on ignition-resistant building materials and all home hardening activities.

VERTICAL SPACING

Eliminate opportunities for a vertical "fire ladder" by:

- Remove branches beneath large trees for a 6-foot minimum clearance.
- Create proper vertical spacing between shrubs and the lowest branches of trees by using the formula shown.



HORIZONTAL SPACING

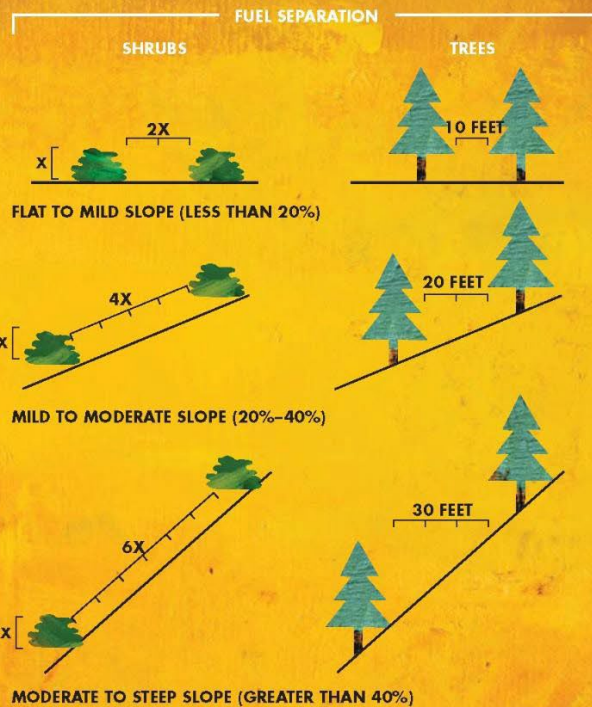
The spacing between grass, shrubs, and trees is crucial to reduce the spread of wildfire. The spacing needed is determined by the type and size of the shrubs and trees, as well as the slope of the land. For example, a property on a steep slope with larger plant life will require greater spacing between trees and shrubs than a level property that has small, sparse vegetation.

Fire-Safe Landscaping

Fire-safe landscaping isn't necessarily the same thing as a well-maintained yard. Fire-safe landscaping uses fire-resistant plants that are strategically planted to resist the spread of fire to your home.

Dead Tree Removal

If you have dead or dying trees on your property the entire tree needs to be removed to reduce wildfire risk. Visit ReadyforWildfire.org/dead-tree-removal to learn about permit requirements.



DOWNLOAD THE READY FOR WILDFIRE APP

It's never been more important to keep on top of preparing your family, home and property for a wildfire. Fires are on the rise, and are burning hotter, faster and more unpredictably than ever before. Download the app to:

Get custom wildfire alerts



Track your progress



Get detailed action steps

☑ 1. ☐ 2. ☐ 3.

Download on the App Store

GET IT ON Google Play



Appendix C

STATUTES AND REGULATIONS

This appendix has been designed to present only those laws and regulations, or portions thereof, which pertain directly to Defensible Space property inspections, Firewise building construction, and Fire Safe practices around structures. As such, this appendix should only be used as a quick field reference. For full and current text, meaning, and proper context of laws and regulations reference should be made to the applicable codes, manuals, directives, etc.

I. STATE LAWS

A. *Health and Safety Code (HSC)*

Section 13108.5 - Buildings in Fire Hazard Severity Zones

(a) The State Fire Marshal, in consultation with the Director of Forestry and Fire Protection and the Director of Housing and Community Development, shall, pursuant to Section 18930, propose fire protection building standards for roofs, exterior walls, structure projections, including, but not limited to, porches, decks, balconies, and eaves, and structure openings, including, but not limited to, attic and eave vents and windows of buildings in fire hazard severity zones, including very high fire hazard severity zones designated by the State Fire Marshal pursuant to Article 9 (commencing with Section 4201) of Chapter 1 of Part 2 of Division 4 of the Public Resources Code.

(b) (1) Building standards adopted pursuant to this section shall also apply to buildings located in very high fire hazard severity zones designated pursuant to Chapter 6.8 (commencing with Section 51175) of Part 1 of Division 1 of Title 5 of the Government Code, and other areas designated by a local agency following a finding supported by substantial evidence in the record that the requirements of the building standards adopted pursuant to this section are necessary for effective fire protection within the area.

(2) Upon identification by the Director of Forestry and Fire Protection pursuant to Section 51178 of the Government Code of high fire hazard severity zones and by a local agency pursuant to Section 51179 of the Government Code, the Office of the State Fire Marshal and the Department of Housing and Community Development shall propose, and the California Building Standards Commission shall adopt, expanded application of the building standards adopted pursuant to this section to high fire hazard severity zones during the next triennially occurring code adoption cycle.

(3) The State Fire Marshal and the Department of Housing and Community Development shall, after consulting with interested stakeholders, including local fire officials, consider if it is appropriate to expand the application of the building standards adopted pursuant to this section to moderate fire hazard severity zones. If it is found appropriate, the State Fire Marshal and the Department of Housing and Community Development shall, pursuant to Section 18930, recommend expanding the application of the building standards adopted pursuant to this section to moderate fire hazard severity zones.

(c) Building standards adopted pursuant to this section shall also apply to buildings located in urban-wildland interface communities. A local agency may, at its discretion, include in or exclude from the requirements of these building standards any area in its jurisdiction following a finding supported by substantial evidence in the record at a public hearing that the requirements of these building standards are necessary or not necessary, respectively, for effective fire protection within the area. Changes made by a local agency to an urban-wildland interface community area following a finding supported by substantial evidence in the record shall be final and shall not be rebuttable.

(d) For purposes of subdivision (c), “urban wildland interface community” means a community listed in “Communities at Risk from Wild Fires,” produced by the California Department of Forestry and Fire Protection, Fire and Resource Assessment Program, pursuant to the National Fire Plan, federal Fiscal Year 2001 Department of the Interior and Related Agencies Appropriations Act (Public Law 106-291).

Section 13132.7 – Roof Replacement

(a) Within a very high fire hazard severity zone designated by the Director of Forestry and Fire Protection pursuant to Article 9 (commencing with Section 4201) of Chapter 1 of Part 2 of Division 4 of the Public Resources Code and within a very high hazard severity zone designated by a local agency pursuant to Chapter 6.8 (commencing with Section 51175) of Part 1 of Division 1 of Title 5 of the Government Code, the entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, every new structure, and any roof covering applied in the alteration, repair, or replacement of the roof of every existing structure, shall be a fire retardant roof covering that is at least class B as defined in the Uniform Building Code, as adopted and amended by the State Building Standards Commission.

(b) In all other areas, the entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within anyone-year period, every new structure, and any roof covering applied in the alteration, repair, or replacement of the roof of every existing structure, shall be a fire- retardant roof covering that is at least class C as defined in the Uniform Building Code, as adopted and amended by the State Building Standards Commission.

(c) Notwithstanding subdivision (b), within state responsibility areas classified by the State Board of Forestry and Fire Protection pursuant to Article 3 (commencing with Section 4125) of Chapter 1 of Part 2 of Division 4 of the Public Resources Code, except for those state responsibility areas designated as moderate fire hazard responsibility zones, the entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, every new structure, and any roof covering applied in the alteration, repair, or replacement of the roof of every existing structure, shall be a fire retardant roof covering that is at least class B as defined in the Uniform Building Code, as adopted and amended by the State Building Standards Commission.

(d) (1) Notwithstanding subdivision (a), (b), or (c), within very high fire hazard severity zones designated by the Director of Forestry and Fire Protection pursuant to Article 9 (commencing with Section 4201) of Chapter 1 of Part 2 of Division 4 of the Public Resources Code or by a local agency pursuant to Chapter 6.8 (commencing with Section 51175) of Part 1 of Division 1 of Title 5 of the Government Code, the entire roof covering of every existing structure where more than 50 percent of the total roof area is replaced within any one-year period, every new structure, and any roof covering applied in the alteration, repair, or replacement of the roof of every existing structure, shall be a fire retardant roof covering that is at least class A as defined in the Uniform Building Code, as adopted and amended by the State Building Standards Commission.

(2) Paragraph (1) does not apply to any jurisdiction containing a very high fire hazard severity zone if the jurisdiction fulfills both of the following requirements:

(A) Adopts the model ordinance approved by the State Fire Marshal pursuant to Section 51189 of the Government Code or an ordinance that substantially conforms to the model ordinance of the State Fire Marshal.

(B) Transmits, upon adoption, a copy of the ordinance to the State Fire Marshal.

(e) The State Building Standards Commission shall incorporate the requirements set forth in subdivisions (a), (b), and (c) by publishing them as an amendment to the California Building Standards Code in accordance with Chapter 4 (commencing with Section 18935) of Part 2.5 of Division 13.

(f) Nothing in this section shall limit the authority of a city, county, city and county, or fire protection district in establishing more restrictive requirements, in accordance with current law, than those specified in this section.

(g) This section shall not affect the validity of an ordinance, adopted prior to the effective date for the relevant roofing standard specified in subdivisions (a) and (b), by a city, county, city and county, or fire protection district, unless the ordinance mandates a standard that is less stringent than the standards set forth in subdivision (a), in which case the ordinance shall not be valid on or after the effective date for the relevant roofing standard specified in subdivisions (a) and (b).

(h) Any qualified historical building or structure as defined in Section 18955 may, on a case-by-case basis, utilize alternative roof constructions as provided by the State Historical Building Code.

(i) The installer of the roof covering shall provide certification of the roof covering classification, as provided by the manufacturer or supplier, to the building owner and, when requested, to the agency responsible for enforcement of this part. The installer shall also install the roof covering in accordance with the manufacturer's listing.

(j) No wood roof covering materials shall be sold or applied in this state unless both of the following conditions are met:

(1) The materials have been approved and listed by the State Fire Marshal as complying with the requirements of this section.

(2) The materials have passed at least 5 years of the 10-year natural weathering test. The 10-year natural weathering test required by this subdivision shall be conducted in accordance with standard 15-2 of the 1994 edition of the Uniform Building Code at a testing facility recognized by the State Fire Marshal.

(k) The Insurance Commissioner shall accept the use of fire-retardant wood roof covering material that complies with the requirements of this section, used in the partial repair or replacement of non-fire-retardant wood roof covering material, as complying with the requirement in Section 2695.9 of Title 10 of the California Code of Regulations relative to matching replacement items in quality, color, and size.

(l) No common interest development, as defined in Section 4100 or 6534 of the Civil Code, may require an owner to install or repair a roof in a manner that is in violation of this section. The governing documents, as defined in Section 4150 or 6552 of the Civil Code, of a common interest development within a very high fire severity zone shall allow for at least one type of fire-retardant roof covering material that meets the requirements of this section.

B. Public Resources Code (PRC)

Section 4103.5 - Campfire Defined.

"Campfire" means a fire that is used for cooking, personal warmth, lighting, ceremonial, or aesthetic purposes, including fires contained within outdoor fireplaces and enclosed stoves with flues or chimneys, stoves using jellied, liquid, solid, or gaseous fuels, portable barbecue pits and braziers, or space heating devices which are used outside any structure, mobile home, or living accommodation mounted on a motor vehicle. "Campfire" does not include portable lanterns designed to emit light resulting from a combustion process.

Section 4119 – Inspection Authority

The department, or its duly authorized agent, shall enforce the state forest and fire laws. The department may inspect all properties, except the interior of dwellings, subject to the state forest and fire laws, for the purpose of ascertaining compliance with such laws.

Section 4202 - Classification of Zones.

The State Fire Marshal shall classify lands within state responsibility areas into fire hazard severity zones. Each zone shall embrace relatively homogeneous lands and shall be based on fuel loading, slope, fire weather, and other relevant factors present, including areas where winds have been identified by the department as a major cause of wildfire spread.

Section 4203 - Designation of Zones and Fire Hazard Ratings.

(a) The State Fire Marshal shall, by regulation, designate fire hazard severity zones and assign to each zone a rating reflecting the degree of severity of fire hazard that is expected to prevail in the zone.

(b) No designation of a zone and assignment of a rating shall be adopted by the State Fire Marshal until the proposed regulation has been transmitted to the board of supervisors of the county in which the zone is located at least 45 days before the adoption of the proposed regulation and a public hearing has been held in that county during that 45-day period.

Section 4204 - Review of Zones and Maps.

The State Fire Marshal shall periodically review zones designated and rated pursuant to this article and, as necessary, shall revise zones or their ratings or repeal the designation of zones. Any revision of a zone or its rating or any repeal of a zone shall conform to the requirements of Section 4203. In addition, the revision or repeal of a zone may be petitioned pursuant to Sections 11340.6 and 11340.7 of the Government Code.

Section 4290 - Adoption of Building Standards within State Responsibility Areas

(a) The board shall adopt regulations implementing minimum fire safety standards related to defensible space that are applicable to state responsibility area lands under the authority of the department, and to lands classified and designated as very high fire hazard severity zones, as defined in subdivision (i) of Section 51177 of the Government Code. These regulations apply to the perimeters and access to all residential, commercial, and industrial building construction within state responsibility areas approved after January 1, 1991, and within lands classified and designated as very high fire hazard severity zones, as defined in subdivision (i) of Section 51177 of the Government Code after July 1, 2021. The board may not adopt building standards, as defined in Section 18909 of the Health and Safety Code, under the authority of this section. As an integral part of fire safety standards, the State Fire Marshal has the authority to adopt regulations for roof coverings and openings into the attic areas of buildings specified in Section 13108.5 of the Health and Safety Code. The regulations apply to the placement of mobile homes as defined by National Fire Protection Association standards. These regulations do not apply where an application for a building permit was filed prior to January 1, 1991, or to parcel or tentative maps or other developments approved prior to January 1, 1991, if the final map for the tentative map is approved within the time prescribed by the local ordinance. The regulations shall include all of the following:

- (1) Road standards for fire equipment access.
- (2) Standards for signs identifying streets, roads, and buildings.
- (3) Minimum private water supply reserves for emergency fire use.
- (4) Fuel breaks and greenbelts.

(b) The board shall, on and after July 1, 2021, periodically update regulations for fuel breaks and greenbelts near communities to provide greater fire safety for the perimeters to all residential, commercial, and industrial building construction within state responsibility areas and lands classified and designated as very high fire hazard severity zones, as defined in subdivision (i) of Section 51177 of the Government Code, after July 1, 2021. These regulations shall include measures to preserve undeveloped ridgelines to reduce fire risk and improve fire protection. The board shall, by regulation, define “ridgeline” for purposes of this subdivision.

(c) These regulations do not supersede local regulations which equal or exceed minimum regulations adopted by the state.

(d) The board may enter into contracts with technical experts to meet the requirements of this section.

Section 4290.1. – “Fire Risk Reduction Community” list

(a) On or before July 1, 2022, the board shall develop criteria for and maintain a “Fire Risk Reduction Community” list of local agencies located in a state responsibility area or a very high fire hazard severity zone, identified pursuant to Section 51178 of the Government Code, that meet best practices for local fire planning.

(b) The board shall consider all of the following when developing the criteria for the list required under subdivision (a):

- (1) Compliance with the board’s regulations, including minimum fire safety standards.
- (2) Participation in the National Fire Protection Association’s “Firewise USA” or the National Wildfire Coordinating Group’s “Fire Adapted Communities” programs.
- (3) Adoption of the board’s recommendations to improve the safety element pursuant to subdivision (b) of Section 65302.5 of the Government Code.
- (4) Recently developed or updated community wildfire protection plans.

(c) The board shall post the “Fire Risk Reduction Community” list on its internet website.

Section 4290.5. Subdivision Fire Safety

(a) On or before July 1, 2021, and every five years thereafter, the board, in consultation with the State Fire Marshal, shall survey local governments, including counties, cities, and fire districts, to identify existing subdivisions located in a state responsibility area or a very high fire hazard severity zone, identified pursuant to Section 51178 of the Government Code, without a secondary egress route that are at significant fire risk.

(b) (1) The board, in consultation with the State Fire Marshal and the local government that identified the subdivision, shall develop recommendations to improve the subdivision’s fire safety. The recommendations may include, but are not limited to, the following:

- (A) Creating secondary access to the subdivision.
- (B) Improvements to the existing access road.
- (C) Other additional fire safety measures.

(2) The board shall provide the final recommendations developed pursuant to this subdivision to the local government that identified the subdivision and to the residents of the subdivision.

(c) The board may enter into contracts with an independent group to conduct the survey required in subdivision (a).

(d) For purposes of this section, “subdivision” means an existing residential development of more than 30 dwelling units.

(e) The board shall maintain a list of the subdivisions identified in subdivision (a) and the status of the implementation of the recommendations provided pursuant to subdivision (b).

Section 4291 - Defensible Space.

(a) A person who owns, leases, controls, operates, or maintains a building or structure in, upon, or adjoining a mountainous area, forest-covered lands, shrub-covered lands, grass-covered lands, or land that is covered with flammable material, shall at all times do all of the following:

(1) (A) Maintain defensible space of 100 feet from each side and from the front and rear of the structure, but not beyond the property line, except as provided in subparagraph (B). The amount of fuel modification necessary shall consider the flammability of the structure as affected by building material, building standards, location, and type of vegetation. Fuels shall be maintained and spaced in a condition so that a wildfire burning under average weather conditions would be unlikely to ignite the structure. This subparagraph does not apply to single specimens of trees or other vegetation that are well-pruned and maintained so as to effectively manage fuels and not form a means of rapidly transmitting fire from other nearby vegetation to a structure or from a structure to other nearby vegetation or to interrupt the advance of embers toward a structure. The intensity of fuel management may vary within the 100-foot perimeter of the structure, with more intense fuel reductions being utilized between 5 and 30 feet around the structure, and an ember-resistant zone being required within 5 feet of the structure, based on regulations promulgated by the board, in consultation with the department, to consider the elimination of materials in the ember-resistant zone that would likely be ignited by embers. Consistent with fuel management objectives, steps should be taken to minimize erosion, soil disturbance, and the spread of flammable nonnative grasses and weeds. For purposes of this subparagraph, "fuel" means any combustible material, including petroleum-based products, cultivated landscape plants, grasses, weeds, and wildland vegetation.

(B) A greater distance than that required under subparagraph (A) may be required by state law, local ordinance, rule, or regulation. Fuel modification beyond the property line may only be required by state law, local ordinance, rule, or regulation in order to maintain 100 feet of defensible space from a structure. Fuel modification on adjacent property shall only be conducted following written consent by the adjacent landowner. Any local ordinance related to fuel modification shall be in compliance with all applicable state laws, regulations, and policies. Any local ordinance may include provisions to allocate costs for any fuel modification beyond the property line.

(C) An insurance company that insures an occupied dwelling or occupied structure may require a greater distance than that required under subparagraph (A) if a fire expert, designated by the director, provides findings that the fuel modification is necessary to significantly reduce the risk of transmission of flame or heat sufficient to ignite the structure, and there is no other feasible mitigation measure possible to reduce the risk of ignition or spread of wildfire to the structure. The greater distance may not be beyond the property line unless allowed by state law, local ordinance, rule, or regulation.

(2) Remove that portion of a tree that extends within 10 feet of the outlet of a chimney or stovepipe.

(3) Maintain a tree, shrub, or other plant adjacent to or overhanging a building free of dead or dying wood.

(4) Maintain the roof of a structure free of leaves, needles, or other vegetative materials.

(5) Before constructing a new building or structure or rebuilding a building or structure damaged by a fire in an area subject to this section, the construction or rebuilding of which requires a building permit, the owner shall obtain a certification from the local building official that the dwelling or structure, as proposed to be built, complies with all applicable state and local building standards, including those described in subdivision (b) of Section 51189 of the Government Code, and shall provide a copy of the certification, upon request, to the insurer providing course of construction insurance coverage for the building or structure. Upon completion of the construction or rebuilding,

the owner shall obtain from the local building official, a copy of the final inspection report that demonstrates that the dwelling or structure was constructed in compliance with all applicable state and local building standards, including those described in subdivision (b) of Section 51189 of the Government Code, and shall provide a copy of the report, upon request, to the property insurance carrier that insures the dwelling or structure.

(b) A person is not required under this section to manage fuels on land if that person does not have the legal right to manage fuels, nor is a person required to enter upon or to alter property that is owned by any other person without the consent of the owner of the property.

(c) (1) Except as provided in Section 18930 of the Health and Safety Code, the State Fire Marshal may adopt regulations exempting a structure with an exterior constructed entirely of nonflammable materials, or, conditioned upon the contents and composition of the structure, the director may vary the requirements respecting the removing or clearing away of flammable vegetation or other combustible growth with respect to the area surrounding those structures.

(2) An exemption or variance under paragraph (1) shall not apply unless and until the occupant of the structure, or if there is not an occupant, the owner of the structure, files with the State Fire Marshal, in a form as the State Fire Marshal shall prescribe, a written consent to the inspection of the interior and contents of the structure to ascertain whether this section and the regulations adopted under this section are complied with at all times.

(d) The State Fire Marshal may authorize the removal of vegetation that is not consistent with the standards of this section. The State Fire Marshal may prescribe a procedure for the removal of that vegetation and make the expense a lien upon the building, structure, or grounds, in the same manner that is applicable to a legislative body under Section 51186 of the Government Code.

(e) (1) The board, in consultation with the State Fire Marshal, shall develop, periodically update, and post on its Internet website a guidance document on fuel management pursuant to this chapter. The guidance document shall include, but not be limited to, regionally appropriate vegetation management suggestions that preserve and restore native species that are fire resistant or drought tolerant, or both, minimize erosion, minimize water consumption, and permit trees near homes for shade, aesthetics, and habitat; and suggestions to minimize or eliminate the risk of flammability of nonvegetative sources of combustion, such as woodpiles, propane tanks, decks, outdoor furniture, barbecue equipment, and outdoor fire pits.

(2) On or before January 1, 2023, the board, in consultation with the State Fire Marshal, shall update the guidance document to include suggestions for creating an ember-resistant zone within five feet of a structure, based on regulations promulgated by the board, in consultation with the department, to consider the elimination of materials in the ember-resistant zone that would likely be ignited by embers.

(f) The State Fire Marshal shall do both of the following:

(1) Recommend to the board the types of vegetation or fuel that are to be excluded from an ember-resistant zone based on the probability that vegetation and fuel will lead to ignition by ember of a structure as a part of the update to the guidance document pursuant to paragraph (2) of subdivision (e).

(2) Make reasonable efforts to provide notice to affected residents describing the requirements added by the amendments to paragraph (1) of subdivision (a) made in Assembly Bill 3074 of the 2019–20 Regular Session before the imposition of penalties for violating those requirements.

(g) (1) The requirement for an ember-resistant zone pursuant to paragraph (1) of subdivision (a) shall not take effect for new structures until the board updates the regulations, pursuant to paragraph (1) of subdivision (a), and the guidance document, pursuant to paragraph (2) of subdivision (e).

(2) The requirement for an ember-resistant zone pursuant to paragraph (1) of subdivision (a) shall take effect for existing structures one year after the effective date for the new structures.

(h) The department shall not change defensible space inspection practices and forms or enforcement to implement the requirement for an ember-resistant zone until the State Fire Marshal makes a written finding, which the State Fire Marshal shall post on the department's internet website, that the Legislature has appropriated sufficient resources to do so.

(i) For purposes of this section, a structure for the purpose of an ember-resistant zone shall include any attached deck. This section does not limit the authority of the board or the department to require the removal of fuel or vegetation on top of or underneath a deck pursuant to this section.

(j) As used in this section, "person" means a private individual, organization, partnership, limited liability company, or corporation.

Section 4291.1 - Defensible Space; Violation.

(a) Notwithstanding Section 4021, a violation of Section 4291 is an infraction punishable by a fine of not less than one hundred dollars (\$100), nor more than five hundred dollars (\$500). If a person is convicted of a second violation of Section 4291 within five years, that person shall be punished by a fine of not less than two hundred fifty dollars (\$250), nor more than five hundred dollars (\$500). If a person is convicted of a third violation of Section 4291 within five years, that person is guilty of a misdemeanor and shall be punished by a fine of not less than five hundred dollars (\$500). If a person is convicted of a third violation of Section 4291 within five years, the department may perform or contract for the performance of work necessary to comply with Section 4291 and may bill the person convicted for the costs incurred, in which case the person convicted, upon payment of those costs, shall not be required to pay the fine. If a person convicted of a violation of Section 4291 is granted probation, the court shall impose as a term or condition of probation, in addition to any other term or condition of probation, that the person pay at least the minimum fine prescribed in this section.

(b) If a person convicted of a violation of Section 4291 produces in court verification prior to imposition of a fine by the court, that the condition resulting in the citation no longer exists, the court may reduce the fine imposed for the violation of Section 4291 to fifty dollars (\$50).

Section 4291.3 – Additional Firebreak

(a) Subject to any other applicable law, a state or local fire official, at their discretion, may authorize an owner of property, or the owner's agent, to construct a firebreak, or implement appropriate vegetation management techniques, to ensure that defensible space is adequate for the protection of a hospital, adult residential care facility, school, aboveground storage tank, hazardous materials facility, or similar facility on the property. The firebreak may be for a radius of up to 300 feet from the facility, or to the property line, whichever distance is shorter.

(b) The director may authorize an owner of a property not listed in subdivision (a) to construct a firebreak, or implement appropriate vegetation management techniques, within a radius of up to 300 feet from a structure, or to the property line, whichever distance is shorter, if it is determined by the director as necessary to protect life, property, and natural resources from unreasonable risks associated with wildland fires.

Section 4423 - Burn Permits.

A person shall not burn any brush, stumps, logs, fallen timber, fallows, slash, grass-covered land, brush-covered land, forest-covered land, or other flammable material, in any state responsibility area, area receiving fire protection by the department by contract, or upon federal lands administered by the United States Department of Agriculture or Department of the Interior, unless the person has a written permit

from the department or its duly authorized representative or the authorized federal officer on federal lands administered by the United States Department of Agriculture or of the Interior and in strict accordance with the terms of the permit:

(a) At any time in Zone A.

(b) At any time in Zone B between May 1st and the date the director declares, by proclamation, that the hazardous fire conditions have abated for that year, or at any other time in Zone B during any year when the director has declared, by proclamation, that unusual fire hazard conditions exist in the area. The issuing agency may require the permittee to contact the agency to determine permit suspension status prior to burning.

Section 4423.1 - Burning Suspension.

(a) Burning under permit by a person on public or private lands, except within incorporated cities, may be suspended, restricted, or otherwise prohibited by proclamation. Any of the following public officers may issue a proclamation, which shall be applicable within their respective jurisdictions:

(1) The director or the director's designee.

(2) Any county fire warden with the approval of the director.

(3) The federal officers directing activities within California of the United States Bureau of Land Management, the National Park Service, and the United States Forest Service.

(b) The proclamation may be issued when, in the judgment of the issuing public official, the menace of destruction by fire to life, improved property, or natural resources is, or is forecast to become, extreme due to critical fire weather, fire suppression forces being heavily committed to control fires already burning, acute dryness of the vegetation, or other factors that may cause the rapid spread of fire. A proclamation is effective on issuance or at a time specified therein and shall remain in effect until a proclamation removing the suspension, restriction, or prohibition is issued. The proclamation may be effective for a single day or longer. The proclamation shall declare the conditions that necessitate its issuance, designate the geographic area to which it applies, require that all or specified burning under permit be suspended, restricted, or prohibited until the conditions necessitating the proclamation abate, and identify the public official issuing the proclamation. The proclamation may be in the form of a verbal or audio-recorded telephone message, a press release, or a posted order.

(c) The proclamation may be issued without complying with Chapter 3.5 (commencing with Section 11340) and Chapter 5 (commencing with Section 11500) of Part 1 of Division 3 of Title 2 of the Government Code.

Section 4423.2. - Burning Suspension Restricted Temporary Permit

(a) Whenever the burning under permit has been suspended, restricted, or prohibited by proclamation pursuant to Section 4423.1, the officer having jurisdiction may issue a restricted temporary burning permit in instances in which the continuation of burning may be essential for reasons of public health, safety, or welfare. The permit may stipulate any special precautions that are required to be followed to reduce the risk of uncontrolled fire originating from the operation.

(b) Violation of the terms of a restricted temporary burning permit is a misdemeanor, and any person upon conviction thereof shall be punished by a fine of not less than two hundred fifty dollars (\$250). No part of the fine shall be suspended. The court may permit the fine prescribed by this section to be paid in installments if the court determines that the defendant is unable to pay the fine in one lump sum.

Section 4423.3. - Campfire not Restricted Unless Specified

The use of a campfire is not restricted or prohibited by a proclamation issued pursuant to Section 4423.1, unless specifically restricted or prohibited in that or a subsequent proclamation. If restricted by proclamation, campfires shall be confined to facilities constructed for that purpose within the confines of a campground established, maintained, and open for public use, whether publicly or privately owned.

Section 4423.4. - Smoking not Restricted Unless Specified

Outdoor smoking is not restricted or prohibited by a proclamation issued pursuant to Section 4423.1, unless specifically restricted or prohibited in that or a subsequent proclamation. If restricted by proclamation, smoking shall be confined to the following: (a) Within motor vehicles while operating or parked on established roads, rest stops, or parking areas cleared of flammable vegetation. (b) Within established campgrounds open to the public. (c) Within an area that is at least three feet or approximately one meter in diameter which has been cleared to mineral soil by removal of all flammable vegetation and duff. The exempted locations may be included within the smoking ban if specifically noticed in the proclamation.

Section 4423.5 - Burn Suspension Violation

Use of open fire or burning under permit within an area closed by proclamation pursuant to the provisions of Section 4423.1, except as provided in Sections 4423.2, 4423.3, and 4423.4, is a misdemeanor and any person upon conviction thereof shall be punished by a fine of not less than one hundred dollars (\$100).

No part of such fine shall be suspended. The court may permit the fine prescribed by this section to be paid in installments if the court determines that the defendant is unable to pay the fine in one lump sum. 4425. Any violation of the terms of a burning permit issued pursuant to Section 4423, a restricted temporary burning permit issued pursuant to Section 4423.2, or a campfire permit issued pursuant to Section 4433 renders the permit null and void.

Section 4427 - Clearing and Tools Required

During any time of the year when burning permits are required in an area pursuant to this article, no person shall use or operate any motor, engine, boiler, stationary equipment, welding equipment, cutting torches, tarpots, or grinding devices from which a spark, fire, or flame may originate, which is located on or near any forest-covered land, brush-covered land, or grass-covered land, without doing both of the following:

- (a) First clearing away all flammable material, including snags, from the area around such operation for a distance of 10 feet.
- (b) Maintain one serviceable round point shovel with an overall length of not less than forty-six (46) inches and one backpack pump water-type fire extinguisher fully equipped and ready for use in the immediate area during the operation.

This section does not apply to portable power saws and other portable tools powered by a gasoline-fueled internal combustion engine.

Section 4431 - Portable Gas Powered Tools.

During any time of the year when burning permits are required in an area pursuant to this article, no person shall use or operate or cause to be operated in the area any portable saw, auger, drill, tamper, or other portable tool powered by a gasoline-fueled internal combustion engine on or near any forest-covered land, brush-covered land, or grass-covered land, within 25 feet of any flammable material, without providing and maintaining at the immediate locations of use or operation of the saw or tool, for firefighting purposes one serviceable round point shovel, with an overall length of not less than 46 inches,

or one serviceable fire extinguisher. The Director of Forestry and Fire Protection shall by administrative regulation specify the type and size of fire extinguisher necessary to provide at least minimum assurance of controlling fire caused by the use of portable power tools under various climatic and fuel conditions. The required fire tools shall at no time be farther from the point of operation of the power saw or tool than 25 feet with unrestricted access for the operator from the point of operation.

Section 4432 - Neglecting a Campfire.

(a) A person shall not leave a campfire, kindled or attended by that person, burning or unextinguished unless one of the following requirements is satisfied:

- (1) The person leaves some other person in attendance.
- (2) The fire is enclosed within a stove, oven, drum, or other nonflammable container, in such a manner that the fire cannot escape from the container.

(b) A person shall not allow a campfire, kindled or attended by that person, to spread after it is built.

Section 4433 - Campfire Permit Required

(a) A person shall not light, maintain, or use a campfire upon brush-covered land, grass-covered land, or forest-covered land that is the property of another person unless the person first obtains a written permit from the owner, lessee, or agent of the owner or lessee of the property.

(b) If, however, campsites and special areas have been established by the property owner and posted as areas for camping, a permit is not necessary.

(c) A written campfire permit duly issued by or under the authority of the United States Forest Service is necessary for use on land under the jurisdiction and control of the United States Forest Service.

Section 4434 - Campfire Escape

The escape of any campfire from the control of any person who is maintaining the campfire is prima facie evidence that such person was negligent in maintaining the campfire.

Section 4442 - Spark Arresters.

(a) Except as otherwise provided in this section, no person shall use, operate, or allow to be used or operated, any internal combustion engine which uses hydrocarbon fuels on any forest-covered land, brush-covered land, or grass-covered land unless the engine is equipped with a spark arrester, as defined in subdivision (c), maintained in effective working order or the engine is constructed, equipped, and maintained for the prevention of fire pursuant to Section 4443.

(b) Spark arresters affixed to the exhaust system of engines or vehicles subject to this section shall not be placed or mounted in such a manner as to allow flames or heat from the exhaust system to ignite any flammable material.

(c) A spark arrester is a device constructed of nonflammable materials specifically for the purpose of removing and retaining carbon and other flammable particles over 0.0232 of an inch in size from the exhaust flow of an internal combustion engine that uses hydrocarbon fuels or which is qualified and rated by the United States Forest Service.

(d) Engines used to provide motive power for trucks, truck tractors, buses, and passenger vehicles, except motorcycles, are not subject to this section if the exhaust system is equipped with a muffler as defined in the Vehicle Code.

(e) Turbocharged engines are not subject to this section if all exhausted gases pass through the rotating turbine wheel, there is no exhaust bypass to the atmosphere, and the turbocharger is an ineffective mechanical condition.

(f) Motor vehicles when being operated in an organized racing or competitive event upon a closed course are not subject to this section if the event is conducted under the auspices of a recognized sanctioning body and by permit issued by the fire protection authority having jurisdiction.

Section 4442.5 - Written Notice.

No person shall sell, offer for sale, lease, or rent to any person any internal combustion engine subject to Section 4442 or 4443, and not subject to Section 13005 of the Health and Safety Code, unless the person provides a written notice to the purchaser or bailee, at the time of sale or at the time of entering into the lease or rental contract, stating that it is a violation of Section 4442 or 4443 to use or operate the engine on any forest-covered, brush-covered, or grass-covered land unless the engine is equipped with a spark arrester, as defined in Section 4442, maintained in effective working order or the engine is constructed, equipped, and maintained for the prevention of fire pursuant to Section 4443.

Section 4442.6. - Warning Label

(a) A person shall not sell, offer for sale, lease, or rent to a person any equipment that is powered by an internal combustion engine subject to Section 4442 or 4443, and not subject to Section 13005 of the Health and Safety Code, unless that equipment has a permanent warning label attached that is in plain view to the operator that states, “WARNING—Operation of This Equipment May Create Sparks That Can Start Fires Around Dry Vegetation. A Spark Arrestor May be Required. The Operator Should Contact Local Fire Agencies For Laws or Regulations Relating to Fire Prevention Requirements.”

(b) A person who manufactures equipment that is powered by an internal combustion engine described in subdivision (a) shall attach to that equipment a permanent warning label that is in plain view to the operator and that complies with subdivision (a).

(c) Notwithstanding Section 4021, a violation of subdivision (a) or (b) is an infraction punishable by a fine of not more than one hundred dollars (\$100).

Section 4443 – Handheld Portable Engines

No person shall use, operate, or cause to be operated on any forest-covered land, brush-covered land, or grass-covered land any handheld portable, multi-position, internal-combustion engine manufactured after June 30, 1978, which is operated on hydrocarbon fuels, unless it is constructed and equipped and maintained for the prevention of fire.

The board shall, by regulation, specify standards for the construction, equipment, and maintenance of such engines for the prevention of fire and shall specify a uniform method of testing to be used by engine and equipment manufacturers, governmental agencies, and equipment users. The regulations shall include specifications of exhaust system standards for carbon particle retention or destruction, exposed surface temperature, gas temperature, flammable debris accumulation, durability, and serviceability. Portable power saw and other portable equipment described in this section which were manufactured prior to July 1, 1978, shall be subject to fire safety design specifications as prescribed by the board.

Section 4446 - Incinerator Permit Required

Every person shall exercise reasonable care in the disposal of flammable material so that the material does not cause the inception of or spread of uncontrolled fire. A person shall not burn any flammable material in any incinerator within any state responsibility area, within any area receiving fire protection by the director by contract, or upon federal lands administered by the United States Department of

Agriculture or Department of the Interior, unless all of the following minimum requirements are complied with:

- (a) The area within 10 feet of the exterior of the incinerator is maintained free and clear of all flammable material and vegetation.
- (b) A screen constructed of a nonflammable material, with no greater than ¹/₄-inch mesh, or metal doors, close or cover each opening in the exterior of an incinerator to prevent the escape of flames, sparks, ashes, or other burning material which might cause an uncontrolled fire.
- (c) A permit is obtained prior to burning for the use of the incinerator pursuant to Section 4423 and all other applicable provisions of law.

This section does not apply to the disposal of flammable material incident to the processing of forest products.

C. *Civil Code (CIV)*

Section 1102.19 – Disclosures Upon Transfer of Residential Property.

(a) On and after July 1, 2021, a seller of a real property subject to this article that is located in a high or very high fire hazard severity zone, as identified by the Director of Forestry and Fire Protection pursuant to Section 51178 of the Government Code or Article 9 (commencing with Section 4201) of Chapter 1 of Part 2 of Division 4 of the Public Resources Code, shall provide to the buyer documentation stating that the property is in compliance with Section 4291 of the Public Resources Code or local vegetation management ordinances, as follows:

(1) In a local jurisdiction that has enacted an ordinance requiring an owner of real property to obtain documentation that the property is in compliance with Section 4291 of the Public Resources Code or a local vegetation management ordinance, the seller shall provide the buyer with a copy of the documentation that complies with the requirements of that local ordinance and information on the local agency from which a copy of that documentation may be obtained.

(2) In a local jurisdiction that has not enacted an ordinance for an owner of real property to obtain documentation that a property is in compliance with Section 4291 of the Public Resources Code or a local vegetation management ordinance, and if a state or local agency, or other government entity, or other qualified nonprofit entity, provides an inspection with documentation for the jurisdiction in which the property is located, the seller shall provide the buyer with the documentation obtained in the six-month period preceding the date the seller enters into a transaction to sell that real property and provide information on the local agency from which a copy of that documentation may be obtained.

(b) On and after July 1, 2021, if the seller of a real property described in subdivision (a) has not obtained documentation of compliance in accordance with paragraph (1) or (2) of subdivision (a), the seller and the buyer shall enter into a written agreement pursuant to which the buyer agrees to obtain documentation of compliance with Section 4291 of the Public Resources Code or a local vegetation management ordinance as follows:

(1) In a local jurisdiction that has enacted an ordinance requiring an owner or buyer to obtain documentation of compliance with Section 4291 of the Public Resources Code or a local vegetation management ordinance, the buyer shall comply with that ordinance.

(2) In a local jurisdiction that has not enacted an ordinance requiring an owner or buyer to obtain documentation of compliance, and if a state or local agency, or other government entity, or other qualified nonprofit entity, provides an inspection with documentation for the jurisdiction in which the property is located, the buyer shall obtain documentation of compliance within one year of the date of the close of escrow.

(c) Nothing in this section, including the existence of an agreement between a buyer and seller pursuant to subdivision, shall limit the ability of a state or local agency to enforce defensible space requirements pursuant to Section 51182 of the Government Code, Section 4291 of the Public Resources Code, or other applicable statutes, regulations, and local ordinances.

II. STATE REGULATIONS

Title 14, California Code of Regulations (14 CCR), Division 1.5, Chapter 7

Subchapter 2. SRA/VHFHSZ Fire Safe Regulations

ARTICLE 1. ADMINISTRATION

Section 1270 - Title

These regulations shall be known as the “SRA/VHFHSZ Fire Safe Regulations,” and shall constitute the basic wildfire protection standards of the California Board of Forestry and Fire Protection.

Section 1270.01 - Purpose.

(a) These regulations have been prepared and adopted for the purpose of establishing minimum wildfire protection standards in conjunction with building, construction and development in the State Responsibility Area (SRA) and, after July 1, 2021, the Very High Fire Hazard Severity Zones as defined in Government Code § 51177(i) (VHFHSZ).

(b) The future design and construction of structures, subdivisions and developments in the SRA and, after July 1, 2021, the VHFHSZ shall provide for basic emergency access and perimeter wildfire protection measures as specified in the following articles.

(c) These measures shall provide for emergency access; signing and building numbering; private water supply reserves for emergency fire use; and vegetation modification. The fire protection standards which follow shall specify the minimums for such measures.

Section 1270.02 - Scope.

(a) These regulations shall apply to:

- (1) the perimeters and access to all residential, commercial, and industrial building construction within the SRA approved after January 1, 1991, and those approved after July 1, 2021 within the VHFHSZ, except as set forth below in subsections (b.)
- (2) the siting of newly installed commercial modulars, manufactured homes, mobile homes, and factory-built housing, as defined in Health and Safety Code sections 18001.8, 18007, 18008, and 19971;
- (3) all tentative and parcel maps or other developments approved after January 1, 1991; and
- (4) applications for building permits on a parcel approved in a pre-1991 parcel or tentative map to the extent that conditions relating to the perimeters and access to the buildings were not imposed as part of the approval of the parcel or tentative map.

(b) These regulations do not apply where an application for a building permit is filed after January 1, 1991 for building construction on a parcel that was formed from a parcel map or tentative map (if the final map for the tentative map is approved within the time prescribed by the local ordinance) approved prior to January 1, 1991, to the extent that conditions relating to the perimeters and access to the buildings were imposed by the parcel map or final tentative map approved prior to January 1, 1991.

(c) Affected activities include, but are not limited to:

- (1) permitting or approval of new parcels, excluding lot line adjustments as specified in Government Code (GC) section 66412(d);
- (2) application for a building permit for new construction, not relating to an existing structure;
- (3) application for a use permit;

(4) road construction including construction of a road that does not currently exist, or extension of an existing road.

(f) EXEMPTION: Roads used solely for agricultural, mining, or the management and harvesting of wood products.

Section 1270.03 – Provisions for Application of these Regulations.

This subchapter shall be applied as follows:

(a) the local jurisdictions shall provide the Director of the California Department of Forestry and Fire Protection (CAL FIRE) or their designee with notice of applications for building permits, tentative parcel maps, tentative maps, and installation or use permits for construction or development within the SRA or, after July 1, 2021, the VHFHSZ.

(b) the Director or their designee may review and make fire protection recommendations on applicable construction or development permits or maps provided by the local jurisdiction.

(c) the local jurisdiction shall ensure that the applicable sections of this subchapter become a condition of approval of any applicable construction or development permit or map.

Section 1270.04 – Local Ordinances.

(a) Nothing contained in these regulations shall be considered as abrogating the provisions of any ordinance, rule or regulation of any state or local jurisdiction provided that such ordinance, rule, regulation or general plan element is equal to or more stringent than these minimum standards.

(b) The Board may certify local ordinances as equaling or exceeding these regulations when they provide the same practical effect.

(c) Counties may submit their local ordinances for certification via email to the Board.

(d) The Board's certification of local ordinances pursuant to this section is rendered invalid when previously certified ordinances are subsequently amended by local jurisdictions without Board re-certification of the amended ordinances. The Board's regulations supersede the amended local ordinance(s) when the amended local ordinance(s) are not re-certified by the Board. Amendments made by local jurisdictions to previously certified ordinances shall be submitted for re-certification.

Section 1270.05 – Inspections.

Inspections shall conform to the following requirements:

(a) Inspection shall be made by:

- (1) the Director, or
- (2) local jurisdictions that have assumed state fire protection responsibility on SRA lands, or
- (3) local jurisdictions where the inspection duties have been formally delegated by CAL FIRE to the local jurisdiction.

(b) Inspections made under 14 CCR § 12705.05 (a)(2) or 14 CCR § 1270.05 (a)(3) shall occur only when these regulations are incorporated into local ordinance in one of the following manners:

- (1) these regulations have been incorporated verbatim or by reference into that jurisdiction's permitting or approval process for the activities described in 14 CCR § 1270.02; or
- (2) the local ordinances have been certified pursuant to 14 CCR § 1270.04;

(c) Nothing in this section abrogates CAL FIRE's authority to inspect and enforce state forest and fire laws even when the inspection duties have been delegated pursuant to this section.

(d) Reports of violations shall be provided to the CAL FIRE Unit headquarters that administers SRA fire protection in the local jurisdiction.

(e) When inspections are conducted, they shall occur prior to: the issuance of the use permit or certificate of occupancy; the recordation of the parcel map or final map; the filing of a notice of completion; or the final inspection of any project or building permit.

Section 1270.06 – Exceptions to Standards

(a) Upon request by the applicant, exceptions to standards within this subchapter or to local jurisdiction-certified ordinances may be allowed by the inspection entity listed in 14 CCR § 1270.05, where the exceptions provide the same practical effect as these regulations towards providing defensible space. Exceptions granted by the inspection entity listed in 14 CCR § 1270.05 shall be made on a case-by-case basis only. Exceptions granted by the inspection entity listed in 14 CCR § 1270.05 shall be forwarded to the appropriate CAL FIRE Unit Office that administers SRA fire protection in that county and shall be retained on file at the Unit Office.

(b) Requests for an exception shall be made in writing to the inspection entity listed in 14 CCR § 1270.05 by the applicant or the applicant's authorized representative. At a minimum, the request shall state the specific section(s) for which an exception is requested, material facts supporting the contention of the applicant, the details of the exception proposed, and a map showing the proposed location and siting of the exception. Local jurisdictions listed in 14 CCR section 1270.05 may establish additional procedures or requirements for exception requests.

(c) Where an exception is not granted by the inspection entity, the applicant may appeal such denial to the local jurisdiction. The local jurisdiction may establish or utilize an appeal process consistent with existing local building or planning department appeal processes.

(d) Before the local jurisdiction makes a determination on an appeal, the inspection authority shall be consulted and shall provide to that local jurisdiction documentation outlining the effects of the requested exception on wildfire protection.

(e) If an appeal is granted, the local jurisdiction shall make findings that the decision meets the intent of providing defensible space consistent with these regulations. Such findings shall include a statement of reasons for the decision. A written copy of these findings shall be provided to the CAL FIRE Unit headquarters that administers SRA fire protection in that local jurisdiction.

Section 1271.00 - Definitions.

Agriculture: Land used for agricultural purposes as defined in a local jurisdiction's zoning ordinances.

Building: Any structure used or intended for supporting or sheltering any use or occupancy, except Utility and Miscellaneous Group U buildings.

CAL FIRE: California Department of Forestry and Fire Protection.

Dead-end road: A road that has only one point of vehicular ingress/egress, including cul-de-sacs and looped roads.

Defensible space: The area within the perimeter of a parcel, development, neighborhood or community where basic wildland fire protection practices and measures are implemented, providing the key point of defense from an approaching wildfire or defense against encroaching wildfires or escaping structure fires. The perimeter as used in this regulation is the area encompassing the parcel or parcels proposed for construction and/or development, excluding the physical structure itself. The area is characterized by the establishment and maintenance of emergency vehicle access, emergency water reserves, road names and building identification, and fuel modification measures.

Development: As defined in section 66418.1 of the California Government Code.

Director: Director of the Department of Forestry and Fire Protection or their designee.

Driveway: A vehicular access that serves up to two (2) parcels with no more than two (2) residential units and any number of non-commercial or industrial buildings on each parcel.

Distance Measurements: All specified or referenced distances are measured along the ground, unless otherwise stated.

EXCEPTION: An alternative to the specified standard requested by the applicant that may be necessary due to health, safety, environmental conditions, physical site limitations or other limiting conditions, such as recorded historical sites, that provides mitigation of the problem.

Fire valve: see hydrant.

Fuel modification area: An area where the volume of flammable vegetation has been reduced, providing reduced fire intensity and duration.

Greenbelts: A facility or land-use, designed for a use other than fire protection, which will slow or resist the spread of a wildfire. Includes parking lots, irrigated or landscaped areas, golf courses, parks, playgrounds, maintained vineyards, orchards or annual crops that do not cure in the field.

Hammerhead/T: A road or driveway that provides a "T" shaped, three-point turnaround space for emergency equipment, being no narrower than the road that serves it.

Hydrant: A valved connection on a water supply or storage system, having either one two and a half (2 1/2) inch or one four and a half (4 1/2) inch outlet, with male American National Fire Hose Screw Threads (NH), used to supply fire apparatus and hoses with water.

Local Jurisdiction: Any county, city/county agency or department, or any locally authorized district that issues or approves building permits, use permits, tentative maps or tentative parcel maps, or has authority to regulate development and construction activity.

Occupancy: The purpose for which a building, or part thereof, is used or intended to be used.

One-way road: A minimum of one traffic lane width designed for traffic flow in one direction only.

Residential unit: Any building or portion thereof which contains living facilities, including provisions for sleeping, eating, cooking and/or sanitation for one or more persons. Manufactured homes, mobile homes, and factory-built housing are considered residential units for the purposes of mandatory measures required in 14 CCR § 1270.01(c).

Road: Vehicular access to more than two (2) parcels; more than four (4) residential units; or access to any industrial or commercial occupancy. Includes public and private streets and lanes.

Road or driveway structures: Bridges, culverts, and other appurtenant structures which supplement the traffic lane or shoulders.

Same Practical Effect: As used in this subchapter, means an exception or alternative with the capability of applying accepted wildland fire suppression strategies and tactics, and provisions for fire fighter safety, including:

- (a) access for emergency wildland fire equipment,
- (b) safe civilian evacuation,
- (c) signing that avoids delays in emergency equipment response,
- (d) available and accessible water to effectively attack wildfire or defend a structure from wildfire, and
- (e) fuel modification sufficient for civilian and fire fighter

safety. Shoulder: Vehicular access adjacent to the traffic lane.

State Board of Forestry and Fire Protection (Board): As defined in Public Resources Code section 730.

State Responsibility Area (SRA): As defined in Public Resources Code sections 4126-4127; and the California Code of Regulations, title 14, division 1.5, chapter 7, article 1, sections 1220-1220.5.

Structure: That which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

Subdivision: As defined in section 66424 of the Government Code.

Traffic lane: The portion of a road or driveway that provides a single line of vehicle travel.

Turnaround: A road or driveway, unobstructed by parking, which allows for a safe opposite change of direction for emergency equipment. Design of such area may be a hammerhead/T or terminus bulb.

Turnouts: A widening in a road or driveway to allow vehicles to pass.

Utility and Miscellaneous Group U building: A structure of an accessory character or a miscellaneous structure not classified in any specific occupancy permitted, constructed, equipped, and maintained to conform to the requirements of Title 24, California Building Standards Code.

Vertical clearance: The minimum specified height of a bridge or overhead projection above the road or driveway.

Wildfire: As defined in Public Resources Code Section 4103 and 4104.

ARTICLE 2. - EMERGENCY ACCESS and EGRESS

Section 1273.00 - Intent.

Roads and driveways, whether public or private, unless exempted under 14 CCR § 1270.02(d), shall provide for safe access for emergency wildfire equipment and civilian evacuation concurrently, and shall provide unobstructed traffic circulation during a wildfire emergency consistent with 14 CCR §§ 1273.00 through 1273.09.

Section 1273.01 - Width.

(a) All roads shall be constructed to provide a minimum of two ten (10) foot traffic lanes, not including shoulder and striping. These traffic lanes shall provide for two-way traffic flow to support emergency vehicles and civilian egress unless other standards are provided in this article or additional requirements are mandated by local jurisdictions or local subdivision requirements. Vertical clearances shall conform to the requirements in California Vehicle Code section 35250.

(b) All one-way roads shall be constructed to provide a minimum of one twelve (12) foot traffic lane, not including shoulders. The local jurisdiction may approve one-way roads.

(1) All one-way roads shall, at both ends, connect to a road with two traffic lanes providing for travel in different directions, and shall provide access to an area currently zoned for no more than ten (10) residential units.

(2) In no case shall a one-way road exceed 2,640 feet in length. A turnout shall be placed and constructed at approximately the midpoint of each one-way road.

(c) All driveways shall be constructed to provide a minimum of one (1) ten (10) foot traffic lane, fourteen (14) feet unobstructed horizontal clearance, and unobstructed vertical clearance of thirteen feet, six inches (13' 6").

Section 1273.02 - Road Surfaces.

(a) Roads shall be designed and maintained to support the imposed load of fire apparatus weighing at least 75,000 pounds and provide an aggregate base.

(b) Driveways and road and driveway structures shall be designed and maintained to support at least 40,000 pounds.

(c) Project proponent shall provide engineering specifications to support design if requested by the local authority having jurisdiction.

Section 1273.03 - Grades.

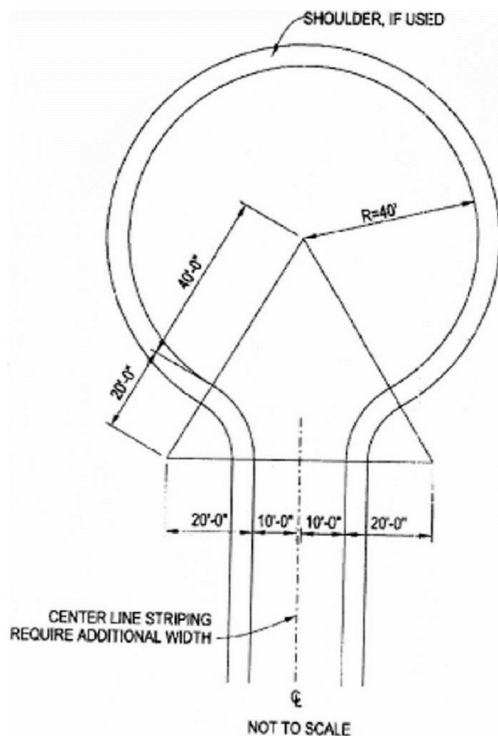
- (a) At no point shall the grade for all roads and driveways exceed 16 percent.
- (b) The grade may exceed 16%, not to exceed 20%, with approval from the local authority having jurisdiction and with mitigations to provide for the same practical effect.

Section 1273.04 - Radius.

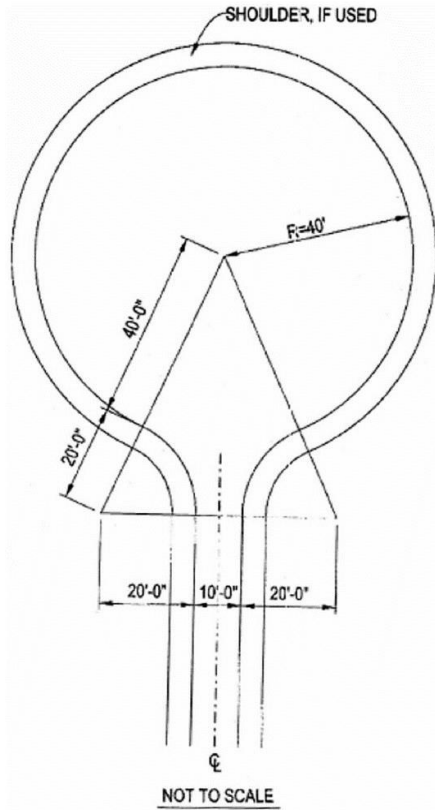
- (a) No road or road structure shall have a horizontal inside radius of curvature of less than fifty (50) feet. An additional surface width of four (4) feet shall be added to curves of 50-100 feet radius; two (2) feet to those from 100-200 feet.
- (b) The length of vertical curves in roadways, exclusive of gutters, ditches, and drainage structures designed to hold or divert water, shall be not less than one hundred (100) feet.

Section 1273.05 - Turnarounds.

- (a) Turnarounds are required on driveways and dead-end roads.
- (b) The minimum turning radius for a turnaround shall be forty (40) feet, not including parking, in accordance with the figures in 14 CCR §§ 1273.05(e) and 1273.05(f). If a hammerhead/T is used instead, the top of the “T” shall be a minimum of sixty (60) feet in length.
- (c) Driveways exceeding 150 feet in length, but less than 800 feet in length, shall provide a turnout near the midpoint of the driveway. Where the driveway exceeds 800 feet, turnouts shall be provided no more than 400 feet apart.
- (d) A turnaround shall be provided on driveways over 300 feet in length and shall be within fifty (50) feet of the building.
- (d) Each dead-end road shall have a turnaround constructed at its terminus. Where parcels are zoned five (5) acres or larger, turnarounds shall be provided at a maximum of 1,320ft intervals.
- (e) Figure A. Turnarounds on roads with two ten-foot traffic lanes.



(f) Figure B. Turnarounds on driveways with one ten-foot traffic lane.



Section 1273.06 - Turnouts.

Turnouts shall be a minimum of twelve (12) feet wide and thirty (30) feet long with a minimum twenty-five (25) foot taper on each end.

Section 1273.07 – Road and Driveway Structures.

- (a) Appropriate signing, including but not limited to weight or vertical clearance limitations, one-way road or single traffic lane conditions, shall reflect the capability of each bridge.
- (b) Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge shall be constructed and maintained in accordance with the American Association of State and Highway Transportation Officials Standard Specifications for Highway Bridges, 17th Edition, published 2002 (known as AASHTO HB-17), hereby incorporated by reference. Bridges and elevated surfaces shall be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted at both entrances to bridges when required by the local authority having jurisdiction.
- (c) Where elevated surfaces designed for emergency vehicle use are adjacent to surfaces which are not designed for such use, barriers, or signs, or both, as approved by the local authority having jurisdiction, shall be installed and maintained.
- (d) A bridge with only one traffic lane may be authorized by the local jurisdiction; however, it shall provide for unobstructed visibility from one end to the other and turnouts at both ends.

Section 1273.08- Dead-End Roads.

- (a) The maximum length of a dead-end road, including all dead-end roads accessed from that dead-end road, shall not exceed the following cumulative lengths, regardless of the number of parcels served: parcels zoned for less than one acre - 800 feet
parcels zoned for 1 acre to 4.99 acres - 1,320 feet
parcels zoned for 5 acres to 19.99 acres - 2,640 feet
parcels zoned for 20 acres or larger - 5,280 feet

All lengths shall be measured from the edge of the road surface at the intersection that begins the road to the end of the road surface at its farthest point. Where a dead-end road crosses areas of differing zoned parcel sizes requiring different length limits, the shortest allowable length shall apply.

- (b) See 14 CCR § 1273.05 for dead-end road turnaround requirements.

Section 1273.09 - Gate Entrances.

- (a) Gate entrances shall be at least two (2) feet wider than the width of the traffic lane(s) serving that gate and a minimum width of fourteen (14) feet unobstructed horizontal clearance and unobstructed vertical clearance of thirteen feet, six inches (13' 6").

- (b) All gates providing access from a road to a driveway shall be located at least thirty (30) feet from the roadway and shall open to allow a vehicle to stop without obstructing traffic on that road.

- (c) Where a one-way road with a single traffic lane provides access to a gated entrance, a forty (40) foot turning radius shall be used.

- (d) Security gates shall not be installed without approval. Where security gates are installed, they shall have an approved means of emergency operation. Approval shall be by the local authority having jurisdiction. The security gates and the emergency operation shall be maintained operational at all times.

ARTICLE 3. – SIGNING AND BUILDING NUMBERING

Section 1274.00 – Intent

To facilitate locating a fire and to avoid delays in response, all newly constructed or approved roads and buildings shall be designated by names or numbers posted on signs clearly visible and legible from the road. This section shall not restrict the size of letters or numbers appearing on road signs for other purposes.

Section 1274.01 - Road Signs

- (a) Newly constructed or approved roads must be identified by a name or number through a consistent system that provides for sequenced or patterned numbering and/or non-duplicative naming within each local jurisdiction. This section does not require any entity to rename or renumber existing roads, nor shall a road providing access only to a single commercial or industrial occupancy require naming or numbering.

- (b) The size of letters, numbers, and symbols for road signs shall be a minimum four (4) inch letter height, half-inch (.5) inch stroke, reflectorized, contrasting with the background color of the sign.

Section 1274.02 - Road Signs Installation, Location, and Visibility

(a) Road signs shall be visible and legible from both directions of vehicle travel for a distance of at least one hundred (100) feet.

(b) Signs required by this article identifying intersecting roads shall be placed at the intersection of those roads.

(c) A sign identifying traffic access or flow limitations, including but not limited to weight or vertical clearance limitations, dead-end roads, one-way roads, or single lane conditions, shall be placed:

- (i) at the intersection preceding the traffic access limitation, and
- (ii) no more than one hundred (100) feet before such traffic access limitation.

(d) Road signs required by this article shall be posted at the beginning of construction and shall be maintained thereafter.

Section 1274.03 – Addresses for Buildings

(a) All buildings shall be issued an address by the local jurisdiction which conforms to that jurisdiction's overall address system. Utility and miscellaneous Group U buildings are not required to have a separate address; however, each residential unit within a building shall be separately identified.

(b) The size of letters, numbers, and symbols for addresses shall conform to the standards in the California Fire Code, California Code of Regulations title 24, part 9.

(c) Addresses for residential buildings shall be reflectorized.

Section 1274.04 – Address Installation, Location, and Visibility

(a) All buildings shall have a permanently posted address which shall be plainly legible and visible from the road fronting the property.

(b) Where access is by means of a private road and the address identification cannot be viewed from the public way, an unobstructed sign or other means shall be used so that the address is visible from the public way.

(c) Address signs along one-way roads shall be visible from both directions.

(d) Where multiple addresses are required at a single driveway, they shall be mounted on a single sign or post.

(e) Where a road provides access solely to a single commercial or industrial business, the address sign shall be placed at the nearest road intersection providing access to that site, or otherwise posted to provide for unobstructed visibility from that intersection.

(f) In all cases, the address shall be posted at the beginning of construction and shall be maintained thereafter.

ARTICLE 4. EMERGENCY WATER STANDARDS

Section 1275.00 - Intent.

Emergency water for wildfire protection shall be available, accessible, and maintained in quantities and locations specified in the statute and these regulations in order to attack a wildfire or defend property from a wildfire.

Section 1275.01 - Application.

The provisions of this article shall apply in the tentative and parcel map process when new parcels are approved by the local jurisdiction having authority.

Section 1275.02 – Water Supply

(a) When a water supply for structure defense is required to be installed, such protection shall be installed and made serviceable prior to and during the time of construction except when alternative methods of protection are provided and approved by the local authority having jurisdiction.

(b) Water systems equaling or exceeding the California Fire Code, California Code of Regulations title 24, part 9, or, where a municipal-type water supply is unavailable, National Fire Protection Association (NFPA) 1142, “Standard on Water Supplies for Suburban and Rural Fire Fighting,” 2017 Edition, hereby incorporated by reference, shall be accepted as meeting the requirements of this article.

(c) Such emergency water may be provided in a fire agency mobile water tender, or naturally occurring or manmade containment structure, as long as the specified quantity is immediately available.

(d) Nothing in this article prohibits the combined storage of emergency wildfire and structural firefighting water supplies unless so prohibited by local ordinance or specified by the local fire agency.

(e) Where freeze or crash protection is required by local jurisdictions having authority, such protection measures shall be provided.

Section 1275.03 – Hydrants and Fire Valves.

(a) The hydrant or fire valve shall be eighteen (18) inches above the finished surface. Its location in relation to the road or driveway and to the building(s) or structure(s) it serves shall comply with California Fire Code, California Code of Regulations title 24, part 9, Chapter 5, and Appendix C.

(b) The hydrant head shall be a two and half (2 1/2) inch National Hose male thread with cap for pressure and gravity flow systems and four and a half (4 1/2) inch for draft systems.

(c) Hydrants shall be wet or dry barrel and have suitable freeze or crash protection as required by the local jurisdiction.

Section 1275.04 - Signing of Water Sources.

(a) Each hydrant, fire valve, or access to water shall be identified as follows:

- (1) if located along a driveway, a reflectorized blue marker, with a minimum dimension of three (3) inches shall be located on the driveway address sign and mounted on a fire-retardant post, or
- (2) if located along a road,

- (i) a reflectorized blue marker, with a minimum dimension of three (3) inches, shall be mounted on a fire-retardant post. The signpost shall be within three (3) feet of said hydrant or fire valve, with the sign no less than three (3) feet nor greater than five (5) feet above ground, in a horizontal position and visible from the driveway, or
- (ii) as specified in the State Fire Marshal's Guidelines for Fire Hydrant Markings Along State Highways and Freeways, May 1988.

ARTICLE 5. FUEL MODIFICATION STANDARDS

Section 1276.00 - Intent.

To reduce the intensity of a wildfire by reducing the volume and density of flammable vegetation, the strategic siting of fuel modification and greenbelts shall provide for increased safety for emergency fire equipment and evacuating civilians by its utilization around structures and roads, including driveways, and a point of attack or defense from a wildfire.

Section 1276.01 - Setback for Structure Defensible Space.

(a) All parcels shall provide a minimum thirty (30) foot setback for all buildings from all property lines and/or the center of a road.

(b) When a thirty (30) foot setback is not possible for practical reasons, which may include but are not limited to parcel dimensions or size, topographic limitations, or other easements, the local jurisdiction shall provide for same practical effect.

(i) Same practical effect requirements shall reduce the likelihood of home-to-home ignition.

(ii) Same practical effect options may include, but are not limited to, noncombustible block walls or fences; five (5) feet of noncombustible material horizontally around the structure; installing hardscape landscaping or reducing exposed windows on the side of the structure with a less than thirty (30) foot setback; or additional structure hardening such as those required in the California Building Code, California Code of Regulations title 24, part 2, Chapter 7A.

(c) Structures constructed in the SRA are required to comply with the defensible space regulations in Title 14. Natural Resources Division 1.5. Department of Forestry and Fire Protection Chapter 7. Fire Protection Subchapter 3. Fire Hazard.

Section 1276.02 – Maintenance of Defensible Space Measures

To ensure continued maintenance of commonly owned properties in conformance with these standards and to assure continued availability, access, and utilization of the defensible space provided by these standards during a wildfire, provisions for annual maintenance shall be provided in emergency access covenants or similar binding agreements.

Section 1276.03 - Disposal of Flammable Vegetation and Fuels.

Disposal, including chipping, burying, burning, or removal to a site approved by the local jurisdiction, of flammable vegetation and fuels caused by site development and construction, road and driveway construction, and fuel modification shall be completed prior to completion of road construction or final inspection of a building permit.

Section 1276.04 – Greenbelts

Subdivision and other developments, which propose greenbelts as a part of the development plan, shall locate said greenbelts strategically as a separation between wildland fuels and structures. The locations shall be approved by the local authority having jurisdiction and may be consistent with the CAL FIRE Unit Fire Management Plan or Contract County Fire Plan.

Subchapter 3. FIRE HAZARD

ARTICLE 1. FIRE HAZARD SEVERITY

Section 1280 – Definitions

The following definitions apply to Title 14 of the California Code of Regulations (14 CCR), Division 1.5, Chapter 7, Subchapter 3, Article 1.

Director: Director of the Department of Forestry and Fire Protection or their designee.

Local responsibility area (LRA): Those areas of land classified by the Board of Forestry and Fire Protection (Board) where the financial responsibility of preventing and suppressing wildfires is not that of the state or federal government, pursuant to Public Resources Code (PRC) section 4125.

Portable document format (PDF): file format used to present and exchange documents reliably, independent of software, hardware, or operating system. PDF is an open standard maintained by the International Organization for Standardization (ISO).

State Responsibility Area (SRA): As defined in Public Resources Code section 4102.

Very high fire hazard severity zone (VHFHSZ): as defined in Government Code section 51177(i).

Section 1280.1 - Fire Hazard Severity Zones in the SRA.

The fire hazard severity zones and the rating reflecting the degree of severity of fire hazard that is expected to prevail in those zones, shall be designated by the Director and delineated on a series of maps on file in the Sacramento Office of the Department of Forestry and Fire Protection, Fire and Resources Assessment Program, 1300 U St. The official maps are also filed electronically on the Department's web site, <https://osfm.fire.ca.gov/divisions/community-wildfire-preparedness-and-mitigation/wildland-hazards-building-codes/fire-hazard-severity-zones-maps/>. The maps are entitled "Fire Hazard Severity Zones in [State Responsibility Area] SRA," dated November 7, 2007, and are incorporated by reference.

Section 1280.2 - Very High Fire Hazard Severity Zones in the LRA.

(a) Within thirty (30) days of adopting a local ordinance designating VHFHSZ pursuant to Government Code section 51179(a), a local agency shall transmit a copy of the ordinance and a map depicting the adopted zones within the local agency to the Board of Forestry and Fire Protection (Board).

(b) The ordinance(s) and map(s) shall be delivered in a PDF file(s) and submitted electronically to the Board.

(c) The Board may request additional versions of the map(s) to establish greater clarity regarding the adopted zones. This request may ask for the maps in other file formats, such as Geographic Information System (GIS) shapefiles or similar, based on the Board's and the local agency's capabilities.

(d) Local agencies shall supply the following information, on a form provided by the Board, when they submit their ordinance(s) and map(s):

- (1) the agency's name and a point of contact, including address, email, phone, and fax number.
- (2) information about the agency's meeting adopting the VHFHSZ, including the date, location, agenda and agenda item number, and staff reports.
- (3) information about the ordinance, including the name and/or number, copies of the signatory page(s), and the text of the ordinance.

(4) information about the section(s) of city or county code adopted or amended by the ordinance, including the name and/or number and code text.

(5) information about the decision, pursuant to Government Code section 51179(b), to include areas within the jurisdiction as VHFHSZ that were not identified as such by the director. The local agency shall provide the finding(s) supported by substantial evidence in the record that the requirements of Government Code section 51182 are necessary for effective fire protection in the area. This information may be in the form of staff reports, data analysis, mapping, or other background work that informed the local agency's decision.

ARTICLE 3. FIRE HAZARD REDUCTION AROUND BUILDINGS AND STRUCTURES

Section 1299.01. Purpose

The intent of this regulation is to provide guidance for implementation of Public Resources Code Section 4291 to improve safety for fire fighters defending a home as well as increase the survivability of a "Building or Structure" as defined, that exists in grass, brush, and forest covered lands within the designated State Responsibility Area (SRA) of California.

Section 1299.02. Definitions

The following definitions apply to this article:

(a) Defensible space. The buffer that landowners are required to create on their property between a "Building or Structure" and the plants, brush and trees or other items surrounding the "Building or Structure" that could ignite in the event of a fire.

(b) Building or Structure. Anything constructed that is designed or intended for support, enclosure, shelter, or protection of persons, animals, or property, having a permanent roof that is supported by walls or posts that connect to, or rest on the ground.

(c) Outbuilding. Buildings or structures that are less than one hundred-twenty (120) square feet in size and not used for human habitation. For purposes of this Section, an "Outbuilding" is not a "Building or Structure" as defined in subsection (b) above.

Section 1299.03. Requirements

Defensible space is required to be maintained at all times, whenever flammable vegetative conditions exist. One hundred feet (100 ft.) of defensible space clearance shall be maintained in two distinct "Zones" as follows: "Zone 1" extends thirty feet (30 ft.) out from each "Building or Structure," or to the property line, whichever comes first; "Zone 2" extends from thirty feet (30 ft.) to one hundred feet (100 ft.) from each "Building or Structure," but not beyond the property line. The vegetation treatment requirements for Zone 1 are more restrictive than for Zone 2, as provided in (a) and (b) below. The Department of Forestry and Fire Protection's "Property Inspection Guide, 2000 version, April 2000," provides additional guidance on vegetation treatment within Zone 1 and Zone 2, but is not mandatory and is not intended as a substitute for these regulations.

(a) Zone 1 Requirements:

(1) Remove all dead or dying grass, plants, shrubs, trees, branches, leaves, weeds, and pine needles from the Zone whether such vegetation occurs in yard areas around the "Building or Structure," on the roof or rain gutters of the "Building or Structure," or any other location within the Zone.

(2) Remove dead tree or shrub branches that overhang roofs, below or adjacent to windows, or which are adjacent to wall surfaces, and keep all branches a minimum of ten feet (10 ft.) away from chimney and stovepipe outlets.

(3) Relocate exposed firewood piles outside of Zone 1 unless they are completely covered in a fire-resistant material.

(4) Remove flammable vegetation and items that could catch fire which are adjacent to or under combustible decks, balconies and stairs.

(b) Zone 2 Requirements:

(1) In this zone create horizontal and vertical spacing among shrubs and trees using the “Fuel Separation” method, the “Continuous Tree Canopy” method or a combination of both to achieve defensible space clearance requirements. Further guidance regarding these methods is contained in the State Board of Forestry and Fire Protection's, “General Guidelines for Creating Defensible Space, February 8, 2006,” incorporated herein by reference, and the “Property Inspection Guide” referenced elsewhere in this regulation.

(2) In both the Fuel Separation and Continuous Tree Canopy methods the following standards apply:

(A) Dead and dying woody surface fuels and aerial fuels shall be removed. Loose surface litter, normally consisting of fallen leaves or needles, twigs, bark, cones, and small branches, shall be permitted to a maximum depth of three inches (3 in.).

(B) Cut annual grasses and forbs down to a maximum height of four inches (4 in.).

(C) All exposed wood piles must have a minimum of ten feet (10 ft.) of clearance, down to bare mineral soil, in all directions.

(c) For both Zones 1 and 2:

(1) “Outbuildings” and Liquid Propane Gas (LPG) storage tanks shall have the following minimum clearance: ten feet (10 ft.) of clearance to bare mineral soil and no flammable vegetation for an additional ten feet (10 ft.) around their exterior.

(2) Protect water quality. Do not clear vegetation to bare mineral soil and avoid the use of heavy equipment in and around streams and seasonal drainages. Vegetation removal can cause soil erosion, especially on steep slopes. Keep soil disturbance to a minimum on steep slopes.

Section 1299.04. Additional Clearance

(a) An insurance company that insures an occupied “Building or Structure” may require additional clearance beyond that required under § 1299.03 only if a fire expert designated by the Director provides findings that the clearing is necessary.

(b) Within the intent of the regulations, a fire expert designated by the Director may require more than one hundred feet (100 ft.) of defensible space. A fire expert cannot require additional defensible space clearance beyond the property line.

(c) Further guidance to property owners on implementation of this regulation is contained in the “General Guidelines for Creating Defensible Space” and the “Property Inspection Guide,” both of which are referenced elsewhere in this regulation.

Section 1299.05. Alternative Methods

The provisions of these regulations are not intended to exclude alternative methods not specifically prescribed by these regulations. A fire expert designated by the Director may approve alternative practices which provide for the same practical effects as those stated in these regulations.