

# ORANGE COUNTY FIRE AUTHORITY

Community Risk Reduction

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## Fire Safe Development in State Responsibility Areas and in Local Responsibility Area Very High Fire Hazard Severity Zones



### Guideline B-09a

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# Fire Safe Development in SRA and in LRA VHFHSZ

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# Fire Safe Development in SRA and in LRA VHFHSZ

## PURPOSE

This Guideline applies to new, remodeled, reconstructed, relocated residential or commercial structures and developments and other facilities *located within State Responsibility Area (SRA) lands and in the Very High Fire Hazard Severity Zones (VHFHSZ) within Local Responsibility Area (LRA) lands* for which emergency firefighting response or evacuation may be necessary.

Section 4290 of the Public Resources Code requires the Board of Forestry and Fire Protection to “adopt regulations implementing minimum fire safety standards related to defensible spaces which are applicable to state responsibility area lands under the authority of the department.” As protection from wildfire is not strictly a municipal affair regulated by individual local jurisdictions, these requirements also extend into local responsibility areas that are designated as Very High Fire Hazard Severity Zones in accordance with Article 11, Section 5 of the California Constitution. The requirements for protection from wildfire are further clarified and made specific in regulation in Title 14, the Natural Resources Division of the California Code of Regulations.

In some cases, state regulations governing development within areas potentially impacted by wildfires in Title 14 are more stringent than local standards enforced by OCFA based on the California Fire Code. In such cases, the more stringent state regulation would take precedence. Conversely, where the local regulation is more stringent and has been certified by the Board of Forestry and Fire Protection, it would take precedence over the state regulation.

Guideline B-09a is intended to assist the applicant in attaining compliance with both local and statewide requirements for projects within SRA land and LRA VHFHSZ and is intended to be used *in conjunction with and not in place of* Guideline B-09. The text of Title 14 pertaining to access and water requirements for fire safe development has been reproduced in this Guideline and, where relevant, comments have been provided in a box after each Title 14 requirement. The comments may direct you to a more stringent local requirement where conflicting requirements exist, direct you to comply with a combination of state and local requirements where requirements are compatible or supplementary, or refer you to other codes or standards for additional guidance.

It is incumbent upon the developer and owner, and his/her agents and representatives, to ensure that projects comply with the requirements of all Authorities Having Jurisdiction. Nothing in this Guideline or Guideline B-09 is intended to abrogate the authority of CAL FIRE to enforce state regulations independently from or in addition to local design standards.

# **CALIFORNIA BOARD OF FORESTRY AND FIRE PROTECTION**

## **SRA FIRE SAFE REGULATIONS**



**As of January 1, 2020**  
**California Code of Regulations**  
**Title 14 Natural Resources**  
**Division 1.5 Department of Forestry**  
Chapter 7 - Fire Protection  
Subchapter 2 SRA Fire Safe Regulations  
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**ARTICLE 1. ADMINISTRATION**

- § 1270.00. Title
- § 1270.01. Purpose
- § 1270.02. Scope
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- § 1271.00. Definitions

**1270.00. Title**

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

**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).

(b) The future design and construction of structures, subdivisions and developments in SRA 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.

**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 except as set forth below in subsection (b);
- (2) the siting of newly installed commercial modular, manufactured homes, mobilehomes, and factory-built housing, as defined in Health and Safety Code section 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.
- (d) EXEMPTION: Roads used solely for agricultural, mining, or the management and harvesting of wood products.

### **1270.03. Provisions for Application of these Regulations**

This subchapter shall be applied as follows:

- (a) 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 SRA.
- (b) the Director or their designee may review and make fire protection recommendations on applicable construction or development 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.

### **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 providing 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.

### **1270.05. Inspection Authority**

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 § 1270.05(a)(2) or 14 CCR § 1270.05(a)(3) shall only occur when these regulations are to be 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 Section 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.

#### **1270.06. Exceptions to Standards**

(a) Upon request by the applicant, exceptions to standards within this subchapter or local jurisdiction certified ordinances may be allowed by the inspection entity listed in 14 CCR § 1270.05, where the exceptions provide the same overall 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. Jurisdictions may establish additional procedures or requirements for exception requests.

(c) Where an exception is not granted by the inspection authority, 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 wildland fire 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.

## **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, street 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 provide 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 ½) inch or one four and a half (4 ½) 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, mobilehomes, and factory-built housing are considered residential units for purposes of mandatory measures required in Section § 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 the Public Resources Code section 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 buildings:** 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.

See also definitions provided in the "Scope" section of OCFA Guideline B-09 and Chapter 2 of the California Fire Code.

## **ARTICLE 2. EMERGENCY ACCESS AND EGRESS**

- § 1273.00. Intent
- § 1273.01. Width
- § 1273.02. Road Surfaces
- § 1273.03. Grades
- § 1273.04. Radius
- § 1273.05. Turnarounds
- § 1273.06. Turnouts
- § 1273.07. Road and Driveway Structures
- § 1273.08. Dead-end Roads
- § 1273.09. Gate Entrances

**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.

**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 vehicle 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 connect to a road with two traffic lanes at both ends, 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").

**Guideline B-09 Section 2.A.4:**

In wildfire risk areas, fire lanes shall be at least 28 feet wide.

*Exception: fire lanes that are 150 feet or less in length may be 24 feet wide if serving one to three dwelling units; where all structures served by the fire lane are protected with fire sprinklers, this length may be increased to 400 feet.*

This width shall be provided to a logical termination outside of the wildfire risk area. Refer to the Fire Hazard Severity Zone maps on the OCFA website.

**1273.02. 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.

**Guideline B-09 Section 2.A.1:**

In SRA and in LRA VHFHSZ, roads and driveways designated as fire lanes shall comply with the more stringent OCFA requirement of 94,000 pounds.

**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.

**Guideline B-09 Section 2.A.7:**

Fire Apparatus Access Road Grade - The grade for access roads shall not exceed 10% or 5.7 degrees (7% or 4 degrees in Irvine unless otherwise approved by the City Engineer). The grade may be increased to a maximum of 15% or 8.5 degrees for approved lengths of access roadways, when all structures served by the access road are protected by automatic fire sprinkler systems. Cross-slope shall not be greater than 2% for paved access roadways.

**1273.04. Radius**

- (a) No road or road structures 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 roads, exclusive of gutters, ditches, and drainage structures designed to hold or divert water, shall be not less than one hundred (100) feet.

**Guideline B-09 Section 2.A.7:**

Cross-slope shall not be greater than 2% for paved access roadways.

**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, turnaround shall be provided at a maximum of 1,320 foot intervals.

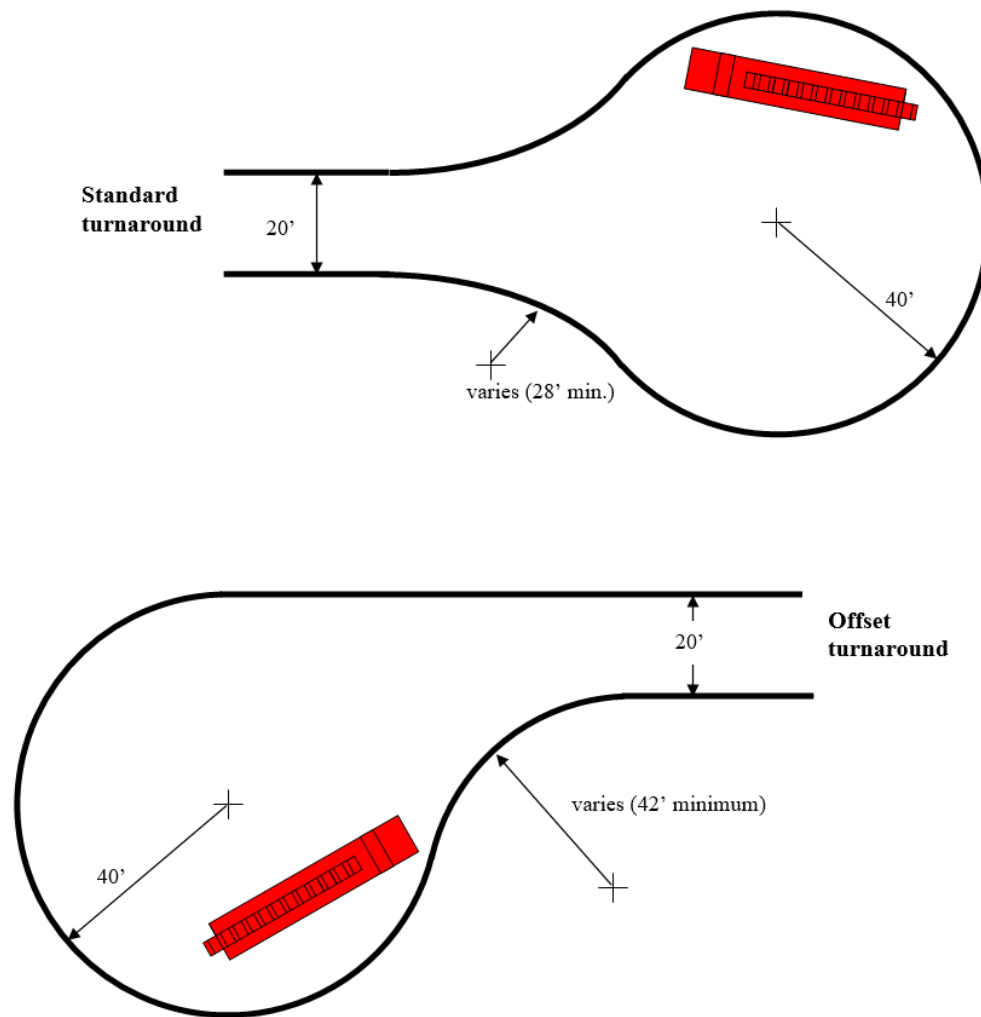


**Guideline B-09 Attachment 7**

Circular and hammerhead turnarounds shall meet the more stringent minimum requirements of OCFA. For example, as shown in the diagram below, a standard circular turnaround would need a 28' radius where the "bulb" connects to the 20' wide "neck."

Dead-end fire lanes over 800 feet long shall have a mid-point turnaround or other approved form of mitigation per Guideline B-09 Section 2.A.9.

**ATTACHMENT 7  
Minimum Turnaround and Hammerhead Dimensions**



NOTE: Parking is not permitted in these turnarounds at the dimensions shown.

**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.

Turnouts intended only for passage of vehicles shall be 12 feet wide by 60 feet long to accommodate OCFA apparatus. Where the turnout also functions as a staging area for firefighting, the width shall be increased to 16 feet. Please refer to the access section in Guideline H-01 for additional considerations regarding turnouts used for firefighting at high-rise buildings.

**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.

**Guideline B-09 Section 2.A.10**

Bridges and underground vaults or similar subterranean features beneath fire apparatus roadways shall be designed to meet AASHTO standard H-20 or HB-17, whichever is more stringent. See Guideline B-09 Section 2.A.1 for gross vehicle weight and distribution.

Where one-way/lane roads are allowed by OCFA, they shall be a minimum of 13 feet wide, consistent with the minimum width allowed in OCFA Guideline B-09 Section 5.A for one-way fire lanes passing through gates.

**1273.08. Dead-End Roads**

- (a) The maximum length of a dead-end road, including all dead-end roads accessed from the dead-end road, shall not exceed the following cumulative lengths, regardless of the numbers of parcels served:
- parcels zoned for less than one acre – 800 feet
  - parcels zoned for 1 acre to 4.99 acres – 1320 feet
  - parcels zoned for 5 acres to 19.99 acres – 2640 feet
  - parcels zoned for 20 acres or larger – 5280 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.

Regardless of parcel size, dead-end fire lanes over 800 feet long shall have a mid-point turnaround or other approved form of mitigation per Guideline B-09 Section 2.A.9.

Driveways that are designated fire lanes shall also comply with all applicable requirements in Guideline B-09 or the provisions of an approved alternate methods and materials proposal. In no case shall they be less stringent than Title 14.

### **1273.09. Gate Entrance**

(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 and 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.

### **Guideline B-09 Section 5 and Attachment 15**

Gates crossing fire lanes shall comply with the most stringent requirements from Title 14 and B-09. For example, gates shall have a minimum clear opening of 15 feet when serving a single lane of traffic (13 foot minimum road width per B-09 plus an additional 2 feet of clearance per Title 14). Gates shall be set back at least 60 feet from the adjacent road leading to the gate.

**ARTICLE 3. SIGNING AND BUILDING NUMBERING**

§ 1274.00. Intent

§ 1274.01. Road Signs

§ 1274.02. Road Sign Installation, Location, and Visibility

§ 1274.03. Addresses for Buildings

§ 1274.04. Address Installation, Location, and Visibility

**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 of numbers appearing on road signs for other purposes.

**1274.01. Roads 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 4 (4) inch letter height, half (.5) inch stroke, reflectorized, contrasting with the background color of the sign.

**1274.02. Road Sign 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 condition, 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.

**1274.03. Addresses for Buildings**

(a) All buildings shall be issued an address by the local jurisdiction which conform 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.

**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.

#### **OCFA Guideline B-09 Section 4.C**

The numbers shall be a *minimum* of 4" in height for single-family homes/duplexes, or individual unit numbers in multi-family residential structures, and 6" or more for commercial structures or the primary building address or address range posted on multi-family residential structures. The 6" numbers shall have a 1" stroke. Building setbacks, elevation, and landscaping can affect these minimum size requirements.

### **ARTICLE 4. EMERGENCY WATER STANDARDS**

- § 1275.00. Intent
- § 1275.01. Application
- § 1275.02. Water Supply
- § 1275.03. Hydrant/Fire Valve
- § 1275.04. Signing of Water Sources

#### **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.

#### **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.

#### **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 man-made 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.

### **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 Regulation title 24, part 9, Chapter 5, and Appendix C.

(b) The hydrant head shall be a two and a half (2 ½) inch National Hose male thread with cap for pressure and gravity flow systems and four and a half (4 ½) inch for draft systems. Such hydrants shall be wet or dry barrel and have suitable freeze or crash protection as required by the local jurisdiction.

The hose lay distance to a hydrant shall not exceed 250' (300' for sprinklered detached single-family residences or duplexes) from the structure as measured along the fire lane fronting the structure. Please see Attachments 24 and 29 in Guideline B-09.

### **1275.04 Signing of Water Sources**

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 street or road,

(i) a reflectorized blue marker, with a minimum dimension of three (3) inches, shall be mounted on a fire retardant post. The sign post shall be within three (3) feet of said hydrant or fire valve, with the sign no less than three (3) feet no 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.

Paved roadways shall also have a "blue dot" reflector installed in the roadway in accordance with Section 8.E and Attachment 26 in Guideline B-09. Before placing any reflector on a state highway or freeway, the developer/owner shall obtain an encroachment permit from the Department of Transportation in accordance with Section 13060 of the Health and Safety Code.

**ARTICLE 5. FUEL MODIFICATION STANDARDS**

§ 1276.00. Intent

§ 1276.01. Setback for Structure Defensible Space

§ 1276.02. Maintenance of Defensible Space Measures

§ 1276.03. Disposal of Flammable Vegetation and Fuels

§ 1276.04. Greenbelts

**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 greenbelt 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.

**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 the road.

(b) When a thirty (30) foot setback is not possible for practical reasons, which may include but are not limited to parcel dimension 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.

**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, provision for annual maintenance shall be provided in emergency access covenants or similar binding agreements.

**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.

**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.

See OCFA Guideline C-05 for detailed Fuel Modification requirements.