

Board of Forestry and Fire Protection

Defensible Space Zone 0

Title 14 of the California Code of Regulations

Division 1.5, Chapter 7,

Subchapter 3 Article 3

[14 CCR 1298 et seq. covers the Local Responsibility Area]

§ 1298.01. Purpose.

These regulations implement the defensible space requirements described in Government Code Section 51182 for the creation of an ember-resistant zone surrounding Occupied Structures in a Local Responsibility Area (LRA) within a Very High Fire Hazard Severity Zone (VHFHSZ). These regulations aim to improve public safety, improve safety for firefighters defending structures, and increase the likelihood an Occupied Structure will survive a wildfire event within those parts of the state where fire protection is managed by local agencies (the LRA) within a VHFHSZ, as designated under the process described in Government Code sections 51178, 51179, and 51181.

Note: Authority cited: Section 51182, Government Code. Reference: Sections 51178, 51179, and 51181 Government Code and Section 4291, Public Resources Code. California Code of Regulations Title 14 Section 1220.

§ 1298.02. Definitions.

The following definitions apply to this article:

1 (a) Combustible. Vegetative, wood, or other materials that are likely to ignite and
2 transmit flames in a wildfire.

3 (b) Defensible Space. The buffer landowners are required to create on their property
4 between an Occupied Structure and the plants, brush, and trees, or other Combustible
5 items surrounding the Occupied Structure.

6 (c) Existing Occupied Structure. An Occupied Structure that was constructed, under
7 construction, or for which the building permit application for initial construction had been
8 submitted before the effective date of the regulation that added this subsection.

9 (d) Ladder Fuels. Fuels that can transmit fire vertically to other vegetation, structures, or
10 Combustible landscape features.

11 (e) New Occupied Structure. An Occupied Structure for which the building permit
12 application for initial construction was submitted after the effective date of the regulation
13 that added this subsection.

14 (f) Noncombustible. Materials that pass the American Society for Testing and Materials
15 (ASTM) E136 test, thus meeting the standard for “noncombustible materials” described
16 in Section 501.4.1 (and any amendments thereto) of Title 24, Part 7 of the California
17 Wildland-Urban Interface Code.

18 (g) Non-Woody Plant. A plant that lacks hardened stems or trunks. This includes, but is
19 not limited to, herbaceous plants with soft, green stems, such as annuals, perennials,
20 bulbs, grasses, ferns, mosses, and some succulents.

21 (h) Occupied Structure. Any constructed building or structure that is intended or used for
22 support, enclosure, shelter, or protection of persons, animals, or property, having a
23 permanent roof that is supported by walls or posts that connect to, or rest on the
24 ground. An Occupied Structure, for the purpose of determining an ember-resistant zone,
25 includes an attached deck, stairs, or pergola, but does not include patios made of

Noncombustible materials. For the purposes of these regulations, an attached deck, stairs, or pergola includes those that are self-supporting and within one (1) foot of the Occupied Structure.

(i) 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 an Occupied Structure as defined in subsection (g) above.

(j) Tree. A woody perennial plant with a well-defined stem or trunk, a diameter at four and a half (4.5) feet above the ground of at least four (4) inches, and a height at maturity of at least fifteen (15) feet.

Note: Authority cited: Section 51182, Government Code. Reference: Sections 51178, 51179, 51181 and 51186 Government Code; Section 4291, Public Resources Code; and Sections 18908 and 18917, Health and Safety Code.

§ 1298.03. Provisions for the Local Agency Responsible for Fire Protection in LRAs.

A local agency responsible for fire protection in an LRA may choose to develop alternative practices for Defensible Space compliance, based on the regulations in this article, that account for local variations. These local variations may include location-based fire risk, lot size, structure density, composition of the structure exterior pursuant to Government Code section 51183, local fire hazards, potential response to emergency conditions, geography/topography, and/or compliance with California Wildland-Urban Interface Code building standards (or a combination thereof). The alternative practices shall be approved by the city council, board of supervisors, or appropriate governing body and supported with a finding by the local agency responsible for fire protection that

the alternative practices provide for, at a minimum, substantially similar practical effects as those stated in these regulations, so long as those effects meet the requirements of Public Resources Code section 4117 which requires any county, city, or district that adopts ordinances, rules, or regulations to provide fire prevention restrictions or regulations as necessary to meet local conditions of weather, vegetation, or other fire hazards. Such ordinances, rules, or regulations shall be as protective or more protective than state statutes in order to meet local fire hazard conditions.

Note: Authority cited: Section 51182, Government Code. Reference: Sections 51178, 51179, and 51181 Government Code; Sections 4290, 4291 and 4291.3, Public Resources Code.

§ 1298.04. Zone 0 Requirements.

(a) Zone 0 is the area within five (5) feet around each Occupied Structure, beginning at the exterior surface of the exterior wall, roof, attached deck, stairs, or pergola and extending five (5) feet out, or to the property line, whichever comes first. For the purposes of compliance with Defensible Space requirements, the addition of any Occupied Structure, including an accessory dwelling unit as defined in Government Code section 66313, on a neighboring property shall not require a landowner to create additional defensible space on their own property and shall not result in that landowner being found to be out of compliance with defensible space regulations.

(b) Zone 0 Requirements are as follows:

(1) Except as set forth herein, no Combustible materials are permitted within the full 5 feet of Zone 0. This includes but is not limited to: fallen leaves and tree

1 needles; Combustible mulches, including bark and woodchips; and other
2 Combustible debris.

3 (A) Inspectors may allow temporary exceptions to limitations on mulches
4 to prevent erosion during new or continuing construction and during
5 emergencies.

6 (2) The roof and rain gutters of an Occupied Structure shall be kept clear of
7 leaves, needles, and other Combustible debris.

8 (3) The areas underneath decks, balconies, pergolas, and stairs shall be kept
9 free of vegetation and Combustible items.

10 (4) No firewood shall be stored in Zone 0.

11 (5) Trees within Zone 0 shall be maintained as follows:

12 (A) To ensure that there are no dead or dying branches;

13 (B) To ensure that all live tree branches are at least ten (10) feet away
14 from chimneys and stovepipe outlets;

15 (C) To ensure that live tree branches are not underneath eaves;

16 (D) To ensure that all Ladder Fuels have been removed, including those
17 fuels in the first six (6) feet from the ground or to one third (1/3) of the
18 tree's total height, whichever is smaller, and those fuels within five (5) feet
19 above a roof that create a high risk of fire transmission; and

20 (E) To ensure that all live tree branches are at least five (5) feet above a
21 roof and at least one (1) foot from the walls of an Occupied Structure
22 where there is no eave.

23 (6) To protect areas on an Occupied Structure that are most vulnerable to fire
24 (e.g. edge of wall, under eave, glass, vents, posts, etc.), no vegetation is
25 permitted in those parts of Zone 0 that are: under eaves; less than one (1) foot

1 from an Occupied Structure where there is no eave; or less than five (5) feet from
2 a deck, stairs, or pergola that is attached to an Occupied Structure; or within two
3 (2) feet of windows, doors, posts, or vents. This means that:

4 (A) There shall be a minimum one (1) foot vegetation-free buffer spanning
5 from the edge of the wall out at least one (1) foot or to the eave
6 (whichever is farthest, up to five (5) feet); and

7 (B) There shall be a minimum five (5) feet of vegetation-free buffer
8 spanning out from the edge of any attached deck, stairs, or pergola.

9 (7) Those parts of Zone 0 that are at least one (1) foot from the Occupied
10 Structure, not under eaves, and at least two (2) feet from windows, doors, or
11 vents may have vegetation if any of the following conditions are met:

12 (A) Well-maintained Non-Woody Plants less than three (3) inches tall that
13 are free of dead or dying materials are permitted, including lawns and
14 ground covers.

15 (B) Well-maintained Non-Woody Plants between three (3) and eighteen
16 (18) inches tall free of dead or dying material are permitted if they are in
17 plantings no more than one (1) square foot in area; and are set apart from
18 each other by one and a half (1.5) times the height of the tallest plant.

19 (C) Well-maintained Non-Woody Plants in pots are permitted if they are in
20 unaffixed, Noncombustible pots or containers that are no larger than five
21 (5) gallon capacity and are set apart by one and a half (1.5) times the
22 height of the plant from each other. These plants shall be no greater than
23 eighteen (18) inches in height.

24 (8) Combustible fences and gates shall not be attached to an Occupied
25 Structure.

1 (9) Fences.

2 (A) All fences and gates that are attached to an Occupied Structure, or
3 come within one (1) foot of contact with an Occupied Structure, shall have
4 a five (5) foot Noncombustible span from the point of attachment or the
5 point closest to the Occupied Structure.

6 (B) After the effective date of this regulation, no new Combustible fences
7 or gates (whether attached or parallel to the Occupied Structure) are
8 permitted within five (5) feet of an Occupied Structure.

9 (C) Fence repairs to an existing Combustible fence may be made using
10 Combustible replacement materials.

11 (10) Outbuildings are not permitted in Zone 0 unless they are constructed entirely
12 of Noncombustible materials.

13 (c)

14 (1) New Occupied Structures must comply with all requirements of subsection
15 1298.04(b) upon the effective date of these regulations.

16 (2) Existing Occupied Structures must comply with provisions 1298.04(b)(2) and
17 (b)(5)(A), (B), and (C) upon the effective date of these regulations.

18 (3) Existing Occupied Structures must comply with provisions 1298.04(b)(1) and
19 (b)(3)-(4) and 1298.04(b)(5)(D) and (E) within three (3) years from the effective
20 date of these regulations.

21 (4) Existing Occupied Structures must comply with provisions 1298.04(b)(6)-(10)
22 within three (3) years of the effective date of these regulations, or within five (5)
23 years from the effective date of these regulations, on a timeline set by the local
24 agency responsible for fire protection.

Note: Authority cited: Section 51182, Government Code. Reference: Sections 4290 and 4291, Public Resources Code; and Gov Code section 66313.

[14 CCR 1299 et seq. covers the State Responsibility Area]

§ 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.

Note: Authority cited: Sections 4290 and 4291, Public Resources Code. Reference: Section 4291, Public Resources Code.

§ 1299.02. Definitions.

The following definitions apply to this article:

(a) 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. A Building or Structure, for the purpose of an ember-resistant zone, includes an attached deck, stairs, or pergola but, does not include patios made of Noncombustible material. For the purposes of these regulations, an attached deck, stairs, or pergola includes those that are self-supporting and within one (1) foot of the Building or Structure.

(b) Combustible. Vegetative, wood, or other materials that are likely to ignite and transmit flames.

~~(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.~~

(ac) 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.

~~(d) Existing Building or Structure. A Building or Structure that was constructed, under construction, or for which the building permit application for initial construction had been submitted before the effective date of the regulation that added this subsection.~~

~~(e) Ladder Fuels. Fuels that can transmit fire to other vegetation, structures, or Combustible landscape features.~~

~~(f) New Building or Structure. A Building or Structure for which an application for a building permit for initial construction was submitted after the effective date of the regulation that added this subsection.~~

~~(g) Noncombustible. Materials that pass the American Society for Testing and Materials (ASTM) E136 test, thus meeting the standard for “noncombustible materials” described in Section 501.4.1 (and any amendments thereto) of Title 24, Part 7 of the California Wildland-Urban Interface Code (CWUI).~~

~~(h) Non-Woody Plant. A plant that does not have hardened stems or trunks. This includes but is not limited to herbaceous plants with soft, green stems such as bulbs, annuals, grasses, and mosses.~~

(ie) 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.

(i) Tree. A woody perennial plant with a well-defined stem or trunk, a diameter at four and a half (4.5) feet above the ground of at least four (4) inches, and a height at maturity of at least fifteen (15) feet.

Note: Authority cited: Sections 4290 and 4291, Public Resources Code. Reference: Section 4291, Public Resources Code; and Sections 18908 and 18917, Health and Safety Code.

§ 1299.03. Requirements.

Defensible space is required to be maintained at all times per these regulations.
~~whenever flammable vegetative conditions exist.~~

(a) One hundred ~~feet~~ (100~~ft.~~) feet of defensible space clearance shall be maintained in ~~two~~ three (3) distinct “~~Z~~zones” as follows:

(i) Zone 0 is the area within five (5) feet around each Building or Structure, beginning at the exterior surface of the exterior wall, roof, attached deck, stairs, or pergola, and extending five (5) feet out, or to the property line, whichever comes first.

(ii) “Zone 1” extends from five (5) to thirty (30) feet (30-ft.) out from each “Building or Structure,” or to the property line, whichever comes first.

(iii) “Zone 2” extends from thirty (30) feet (30-ft.) to one hundred (100) feet (100-ft.) from each “Building or Structure,” but not beyond the property line.

(b) The vegetation treatment requirements for Zone 0 are more restrictive than for Zone 1; the requirements for Zone 1 are more restrictive than for Zone 2; as provided in this section (a) and (b) below. The Department of Forestry and Fire Protection's “Property Inspection Guide, 2000 version, April 2000,” provides additional guidance on vegetation

1 treatment within Zone 1 and Zone 2, but is not mandatory and is not intended as a
2 substitute for these regulations.

3 (c) For the purposes of compliance with Defensible Space requirements, the addition of
4 any Building or Structure, including an accessory dwelling unit as defined in
5 Government Code section 66313, on a neighboring property shall not require a
6 landowner to create additional defensible space on their own property and shall not
7 result in that landowner being found to be out of compliance with defensible space
8 regulations.

9 (d) Zone 0 Requirements are as follows:

10 (1) Except as set forth herein, no Combustible materials are permitted within
11 Zone 0. This includes but is not limited to: fallen leaves and tree needles;
12 Combustible mulches, including bark and woodchips; and other Combustible
13 debris.

14 (A) Inspectors may allow temporary exceptions to limitations on
15 mulches to prevent erosion during new or continuing construction and
16 during emergencies.

17 (2) The roof and rain gutters of a Building or Structure shall be kept clear of
18 leaves, needles, and other Combustible debris.

19 (3) The areas underneath decks, balconies, pergolas, and stairs shall be kept
20 free of vegetation and Combustible items.

21 (4) No firewood shall be stored in Zone 0.

22 (5) Trees within Zone 0 shall be maintained as follows:

23 (A) To ensure that there are no dead or dying branches;

24 (B) To ensure that all live tree branches are at least ten (10) feet away
25 from chimneys and stovepipe outlets;

1 (C) To ensure that live tree branches are not underneath eaves;

2 (D) To ensure that all Ladder Fuels have been removed, including those
3 fuels in the first six (6) feet from the ground or to one third (1/3) of the
4 tree's total height, whichever is smaller, and those within five (5) feet
5 above a roof as to create a high risk of fire transmission; and

6 (E) To ensure that all live tree branches are at least five (5) feet above a
7 roof, and at least one (1) foot from the walls of a Building or Structure.

8 (6) To protect areas on Buildings and Structures that are most vulnerable to fire,
9 no vegetation is permitted in those parts of Zone 0 that are: under eaves; less
10 than one (1) foot from a Building or Structure or less than five (5) feet from a
11 deck, stairs, or pergola that is attached to a Building or Structure; or within two
12 (2) feet of windows, doors, and vents. This means that:

13 (A) There shall be a minimum one (1) foot vegetation-free buffer spanning
14 from the edge of the wall out at least one (1) foot or to the eave (whichever is
15 farthest, up to five (5) feet); and

16 (B) There shall be a minimum five (5) feet of vegetation-free buffer spanning
17 out from the edge of any attached deck, stairs, or pergola.

18 (7) Those parts of Zone 0 that are at least one (1) foot from the Building or
19 Structure, not under eaves, and at least two (2) feet from windows, doors, or
20 vents may have vegetation if any of the following conditions is met:

21 (A) Well-maintained Non-Woody Plants less than three (3) inches tall that
22 are free of dead or dying materials are permitted, including lawns and
23 ground covers.

24 (B) Well-maintained Non-Woody Plants between three (3) and eighteen
25 (18) inches tall free of dead or dying material are permitted if they are in

1 plantings no more than one (1) square foot in area; and are set apart from
2 each other by one and a half (1.5) times the height of the tallest plant.

3 (C) Well-maintained Non-Woody Plants in pots are permitted if they are in
4 unaffixed, non-Combustible pots or containers that are no larger than five
5 (5) gallon capacity and are set apart by one and a half (1.5) times the
6 height of the plant from each other. These plants shall be no greater than
7 eighteen (18) inches in height.

8 (8) Combustible fences and gates shall not be attached to a Building or
9 Structure.

10 (9) All fences and gates that are attached to a Building or Structure, or come
11 within one (1) foot of contact with a Building or Structure, shall have a five (5) foot
12 Noncombustible span from the point of attachment or the point closest to the
13 Building or Structure. After the effective date of this regulation, no new
14 Combustible fences or gates are permitted within five (5) feet of a Building or
15 Structure. Fence repairs to an existing Combustible fence may be made using
16 Combustible replacement materials.

17 (10) Outbuildings are not permitted in Zone 0 unless they are constructed entirely
18 of Noncombustible materials.

19 (e)

20 (1) New Buildings or Structures must comply with all of the requirements of
21 subsection 1299.03 (d) upon the effective date of these regulations.

22 (2) Existing Buildings or Structures must comply with provisions 1299.03(d)(2)
23 and (d)(5)(A), (B), and (C) upon the effective date of these regulations.

(3) Existing Buildings or Structures must comply with provisions 1299.03(d)(1) and (d)(3)-(4) and 1299(d)(5)(D) and (E) within three (3) years from the effective date of these regulations.

(4) Existing Buildings or Structures must comply with provisions 1299.03(d)(6)-(10) within five (5) years from the effective date of these regulations, or on a timeline set by the Director, which shall not be less than three (3) years from the effective date of these regulations.

(af) 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 on 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 (10) feet away from chimney and stovepipe outlets.

(3) Relocate exposed firewood piles unless they are completely enclosed ~~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.

(bg) 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 (3) inches ~~(3 in.)~~.

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

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

~~(e)~~ For both Zones 1 and 2:

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

Note: Authority cited: Sections 4290 and 4291, Public Resources Code. Reference: Section 4291, Public Resources Code; and Sections 18908 and 18917, Health and Safety Code.