



San Diego County Fire Protection District FIRE MARSHAL BULLETIN

Fire Marshal Bulletin Number: 2024-02
Subject: Wildfire Prepared Homeowner Guide
Effective Date: January 01, 2024

Purpose: The purpose of this bulletin is to help prepare homeowners for wildfire. By hardening your home, you may reduce the impact of fire damages. The list below identifies key improvements that are consistent with California Building Code chapter 7A.

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Roofs

Roof must be Class A fire-resistant rated.

Most roof covers are Class A, including but not limited to the following:

- Asphalt shingles
- Concrete, brick, or masonry tiles with bird stops to reduce debris accumulation.
- Metal shingles or sheets

Wood shake shingles are not Class A fire-resistant rated. Homes with this type of roof do not qualify.

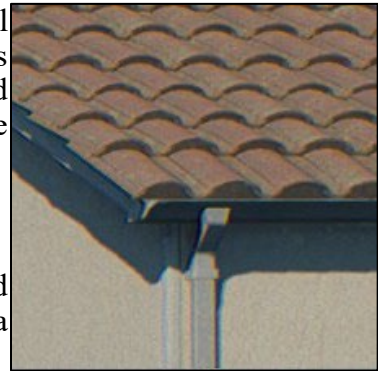
What are bird stops?

Bird stops seal the open edges of the roof covering to keep fuel sources (such as bird nests and wind-blown debris) and embers from getting underneath the roof covering. These can be purchased from a roofing supply store, or you can use a mortar mix to plug the ends, which is the best option for openings at the ridge of the roof.

- Roof must be kept clear of debris.

Why? The roof is a large surface where debris can easily build up and be ignited by burning embers that are carried in the wind during a wildfire.

- Gutters and downspouts must be made of a noncombustible material such as metal.
- Gutters and downspouts must be kept clear of debris, such as leaves and pine needles.



Building Features

Vents

Vents must meet the following requirements:

- All vents must be either (1) corrosion-resistant and ember- and fire-resistant; OR (2) noncombustible and covered with 1/8-inch or finer metal mesh.
- Dryer vents must have a louver or flap in lieu of mesh (due to their design and function).

Exception: Plumbing vents are excluded from these requirements.



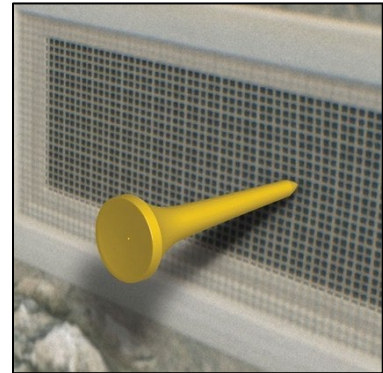
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Why?

Burning embers can enter your home through vents and start fire inside the house. Vents that meet the requirements above can better prevent ember entry.

Where are my vents?

Vents include any opening intended to permit ventilation. Common locations include enclosed attics, gable ends, ridge vents, off ridge vents, turbine vents, exhaust fan vents, enclosed eave soffit spaces, enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters, foundations, crawl spaces, and under eaves.



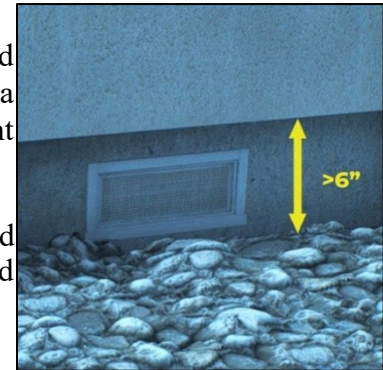
Tips

1. Mesh can be placed on the inside or outside of the vent.
2. You can use a golf tee to test whether the mesh is the correct size of 1/8 inch or finer. If the tee does not fit through the mesh openings.

Ground Clearance for Exterior Walls Covering/Cladding

All exterior walls must have a minimum of 6 vertical inches measured from the ground up and from any attached horizontal surface like a deck) of noncombustible material such as brick, stone, fiber-cement siding, or concrete.

Why? Embers can accumulate at the base of exterior walls and porches/decks, which make direct contact with your home, and potentially damage or ignite your home.



Defensible Space

What is defensible space?

This refers to the area around your home that can be designed, and maintained to eliminate fuels and act as a buffer to help lower the chance fire will spread to your home.

Decks or Covered Porches

Decks or covered porches including staircases **must meet all the following requirements through monthly maintenance:**

Around the structure:

Must have 5 feet of noncombustible defensible space. (As part of the 5-foot Home Ignition Zone required for the home, described below).

Top surfaces:

- **Must be clear of debris and have no trees or shrubs.** Up to 10 potted plants, each with a maximum height and width of 36 inches in noncombustible planters, are permitted.
- **Must have only noncombustible or ignition-resistant items (such as cast aluminum furniture).** A small number of combustible items that can be easily removed and stored when necessary, such as chair cushions, door mats, etc., are permitted.

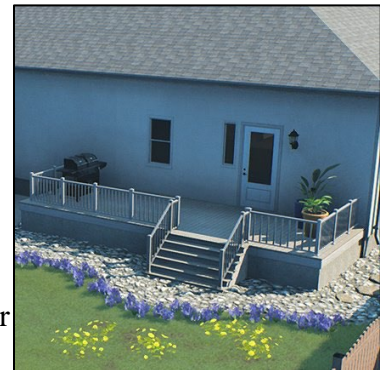


Underneath:

- **Must have no vegetation of any kind (including grass and weeds) underneath.** Noncombustible materials like concrete, gravel, or bare soil are permitted.
- **Must have nothing stored underneath.**

Additionally, for decks or porches 4 feet or less above the ground (measured from the top of the walking surface to the ground) must also meet the following additional requirements:

- **The area under the deck must be enclosed** to reduce the accumulation of debris using one of the following methods:
 - Install noncombustible, corrosion-resistant 1/8 inch or finer mesh around the outer edge of the deck from the walking surface to the ground to prevent ember intrusion. If a material such as lattice is installed over the mesh, it must also be noncombustible.
 - Fully enclose with a noncombustible wall covering/cladding.



For decks with an additional structure (like a pergola or gazebo), the following requirements must be met:

- Only metal pergolas are allowed on decks.
- Must have no solid cover (noncombustible slats that cover no more than 10% total of the surface area where a roof cover would be is acceptable).
- Must have no vegetation and no curtains/drapes/screens.



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Detached Decks

Must meet the same requirements as attached decks.

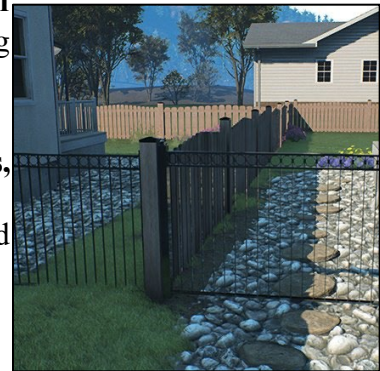
Home Ignition Zone – The First 5 Feet Around the Home

The Home Ignition Zone (HIZ) is one of the most critical aspects of wildfire mitigation and includes the area starting from the edge of the exterior walls to a distance of 5 feet from the building footprint. Note that when decks and/or covered porches, including staircases are present, the HIZ must extend around them.



The HIZ must meet and maintain monthly all the following conditions:

- **Ground cover must be noncombustible and kept free of debris.** (Noncombustible hardscape such as gravel or paving stones is recommended. Bare soil is also acceptable.)
- **No vegetation (trees, shrubs, bushes, plants, grass, weeds, etc.) should exist within or overhang the HIZ.**
Any overhanging limbs or branches from nearby trees and bushes must be trimmed back to be outside the HIZ.
- **No combustible items (furniture, firewood, trash cans, storage sheds, etc.) should be stored in the HIZ.**
- **No boats, RVs, or other vehicles should be parked in the HIZ.**



Landscaping in the Remainder of the Parcel

The remainder of the property beyond the 5-foot HIZ must have defensible space that is regularly maintained. Defensible space separates fuels to reduce flame intensity near a home. This includes:

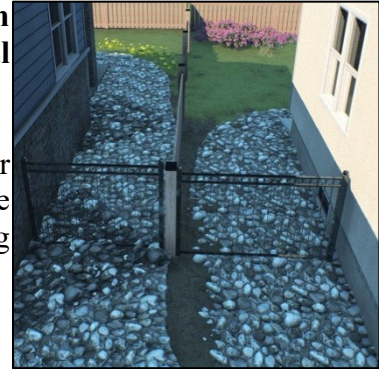
- **Routinely removing fallen pine needles, leaves, and other debris from trees accumulated in the yard.**
- **Caring for trees with a trunk of 4 inches or greater in diameter:**
 - Must be pruned to have a canopy-to-canopy distance of at least 10 feet to other trees. Tree limbs and branches must be pruned to a minimum height of 6 feet off the ground.
 - Spacing between the tree canopy and the next closest shrub, bush, or tree with a trunk diameter of less than 4 inches must be at least twice the height of the bush, shrub, or tree (or 10 feet, whichever is less).

- **Caring for shrubs and bushes, including trees with a trunk of less than 4 inches in diameter:**
 - Must not be placed under larger trees.
 - Must have spacing between them of at least twice the height of the tallest bush or shrub. Rows of shrubs or bushes are not allowed.
 - Routinely removing dead vegetation.

Fences

Fencing within 5 feet of the home, including where fences attach to the home, must be constructed of a noncombustible material (such as metal/aluminum).

Why? Even if most of your fencing is farther than 5 feet from your home, combustible fences can ignite and act like a wick leading fire straight to your home. To help prevent this, it is critical that fencing near or attached to your home is noncombustible.



Accessory Structures & Outbuildings

For unattached accessory structures and outbuildings that are within 30 feet of the home and that have a footprint greater than or equal to 15 square feet (such as sheds, gazebos, accessory dwelling units (ADUs), open covered structures with a solid roof, dog houses, playhouses, etc.):

- No more than 3 total of these structures are allowed within 30 feet of the home.
- Each structure must meet the same wildfire resilience requirements as the home structure.
- Each structure must have its own 5 feet of defensible space (as prescribed under Home Ignition Zone) that does not overlap the 5-foot HIZ required for the home, decks, or other structures within 30 feet of the home.

For ADUs attached to the primary home must meet the same requirements as the primary home.

Gutters & Downspouts

Noncombustible gutters must also be covered with a noncombustible material such as metal to prevent the collection of debris such as leaves and pine needles.

Eaves & Soffits

Must enclose eaves on the underside with soffits made with one of the following:

- Noncombustible or ignition-resistant materials
- 2-inch lumber (e.g., 2x4, 2x6; NOT plywood)

Why? Heat and embers can get trapped under eaves and ignite them.





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Vents

Dryer vents must be made of metal and have a louver or flap.

Exterior Walls Covering/Cladding

Wall coverings/claddings must be a noncombustible or ignition-resistant material, such as metal siding, fiber-cement siding, masonry veneer, or stucco.

NOTE: Ignition-resistant construction can include combustible materials such as wood siding in the assembly and is not allowed for Plus designations.

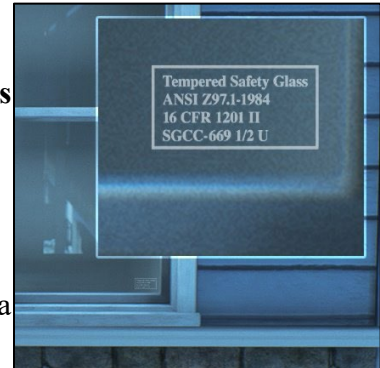
Decorative shutters, if in place, must be made of noncombustible materials.

Exterior Glass (Windows, Skylights & Glass Within Doors)

All exterior windows, skylights, and glass openings within doors must comply with one of the following requirements:

- Multipaned glass with at least two tempered panes
- Glass blocks (windows only)
-

Why? These types of glass are more resistant to breaking during a wildfire, which helps keep flames from entering.



Exterior Doors

All exterior doors must comply with one of the following requirements:

- Exterior surface or cladding must be solid, have a metal threshold, and be constructed with noncombustible or ignition-resistant material, such as:
 - Metal
 - Solid hardwood
 - Fiberglass
- Combustible doors are allowed if a noncombustible storm door is installed as the outermost exterior door.

Enclosed Space Underneath Bay Windows

Any open space under first-floor bay windows must be eliminated by constructing a noncombustible wall section.

Why? Embers can accumulate under this unenclosed area and will ignite the home.

Decks

- All deck components, including posts, joists, railings, stairs, and walking surfaces must be constructed with noncombustible materials such as metal or light-weight concrete.

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- Deck walking surfaces constructed with a solid (no gaps), noncombustible material such as metal or light-weight concrete; railings within 5 feet of the home constructed of a noncombustible material, including where railings attach to the home; and deck posts with a minimum of 6 vertical inches of noncombustible material at grade. As noted in the defensible space section, all decks including attached staircases must include the noncombustible 5- foot Home Ignition Zone around them.
 - For staircases 4 feet in width or less that attach to a deck and are open underneath should have one of the following requirements:
 - **Open Risers (no solid risers)**
 - Must have a minimum of 6 vertical inches of the bottom of stairs made from noncombustible material.
 - Stair treads should be a solid (no gaps), noncombustible material, such as metal or light-weight concrete.
 - **Closed Risers**
 - Must have a minimum of 6 vertical inches of the bottom of stairs made from noncombustible material.
 - Stair treads and risers should be a solid (no gaps), noncombustible material, such as metal or light-weight concrete.
 - For staircases wider than 4 feet that attach to a deck, the staircase should be cleared underneath and enclosed with noncombustible material with openings not to exceed 1/8-inch, such as 1/8-inch or finer metal mesh and include the following requirements:
 - **Closed Risers**
 - Must have a minimum of 6 vertical inches of the bottom of stairs made from noncombustible material.
 - Stair treads and risers should be a solid (no gaps), noncombustible material, such as metal or light-weight concrete.

Fences

This may require you to coordinate with your neighbor(s) to eliminate duplicative fences that can trap debris between them.

Accessory Structures & Outbuildings

All unattached accessory structures and outbuildings with a footprint greater or equal to 15 square feet—such as sheds, gazebos, accessory dwelling units (ADUs), open covered structures with a solid roof, dog houses, playhouses, etc.—must be located a minimum of 30 feet away from the home.



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Definitions

Within this standard, acceptable products and materials are those listed by the California State Fire Marshal or in a current report issued by an approved agency (accredited to ISO 17065) to meet one of the following test standards:

- **Noncombustible** – Made from material of which no part will ignite and burn when subjected to fire. Any material passing ASTM E136 shall be considered noncombustible.
- **Ignition-resistant** – A type of building material that resists ignition or sustained flaming combustion sufficiently so as to reduce losses from wildland-urban interface conflagrations under worst-case weather and fuel conditions with wildfire exposure of burning embers and small flames.
- **Ignition-** resistant building materials must comply with one of the following:
 - Extended ASTM E84 (UL 723) test or ASTM E2768
 - Noncombustible material

NOTE: An ignition-resistant material should not be confused with ignition- resistant construction as ignition-resistant construction can include combustible materials in the assembly.

- **Parcel** – Refers to a single plot of land (i.e., lawn, yard, property) and includes all buildings and structures within (house, shed, etc.).