PROTECT YOUR HOME FROM WILDFIRE

VENTS

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INFO

Wind-blown embers are the principal cause of building ignition and can readily enter attic and crawl space vents.

The Attic, Crawl Space and Vents

Wind-blown embers are the principal cause of building ignition and can readily enter attic and crawl space vents in your roof and other openings in your home, which are often hot and dry. Installing the proper size and type of mesh screening can dramatically reduce ignition potential and limit the entry of embers into your home. Although vents serve an important function for your home by removing moisture and adding oxygen, they must be configured with proper non-combustible metal screens (⅛" or smaller) to ensure that embers cannot enter. This is one low cost and simple way to improve your home's vulnerability to ignition.

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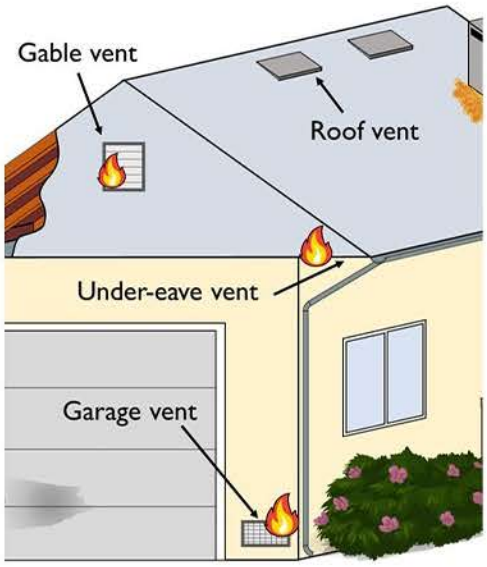
Embers and hot gasses from nearby vegetation or buildings can be blown or pulled into the openings and enter attic spaces, crawlspaces, laundry vents, ductwork, potentially leading to ignition from the inside of the building. Ember-resistant vents are addressed as part of the official Chapter 7A of the California Building code.



Ignition Vulnerability Points for Vents

Source: ucanr.edu

PROTECT YOUR HOME

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FireSafe COUNCIL
SANTA BARBARA COUNTY

The Santa Barbara County Fire Safe Council's mission is to promote wildfire safety in Santa Barbara County through education and action. This Wildfire Home Hardening Guide was generously funded through the Cal Fire Climate Investment Grant for the Regional Wildfire Mitigation Program.

CAL FIRE SINCE 1885

RWMP REGIONAL WILDFIRE MITIGATION PROGRAM

CALIFORNIA CLIMATE INVESTMENTS
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Protect your vents and other openings to your home

Take a comprehensive inventory of all the open vents and other openings to your home, measure them, and determine if the vent coverings are noncombustible, with 1/8" openings to prevent ember entry. Most older vent coverings have ¼" openings, which are vulnerable to ember intrusion. It is simple to purchase non-corrosive, metal mesh screens and either replace the mesh (best option) or simply add them to/over the older mesh that is already there.

Do not use fiberglass or plastic mesh because they can melt and burn. Although there are both inlet and outlet vents on the exterior of your home, they can both be ember entry points. Vents can be located in many different places in the home.

Attic and ventilated cathedral ceilings have vents, as well as crawlspaces. Attic and soffit vents should be baffled to prevent ember intrusion. A metal mesh only reduces the risk of intrusion in these areas. Heating, ventilation, and air conditioning (HVAC) systems also have vents. For under-eave inlet vents, opt for a soffited (covered) eave design instead of open eaves. For outlet vents, opt for a ridge that is rated to resist wind driven rain, with an external baffle. Turbine vents are also acceptable when a piece of 1/8" mesh is attached to the bottom of the roof sheathing.

Old 1/4" mesh vent with 1/16" replacement example

On left side is a turbine vent and on the right is a soffited eave with vent

Baffle on vent

1/4" mesh (vulnerable) compared with 1/8" (desired)

1/4" mesh with vegetation

1/4" vulnerable vent

Clear your attic and crawl spaces of combustibles

Take an inventory of what you have stored in your attic and crawl spaces and remove all combustible materials like cardboard boxes or clothing. If embers enter, this can reduce the potential for stored items to ignite the rest of the home.

Combustible material in attic

Consider other categories of vents in your home and ensure they are safe

Additional types of vents that are found in homes include vents for household uses such as dryer vents, stove hood vents, and water heater vents. All of these vent openings should have non-combustible screening to prevent ember entry. However, caution should be used to ensure enough air flow for dryer vents, and all vents should be assessed on a case-by-case basis depending on what purpose they serve in your home.