# **Reducing Wildfire Risk to Your Home**

For most single-family homes, the exterior envelope of the building including roof, walls, windows, doors, trims, etc. is not typically required to be fire resistant. This means that most homes are vulnerable to ignition to embers, flames and hot gases from wildfires or other burning fuels (e.g., neighboring buildings, landscaping, sheds, vehicles) nearby. Additionally, vents and other openings, if not protected, can provide a pathway for embers to enter the house. How can you reduce wildfire risk to your home?



#### **Exterior Vents:**

- Replace existing vent covers with corrosion-resistant 1/8inch or 1/16-inch (preferred) wire mesh or an approved ember and flame-resistant vent.
- · When replacing or reinstalling vents, use a fire-resistant caulk/sealant to seal around the edges of the vent to prevent water and ember intrusion between the vent and the exterior wall.
- Clean vents periodically to remove debris so that each vent can perform its moisture management function properly.

## Windows and Doors:

- Replace single-pane windows or glazed doors with double-paned or temperedlaminated glazing.
- Install aluminum coverings or use metal framing for window and door frames.
- · Use fiberglass or metal screening on windows.





**Exterior Siding:**  Replace combustible siding with noncombustible or ignition resistant materials (e.g., fiber cement, stucco).



- Block gaps in siding with firestopping materials such as mineral wool or fire-resistant caulking/sealants.
- · Where replacement of combustible siding for the entire home is infeasible, replace the bottom 6-12 inches of siding from grade extending upward. This should provide increased resistance to ignition due to surface fuels such as from the accumulation of dead leaves.

## **Gutters:**

- · Use metal gutters and downspouts.
- · Install corrosion-resistant noncombustible drip edge
- tightly fitting the flashing against the gutter.
- Use gutter covers made from noncombustible materials to prevent debris from accumulating in gutters.

## Sealing Gaps in Skylights, Windows, Doors, and Garage Doors:

- Use a fire-resistant caulk/ sealant, or expandable foam to seal the gaps between wall and frame joints around skylights, windows, doors, and garage doors.
  - Verify weather stripping around doors, garage doors and operable windows is in good condition and provides a weather-tight seal.
- · Consider replacing existing combustible weather stripping with fire-rated weather stripping.

## Flashing:

- · Check the flashing around vents around skylights. chimneys, and other roof penetrations.
- · Replace missing, loose, or corroded flashing using noncombustible corrosion-resistant screening materials at the roof edges and where exterior walls meet the roof.
- Seal using a fire-resistant caulk/sealant. noncombustible mortar, or fire-rated expanding foam.
- For profile-tiled roof edges, install bird stops or mortar at the open ends of tiles.

# Roof:

- · Regularly check for any loose or missing shingles or roof tiles and repair or replace them to prevent ember penetration.
- Where possible, replace roof with Class A covering materials (e.g., concrete tiles, composite asphalt shingles) with associated underlayment and decking where required by the manufacturer. Alternatively, use noncombustible, 1- hour fire-rated roof assemblies for enhanced performance.
- All roof joints should be provided with appropriate noncombustible, lapped metal flashing.

## Always check the local fire department for recommendations specific to the risks for your area.

### **Decks and Fences:**

 Use noncombustible materials for deck framing. decking, walking surfaces, railings, stairs and fences.



- All metal components must be corrosion resistant.
- · At a minimum, use noncombustible materials for the first five feet of the fence that is in contact with the home.
- · Where combustible decks attach directly to walls with combustible siding, remove the bottom two to three courses of siding and replace them with noncombustible siding. If this is not possible or desirable, install a metal flashing strip approximately 18 inches tall extending from the top of the deck over the existing siding. Be sure to tuck the top of the flashing behind the siding to prevent water from seeping between the flashing and the siding.
- · For decks four feet or less above the ground, enclose the space under the deck from the walking surface to the ground using corrosionresistant metal mesh having openings 1/8inch or less. Alternatively, fully enclose the space using noncombustible materials.

## Soffits:

- · Where possible, enclose any open or unenclosed soffits.
- · Ensure that any soffit vents are sufficiently protected per "Exterior Vents" section.

# **General Housekeeping:**

· Regularly remove vegetative and other debris from roofs, gutters, joints, where the foundation meets the ground surface, and along fences.



- Do not store flammable materials on or under decks, under porches, or in crawl spaces.
- Ensure that there are no combustible fuels (e.g., mulch, trees, shrubs, wood piles, trash bins) within 0-5 feet of the home.







For more information, see Marshall Fire MAT documents at: https://www.fema.gov/emergency-managers/risk-management/ building-science/disaster-support