



What homeowners need to know about home hardening

Senate Bill 762 (2021) created a statewide approach to a wide range of wildfire mitigation measures. The legislature directed the Building Codes Division to adopt fire hardening building code standards that could be applied to areas of the state mapped as extreme or high risk and that are in the wildland urban interface. Fire hardening refers to building materials and practices that can reduce the risk of ignition of a home by embers from wildfires.

What you need to know

If you are in the high or extreme risk class and in the wildland urban interface:

- **No action is required related to home hardening.** Building code standards do not apply retroactively. They apply only if you are replacing a covered item (roof or siding) or doing an addition to your home.
- If you are replacing your roof or siding, or if you are doing an addition to your home, you will need to use fire hardening materials after the effective date of the code.

- You are not required to change materials for partial repairs of your roof or siding.

If you are not in the high or extreme risk class or are outside of the wildland urban interface:

- No action is required related to home hardening. If you want to make your home more fire resilient, this document provides guidance on things you can do to improve your home's resistance to wildfire.

How home fire hardening works

Fire hardened means your home is prepared for a wildfire and an ember storm. It does not mean fireproof. Home hardening addresses the most vulnerable parts of your home with building materials and installation methods that increase resistance to heat, flames, and embers that come with most wildfires.

Fire hardening means taking steps to make a home or business more resistant to damage from a wildfire, including:

- Using materials for siding and roofing that resist ignition during a wildfire

- Installing fire-resistant windows to protect openings
- Using attic ventilation devices that help reduce ember intrusion

Embers – the hot glowing fragments of wood – are responsible for most damage during wildfires. They can collect on your home, deck, or porch and ignite combustible materials (those that catch fire and burn easily). Embers can also be forced into gaps in the home (attic vents or windows) and burn the home from the inside out. When this happens, there can be little damage to the nearby plants and trees, leaving people puzzled as to what caused their home to burn.

Fire hardening, along with creating defensible space, reduces the chances that a nearby fire will ignite your structure and the potential for damage.

Fire hardening makes the community more resistant to the spread of wildfire. Slowing down a fire, may create more time and opportunity for emergency responders to protect life and property from a fire. Part of learning to live with wildfire is understanding that we have some control in how we prepare for and address this hazard, and how we manage fire in our own homes and communities.



Fire hardening tips to protect your home from wildfire

Roofing: Making a roof “fire-safe” is a big step to reduce how vulnerable your home is to wildfire. Install Class A or Class B roof covering.

Exterior wall covering: Combustible siding can ignite from direct flame contact or radiant heat and spread fire into walls, attics, and openings. Install noncombustible or ignition-resistant siding and trim.

Ventilation: Roof and eave vents create openings for flying embers that can ignite combustible materials inside the home. Install ember- and flame-resistant vents or 1/8-inch maximum wire mesh.

Soffits and eaves: Soffits and eaves may be ignited by embers and hot gases. Enclose soffits and eaves with noncombustible or ignition-resistant materials.

Windows and skylights: Glass exposed to heat or flames may break after only one to three minutes, allowing flames and embers inside. Install tempered, multi-layered, or fire-resistant rated glass.

Walking surfaces: Decks, porches, and balconies are vulnerable to embers and other wildfire exposures. Enclose the underside of walking surfaces and construct with noncombustible, ignition-resistant, or fire-retardant-treated materials.

Gutters: Combustible gutters can ignite when exposed to embers and flames. Install noncombustible gutters and guards or covers to prevent accumulation of leaves and debris.

Manufactured home skirting: Combustible skirting installed to enclose the space under a manufactured home is a vulnerable point for wildfires. Install noncombustible or ignition-resistant skirting.



[BCD wildfire hazard mitigation web page](#)

For more information about home fire hardening, contact the **Oregon Building Codes Division** at bcd.firehardening@dcbs.oregon.gov