
FACT SHEET:

Wildland-Urban Interface Building Codes

California Department of Forestry and Fire Protection

Office of the State Fire Marshal



Over the years, it has become clear that the two most common ways that buildings are lost during wildland fires are from direct heat and flames, or from burning embers that can blow up to a mile ahead of the fire. This knowledge has led to a two-pronged approach in addressing the problem: Heat and flames must be kept away from buildings AND the ability of embers to ignite buildings must be eliminated.

California law already requires that homeowners clear flammable vegetation within 30 feet of buildings and modify vegetation within 100 feet around buildings to create a defensible space for firefighters to safely protect their homes. Ongoing education and inspection are conducted to enforce those requirements.



The second component is to construct buildings that resist burning embers. Buildings catch fire when burning embers fall on wood roofs, blow into the building through vents, pile up in cracks or lodge under boards. Ignition-resistant construction creates an “envelope” around the structure to decrease the number of burning embers that can enter the building. By building the structure in a way that diminishes ember intrusion, the main cause of home loss during wildland-urban interface fires can be reduced and even eliminated.

After a thorough and collaborative effort between the California Department of Forestry and Fire Protection (CAL FIRE) Office of the State Fire Marshal, local fire districts, building associations and other public safety organizations to identify better construction methods and materials to make buildings more ignition-resistant, new wildland building standards have been developed for California’s fire prone areas.

The following ignition resistant standards will make homes and businesses more resistant to wildfire:

- ✓ Decks enclosed with ignition resistant material to within six inches of the ground
- ✓ Eaves protected on the exposed side with ignition resistant material
- ✓ Roof built to Class A fire resistant standards in state responsibility areas and in very high Fire Hazard Severity Zones in local responsibility areas
- ✓ All under-floor areas enclosed
- ✓ Dual-paned tempered glass for all exterior windows
- ✓ Ignition-resistant materials for exterior doors
- ✓ All exterior vents designed to prevent ember intrusion

A working group of builders, firefighters, inspectors, researchers, city and county representatives, housing experts, and the insurance industry have worked closely with the State Fire Marshal to develop these standards. The standards are based on lab-tested and verifiable performance standards that describe the type of wildfire exposure a building must be able to withstand. This allows for a wide range of materials and designs.



For more information about living safely in California’s wildland-urban interface visit the CAL FIRE website at www.fire.ca.gov