

Building Codes Protect Homes from Wildfire

Full Mitigation Best Practice Story

Los Angeles County, California



Los Angeles County, CA – For Karen Stevens, her family, and neighbors in the Southern Oaks section of Stevenson Ranch, it was a blessing that the planned development where they live has a 200-foot-wide greenbelt around it designed to ward off wildfires.

“There were plenty of embers flying around,” said Stevens, whose Morning Mist Drive home in Santa Clarita north of Los Angeles backs up to hills of the Santa Susana Mountains.

These same mountains were set ablaze by the Simi Fire, one of 12 wildfires that burned more than 739,000 acres in five Southern California counties in October 2003. Airdrops were made on the wildfire as it came towards the two-story Stevens home, and firefighters literally surrounded the area. Firefighters were bolstered in their fight by the mitigation measures taken to protect the community.

Tile roofs on all the homes in Stevenson Ranch are just one of the protective measures, to which Stevens, her husband, Todd, and others can attest, as embers harmlessly dropped onto rooftops. No homes were damaged.

The Stevens family evacuated three times as an added safety measure. Homes in the Stevenson Ranch planned development were all built to conform to Los Angeles County building and fire codes. All developers must comply with these codes before building permits are issued.

There is a multi-hazard approach to disaster-resistant construction. Wildfire mitigation measures include double pane heat resistant windows, concrete slate tile roofing materials and enclosed eaves as primary protective measures standard in all homes built in the wildland-urban interface. There are 100-foot greenbelts between homes on the wildland sides of developments. The greenbelts are planted with fire resistant plant materials and have sprinkler systems. The green areas must be maintained, and maintenance of greenbelts is managed through the homeowners association.

The area has active seismic faults. To mitigate against earthquakes, homes are built on high-tension slabs and bolted onto the slabs. “Earthquake safety was important to us when we were considering buying a home here,” said Todd Stevens. “Since the experience of the wildfires, we’re very grateful for the wildfire protective measures that are required. We would not hesitate recommending that a family move here.”

Stevens estimates that the current market value of their home is over one million dollars. Clearly, pre-fire mitigation, which cost far less money than the value of the Stevens home, has protected this family’s major investment.

“The truth is, the whole community was planned for a fire,” the mother of five young children said. “The embers just dissipated. We were never nervous about losing our home.” Many effective mitigation measures are reflected in the Stevens family story.

Clearly, code enforcement by the Los Angeles County Building Department played a major role in the successful outcome of this threatened neighborhood. Use of fire resistant building materials, such as concrete roof tiles, double pane heat resistant windows, and enclosed eaves, serve to protect the structures. The neighborhood landscaping with a 200-foot greenbelt around the development and 100-foot greenbelts