

IBHS Wildfire Re-enactment Timeline and Voiceover (00:03:00)

Live Intro: The Institute for Business & Home Safety analyzed the performance of homes affected by the Witch Creek Wildfire in San Diego County, California, in October 2007. This animation depicts some of the scenarios firefighters witnessed during the wildfire that burned more than 1,200 homes. It also contrasts the performance of traditional homes with those developed using Shelter-in-Place guidelines.

Cue	End time	Voiceover
	:09	Santa Ana winds gusting up to 59 miles per hour drove the fire from Ramona, initially toward the southwest through the canyons.
	:20	Once the fire reaches populated areas, notice how it moves through with very few homes actually burning from the flames. However, the danger is not over.
	:38	The majority of homes destroyed by the Witch Fire were ignited by fire brands – which can travel up to a mile. When embers land on fuel sources or find vulnerable entry points, flames aren't visible right away, but once a house is burning, it can be consumed in about half an hour.
	:53	What you're seeing here is a wooden jungle gym that becomes a fire source, and because it's located so close to the house, heat from the fire shatters a single-pane window, allowing flames and embers inside. The house is destroyed.
	1:12	In this instance, wind-blown fire brands ignite a wooden fence that separates two houses. The nearby palm tree becomes a torch, producing embers that are blown into the attic of the home on the left. While that house is burning from the inside out, flames from the fence spread to the house next door.
	1:25	Now let's turn our attention to the roof. Here, wind-blown embers ignite debris that collected in the ends of the tile and in nearby gutters. The fire quickly spreads to the roof and eventually consumes the house.
	1:42	Once a house catches fire, radiant heat and the burn rate intensify significantly over what would be experienced in strictly a grass or brushfire. The amount of heat generated by a house fire puts neighboring homes and cars at increased risk.
	1:53	Now let's look at wind direction and slope. IBHS data shows homes on the edge of a ridge were twice as likely to be destroyed when wind blew the fire uphill.
	2:00	Fire races upslope when gases pre-heat the vegetation, so putting the wind behind it is a costly combination.
	2:06	Let's watch as the same scenario plays out in a shelter in place community built with wildfire in mind.
	2:16	Things in the yard are built with heavier timbers or fire-resistant materials. Things that are combustible are placed an appropriate distance from the house to keep flames away.
	2:28	Notice that highly-combustible palm trees are at least 30 feet from the house and well-maintained. If they do burn damage is limited because of the other preventive measures taken.
	2:37	Turning now to this tile roof, embers can't enter because edges are sealed, gutters are clear and existing vents are covered with fine mesh.
	2:44	Firebreaks here are established with stucco walls and instead of a wood deck there's a concrete patio.
	3:00	IBHS research shows this community approach was successful. In addition to keeping fire away, taking steps to reduce fuel sources and minimize entry points for flames and embers helps increase a home's defenses.

Live Tag: For more information on this research project and what you can do to reduce your wildfire risk, visit the IBHS web site www.DisasterSafety.org/megafire.