PROTECT YOUR HOME FROM WILDFIRE

WINDOWS SKYLIGHTS





Heat from a wildfire can cause older, single pane windows to burst and break even before the home is on fire.

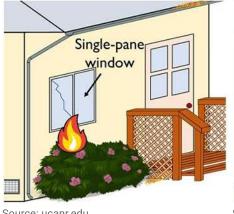
WILDFIREHOMEHARDENING.ORG

How can up-to-code windows and skylights will help protect your home?

Heat from a wildfire can cause windows to burst and break even before the home is on fire, which allows embers to enter and start fires inside the home. Single-paned and large windows are particularly vulnerable, as well as plastic-domed skylights. Combustible framing materials can ignite or deform, and the glass can crack and fall out due to thermal stress from direct flame contact or radiant heat and let fire enter.



Incorrect window setup: Correct window setup:







Source: ucanr.edu





PROTECT YOUR HOME LEARN MORE AT WILDFIREHOMEHARDENING.ORG



The Santa Barbara County Fire Safe Council's mission is to promote wildfire safety in Santa Barbara County through education and action. This Wildfire Home Hardening Guide was generously funded through the Cal Fire Climate Investment Grant for the Regional Wildfire Mitigation Program.









Replace old windows

Replace your old windows for dual-pane, tempered glass: Confirm that you have dual-paned windows (with one pane of tempered glass) in order to protect your home. Dual pane windows have two sheets of glass separated by airspace, and also have the benefits of energy conservation and insulation. Single-pane windows are more common in older structures, and are highly vulnerable to bursting or breaking just from the heat of a wildfire.

Also, if you are adding new windows or constructing a home, be aware of your local conditions and consider limiting the size and number of windows that face large areas of vegetation or the prevailing wind direction, where a wildfire would most likely be coming from. When you leave your house, close your windows and skylights, otherwise embers can enter through openings.



Single paned window (vulnerable)



Dual paned window installation



Install fire-resistant screens

Installing fine-mesh 1/16" metal window screens also helps protect your home from ember ignition. Both plastic-clad fiberglass and metal screening will reduce radiant exposure to the glass and protect against ember entry, but neither will protect against flames. This is an important step in addition to making sure you have double-paned windows. Vinyl screens can melt and possibly ignite, and thus should be replaced.



Combustible vegetation

Do not plant combustible vegetation below your windows or use combustible mulch. If areas directly beneath your windows are combustible, it will increase the risk of your windows breaking or bursting.



Combustible vegetation leading to a single-paned window



REGULARLY check your skylights especially during peak fire season

Regularly clear any vegetative debris around them, which can cause ignition. If your skylights are older, they may need to be switched out, especially if they are the combustible plastic domed type, which can melt due to heat from a fire and allow embers to enter. The type of skylight that is best depends on the slope of your roof, but in all cases, dual pane, tempered glass is safest.

For steep-sloped roofs, flat dual pane skylights offer the best protection against embers or fire ignition. If you can add a non-combustible screen to any skylight, it will offer additional protection.



Dual-paned skylight with flashing



Domed skylight with branches and debris

If you have a low-slope or flat roof, domed skylights are preferred to limit the amount of debris accumulation. Skylights on any roof are still vulnerable to extended radiant heat exposure from nearby vegetation and combustible materials. Make sure to close skylights that open when you are away.



Perform regular maintenance on your skylights

Both domed and flat skylights can be vulnerable points on your home from extended radiant heat exposure, and each uses a metal flashing to protect the framing. It is critical that the flashing is maintained and all seals are intact to avoid risks for ALL types of skylights.

